

MEDICAL LABORATORY EVALUATION

PARTICIPANT SUMMARY

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Hematology, Coagulation,
Blood Bank, Urinalysis, PPM
2017 MLE-M3



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
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 QBC Hematology and Coagulation (CG Specimens) which consist of peer groups of 5 or more laboratories. Acceptable performance is established on a target value $\pm$ the intervals below. An explanation on how to calculate the range of acceptability based upon these limits is also provided in your MLE Program Guide on page 37 under the heading "Acceptable Ranges for Quantitative Results."

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

*Whichever is greater

HEMOCUE HEMATOLOGY–HEMOGLOBIN (g/dL)

Specimen HQ-5							Specimen HQ-6					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
HemoCue	38	4.96	0.13	2.6	5.0	4.6 - 5.4	39	13.17	0.29	2.2	13.2	12.2 - 14.1

HEMOCUE HEMATOLOGY–GLUCOSE (mg/dL)

Specimen HQ-5							Specimen HQ-6					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	30	38.5	4.4	11.4	39	26 - 51	30	94.7	9.4	9.9	97	75 - 114
All HemoCue Methods	27	38.7	4.6	11.8	39	26 - 51	27	94.5	8.1	8.6	96	75 - 114
HemoCue Glucose 201/+	25	38.6	4.5	11.7	39	26 - 51	25	94.4	8.3	8.8	96	75 - 114

SEDIMENTATION RATE (MM/HR)

Specimen ES-5							Specimen ES-6					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	131	8.8	2.8	31.5	9	3 - 15	131	56.2	15.5	27.6	53	25 - 88
All Automated Methods	38	9.1	3.4	37.5	9	2 - 16	38	71.8	13.9	19.4	75	43 - 100
All Manual Methods	91	8.6	2.4	27.4	9	3 - 14	90	49.0	10.0	20.4	48	29 - 70
All Vital Diagnostics Methods	23	8.7	1.8	21.2	8	5 - 13	23	75.5	8.4	11.2	75	58 - 93
Vital Diagnostics Excyte M/10	14	8.6	1.6	18.7	9	5 - 12	14	75.0	7.5	10.0	77	59 - 91
Westergren - diluted	73	8.3	2.5	29.6	8	3 - 14	73	49.3	9.4	19.0	48	30 - 69
Westergren - undiluted	10	10.4	1.3	13.0	10	7 - 14	10	53.4	11.8	22.1	56	29 - 78

SEDIMAT SEDIMENTATION RATE (MM/HR)

Specimen MAT-5							Specimen MAT-6					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Polymedco Sedimat 15	14	2.0	0.8	39.2	2	0 - 4	14	63.1	6.5	10.3	63	50 - 77

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

Specimen CL-11							Specimen CL-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	20.94	0.85	4.1	20.9	17.7 - 24.1	10	3.20	0.17	5.3	3.2	2.7 - 3.7
Specimen CL-13							Specimen CL-14					
All Method	10	7.67	0.19	2.5	7.7	6.5 - 8.9	10	20.84	0.97	4.7	20.7	17.7 - 24.0
Specimen CL-15												
All Method	10	3.16	0.21	6.7	3.2	2.6 - 3.7						

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

Specimen CL-11							Specimen CL-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	5.204	0.109	2.1	5.23	4.89 - 5.52	10	2.129	0.059	2.8	2.13	2.00 - 2.26
Specimen CL-13							Specimen CL-14					
All Method	10	4.600	0.099	2.2	4.65	4.32 - 4.88	10	5.162	0.123	2.4	5.14	4.85 - 5.48
Specimen CL-15												
All Method	10	2.123	0.063	3.0	2.11	1.99 - 2.26						

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

Specimen CL-11							Specimen CL-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	16.91	0.29	1.7	17.0	15.7 - 18.1	10	5.60	0.09	1.7	5.6	5.2 - 6.0
Specimen CL-13							Specimen CL-14					
All Method	10	13.63	0.29	2.1	13.6	12.6 - 14.6	10	16.79	0.21	1.3	16.8	15.6 - 18.0
Specimen CL-15												
All Method	10	5.57	0.08	1.5	5.6	5.1 - 6.0						

