MEDICAL LABORATORY EVALUATION

PARTICIPANT SUMMARY

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Hematology, Coagulation,
Blood Bank, Urinalysis, PPM
2021 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 ± 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	± 15%
Automated Differential	± 3 SD
Body Fluid - Red Cell Count	± 2 SD
Body Fluid - White Cell Count	± 2 SD
Creatinine, Urine (Quantitative)	± 17%
Fibrinogen	± 20%
Glucose, Whole Blood – HemoCue	± 6 mg/dL or ± 20%*
Hematocrit	± 6%
Hematocrit, Waived	± 6% or ± 2 SD*
Hemoglobin	± 7%
Hemoglobin, Waived	± 7% or ± 2 SD*
International Normalized Ratio (INR)	± 15%
Microalbumin (Quantitative)	± 30%
Platelet Count	± 25%
Prothrombin Time	± 15%
Red Blood Cell Count	± 6%
Reticulocyte Count	± 30% or ± 2 SD*
Sedimentation Rate	± 3 SD
Specific Gravity	± 0.010
White Blood Cell Count	± 15%

*Whichever is greater

HEMOCUE HEMATOLOGY–HEMOGLOBIN (g/dL)

	Specimen HQ-3						Specimen HQ-4					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	26	10.25	1.23	12.0	9.8	9.5 - 11.0	26	6.40	0.80	12.6	6.1	5.9 - 6.9
All HemoCue 301/801	5	13.08	0.25	1.9	13.2	12.1 - 14.0	5	8.23	0.22	2.7	8.3	7.6 - 8.9
HemoCue 201/+	22	9.74	0.12	1.2	9.8	9.0 - 10.5	22	6.06	0.10	1.6	6.1	5.6 - 6.5
HemoCue 801	5	13.08	0.25	1.9	13.2	12.1 - 14.0	5	8.23	0.22	2.7	8.3	7.6 - 8.9

HEMOCUE HEMATOLOGY–GLUCOSE (mg/dL)

	Specimen HQ-3						Specimen HQ-4					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	25	115.6	7.7	6.7	115	92 - 139	24	83.7	4.0	4.7	84	66 - 101
All HemoCue Methods	25	115.6	7.7	6.7	115	92 - 139	24	83.7	4.0	4.7	84	66 - 101
HemoCue Glucose 201	25	115.6	7.7	6.7	115	92 - 139	24	83.7	4.0	4.7	84	66 - 101

SEDIMENTATION RATE (MM/HR)

	Specimen ES-3						Specimen ES-4					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	73	45.6	10.6	23.3	41	13 - 78	76	10.2	3.5	34.2	10	0 - 21
All Automated Methods	19	59.5	9.8	16.4	61	30 - 89	20	12.5	3.8	30.1	12	1 - 24
All Manual Methods	53	41.1	7.3	17.8	40	19 - 64	54	9.3	2.7	29.3	10	1 - 18
All Vital Diagnostics Methods	13	60.5	9.2	15.3	61	32 - 89	13	10.8	2.1	19.4	11	4 - 18
Vital Diagnostics Excyte M/10	7	57.3	6.4	11.2	59	38 - 77	7	10.6	1.5	14.3	10	6 - 16
Westergren - diluted	48	41.7	8.5	20.3	40	16 - 68	48	9.1	2.7	30.0	10	0 - 18
Westergren - undiluted	5	40.4	2.7	6.7	40	32 - 49	5	9.8	1.3	13.3	9	5 - 14

SEDIMAT SEDIMENTATION RATE (MM/HR)

	Specimen MAT-3						Specimen MAT-4					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
Polymedco Sedimat 15	10	63.4	4.3	6.7	63	50 - 77	10	2.3	0.7	30.3	2	0 - 5

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

	Specimen CL-6						Specimen CL-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	2.78	0.44	16.0	2.8	2.3 - 3.3	12	19.93	1.88	9.4	20.4	16.9 - 23.0
All Abbott Cell-Dyn Instruments	12	3.17	0.21	6.6	3.1	2.6 - 3.7	12	21.47	0.64	3.0	21.2	18.2 - 24.7
Abbott Cell-Dyn Emerald 22	6	2.40	0.10	4.2	2.4	2.0 - 2.8	6	18.40	1.18	6.4	18.1	15.6 - 21.2
Abbott Cell-Dyn Ruby	6	3.17	0.21	6.6	3.1	2.6 - 3.7	6	21.47	0.64	3.0	21.2	18.2 - 24.7
	Specimen CL-8						**Specimen CL-9**					
All Method	12	19.52	2.15	11.0	19.3	16.5 - 22.5	12	7.50	0.85	11.4	7.5	6.3 - 8.7
All Abbott Cell-Dyn Instruments	12	21.37	1.06	5.0	21.2	18.1 - 24.6	12	8.20	0.40	4.9	8.2	6.9 - 9.5
Abbott Cell-Dyn Emerald 22	6	17.67	0.40	2.3	17.6	15.0 - 20.4	6	6.80	0.44	6.4	7.0	5.7 - 7.9
Abbott Cell-Dyn Ruby	6	21.37	1.06	5.0	21.2	18.1 - 24.6	6	8.20	0.40	4.9	8.2	6.9 - 9.5
	Specimen CL-10											
All Method	12	9.20	1.06	11.5	9.1	7.8 - 10.6						
All Abbott Cell-Dyn Instruments	12	10.10	0.50	5.0	10.1	8.5 - 11.7						
Abbott Cell-Dyn Emerald 22	6	8.30	0.36	4.3	8.4	7.0 - 9.6						
Abbott Cell-Dyn Ruby	6	10.10	0.50	5.0	10.1	8.5 - 11.7						

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

	Specimen CL-6						Specimen CL-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	2.188	0.114	5.2	2.19	2.05 - 2.32	12	5.098	0.315	6.2	4.97	4.79 - 5.41
All Abbott Cell-Dyn Instruments	12	2.287	0.046	2.0	2.26	2.14 - 2.43	12	5.327	0.303	5.7	5.28	5.00 - 5.65
Abbott Cell-Dyn Emerald 22	6	2.090	0.036	1.7	2.10	1.96 - 2.22	6	4.870	0.026	0.5	4.88	4.57 - 5.17
Abbott Cell-Dyn Ruby	6	2.287	0.046	2.0	2.26	2.14 - 2.43	6	5.327	0.303	5.7	5.28	5.00 - 5.65
	Specimen CL-8						**Specimen CL-9**					
All Method	12	5.030	0.287	5.7	5.02	4.72 - 5.34	12	4.720	0.273	5.8	4.64	4.43 - 5.01
All Abbott Cell-Dyn Instruments	12	5.240	0.226	4.3	5.18	4.92 - 5.56	12	4.917	0.257	5.2	4.88	4.62 - 5.22
Abbott Cell-Dyn Emerald 22	6	4.820	0.151	3.1	4.80	4.53 - 5.11	6	4.523	0.061	1.4	4.51	4.25 - 4.80
Abbott Cell-Dyn Ruby	6	5.240	0.226	4.3	5.18	4.92 - 5.56	6	4.917	0.257	5.2	4.88	4.62 - 5.22
	Specimen CL-10											
All Method	12	6.273	0.328	5.2	6.18	5.89 - 6.65						
All Abbott Cell-Dyn Instruments	12	6.533	0.250	3.8	6.52	6.14 - 6.93						
Abbott Cell-Dyn Emerald 22	6	6.013	0.060	1.0	6.02	5.65 - 6.38						
Abbott Cell-Dyn Ruby	6	6.533	0.250	3.8	6.52	6.14 - 6.93						

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

	Specimen CL-6						Specimen CL-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	5.10	0.48	9.4	5.2	4.7 - 5.5	12	16.38	0.81	5.0	16.6	15.2 - 17.6
All Abbott Cell-Dyn Instruments	12	5.53	0.06	1.0	5.5	5.1 - 6.0	12	16.80	0.40	2.4	16.8	15.6 - 18.0
Abbott Cell-Dyn Emerald 22	6	4.67	0.12	2.5	4.6	4.3 - 5.0	6	15.97	0.99	6.2	15.5	14.8 - 17.1
Abbott Cell-Dyn Ruby	6	5.53	0.06	1.0	5.5	5.1 - 6.0	6	16.80	0.40	2.4	16.8	15.6 - 18.0
	Specimen CL-8						**Specimen CL-9**					
All Method	12	16.12	0.70	4.3	16.2	14.9 - 17.3	12	12.85	0.74	5.8	12.8	11.9 - 13.8
All Abbott Cell-Dyn Instruments	12	16.70	0.26	1.6	16.6	15.5 - 17.9	12	13.50	0.30	2.2	13.5	12.5 - 14.5
Abbott Cell-Dyn Emerald 22	6	15.53	0.35	2.3	15.5	14.4 - 16.7	6	12.20	0.17	1.4	12.1	11.3 - 13.1
Abbott Cell-Dyn Ruby	6	16.70	0.26	1.6	16.6	15.5 - 17.9	6	13.50	0.30	2.2	13.5	12.5 - 14.5
	Specimen CL- 10											
All Method	12	18.07	0.96	5.3	18.0	16.8 - 19.4						
All Abbott Cell-Dyn Instruments	12	18.90	0.40	2.1	18.9	17.5 - 20.3						
Abbott Cell-Dyn Emerald 22	6	17.23	0.23	1.3	17.1	16.0 - 18.5						
Abbott Cell-Dyn Ruby	6	18.90	0.40	2.1	18.9	17.5 - 20.3						

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

	Specimen CL-6						Specimen CL-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	15.45	0.55	3.5	15.4	14.5 - 16.4	12	46.22	1.18	2.6	46.1	43.4 - 49.0
All Abbott Cell-Dyn Instruments	12	15.67	0.71	4.5	15.8	14.7 - 16.7	12	46.83	1.31	2.8	46.7	44.0 - 49.7
Abbott Cell-Dyn Emerald 22	6	15.23	0.32	2.1	15.1	14.3 - 16.2	6	45.60	0.79	1.7	45.9	42.8 - 48.4
Abbott Cell-Dyn Ruby	6	15.67	0.71	4.5	15.8	14.7 - 16.7	6	46.83	1.31	2.8	46.7	44.0 - 49.7
	Specimen CL-8						**Specimen CL-9**					
All Method	12	44.83	2.10	4.7	45.2	42.1 - 47.6	12	38.85	1.52	3.9	39.1	36.5 - 41.2
All Abbott Cell-Dyn Instruments	12	44.37	2.38	5.4	44.8	41.7 - 47.1	12	39.87	1.06	2.7	39.7	37.4 - 42.3
Abbott Cell-Dyn Emerald 22	6	45.30	2.17	4.8	45.6	42.5 - 48.1	6	37.83	1.23	3.3	37.5	35.5 - 40.2
Abbott Cell-Dyn Ruby	6	44.37	2.38	5.4	44.8	41.7 - 47.1	6	39.87	1.06	2.7	39.7	37.4 - 42.3
	Specimen CL-10											
All Method	12	53.92	1.39	2.6	54.0	50.6 - 57.2						
All Abbott Cell-Dyn Instruments	12	54.57	0.99	1.8	54.1	51.2 - 57.9						
Abbott Cell-Dyn Emerald 22	6	53.27	1.61	3.0	52.6	50.0 - 56.5						
Abbott Cell-Dyn Ruby	6	54.57	0.99	1.8	54.1	51.2 - 57.9						

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

	Specimen CL-6						Specimen CL-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	91.2	13.6	14.9	92	68 - 114	12	523.0	41.5	7.9	508	392 - 654
All Abbott Cell-Dyn Instruments	12	79.0	2.6	3.3	78	59 - 99	12	511.7	28.9	5.7	497	383 - 640
Abbott Cell-Dyn Emerald 22	6	103.3	3.2	3.1	102	77 - 130	6	534.3	55.6	10.4	519	400 - 668
Abbott Cell-Dyn Ruby	6	79.0	2.6	3.3	78	59 - 99	6	511.7	28.9	5.7	497	383 - 640
	Specimen CL-8						**Specimen CL-9**					
All Method	12	498.2	16.9	3.4	494	373 - 623	12	281.8	19.9	7.1	275	211 - 353
All Abbott Cell-Dyn Instruments	12	504.7	23.1	4.6	518	378 - 631	12	287.3	22.5	7.8	278	215 - 360
Abbott Cell-Dyn Emerald 22	6	491.7	7.2	1.5	488	368 - 615	6	276.3	19.9	7.2	268	207 - 346
Abbott Cell-Dyn Ruby	6	504.7	23.1	4.6	518	378 - 631	6	287.3	22.5	7.8	278	215 - 360
	Specimen CL-10											
All Method	12	133.7	49.6	37.1	141	100 - 168						
All Abbott Cell-Dyn Instruments	12	177.0	7.9	4.5	180	132 - 222						
Abbott Cell-Dyn Emerald 22	6	90.3	21.2	23.5	87	67 - 113						
Abbott Cell-Dyn Ruby	6	177.0	7.9	4.5	180	132 - 222						

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

	Specimen CL-6						Specimen CL-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	47.03	2.24	4.8	47.5	40.3 - 53.8	12	69.28	2.80	4.0	69.2	60.8 - 77.7
All Abbott Cell-Dyn Instruments	12	48.90	0.56	1.1	49.0	47.2 - 50.6	12	71.70	1.04	1.5	72.2	68.5 - 74.9
Abbott Cell-Dyn Emerald 22	6	45.17	1.33	2.9	44.5	41.1 - 49.2	6	66.87	1.01	1.5	67.0	63.8 - 69.9
Abbott Cell-Dyn Ruby	6	48.90	0.56	1.1	49.0	47.2 - 50.6	6	71.70	1.04	1.5	72.2	68.5 - 74.9
	Specimen CL-8						**Specimen CL-9**					
All Method	12	68.82	3.42	5.0	69.3	58.5 - 79.1	12	56.30	5.05	9.0	56.5	41.1 - 71.5
All Abbott Cell-Dyn Instruments	12	71.80	0.44	0.6	72.0	70.4 - 73.2	12	60.77	1.32	2.2	60.5	56.8 - 64.8
Abbott Cell-Dyn Emerald 22	6	65.83	1.52	2.3	66.1	61.2 - 70.4	6	51.83	1.43	2.8	51.5	47.5 - 56.2
Abbott Cell-Dyn Ruby	6	71.80	0.44	0.6	72.0	70.4 - 73.2	6	60.77	1.32	2.2	60.5	56.8 - 64.8
	Specimen CL-10											
All Method	12	69.37	2.01	2.9	70.1	63.3 - 75.5						
All Abbott Cell-Dyn Instruments	12	70.93	0.21	0.3	71.0	70.3 - 71.6						
Abbott Cell-Dyn Emerald 22	6	67.80	1.65	2.4	67.9	62.8 - 72.8						
Abbott Cell-Dyn Ruby	6	70.93	0.21	0.3	71.0	70.3 - 71.6						

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

	Specimen CL-6						Specimen CL-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	26.82	9.58	35.7	26.6	0.0 - 55.6	12	12.28	2.56	20.9	12.6	4.5 - 20.0
All Abbott Cell-Dyn Instruments	12	35.03	3.58	10.2	37.1	24.2 - 45.8	12	14.37	0.96	6.7	14.2	11.4 - 17.3
Abbott Cell-Dyn Emerald 22	6	18.60	3.75	20.2	18.7	7.3 - 29.9	6	10.20	1.57	15.4	10.5	5.4 - 15.0
Abbott Cell-Dyn Ruby	6	35.03	3.58	10.2	37.1	24.2 - 45.8	6	14.37	0.96	6.7	14.2	11.4 - 17.3
	Specimen CL-8						**Specimen CL-9**					
All Method	12	12.40	2.20	17.8	12.6	5.7 - 19.1	12	17.07	6.64	38.9	17.7	0.0 - 37.0
All Abbott Cell-Dyn Instruments	12	14.27	0.58	4.0	14.6	12.5 - 16.0	12	22.80	1.47	6.5	23.1	18.3 - 27.3
Abbott Cell-Dyn Emerald 22	6	10.53	1.16	11.0	10.7	7.0 - 14.1	6	11.33	3.07	27.1	11.7	2.1 - 20.6
Abbott Cell-Dyn Ruby	6	14.27	0.58	4.0	14.6	12.5 - 16.0	6	22.80	1.47	6.5	23.1	18.3 - 27.3
	Specimen CL-10											
All Method	12	14.57	4.60	31.6	15.2	0.7 - 28.4						
All Abbott Cell-Dyn Instruments	12	18.70	0.20	1.1	18.7	18.1 - 19.3						
Abbott Cell-Dyn Emerald 22	6	10.43	1.31	12.5	10.3	6.5 - 14.4						
Abbott Cell-Dyn Ruby	6	18.70	0.20	1.1	18.7	18.1 - 19.3						

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

	Specimen CL-6						Specimen CL-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	18.20	10.69	58.7	18.2	0.0 - 50.3	12	8.82	4.25	48.3	8.6	0.0 - 21.6
All Abbott Cell-Dyn Instruments	12	8.60	1.81	21.0	8.4	3.1 - 14.1	12	5.00	0.62	12.5	4.8	3.1 - 6.9
Abbott Cell-Dyn Emerald 22	6	27.80	2.43	8.7	27.1	20.5 - 35.1	6	12.63	1.08	8.5	13.1	9.3 - 15.9
Abbott Cell-Dyn Ruby	6	8.60	1.81	21.0	8.4	3.1 - 14.1	6	5.00	0.62	12.5	4.8	3.1 - 6.9
	Specimen CL-8						**Specimen CL-9**					
All Method	12	8.80	4.15	47.2	8.7	0.0 - 21.3	12	13.63	7.97	58.5	13.5	0.0 - 37.6
All Abbott Cell-Dyn Instruments	12	5.03	0.40	8.0	5.1	3.8 - 6.3	12	6.37	0.31	4.8	6.3	5.4 - 7.3
Abbott Cell-Dyn Emerald 22	6	12.57	0.61	4.9	12.7	10.7 - 14.4	6	20.90	0.56	2.7	21.0	19.2 - 22.6
Abbott Cell-Dyn Ruby	6	5.03	0.40	8.0	5.1	3.8 - 6.3	6	6.37	0.31	4.8	6.3	5.4 - 7.3
	Specimen CL-10											
All Method	12	10.07	5.35	53.1	9.7	0.0 - 26.2						
All Abbott Cell-Dyn Instruments	12	5.23	0.25	4.8	5.2	4.4 - 6.0						
Abbott Cell-Dyn Emerald 22	6	14.90	1.15	7.7	14.8	11.4 - 18.4						
Abbott Cell-Dyn Ruby	6	5.23	0.25	4.8	5.2	4.4 - 6.0						

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

	Specimen CL-6						Specimen CL-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	7.57	1.49	19.8	7.0	3.0 - 12.1	12	8.90	1.05	11.8	8.7	5.7 - 12.1
All Abbott Cell-Dyn Instruments	12	6.50	0.40	6.2	6.5	5.3 - 7.7	12	8.53	0.59	6.9	8.3	6.7 - 10.3
Abbott Cell-Dyn Emerald 22	6	8.63	1.42	16.4	8.9	4.3 - 12.9	6	9.27	1.42	15.3	9.0	5.0 - 13.6
Abbott Cell-Dyn Ruby	6	6.50	0.40	6.2	6.5	5.3 - 7.7	6	8.53	0.59	6.9	8.3	6.7 - 10.3

	Specimen CL-8						Specimen CL-9					
All Method	12	9.38	1.20	12.8	9.0	5.7 - 13.0	12	12.85	3.20	24.9	12.6	3.2 - 22.5
All Abbott Cell-Dyn Instruments	12	8.50	0.36	4.2	8.6	7.4 - 9.6	12	10.00	0.30	3.0	10.0	9.1 - 10.9
Abbott Cell-Dyn Emerald 22	6	10.27	1.07	10.4	10.5	7.0 - 13.5	6	15.70	1.08	6.9	15.4	12.4 - 19.0
Abbott Cell-Dyn Ruby	6	8.50	0.36	4.2	8.6	7.4 - 9.6	6	10.00	0.30	3.0	10.0	9.1 - 10.9

	Specimen CL-10					
All Method	12	5.73	0.97	17.0	5.5	2.8 - 8.7
All Abbott Cell-Dyn Instruments	12	4.93	0.15	3.1	4.9	4.4 - 5.4
Abbott Cell-Dyn Emerald 22	6	6.53	0.65	10.0	6.5	4.5 - 8.5
Abbott Cell-Dyn Ruby	6	4.93	0.15	3.1	4.9	4.4 - 5.4

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

	Specimen CL-6						Specimen CL-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	0.38	0.26	66.8	0.4	0.0 - 1.2	12	0.38	0.17	44.9	0.3	0.0 - 1.0
All Abbott Cell-Dyn Instruments	12	0.30	0.35	115.5	0.1	0.0 - 1.4	12	0.40	0.17	43.3	0.3	0.0 - 1.0
Abbott Cell-Dyn Emerald 22	6	0.47	0.15	32.7	0.5	0.0 - 1.0	6	0.37	0.21	56.8	0.3	0.0 - 1.0
Abbott Cell-Dyn Ruby	6	0.30	0.35	115.5	0.1	0.0 - 1.4	6	0.40	0.17	43.3	0.3	0.0 - 1.0

	Specimen CL-8						Specimen CL-9					
All Method	6	0.45	0.31	69.9	0.3	0.0 - 1.4	12	0.20	0.30	151.7	0.1	0.0 - 1.2
All Abbott Cell-Dyn Instruments	3	0.43	0.32	74.2	0.3	0.0 - 1.4	12	0.03	0.06	173.2	0.0	0.0 - 0.3
Abbott Cell-Dyn Emerald 22	3	0.47	0.38	81.1	0.3	0.0 - 1.7	6	0.37	0.38	103.3	0.2	0.0 - 1.6
Abbott Cell-Dyn Ruby	3	0.43	0.32	74.2	0.3	0.0 - 1.4	6	0.03	0.06	173.2	0.0	0.0 - 0.3

	Specimen CL-10					
All Method	12	0.27	0.18	65.7	0.2	0.0 - 0.8
All Abbott Cell-Dyn Instruments	12	0.20	0.01	0.0	0.2	0.1 - 0.3
Abbott Cell-Dyn Emerald 22	6	0.33	0.25	75.5	0.3	0.0 - 1.1
Abbott Cell-Dyn Ruby	6	0.20	0.01	0.0	0.2	0.1 - 0.3

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10^9/L)

	Specimen SYX-6						Specimen SYX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	48	2.95	0.12	4.0	2.9	2.5 - 3.4	49	20.71	0.60	2.9	20.8	17.6 - 23.9
All Sysmex Instruments	48	2.95	0.12	4.0	2.9	2.5 - 3.4	49	20.71	0.60	2.9	20.8	17.6 - 23.9
Sysmex KX-21N & K-800, 1000, 4500	8	2.80	0.25	9.0	2.9	2.3 - 3.3	8	20.28	0.63	3.1	20.3	17.2 - 23.4
Sysmex pocH-100i	7	2.90	0.08	2.8	2.9	2.4 - 3.4	7	20.04	0.39	1.9	20.0	17.0 - 23.1
Sysmex XP-300	33	2.96	0.09	3.2	3.0	2.5 - 3.5	34	20.96	0.47	2.2	21.0	17.8 - 24.1
	Specimen SYX-8						**Specimen SYX-9**					
All Method	46	20.71	0.43	2.1	20.8	17.6 - 23.9	49	8.38	0.32	3.8	8.4	7.1 - 9.7
All Sysmex Instruments	46	20.71	0.43	2.1	20.8	17.6 - 23.9	49	8.38	0.32	3.8	8.4	7.1 - 9.7
Sysmex KX-21N & K-800, 1000, 4500	8	20.14	0.53	2.7	20.3	17.1 - 23.2	8	8.06	0.38	4.7	8.0	6.8 - 9.3
Sysmex pocH-100i	7	20.26	0.33	1.6	20.3	17.2 - 23.3	7	8.14	0.28	3.4	8.1	6.9 - 9.4
Sysmex XP-300	32	20.90	0.32	1.5	20.9	17.7 - 24.1	33	8.48	0.19	2.2	8.5	7.2 - 9.8
	Specimen SYX-10											
All Method	49	25.51	0.63	2.5	25.6	21.6 - 29.4						
All Sysmex Instruments	49	25.51	0.63	2.5	25.6	21.6 - 29.4						
Sysmex KX-21N & K-800, 1000, 4500	8	24.81	0.64	2.6	25.0	21.0 - 28.6						
Sysmex pocH-100i	7	25.07	0.56	2.2	24.9	21.3 - 28.9						
Sysmex XP-300	34	25.76	0.45	1.7	25.7	21.8 - 29.7						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–RED BLOOD CELL COUNT (x 10^{12}/L)

	Specimen SYX-6						Specimen SYX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	48	2.459	0.039	1.6	2.46	2.31 - 2.61	49	5.726	0.104	1.8	5.70	5.38 - 6.07
All Sysmex Instruments	48	2.459	0.039	1.6	2.46	2.31 - 2.61	49	5.726	0.104	1.8	5.70	5.38 - 6.07
Sysmex KX-21N & K-800, 1000, 4500	8	2.424	0.039	1.6	2.42	2.27 - 2.57	8	5.639	0.052	0.9	5.64	5.30 - 5.98
Sysmex pocH-100i	7	2.471	0.047	1.9	2.48	2.32 - 2.62	7	5.864	0.076	1.3	5.86	5.51 - 6.22
Sysmex XP-300	33	2.465	0.033	1.3	2.47	2.31 - 2.62	34	5.717	0.091	1.6	5.70	5.37 - 6.07
	Specimen SYX-8						**Specimen SYX-9**					
All Method	47	5.702	0.085	1.5	5.67	5.36 - 6.05	49	4.226	0.076	1.8	4.21	3.97 - 4.48
All Sysmex Instruments	47	5.702	0.085	1.5	5.67	5.36 - 6.05	49	4.226	0.076	1.8	4.21	3.97 - 4.48
Sysmex KX-21N & K-800, 1000, 4500	8	5.638	0.036	0.6	5.65	5.29 - 5.98	8	4.171	0.023	0.6	4.17	3.92 - 4.43
Sysmex pocH-100i	7	5.844	0.058	1.0	5.88	5.49 - 6.20	7	4.314	0.086	2.0	4.30	4.05 - 4.58
Sysmex XP-300	31	5.681	0.053	0.9	5.67	5.34 - 6.03	34	4.221	0.067	1.6	4.21	3.96 - 4.48
	Specimen SYX-10											
All Method	49	6.024	0.104	1.7	6.01	5.66 - 6.39						
All Sysmex Instruments	49	6.024	0.104	1.7	6.01	5.66 - 6.39						
Sysmex KX-21N & K-800, 1000, 4500	8	5.946	0.047	0.8	5.95	5.58 - 6.31						
Sysmex pocH-100i	7	6.164	0.090	1.5	6.20	5.79 - 6.54						
Sysmex XP-300	34	6.013	0.090	1.5	6.02	5.65 - 6.38						

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

	Specimen SYX-6						Specimen SYX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	49	5.99	0.15	2.6	6.0	5.5 - 6.5	49	17.90	0.22	1.2	17.9	16.6 - 19.2
All Sysmex Instruments	49	5.99	0.15	2.6	6.0	5.5 - 6.5	49	17.90	0.22	1.2	17.9	16.6 - 19.2
Sysmex KX-21N & K-800, 1000, 4500	8	5.99	0.11	1.9	6.0	5.5 - 6.5	8	17.76	0.19	1.1	17.8	16.5 - 19.1
Sysmex pocH-100i	7	6.16	0.10	1.6	6.2	5.7 - 6.6	7	18.17	0.23	1.3	18.1	16.8 - 19.5
Sysmex XP-300	34	5.95	0.15	2.5	6.0	5.5 - 6.4	34	17.87	0.18	1.0	17.9	16.6 - 19.2
	Specimen SYX-8						**Specimen SYX-9**					
All Method	47	17.89	0.24	1.3	17.9	16.6 - 19.2	49	12.26	0.16	1.3	12.2	11.4 - 13.2
All Sysmex Instruments	47	17.89	0.24	1.3	17.9	16.6 - 19.2	49	12.26	0.16	1.3	12.2	11.4 - 13.2
Sysmex KX-21N & K-800, 1000, 4500	8	17.78	0.21	1.2	17.8	16.5 - 19.1	8	12.19	0.11	0.9	12.2	11.3 - 13.1
Sysmex pocH-100i	7	18.24	0.21	1.1	18.2	16.9 - 19.6	7	12.39	0.18	1.4	12.4	11.5 - 13.3
Sysmex XP-300	32	17.84	0.18	1.0	17.8	16.5 - 19.1	34	12.26	0.16	1.3	12.2	11.3 - 13.2
	Specimen SYX-10											
All Method	49	17.88	0.19	1.1	17.9	16.6 - 19.2						
All Sysmex Instruments	49	17.88	0.19	1.1	17.9	16.6 - 19.2						
Sysmex KX-21N & K-800, 1000, 4500	8	17.79	0.20	1.1	17.8	16.5 - 19.1						
Sysmex pocH-100i	7	18.11	0.13	0.7	18.1	16.8 - 19.4						
Sysmex XP-300	34	17.85	0.16	0.9	17.9	16.5 - 19.1						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–HEMATOCRIT (percent)