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

Specimen CL-11							Specimen CL-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	45.00	2.67	5.9	44.8	42.3 - 47.7	10	15.25	0.84	5.5	15.1	14.3 - 16.2
Specimen CL-13							Specimen CL-14					
All Method	10	37.75	2.15	5.7	37.5	35.4 - 40.1	10	44.72	2.76	6.2	44.0	42.0 - 47.5
Specimen CL-15												
All Method	10	15.23	0.92	6.0	15.0	14.3 - 16.2						

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

Specimen CL-11							Specimen CL-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	518.8	49.5	9.5	532	389 - 649	10	75.5	8.8	11.7	76	56 - 95
Specimen CL-13							Specimen CL-14					
All Method	10	269.7	21.4	7.9	269	202 - 338	10	512.0	41.1	8.0	526	384 - 640
Specimen CL-15												
All Method	10	76.9	9.6	12.4	78	57 - 97						

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

Specimen CL-11							Specimen CL-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	77.41	1.13	1.5	77.5	74.0 - 80.9	10	51.46	1.26	2.4	51.3	47.6 - 55.3
Specimen CL-13							Specimen CL-14					
All Method	10	66.46	0.95	1.4	66.6	63.6 - 69.4	10	77.08	1.43	1.8	77.3	72.8 - 81.4
Specimen CL-15												
All Method	10	50.86	1.41	2.8	50.8	46.6 - 55.1						

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

Specimen CL-11							Specimen CL-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	15.49	1.43	9.2	15.6	11.1 - 19.8	10	38.45	1.53	4.0	38.3	33.8 - 43.1
Specimen CL-13							Specimen CL-14					
All Method	10	23.33	1.53	6.6	23.4	18.7 - 28.0	10	15.60	1.49	9.6	15.5	11.1 - 20.1
Specimen CL-15												
All Method	10	38.27	1.77	4.6	38.2	32.9 - 43.6						

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

Specimen CL-11							Specimen CL-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	2.31	0.39	17.0	2.4	1.1 - 3.5	10	5.84	0.88	15.1	5.8	3.1 - 8.5
Specimen CL-13							Specimen CL-14					
All Method	10	5.49	1.01	18.3	5.5	2.4 - 8.6	10	2.57	0.33	13.0	2.7	1.5 - 3.6
Specimen CL-15												
All Method	10	6.22	0.88	14.1	6.7	3.5 - 8.9						

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

Specimen CL-11							Specimen CL-12					
<i><u>Instrument</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	10	4.34	0.28	6.4	4.3	3.5 - 5.2	10	3.38	0.52	15.3	3.5	1.8 - 5.0
Specimen CL-13							Specimen CL-14					
All Method	10	4.19	0.29	7.0	4.1	3.3 - 5.1	10	4.34	0.13	3.1	4.4	3.9 - 4.8
Specimen CL-15												
All Method	10	3.44	0.18	5.3	3.5	2.8 - 4.0						

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

Specimen CL-11							Specimen CL-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	0.44	0.16	35.9	0.4	0.0 - 1.0	10	0.88	0.55	62.0	0.8	0.0 - 2.6
Specimen CL-13							Specimen CL-14					
All Method	10	0.51	0.34	67.6	0.4	0.0 - 1.6	10	0.41	0.18	43.7	0.4	0.0 - 1.0
Specimen CL-15												
All Method	10	1.20	0.66	55.4	1.1	0.0 - 3.2						

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

<u>Instrument</u>	Specimen SYX-11						Specimen SYX-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	60	20.66	0.68	3.3	20.7	17.5 - 23.8	60	2.98	0.13	4.5	3.0	2.5 - 3.5
All Sysmex Instruments	59	20.68	0.66	3.2	20.7	17.5 - 23.8	59	2.97	0.13	4.5	3.0	2.5 - 3.5
Sysmex KX-21N & K-800, 1000, 4500	20	20.67	0.89	4.3	20.6	17.5 - 23.8	21	2.98	0.13	4.5	2.9	2.5 - 3.5
Sysmex pocH-100i	15	20.14	0.41	2.0	20.3	17.1 - 23.2	15	2.85	0.08	2.9	2.9	2.4 - 3.3
Sysmex XP-300	24	21.18	0.39	1.8	21.2	17.9 - 24.4	22	3.05	0.11	3.5	3.0	2.5 - 3.6
	Specimen SYX-13						Specimen SYX-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	62	8.26	0.32	3.9	8.3	7.0 - 9.6	62	20.59	0.62	3.0	20.6	17.4 - 23.7
All Sysmex Instruments	61	8.27	0.32	3.9	8.3	7.0 - 9.6	61	20.60	0.61	3.0	20.6	17.5 - 23.7
Sysmex KX-21N & K-800, 1000, 4500	21	8.18	0.32	3.9	8.2	6.9 - 9.5	21	20.54	0.62	3.0	20.5	17.4 - 23.7
Sysmex pocH-100i	15	8.03	0.21	2.6	8.0	6.8 - 9.3	15	20.06	0.39	1.9	20.0	17.0 - 23.1
Sysmex XP-300	24	8.51	0.22	2.6	8.5	7.2 - 9.8	24	21.03	0.39	1.9	21.1	17.8 - 24.2
	Specimen SYX-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	61	3.01	0.14	4.6	3.0	2.5 - 3.5						
All Sysmex Instruments	60	3.01	0.14	4.6	3.0	2.5 - 3.5						
Sysmex KX-21N & K-800, 1000, 4500	20	3.00	0.11	3.7	3.0	2.5 - 3.5						
Sysmex pocH-100i	15	2.95	0.10	3.4	3.0	2.5 - 3.4						
Sysmex XP-300	24	3.07	0.14	4.6	3.1	2.6 - 3.6						

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

<u>Instrument</u>	Specimen SYX-11						Specimen SYX-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	59	5.668	0.068	1.2	5.67	5.32 - 6.01	60	2.462	0.038	1.5	2.46	2.31 - 2.61
All Sysmex Instruments	58	5.669	0.068	1.2	5.67	5.32 - 6.01	60	2.462	0.038	1.5	2.46	2.31 - 2.61
Sysmex KX-21N & K-800, 1000, 4500	19	5.663	0.050	0.9	5.67	5.32 - 6.01	21	2.459	0.035	1.4	2.45	2.31 - 2.61
Sysmex pocH-100i	15	5.731	0.105	1.8	5.70	5.38 - 6.08	15	2.488	0.038	1.5	2.48	2.33 - 2.64
Sysmex XP-300	24	5.649	0.061	1.1	5.66	5.30 - 5.99	23	2.450	0.032	1.3	2.45	2.30 - 2.60
	Specimen SYX-13						Specimen SYX-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	60	4.217	0.053	1.3	4.22	3.96 - 4.48	61	5.667	0.071	1.2	5.65	5.32 - 6.01
All Sysmex Instruments	59	4.217	0.054	1.3	4.22	3.96 - 4.47	60	5.667	0.071	1.3	5.65	5.32 - 6.01
Sysmex KX-21N & K-800, 1000, 4500	21	4.210	0.036	0.9	4.22	3.95 - 4.47	20	5.668	0.053	0.9	5.66	5.32 - 6.01
Sysmex pocH-100i	15	4.277	0.065	1.5	4.28	4.02 - 4.54	15	5.727	0.083	1.5	5.73	5.38 - 6.08
Sysmex XP-300	23	4.197	0.045	1.1	4.21	3.94 - 4.45	23	5.626	0.033	0.6	5.63	5.28 - 5.97
	Specimen SYX-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	61	2.458	0.037	1.5	2.46	2.31 - 2.61						
All Sysmex Instruments	60	2.458	0.037	1.5	2.46	2.31 - 2.61						
Sysmex KX-21N & K-800, 1000, 4500	20	2.462	0.025	1.0	2.46	2.31 - 2.61						
Sysmex pocH-100i	15	2.472	0.047	1.9	2.47	2.32 - 2.63						
Sysmex XP-300	24	2.448	0.036	1.5	2.44	2.30 - 2.60						