	Specimen SYX-6						Specimen SYX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	49	17.66	0.43	2.5	17.6	16.6 - 18.8	49	50.33	1.35	2.7	49.9	47.3 - 53.4
All Sysmex Instruments	49	17.66	0.43	2.5	17.6	16.6 - 18.8	49	50.33	1.35	2.7	49.9	47.3 - 53.4
Sysmex KX-21N & K-800, 1000, 4500	8	17.21	0.15	0.8	17.2	16.1 - 18.3	8	49.29	0.55	1.1	49.4	46.3 - 52.3
Sysmex pocH-100i	7	18.19	0.49	2.7	18.1	17.0 - 19.3	7	52.39	1.47	2.8	52.9	49.2 - 55.6
Sysmex XP-300	34	17.66	0.34	1.9	17.6	16.5 - 18.8	34	50.15	1.01	2.0	50.0	47.1 - 53.2
	Specimen SYX-8						**Specimen SYX-9**					
All Method	47	50.11	1.26	2.5	49.7	47.1 - 53.2	49	34.02	0.95	2.8	33.7	31.9 - 36.1
All Sysmex Instruments	47	50.11	1.26	2.5	49.7	47.1 - 53.2	49	34.02	0.95	2.8	33.7	31.9 - 36.1
Sysmex KX-21N & K-800, 1000, 4500	8	49.36	0.50	1.0	49.5	46.4 - 52.4	8	33.35	0.32	0.9	33.4	31.3 - 35.4
Sysmex pocH-100i	7	52.23	1.32	2.5	52.7	49.0 - 55.4	7	35.57	1.08	3.0	36.0	33.4 - 37.8
Sysmex XP-300	32	49.83	0.85	1.7	49.7	46.8 - 52.9	34	33.86	0.66	1.9	33.8	31.8 - 35.9
	Specimen SYX-10											
All Method	49	49.34	1.35	2.7	49.0	46.3 - 52.4						
All Sysmex Instruments	49	49.34	1.35	2.7	49.0	46.3 - 52.4						
Sysmex KX-21N & K-800, 1000, 4500	8	48.36	0.48	1.0	48.4	45.4 - 51.3						
Sysmex pocH-100i	7	51.47	1.62	3.2	52.2	48.3 - 54.6						
Sysmex XP-300	34	49.13	0.93	1.9	49.0	46.1 - 52.1						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–PLATELET COUNT (x10^9/L)

	Specimen SYX-6						Specimen SYX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	49	62.6	3.4	5.4	62	46 - 79	49	389.3	14.8	3.8	388	291 - 487
All Sysmex Instruments	49	62.6	3.4	5.4	62	46 - 79	49	389.3	14.8	3.8	388	291 - 487
Sysmex KX-21N & K-800, 1000, 4500	8	61.3	2.9	4.7	62	45 - 77	8	387.4	6.4	1.6	388	290 - 485
Sysmex pocH-100i	7	64.3	2.0	3.1	65	48 - 81	7	380.3	10.5	2.8	383	285 - 476
Sysmex XP-300	34	62.6	3.7	5.8	63	46 - 79	34	391.6	16.4	4.2	394	293 - 490
	Specimen SYX-8						**Specimen SYX-9**					
All Method	47	389.4	19.2	4.9	391	292 - 487	48	204.4	7.8	3.8	206	153 - 256
All Sysmex Instruments	47	389.4	19.2	4.9	391	292 - 487	48	204.4	7.8	3.8	206	153 - 256
Sysmex KX-21N & K-800, 1000, 4500	8	390.8	11.1	2.8	390	293 - 489	8	202.4	6.8	3.4	206	151 - 253
Sysmex pocH-100i	7	381.3	17.5	4.6	384	285 - 477	7	203.6	6.5	3.2	205	152 - 255
Sysmex XP-300	32	390.9	21.0	5.4	395	293 - 489	34	204.3	9.7	4.7	205	153 - 256
	Specimen SYX-10											
All Method	49	498.5	19.9	4.0	497	373 - 624						
All Sysmex Instruments	49	498.5	19.9	4.0	497	373 - 624						
Sysmex KX-21N & K-800, 1000, 4500	8	497.3	18.7	3.8	491	372 - 622						
Sysmex pocH-100i	7	482.7	15.1	3.1	479	362 - 604						
Sysmex XP-300	34	502.0	19.8	3.9	503	376 - 628						

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

	Specimen SYX-6						Specimen SYX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	43	11.29	1.16	10.2	11.3	7.8 - 14.8	43	61.57	0.76	1.2	61.7	59.2 - 63.9
All Sysmex Instruments	43	11.29	1.16	10.2	11.3	7.8 - 14.8	43	61.57	0.76	1.2	61.7	59.2 - 63.9
Sysmex KX-21N & K-800, 1000, 4500	7	11.70	0.57	4.9	11.3	9.9 - 13.5	7	61.56	0.84	1.4	61.8	59.0 - 64.1
Sysmex pocH-100i	6	10.20	0.72	7.1	10.1	8.0 - 12.4	6	61.68	0.47	0.8	61.7	60.2 - 63.1
Sysmex XP-300	30	11.41	1.22	10.7	11.3	7.7 - 15.1	30	61.54	0.81	1.3	61.7	59.1 - 64.0
	Specimen SYX-8						**Specimen SYX-9**					
All Method	41	61.66	0.61	1.0	61.8	59.8 - 63.5	43	31.01	0.88	2.8	30.9	28.3 - 33.7
All Sysmex Instruments	41	61.66	0.61	1.0	61.8	59.8 - 63.5	43	31.01	0.88	2.8	30.9	28.3 - 33.7
Sysmex KX-21N & K-800, 1000, 4500	7	61.57	0.54	0.9	61.7	59.9 - 63.2	7	31.04	0.65	2.1	30.9	29.1 - 33.0
Sysmex pocH-100i	6	61.55	0.63	1.0	61.6	59.6 - 63.5	6	30.45	0.76	2.5	30.4	28.1 - 32.8
Sysmex XP-300	29	61.78	0.75	1.2	61.8	59.5 - 64.1	30	31.11	0.93	3.0	31.1	28.3 - 33.9
	Specimen SYX-10											
All Method	41	15.38	0.45	2.9	15.3	14.0 - 16.8						
All Sysmex Instruments	41	15.38	0.45	2.9	15.3	14.0 - 16.8						
Sysmex KX-21N & K-800, 1000, 4500	7	15.37	0.94	6.1	15.1	12.5 - 18.2						
Sysmex pocH-100i	6	15.55	0.23	1.5	15.6	14.8 - 16.3						
Sysmex XP-300	29	15.41	0.48	3.1	15.4	13.9 - 16.9						

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

	Specimen SYX-6						Specimen SYX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	43	18.21	1.59	8.8	18.2	13.4 - 23.0	42	13.51	0.77	5.7	13.5	11.2 - 15.9
All Sysmex Instruments	43	18.21	1.59	8.8	18.2	13.4 - 23.0	42	13.51	0.77	5.7	13.5	11.2 - 15.9
Sysmex KX-21N & K-800, 1000, 4500	7	18.16	0.80	4.4	18.2	15.7 - 20.6	7	13.74	0.80	5.8	13.7	11.3 - 16.2
Sysmex pocH-100i	6	16.48	1.73	10.5	16.3	11.3 - 21.7	6	12.47	0.55	4.4	12.7	10.8 - 14.2
Sysmex XP-300	30	18.56	1.51	8.2	18.6	14.0 - 23.2	29	13.67	0.63	4.6	13.5	11.7 - 15.6
	Specimen SYX-8						**Specimen SYX-9**					
All Method	42	13.52	0.88	6.5	13.5	10.8 - 16.2	42	16.29	0.89	5.5	16.5	13.6 - 19.0
All Sysmex Instruments	42	13.52	0.88	6.5	13.5	10.8 - 16.2	42	16.29	0.89	5.5	16.5	13.6 - 19.0
Sysmex KX-21N & K-800, 1000, 4500	7	13.47	0.45	3.4	13.5	12.1 - 14.9	7	16.71	0.75	4.5	16.8	14.4 - 19.0
Sysmex pocH-100i	6	12.17	0.60	4.9	12.1	10.3 - 14.0	6	14.58	0.84	5.8	14.8	12.0 - 17.2
Sysmex XP-300	29	13.81	0.74	5.4	13.8	11.5 - 16.1	30	16.43	0.74	4.5	16.6	14.1 - 18.7
	Specimen SYX-10											
All Method	43	10.48	0.56	5.4	10.5	8.7 - 12.2						
All Sysmex Instruments	43	10.48	0.56	5.4	10.5	8.7 - 12.2						
Sysmex KX-21N & K-800, 1000, 4500	7	10.89	0.62	5.7	10.9	9.0 - 12.8						
Sysmex pocH-100i	6	10.00	0.55	5.5	10.0	8.3 - 11.7						
Sysmex XP-300	30	10.48	0.49	4.7	10.5	9.0 - 12.0						

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

	Specimen SYX-6						Specimen SYX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	42	70.50	1.98	2.8	70.3	64.5 - 76.5	41	24.83	0.88	3.5	24.8	22.1 - 27.5
All Sysmex Instruments	42	70.50	1.98	2.8	70.3	64.5 - 76.5	41	24.83	0.88	3.5	24.8	22.1 - 27.5
Sysmex KX-21N & K-800, 1000, 4500	7	70.14	0.69	1.0	70.1	68.0 - 72.3	7	24.70	0.49	2.0	24.9	23.2 - 26.2
Sysmex pocH-100i	6	73.32	1.50	2.0	73.6	68.8 - 77.9	5	25.98	0.25	1.0	26.0	25.2 - 26.8
Sysmex XP-300	29	70.00	1.80	2.6	70.0	64.5 - 75.5	29	24.67	0.88	3.6	24.7	22.0 - 27.4
	Specimen SYX-8						**Specimen SYX-9**					
All Method	40	24.84	0.94	3.8	24.8	22.0 - 27.7	42	52.79	1.35	2.6	52.5	48.7 - 56.9
All Sysmex Instruments	40	24.84	0.94	3.8	24.8	22.0 - 27.7	42	52.79	1.35	2.6	52.5	48.7 - 56.9
Sysmex KX-21N & K-800, 1000, 4500	7	24.96	0.71	2.9	24.8	22.8 - 27.1	7	52.24	1.06	2.0	52.3	49.0 - 55.5
Sysmex pocH-100i	6	26.28	0.85	3.2	26.1	23.7 - 28.9	6	54.97	1.09	2.0	55.0	51.6 - 58.3
Sysmex XP-300	27	24.48	0.66	2.7	24.5	22.4 - 26.5	29	52.47	1.01	1.9	52.3	49.4 - 55.5
	Specimen SYX-10											
All Method	41	74.03	0.69	0.9	74.0	71.9 - 76.2						
All Sysmex Instruments	41	74.03	0.69	0.9	74.0	71.9 - 76.2						
Sysmex KX-21N & K-800, 1000, 4500	7	73.74	0.87	1.2	73.8	71.1 - 76.4						
Sysmex pocH-100i	6	74.45	0.44	0.6	74.5	73.1 - 75.8						
Sysmex XP-300	28	74.01	0.67	0.9	74.0	72.0 - 76.1						

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10^9/L)

	Specimen HD-6						Specimen HD-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	315	1.95	0.16	8.0	2.0	1.6 - 2.3	312	20.14	0.71	3.5	20.2	17.1 - 23.2
All Abbott Cell-Dyn Instruments	82	2.04	0.12	5.9	2.0	1.7 - 2.4	78	19.62	0.68	3.5	19.6	16.6 - 22.6
All ABX Instruments	56	1.99	0.08	4.1	2.0	1.6 - 2.3	56	20.33	0.66	3.2	20.4	17.2 - 23.4
All Boule (CDS) Instruments	115	1.80	0.09	4.9	1.8	1.5 - 2.1	113	20.16	0.47	2.3	20.2	17.1 - 23.2
All COULTER Instruments	57	2.09	0.11	5.2	2.1	1.7 - 2.5	56	20.67	0.56	2.7	20.7	17.5 - 23.8
Abbott Cell-Dyn 1700	5	2.18	0.16	7.5	2.1	1.8 - 2.6	5	21.14	0.72	3.4	20.9	17.9 - 24.4
Abbott Cell-Dyn 1800	15	1.93	0.11	5.7	1.9	1.6 - 2.3	15	19.77	1.02	5.1	19.8	16.8 - 22.8
Abbott Cell-Dyn Emerald	61	2.05	0.09	4.3	2.0	1.7 - 2.4	60	19.54	0.60	3.1	19.6	16.6 - 22.5
Boule (CDS) Medonic M series	114	1.80	0.09	4.8	1.8	1.5 - 2.1	112	20.16	0.47	2.3	20.2	17.1 - 23.2
COULTER AcT diff/diff 2	56	2.09	0.11	5.3	2.1	1.7 - 2.5	55	20.70	0.53	2.5	20.7	17.5 - 23.9
Diatron Abacus 3 CP	5	2.00	0.10	5.0	2.0	1.7 - 2.3	5	19.95	0.60	3.0	20.0	16.9 - 23.0
Horiba ABX Micros/45/60	56	1.99	0.08	4.1	2.0	1.6 - 2.3	56	20.33	0.66	3.2	20.4	17.2 - 23.4

	Specimen HD-8						Specimen HD-9					
All Method	310	20.22	0.70	3.4	20.3	17.1 - 23.3	312	7.71	0.34	4.5	7.7	6.5 - 8.9
All Abbott Cell-Dyn Instruments	81	19.77	0.84	4.3	19.7	16.8 - 22.8	83	7.80	0.37	4.7	7.8	6.6 - 9.0
All ABX Instruments	56	20.37	0.62	3.1	20.5	17.3 - 23.5	56	7.78	0.26	3.4	7.8	6.6 - 9.0
All Boule (CDS) Instruments	114	20.17	0.49	2.4	20.1	17.1 - 23.2	113	7.46	0.23	3.1	7.5	6.3 - 8.6
All COULTER Instruments	56	20.86	0.62	3.0	20.8	17.7 - 24.0	56	8.05	0.27	3.3	8.0	6.8 - 9.3
Abbott Cell-Dyn 1700	5	21.64	0.79	3.6	21.8	18.3 - 24.9	5	8.38	0.18	2.1	8.4	7.1 - 9.7
Abbott Cell-Dyn 1800	16	20.27	1.39	6.9	20.0	17.2 - 23.4	16	7.60	0.47	6.2	7.6	6.4 - 8.8
Abbott Cell-Dyn Emerald	62	19.60	0.62	3.2	19.6	16.6 - 22.6	62	7.80	0.29	3.7	7.8	6.6 - 9.0
Boule (CDS) Medonic M series	113	20.17	0.49	2.4	20.1	17.1 - 23.2	112	7.45	0.23	3.1	7.5	6.3 - 8.6
COULTER AcT diff/diff 2	54	20.84	0.52	2.5	20.8	17.7 - 24.0	53	8.02	0.20	2.4	8.0	6.8 - 9.3
Diatron Abacus 3 CP	5	19.70	0.78	4.0	19.8	16.7 - 22.7	5	7.60	0.34	4.4	7.8	6.4 - 8.8
Horiba ABX Micros/45/60	56	20.37	0.62	3.1	20.5	17.3 - 23.5	56	7.78	0.26	3.4	7.8	6.6 - 9.0

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

Specimen HD-10

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	313	5.10	0.32	6.2	5.2	4.3 - 5.9
All Abbott Cell-Dyn Instruments	82	5.28	0.27	5.2	5.3	4.4 - 6.1
All ABX Instruments	56	5.25	0.18	3.4	5.3	4.4 - 6.1
All Boule (CDS) Instruments	114	4.79	0.18	3.7	4.8	4.0 - 5.6
All COULTER Instruments	55	5.35	0.18	3.3	5.3	4.5 - 6.2
Abbott Cell-Dyn 1700	5	5.76	0.15	2.6	5.7	4.8 - 6.7
Abbott Cell-Dyn 1800	16	5.04	0.29	5.7	5.0	4.2 - 5.8
Abbott Cell-Dyn Emerald	61	5.30	0.21	3.9	5.3	4.5 - 6.1
Boule (CDS) Medonic M series	113	4.79	0.17	3.6	4.8	4.0 - 5.6
COULTER AcT diff/diff 2	55	5.35	0.18	3.3	5.3	4.5 - 6.2
Diatron Abacus 3 CP	5	4.97	0.15	3.1	5.0	4.2 - 5.8
Horiba ABX Micros/45/60	56	5.25	0.18	3.4	5.3	4.4 - 6.1

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10^{12}/L)

	Specimen HD-6						Specimen HD-7					
Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	312	2.282	0.061	2.7	2.28	2.14 - 2.42	309	5.608	0.118	2.1	5.61	5.27 - 5.95
All Abbott Cell-Dyn Instruments	81	2.330	0.070	3.0	2.33	2.19 - 2.47	79	5.565	0.146	2.6	5.56	5.23 - 5.90
All ABX Instruments	54	2.277	0.042	1.8	2.27	2.14 - 2.42	55	5.620	0.093	1.7	5.62	5.28 - 5.96
All Boule (CDS) Instruments	113	2.247	0.039	1.7	2.25	2.11 - 2.39	111	5.647	0.088	1.6	5.65	5.30 - 5.99
All COULTER Instruments	56	2.300	0.058	2.5	2.31	2.16 - 2.44	58	5.576	0.123	2.2	5.57	5.24 - 5.92
Abbott Cell-Dyn 1700	5	2.344	0.021	0.9	2.35	2.20 - 2.49	5	5.580	0.225	4.0	5.55	5.24 - 5.92
Abbott Cell-Dyn 1800	15	2.398	0.071	3.0	2.40	2.25 - 2.55	15	5.559	0.198	3.6	5.57	5.22 - 5.90
Abbott Cell-Dyn Emerald	61	2.312	0.061	2.6	2.32	2.17 - 2.46	60	5.574	0.142	2.6	5.56	5.23 - 5.91
Boule (CDS) Medonic M series	111	2.248	0.039	1.7	2.25	2.11 - 2.39	109	5.649	0.087	1.5	5.65	5.31 - 5.99
COULTER AcT diff/diff 2	54	2.300	0.059	2.6	2.31	2.16 - 2.44	56	5.571	0.122	2.2	5.57	5.23 - 5.91
Diatron Abacus 3 CP	5	2.273	0.017	0.8	2.28	2.13 - 2.41	5	5.690	0.127	2.2	5.67	5.34 - 6.04
Horiba ABX Micros/45/60	54	2.277	0.042	1.8	2.27	2.14 - 2.42	55	5.620	0.093	1.7	5.62	5.28 - 5.96

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10^{12}/L) cont'd

	Specimen HD-8						Specimen HD-9					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	312	5.624	0.123	2.2	5.63	5.28 - 5.97	311	4.519	0.092	2.0	4.52	4.24 - 4.80
All Abbott Cell-Dyn Instruments	82	5.584	0.137	2.5	5.60	5.24 - 5.92	83	4.522	0.106	2.3	4.52	4.25 - 4.80
All ABX Instruments	56	5.620	0.098	1.8	5.62	5.28 - 5.96	55	4.533	0.081	1.8	4.54	4.26 - 4.81
All Boule (CDS) Instruments	113	5.666	0.091	1.6	5.66	5.32 - 6.01	110	4.508	0.068	1.5	4.51	4.23 - 4.78
All COULTER Instruments	58	5.612	0.170	3.0	5.60	5.27 - 5.95	56	4.536	0.111	2.5	4.54	4.26 - 4.81
Abbott Cell-Dyn 1700	5	5.628	0.208	3.7	5.62	5.29 - 5.97	5	4.578	0.114	2.5	4.55	4.30 - 4.86
Abbott Cell-Dyn 1800	16	5.569	0.191	3.4	5.52	5.23 - 5.91	16	4.527	0.114	2.5	4.51	4.25 - 4.80
Abbott Cell-Dyn Emerald	61	5.585	0.115	2.1	5.60	5.24 - 5.93	62	4.516	0.104	2.3	4.53	4.24 - 4.79
Boule (CDS) Medonic M series	111	5.669	0.089	1.6	5.66	5.32 - 6.01	108	4.510	0.067	1.5	4.51	4.23 - 4.79
COULTER AcT diff/diff 2	56	5.610	0.172	3.1	5.59	5.27 - 5.95	54	4.534	0.113	2.5	4.54	4.26 - 4.81
Diatron Abacus 3 CP	5	5.770	0.185	3.2	5.84	5.42 - 6.12	5	4.468	0.046	1.0	4.46	4.19 - 4.74
Horiba ABX Micros/45/60	56	5.620	0.098	1.8	5.62	5.28 - 5.96	55	4.533	0.081	1.8	4.54	4.26 - 4.81

	Specimen HD-10					
All Method	311	6.152	0.135	2.2	6.16	5.78 - 6.53
All Abbott Cell-Dyn Instruments	81	6.096	0.155	2.5	6.10	5.73 - 6.47
All ABX Instruments	54	6.219	0.113	1.8	6.22	5.84 - 6.60
All Boule (CDS) Instruments	112	6.157	0.091	1.5	6.15	5.78 - 6.53
All COULTER Instruments	56	6.161	0.154	2.5	6.17	5.79 - 6.54
Abbott Cell-Dyn 1700	5	6.160	0.254	4.1	6.18	5.79 - 6.53
Abbott Cell-Dyn 1800	16	5.994	0.159	2.6	5.96	5.63 - 6.36
Abbott Cell-Dyn Emerald	60	6.119	0.134	2.2	6.11	5.75 - 6.49
Boule (CDS) Medonic M series	110	6.158	0.091	1.5	6.16	5.78 - 6.53
COULTER AcT diff/diff 2	54	6.161	0.157	2.5	6.17	5.79 - 6.54
Diatron Abacus 3 CP	5	6.113	0.193	3.2	6.08	5.74 - 6.48
Horiba ABX Micros/45/60	54	6.219	0.113	1.8	6.22	5.84 - 6.60

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

	Specimen HD-6						Specimen HD-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	312	5.98	0.15	2.6	6.0	5.5 - 6.4	312	18.27	0.38	2.1	18.3	16.9 - 19.6
All Abbott Cell-Dyn Instruments	82	5.96	0.22	3.7	6.0	5.5 - 6.4	80	18.18	0.42	2.3	18.2	16.9 - 19.5
All ABX Instruments	56	6.04	0.11	1.9	6.0	5.6 - 6.5	55	18.26	0.28	1.5	18.2	16.9 - 19.6
All Boule (CDS) Instruments	112	6.01	0.08	1.4	6.0	5.5 - 6.5	112	18.42	0.30	1.6	18.4	17.1 - 19.8
All COULTER Instruments	57	5.87	0.19	3.2	5.9	5.4 - 6.3	56	18.10	0.41	2.2	18.1	16.8 - 19.4
Abbott Cell-Dyn 1700	5	6.06	0.21	3.4	6.1	5.6 - 6.5	5	17.96	1.34	7.4	18.2	16.7 - 19.3
Abbott Cell-Dyn 1800	15	6.23	0.19	3.1	6.2	5.7 - 6.7	15	18.41	0.49	2.7	18.5	17.1 - 19.7
Abbott Cell-Dyn Emerald	62	5.88	0.17	2.9	5.9	5.4 - 6.3	60	18.12	0.34	1.9	18.1	16.8 - 19.4
Boule (CDS) Medonic M series	110	6.01	0.09	1.5	6.0	5.5 - 6.5	109	18.42	0.28	1.5	18.4	17.1 - 19.8
COULTER AcT diff/diff 2	56	5.87	0.19	3.2	5.9	5.4 - 6.3	55	18.10	0.41	2.3	18.1	16.8 - 19.4
Diatron Abacus 3 CP	5	6.17	0.38	6.1	6.0	5.7 - 6.6	5	18.88	0.68	3.6	19.1	17.5 - 20.2
HemoCue 201/+	5	6.07	0.12	1.9	6.0	5.6 - 6.5	5	17.83	0.15	0.9	17.8	16.5 - 19.1
Horiba ABX Micros/45/60	56	6.04	0.11	1.9	6.0	5.6 - 6.5	55	18.26	0.28	1.5	18.2	16.9 - 19.6

	Specimen HD-8						Specimen HD-9					
All Method	313	18.30	0.36	2.0	18.3	17.0 - 19.6	314	13.45	0.26	1.9	13.5	12.5 - 14.4
All Abbott Cell-Dyn Instruments	80	18.23	0.39	2.2	18.2	16.9 - 19.6	82	13.44	0.31	2.3	13.4	12.4 - 14.4
All ABX Instruments	56	18.29	0.30	1.6	18.3	17.0 - 19.6	55	13.55	0.22	1.6	13.5	12.6 - 14.6
All Boule (CDS) Instruments	114	18.43	0.29	1.6	18.4	17.1 - 19.8	112	13.44	0.19	1.4	13.5	12.5 - 14.4
All COULTER Instruments	55	18.14	0.41	2.3	18.2	16.8 - 19.5	56	13.40	0.34	2.6	13.4	12.4 - 14.4
Abbott Cell-Dyn 1700	5	18.48	0.77	4.2	18.2	17.1 - 19.8	5	13.30	0.63	4.7	13.5	12.3 - 14.3
Abbott Cell-Dyn 1800	16	18.68	0.72	3.9	18.6	17.3 - 20.0	16	13.68	0.39	2.8	13.8	12.7 - 14.7
Abbott Cell-Dyn Emerald	61	18.14	0.32	1.8	18.1	16.8 - 19.5	60	13.34	0.23	1.7	13.3	12.4 - 14.3
Boule (CDS) Medonic M series	110	18.43	0.27	1.5	18.4	17.1 - 19.8	109	13.44	0.19	1.4	13.5	12.5 - 14.4
COULTER AcT diff/diff 2	54	18.14	0.41	2.3	18.2	16.8 - 19.5	54	13.38	0.31	2.3	13.4	12.4 - 14.4
Diatron Abacus 3 CP	5	18.50	0.65	3.5	18.5	17.2 - 19.8	5	13.48	0.10	0.7	13.5	12.5 - 14.5
HemoCue 201/+	5	18.03	0.67	3.7	17.7	16.7 - 19.3	5	13.67	0.21	1.5	13.6	12.7 - 14.7
Horiba ABX Micros/45/60	56	18.29	0.30	1.6	18.3	17.0 - 19.6	55	13.55	0.22	1.6	13.5	12.6 - 14.6

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

Specimen HD-10

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	312	17.37	0.32	1.8	17.4	16.1 - 18.6
All Abbott Cell-Dyn Instruments	81	17.37	0.37	2.1	17.4	16.1 - 18.6
All ABX Instruments	56	17.47	0.29	1.7	17.5	16.2 - 18.7
All Boule (CDS) Instruments	113	17.35	0.26	1.5	17.3	16.1 - 18.6
All COULTER Instruments	55	17.29	0.36	2.1	17.3	16.0 - 18.6
Abbott Cell-Dyn 1700	5	17.18	0.84	4.9	17.4	15.9 - 18.4
Abbott Cell-Dyn 1800	16	17.51	0.47	2.7	17.6	16.2 - 18.8
Abbott Cell-Dyn Emerald	60	17.35	0.32	1.8	17.3	16.1 - 18.6
Boule (CDS) Medonic M series	110	17.35	0.24	1.4	17.3	16.1 - 18.6
COULTER AcT diff/diff 2	54	17.29	0.36	2.1	17.3	16.0 - 18.6
Diatron Abacus 3 CP	5	17.13	0.68	4.0	17.2	15.9 - 18.4
HemoCue 201/+	5	17.63	0.40	2.3	17.4	16.3 - 18.9
Horiba ABX Micros/45/60	56	17.47	0.29	1.7	17.5	16.2 - 18.7

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

	Specimen HD-6						**Specimen HD-7**					
Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	315	16.78	1.20	7.1	16.5	15.7 - 17.8	312	51.94	2.17	4.2	51.4	48.8 - 55.1
All Abbott Cell-Dyn Instruments	82	18.33	0.62	3.4	18.4	17.2 - 19.5	79	54.71	1.70	3.1	54.6	51.4 - 58.0
All ABX Instruments	56	16.22	0.43	2.6	16.2	15.2 - 17.2	55	50.89	1.11	2.2	50.9	47.8 - 54.0
All Boule (CDS) Instruments	113	15.69	0.44	2.8	15.7	14.7 - 16.7	112	50.81	1.23	2.4	50.7	47.7 - 53.9
All COULTER Instruments	57	17.12	0.56	3.3	17.1	16.0 - 18.2	58	51.48	1.33	2.6	51.5	48.3 - 54.6
Abbott Cell-Dyn 1700	5	17.30	0.34	2.0	17.3	16.2 - 18.4	5	51.80	2.25	4.3	52.3	48.6 - 55.0
Abbott Cell-Dyn 1800	15	18.35	0.56	3.0	18.3	17.2 - 19.5	15	53.69	1.78	3.3	54.2	50.4 - 57.0
Abbott Cell-Dyn Emerald	62	18.40	0.58	3.2	18.4	17.2 - 19.6	60	55.10	1.53	2.8	55.0	51.7 - 58.5
Boule (CDS) Medonic M series	110	15.69	0.44	2.8	15.7	14.7 - 16.7	109	50.83	1.23	2.4	50.7	47.7 - 53.9
COULTER AcT diff/diff 2	55	17.12	0.57	3.3	17.1	16.0 - 18.2	56	51.45	1.35	2.6	51.5	48.3 - 54.6
Diatron Abacus 3 CP	5	17.90	0.14	0.8	18.0	16.8 - 19.0	5	56.40	1.31	2.3	56.2	53.0 - 59.8
Horiba ABX Micros/45/60	56	16.22	0.43	2.6	16.2	15.2 - 17.2	55	50.89	1.11	2.2	50.9	47.8 - 54.0