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

Specimen SYX-11							Specimen SYX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	59	18.02	0.22	1.2	18.0	16.7 - 19.3	60	6.17	0.14	2.2	6.2	5.7 - 6.7
All Sysmex Instruments	58	18.01	0.22	1.2	18.0	16.7 - 19.3	59	6.16	0.12	2.0	6.1	5.7 - 6.6
Sysmex KX-21N & K-800, 1000, 4500	19	18.04	0.24	1.3	18.0	16.7 - 19.4	21	6.19	0.12	1.9	6.2	5.7 - 6.7
Sysmex pocH-100i	14	18.11	0.23	1.3	18.1	16.8 - 19.4	15	6.23	0.16	2.6	6.2	5.7 - 6.7
Sysmex XP-300	24	17.95	0.14	0.8	17.9	16.6 - 19.3	23	6.12	0.11	1.8	6.1	5.6 - 6.6
Specimen SYX-13							Specimen SYX-14					
All Method	60	12.24	0.17	1.4	12.2	11.3 - 13.2	60	18.03	0.22	1.2	18.0	16.7 - 19.3
All Sysmex Instruments	59	12.24	0.17	1.4	12.2	11.3 - 13.1	59	18.03	0.22	1.2	18.0	16.7 - 19.3
Sysmex KX-21N & K-800, 1000, 4500	21	12.26	0.17	1.4	12.2	11.3 - 13.2	20	18.08	0.24	1.3	18.1	16.8 - 19.4
Sysmex pocH-100i	14	12.26	0.19	1.5	12.3	11.4 - 13.2	14	18.03	0.25	1.4	18.0	16.7 - 19.3
Sysmex XP-300	23	12.23	0.15	1.2	12.2	11.3 - 13.1	24	18.00	0.16	0.9	18.0	16.7 - 19.3
Specimen SYX-15												
All Method	61	6.20	0.15	2.4	6.2	5.7 - 6.7						
All Sysmex Instruments	60	6.19	0.14	2.3	6.2	5.7 - 6.7						
Sysmex KX-21N & K-800, 1000, 4500	20	6.21	0.12	1.9	6.2	5.7 - 6.7						
Sysmex pocH-100i	15	6.23	0.15	2.4	6.2	5.7 - 6.7						
Sysmex XP-300	23	6.14	0.10	1.6	6.1	5.7 - 6.6						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–HEMATOCRIT (percent)

<u>Instrument</u>	Specimen SYX-11						Specimen SYX-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	59	48.77	1.22	2.5	48.4	45.8 - 51.7	60	17.41	0.67	3.8	17.3	16.3 - 18.5
All Sysmex Instruments	58	48.79	1.23	2.5	48.4	45.8 - 51.8	59	17.39	0.66	3.8	17.2	16.3 - 18.5
Sysmex KX-21N & K-800, 1000, 4500	19	48.29	0.92	1.9	48.2	45.3 - 51.2	19	16.97	0.28	1.7	17.0	15.9 - 18.0
Sysmex pocH-100i	15	50.39	1.39	2.8	50.0	47.3 - 53.5	15	18.16	0.48	2.6	18.1	17.0 - 19.3
Sysmex XP-300	24	48.37	0.78	1.6	48.4	45.4 - 51.3	23	17.16	0.39	2.2	17.2	16.1 - 18.2
	Specimen SYX-13						Specimen SYX-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	61	33.19	1.00	3.0	32.9	31.1 - 35.2	62	48.80	1.38	2.8	48.4	45.8 - 51.8
All Sysmex Instruments	61	33.25	1.08	3.3	33.0	31.2 - 35.3	61	48.80	1.39	2.9	48.4	45.8 - 51.8
Sysmex KX-21N & K-800, 1000, 4500	21	32.67	0.66	2.0	32.7	30.7 - 34.7	20	48.28	0.96	2.0	48.2	45.3 - 51.2
Sysmex pocH-100i	15	34.71	0.85	2.4	34.8	32.6 - 36.8	15	50.33	1.24	2.5	50.5	47.3 - 53.4
Sysmex XP-300	24	32.89	0.62	1.9	33.0	30.9 - 34.9	24	48.16	0.68	1.4	48.2	45.2 - 51.1
	Specimen SYX-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	59	17.34	0.56	3.2	17.2	16.2 - 18.4						
All Sysmex Instruments	58	17.33	0.56	3.2	17.2	16.2 - 18.4						
Sysmex KX-21N & K-800, 1000, 4500	18	16.98	0.28	1.6	17.0	15.9 - 18.1						
Sysmex pocH-100i	15	18.03	0.54	3.0	17.9	16.9 - 19.2						
Sysmex XP-300	24	17.17	0.32	1.8	17.2	16.1 - 18.3						

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

Specimen SYX-11							Specimen SYX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	61	387.5	18.7	4.8	388	290 - 485	59	60.1	3.8	6.3	60	45 - 76
All Sysmex Instruments	60	387.3	18.8	4.9	388	290 - 485	58	60.1	3.8	6.3	61	45 - 76
Sysmex KX-21N & K-800, 1000, 4500	20	396.5	15.6	3.9	398	297 - 496	21	63.3	7.8	12.4	62	47 - 80
Sysmex pocH-100i	15	365.8	15.1	4.1	361	274 - 458	15	58.9	3.5	5.9	58	44 - 74
Sysmex XP-300	24	393.3	12.4	3.1	395	294 - 492	23	60.4	3.5	5.8	60	45 - 76
Specimen SYX-13							Specimen SYX-14					
All Method	62	191.2	8.1	4.3	191	143 - 239	62	388.5	17.7	4.6	393	291 - 486
All Sysmex Instruments	61	191.1	8.2	4.3	191	143 - 239	61	388.4	17.9	4.6	393	291 - 486
Sysmex KX-21N & K-800, 1000, 4500	21	193.3	8.1	4.2	196	144 - 242	21	397.2	10.9	2.7	397	297 - 497
Sysmex pocH-100i	15	185.4	8.2	4.4	186	139 - 232	15	363.7	11.5	3.2	362	272 - 455
Sysmex XP-300	24	192.9	6.9	3.6	193	144 - 242	24	396.0	10.9	2.8	399	297 - 496
Specimen SYX-15												
All Method	59	60.5	4.0	6.6	60	45 - 76						
All Sysmex Instruments	58	60.6	4.0	6.6	60	45 - 76						
Sysmex KX-21N & K-800, 1000, 4500	18	61.0	4.1	6.7	61	45 - 77						
Sysmex pocH-100i	15	60.3	3.3	5.5	59	45 - 76						
Sysmex XP-300	24	60.8	4.3	7.1	60	45 - 76						

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

<u>Instrument</u>	Specimen SYX-11						Specimen SYX-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	49	60.19	0.61	1.0	60.3	58.3 - 62.1	50	11.45	1.14	10.0	11.5	8.0 - 14.9
All Sysmex Instruments	48	60.17	0.60	1.0	60.3	58.3 - 62.0	51	11.46	1.39	12.1	11.5	7.2 - 15.7
Sysmex KX-21N & K-800, 1000, 4500	18	59.98	0.68	1.1	60.1	57.9 - 62.1	19	11.54	1.32	11.4	11.6	7.5 - 15.5
Sysmex pocH-100i	12	60.43	0.40	0.7	60.4	59.2 - 61.7	12	11.08	1.49	13.4	11.3	6.6 - 15.6
Sysmex XP-300	18	60.09	0.76	1.3	60.3	57.8 - 62.4	19	11.71	1.37	11.7	11.8	7.5 - 15.9
	Specimen SYX-13						Specimen SYX-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	52	31.62	0.99	3.1	31.6	28.6 - 34.6	51	60.02	0.72	1.2	60.1	57.8 - 62.2
All Sysmex Instruments	51	31.60	0.98	3.1	31.5	28.6 - 34.6	50	60.00	0.72	1.2	60.1	57.8 - 62.2
Sysmex KX-21N & K-800, 1000, 4500	19	31.77	0.92	2.9	31.6	28.9 - 34.6	18	59.81	0.69	1.1	60.0	57.7 - 61.9
Sysmex pocH-100i	12	31.17	1.13	3.6	30.9	27.7 - 34.6	12	60.49	0.48	0.8	60.6	59.0 - 62.0
Sysmex XP-300	19	31.72	0.93	2.9	31.9	28.9 - 34.5	19	59.85	0.77	1.3	60.0	57.5 - 62.2
	Specimen SYX-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	51	11.50	1.66	14.4	11.2	6.5 - 16.5						
All Sysmex Instruments	50	11.54	1.65	14.3	11.4	6.5 - 16.5						
Sysmex KX-21N & K-800, 1000, 4500	18	12.00	1.79	15.0	11.8	6.6 - 17.4						
Sysmex pocH-100i	12	11.16	1.42	12.7	10.9	6.8 - 15.5						
Sysmex XP-300	19	11.31	1.66	14.7	10.8	6.3 - 16.4						