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

	Specimen HD-8						Specimen HD-9					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	314	52.15	2.17	4.2	51.6	49.0 - 55.3	314	38.17	2.13	5.6	37.8	35.8 - 40.5
All Abbott Cell-Dyn Instruments	81	54.80	1.50	2.7	54.8	51.5 - 58.1	83	40.73	1.19	2.9	40.8	38.2 - 43.2
All ABX Instruments	55	50.83	0.99	2.0	50.9	47.7 - 53.9	56	37.54	0.89	2.4	37.6	35.2 - 39.8
All Boule (CDS) Instruments	112	50.92	1.14	2.2	50.9	47.8 - 54.0	110	36.21	0.87	2.4	36.3	34.0 - 38.4
All COULTER Instruments	56	51.63	1.37	2.7	51.8	48.5 - 54.8	55	38.49	1.04	2.7	38.5	36.1 - 40.9
Abbott Cell-Dyn 1700	5	52.26	2.35	4.5	51.7	49.1 - 55.4	5	39.20	1.29	3.3	39.7	36.8 - 41.6
Abbott Cell-Dyn 1800	16	53.98	1.72	3.2	54.3	50.7 - 57.3	16	40.03	1.12	2.8	40.0	37.6 - 42.5
Abbott Cell-Dyn Emerald	61	55.14	1.25	2.3	55.0	51.8 - 58.5	62	41.04	1.03	2.5	41.1	38.5 - 43.6
Boule (CDS) Medonic M series	109	50.94	1.14	2.2	50.9	47.8 - 54.1	107	36.23	0.87	2.4	36.3	34.0 - 38.5
COULTER AcT diff/diff 2	54	51.59	1.38	2.7	51.8	48.4 - 54.7	53	38.50	1.05	2.7	38.5	36.1 - 40.9
Diatron Abacus 3 CP	5	56.00	2.74	4.9	56.3	52.6 - 59.4	5	40.75	0.56	1.4	40.7	38.3 - 43.2
Horiba ABX Micros/45/60	55	50.83	0.99	2.0	50.9	47.7 - 53.9	56	37.54	0.89	2.4	37.6	35.2 - 39.8

	Specimen HD-10					
All Method	312	50.98	1.96	3.8	50.8	47.9 - 54.1
All Abbott Cell-Dyn Instruments	80	53.04	1.58	3.0	53.1	49.8 - 56.3
All ABX Instruments	54	50.66	1.18	2.3	50.9	47.6 - 53.7
All Boule (CDS) Instruments	112	49.54	1.13	2.3	49.7	46.5 - 52.6
All COULTER Instruments	55	50.83	1.18	2.3	50.9	47.7 - 53.9
Abbott Cell-Dyn 1700	5	51.14	2.21	4.3	52.3	48.0 - 54.3
Abbott Cell-Dyn 1800	15	51.75	1.40	2.7	51.6	48.6 - 54.9
Abbott Cell-Dyn Emerald	60	53.52	1.26	2.4	53.5	50.3 - 56.8
Boule (CDS) Medonic M series	109	49.55	1.13	2.3	49.7	46.5 - 52.6
COULTER AcT diff/diff 2	53	50.82	1.20	2.4	50.9	47.7 - 53.9
Diatron Abacus 3 CP	5	54.00	1.84	3.4	53.6	50.7 - 57.3
Horiba ABX Micros/45/60	54	50.66	1.18	2.3	50.9	47.6 - 53.7

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–PLATELET COUNT (x 10^9/L)

	Specimen HD-6						Specimen HD-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	311	64.5	7.0	10.8	64	48 - 81	312	514.3	28.1	5.5	515	385 - 643
All Abbott Cell-Dyn Instruments	79	64.6	10.4	16.1	62	48 - 81	80	513.3	37.4	7.3	509	384 - 642
All ABX Instruments	56	71.0	6.6	9.4	72	53 - 89	54	516.2	19.2	3.7	518	387 - 646
All Boule (CDS) Instruments	114	61.6	4.1	6.6	61	46 - 77	114	506.6	23.0	4.5	506	379 - 634
All COULTER Instruments	58	65.4	5.4	8.3	66	49 - 82	57	532.4	23.0	4.3	530	399 - 666
Abbott Cell-Dyn 1700	5	61.8	2.9	4.8	62	46 - 78	5	546.4	48.9	9.0	529	409 - 683
Abbott Cell-Dyn 1800	15	62.3	4.4	7.1	62	46 - 78	15	553.3	38.2	6.9	550	414 - 692
Abbott Cell-Dyn Emerald	61	66.8	13.7	20.5	62	50 - 84	61	502.9	31.7	6.3	499	377 - 629
Boule (CDS) Medonic M series	112	61.6	4.1	6.6	61	46 - 77	112	506.2	22.0	4.4	506	379 - 633
COULTER AcT diff/diff 2	56	65.5	5.4	8.3	66	49 - 82	55	533.3	22.8	4.3	531	399 - 667
Diatron Abacus 3 CP	5	63.3	1.0	1.5	64	47 - 80	5	505.0	17.8	3.5	509	378 - 632
Horiba ABX Micros/45/60	56	71.0	6.6	9.4	72	53 - 89	54	516.2	19.2	3.7	518	387 - 646

	Specimen HD-8						Specimen HD-9					
All Method	312	517.1	28.1	5.4	515	387 - 647	314	253.5	14.2	5.6	253	190 - 317
All Abbott Cell-Dyn Instruments	82	518.5	40.7	7.9	512	388 - 649	82	255.7	18.0	7.0	257	191 - 320
All ABX Instruments	56	515.1	23.8	4.6	516	386 - 644	55	257.1	14.0	5.5	260	192 - 322
All Boule (CDS) Instruments	115	510.0	22.0	4.3	511	382 - 638	114	249.8	11.1	4.4	251	187 - 313
All COULTER Instruments	58	539.5	25.8	4.8	539	404 - 675	58	254.3	13.6	5.4	253	190 - 318
Abbott Cell-Dyn 1700	5	541.6	29.8	5.5	547	406 - 677	5	262.6	18.0	6.9	262	196 - 329
Abbott Cell-Dyn 1800	16	570.3	42.8	7.5	560	427 - 713	16	255.6	21.2	8.3	257	191 - 320
Abbott Cell-Dyn Emerald	61	503.7	30.4	6.0	504	377 - 630	61	255.2	17.3	6.8	257	191 - 319
Boule (CDS) Medonic M series	113	509.8	21.7	4.3	511	382 - 638	112	249.7	10.8	4.3	251	187 - 313
COULTER AcT diff/diff 2	56	540.5	25.4	4.7	542	405 - 676	56	254.4	13.7	5.4	253	190 - 318
Diatron Abacus 3 CP	5	486.8	20.0	4.1	488	365 - 609	5	244.8	15.5	6.3	248	183 - 306
Horiba ABX Micros/45/60	56	515.1	23.8	4.6	516	386 - 644	55	257.1	14.0	5.5	260	192 - 322

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

Specimen HD-10

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	314	164.3	12.2	7.4	163	123 - 206
All Abbott Cell-Dyn Instruments	82	171.0	14.7	8.6	169	128 - 214
All ABX Instruments	54	164.6	9.0	5.5	166	123 - 206
All Boule (CDS) Instruments	114	157.8	9.3	5.9	157	118 - 198
All COULTER Instruments	56	168.4	8.2	4.9	168	126 - 211
Abbott Cell-Dyn 1700	5	178.8	12.8	7.2	175	134 - 224
Abbott Cell-Dyn 1800	16	179.1	14.7	8.2	182	134 - 224
Abbott Cell-Dyn Emerald	61	168.2	14.0	8.3	166	126 - 211
Boule (CDS) Medonic M series	112	157.8	8.9	5.7	157	118 - 198
COULTER AcT diff/diff 2	54	168.6	8.2	4.9	168	126 - 211
Diatron Abacus 3 CP	5	152.3	9.9	6.5	154	114 - 191
Horiba ABX Micros/45/60	54	164.6	9.0	5.5	166	123 - 206

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

	Specimen HD-6						Specimen HD-7					
Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	306	58.47	8.25	14.1	62.0	33.7 - 83.3	306	13.65	1.55	11.4	14.1	8.9 - 18.4
All Abbott Cell-Dyn Instruments	79	53.96	3.23	6.0	54.3	44.2 - 63.7	79	13.07	1.44	11.0	13.1	8.7 - 17.4
All ABX Instruments	53	45.15	5.50	12.2	44.2	28.6 - 61.7	53	11.55	1.27	10.9	11.3	7.7 - 15.4
All Boule (CDS) Instruments	110	65.14	1.91	2.9	65.2	59.4 - 70.9	111	14.61	0.50	3.4	14.5	13.1 - 16.2
All COULTER Instruments	54	63.79	2.12	3.3	64.2	57.4 - 70.2	53	14.32	0.57	4.0	14.4	12.6 - 16.1
Abbott Cell-Dyn 1700	5	56.70	3.32	5.8	58.3	46.7 - 66.7	5	12.42	0.57	4.6	12.3	10.7 - 14.2
Abbott Cell-Dyn 1800	15	49.39	3.02	6.1	48.1	40.3 - 58.5	15	10.96	0.65	5.9	10.9	9.0 - 13.0
Abbott Cell-Dyn Emerald	59	54.89	2.04	3.7	55.1	48.7 - 61.1	59	13.66	1.06	7.7	13.4	10.4 - 16.9
Boule (CDS) Medonic M series	110	65.14	1.91	2.9	65.2	59.4 - 70.9	111	14.61	0.50	3.4	14.5	13.1 - 16.2
COULTER AcT diff/diff 2	54	63.79	2.12	3.3	64.2	57.4 - 70.2	53	14.32	0.57	4.0	14.4	12.6 - 16.1
Diatron Abacus 3 CP	5	65.43	2.50	3.8	66.2	57.9 - 73.0	5	16.40	0.22	1.3	16.5	15.7 - 17.1
Horiba ABX Micros/45/60	53	45.15	5.50	12.2	44.2	28.6 - 61.7	53	11.55	1.27	10.9	11.3	7.7 - 15.4

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

	Specimen HD-8						Specimen HD-9					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	307	13.63	1.59	11.7	14.1	8.8 - 18.5	306	31.00	3.70	11.9	32.3	19.8 - 42.1
All Abbott Cell-Dyn Instruments	80	13.01	1.56	12.0	12.9	8.3 - 17.7	80	28.93	2.00	6.9	29.6	22.9 - 35.0
All ABX Instruments	53	11.52	1.16	10.1	11.4	8.0 - 15.1	53	25.32	2.75	10.8	24.9	17.0 - 33.6
All Boule (CDS) Instruments	111	14.61	0.52	3.5	14.6	13.0 - 16.2	111	33.72	1.07	3.2	33.6	30.5 - 37.0
All COULTER Instruments	53	14.40	0.44	3.0	14.3	13.0 - 15.8	53	33.46	1.15	3.5	33.6	29.9 - 37.0
Abbott Cell-Dyn 1700	5	12.14	0.46	3.8	12.1	10.7 - 13.6	5	29.66	0.73	2.5	29.7	27.4 - 31.9
Abbott Cell-Dyn 1800	16	10.87	0.61	5.6	10.8	9.0 - 12.7	16	25.80	1.43	5.5	25.3	21.5 - 30.1
Abbott Cell-Dyn Emerald	59	13.66	1.20	8.8	13.2	10.0 - 17.3	58	29.81	1.02	3.4	29.8	26.7 - 32.9
Boule (CDS) Medonic M series	111	14.61	0.52	3.5	14.6	13.0 - 16.2	111	33.72	1.07	3.2	33.6	30.5 - 37.0
COULTER AcT diff/diff 2	53	14.40	0.44	3.0	14.3	13.0 - 15.8	53	33.46	1.15	3.5	33.6	29.9 - 37.0
Diatron Abacus 3 CP	5	16.65	0.17	1.0	16.7	16.1 - 17.2	5	35.08	1.23	3.5	35.0	31.3 - 38.8
Horiba ABX Micros/45/60	53	11.52	1.16	10.1	11.4	8.0 - 15.1	53	25.32	2.75	10.8	24.9	17.0 - 33.6

	Specimen HD-10					
All Method	305	58.04	9.54	16.4	58.9	29.4 - 86.7
All Abbott Cell-Dyn Instruments	79	51.67	2.85	5.5	52.5	43.1 - 60.3
All ABX Instruments	53	44.15	4.64	10.5	43.4	30.2 - 58.1
All Boule (CDS) Instruments	110	68.40	1.38	2.0	68.6	64.2 - 72.6
All COULTER Instruments	54	59.52	1.12	1.9	59.4	56.1 - 62.9
Abbott Cell-Dyn 1700	5	53.02	2.21	4.2	53.1	46.3 - 59.7
Abbott Cell-Dyn 1800	16	46.98	1.95	4.2	47.2	41.1 - 52.9
Abbott Cell-Dyn Emerald	58	52.84	1.43	2.7	53.0	48.5 - 57.2
Boule (CDS) Medonic M series	110	68.40	1.38	2.0	68.6	64.2 - 72.6
COULTER AcT diff/diff 2	54	59.52	1.12	1.9	59.4	56.1 - 62.9
Diatron Abacus 3 CP	5	57.85	0.66	1.1	57.8	55.8 - 59.9
Horiba ABX Micros/45/60	53	44.15	4.64	10.5	43.4	30.2 - 58.1

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

	Specimen HD-6						Specimen HD-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	306	10.47	6.89	65.8	7.4	0.0 - 31.2	308	4.80	1.57	32.7	4.5	0.0 - 9.6
All Abbott Cell-Dyn Instruments	80	13.46	3.14	23.4	12.4	4.0 - 22.9	79	3.76	1.52	40.3	3.0	0.0 - 8.4
All ABX Instruments	53	22.73	3.90	17.1	22.8	11.0 - 34.5	51	4.24	0.44	10.3	4.3	2.9 - 5.6
All Boule (CDS) Instruments	110	5.77	1.61	28.0	5.7	0.9 - 10.7	110	6.31	0.54	8.6	6.2	4.6 - 8.0
All COULTER Instruments	54	5.10	1.12	21.9	5.0	1.7 - 8.5	54	3.84	0.42	11.1	3.9	2.5 - 5.2
Abbott Cell-Dyn 1700	5	12.36	2.32	18.8	12.1	5.4 - 19.4	5	5.20	0.24	4.7	5.2	4.4 - 6.0
Abbott Cell-Dyn 1800	15	18.60	2.16	11.6	17.9	12.1 - 25.1	15	6.54	0.38	5.9	6.5	5.3 - 7.7
Abbott Cell-Dyn Emerald	59	12.36	1.74	14.0	11.8	7.1 - 17.6	58	2.98	0.31	10.4	2.9	2.0 - 4.0
Boule (CDS) Medonic M series	110	5.77	1.61	28.0	5.7	0.9 - 10.7	110	6.31	0.54	8.6	6.2	4.6 - 8.0
COULTER AcT diff/diff 2	54	5.10	1.12	21.9	5.0	1.7 - 8.5	54	3.84	0.42	11.1	3.9	2.5 - 5.2
Diatron Abacus 3 CP	5	5.43	0.76	14.1	5.6	3.1 - 7.8	5	6.75	0.26	3.9	6.7	5.9 - 7.6
Horiba ABX Micros/45/60	53	22.73	3.90	17.1	22.8	11.0 - 34.5	51	4.24	0.44	10.3	4.3	2.9 - 5.6

	Specimen HD-8						Specimen HD-9					
All Method	308	4.80	1.53	31.9	4.5	0.2 - 9.4	304	8.19	1.96	24.0	7.9	2.3 - 14.1
All Abbott Cell-Dyn Instruments	80	3.89	1.50	38.7	3.2	0.0 - 8.4	80	8.02	2.45	30.6	6.9	0.6 - 15.4
All ABX Instruments	51	4.23	0.42	9.9	4.3	2.9 - 5.5	52	10.57	1.43	13.5	10.8	6.2 - 14.9
All Boule (CDS) Instruments	110	6.27	0.64	10.2	6.3	4.3 - 8.2	111	8.20	0.90	11.0	8.3	5.5 - 10.9
All COULTER Instruments	54	3.84	0.51	13.3	3.8	2.3 - 5.4	54	6.27	0.61	9.6	6.3	4.4 - 8.1
Abbott Cell-Dyn 1700	5	5.42	0.28	5.1	5.5	4.5 - 6.3	5	9.58	0.61	6.3	9.6	7.7 - 11.4
Abbott Cell-Dyn 1800	16	6.56	0.48	7.3	6.6	5.1 - 8.0	16	12.46	0.85	6.8	12.6	9.9 - 15.1
Abbott Cell-Dyn Emerald	59	3.03	0.31	10.4	3.0	2.0 - 4.0	59	6.68	0.73	11.0	6.5	4.4 - 8.9
Boule (CDS) Medonic M series	110	6.27	0.64	10.2	6.3	4.3 - 8.2	111	8.20	0.90	11.0	8.3	5.5 - 10.9
COULTER AcT diff/diff 2	54	3.84	0.51	13.3	3.8	2.3 - 5.4	54	6.27	0.61	9.6	6.3	4.4 - 8.1
Diatron Abacus 3 CP	5	6.55	0.24	3.6	6.7	5.8 - 7.3	5	8.90	0.83	9.4	8.9	6.4 - 11.4
Horiba ABX Micros/45/60	51	4.23	0.42	9.9	4.3	2.9 - 5.5	52	10.57	1.43	13.5	10.8	6.2 - 14.9

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

Specimen HD-10

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	304	12.84	5.25	40.9	12.6	0.0 - 28.7
All Abbott Cell-Dyn Instruments	80	15.04	4.52	30.0	13.1	1.4 - 28.6
All ABX Instruments	52	19.76	1.89	9.6	20.0	14.0 - 25.5
All Boule (CDS) Instruments	110	7.36	1.21	16.5	7.4	3.7 - 11.0
All COULTER Instruments	54	13.93	1.00	7.2	14.2	10.9 - 17.0
Abbott Cell-Dyn 1700	5	18.22	1.06	5.8	18.0	15.0 - 21.5
Abbott Cell-Dyn 1800	16	23.18	1.22	5.3	23.4	19.5 - 26.9
Abbott Cell-Dyn Emerald	57	12.59	1.10	8.7	12.4	9.2 - 15.9
Boule (CDS) Medonic M series	110	7.36	1.21	16.5	7.4	3.7 - 11.0
COULTER AcT diff/diff 2	54	13.93	1.00	7.2	14.2	10.9 - 17.0
Diatron Abacus 3 CP	5	16.98	0.49	2.9	17.0	15.4 - 18.5
Horiba ABX Micros/45/60	52	19.76	1.89	9.6	20.0	14.0 - 25.5

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

	Specimen HD-6						Specimen HD-7					
Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	307	30.94	2.37	7.7	31.0	23.8 - 38.1	306	81.47	2.34	2.9	81.6	74.4 - 88.5
All Abbott Cell-Dyn Instruments	79	32.50	1.42	4.4	32.5	28.2 - 36.8	79	83.14	1.18	1.4	83.4	79.5 - 86.7
All ABX Instruments	53	32.16	2.32	7.2	32.3	25.1 - 39.2	53	84.17	0.97	1.2	84.5	81.2 - 87.1
All Boule (CDS) Instruments	111	29.18	1.85	6.3	29.2	23.6 - 34.8	111	79.08	0.74	0.9	79.1	76.8 - 81.3
All COULTER Instruments	53	31.00	1.58	5.1	30.7	26.2 - 35.8	53	81.81	0.59	0.7	81.8	80.0 - 83.6
Abbott Cell-Dyn 1700	5	30.94	1.21	3.9	30.4	27.3 - 34.6	5	82.38	0.75	0.9	82.5	80.1 - 84.7
Abbott Cell-Dyn 1800	15	32.01	1.76	5.5	32.0	26.7 - 37.3	15	82.50	0.91	1.1	82.6	79.7 - 85.3
Abbott Cell-Dyn Emerald	59	32.76	1.23	3.8	32.7	29.0 - 36.5	59	83.37	1.20	1.4	83.8	79.7 - 87.0
Boule (CDS) Medonic M series	111	29.18	1.85	6.3	29.2	23.6 - 34.8	111	79.08	0.74	0.9	79.1	76.8 - 81.3
COULTER AcT diff/diff 2	53	31.00	1.58	5.1	30.7	26.2 - 35.8	53	81.81	0.59	0.7	81.8	80.0 - 83.6
Diatron Abacus 3 CP	5	28.45	1.52	5.3	28.7	23.8 - 33.1	5	76.97	0.15	0.2	77.0	76.5 - 77.5
Horiba ABX Micros/45/60	53	32.16	2.32	7.2	32.3	25.1 - 39.2	53	84.17	0.97	1.2	84.5	81.2 - 87.1

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

	Specimen HD-8						Specimen HD-9					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	308	81.49	2.36	2.9	81.7	74.4 - 88.6	307	60.76	2.89	4.8	60.4	52.0 - 69.5
All Abbott Cell-Dyn Instruments	80	83.10	1.27	1.5	83.3	79.2 - 87.0	79	63.06	1.33	2.1	63.4	59.0 - 67.1
All ABX Instruments	53	84.23	0.87	1.0	84.5	81.6 - 86.9	52	64.21	1.49	2.3	64.4	59.7 - 68.7
All Boule (CDS) Instruments	113	79.09	0.86	1.1	79.0	76.5 - 81.7	112	58.01	1.22	2.1	58.1	54.3 - 61.7
All COULTER Instruments	53	81.75	0.63	0.8	81.7	79.8 - 83.7	53	60.23	1.24	2.1	60.1	56.5 - 64.0
Abbott Cell-Dyn 1700	5	82.44	0.54	0.7	82.7	80.8 - 84.1	5	60.76	0.72	1.2	60.7	58.6 - 63.0
Abbott Cell-Dyn 1800	16	82.58	0.79	1.0	82.7	80.2 - 85.0	16	61.74	1.58	2.6	62.1	57.0 - 66.5
Abbott Cell-Dyn Emerald	59	83.30	1.37	1.6	83.7	79.1 - 87.5	59	63.51	1.07	1.7	63.6	60.2 - 66.8
Boule (CDS) Medonic M series	113	79.09	0.86	1.1	79.0	76.5 - 81.7	112	58.01	1.22	2.1	58.1	54.3 - 61.7
COULTER AcT diff/diff 2	53	81.75	0.63	0.8	81.7	79.8 - 83.7	53	60.23	1.24	2.1	60.1	56.5 - 64.0
Diatron Abacus 3 CP	5	76.80	0.29	0.4	76.8	75.9 - 77.7	5	56.03	0.48	0.9	56.2	54.5 - 57.5
Horiba ABX Micros/45/60	53	84.23	0.87	1.0	84.5	81.6 - 86.9	52	64.21	1.49	2.3	64.4	59.7 - 68.7

	Specimen HD-10					
All Method	307	29.06	5.28	18.2	27.1	13.2 - 44.9
All Abbott Cell-Dyn Instruments	79	33.21	2.50	7.5	34.2	25.7 - 40.8
All ABX Instruments	53	36.12	3.12	8.7	37.0	26.7 - 45.5
All Boule (CDS) Instruments	112	24.21	1.64	6.8	24.3	19.2 - 29.2
All COULTER Instruments	54	26.54	1.32	5.0	26.5	22.5 - 30.5
Abbott Cell-Dyn 1700	5	28.76	1.54	5.4	28.9	24.1 - 33.4
Abbott Cell-Dyn 1800	16	29.84	1.33	4.5	29.8	25.8 - 33.9
Abbott Cell-Dyn Emerald	57	34.59	1.01	2.9	34.6	31.5 - 37.7
Boule (CDS) Medonic M series	112	24.21	1.64	6.8	24.3	19.2 - 29.2
COULTER AcT diff/diff 2	54	26.54	1.32	5.0	26.5	22.5 - 30.5
Diatron Abacus 3 CP	5	25.18	0.76	3.0	25.1	22.8 - 27.5
Horiba ABX Micros/45/60	53	36.12	3.12	8.7	37.0	26.7 - 45.5

HEMATOLOGY W/ 5-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10^9/L)

	Specimen DIF-6						Specimen DIF-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	4.10	0.17	4.1	4.2	3.4 - 4.8	19	21.61	0.64	3.0	21.6	18.3 - 24.9
All COULTER Instruments	19	4.10	0.17	4.1	4.2	3.4 - 4.8	19	21.61	0.64	3.0	21.6	18.3 - 24.9
Coulter DxH 500	5	3.97	0.21	5.2	3.9	3.3 - 4.6	5	21.07	0.42	2.0	21.2	17.9 - 24.3
Coulter DxH 520	8	4.11	0.18	4.4	4.2	3.4 - 4.8	8	21.63	0.60	2.8	21.7	18.3 - 24.9
COULTER UniCel DxH 600	5	4.20	0.01	0.0	4.2	3.5 - 4.9	5	21.93	0.84	3.8	21.5	18.6 - 25.3
	Specimen DIF-8						**Specimen DIF-9**					
All Method	19	21.64	0.55	2.5	21.6	18.3 - 24.9	19	9.27	0.43	4.6	9.3	7.8 - 10.7
All COULTER Instruments	19	21.64	0.55	2.5	21.6	18.3 - 24.9	19	9.27	0.43	4.6	9.3	7.8 - 10.7
Coulter DxH 500	5	21.33	0.38	1.8	21.5	18.1 - 24.6	5	8.93	0.15	1.7	8.9	7.5 - 10.3
Coulter DxH 520	8	21.73	0.61	2.8	21.9	18.4 - 25.0	8	9.11	0.22	2.4	9.2	7.7 - 10.5
COULTER UniCel DxH 600	5	21.50	0.53	2.5	21.3	18.2 - 24.8	5	9.77	0.40	4.1	10.0	8.3 - 11.3
	Specimen DIF-10											
All Method	19	24.85	0.64	2.6	24.9	21.1 - 28.6						
All COULTER Instruments	19	24.85	0.64	2.6	24.9	21.1 - 28.6						
Coulter DxH 500	5	24.57	0.58	2.4	24.9	20.8 - 28.3						
Coulter DxH 520	8	25.00	0.67	2.7	25.2	21.2 - 28.8						
COULTER UniCel DxH 600	5	24.67	0.81	3.3	24.2	20.9 - 28.4						

HEMATOLOGY W/ 5-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10^{12}/L)

	Specimen DIF-6						Specimen DIF-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	2.548	0.053	2.1	2.55	2.39 - 2.71	19	5.353	0.103	1.9	5.35	5.03 - 5.68
All COULTER Instruments	19	2.548	0.053	2.1	2.55	2.39 - 2.71	19	5.353	0.103	1.9	5.35	5.03 - 5.68
Coulter DxH 500	5	2.517	0.112	4.5	2.49	2.36 - 2.67	5	5.293	0.099	1.9	5.34	4.97 - 5.62
Coulter DxH 520	8	2.563	0.029	1.1	2.56	2.40 - 2.72	8	5.405	0.085	1.6	5.40	5.08 - 5.73
COULTER UniCel DxH 600	5	2.530	0.026	1.0	2.54	2.37 - 2.69	5	5.297	0.130	2.5	5.29	4.97 - 5.62
	Specimen DIF-8						**Specimen DIF-9**					
All Method	19	5.388	0.098	1.8	5.40	5.06 - 5.72	19	4.110	0.068	1.7	4.10	3.86 - 4.36
All COULTER Instruments	19	5.388	0.098	1.8	5.40	5.06 - 5.72	19	4.110	0.068	1.7	4.10	3.86 - 4.36
Coulter DxH 500	5	5.360	0.108	2.0	5.33	5.03 - 5.69	5	4.077	0.040	1.0	4.10	3.83 - 4.33
Coulter DxH 520	8	5.429	0.081	1.5	5.44	5.10 - 5.76	8	4.119	0.082	2.0	4.11	3.87 - 4.37
COULTER UniCel DxH 600	5	5.290	0.098	1.9	5.26	4.97 - 5.61	5	4.107	0.067	1.6	4.09	3.86 - 4.36
	Specimen DIF-10											
All Method	19	6.233	0.100	1.6	6.25	5.85 - 6.61						
All COULTER Instruments	19	6.233	0.100	1.6	6.25	5.85 - 6.61						
Coulter DxH 500	5	6.187	0.115	1.9	6.19	5.81 - 6.56						
Coulter DxH 520	8	6.260	0.073	1.2	6.27	5.88 - 6.64						
COULTER UniCel DxH 600	5	6.177	0.151	2.5	6.11	5.80 - 6.55						

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

	Specimen DIF-6						Specimen DIF-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	5.40	0.25	4.6	5.3	5.0 - 5.8	19	17.07	0.33	1.9	17.2	15.8 - 18.3
All COULTER Instruments	19	5.40	0.25	4.6	5.3	5.0 - 5.8	19	17.07	0.33	1.9	17.2	15.8 - 18.3
Coulter DxH 500	5	5.20	0.20	3.8	5.2	4.8 - 5.6	5	17.00	0.52	3.1	17.3	15.8 - 18.2
Coulter DxH 520	8	5.31	0.16	3.1	5.3	4.9 - 5.7	8	17.15	0.25	1.5	17.2	15.9 - 18.4
COULTER UniCel DxH 600	5	5.73	0.06	1.0	5.7	5.3 - 6.2	5	17.13	0.23	1.3	17.0	15.9 - 18.4
	Specimen DIF-8						**Specimen DIF-9**					
All Method	19	17.16	0.23	1.3	17.1	15.9 - 18.4	19	11.43	0.34	2.9	11.4	10.6 - 12.3
All COULTER Instruments	19	17.16	0.23	1.3	17.1	15.9 - 18.4	19	11.43	0.34	2.9	11.4	10.6 - 12.3
Coulter DxH 500	5	17.10	0.36	2.1	17.0	15.9 - 18.3	5	11.20	0.30	2.7	11.2	10.4 - 12.0
Coulter DxH 520	8	17.24	0.22	1.3	17.4	16.0 - 18.5	8	11.31	0.24	2.1	11.3	10.5 - 12.2
COULTER UniCel DxH 600	5	17.07	0.12	0.7	17.0	15.8 - 18.3	5	11.87	0.06	0.5	11.9	11.0 - 12.7
	Specimen DIF-10											
All Method	19	19.32	0.49	2.5	19.4	17.9 - 20.7						
All COULTER Instruments	19	19.32	0.49	2.5	19.4	17.9 - 20.7						
Coulter DxH 500	5	19.17	0.68	3.6	19.4	17.8 - 20.6						
Coulter DxH 520	8	19.15	0.37	1.9	19.2	17.8 - 20.5						
COULTER UniCel DxH 600	5	19.83	0.40	2.0	19.6	18.4 - 21.3						

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

	Specimen DIF-6						Specimen DIF-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	18.38	0.51	2.8	18.5	17.2 - 19.5	19	55.05	1.27	2.3	55.1	51.7 - 58.4
All COULTER Instruments	19	18.38	0.51	2.8	18.5	17.2 - 19.5	19	55.05	1.27	2.3	55.1	51.7 - 58.4
Coulter DxH 500	5	17.93	0.75	4.2	17.9	16.8 - 19.1	5	53.70	1.10	2.0	53.7	50.4 - 57.0
Coulter DxH 520	8	18.31	0.29	1.6	18.4	17.2 - 19.5	8	55.20	1.16	2.1	55.5	51.8 - 58.6
COULTER UniCel DxH 600	5	18.67	0.21	1.1	18.6	17.5 - 19.8	5	55.77	1.21	2.2	55.9	52.4 - 59.2

	Specimen DIF-8						Specimen DIF-9					
All Method	19	55.42	1.05	1.9	55.5	52.0 - 58.8	19	36.81	1.14	3.1	36.5	34.5 - 39.1
All COULTER Instruments	19	55.42	1.05	1.9	55.5	52.0 - 58.8	19	36.81	1.14	3.1	36.5	34.5 - 39.1
Coulter DxH 500	5	54.50	0.52	1.0	54.2	51.2 - 57.8	5	35.97	0.50	1.4	35.9	33.8 - 38.2
Coulter DxH 520	8	55.41	1.03	1.9	55.5	52.0 - 58.8	8	36.53	1.12	3.1	36.2	34.3 - 38.8
COULTER UniCel DxH 600	5	55.80	0.92	1.6	55.6	52.4 - 59.2	5	37.90	0.40	1.1	37.9	35.6 - 40.2

	Specimen DIF-10					
All Method	19	63.95	1.40	2.2	64.0	60.1 - 67.8
All COULTER Instruments	19	63.95	1.40	2.2	64.0	60.1 - 67.8
Coulter DxH 500	5	62.87	1.72	2.7	62.3	59.0 - 66.7
Coulter DxH 520	8	63.75	0.94	1.5	63.7	59.9 - 67.6
COULTER UniCel DxH 600	5	64.73	1.38	2.1	64.2	60.8 - 68.7

HEMATOLOGY W/ 5-PART DIFFERENTIAL–PLATELET COUNT (x 10^9/L)

	Specimen DIF-6						Specimen DIF-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	81.6	4.2	5.1	80	61 - 102	19	487.9	26.6	5.5	490	365 - 610
All COULTER Instruments	19	81.6	4.2	5.1	80	61 - 102	19	487.9	26.6	5.5	490	365 - 610
Coulter DxH 500	5	84.0	4.6	5.5	85	63 - 105	5	452.0	16.1	3.6	450	339 - 565
Coulter DxH 520	8	82.0	4.1	5.0	82	61 - 103	8	497.8	21.5	4.3	503	373 - 623
COULTER UniCel DxH 600	5	79.7	3.8	4.8	78	59 - 100	5	497.0	25.2	5.1	484	372 - 622
	Specimen DIF-8						**Specimen DIF-9**					
All Method	19	490.7	27.4	5.6	489	368 - 614	19	265.3	18.9	7.1	262	198 - 332
All COULTER Instruments	19	490.7	27.4	5.6	489	368 - 614	19	265.3	18.9	7.1	262	198 - 332
Coulter DxH 500	5	452.7	23.4	5.2	448	339 - 566	5	246.3	7.8	3.2	244	184 - 308
Coulter DxH 520	8	508.0	17.3	3.4	507	381 - 635	8	276.4	15.9	5.8	280	207 - 346
COULTER UniCel DxH 600	5	484.3	14.6	3.0	482	363 - 606	5	264.3	10.7	4.0	262	198 - 331
	Specimen DIF-10											
All Method	19	545.5	41.2	7.6	557	409 - 682						
All COULTER Instruments	19	545.5	41.2	7.6	557	409 - 682						
Coulter DxH 500	5	482.0	13.7	2.9	485	361 - 603						
Coulter DxH 520	8	570.0	23.7	4.2	571	427 - 713						
COULTER UniCel DxH 600	5	558.7	4.7	0.8	557	419 - 699						

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

	Specimen DIF-6						Specimen DIF-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	43.57	6.59	15.1	41.2	23.8 - 63.4	19	36.59	19.18	52.4	26.7	0.0 - 94.2
All COULTER DxH 500/520	13	40.21	3.75	9.3	40.6	28.9 - 51.5	13	25.44	1.42	5.6	25.9	21.1 - 29.7
All COULTER Instruments	6	52.83	0.34	0.6	52.8	51.8 - 53.9	6	67.25	0.21	0.3	67.3	66.6 - 67.9
Coulter DxH 500	5	40.97	3.07	7.5	40.6	31.7 - 50.2	5	25.90	1.82	7.0	26.9	20.4 - 31.4
Coulter DxH 520	8	39.93	4.13	10.3	40.6	27.5 - 52.4	8	25.26	1.34	5.3	25.6	21.2 - 29.3
COULTER UniCel DxH 600	5	52.67	0.15	0.3	52.7	52.2 - 53.2	5	67.17	0.15	0.2	67.2	66.7 - 67.7

	Specimen DIF-8						Specimen DIF-9					
All Method	19	36.62	18.73	51.2	26.4	0.0 - 92.9	19	41.95	11.30	26.9	35.7	8.0 - 75.9
All COULTER DxH 500/520	13	25.74	1.59	6.2	25.7	20.9 - 30.6	13	35.42	1.72	4.8	35.4	30.2 - 40.6
All COULTER Instruments	6	66.55	0.79	1.2	66.8	64.1 - 69.0	6	59.90	0.14	0.2	59.9	59.4 - 60.4
Coulter DxH 500	5	25.47	1.07	4.2	25.7	22.2 - 28.7	5	35.47	1.35	3.8	35.5	31.4 - 39.6
Coulter DxH 520	8	25.84	1.80	7.0	25.9	20.4 - 31.3	8	35.40	1.92	5.4	35.2	29.6 - 41.2
COULTER UniCel DxH 600	5	66.93	0.25	0.4	66.9	66.1 - 67.7	5	59.93	0.15	0.3	59.9	59.4 - 60.4

	Specimen DIF-10					
All Method	19	36.87	19.59	53.1	26.4	0.0 - 95.7
All COULTER DxH 500/520	13	25.47	1.30	5.1	25.5	21.5 - 29.4
All COULTER Instruments	6	68.20	0.29	0.4	68.3	67.3 - 69.1
Coulter DxH 500	5	25.50	0.85	3.4	25.4	22.9 - 28.1
Coulter DxH 520	8	25.46	1.49	5.8	25.6	21.0 - 30.0
COULTER UniCel DxH 600	5	68.10	0.26	0.4	68.2	67.3 - 68.9

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

	Specimen DIF-6						Specimen DIF-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	10.39	17.00	163.6	0.5	0.0 - 61.5	19	5.99	9.08	151.4	0.7	0.0 - 33.3
All COULTER DxH 500/520	13	0.49	0.38	77.0	0.3	0.0 - 1.7	13	0.71	0.16	22.3	0.7	0.2 - 1.2
All COULTER Instruments	6	37.63	0.80	2.1	37.4	35.2 - 40.1	6	20.53	0.63	3.1	20.8	18.6 - 22.5
Coulter DxH 500	5	0.47	0.21	44.6	0.4	0.0 - 1.1	5	0.80	0.17	21.7	0.7	0.2 - 1.4
Coulter DxH 520	8	0.50	0.44	87.5	0.3	0.0 - 1.9	8	0.68	0.15	22.0	0.7	0.2 - 1.2
COULTER UniCel DxH 600	5	37.83	0.84	2.2	37.4	35.3 - 40.4	5	20.83	0.15	0.7	20.8	20.3 - 21.3

	Specimen DIF-8						Specimen DIF-9					
All Method	19	6.17	9.48	153.5	0.7	0.0 - 34.7	19	8.33	13.82	165.8	0.4	0.0 - 49.8
All COULTER DxH 500/520	13	0.65	0.11	17.2	0.7	0.3 - 1.0	13	0.29	0.12	42.0	0.3	0.0 - 0.7
All COULTER Instruments	6	21.35	0.44	2.1	21.2	20.0 - 22.7	6	30.45	1.21	4.0	30.3	26.8 - 34.1
Coulter DxH 500	5	0.70	0.10	14.3	0.7	0.4 - 1.0	5	0.33	0.12	34.6	0.4	0.0 - 0.7
Coulter DxH 520	8	0.64	0.12	18.6	0.7	0.2 - 1.0	8	0.28	0.13	46.6	0.3	0.0 - 0.7
COULTER UniCel DxH 600	5	21.40	0.53	2.5	21.2	19.8 - 23.0	5	30.87	1.08	3.5	30.4	27.6 - 34.2

	Specimen DIF-10					
All Method	19	5.91	8.80	148.8	0.9	0.0 - 32.4
All COULTER DxH 500/520	13	0.79	0.16	20.0	0.8	0.3 - 1.3
All COULTER Instruments	6	20.00	0.44	2.2	20.0	18.6 - 21.4
Coulter DxH 500	5	0.90	0.10	11.1	0.9	0.6 - 1.2
Coulter DxH 520	8	0.75	0.16	21.4	0.8	0.2 - 1.3
COULTER UniCel DxH 600	5	20.17	0.35	1.7	20.2	19.1 - 21.3

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

	Specimen DIF-6						Specimen DIF-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	0.61	0.81	132.9	0.2	0.0 - 3.1	19	1.99	3.25	163.0	0.1	0.0 - 11.8
All COULTER DxH 500/520	13	0.16	0.22	137.4	0.1	0.0 - 0.9	13	0.11	0.14	126.1	0.1	0.0 - 0.6
All COULTER Instruments	6	1.85	0.39	20.9	2.0	0.6 - 3.1	6	7.18	0.62	8.7	7.1	5.3 - 9.1
Coulter DxH 500	5	0.07	0.06	86.6	0.1	0.0 - 0.3	5	0.10	0.10	100.0	0.1	0.0 - 0.4
Coulter DxH 520	8	0.20	0.26	128.2	0.2	0.0 - 1.0	8	0.11	0.16	138.0	0.1	0.0 - 0.6
COULTER UniCel DxH 600	5	1.80	0.46	25.5	1.9	0.4 - 3.2	5	6.90	0.36	5.2	6.8	5.8 - 8.0

	Specimen DIF-8						Specimen DIF-9					
All Method	19	1.95	3.15	161.3	0.2	0.0 - 11.5	19	1.09	1.74	160.4	0.1	0.0 - 6.4
All COULTER DxH 500/520	13	0.13	0.09	71.1	0.1	0.0 - 0.4	13	0.10	0.09	89.4	0.1	0.0 - 0.4
All COULTER Instruments	6	6.98	0.66	9.4	6.9	5.0 - 9.0	6	3.80	0.88	23.0	4.0	1.1 - 6.5
Coulter DxH 500	5	0.13	0.06	43.3	0.1	0.0 - 0.4	5	0.10	0.10	100.0	0.1	0.0 - 0.4
Coulter DxH 520	8	0.13	0.10	82.8	0.1	0.0 - 0.5	8	0.10	0.09	92.6	0.1	0.0 - 0.4
COULTER UniCel DxH 600	5	6.70	0.44	6.5	6.5	5.3 - 8.1	5	3.50	0.78	22.3	3.9	1.1 - 5.9

	Specimen DIF-10					
All Method	19	1.96	3.09	157.7	0.2	0.0 - 11.3
All COULTER DxH 500/520	13	0.16	0.11	68.4	0.2	0.0 - 0.5
All COULTER Instruments	6	6.90	0.39	5.7	6.9	5.7 - 8.1
Coulter DxH 500	5	0.20	0.01	0.0	0.2	0.1 - 0.3
Coulter DxH 520	8	0.15	0.13	87.3	0.2	0.0 - 0.6
COULTER UniCel DxH 600	5	7.03	0.35	5.0	7.0	5.9 - 8.1

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

	Specimen DIF-6						Specimen DIF-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	45.35	23.78	52.4	58.2	0.0 - 116.7	19	55.29	31.39	56.8	72.1	0.0 - 149.5
All COULTER DxH 500/520	13	59.05	4.25	7.2	58.8	46.3 - 71.8	13	73.56	1.65	2.2	73.1	68.6 - 78.6
All COULTER Instruments	6	7.70	0.24	3.2	7.7	6.9 - 8.5	6	5.05	0.13	2.6	5.1	4.6 - 5.5
Coulter DxH 500	5	58.37	3.27	5.6	58.8	48.5 - 68.2	5	73.03	1.97	2.7	72.1	67.1 - 79.0
Coulter DxH 520	8	59.30	4.73	8.0	58.9	45.0 - 73.6	8	73.76	1.62	2.2	73.5	68.9 - 78.7
COULTER UniCel DxH 600	5	7.70	0.30	3.9	7.7	6.8 - 8.6	5	5.10	0.10	2.0	5.1	4.8 - 5.4

	Specimen DIF-8						Specimen DIF-9					
All Method	19	55.11	31.24	56.7	72.7	0.0 - 148.9	19	48.57	26.71	55.0	63.9	0.0 - 128.7
All COULTER DxH 500/520	13	73.29	1.69	2.3	73.1	68.2 - 78.4	13	64.10	1.82	2.8	64.1	58.6 - 69.6
All COULTER Instruments	6	5.13	0.33	6.4	5.0	4.1 - 6.2	6	5.85	0.37	6.3	5.9	4.7 - 7.0
Coulter DxH 500	5	73.47	1.00	1.4	73.1	70.4 - 76.5	5	64.00	1.35	2.1	63.9	59.9 - 68.1
Coulter DxH 520	8	73.23	1.95	2.7	73.3	67.3 - 79.1	8	64.14	2.04	3.2	64.4	58.0 - 70.3
COULTER UniCel DxH 600	5	4.97	0.12	2.3	4.9	4.6 - 5.4	5	5.70	0.26	4.6	5.8	4.9 - 6.5

	Specimen DIF-10					
All Method	19	55.13	31.38	56.9	72.4	0.0 - 149.3
All COULTER DxH 500/520	13	73.40	1.47	2.0	73.5	68.9 - 77.9
All COULTER Instruments	6	4.90	0.41	8.3	4.8	3.6 - 6.2
Coulter DxH 500	5	73.20	0.80	1.1	73.2	70.8 - 75.6
Coulter DxH 520	8	73.48	1.70	2.3	73.7	68.3 - 78.6
COULTER UniCel DxH 600	5	4.70	0.10	2.1	4.7	4.4 - 5.0

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

	Specimen DIF-6						Specimen DIF-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	0.00	0.01	0.0	0.0	0.0 - 0.1	19	0.07	0.12	176.3	0.0	0.0 - 0.5
All COULTER DxH 500/520	13	0.00	0.01	0.0	0.0	0.0 - 0.1	13	0.09	0.13	143.0	0.0	0.0 - 0.5
All COULTER Instruments	6	0.00	0.01	0.0	0.0	0.0 - 0.1	6	0.00	0.01	0.0	0.0	0.0 - 0.1
Coulter DxH 500	5	0.00	0.01	0.0	0.0	0.0 - 0.1	5	0.03	0.06	173.2	0.0	0.0 - 0.3
Coulter DxH 520	8	0.00	0.01	0.0	0.0	0.0 - 0.1	8	0.11	0.15	129.6	0.1	0.0 - 0.6
COULTER UniCel DxH 600	5	0.00	0.01	0.0	0.0	0.0 - 0.1	5	0.00	0.01	0.0	0.0	0.0 - 0.1

	Specimen DIF-8						Specimen DIF-9					
All Method	19	0.06	0.06	105.4	0.1	0.0 - 0.3	19	0.00	0.01	0.0	0.0	0.0 - 0.1
All COULTER DxH 500/520	13	0.08	0.06	73.7	0.1	0.0 - 0.3	13	0.00	0.01	0.0	0.0	0.0 - 0.1
All COULTER Instruments	6	0.00	0.01	0.0	0.0	0.0 - 0.1	6	0.00	0.01	0.0	0.0	0.0 - 0.1
Coulter DxH 500	5	0.07	0.06	86.6	0.1	0.0 - 0.3	5	0.00	0.01	0.0	0.0	0.0 - 0.1
Coulter DxH 520	8	0.09	0.06	73.2	0.1	0.0 - 0.3	8	0.00	0.01	0.0	0.0	0.0 - 0.1
COULTER UniCel DxH 600	5	0.00	0.01	0.0	0.0	0.0 - 0.1	5	0.00	0.01	0.0	0.0	0.0 - 0.1

	Specimen DIF-10					
All Method	19	0.06	0.06	105.4	0.1	0.0 - 0.3
All COULTER DxH 500/520	13	0.08	0.06	73.7	0.1	0.0 - 0.3
All COULTER Instruments	6	0.00	0.01	0.0	0.0	0.0 - 0.1
Coulter DxH 500	5	0.07	0.06	86.6	0.1	0.0 - 0.3
Coulter DxH 520	8	0.09	0.06	73.2	0.1	0.0 - 0.3
COULTER UniCel DxH 600	5	0.00	0.01	0.0	0.0	0.0 - 0.1

RETICULOCYTE COUNT (percent)

	Specimen RT-3						Specimen RT-4					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	22	3.01	0.50	16.5	3.0	2.0 - 4.1	22	6.34	1.18	18.6	6.2	3.9 - 8.7
All Automated Methods	17	2.88	0.35	12.3	2.9	2.0 - 3.8	17	6.03	0.90	15.0	6.0	4.2 - 7.9
All Manual Methods	5	3.55	0.70	19.9	3.6	2.1 - 5.0	5	7.65	1.43	18.7	7.7	4.7 - 10.6
Sysmex XN-1000	14	2.87	0.36	12.6	2.9	2.0 - 3.8	14	5.92	0.93	15.7	6.0	4.0 - 7.8

HEMATOLOGY W/ 5-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10^9/L)

	Specimen BCX-6						Specimen BCX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	87	9.63	0.23	2.4	9.6	8.1 - 11.1	85	6.78	0.15	2.2	6.8	5.7 - 7.8
All ABX Instruments	85	9.64	0.23	2.4	9.6	8.1 - 11.1	83	6.78	0.15	2.2	6.8	5.7 - 7.8
All COULTER Instruments	5	9.13	0.64	7.0	9.4	7.7 - 10.6	5	6.63	0.29	4.4	6.8	5.6 - 7.7
ABX Pentra 60C+	76	9.65	0.24	2.4	9.7	8.2 - 11.1	75	6.77	0.15	2.3	6.8	5.7 - 7.8
ABX Pentra 80 / XL 80	9	9.53	0.19	2.0	9.6	8.1 - 11.0	9	6.77	0.23	3.4	6.8	5.7 - 7.8
COULTER AcT 5diff	5	9.13	0.64	7.0	9.4	7.7 - 10.6	5	6.63	0.29	4.4	6.8	5.6 - 7.7

	Specimen BCX-8						Specimen BCX-9					
All Method	84	4.87	0.13	2.6	4.9	4.1 - 5.6	86	7.32	0.18	2.4	7.3	6.2 - 8.5
All ABX Instruments	82	4.87	0.13	2.7	4.9	4.1 - 5.6	84	7.32	0.18	2.5	7.3	6.2 - 8.5
All COULTER Instruments	5	4.63	0.38	8.2	4.8	3.9 - 5.4	5	7.03	0.46	6.6	7.3	5.9 - 8.1
ABX Pentra 60C+	74	4.87	0.13	2.7	4.9	4.1 - 5.6	75	7.32	0.17	2.4	7.3	6.2 - 8.5
ABX Pentra 80 / XL 80	9	4.83	0.22	4.6	4.9	4.1 - 5.6	9	7.32	0.25	3.4	7.4	6.2 - 8.5
COULTER AcT 5diff	5	4.63	0.38	8.2	4.8	3.9 - 5.4	5	7.03	0.46	6.6	7.3	5.9 - 8.1

	Specimen BCX-10					
All Method	85	27.43	0.60	2.2	27.5	23.3 - 31.6
All ABX Instruments	83	27.43	0.61	2.2	27.5	23.3 - 31.6
All COULTER Instruments	5	26.57	1.36	5.1	27.3	22.5 - 30.6
ABX Pentra 60C+	75	27.49	0.59	2.1	27.6	23.3 - 31.7
ABX Pentra 80 / XL 80	9	26.60	0.83	3.1	26.7	22.6 - 30.6
COULTER AcT 5diff	5	26.57	1.36	5.1	27.3	22.5 - 30.6

HEMATOLOGY W/ 5-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10^{12}/L)

	Specimen BCX-6						Specimen BCX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	85	6.184	0.081	1.3	6.19	5.81 - 6.56	85	3.763	0.067	1.8	3.77	3.53 - 3.99
All ABX Instruments	83	6.185	0.081	1.3	6.19	5.81 - 6.56	83	3.764	0.067	1.8	3.77	3.53 - 3.99
All COULTER Instruments	5	6.043	0.165	2.7	6.09	5.68 - 6.41	5	3.637	0.145	4.0	3.64	3.41 - 3.86
ABX Pentra 60C+	75	6.179	0.080	1.3	6.19	5.80 - 6.55	74	3.762	0.063	1.7	3.78	3.53 - 3.99
ABX Pentra 80 / XL 80	9	6.164	0.248	4.0	6.20	5.79 - 6.54	9	3.708	0.139	3.8	3.74	3.48 - 3.94
COULTER AcT 5diff	5	6.043	0.165	2.7	6.09	5.68 - 6.41	5	3.637	0.145	4.0	3.64	3.41 - 3.86

	Specimen BCX-8						Specimen BCX-9					
All Method	87	4.991	0.080	1.6	4.99	4.69 - 5.30	86	4.613	0.065	1.4	4.62	4.33 - 4.89
All ABX Instruments	84	4.995	0.079	1.6	4.99	4.69 - 5.30	83	4.614	0.064	1.4	4.62	4.33 - 4.90
All COULTER Instruments	5	4.900	0.026	0.5	4.91	4.60 - 5.20	5	4.583	0.100	2.2	4.59	4.30 - 4.86
ABX Pentra 60C+	76	4.992	0.080	1.6	4.99	4.69 - 5.30	75	4.615	0.065	1.4	4.63	4.33 - 4.90
ABX Pentra 80 / XL 80	9	4.968	0.175	3.5	5.02	4.66 - 5.27	9	4.543	0.176	3.9	4.61	4.27 - 4.82
COULTER AcT 5diff	5	4.900	0.026	0.5	4.91	4.60 - 5.20	5	4.583	0.100	2.2	4.59	4.30 - 4.86

	Specimen BCX-10					
All Method	86	3.071	0.052	1.7	3.07	2.88 - 3.26
All ABX Instruments	83	3.073	0.050	1.6	3.07	2.88 - 3.26
All COULTER Instruments	5	3.017	0.085	2.8	3.02	2.83 - 3.20
ABX Pentra 60C+	75	3.078	0.049	1.6	3.08	2.89 - 3.27
ABX Pentra 80 / XL 80	9	3.001	0.086	2.9	3.02	2.82 - 3.19
COULTER AcT 5diff	5	3.017	0.085	2.8	3.02	2.83 - 3.20

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

	Specimen BCX-6						Specimen BCX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	87	18.40	0.24	1.3	18.4	17.1 - 19.7	86	12.22	0.14	1.2	12.2	11.3 - 13.1
All ABX Instruments	85	18.42	0.23	1.2	18.4	17.1 - 19.8	84	12.23	0.14	1.2	12.2	11.3 - 13.1
All COULTER Instruments	5	17.67	0.32	1.8	17.8	16.4 - 19.0	5	11.93	0.29	2.4	12.1	11.0 - 12.8
ABX Pentra 60C+	76	18.42	0.23	1.3	18.4	17.1 - 19.8	76	12.23	0.16	1.3	12.2	11.3 - 13.1
ABX Pentra 80 / XL 80	9	18.36	0.21	1.1	18.4	17.0 - 19.7	9	12.27	0.09	0.7	12.3	11.4 - 13.2
COULTER AcT 5diff	5	17.67	0.32	1.8	17.8	16.4 - 19.0	5	11.93	0.29	2.4	12.1	11.0 - 12.8

	Specimen BCX-8						Specimen BCX-9					
All Method	88	14.66	0.19	1.3	14.7	13.6 - 15.7	88	13.49	0.18	1.4	13.5	12.5 - 14.5
All ABX Instruments	85	14.66	0.19	1.3	14.7	13.6 - 15.7	85	13.49	0.17	1.3	13.5	12.5 - 14.5
All COULTER Instruments	5	14.47	0.21	1.4	14.4	13.4 - 15.5	5	13.37	0.38	2.8	13.2	12.4 - 14.4
ABX Pentra 60C+	76	14.67	0.19	1.3	14.7	13.6 - 15.7	76	13.49	0.18	1.3	13.5	12.5 - 14.5
ABX Pentra 80 / XL 80	9	14.63	0.15	1.0	14.7	13.6 - 15.7	9	13.47	0.17	1.3	13.5	12.5 - 14.5
COULTER AcT 5diff	5	14.47	0.21	1.4	14.4	13.4 - 15.5	5	13.37	0.38	2.8	13.2	12.4 - 14.4

	Specimen BCX-10					
All Method	87	7.83	0.10	1.3	7.8	7.2 - 8.4
All ABX Instruments	85	7.83	0.10	1.3	7.8	7.2 - 8.4
All COULTER Instruments	5	7.50	0.52	6.9	7.8	6.9 - 8.1
ABX Pentra 60C+	76	7.83	0.10	1.3	7.8	7.2 - 8.4
ABX Pentra 80 / XL 80	9	7.80	0.10	1.3	7.8	7.2 - 8.4
COULTER AcT 5diff	5	7.50	0.52	6.9	7.8	6.9 - 8.1

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

	Specimen BCX-6						Specimen BCX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	86	52.75	0.88	1.7	52.9	49.5 - 56.0	86	34.61	0.61	1.8	34.7	32.5 - 36.7
All ABX Instruments	83	52.81	0.79	1.5	52.9	49.6 - 56.0	84	34.62	0.60	1.7	34.7	32.5 - 36.7
All COULTER Instruments	5	51.13	1.71	3.3	50.3	48.0 - 54.3	5	33.57	1.62	4.8	33.3	31.5 - 35.6
ABX Pentra 60C+	75	52.84	0.75	1.4	52.9	49.6 - 56.1	75	34.57	0.56	1.6	34.6	32.4 - 36.7
ABX Pentra 80 / XL 80	9	51.90	2.14	4.1	52.3	48.7 - 55.1	9	34.48	1.26	3.7	34.7	32.4 - 36.6
COULTER AcT 5diff	5	51.13	1.71	3.3	50.3	48.0 - 54.3	5	33.57	1.62	4.8	33.3	31.5 - 35.6
	Specimen BCX-8						**Specimen BCX-9**					
All Method	87	42.04	0.72	1.7	42.0	39.5 - 44.6	87	38.75	0.67	1.7	38.8	36.4 - 41.1
All ABX Instruments	84	42.07	0.71	1.7	42.1	39.5 - 44.6	84	38.77	0.64	1.7	38.8	36.4 - 41.1
All COULTER Instruments	5	41.23	0.83	2.0	41.5	38.7 - 43.8	5	38.37	1.38	3.6	38.9	36.0 - 40.7
ABX Pentra 60C+	76	42.06	0.72	1.7	42.1	39.5 - 44.6	76	38.77	0.65	1.7	38.8	36.4 - 41.1
ABX Pentra 80 / XL 80	9	41.77	1.39	3.3	42.1	39.2 - 44.3	9	38.27	1.40	3.6	38.5	35.9 - 40.6
COULTER AcT 5diff	5	41.23	0.83	2.0	41.5	38.7 - 43.8	5	38.37	1.38	3.6	38.9	36.0 - 40.7
	Specimen BCX-10											
All Method	87	23.08	0.37	1.6	23.1	21.6 - 24.5						
All ABX Instruments	84	23.08	0.37	1.6	23.1	21.6 - 24.5						
All COULTER Instruments	5	22.97	0.40	1.8	22.9	21.5 - 24.4						
ABX Pentra 60C+	76	23.06	0.38	1.6	23.0	21.6 - 24.5						
ABX Pentra 80 / XL 80	9	23.09	0.63	2.7	23.2	21.7 - 24.5						
COULTER AcT 5diff	5	22.97	0.40	1.8	22.9	21.5 - 24.4						

HEMATOLOGY W/ 5-PART DIFFERENTIAL–PLATELET COUNT (x 10^9/L)

	Specimen BCX-6						Specimen BCX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	86	83.0	4.5	5.5	83	62 - 104	85	300.4	9.9	3.3	302	225 - 376
All ABX Instruments	83	82.9	4.5	5.4	83	62 - 104	82	300.5	9.1	3.0	302	225 - 376
All COULTER Instruments	5	86.7	5.9	6.8	89	65 - 109	5	278.3	10.0	3.6	282	208 - 348
ABX Pentra 60C+	74	83.2	4.5	5.4	83	62 - 104	74	300.3	9.3	3.1	302	225 - 376
ABX Pentra 80 / XL 80	9	80.6	4.0	5.0	80	60 - 101	9	297.3	16.8	5.6	302	222 - 372
COULTER AcT 5diff	5	86.7	5.9	6.8	89	65 - 109	5	278.3	10.0	3.6	282	208 - 348
	Specimen BCX-8						**Specimen BCX-9**					
All Method	87	145.7	6.8	4.7	146	109 - 183	86	244.8	8.7	3.5	244	183 - 306
All ABX Instruments	84	145.5	6.8	4.7	146	109 - 182	83	245.1	8.6	3.5	244	183 - 307
All COULTER Instruments	5	149.0	8.2	5.5	151	111 - 187	5	235.3	6.7	2.8	232	176 - 295
ABX Pentra 60C+	76	145.5	7.1	4.9	146	109 - 182	75	245.2	8.7	3.5	244	183 - 307
ABX Pentra 80 / XL 80	9	143.1	10.1	7.1	147	107 - 179	9	240.1	15.6	6.5	243	180 - 301
COULTER AcT 5diff	5	149.0	8.2	5.5	151	111 - 187	5	235.3	6.7	2.8	232	176 - 295
	Specimen BCX-10											
All Method	86	389.5	13.0	3.3	389	292 - 487						
All ABX Instruments	84	390.0	12.7	3.2	390	292 - 488						
All COULTER Instruments	5	350.3	31.8	9.1	364	262 - 438						
ABX Pentra 60C+	76	390.7	12.4	3.2	391	293 - 489						
ABX Pentra 80 / XL 80	9	376.6	23.5	6.2	384	282 - 471						
COULTER AcT 5diff	5	350.3	31.8	9.1	364	262 - 438						

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

	Specimen BCX-6						Specimen BCX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	88	61.04	4.30	7.0	61.3	48.1 - 74.0	87	58.23	3.91	6.7	57.9	46.4 - 70.0
All ABX Instruments	85	61.25	4.18	6.8	61.6	48.7 - 73.8	84	58.45	3.79	6.5	58.1	47.0 - 69.9
All COULTER Instruments	5	54.93	3.45	6.3	55.1	44.5 - 65.3	5	52.07	2.10	4.0	52.2	45.7 - 58.4
ABX Pentra 60C+	76	61.82	3.87	6.3	62.2	50.1 - 73.5	75	58.85	3.74	6.3	58.6	47.6 - 70.1
ABX Pentra 80 / XL 80	9	56.47	3.71	6.6	57.6	45.3 - 67.7	9	55.08	2.33	4.2	55.8	48.0 - 62.1
COULTER AcT 5diff	5	54.93	3.45	6.3	55.1	44.5 - 65.3	5	52.07	2.10	4.0	52.2	45.7 - 58.4

	Specimen BCX-8						Specimen BCX-9					
All Method	88	55.34	4.35	7.9	55.5	42.2 - 68.5	88	63.41	4.26	6.7	63.8	50.6 - 76.3
All ABX Instruments	85	55.48	4.32	7.8	55.6	42.5 - 68.5	85	63.53	4.24	6.7	63.9	50.8 - 76.3
All COULTER Instruments	5	51.53	4.21	8.2	53.5	38.9 - 64.2	5	59.97	4.07	6.8	61.3	47.7 - 72.2
ABX Pentra 60C+	76	55.91	4.29	7.7	56.1	43.0 - 68.8	76	63.93	4.13	6.5	64.5	51.5 - 76.4
ABX Pentra 80 / XL 80	9	51.86	2.68	5.2	52.5	43.8 - 59.9	9	60.17	3.91	6.5	59.5	48.4 - 71.9
COULTER AcT 5diff	5	51.53	4.21	8.2	53.5	38.9 - 64.2	5	59.97	4.07	6.8	61.3	47.7 - 72.2

	Specimen BCX-10					
All Method	85	69.55	3.00	4.3	69.8	60.5 - 78.6
All ABX Instruments	85	69.55	3.00	4.3	69.8	60.5 - 78.6
All COULTER Instruments	5	56.73	0.32	0.6	56.6	55.7 - 57.7
ABX Pentra 60C+	76	70.17	2.43	3.5	70.1	62.8 - 77.5
ABX Pentra 80 / XL 80	9	64.36	2.28	3.5	63.8	57.5 - 71.2
COULTER AcT 5diff	5	56.73	0.32	0.6	56.6	55.7 - 57.7

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

	Specimen BCX-6						Specimen BCX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	88	32.51	4.26	13.1	31.9	19.7 - 45.3	88	32.92	4.14	12.6	33.3	20.5 - 45.4
All ABX Instruments	85	32.75	4.12	12.6	32.2	20.3 - 45.2	85	32.94	4.18	12.7	33.3	20.3 - 45.5
All COULTER Instruments	5	25.73	2.47	9.6	26.4	18.3 - 33.2	5	32.53	3.40	10.4	31.6	22.3 - 42.8
ABX Pentra 60C+	76	32.20	3.81	11.8	31.6	20.7 - 43.7	76	32.45	4.06	12.5	33.1	20.2 - 44.7
ABX Pentra 80 / XL 80	9	37.42	3.81	10.2	36.5	26.0 - 48.9	9	37.08	2.70	7.3	36.6	28.9 - 45.2
COULTER AcT 5diff	5	25.73	2.47	9.6	26.4	18.3 - 33.2	5	32.53	3.40	10.4	31.6	22.3 - 42.8

	Specimen BCX-8						Specimen BCX-9					
All Method	88	36.33	4.47	12.3	36.7	22.9 - 49.8	88	29.94	4.49	15.0	29.5	16.4 - 43.5
All ABX Instruments	85	36.67	4.14	11.3	36.9	24.2 - 49.1	85	30.21	4.32	14.3	29.5	17.2 - 43.2
All COULTER Instruments	5	26.77	2.30	8.6	26.9	19.8 - 33.7	5	22.20	1.15	5.2	22.1	18.7 - 25.7
ABX Pentra 60C+	76	36.30	4.08	11.2	36.3	24.0 - 48.6	76	29.85	4.24	14.2	29.3	17.1 - 42.6
ABX Pentra 80 / XL 80	9	39.76	3.49	8.8	39.0	29.2 - 50.3	9	33.26	3.96	11.9	32.4	21.3 - 45.2
COULTER AcT 5diff	5	26.77	2.30	8.6	26.9	19.8 - 33.7	5	22.20	1.15	5.2	22.1	18.7 - 25.7

	Specimen BCX-10					
All Method	88	24.39	3.17	13.0	24.1	14.8 - 34.0
All ABX Instruments	85	24.46	3.18	13.0	24.1	14.9 - 34.0
All COULTER Instruments	5	22.33	2.55	11.4	22.3	14.6 - 30.0
ABX Pentra 60C+	76	23.80	2.58	10.8	23.7	16.0 - 31.6
ABX Pentra 80 / XL 80	9	30.07	2.07	6.9	31.3	23.8 - 36.3
COULTER AcT 5diff	5	22.33	2.55	11.4	22.3	14.6 - 30.0

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

	Specimen BCX-6						Specimen BCX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	85	0.76	0.34	45.1	0.7	0.0 - 1.8	87	1.32	0.67	50.9	1.2	0.0 - 3.4
All ABX Instruments	84	0.75	0.34	45.3	0.7	0.0 - 1.8	84	1.30	0.67	51.3	1.2	0.0 - 3.4
All COULTER Instruments	5	2.57	1.18	46.2	3.2	0.0 - 6.2	5	1.67	0.78	46.6	1.9	0.0 - 4.0
ABX Pentra 60C+	75	0.77	0.35	45.4	0.7	0.0 - 1.9	75	1.33	0.67	50.6	1.2	0.0 - 3.4
ABX Pentra 80 / XL 80	9	0.62	0.23	37.5	0.6	0.0 - 1.4	9	1.04	0.58	55.4	0.9	0.0 - 2.8
COULTER AcT 5diff	5	2.57	1.18	46.2	3.2	0.0 - 6.2	5	1.67	0.78	46.6	1.9	0.0 - 4.0
	Specimen BCX-8						**Specimen BCX-9**					
All Method	85	1.06	0.60	56.2	1.0	0.0 - 2.9	87	1.19	0.52	44.0	1.1	0.0 - 2.8
All ABX Instruments	82	1.04	0.58	55.7	1.0	0.0 - 2.8	84	1.19	0.52	44.1	1.1	0.0 - 2.8
All COULTER Instruments	5	1.57	0.95	60.7	1.6	0.0 - 4.5	5	1.10	0.56	50.6	1.2	0.0 - 2.8
ABX Pentra 60C+	73	1.04	0.56	53.4	1.0	0.0 - 2.8	75	1.21	0.52	42.8	1.1	0.0 - 2.8
ABX Pentra 80 / XL 80	9	1.04	0.79	75.4	0.9	0.0 - 3.5	9	0.99	0.55	55.7	1.0	0.0 - 2.7
COULTER AcT 5diff	5	1.57	0.95	60.7	1.6	0.0 - 4.5	5	1.10	0.56	50.6	1.2	0.0 - 2.8
	Specimen BCX-10											
All Method	84	0.75	0.28	37.7	0.7	0.0 - 1.6						
All ABX Instruments	83	0.75	0.28	37.8	0.7	0.0 - 1.7						
All COULTER Instruments	5	1.87	1.12	59.7	2.3	0.0 - 5.3						
ABX Pentra 60C+	74	0.77	0.29	37.2	0.7	0.0 - 1.7						
ABX Pentra 80 / XL 80	9	0.61	0.23	37.9	0.6	0.0 - 1.4						
COULTER AcT 5diff	5	1.87	1.12	59.7	2.3	0.0 - 5.3						

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

	Specimen BCX-6						Specimen BCX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	87	4.84	1.16	24.0	4.7	1.3 - 8.4	88	7.11	1.78	25.1	6.9	1.7 - 12.5
All ABX Instruments	84	4.88	1.16	23.8	4.7	1.3 - 8.4	85	7.10	1.81	25.5	6.8	1.6 - 12.6
All COULTER Instruments	5	3.73	0.21	5.6	3.8	3.1 - 4.4	5	7.33	0.83	11.4	7.6	4.8 - 9.9
ABX Pentra 60C+	75	4.84	1.12	23.1	4.7	1.4 - 8.2	76	7.17	1.84	25.6	6.9	1.6 - 12.7
ABX Pentra 80 / XL 80	9	5.19	1.51	29.2	4.7	0.6 - 9.8	9	6.49	1.50	23.1	6.2	1.9 - 11.0
COULTER AcT 5diff	5	3.73	0.21	5.6	3.8	3.1 - 4.4	5	7.33	0.83	11.4	7.6	4.8 - 9.9
	Specimen BCX-8						**Specimen BCX-9**					
All Method	87	6.41	1.73	27.0	6.1	1.2 - 11.7	86	4.65	1.18	25.3	4.7	1.1 - 8.2
All ABX Instruments	84	6.34	1.71	27.0	6.1	1.2 - 11.5	83	4.59	1.15	25.0	4.6	1.1 - 8.1
All COULTER Instruments	5	8.53	0.91	10.6	8.4	5.8 - 11.3	5	6.13	1.01	16.4	6.0	3.1 - 9.2
ABX Pentra 60C+	74	6.18	1.57	25.3	6.1	1.4 - 10.9	75	4.57	1.14	24.9	4.5	1.1 - 8.0
ABX Pentra 80 / XL 80	9	7.06	1.98	28.1	8.0	1.1 - 13.0	8	4.76	1.30	27.3	5.1	0.8 - 8.7
COULTER AcT 5diff	5	8.53	0.91	10.6	8.4	5.8 - 11.3	5	6.13	1.01	16.4	6.0	3.1 - 9.2
	Specimen BCX-10											
All Method	88	4.87	0.81	16.6	4.9	2.4 - 7.3						
All ABX Instruments	85	4.80	0.74	15.4	4.8	2.5 - 7.1						
All COULTER Instruments	5	6.67	0.55	8.3	6.7	5.0 - 8.4						
ABX Pentra 60C+	76	4.83	0.75	15.5	4.9	2.5 - 7.1						
ABX Pentra 80 / XL 80	9	4.57	0.65	14.2	4.5	2.6 - 6.6						
COULTER AcT 5diff	5	6.67	0.55	8.3	6.7	5.0 - 8.4						

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

	Specimen BCX-6						Specimen BCX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	84	0.30	0.01	0.0	0.3	0.2 - 0.4	85	0.24	0.05	20.5	0.2	0.0 - 0.4
All ABX Instruments	84	0.30	0.01	0.0	0.3	0.2 - 0.4	85	0.24	0.05	20.5	0.2	0.0 - 0.4
All COULTER Instruments	5	6.03	0.78	12.9	5.8	3.7 - 8.4	5	5.40	0.35	6.4	5.6	4.3 - 6.5
ABX Pentra 60C+	75	0.30	0.01	0.0	0.3	0.2 - 0.4	76	0.24	0.05	20.5	0.2	0.0 - 0.4
ABX Pentra 80 / XL 80	9	0.30	0.01	0.0	0.3	0.2 - 0.4	9	0.20	0.01	0.0	0.2	0.1 - 0.3
COULTER AcT 5diff	5	6.03	0.78	12.9	5.8	3.7 - 8.4	5	5.40	0.35	6.4	5.6	4.3 - 6.5

	Specimen BCX-8						Specimen BCX-9					
All Method	85	0.28	0.04	14.0	0.3	0.1 - 0.4	85	0.30	0.01	0.0	0.3	0.2 - 0.4
All ABX Instruments	85	0.28	0.04	14.0	0.3	0.1 - 0.4	85	0.30	0.01	0.0	0.3	0.2 - 0.4
All COULTER Instruments	5	5.93	0.50	8.5	6.0	4.4 - 7.5	5	6.27	0.42	6.6	6.4	5.0 - 7.6
ABX Pentra 60C+	76	0.28	0.04	13.4	0.3	0.1 - 0.4	76	0.30	0.01	0.0	0.3	0.2 - 0.4
ABX Pentra 80 / XL 80	9	0.27	0.05	18.7	0.3	0.1 - 0.5	9	0.30	0.01	0.0	0.3	0.2 - 0.4
COULTER AcT 5diff	5	5.93	0.50	8.5	6.0	4.4 - 7.5	5	6.27	0.42	6.6	6.4	5.0 - 7.6

	Specimen BCX-10					
All Method	85	0.40	0.01	0.0	0.4	0.3 - 0.5
All ABX Instruments	85	0.40	0.01	0.0	0.4	0.3 - 0.5
All COULTER Instruments	5	8.27	0.67	8.1	8.6	6.2 - 10.3
ABX Pentra 60C+	76	0.40	0.01	0.0	0.4	0.3 - 0.5
ABX Pentra 80 / XL 80	9	0.40	0.01	0.0	0.4	0.3 - 0.5
COULTER AcT 5diff	5	8.27	0.67	8.1	8.6	6.2 - 10.3

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10^9/L)

Specimen MX-6

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	123	3.51	0.36	10.3	3.3	2.9 - 4.1
All Sysmex XN/XS Instruments	123	3.51	0.36	10.3	3.3	2.9 - 4.1
Sysmex XN-1000	19	3.88	0.06	1.6	3.9	3.2 - 4.5
Sysmex XN-330	7	3.16	0.10	3.1	3.2	2.6 - 3.7
Sysmex XN-430	36	3.31	0.20	6.1	3.3	2.8 - 3.9
Sysmex XN-450	11	3.23	0.11	3.4	3.2	2.7 - 3.8
Sysmex XN-530	5	3.27	0.06	1.8	3.3	2.7 - 3.8
Sysmex XN-550	21	3.29	0.27	8.1	3.2	2.7 - 3.8
Sysmex XS-1000i	24	3.95	0.11	2.7	4.0	3.3 - 4.6

Specimen MX-7

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	124	20.10	0.48	2.4	20.0	17.0 - 23.2
All Sysmex XN/XS Instruments	124	20.10	0.48	2.4	20.0	17.0 - 23.2
Sysmex XN-1000	19	20.45	0.37	1.8	20.4	17.3 - 23.6
Sysmex XN-330	7	19.70	0.38	1.9	19.7	16.7 - 22.7
Sysmex XN-430	38	20.17	0.51	2.5	20.1	17.1 - 23.2
Sysmex XN-450	11	20.13	0.35	1.8	20.0	17.1 - 23.2
Sysmex XN-530	5	19.80	0.26	1.3	19.9	16.8 - 22.8
Sysmex XN-550	20	19.87	0.42	2.1	19.8	16.8 - 22.9
Sysmex XS-1000i	24	20.02	0.36	1.8	20.0	17.0 - 23.1

Specimen MX-8

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	125	20.16	0.48	2.4	20.1	17.1 - 23.2
All Sysmex XN/XS Instruments	125	20.16	0.48	2.4	20.1	17.1 - 23.2
Sysmex XN-1000	18	20.41	0.21	1.0	20.4	17.3 - 23.5
Sysmex XN-330	7	19.73	0.39	2.0	19.8	16.7 - 22.7
Sysmex XN-430	38	20.22	0.46	2.3	20.2	17.1 - 23.3
Sysmex XN-450	11	20.21	0.55	2.7	20.2	17.1 - 23.3
Sysmex XN-530	5	19.80	0.20	1.0	19.8	16.8 - 22.8
Sysmex XN-550	21	20.01	0.59	3.0	19.8	17.0 - 23.1
Sysmex XS-1000i	25	20.15	0.37	1.9	20.2	17.1 - 23.2

Specimen MX-9

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	125	6.85	0.40	5.8	6.7	5.8 - 7.9
All Sysmex XN/XS Instruments	125	6.85	0.40	5.8	6.7	5.8 - 7.9
Sysmex XN-1000	19	7.43	0.13	1.8	7.4	6.3 - 8.6
Sysmex XN-330	7	6.57	0.10	1.4	6.5	5.5 - 7.6
Sysmex XN-430	38	6.82	0.25	3.7	6.8	5.7 - 7.9
Sysmex XN-450	11	6.70	0.21	3.1	6.8	5.6 - 7.8
Sysmex XN-530	5	6.57	0.15	2.3	6.6	5.5 - 7.6
Sysmex XN-550	21	6.71	0.47	6.9	6.6	5.7 - 7.8
Sysmex XS-1000i	25	6.79	0.41	6.0	6.7	5.7 - 7.9

Specimen MX-10

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	123	23.03	0.49	2.1	23.0	19.5 - 26.5
All Sysmex XN/XS Instruments	123	23.03	0.49	2.1	23.0	19.5 - 26.5
Sysmex XN-1000	19	23.15	0.34	1.4	23.2	19.6 - 26.7
Sysmex XN-330	7	22.44	0.41	1.8	22.5	19.0 - 25.9
Sysmex XN-430	38	23.17	0.46	2.0	23.2	19.6 - 26.7
Sysmex XN-450	11	22.96	0.33	1.4	23.0	19.5 - 26.5
Sysmex XN-530	5	22.77	0.29	1.3	22.6	19.3 - 26.2
Sysmex XN-550	21	22.98	0.71	3.1	22.7	19.5 - 26.5
Sysmex XS-1000i	24	23.08	0.47	2.0	23.1	19.6 - 26.6

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10^{12}/L)

	Specimen MX-6						Specimen MX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	125	2.236	0.031	1.4	2.24	2.10 - 2.38	125	5.478	0.060	1.1	5.48	5.14 - 5.81
All Sysmex XN/XS Instruments	125	2.236	0.031	1.4	2.24	2.10 - 2.38	125	5.478	0.060	1.1	5.48	5.14 - 5.81
Sysmex XN-1000	19	2.241	0.022	1.0	2.24	2.10 - 2.38	19	5.453	0.057	1.0	5.44	5.12 - 5.79
Sysmex XN-330	7	2.223	0.042	1.9	2.21	2.08 - 2.36	7	5.493	0.087	1.6	5.52	5.16 - 5.83
Sysmex XN-430	37	2.228	0.031	1.4	2.23	2.09 - 2.37	37	5.488	0.056	1.0	5.50	5.15 - 5.82
Sysmex XN-450	11	2.218	0.015	0.7	2.22	2.08 - 2.36	11	5.483	0.061	1.1	5.48	5.15 - 5.82
Sysmex XN-530	5	2.230	0.030	1.3	2.23	2.09 - 2.37	5	5.540	0.040	0.7	5.54	5.20 - 5.88
Sysmex XN-550	22	2.235	0.022	1.0	2.23	2.10 - 2.37	22	5.504	0.038	0.7	5.50	5.17 - 5.84
Sysmex XS-1000i	25	2.260	0.032	1.4	2.26	2.12 - 2.40	25	5.451	0.064	1.2	5.46	5.12 - 5.78

	Specimen MX-8						Specimen MX-9					
All Method	125	5.479	0.057	1.0	5.48	5.15 - 5.81	125	4.573	0.048	1.1	4.57	4.29 - 4.85
All Sysmex XN/XS Instruments	125	5.479	0.057	1.0	5.48	5.15 - 5.81	125	4.573	0.048	1.1	4.57	4.29 - 4.85
Sysmex XN-1000	19	5.475	0.054	1.0	5.47	5.14 - 5.81	19	4.589	0.049	1.1	4.59	4.31 - 4.87
Sysmex XN-330	7	5.510	0.072	1.3	5.52	5.17 - 5.85	7	4.589	0.027	0.6	4.59	4.31 - 4.87
Sysmex XN-430	37	5.482	0.054	1.0	5.48	5.15 - 5.82	37	4.572	0.053	1.2	4.57	4.29 - 4.85
Sysmex XN-450	11	5.467	0.046	0.8	5.45	5.13 - 5.80	11	4.540	0.031	0.7	4.54	4.26 - 4.82
Sysmex XN-530	5	5.513	0.023	0.4	5.50	5.18 - 5.85	5	4.580	0.072	1.6	4.60	4.30 - 4.86
Sysmex XN-550	22	5.501	0.042	0.8	5.49	5.17 - 5.84	22	4.570	0.045	1.0	4.56	4.29 - 4.85
Sysmex XS-1000i	25	5.455	0.070	1.3	5.45	5.12 - 5.79	25	4.572	0.049	1.1	4.58	4.29 - 4.85

	Specimen MX-10					
All Method	122	6.290	0.067	1.1	6.30	5.91 - 6.67
All Sysmex XN/XS Instruments	122	6.290	0.067	1.1	6.30	5.91 - 6.67
Sysmex XN-1000	19	6.256	0.066	1.1	6.25	5.88 - 6.64
Sysmex XN-330	7	6.326	0.064	1.0	6.34	5.94 - 6.71
Sysmex XN-430	35	6.295	0.067	1.1	6.30	5.91 - 6.68
Sysmex XN-450	11	6.280	0.035	0.6	6.27	5.90 - 6.66
Sysmex XN-530	5	6.337	0.055	0.9	6.31	5.95 - 6.72
Sysmex XN-550	22	6.326	0.045	0.7	6.33	5.94 - 6.71
Sysmex XS-1000i	24	6.260	0.077	1.2	6.26	5.88 - 6.64

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

	Specimen MX-6						Specimen MX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	124	5.81	0.08	1.4	5.8	5.4 - 6.3	124	17.24	0.14	0.8	17.3	16.0 - 18.5
All Sysmex XN/XS Instruments	124	5.81	0.08	1.4	5.8	5.4 - 6.3	124	17.24	0.14	0.8	17.3	16.0 - 18.5
Sysmex XN-1000	19	5.85	0.07	1.2	5.8	5.4 - 6.3	19	17.24	0.12	0.7	17.3	16.0 - 18.5
Sysmex XN-330	7	5.79	0.09	1.6	5.8	5.3 - 6.2	7	17.19	0.16	0.9	17.3	15.9 - 18.4
Sysmex XN-430	37	5.84	0.09	1.5	5.8	5.4 - 6.3	37	17.23	0.14	0.8	17.2	16.0 - 18.5
Sysmex XN-450	11	5.78	0.09	1.5	5.8	5.3 - 6.2	11	17.14	0.17	1.0	17.1	15.9 - 18.4
Sysmex XN-530	5	5.83	0.06	1.0	5.8	5.4 - 6.3	5	17.30	0.01	0.0	17.3	16.0 - 18.6
Sysmex XN-550	22	5.82	0.04	0.7	5.8	5.4 - 6.3	22	17.25	0.09	0.5	17.2	16.0 - 18.5
Sysmex XS-1000i	24	5.76	0.06	1.1	5.8	5.3 - 6.2	25	17.29	0.18	1.1	17.3	16.0 - 18.6

	Specimen MX-8						Specimen MX-9					
All Method	124	17.27	0.15	0.8	17.3	16.0 - 18.5	125	13.21	0.11	0.8	13.2	12.2 - 14.2
All Sysmex XN/XS Instruments	124	17.27	0.15	0.8	17.3	16.0 - 18.5	125	13.21	0.11	0.8	13.2	12.2 - 14.2
Sysmex XN-1000	19	17.26	0.15	0.8	17.2	16.0 - 18.5	19	13.27	0.09	0.7	13.3	12.3 - 14.3
Sysmex XN-330	7	17.21	0.12	0.7	17.3	16.0 - 18.5	7	13.16	0.08	0.6	13.1	12.2 - 14.1
Sysmex XN-430	37	17.27	0.16	0.9	17.3	16.0 - 18.5	37	13.24	0.11	0.9	13.3	12.3 - 14.2
Sysmex XN-450	11	17.20	0.14	0.8	17.2	15.9 - 18.5	11	13.14	0.12	0.9	13.1	12.2 - 14.1
Sysmex XN-530	5	17.27	0.06	0.3	17.3	16.0 - 18.5	5	13.20	0.01	0.0	13.2	12.2 - 14.2
Sysmex XN-550	22	17.25	0.11	0.6	17.3	16.0 - 18.5	22	13.23	0.06	0.5	13.2	12.3 - 14.2
Sysmex XS-1000i	24	17.31	0.16	0.9	17.3	16.1 - 18.6	25	13.17	0.13	1.0	13.2	12.2 - 14.1

	Specimen MX-10					
All Method	122	19.80	0.17	0.8	19.8	18.4 - 21.2
All Sysmex XN/XS Instruments	122	19.80	0.17	0.8	19.8	18.4 - 21.2
Sysmex XN-1000	19	19.82	0.15	0.8	19.8	18.4 - 21.3
Sysmex XN-330	7	19.79	0.17	0.8	19.8	18.4 - 21.2
Sysmex XN-430	36	19.79	0.16	0.8	19.8	18.4 - 21.2
Sysmex XN-450	11	19.67	0.15	0.8	19.7	18.2 - 21.1
Sysmex XN-530	5	19.87	0.12	0.6	19.8	18.4 - 21.3
Sysmex XN-550	22	19.78	0.11	0.6	19.8	18.3 - 21.2
Sysmex XS-1000i	23	19.87	0.22	1.1	19.8	18.4 - 21.3

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

Specimen MX-6

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	123	17.43	0.31	1.8	17.4	16.3 - 18.5
All Sysmex XN/XS Instruments	123	17.43	0.31	1.8	17.4	16.3 - 18.5
Sysmex XN-1000	19	17.21	0.19	1.1	17.3	16.1 - 18.3
Sysmex XN-330	7	17.30	0.31	1.8	17.3	16.2 - 18.4
Sysmex XN-430	35	17.40	0.21	1.2	17.4	16.3 - 18.5
Sysmex XN-450	11	17.26	0.21	1.2	17.3	16.2 - 18.3
Sysmex XN-530	5	17.43	0.23	1.3	17.3	16.3 - 18.5
Sysmex XN-550	22	17.40	0.25	1.4	17.4	16.3 - 18.5
Sysmex XS-1000i	24	17.84	0.23	1.3	17.9	16.7 - 19.0

Specimen MX-7

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	125	51.54	0.77	1.5	51.5	48.4 - 54.7
All Sysmex XN/XS Instruments	125	51.54	0.77	1.5	51.5	48.4 - 54.7
Sysmex XN-1000	19	50.77	0.71	1.4	50.9	47.7 - 53.9
Sysmex XN-330	7	51.39	0.58	1.1	51.5	48.3 - 54.5
Sysmex XN-430	37	51.48	0.65	1.3	51.5	48.3 - 54.6
Sysmex XN-450	11	51.35	0.66	1.3	51.4	48.2 - 54.5
Sysmex XN-530	5	52.20	0.10	0.2	52.2	49.0 - 55.4
Sysmex XN-550	22	51.56	0.49	1.0	51.5	48.4 - 54.7
Sysmex XS-1000i	25	52.27	0.68	1.3	52.4	49.1 - 55.5

Specimen MX-8

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	124	51.50	0.69	1.3	51.5	48.4 - 54.6
All Sysmex XN/XS Instruments	124	51.50	0.69	1.3	51.5	48.4 - 54.6
Sysmex XN-1000	19	50.93	0.63	1.2	51.0	47.8 - 54.0
Sysmex XN-330	7	51.57	0.49	0.9	51.4	48.4 - 54.7
Sysmex XN-430	37	51.39	0.59	1.1	51.5	48.3 - 54.5
Sysmex XN-450	11	51.18	0.62	1.2	51.3	48.1 - 54.3
Sysmex XN-530	5	52.00	0.30	0.6	52.0	48.8 - 55.2
Sysmex XN-550	22	51.52	0.52	1.0	51.6	48.4 - 54.7
Sysmex XS-1000i	25	52.27	0.72	1.4	52.3	49.1 - 55.5

Specimen MX-9

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	124	39.29	0.57	1.4	39.3	36.9 - 41.7
All Sysmex XN/XS Instruments	124	39.29	0.57	1.4	39.3	36.9 - 41.7
Sysmex XN-1000	19	39.16	0.55	1.4	39.3	36.8 - 41.6
Sysmex XN-330	7	39.29	0.41	1.1	39.3	36.9 - 41.7
Sysmex XN-430	37	39.22	0.61	1.5	39.2	36.8 - 41.6
Sysmex XN-450	11	38.96	0.53	1.4	38.9	36.6 - 41.4
Sysmex XN-530	5	39.47	0.42	1.1	39.6	37.0 - 41.9
Sysmex XN-550	22	39.23	0.47	1.2	39.2	36.8 - 41.6
Sysmex XS-1000i	24	39.70	0.51	1.3	39.6	37.3 - 42.1

Specimen MX-10

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	123	58.83	0.87	1.5	58.9	55.2 - 62.4
All Sysmex XN/XS Instruments	123	58.83	0.87	1.5	58.9	55.2 - 62.4
Sysmex XN-1000	19	58.15	0.91	1.6	58.1	54.6 - 61.7
Sysmex XN-330	7	58.41	1.51	2.6	58.7	54.9 - 62.0
Sysmex XN-430	37	58.70	0.88	1.5	58.8	55.1 - 62.3
Sysmex XN-450	11	58.58	0.44	0.8	58.6	55.0 - 62.1
Sysmex XN-530	5	59.33	0.51	0.9	59.2	55.7 - 62.9
Sysmex XN-550	22	59.02	0.66	1.1	59.0	55.4 - 62.6
Sysmex XS-1000i	24	59.36	0.84	1.4	59.5	55.7 - 63.0

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL–PLATELET COUNT (x 10^9/L)

	Specimen MX-6						Specimen MX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	125	53.6	3.8	7.1	53	40 - 67	123	406.9	15.6	3.8	408	305 - 509
All Sysmex XN/XS Instruments	125	53.6	3.8	7.1	53	40 - 67	123	406.9	15.6	3.8	408	305 - 509
Sysmex XN-1000	19	52.5	3.7	7.1	52	39 - 66	19	416.3	10.6	2.5	418	312 - 521
Sysmex XN-330	7	51.3	1.8	3.5	51	38 - 65	7	410.3	7.5	1.8	410	307 - 513
Sysmex XN-430	37	52.8	3.0	5.8	53	39 - 67	37	408.2	14.4	3.5	407	306 - 511
Sysmex XN-450	11	50.7	4.1	8.1	51	38 - 64	11	398.2	31.2	7.8	414	298 - 498
Sysmex XN-530	5	52.7	1.2	2.2	52	39 - 66	5	420.3	9.3	2.2	416	315 - 526
Sysmex XN-550	22	53.0	2.4	4.6	53	39 - 67	22	413.0	11.1	2.7	414	309 - 517
Sysmex XS-1000i	25	58.3	2.8	4.7	58	43 - 73	25	389.0	14.3	3.7	387	291 - 487
	Specimen MX-8						**Specimen MX-9**					
All Method	122	405.7	16.4	4.0	407	304 - 508	121	198.3	6.4	3.2	198	148 - 248
All Sysmex XN/XS Instruments	122	405.7	16.4	4.0	407	304 - 508	121	198.3	6.4	3.2	198	148 - 248
Sysmex XN-1000	19	412.8	14.8	3.6	412	309 - 516	19	200.2	5.9	3.0	199	150 - 251
Sysmex XN-330	7	411.3	10.0	2.4	413	308 - 515	7	197.6	5.0	2.5	198	148 - 247
Sysmex XN-430	36	410.4	14.3	3.5	408	307 - 513	36	199.5	7.4	3.7	199	149 - 250
Sysmex XN-450	11	392.6	34.6	8.8	407	294 - 491	11	190.1	15.0	7.9	195	142 - 238
Sysmex XN-530	5	411.7	13.9	3.4	408	308 - 515	5	195.7	2.3	1.2	197	146 - 245
Sysmex XN-550	21	413.5	8.2	2.0	415	310 - 517	21	200.5	5.4	2.7	200	150 - 251
Sysmex XS-1000i	25	387.5	11.1	2.9	387	290 - 485	25	194.3	5.5	2.8	195	145 - 243
	Specimen MX-10											
All Method	121	451.2	19.6	4.3	453	338 - 565						
All Sysmex XN/XS Instruments	121	451.2	19.6	4.3	453	338 - 565						
Sysmex XN-1000	19	461.7	12.9	2.8	458	346 - 578						
Sysmex XN-330	7	461.7	11.9	2.6	468	346 - 578						
Sysmex XN-430	36	455.7	17.1	3.8	455	341 - 570						
Sysmex XN-450	11	438.4	34.2	7.8	452	328 - 548						
Sysmex XN-530	5	459.3	11.0	2.4	463	344 - 575						
Sysmex XN-550	21	458.9	12.1	2.6	455	344 - 574						
Sysmex XS-1000i	24	428.2	15.1	3.5	430	321 - 536						

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

	Specimen MX-6						Specimen MX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	119	59.08	1.87	3.2	58.8	53.4 - 64.7	119	55.90	2.03	3.6	55.5	49.8 - 62.1
All Sysmex XN/XS Instruments	119	59.08	1.87	3.2	58.8	53.4 - 64.7	119	55.90	2.03	3.6	55.5	49.8 - 62.1
Sysmex XN-1000	17	61.86	0.72	1.2	61.9	59.7 - 64.1	17	58.39	0.90	1.5	58.4	55.6 - 61.1
Sysmex XN-330	7	58.24	1.70	2.9	59.1	53.1 - 63.4	7	54.69	1.12	2.1	54.1	51.3 - 58.1
Sysmex XN-430	36	57.84	1.09	1.9	58.0	54.5 - 61.2	37	54.84	1.40	2.6	54.8	50.6 - 59.1
Sysmex XN-450	11	58.20	0.95	1.6	58.2	55.3 - 61.1	11	54.28	0.82	1.5	53.9	51.8 - 56.8
Sysmex XN-530	5	58.57	1.00	1.7	58.5	55.5 - 61.6	5	54.00	0.85	1.6	54.1	51.4 - 56.6
Sysmex XN-550	19	58.27	1.37	2.4	58.2	54.1 - 62.4	19	54.96	1.24	2.3	54.8	51.2 - 58.7
Sysmex XS-1000i	25	60.27	1.48	2.5	60.2	55.8 - 64.8	24	57.89	1.49	2.6	58.0	53.4 - 62.4

	Specimen MX-8						Specimen MX-9					
All Method	119	55.98	1.85	3.3	55.4	50.4 - 61.6	118	50.06	1.67	3.3	49.7	45.0 - 55.1
All Sysmex XN/XS Instruments	119	55.98	1.85	3.3	55.4	50.4 - 61.6	118	50.06	1.67	3.3	49.7	45.0 - 55.1
Sysmex XN-1000	17	58.15	0.85	1.5	57.9	55.6 - 60.8	17	52.44	0.60	1.1	52.5	50.6 - 54.3
Sysmex XN-330	7	55.40	0.80	1.4	54.9	52.9 - 57.9	7	49.41	0.65	1.3	49.3	47.4 - 51.4
Sysmex XN-430	35	54.63	0.88	1.6	54.5	51.9 - 57.3	36	49.93	1.62	3.2	49.8	45.0 - 54.8
Sysmex XN-450	11	55.33	0.81	1.5	55.2	52.9 - 57.8	11	49.50	0.98	2.0	49.2	46.5 - 52.5
Sysmex XN-530	5	54.73	0.55	1.0	55.0	53.0 - 56.4	5	49.37	0.51	1.0	49.5	47.8 - 51.0
Sysmex XN-550	19	54.79	1.23	2.3	54.5	51.0 - 58.5	19	49.89	1.24	2.5	49.6	46.1 - 53.7
Sysmex XS-1000i	24	57.74	1.47	2.6	57.5	53.3 - 62.2	25	49.57	2.09	4.2	49.1	43.3 - 55.9

	Specimen MX-10					
All Method	118	55.68	1.92	3.5	55.2	49.9 - 61.5
All Sysmex XN/XS Instruments	118	55.68	1.92	3.5	55.2	49.9 - 61.5
Sysmex XN-1000	17	58.06	1.00	1.7	58.2	55.0 - 61.1
Sysmex XN-330	7	54.70	0.81	1.5	54.9	52.2 - 57.2
Sysmex XN-430	35	54.35	0.99	1.8	54.4	51.3 - 57.4
Sysmex XN-450	11	54.65	0.82	1.5	54.5	52.1 - 57.2
Sysmex XN-530	5	54.83	0.67	1.2	54.5	52.8 - 56.9
Sysmex XN-550	19	54.86	1.23	2.2	55.1	51.1 - 58.6
Sysmex XS-1000i	23	57.24	1.85	3.2	56.9	51.7 - 62.8

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

	Specimen MX-6						Specimen MX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	111	16.37	1.28	7.8	16.5	12.5 - 20.3	120	20.15	2.16	10.7	21.1	13.6 - 26.7
All Sysmex XN/XS Instruments	111	16.37	1.28	7.8	16.5	12.5 - 20.3	120	20.15	2.16	10.7	21.1	13.6 - 26.7
Sysmex XN-1000	17	15.80	0.87	5.5	15.8	13.1 - 18.5	17	19.49	0.44	2.2	19.4	18.1 - 20.9
Sysmex XN-330	7	16.99	0.96	5.7	17.1	14.1 - 19.9	7	21.43	0.74	3.4	21.8	19.2 - 23.7
Sysmex XN-430	33	17.13	0.71	4.1	17.1	14.9 - 19.3	34	21.62	0.48	2.2	21.6	20.1 - 23.1
Sysmex XN-450	11	16.37	1.28	7.8	16.7	12.5 - 20.3	11	21.43	0.50	2.4	21.4	19.9 - 23.0
Sysmex XN-530	5	15.73	0.38	2.4	15.9	14.5 - 16.9	5	21.60	0.40	1.9	21.6	20.4 - 22.8
Sysmex XN-550	19	17.06	1.06	6.2	17.1	13.8 - 20.3	19	21.38	0.69	3.2	21.3	19.3 - 23.5
Sysmex XS-1000i	22	14.28	1.75	12.3	15.0	9.0 - 19.6	25	17.23	1.67	9.7	17.1	12.2 - 22.3

	Specimen MX-8						Specimen MX-9					
All Method	119	20.19	2.13	10.5	21.2	13.8 - 26.6	114	28.08	1.33	4.7	28.3	24.1 - 32.1
All Sysmex XN/XS Instruments	119	20.19	2.13	10.5	21.2	13.8 - 26.6	114	28.08	1.33	4.7	28.3	24.1 - 32.1
Sysmex XN-1000	17	19.55	0.40	2.1	19.5	18.3 - 20.8	17	26.15	0.52	2.0	26.1	24.5 - 27.8
Sysmex XN-330	7	21.66	0.43	2.0	21.7	20.3 - 23.0	7	28.44	1.14	4.0	28.0	25.0 - 31.9
Sysmex XN-430	34	21.71	0.39	1.8	21.7	20.5 - 22.9	34	28.29	1.52	5.4	28.4	23.7 - 32.9
Sysmex XN-450	11	21.32	0.62	2.9	21.4	19.4 - 23.2	11	28.08	0.71	2.5	28.1	25.9 - 30.3
Sysmex XN-530	5	21.07	0.25	1.2	21.1	20.3 - 21.9	5	28.83	0.38	1.3	29.0	27.6 - 30.0
Sysmex XN-550	18	21.53	0.52	2.4	21.6	19.9 - 23.1	19	28.07	1.10	3.9	28.1	24.7 - 31.4
Sysmex XS-1000i	25	17.08	1.63	9.6	16.7	12.1 - 22.0	24	28.40	2.14	7.5	29.2	21.9 - 34.9

	Specimen MX-10					
All Method	118	20.45	2.07	10.1	21.3	14.2 - 26.7
All Sysmex XN/XS Instruments	118	20.45	2.07	10.1	21.3	14.2 - 26.7
Sysmex XN-1000	17	20.01	1.39	6.9	19.7	15.8 - 24.2
Sysmex XN-330	7	21.39	0.63	2.9	21.5	19.5 - 23.3
Sysmex XN-430	34	21.74	0.59	2.7	21.8	19.9 - 23.6
Sysmex XN-450	11	21.58	0.34	1.6	21.7	20.5 - 22.6
Sysmex XN-530	5	21.60	0.20	0.9	21.6	21.0 - 22.2
Sysmex XN-550	18	21.64	0.43	2.0	21.7	20.3 - 23.0
Sysmex XS-1000i	24	17.60	1.85	10.5	17.8	12.0 - 23.2

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

Specimen MX-6

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	117	0.87	0.49	55.6	0.7	0.0 - 2.4
All Sysmex XN/XS Instruments	117	0.87	0.49	55.6	0.7	0.0 - 2.4
Sysmex XN-1000	17	1.89	0.35	18.5	1.8	0.8 - 3.0
Sysmex XN-330	7	0.61	0.18	28.9	0.6	0.0 - 1.2
Sysmex XN-350	5	0.75	0.21	28.3	0.8	0.1 - 1.4
Sysmex XN-430	34	0.68	0.21	31.3	0.6	0.0 - 1.4
Sysmex XN-450	11	0.70	0.30	42.9	0.6	0.0 - 1.6
Sysmex XN-530	5	0.50	0.17	34.6	0.6	0.0 - 1.1
Sysmex XN-550	19	0.59	0.20	33.4	0.6	0.0 - 1.2
Sysmex XS-1000i	24	0.87	0.19	21.4	0.8	0.3 - 1.5

Specimen MX-7

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	117	1.33	0.71	53.6	1.1	0.0 - 3.5
All Sysmex XN/XS Instruments	117	1.33	0.71	53.6	1.1	0.0 - 3.5
Sysmex XN-1000	17	2.92	0.34	11.7	3.0	1.8 - 4.0
Sysmex XN-330	7	0.93	0.11	12.0	0.9	0.5 - 1.3
Sysmex XN-350	5	1.05	0.07	6.7	1.1	0.8 - 1.3
Sysmex XN-430	33	0.98	0.12	12.0	1.0	0.6 - 1.4
Sysmex XN-450	11	1.03	0.23	22.7	1.0	0.3 - 1.8
Sysmex XN-530	5	1.07	0.21	19.5	1.0	0.4 - 1.7
Sysmex XN-550	19	0.98	0.15	15.2	1.0	0.5 - 1.5
Sysmex XS-1000i	23	1.24	0.16	12.6	1.2	0.7 - 1.8

Specimen MX-8

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	118	1.36	0.72	53.1	1.1	0.0 - 3.6
All Sysmex XN/XS Instruments	118	1.36	0.72	53.1	1.1	0.0 - 3.6
Sysmex XN-1000	17	2.89	0.30	10.3	3.0	1.9 - 3.8
Sysmex XN-330	7	0.97	0.13	12.9	0.9	0.5 - 1.4
Sysmex XN-350	5	1.25	0.35	28.3	1.3	0.1 - 2.4
Sysmex XN-430	33	0.98	0.21	21.0	1.0	0.3 - 1.7
Sysmex XN-450	11	1.07	0.21	19.6	1.2	0.4 - 1.8
Sysmex XN-530	5	1.23	0.12	9.4	1.3	0.8 - 1.6
Sysmex XN-550	19	1.04	0.20	19.5	1.0	0.4 - 1.7
Sysmex XS-1000i	24	1.18	0.24	20.8	1.2	0.4 - 2.0

Specimen MX-9

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	115	1.65	0.69	41.6	1.4	0.0 - 3.8
All Sysmex XN/XS Instruments	115	1.65	0.69	41.6	1.4	0.0 - 3.8
Sysmex XN-1000	17	3.16	0.33	10.4	3.3	2.1 - 4.2
Sysmex XN-330	7	1.27	0.13	9.9	1.2	0.8 - 1.7
Sysmex XN-350	5	1.45	0.21	14.6	1.5	0.8 - 2.1
Sysmex XN-430	33	1.39	0.54	38.5	1.3	0.0 - 3.1
Sysmex XN-450	11	1.50	0.22	14.9	1.5	0.8 - 2.2
Sysmex XN-530	5	1.40	0.17	12.4	1.5	0.8 - 2.0
Sysmex XN-550	19	1.37	0.32	23.3	1.4	0.4 - 2.4
Sysmex XS-1000i	24	1.48	0.30	19.9	1.4	0.5 - 2.4

Specimen MX-10

Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	118	1.37	0.71	52.0	1.1	0.0 - 3.6
All Sysmex XN/XS Instruments	118	1.37	0.71	52.0	1.1	0.0 - 3.6
Sysmex XN-1000	17	2.76	0.52	18.8	3.0	1.2 - 4.4
Sysmex XN-330	7	0.89	0.13	15.2	0.9	0.4 - 1.3
Sysmex XN-350	5	1.15	0.07	6.1	1.2	0.9 - 1.4
Sysmex XN-430	33	1.00	0.14	14.3	1.0	0.5 - 1.5
Sysmex XN-450	11	1.06	0.25	23.1	1.1	0.3 - 1.9
Sysmex XN-530	5	1.03	0.15	14.8	1.0	0.5 - 1.5
Sysmex XN-550	19	0.98	0.15	14.9	1.0	0.5 - 1.5
Sysmex XS-1000i	24	1.37	0.24	17.5	1.3	0.6 - 2.1

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

	Specimen MX-6						Specimen MX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	118	15.49	0.67	4.3	15.5	13.4 - 17.6	119	14.39	0.71	4.9	14.4	12.2 - 16.6
All Sysmex XN/XS Instruments	118	15.49	0.67	4.3	15.5	13.4 - 17.6	119	14.39	0.71	4.9	14.4	12.2 - 16.6
Sysmex XN-1000	17	15.58	0.50	3.2	15.6	14.0 - 17.1	17	14.41	0.75	5.2	14.5	12.1 - 16.7
Sysmex XN-330	7	15.17	0.78	5.1	15.0	12.8 - 17.6	7	14.34	0.64	4.5	14.3	12.4 - 16.3
Sysmex XN-430	37	15.48	0.83	5.4	15.5	12.9 - 18.0	37	14.45	0.79	5.4	14.4	12.0 - 16.9
Sysmex XN-450	11	15.78	0.58	3.7	15.7	14.0 - 17.6	11	14.65	0.65	4.5	14.8	12.6 - 16.7
Sysmex XN-530	5	15.50	0.95	6.2	15.4	12.6 - 18.4	5	14.47	0.74	5.1	14.2	12.2 - 16.7
Sysmex XN-550	19	15.21	0.75	5.0	15.0	12.9 - 17.5	19	14.32	0.58	4.1	14.3	12.5 - 16.1
Sysmex XS-1000i	24	15.56	0.53	3.4	15.6	13.9 - 17.2	24	14.26	0.75	5.2	14.2	12.0 - 16.5

	Specimen MX-8						Specimen MX-9					
All Method	119	14.37	0.67	4.6	14.3	12.3 - 16.4	117	13.12	0.65	5.0	13.1	11.1 - 15.1
All Sysmex XN/XS Instruments	119	14.37	0.67	4.6	14.3	12.3 - 16.4	117	13.12	0.65	5.0	13.1	11.1 - 15.1
Sysmex XN-1000	17	14.61	0.61	4.2	14.7	12.7 - 16.5	17	13.43	0.39	2.9	13.4	12.2 - 14.6
Sysmex XN-330	7	14.09	0.74	5.3	13.7	11.8 - 16.4	7	13.20	0.76	5.7	13.2	10.9 - 15.5
Sysmex XN-430	37	14.45	0.68	4.7	14.4	12.4 - 16.5	36	13.27	0.80	6.1	13.3	10.8 - 15.7
Sysmex XN-450	11	14.09	0.23	1.7	14.0	13.3 - 14.8	11	13.17	0.38	2.9	13.1	12.0 - 14.4
Sysmex XN-530	5	14.47	0.55	3.8	14.5	12.8 - 16.2	5	12.47	0.12	0.9	12.4	12.1 - 12.9
Sysmex XN-550	19	14.34	0.67	4.7	14.3	12.3 - 16.4	19	13.04	0.60	4.6	13.1	11.2 - 14.9
Sysmex XS-1000i	24	14.30	0.79	5.5	14.1	11.9 - 16.7	24	12.84	0.71	5.6	13.0	10.6 - 15.0

	Specimen MX-10					
All Method	117	14.41	0.63	4.4	14.5	12.5 - 16.4
All Sysmex XN/XS Instruments	117	14.41	0.63	4.4	14.5	12.5 - 16.4
Sysmex XN-1000	17	14.41	0.60	4.1	14.5	12.6 - 16.2
Sysmex XN-330	7	14.57	0.66	4.5	14.6	12.5 - 16.6
Sysmex XN-430	37	14.54	0.66	4.5	14.5	12.5 - 16.6
Sysmex XN-450	11	14.22	0.65	4.6	14.3	12.2 - 16.2
Sysmex XN-530	5	14.30	0.87	6.1	14.7	11.6 - 17.0
Sysmex XN-550	19	14.28	0.64	4.5	14.1	12.3 - 16.3
Sysmex XS-1000i	24	14.39	0.84	5.9	14.6	11.8 - 17.0

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

	Specimen MX-6						Specimen MX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	78	9.01	0.75	8.4	8.9	6.7 - 11.3	78	8.51	0.62	7.3	8.4	6.6 - 10.4
All Sysmex XN/XS Instruments	119	8.50	1.68	19.7	8.9	3.4 - 13.6	119	8.14	1.53	18.8	8.4	3.5 - 12.8
Sysmex XN-1000	17	4.86	0.11	2.3	4.9	4.5 - 5.2	17	4.79	0.18	3.7	4.8	4.2 - 5.4
Sysmex XN-330	7	8.99	1.04	11.6	8.9	5.8 - 12.2	7	8.61	0.55	6.4	8.4	6.9 - 10.3
Sysmex XN-430	37	9.06	0.61	6.8	9.1	7.2 - 11.0	37	8.50	0.58	6.9	8.6	6.7 - 10.3
Sysmex XN-450	11	8.95	0.79	8.8	9.0	6.5 - 11.4	11	8.62	0.87	10.1	8.9	6.0 - 11.3
Sysmex XN-530	5	9.70	1.21	12.5	10.4	6.0 - 13.4	3	8.87	0.71	8.0	9.0	6.7 - 11.0
Sysmex XN-550	19	8.86	0.82	9.3	8.7	6.4 - 11.4	19	8.36	0.59	7.1	8.2	6.5 - 10.2
Sysmex XS-1000i	24	9.41	1.02	10.8	9.3	6.3 - 12.5	24	9.32	0.72	7.7	9.5	7.1 - 11.5

	Specimen MX-8						Specimen MX-9					
All Method	78	8.34	0.63	7.6	8.3	6.4 - 10.3	77	7.61	0.61	8.0	7.5	5.7 - 9.5
All Sysmex XN/XS Instruments	119	8.09	1.57	19.4	8.3	3.3 - 12.8	118	7.28	1.18	16.2	7.6	3.7 - 10.9
Sysmex XN-1000	17	4.80	0.14	2.9	4.8	4.3 - 5.3	17	4.82	0.10	2.1	4.9	4.5 - 5.2
Sysmex XN-330	7	7.89	0.38	4.8	7.7	6.7 - 9.1	7	7.67	0.54	7.1	7.6	6.0 - 9.4
Sysmex XN-430	37	8.38	0.61	7.2	8.3	6.5 - 10.2	36	7.49	0.63	8.4	7.5	5.5 - 9.4
Sysmex XN-450	11	8.20	0.82	10.0	8.0	5.7 - 10.7	11	7.75	0.69	8.9	7.6	5.6 - 9.9
Sysmex XN-530	5	8.50	0.62	7.3	8.3	6.6 - 10.4	5	7.93	0.55	6.9	8.2	6.2 - 9.6
Sysmex XN-550	19	8.49	0.61	7.2	8.6	6.6 - 10.4	19	7.62	0.52	6.8	7.7	6.0 - 9.2
Sysmex XS-1000i	24	9.63	0.77	8.0	9.6	7.3 - 12.0	24	7.95	0.73	9.2	8.1	5.7 - 10.2

	Specimen MX-10					
All Method	78	8.47	0.68	8.0	8.2	6.4 - 10.6
All Sysmex XN/XS Instruments	119	8.07	1.55	19.2	8.2	3.4 - 12.8
Sysmex XN-1000	17	4.75	0.12	2.6	4.8	4.3 - 5.2
Sysmex XN-330	7	8.46	0.65	7.6	8.3	6.5 - 10.4
Sysmex XN-430	37	8.55	0.75	8.7	8.3	6.3 - 10.8
Sysmex XN-450	11	8.48	0.72	8.5	8.2	6.3 - 10.7
Sysmex XN-530	5	8.23	0.32	3.9	8.1	7.2 - 9.2
Sysmex XN-550	19	8.35	0.63	7.5	8.4	6.4 - 10.3
Sysmex XS-1000i	24	9.12	0.97	10.6	9.0	6.2 - 12.1

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

	Specimen MX-6						Specimen MX-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	91	15.77	0.90	5.7	15.8	13.0 - 18.5	91	14.61	0.70	4.8	14.4	12.5 - 16.8
All Sysmex XN/XS Instruments	91	15.77	0.90	5.7	15.8	13.0 - 18.5	91	14.61	0.70	4.8	14.4	12.5 - 16.8
Sysmex XN-1000	16	14.88	0.54	3.6	14.8	13.2 - 16.5	16	14.61	0.63	4.3	14.4	12.7 - 16.6
Sysmex XN-330	7	16.09	0.50	3.1	16.2	14.5 - 17.6	7	14.94	0.75	5.1	15.3	12.6 - 17.3
Sysmex XN-430	36	15.73	0.85	5.4	15.7	13.1 - 18.3	36	14.53	0.78	5.4	14.4	12.1 - 16.9
Sysmex XN-450	11	16.26	1.08	6.6	16.5	13.0 - 19.5	11	14.40	0.62	4.3	14.1	12.5 - 16.3
Sysmex XN-530	5	16.63	1.08	6.5	17.1	13.3 - 19.9	5	14.70	0.79	5.4	15.0	12.3 - 17.1
Sysmex XN-550	17	16.08	0.69	4.3	16.0	14.0 - 18.2	17	14.72	0.62	4.2	14.6	12.8 - 16.6

	Specimen MX-8						Specimen MX-9					
All Method	91	14.97	0.80	5.3	15.0	12.5 - 17.4	89	13.32	0.64	4.8	13.2	11.4 - 15.3
All Sysmex XN/XS Instruments	91	14.97	0.80	5.3	15.0	12.5 - 17.4	89	13.32	0.64	4.8	13.2	11.4 - 15.3
Sysmex XN-1000	16	14.79	0.68	4.6	14.7	12.7 - 16.9	16	12.81	0.29	2.3	12.8	11.9 - 13.7
Sysmex XN-330	7	15.81	0.43	2.7	16.0	14.5 - 17.2	7	13.51	0.57	4.2	13.6	11.8 - 15.3
Sysmex XN-430	36	14.87	0.87	5.9	14.7	12.2 - 17.5	35	13.42	0.61	4.5	13.4	11.5 - 15.3
Sysmex XN-450	11	15.11	0.72	4.7	15.1	12.9 - 17.3	11	13.53	0.47	3.5	13.4	12.1 - 15.0
Sysmex XN-530	5	15.07	0.78	5.2	15.3	12.7 - 17.4	5	12.97	0.81	6.3	12.6	10.5 - 15.5
Sysmex XN-550	17	14.86	0.78	5.2	14.9	12.5 - 17.2	17	13.64	0.84	6.2	13.2	11.1 - 16.2

	Specimen MX-10					
All Method	91	14.76	0.81	5.5	14.7	12.3 - 17.2
All Sysmex XN/XS Instruments	91	14.76	0.81	5.5	14.7	12.3 - 17.2
Sysmex XN-1000	16	14.52	0.73	5.0	14.6	12.3 - 16.8
Sysmex XN-330	7	15.29	0.69	4.5	15.7	13.2 - 17.4
Sysmex XN-430	36	14.69	0.80	5.4	14.7	12.2 - 17.1
Sysmex XN-450	11	15.01	0.85	5.7	15.1	12.4 - 17.6
Sysmex XN-530	5	15.13	0.81	5.4	15.5	12.6 - 17.6
Sysmex XN-550	17	14.70	0.88	6.0	14.5	12.0 - 17.4

2021 M2
BLOOD CELL IDENTIFICATION
Specimens BC-7 through BC-12

CASE HISTORY:

A 70-year-old male presented to a new primary care physician for a routine physical. He said he was long overdue for a checkup but felt fine. He reported having some body aches and arthritis pain during his daily walks in the woods. His medical history included an episode of Lyme disease over a decade ago, that was successfully treated with antibiotics. Upon examination, the patient appeared well nourished and physically fit with mild swelling in both knees. He is an outdoorsman who has never travelled outside the United States and spends much of his time camping, fishing, and photographing wildlife.

A CBC was performed, and results appear below.

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Test	Results	Reference Range
WBC	4.9 x 10^9/L	4.5 - 11 x 10^9/L
RBC	5.1 x 10^{12}/L	4.5 - 6.5 x 10^{12}/L
HGB	15.2 g/dL	14 – 18 g/dL
HCT	44.5 %	40 - 52 %
PLT	120 x 10^9/L	150 - 450 x 10^9/L
MCV	87 fL	80 - 100 fL
MCH	30 pg	26 - 36 pg
MCHC	34 g/dL	32 - 37 g/dL
RDW	13 %	11.5 – 14.5 %

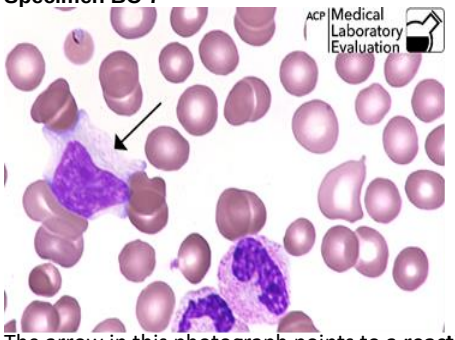
This patient was diagnosed with babesiosis, a malaria-like illness caused by the protozoan parasite Babesia. There are many species of Babesia, with *B. microti* being the primary cause of human babesiosis in the United States. Babesiosis occurs mainly in the northeastern coastal areas of the U.S. Some cases have been reported in the upper midwest and west coast of the U.S., in Europe, and in other regions. Asymptomatic infection is common in endemic areas. Babesia is spread to humans by the bite of an infected tick. The tick must remain attached at least 36 hours for transmission of *B. microti* to occur. Therefore, early removal of ticks is important and daily full-body self-examination is recommended for people in tick-infested areas. The ticks that spread *B. microti* are easily overlooked because they are very small, only about the size of a poppy seed.

In the United States, the clinical spectrum of babesiosis ranges from asymptomatic to rapidly progressive and fatal. Babesiosis can affect all ages, with most patients presenting in their 40s or 50s. The incubation period varies from several days to several months after a recognized tick bite, although most patients do not recall having a tick exposure. When symptoms do occur, the clinical picture ranges from a mild, self-limited flu-like illness to a serious life-threatening disease with severe hemolytic anemia, thrombocytopenia, renal failure, and hypotension. Clinical manifestations, if any, include nonspecific influenza-like signs and symptoms including fever, chills, sweats, weakness, anorexia, headache, myalgia, and arthralgia. Later in the course of the illness, the patient may develop jaundice. Factors associated with more severe disease include advanced age, previous splenectomy and immunodeficient states. The most common complications are congestive heart failure, renal failure, and acute respiratory distress syndrome.

Fortunately, most healthy people infected with *B. microti* do not become ill. Asymptomatic patients such as the one in this case may have incidental findings of slightly depressed leukocyte count, mild hemolytic anemia, rapid heartbeat, enlarged spleen, abnormal liver function tests, and hemoglobinuria due to destruction of infected red blood cells.

BLOOD CELL IDENTIFICATION

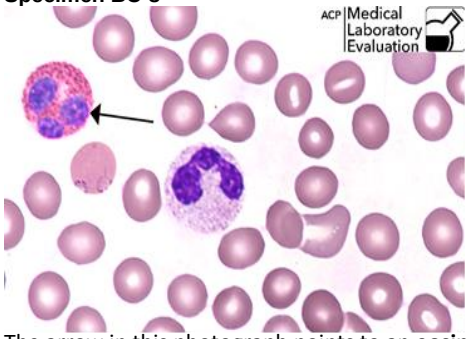
Specimen BC-7



Identification	Labs	Percent	Performance
Lymphocyte, reactive	100	69.44%	Acceptable
Immature/abnormal cell – refer	29	20.14%	Acceptable
Monocyte	15	10.42%	

The arrow in this photograph points to a **reactive lymphocyte**. Reactive lymphocytes appear in a wide variety of forms, sizes and shapes. The cytoplasm is light blue, with a deeper blue color at the extreme border. This characteristic feature is called peripheral basophilia. The cytoplasmic edge of the reactive lymph tends to flow around adjacent red blood cells. The nucleus is large and elongated or stretched, with coarse chromatin. These lymphocytes are responding to immune stimuli in the body. Other reactive changes in lymphocyte morphology include low nucleus-to-cytoplasm ratio and the possible presence of nucleoli. Some participants incorrectly identified this cell as a monocyte. Monocytes tend to have folded nuclei and grayer, finely granular cytoplasm without the darker blue edges. To view another photo of a reactive lymphocyte, see 2019 M2 Specimen BC-8. To view a monocyte, see 20M3 BC-14.

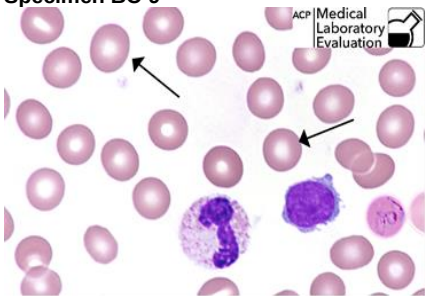
Specimen BC-8



Identification	Labs	Percent	Performance
Eosinophil, any stage	144	100%	Acceptable

The arrow in this photograph points to an **eosinophil**. These cells are easily identified by their characteristic red-orange color. The cytoplasm of an eosinophil is packed with dense, round, red-orange granules stained by the dye eosin. The granules surround the nucleus but do not obscure it. The nuclei of eosinophils are usually segmented into two lobes. They normally constitute 1-3% of the peripheral blood leukocytes and can be increased in patients with allergic reactions or parasitic infections. To view another photo of an "eo", see 2020 M1 Specimen BC-1.

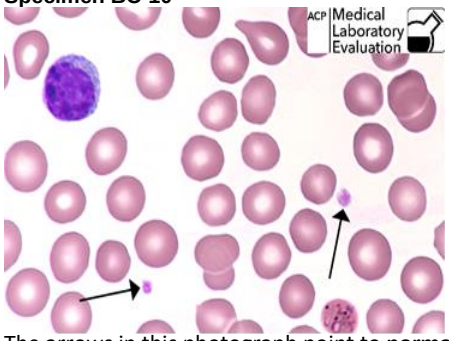
Specimen BC-9



Identification	Labs	Percent	Performance
Erythrocyte, normal	141	97.92%	Acceptable

The arrows in this photograph point to **normal erythrocytes**. As a general rule, the nucleus of a small, normal, resting lymphocyte can be used to provide a relative measurement of the size of the surrounding red blood cells. The arrowed cells are approximately the same size as the nucleus of the normal lymphocyte nearby, or slightly smaller. The red cells are uniform in color, and the area of central pallor covers about one-third of each cell. To view another photo of normal erythrocytes, see 2020 M2 Specimen BC-11.

Specimen BC-10

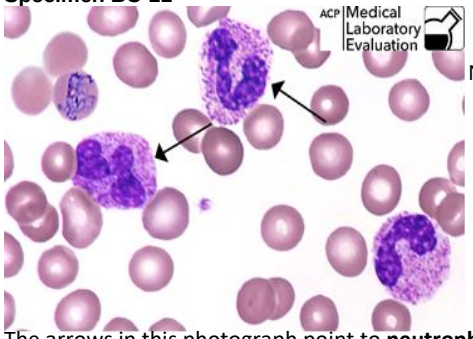


Identification	Labs	Percent	Performance
Platelet, normal	144	100%	Acceptable

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

BLOOD CELL IDENTIFICATION

Specimen BC-11

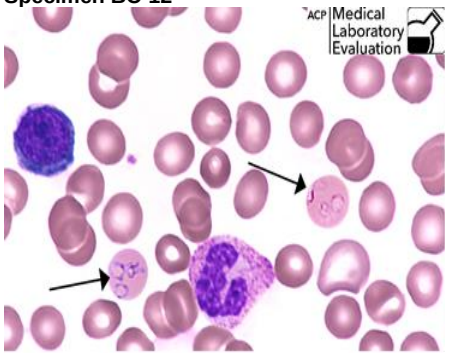


Identification	Labs	Percent	Performance
Neutrophil – seg/band w/toxic granulation	133	92.36%	Acceptable
Neutrophil – Segmented or band	7	4.86%	

The arrows in this photograph point to **neutrophils with toxic granulation**. The cytoplasm of cells with toxic granulation contains small, coarse, dark purple granules. Toxic granulation is a sign that the patient has a serious infection or other toxic condition. In contrast, normal neutrophils primarily have fine, smooth, pink granules. Basophils contain much larger purple-black granules, which can cover part of the cell's nucleus and protrude from the cytoplasmic edge. To view another photo of a neutrophil with toxic granulation, see 2019 M2 Specimen BC-9.

BLOOD CELL IDENTIFICATION

Specimen BC-12



Identification	Labs	Percent	Performance
Protozoan, non-malarial	51	35.42%	Not graded – Educational challenge
Immature/abnormal cell – refer	56	38.89%	
Malaria	37	25.69%	

The arrows in this ungraded educational challenge point to the **non-malarial protozoan**, *Babesia microti*. Co-infection with other tick-transmitted species such as Borriela and Erlichia may be seen. The diagnosis of babesiosis is based on the finding of ring forms and pleomorphic intraerythrocytic organisms. Babesia invades red blood cells, appearing as tiny, delicate rings with one or two chromatin dots. Occasionally, extracellular merozoites are seen. Few cases of malaria occur in the United States in people who have not left the country. The absence gametocytes and lack of pigment within the affected red blood cells can be helpful in the discrimination of *Babesia* from malaria, as well as patient history. Other distinguishing features include piriform (pear-shaped) stages in pairs and tetrads called "Maltese crosses". These later forms, produced by binary fission of the trophozoite, are diagnostic for babesiosis. To view another photo of Babesia, see 2007 M3 Specimen BC-18. To view a photo of Malaria, see 2017 M3 Specimen BC-18.

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BLOOD BANK

ABO GROUP

Specimen	Results	Labs	Percent	Performance
BB-6	Group A	6	100%	Acceptable
BB-7	Group A	6	100%	Acceptable
BB-8	Group O	6	100%	Acceptable
BB-9	Group B	6	100%	Acceptable
BB-10	Group O	6	100%	Acceptable

RH FACTOR (D TYPE)

Specimen	Results	Labs	Percent	Performance
BB-6	Rh Negative	16	100%	Acceptable
BB-7	Rh Positive	16	100%	Acceptable
BB-8	Rh Negative	16	100%	Acceptable
BB-9	Rh Positive	16	100%	Acceptable
BB-10	Rh Positive	16	100%	Acceptable

UNEXPECTED ANTIBODY DETECTION

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

BLOOD BANK

ANTIBODY IDENTIFICATION

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

COMPATIBILITY TESTING

Specimen	Results	Labs	Percent	Performance
AB-6	Compatible	6	100%	Acceptable
AB-7	Compatible	6	100%	Acceptable
AB-8	Not Compatible	6	100%	Acceptable
AB-9	Compatible	6	100%	Acceptable
AB-10	Compatible	6	100%	Acceptable

PROTHROMBIN TIME (seconds)

Reagent/Instrument	Specimen CG-6 Labs	Mean	SD	CV	Median	Range	Specimen CG-7 Labs	Mean	SD	CV	Median	Range
All Method	21	18.69	1.16	6.2	18.5	15.8 - 21.5	21	30.03	2.79	9.3	29.9	25.5 - 34.6
Dade Innovin												
Dade Behring BFT II	5	18.50	0.85	4.6	18.5	15.7 - 21.3	5	31.50	1.70	5.4	31.5	26.7 - 36.3
Sysmex CA-500/600 series	12	18.60	0.61	3.3	18.5	15.8 - 21.4	12	29.64	1.12	3.8	29.5	25.1 - 34.1
All Coagulation Instruments	18	18.54	0.61	3.3	18.4	15.7 - 21.4	18	29.91	1.27	4.2	29.7	25.4 - 34.5

Reagent/Instrument	Specimen CG-8 Labs	Mean	SD	CV	Median	Range	Specimen CG-9 Labs	Mean	SD	CV	Median	Range
All Method	21	10.43	0.55	5.3	10.4	8.8 - 12.0	21	10.85	0.66	6.1	10.8	9.2 - 12.5
Dade Innovin												
Dade Behring BFT II	5	9.60	0.01	0.0	9.6	8.1 - 11.1	5	9.85	0.21	2.2	9.9	8.3 - 11.4
Sysmex CA-500/600 series	12	10.37	0.34	3.3	10.4	8.8 - 12.0	12	10.94	0.59	5.4	10.9	9.3 - 12.6
All Coagulation Instruments	18	10.27	0.40	3.9	10.4	8.7 - 11.9	18	10.77	0.66	6.1	10.8	9.1 - 12.4

Reagent/Instrument	Specimen CG-10 Labs	Mean	SD	CV	Median	Range
All Method	21	13.30	0.75	5.7	13.0	11.3 - 15.3
Dade Innovin						
Dade Behring BFT II	5	12.65	0.07	0.6	12.7	10.7 - 14.6
Sysmex CA-500/600 series	12	13.12	0.47	3.6	13.0	11.1 - 15.1
All Coagulation Instruments	18	13.03	0.45	3.5	12.9	11.0 - 15.0

PROTHROMBIN TIME–INTERNATIONAL NORMALIZED RATIO (INR)

Reagent/Instrument	Specimen CG-6 Labs	Mean	SD	CV	Median	Range	Specimen CG-7 Labs	Mean	SD	CV	Median	Range
All Method	21	1.85	0.11	5.9	1.8	1.5 - 2.2	21	2.94	0.15	5.2	2.9	2.4 - 3.4
Dade Innovin												
Dade Behring BFT II	5	1.80	0.14	7.9	1.8	1.5 - 2.1	5	2.85	0.21	7.4	2.9	2.4 - 3.3
Sysmex CA-500/600 series	12	1.86	0.09	4.8	1.9	1.5 - 2.2	12	2.98	0.15	5.0	2.9	2.5 - 3.5
All Coagulation Instruments	18	1.85	0.09	5.0	1.8	1.5 - 2.2	18	2.96	0.15	5.1	2.9	2.5 - 3.5

Reagent/Instrument	Specimen CG-8 Labs	Mean	SD	CV	Median	Range	Specimen CG-9 Labs	Mean	SD	CV	Median	Range
All Method	21	1.02	0.06	6.1	1.0	0.8 - 1.2	21	1.05	0.06	5.9	1.1	0.8 - 1.3
Dade Innovin												
Dade Behring BFT II	5	1.00	0.01	0.0	1.0	0.8 - 1.2	5	1.10	0.01	0.0	1.1	0.9 - 1.3
Sysmex CA-500/600 series	12	1.03	0.06	6.1	1.0	0.8 - 1.2	12	1.06	0.05	4.9	1.1	0.8 - 1.3
All Coagulation Instruments	18	1.02	0.06	5.5	1.0	0.8 - 1.2	18	1.06	0.05	4.8	1.1	0.9 - 1.3

Reagent/Instrument	Specimen CG-10 Labs	Mean	SD	CV	Median	Range
All Method	21	1.31	0.08	6.3	1.3	1.1 - 1.6
Dade Innovin						
Dade Behring BFT II	5	1.30	0.01	0.0	1.3	1.1 - 1.5
Sysmex CA-500/600 series	12	1.30	0.07	5.7	1.3	1.1 - 1.5
All Coagulation Instruments	18	1.30	0.07	5.0	1.3	1.1 - 1.5

ACTIVATED PARTIAL THROMBOPLASTIN (seconds)

Reagent/Instrument	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range
	Specimen CG-6						**Specimen CG-7**					
All Method	13	33.4	5.0	14.9	31	28 - 39	13	53.6	9.3	17.3	50	45 - 62
Dade Actin FSL												
Sysmex CA-500/600 series	6	30.8	0.4	1.3	31	26 - 36	6	49.0	0.9	1.8	49	41 - 57
	Specimen CG-8						**Specimen CG-9**					
All Method	13	25.6	2.4	9.5	25	21 - 30	13	27.5	6.5	23.6	25	23 - 32
Dade Actin FSL												
Sysmex CA-500/600 series	6	24.5	0.8	3.4	24	20 - 29	6	24.7	0.8	3.3	25	20 - 29
	Specimen CG-10											
All Method	13	29.1	2.9	10.0	29	24 - 34						
Dade Actin FSL												
Sysmex CA-500/600 series	6	27.7	1.2	4.4	28	23 - 32						

Fibrinogen (mg/dL)

One participant reported Fibrinogen. The vendor assay values on a Sysmex CA-540 for specimens CG-6 through CG-10 are: 195 mg/dL, 208 mg/dL, 201 mg/dL, 394 mg/dL, and 132 mg/dL, respectively.

COAGUCHEK XS PLUS PROTHROMBIN TIME (seconds)

	Specimen XS-6						Specimen XS-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	13	22.60	0.39	1.7	22.5	19.2 - 26.0	13	33.37	0.76	2.3	33.4	28.3 - 38.4
All Roche CoaguChek XS Plus Instruments	13	22.60	0.39	1.7	22.5	19.2 - 26.0	13	33.37	0.76	2.3	33.4	28.3 - 38.4
Roche CoaguChek XS Plus - Waived	8	22.59	0.40	1.8	22.6	19.1 - 26.0	8	33.28	0.94	2.8	33.3	28.2 - 38.3
Roche CoaguChek XS Plus	5	22.62	0.42	1.9	22.5	19.2 - 26.1	5	33.52	0.38	1.1	33.4	28.4 - 38.6
	Specimen XS-8						**Specimen XS-9**					
All Method	6	33.13	1.33	4.0	32.9	28.1 - 38.1	6	22.23	0.13	0.6	22.2	18.8 - 25.6
All Roche CoaguChek XS Plus Instruments	6	33.13	1.33	4.0	32.9	28.1 - 38.1	6	22.23	0.13	0.6	22.2	18.8 - 25.6
Roche CoaguChek XS Plus - Waived	4	-	-	-	33.4	28.1 - 38.1	4	-	-	-	22.2	18.8 - 25.6
Roche CoaguChek XS Plus	2	-	-	-	32.9	28.1 - 38.1	2	-	-	-	22.3	18.8 - 25.6

	Specimen XS-10					
All Method	6	15.08	0.05	0.3	15.1	12.8 - 17.4
All Roche CoaguChek XS Plus Instruments	6	15.08	0.05	0.3	15.1	12.8 - 17.4
Roche CoaguChek XS Plus - Waived	4	-	-	-	15.1	12.8 - 17.4
Roche CoaguChek XS Plus	2	-	-	-	15.1	12.8 - 17.4

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

	Specimen XS-6						Specimen XS-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	27	1.86	0.06	3.0	1.9	1.5 - 2.2	29	2.76	0.08	3.0	2.8	2.3 - 3.2
All Roche CoaguChek XS Plus Instruments	27	1.86	0.06	3.0	1.9	1.5 - 2.2	29	2.76	0.08	3.0	2.8	2.3 - 3.2
Roche CoaguChek XS Plus - Waived	20	1.88	0.04	2.4	1.9	1.5 - 2.2	21	2.75	0.09	3.4	2.7	2.3 - 3.2
Roche CoaguChek XS Plus	8	1.80	0.11	5.9	1.8	1.5 - 2.1	8	2.79	0.04	1.3	2.8	2.3 - 3.3
	Specimen XS-8						**Specimen XS-9**					
All Method	7	2.77	0.08	3.0	2.8	2.3 - 3.2	7	1.87	0.05	2.8	1.9	1.5 - 2.2
All Roche CoaguChek XS Plus Instruments	7	2.77	0.08	3.0	2.8	2.3 - 3.2	7	1.87	0.05	2.8	1.9	1.5 - 2.2
Roche CoaguChek XS Plus - Waived	5	2.78	0.10	3.5	2.8	2.3 - 3.2	5	1.88	0.05	2.7	1.9	1.5 - 2.2
Roche CoaguChek XS Plus	2	-	-	-	2.8	2.3 - 3.2	2	-	-	-	1.9	1.5 - 2.2
	Specimen XS-10											
All Method	6	1.28	0.04	3.5	1.3	1.0 - 1.5						
All Roche CoaguChek XS Plus Instruments	6	1.28	0.04	3.5	1.3	1.0 - 1.5						
Roche CoaguChek XS Plus - Waived	4	-	-	-	1.3	1.0 - 1.5						
Roche CoaguChek XS Plus	2	-	-	-	1.3	1.0 - 1.5						

COAGUCHECK XS - INTERNATIONAL NORMALIZED RATIO (INR)

	Specimen INX-3						Specimen INX-4					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
Roche CoaguChek XS	93	1.27	0.05	3.6	1.3	1.0 - 1.5	89	1.88	0.05	2.6	1.9	1.5 - 2.2

i-Stat PROTHROMBIN TIME (seconds)

	Specimen PTI-6						Specimen PTI-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
i-Stat Prothrombin Time	10	14.37	0.12	0.8	14.3	12.2 - 16.6	10	28.80	1.65	5.7	28.0	24.4 - 33.2
	Specimen PTI-8						**Specimen PTI-9**					
i-Stat Prothrombin Time	10	28.27	1.72	6.1	27.7	24.0 - 32.6	10	15.03	0.21	1.4	15.1	12.7 - 17.3
	Specimen PTI-10											
i-Stat Prothrombin Time	10	14.90	0.44	2.9	15.1	12.6 - 17.2						

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

	Specimen PTI-6						Specimen PTI-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
i-Stat Prothrombin Time	10	1.20	0.01	0.0	1.2	1.0 - 1.4	10	2.50	0.17	6.9	2.4	2.1 - 2.9
	Specimen PTI-8						**Specimen PTI-9**					
i-Stat Prothrombin Time	10	2.43	0.15	6.3	2.4	2.0 - 2.8	10	1.27	0.06	4.6	1.3	1.0 - 1.5
	Specimen PTI-10											
i-Stat Prothrombin Time	10	1.27	0.06	4.6	1.3	1.0 - 1.5						

FLUID CELL COUNT – WHITE BLOOD CELL COUNT (µL)

	Specimen BF-3						Specimen BF-4					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	6	267.0	32.5	12.2	267	201 - 333	6	3.5	0.7	20.2	4	2 - 5

FLUID CELL COUNT – RED BLOOD CELL COUNT (µL)

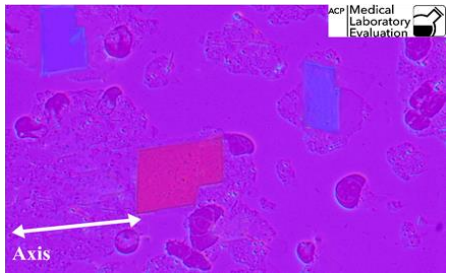
	Specimen BF-3						Specimen BF-4					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	6	1066.0	38.2	3.6	1066	989 - 1143	6	0.0	0.1	0.0	0	0 - 1

2021 M2
FLUID CRYSTAL IDENTIFICATION
Specimens FC-3 and FC-4

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

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

Specimen FC-3

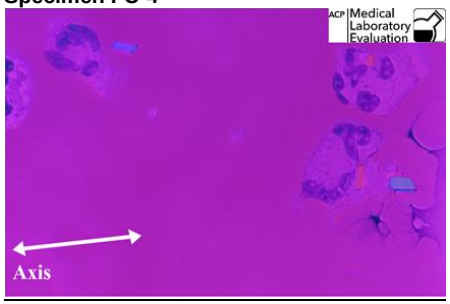


Identification	Labs	Percent	Performance
Cholesterol crystals	5	100%	Acceptable

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

2021 M2
FLUID CRYSTAL IDENTIFICATION

Specimen FC-4



Identification	Labs	Percent	Performance
CPPD crystals	5	100%	Acceptable

The objects in this photograph are **calcium pyrophosphate dihydrate (CPPD) crystals**. Calcium pyrophosphate crystals cause calcium pyrophosphate disease, a condition commonly called pseudogout. CPPD crystals are usually rhomboidal or rod-shaped, but are occasionally needle-shaped. These crystals demonstrate **positive birefringence.** The two blue crystals, located at 3 and 11 o'clock, are aligned with/parallel to the axis. The two pink-red, intracellular crystals are laying perpendicular to the compensator filter/axis. The presence of several polymorphonuclear white blood cells in this fluid specimen indicates acute inflammation. To view another photo of CPPD crystals, see 2020 M1 Specimen FC-1.

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MICROALBUMIN, DIPSTICK

Specimen UM-2

		Participant Results								
Method	***Labs***	***Negative***	***10 mg/L***	***20 mg/L***	***30 mg/L***	***50 mg/L***	***80 mg/L***	***100 mg/L***	***150 mg/L***	***+ (4 - 8 mg/dL)***	***++ (>8 mg/dL)***
ALL METHODS	27	-	1	-	7	-	18	1	-	-	-
McKesson Reagent Strips	4	-	1	-	1	-	2	-	-	-	-
Roche Micral - 1 minute	1	-	-	-	-	-	-	1	-	-	-
Siemens Clinitek Microalbumin	21	-	-	-	5	-	16	-	-	-	-
UriScan Reagent Strips	1	-	-	-	1	-	-	-	-	-	-

CREATININE, DIPSTICK

Specimen UM-2

		Participant Results						
Method	***Labs***	***Negative***	***10 mg/dL***	***30 mg/dL***	***50 mg/dL***	***100 mg/dL***	***200 mg/dL***	***300 mg/dL***
ALL METHODS	25	-	-	-	10	11	4	-
McKesson Reagent Strips	4	-	-	-	2	2	-	-
Siemens Clinitek Microalbumin	21	-	-	-	8	9	4	-

MICROALBUMIN, QUANTITATIVE (mg/L)

Specimen UM-2

Method	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	40	93.29	3.98	4.3	92.2	65.3 - 121.3
All Alere Afinion Analyzers	7	95.74	6.77	7.1	92.9	67.0 - 124.5
Alere Afinion AS100	6	95.58	7.41	7.7	92.5	66.9 - 124.3
Beckman AU	12	92.01	2.80	3.0	91.0	64.4 - 119.7
Siemens DCA Vantage	7	92.24	3.32	3.6	92.0	64.5 - 120.0
Siemens Dimension	10	98.19	7.11	7.2	98.1	68.7 - 127.7

CREATININE, URINE (mg/dL)

Specimen UM-2

Method	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	35	68.63	6.46	9.4	69.5	56.9 - 80.4
All Alere Afinion Analyzers	6	70.53	2.72	3.9	69.6	58.5 - 82.6
Alere Afinion AS100	5	70.76	2.97	4.2	69.8	58.7 - 82.8
Beckman AU	10	62.21	1.62	2.6	62.6	51.6 - 72.8
Siemens DCA Vantage	7	76.39	3.19	4.2	76.7	63.4 - 89.4
Siemens Dimension	7	69.79	1.48	2.1	69.9	57.9 - 81.7

WAIVED HEMATOLOGY–HEMOGLOBIN (g/dL)

	Specimen HD-6						Specimen HD-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	67	6.07	0.14	2.3	6.1	5.6 - 6.5	67	17.40	0.60	3.4	17.5	16.1 - 18.7
All Stanbio Methods	8	6.23	0.10	1.7	6.2	5.7 - 6.7	8	18.23	1.16	6.3	18.0	15.9 - 20.6
Alere (Stanbio) HemoPoint H2	8	6.23	0.10	1.7	6.2	5.7 - 6.7	8	18.23	1.16	6.3	18.0	15.9 - 20.6
HemoCue 201/+	58	6.04	0.12	2.0	6.1	5.6 - 6.5	57	17.38	0.46	2.6	17.4	16.1 - 18.6

WAIVED HEMATOLOGY–HEMATOCRIT (percent)

	Specimen HD-6						Specimen HD-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	10	16.40	4.73	28.8	18.3	6.9 - 25.9	11	46.58	10.34	22.2	51.0	25.8 - 67.3

KOH SKIN PREPARATION

Specimen	***Identification***	***Labs***	***Percent***	***Performance***
K-3	Yeast/fungal elements present	71	95.95%	Acceptable
	Yeast/fungal elements absent	3	4.05%	

Organism present in specimen K-3: *Microsporum gypseum*

K-4	Yeast/fungal elements absent	70	94.59%	Acceptable
	Yeast/fungal elements present	4	5.41%	

Organism present in specimen K-4: *Escherichia coli*

URINALYSIS DIPSTICK–SPECIFIC GRAVITY

Specimen UA-2

Method	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	582	1.0176	0.0046	0.4	1.020	1.007 - 1.028
All Refractive Index Methods	5	1.0276	0.0043	0.4	1.029	1.017 - 1.038
All Roche Methods	12	1.0125	0.0033	0.3	1.010	1.002 - 1.023
All Siemens Methods	453	1.0189	0.0036	0.4	1.020	1.008 - 1.029
Consult Diagnostics Urine Analyzer	7	1.0157	0.0045	0.4	1.015	1.005 - 1.026
Diagnostic Test Group Clarity Urocheck 120	9	1.0150	0.0001	0.0	1.015	1.005 - 1.025
Henry Schein Urispec / Urispec Plus	15	1.0127	0.0037	0.4	1.010	1.002 - 1.023
McKesson 120 Urine Analyzer	24	1.0150	0.0001	0.0	1.015	1.005 - 1.025
McKesson Reagent Strips	9	1.0139	0.0022	0.2	1.015	1.003 - 1.024
Roche Chemstrips	26	1.0090	0.0025	0.2	1.010	0.999 - 1.020
Roche Urisys	10	1.0125	0.0035	0.3	1.010	1.002 - 1.023
Siemens Clinitek 50	5	1.0160	0.0022	0.2	1.015	1.006 - 1.026
Siemens Clinitek Advantus	13	1.0169	0.0025	0.2	1.015	1.006 - 1.027
Siemens Clinitek Status / Status+	316	1.0200	0.0001	0.0	1.020	1.010 - 1.030
Siemens Multistix Pro	13	1.0165	0.0059	0.6	1.015	1.006 - 1.027
Siemens Reagent Strips	77	1.0123	0.0045	0.4	1.010	1.002 - 1.023

URINALYSIS DIPSTICK–pH

Specimen UA-2

Participant Results

Method	***Labs***	***≤3.5***	***4.0***	***4.5***	***5.0***	***5.5***	***6.0***	***6.5***	***7.0***	***7.5***	***8.0***	***8.5***	***≥9.0***
ALL METHODS	594	-	-	-	-	-	-	-	23	166	302	103	-
Consult Diagnostics Reagent Strips	1	-	-	-	-	-	-	-	-	1	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	-	-	-	-	-	7	-	-	-
CTMI CT-120 Urine Analyzer	2	-	-	-	-	-	-	-	-	2	-	-	-
Diagnostic Test Group Clarity Urocheck	3	-	-	-	-	-	-	-	1	1	1	-	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	-	-	-	-	-	6	4	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	-	-	-	1	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	1	-	-
Henry Schein Urispec / Urispec Plus	15	-	-	-	-	-	-	-	11	-	4	-	-
Immunostics Detector Urine Strips	1	-	-	-	-	-	-	-	1	-	-	-	-
McKesson 120 Urine Analyzer	24	-	-	-	-	-	-	-	-	18	6	-	-
McKesson Reagent Strips	8	-	-	-	-	-	-	-	-	6	1	1	-
Medline 120 Urine Analyzer	4	-	-	-	-	-	-	-	-	2	2	-	-
Medline Urinalysis Reagent Strips	2	-	-	-	-	-	-	-	-	1	1	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	-	-	1	-	-
Other Dipstick Method	2	-	-	-	-	-	-	-	-	-	1	1	-
Roche Chemstrips	30	-	-	-	-	-	-	-	2	1	27	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche SuperUA/ChemstripUA	1	-	-	-	-	-	-	-	1	-	-	-	-
Roche Urisys	9	-	-	-	-	-	-	-	2	-	7	-	-
Siemens Clinitek 10 / 100	2	-	-	-	-	-	-	-	-	1	1	-	-
Siemens Clinitek 50	4	-	-	-	-	-	-	-	-	3	-	1	-
Siemens Clinitek 500	2	-	-	-	-	-	-	-	-	1	1	-	-
Siemens Clinitek Advantus	14	-	-	-	-	-	-	-	-	-	14	-	-
Siemens Clinitek Status / Status+	354	-	-	-	-	-	-	-	4	108	150	92	-
Siemens Multistix Pro	10	-	-	-	-	-	-	-	-	3	6	1	-
Siemens Reagent Strips	82	-	-	-	-	-	-	-	-	3	72	7	-
Teco Diagnostics URS	1	-	-	-	-	-	-	-	1	-	-	-	-
Uriscan Optima	1	-	-	-	-	-	-	-	-	1	-	-	-
UriScan Reagent Strips	1	-	-	-	-	-	-	-	-	-	1	-	-

URINALYSIS DIPSTICK–PROTEIN QUALITATIVE

Specimen UA-2

		Participant Results											
Method	***Labs***	***Negative***	***Trace***	***(1+)***	***(2+)***	***(3+)***	***(4+)***	***10 - 20 mg/dL***	***30 - 70 mg/dL***	***75 mg/dL***	***100 - 200 mg/dL***	***≥300 - 600 mg/dL***	***>600 or ≥1000 mg/dL***
ALL METHODS	599	-	1	4	106	125	6	-	5	-	121	231	-
Consult Diagnostics Reagent Strips	1	-	-	-	1	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	5	1	-	-	-	-	1	-	-
CTMI CT-120 Urine Analyzer	2	-	-	-	1	-	-	-	-	-	1	-	-
Diagnostic Test Group Clarity Urocheck	3	-	-	-	3	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	7	3	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	1	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	1	-	-
Henry Schein Urispec / Urispec Plus	15	-	-	-	-	-	-	-	1	-	14	-	-
Immunostics Detector Urine Strips	1	-	-	-	-	-	-	-	-	-	1	-	-
McKesson 120 Urine Analyzer	24	-	-	-	15	7	-	-	-	-	2	-	-
McKesson Reagent Strips	8	-	-	-	3	4	-	-	-	-	1	-	-
Medline 120 Urine Analyzer	4	-	-	-	2	2	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	-	-	1	1	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	1	-	-	-	-	-	-	-	-
Other Dipstick Method	2	-	-	-	2	-	-	-	-	-	-	-	-
Roche Chemstrips	33	-	1	1	22	2	-	-	1	-	6	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche SuperUA/ChemstripUA	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche Urisys	9	-	-	-	1	-	-	-	2	-	6	-	-
Siemens Clinitek 10 / 100	2	-	-	-	-	-	-	-	-	-	1	1	-
Siemens Clinitek 50	4	-	-	-	-	-	-	-	-	-	1	3	-
Siemens Clinitek 500	2	-	-	-	1	-	-	-	-	-	1	-	-
Siemens Clinitek Advantus	12	-	-	-	7	-	-	-	-	-	5	-	-
Siemens Clinitek Atlas	2	-	-	-	-	-	-	-	-	-	-	2	-
Siemens Clinitek Status / Status+	350	-	-	-	11	76	1	-	1	-	53	208	-
Siemens Multistix Pro	11	-	-	-	-	3	2	-	-	-	2	4	-
Siemens Reagent Strips	85	-	-	1	19	26	3	-	-	-	23	13	-
Siemens Uristix	1	-	-	-	-	1	-	-	-	-	-	-	-
Sulfosalicylic Acid	1	-	-	-	1	-	-	-	-	-	-	-	-
Teco Diagnostics URS	1	-	-	-	1	-	-	-	-	-	-	-	-
Uriscan Optima	1	-	-	1	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	1	-	-	-	1	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–GLUCOSE

Specimen UA-2

Method	Labs	Participant Results									
		Negative or Normal	Trace	(1+)	(2+)	(3+)	(4+)	30 - 100 mg/dL	150 - 300 mg/dL	500 mg/dL	>500 or ≥1000 or ≥2000 mg/dL
ALL METHODS	600	597	-	-	-	1	-	1	-	1	-
Consult Diagnostics Reagent Strips	1	1	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	4	4	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	9	9	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	1	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	15	15	-	-	-	-	-	-	-	-	-
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	23	23	-	-	-	-	-	-	-	-	-
McKesson Reagent Strips	8	8	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	5	5	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	2	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-
Other Dipstick Method	2	2	-	-	-	-	-	-	-	-	-
Roche Chemstrips	33	33	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	1	1	-	-	-	-	-	-	-	-	-
Roche SuperUA/ChemstripUA	1	1	-	-	-	-	-	-	-	-	-
Roche Urisys	9	9	-	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	2	2	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	4	4	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	2	2	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	14	14	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	354	352	-	-	-	-	-	1	-	1	-
Siemens Multistix Pro	9	9	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	85	84	-	-	-	1	-	-	-	-	-
Siemens Uristix	1	1	-	-	-	-	-	-	-	-	-
Teco Diagnostics URS	1	1	-	-	-	-	-	-	-	-	-
Uriscan Optima	1	1	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	1	1	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–KETONES

Specimen UA-2

		Participant Results													
Method	***Labs***	***Negative***	***Trace***	***Small***	***Moderate***	***Large***	***(1+)***	***(2+)***	***(3+)***	***(4+)***	***5 - 10 mg/dL***	***15 - 25 mg/dL***	***40 - 60 mg/dL***	***80 - 100 mg/dL***	***≥150 mg/dL***
ALL METHODS	592	2	-	-	1	62	1	-	93	87	-	3	1	45	297
Consult Diagnostics Reagent Strips	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	-	-	-	-	6	-	-	-	-	1	-
CTMI CT-120 Urine Analyzer	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-
Diagnostic Test Group Clarity Urocheck	4	-	-	-	-	-	-	-	4	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	9	-	-	-	-	-	-	-	9	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Henry Schein Urispec / Urispec Plus	15	-	-	-	-	-	-	-	-	-	-	-	-	-	15
Immunostics Detector Urine Strips	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
McKesson 120 Urine Analyzer	24	-	-	-	-	-	-	-	22	-	-	-	-	2	-
McKesson Reagent Strips	8	-	-	-	-	-	-	-	4	4	-	-	-	-	-
Medline 120 Urine Analyzer	4	-	-	-	-	-	-	-	4	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	-	-	-	-	-	-	-	1	1	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Other Dipstick Method	2	-	-	-	-	1	-	-	-	-	-	1	-	-	-
Roche Chemstrips	30	-	-	-	-	12	-	-	17	-	-	1	-	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Roche SuperUA/ChemstripUA	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Roche Urisys	9	-	-	-	-	-	-	-	1	-	-	1	-	-	7
Siemens Clinitek 10 / 100	2	-	-	-	-	-	-	-	-	-	-	-	-	2	-
Siemens Clinitek 50	4	-	-	-	-	-	-	-	-	-	-	-	-	3	1
Siemens Clinitek 500	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-
Siemens Clinitek Advantus	14	-	-	-	-	-	-	-	8	-	-	-	-	6	-
Siemens Clinitek Status / Status+	354	2	-	-	-	2	-	-	10	75	-	-	1	26	238
Siemens Multistix Pro	9	-	-	-	-	1	-	-	1	1	-	-	-	2	4
Siemens Reagent Strips	83	-	-	-	1	45	1	-	-	6	-	-	-	1	29
Uriscan Optima	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-

URINALYSIS DIPSTICK–BILIRUBIN

Specimen UA-2

		Participant Results													
Method	***Labs***	***Negative***	***Positive (Ictotest ONLY)***	***Trace***	***Small***	***Moderate***	***Large***	***(1+)***	***(2+)***	***(3+)***	***(4+)***	***0.5 - 1.0 mg/dL***	***2.0 - 4.0 mg/dL***	***6.0 - 10.0 mg/dL***	***>10.0 mg/dL***
ALL METHODS	579	11	3	1	84	220	31	81	104	17	2	9	16	-	-
Consult Diagnostics Reagent Strips	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	-	-	-	4	2	-	-	1	-	-	-
CTMI CT-120 Urine Analyzer	2	-	-	-	-	-	-	1	-	-	-	1	-	-	-
Diagnostic Test Group Clarity Urocheck	4	-	-	-	-	-	-	3	1	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	9	-	-	-	-	-	-	8	1	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Henry Schein Urispec / Urispec Plus	15	-	-	-	-	-	-	-	-	-	2	-	13	-	-
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	24	-	-	-	-	-	-	20	1	1	-	2	-	-	-
McKesson Reagent Strips	8	-	-	-	1	-	-	7	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	-	-	-	-	-	-	2	2	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Other Dipstick Method	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Roche Chemstrips	28	2	-	-	1	1	-	1	19	3	-	1	-	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Roche SuperUA/ChemstripUA	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Roche Urisys	9	1	-	-	-	-	-	3	-	-	-	3	2	-	-
Siemens Clinitek 10 / 100	2	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	4	-	-	-	2	2	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	2	-	-	-	-	1	-	-	-	1	-	-	-	-	-
Siemens Clinitek Advantus	14	-	1	-	-	6	-	-	7	-	-	-	-	-	-
Siemens Clinitek Status / Status+	351	3	1	-	70	194	-	23	60	-	-	-	-	-	-
Siemens Multistix Pro	10	-	-	-	2	3	3	1	-	1	-	-	-	-	-
Siemens Reagent Strips	76	4	1	1	8	11	27	3	10	11	-	-	-	-	-
Uriscan Optima	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–UROBILINOGEN

Specimen UA-2

		Participant Results				
Method	***Labs***	***Normal or 0.0 - 0.2 mg/dL or <3.2 µmol/L***	***1.0 or <2.0 mg/dL or 16 or 17 µmol/L***	***2.0/3.0 mg/dL or 34 or 35 µmol/L***	***4.0 or 4.0/6.0 mg/dL or 70 µmol/L***	***≥8.0 or ≥12.0 mg/dL or ≥140 or 200 µmol/L***
ALL METHODS	579	81	48	84	347	19
Consult Diagnostics Reagent Strips	1	1	-	-	-	-
Consult Diagnostics Urine Analyzer	7	5	2	-	-	-
CTMI CT-120 Urine Analyzer	2	2	-	-	-	-
Diagnostic Test Group Clarity Urocheck	3	-	3	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	9	1	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	1	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-
Henry Schein Urispec / Urispec Plus	15	15	-	-	-	-
Immunostics Detector Urine Strips	1	-	-	1	-	-
McKesson 120 Urine Analyzer	24	19	4	1	-	-
McKesson Reagent Strips	8	3	1	4	-	-
Medline 120 Urine Analyzer	4	3	1	-	-	-
Medline Urinalysis Reagent Strips	1	-	-	1	-	-
NDC Pro Advantage	1	1	-	-	-	-
Other Dipstick Method	1	1	-	-	-	-
Roche Chemstrips	29	10	16	1	2	-
Roche Criterion Analyzer	1	-	1	-	-	-
Roche SuperUA/ChemstripUA	1	-	1	-	-	-
Roche Urisys	9	2	7	-	-	-
Siemens Clinitek 10 / 100	2	-	-	2	-	-
Siemens Clinitek 50	4	1	-	2	-	1
Siemens Clinitek 500	2	-	1	1	-	-
Siemens Clinitek Advantus	13	-	1	8	4	-
Siemens Clinitek Status / Status+	349	2	-	25	314	8
Siemens Multistix Pro	9	-	-	5	2	2
Siemens Reagent Strips	79	5	8	33	25	8
Uriscan Optima	1	-	1	-	-	-

URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN

Specimen UA-2

		Participant Results																
Method	***Labs***	***Negative***	***Trace***	***Small***	***Moderate***	***Large***	***(1+)***	***(2+)***	***(3+)***	***(4+)***	***(5+)***	***5 - 25 Ery/µL***	***50 - 100 Ery/µL***	***200 - 300 Ery/µL***	***±0.03 mg/dL***	***0.06 - 0.10 mg/dL***	***0.2 - 0.5 mg/dL***	***≥ 1.0 mg/dL***
ALL METHODS	597	1	2	2	71	280	-	28	155	2	-	-	-	55	-	-	-	1
Consult Diagnostics Reagent Strips	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	-	-	-	-	6	-	-	-	-	1	-	-	-	-
CTMI CT-120 Urine Analyzer	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-
Diagnostic Test Group Clarity Urocheck	4	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	9	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Henry Schein Urispec / Urispec Plus	15	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-
Immunostics Detector Urine Strips	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	23	-	-	-	-	-	-	1	20	-	-	-	-	2	-	-	-	-
McKesson Reagent Strips	8	-	-	-	-	1	-	-	7	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	5	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Other Dipstick Method	2	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrips	33	-	-	-	-	4	-	1	3	-	-	-	-	24	-	-	-	1
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Roche SuperUA/ChemstripUA	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Roche Urisys	9	-	-	-	-	-	-	1	-	-	-	-	-	8	-	-	-	-
Siemens Clinitek 10 / 100	2	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	4	-	1	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	2	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	14	-	-	-	-	6	-	-	8	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	352	-	1	1	64	201	-	25	60	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	9	-	-	-	2	5	-	-	1	1	-	-	-	-	-	-	-	-
Siemens Reagent Strips	85	1	-	1	4	54	-	-	24	1	-	-	-	-	-	-	-	-
Uriscan Optima	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–LEUKOCYTE ESTERASE

Specimen UA-2

		Participant Results											
Method	***Labs***	***Negative***	***Trace***	***Small***	***Moderate***	***Large***	***(1+)***	***(2+)***	***(3+)***	***(4+)***	***15 or 25 µL***	***75 or 100 µL***	***250 or 500 µL***
ALL METHODS	596	589	4	-	1	1	1	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	1	1	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	3	3	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	10	-	-	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	15	15	-	-	-	-	-	-	-	-	-	-	-
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	23	22	1	-	-	-	-	-	-	-	-	-	-
McKesson Reagent Strips	8	8	-	-	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	2	1	-	-	1	-	-	-	-	-	-	-	-
Roche Chemstrips	33	32	1	-	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche SuperUA/ChemstripUA	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche Urisys	9	9	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	2	2	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	4	4	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	2	2	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	14	14	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	353	351	-	-	-	1	1	-	-	-	-	-	-
Siemens Multistix Pro	9	9	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	84	82	2	-	-	-	-	-	-	-	-	-	-
Siemens Uristix	1	1	-	-	-	-	-	-	-	-	-	-	-
Uriscan Optima	1	1	-	-	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	1	1	-	-	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–NITRITE

Specimen UA-2

		Participant Results	
Method	***Labs***	***Negative***	***Positive***
ALL METHODS	596	595	1
Consult Diagnostics Reagent Strips	1	1	-
Consult Diagnostics Urine Analyzer	7	7	-
CTMI CT-120 Urine Analyzer	2	2	-
Diagnostic Test Group Clarity Urocheck	4	3	1
Diagnostic Test Group Clarity Urocheck 120	9	9	-
Germaine Labs AimStrip Urine Analyzer	1	1	-
Henry Schein One Step Plus	2	2	-
Henry Schein Urispec / Urispec Plus	14	14	-
Immunostics Detector Urine Strips	1	1	-
McKesson 120 Urine Analyzer	22	22	-
McKesson Reagent Strips	8	8	-
Medline 120 Urine Analyzer	5	5	-
Medline Urinalysis Reagent Strips	2	2	-
NDC Pro Advantage	1	1	-
Other Dipstick Method	2	2	-
Roche Chemstrips	33	33	-
Roche Criterion Analyzer	1	1	-
Roche SuperUA/ChemstripUA	1	1	-
Roche Urisys	9	9	-
Siemens Clinitek 10 / 100	2	2	-
Siemens Clinitek 50	4	4	-
Siemens Clinitek 500	2	2	-
Siemens Clinitek Advantus	14	14	-
Siemens Clinitek Status / Status+	352	352	-
Siemens Multistix Pro	9	9	-
Siemens Reagent Strips	85	85	-
Siemens Uristix	1	1	-
Uriscan Optima	1	1	-
UriScan Reagent Strips	1	1	-

URINALYSIS –MICROALBUMIN (dipstick only)

Specimen UA-2

		Participant Results									
Method	***Labs***	***Negative***	***10 mg/L***	***20 mg/L***	***30 mg/L***	***50 mg/L***	***80 mg/L***	***100 mg/L***	***150 mg/L***	***+ (4 - 8 mg/dL)***	***++ (>8 mg/dL)***
ALL METHODS	43	-	-	-	-	-	3	2	38	-	-
Roche Micral - 1 minute	2	-	-	-	-	-	-	2	-	-	-
Siemens Clinitek Microalbumin	41	-	-	-	-	-	3	-	38	-	-

URINALYSIS –URINE hCG

Specimen UA-2

	Participant Results		
Method	***Labs***	***Positive***	***Negative***
ALL METHODS	352	349	3
Alere Acceava hCG-Urine	1	1	-
Alere Clearview hCG Cassette	4	4	-
Alere hCG Combo Cassette	7	7	-
Alfa Scientific Instant View	4	4	-
Beckman Coulter ICON 20 hCG	4	4	-
Beckman Coulter ICON 25 hCG	20	20	-
Beckman Coulter ICON II	1	1	-
BioSign hCG	1	1	-
BTNX Rapid Response hCG	3	3	-
Cardinal Health SP Brand combo	23	23	-
Cardinal Hlth SPBrand-cassette	8	8	-
Clarity Diagnostics hCG strip/cassette	10	10	-
CONSULT diagnostics hCG Cassette	52	51	1
CONSULT diagnostics hCG Combo	8	7	1
CONSULT diagnostics hCG Dipstick	24	24	-
Henry Schein One Step	37	37	-
Henry Schein One Step Plus	18	18	-
Jant Pharmacal Accutest	2	2	-
LifeSign Status hCG	1	1	-
McKesson hCG Combo Cassette	6	6	-
McKesson hCG Urine Cassette	14	14	-
Medline hCG Combo Test Cassette	4	4	-
Medline hCG Test Cassette	6	5	1
NDC Pro Advantage	1	1	-
PEP (Lab Supply) HCG	1	1	-
Quidel QuickVue One-Step Combo	11	11	-
Quidel QuickVue One-Step Urine	14	14	-
Quidel QuickVue+ One-Step Combo	24	24	-
Quidel Sofia hCG	1	1	-
Sekisui OSOM Card Pregnancy	7	7	-
Sekisui OSOM hCG Combo Test	2	2	-
Siemens Clinitek Status / Status+	10	10	-
Stanbio QuPID	8	8	-
Stanbio QuPID Plus	1	1	-
Stanbio TRUE hCG	7	7	-
Sure-Vue hCG - 25mIU	1	1	-
Sure-Vue hCG-STAT	4	4	-

FECAL OCCULT BLOOD

	Specimen OC-3			Specimen OC-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
ALL METHODS	252	5	247	252	250	2
Alere Clearview iFOBT Complete	1	-	1	1	1	-
Beckman Coulter Hemoccult ICT	44	2	42	44	44	-
Guaiac (slide) Test	141	3	138	141	139	2
Hemosure IFOB	30	-	30	30	30	-
Other Immunochemical FOB kit	29	-	29	29	29	-
Polymedco OC Auto Micro 80	3	-	3	3	3	-
Polymedco OC-Light iFOB	2	-	2	2	2	-
Quidel QuickVue iFOB	2	-	2	2	2	-

2021 M2
Urine Sediment Identification
SPECIMENS US-3 AND US-4

CASE HISTORY:

A 50-year-old female presented to her internist with dysuria, vaginitis, and bleeding after intercourse. She is post-menopausal, newly divorced, and recently began casually dating. On examination, a malodorous, yellow vaginal discharge was observed. A routine urinalysis was performed, and results appear below.

Color= Yellow
Appearance= Hazy

Dipstick results:
Specific gravity = 1.030
pH = 6.0
Blood = Trace (1+)
Leukocyte esterase = Trace (1+)
Protein = Negative
Glucose = Negative
Ketones = Negative
Bilirubin = Negative
Urobilinogen = Negative
Nitrite = Negative

This patient was diagnosed with trichomoniasis. *Trichomonas vaginalis* (TV) is the most common nonviral sexually transmitted infection worldwide. Trichomonads (the individual organisms) are sometimes seen as incidental urinary contaminants from the genital tract. Trichomonas is primarily responsible for vaginal infections; however, it can also infect the urinary tract of both males and females. Trichomoniasis is associated with hematuria and recurrent bacterial urinary tract infections and is frequently accompanied by WBCs and epithelial cells. In women infected with TV, vaginal secretions often have a pH greater than 6.0, application of 10% KOH solution may release amines, and a sharp fishy odor is detected (commonly called the "whiff" test).

Infected women often have a frothy yellow-green vaginal discharge and symptoms resembling yeast infections or bacterial vaginosis. Typical symptoms in women include dysuria, vulvovaginal irritation/itching (pruritis,) and occasionally lower abdominal pain. More than 50% of women and 70% of men with TV are asymptomatic, and patients may remain asymptomatic for years. Since men are usually asymptomatic carriers, they should be treated if a sexual partner is diagnosed with TV.

Serious adverse health outcomes have been linked to TV infection, including pelvic inflammatory disease, increased risk of acquiring HIV, and pregnancy complications. Trichomoniasis in pregnancy increases the risk of premature rupture of membranes, preterm birth, low birth weight, and neonatal infection.

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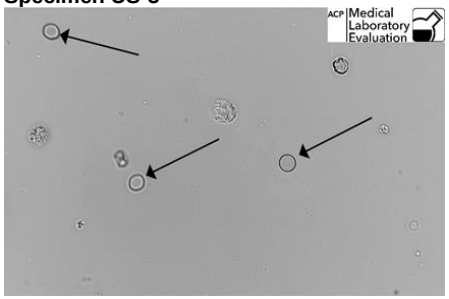
Urine Sediment Identification

Specimen US-3



Identification	Labs	Percent	Performance
Red blood cell (RBC)	319	93.55%	Acceptable
Fat droplets or globules	14	4.11%	
White blood cell (WBC)	4	1.17%	
RBC/blood/hgb cast	2	0.59%	

The arrows in this photograph point to **red blood cells (RBC**.) They are small and transparent compared to the granular white blood cell near the center of the field. Red blood cells in urine often resemble donuts or inner tubes due to their biconcave disk shape. In fact, there is one laying on its edge at 9 o'clock giving us a unique side view of its inner structure. Some participants incorrectly identified these red blood cells as fat droplets, which tend to appear in a wide variety of sizes. These RBCs are uniform in size, all slightly smaller than the WBCs nearby. The dipstick having a positive result for blood should also be a clue to the presence of red cells in the urine sediment. To view another photo of red blood cells, see 2018 M3 Specimen US-5.

Urine Sediment Identification

Specimen US-4

Identification	Labs	Percent	Performance
Trichomonas vaginalis	324	94.74%	Acceptable
White blood cell (WBC)	13	3.80%	
Renal tubular epithelial (RTE)	3	0.88%	

The arrows in this photograph point to ***Trichomonas vaginalis (TV)***. Trichomonads, as the individual organisms are called, can be easily identified in fresh urine or wet mount preparations by their rapid irregular, jerky, rotating motility. Trichomonads may only remain alive and motile for about 30 minutes in urine, however they can remain alive for over 6 hours in saline at room temperature. Each trichomonad has a single nucleus, four anterior flagella, an undulating membrane extending half the length of its body, and a barbed tail (posterior axostyle.) Trichomoniasis is usually detected by microscopic examination of a saline wet mount of vaginal fluid. The rate of detection can be improved without adding significant expense by adding a spun urine sediment examination to the routine wet mount examination. Some participants incorrectly identified this challenge as white blood cells. The white blood cell on the left is much smaller and rounder than the two trichomonads nearby and the WBC does not have flagella or a tail. To view another photo of *Trichomonas vaginalis*, see 2017 M3 Specimen US-5. To view a photo of white blood cells, see 2020 M2 Specimen US-3.

REFERENCES:

Blake DR, et al. "Use of spun urine to enhance detection of Trichomonas vaginalis in adolescent women." *Arch Pediatr Adolesc Med*. December 1999;153:1222–6.

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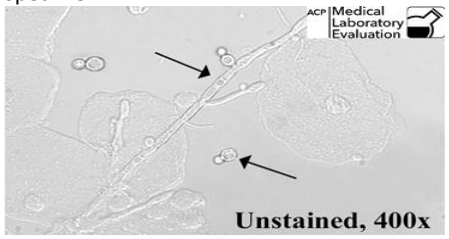
2021 M2
PROVIDER-PERFORMED MICROSCOPY (PPM)
Specimens PPM-7 through PPM-12

WET MOUNT PREPARATION

Specimen PPM-7

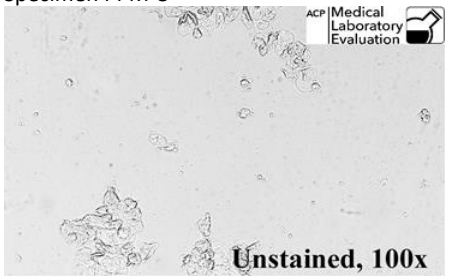


Identification	Labs	Percent	Performance
Yeast/fungi	390	97.99%	Acceptable
Red blood cell (RBC)	4	1.01%	
Fiber/fecal contamination	2	0.50%	

The arrows in this photograph of a vaginal wet mount point to **yeast.** Yeasts are small single-celled fungal organisms that are typically round to oval in shape. They reproduce by budding, a process in which a small portion of the cell is pinched off and grows into a new cell. Sometimes yeasts form long, branching chains of buds resembling the hyphae produced by molds. Technically, these are pseudohyphae, but in the clinical lab they are generally referred to simply as hyphae. The species *Candida albicans* causes the majority of yeast infections in women. It is a part of the normal intestinal flora and may be part of the normal vaginal flora in small amounts. *C. albicans* primarily infects the female genital tract but can also cause urinary tract infections. To view another photo of yeast, see 2015 M2 Specimen PPM-7.

SCABIES DETECTION

Specimen PPM-8



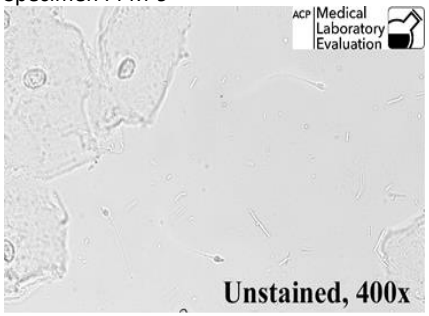
Identification	Labs	Percent	Performance
Scabies absent	143	97.95%	Acceptable
Scabies present	3	2.05%	

Scabies are absent in this photograph of a skin scrapings preparation. Scabies can be difficult to find by laboratory testing because mites are often few in number. There may be only 10-15 mites on the entire body of an infested person who is otherwise healthy, so a negative test does not rule out the diagnosis. To view a photo of a scabies mite, see 2020 M1 Specimen PPM-3.

PROVIDER-PERFORMED MICROSCOPY (PPM)

SPERM DETECTION

Specimen PPM-9

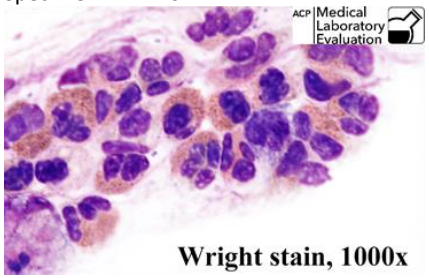


Identification	Labs	Percent	Performance
Sperm present	194	98.48%	Acceptable
Sperm absent	3	1.52%	

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

NASAL SMEAR

Specimen PPM-10



Identification	Labs	Percent	Performance
Eosinophils present	54	96.43%	Acceptable
Eosinophils absent	2	3.57%	

Eosinophils are present in this photograph of Wright-stained nasal mucus. “Eos” have a unique red-orange color that makes them easy to spot and identify. The orange color comes from the dye eosin, which is a component of Wright stain. To view a negative nasal smear, see 2020 M2 Specimen PPM-10.

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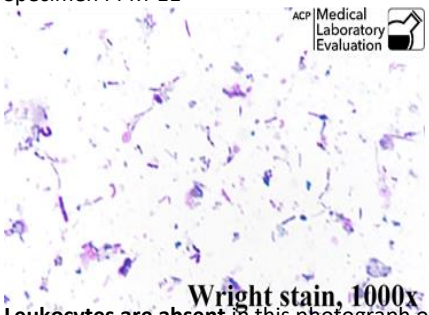
PROVIDER-PERFORMED MICROSCOPY (PPM)

STOOL PREPARATION

Specimen PPM-11

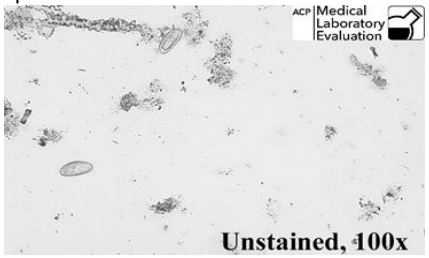


Identification	Labs	Percent	Performance
Leukocytes absent	122	96.06%	Acceptable
Leukocytes present	5	3.94%	

Leukocytes are absent in this photograph of a Wright stained stool preparation. To view a photo of a positive fecal leukocyte smear, see 2020 M3 Specimen PPM-17.

PINWORM PREPARATION

Specimen PPM-12



Identification	Labs	Percent	Performance
Pinworms/eggs present	157	98.13%	Acceptable
Pinworms/eggs absent	3	1.88%	

Two pinworm eggs are present in this photograph of a perianal skin preparation.

REFERENCES:

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

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