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

Specimen SYX-11							Specimen SYX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	51	14.24	0.75	5.3	14.2	11.9 - 16.6	51	19.88	1.69	8.5	20.1	14.8 - 25.0
All Sysmex Instruments	50	14.22	0.75	5.3	14.2	11.9 - 16.5	50	19.83	1.67	8.4	20.1	14.8 - 24.9
Sysmex KX-21N & K-800, 1000, 4500	18	14.32	0.64	4.5	14.4	12.4 - 16.3	19	20.47	1.37	6.7	20.2	16.3 - 24.6
Sysmex pocH-100i	12	13.65	0.55	4.0	13.5	12.0 - 15.3	11	18.22	1.48	8.1	18.2	13.7 - 22.7
Sysmex XP-300	19	14.48	0.82	5.7	14.4	12.0 - 17.0	19	20.05	1.52	7.6	20.4	15.4 - 24.7
Specimen SYX-13							Specimen SYX-14					
All Method	52	15.82	1.17	7.4	16.2	12.2 - 19.4	52	14.43	0.92	6.4	14.4	11.6 - 17.2
All Sysmex Instruments	51	15.80	1.18	7.4	16.1	12.2 - 19.4	51	14.42	0.93	6.4	14.4	11.6 - 17.2
Sysmex KX-21N & K-800, 1000, 4500	19	16.14	1.02	6.4	16.3	13.0 - 19.3	19	14.71	0.73	5.0	14.5	12.5 - 17.0
Sysmex pocH-100i	12	14.88	1.26	8.5	14.9	11.0 - 18.7	12	13.47	0.66	4.9	13.5	11.5 - 15.5
Sysmex XP-300	19	16.05	1.03	6.4	16.1	12.9 - 19.2	19	14.74	0.88	6.0	14.6	12.0 - 17.4
Specimen SYX-15												
All Method	51	19.91	1.89	9.5	20.0	14.2 - 25.6						
All Sysmex Instruments	50	19.85	1.86	9.4	20.0	14.2 - 25.5						
Sysmex KX-21N & K-800, 1000, 4500	18	19.77	1.36	6.9	20.0	15.6 - 23.9						
Sysmex pocH-100i	12	18.00	1.69	9.4	18.4	12.9 - 23.1						
Sysmex XP-300	19	21.03	1.44	6.8	20.8	16.7 - 25.4						

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

<u>Instrument</u>	Specimen SYX-11						Specimen SYX-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	49	25.63	0.69	2.7	25.7	23.5 - 27.7	52	68.66	1.86	2.7	68.6	63.0 - 74.3
All Sysmex Instruments	48	25.68	0.63	2.5	25.7	23.7 - 27.6	51	68.71	1.85	2.7	68.6	63.1 - 74.3
Sysmex KX-21N & K-800, 1000, 4500	17	25.75	0.60	2.3	25.8	23.9 - 27.6	19	68.04	1.48	2.2	68.2	63.5 - 72.5
Sysmex pocH-100i	12	25.93	0.43	1.7	25.7	24.6 - 27.3	12	70.48	1.58	2.2	71.1	65.7 - 75.3
Sysmex XP-300	18	25.44	0.74	2.9	25.7	23.2 - 27.7	19	68.24	1.73	2.5	68.3	63.0 - 73.5
	Specimen SYX-13						Specimen SYX-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	52	52.57	1.33	2.5	52.4	48.5 - 56.6	52	25.61	0.74	2.9	25.6	23.4 - 27.9
All Sysmex Instruments	51	52.61	1.30	2.5	52.4	48.7 - 56.6	51	25.64	0.72	2.8	25.6	23.4 - 27.8
Sysmex KX-21N & K-800, 1000, 4500	19	52.08	0.84	1.6	52.2	49.5 - 54.7	19	25.65	0.79	3.1	25.5	23.2 - 28.1
Sysmex pocH-100i	12	53.95	1.38	2.6	53.9	49.7 - 58.2	12	26.00	0.66	2.5	26.1	24.0 - 28.0
Sysmex XP-300	19	52.23	1.06	2.0	52.3	49.0 - 55.5	19	25.41	0.64	2.5	25.5	23.4 - 27.4
	Specimen SYX-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	51	68.59	1.94	2.8	68.4	62.7 - 74.5						
All Sysmex Instruments	50	68.61	1.95	2.8	68.4	62.7 - 74.5						
Sysmex KX-21N & K-800, 1000, 4500	18	68.24	1.32	1.9	68.2	64.2 - 72.2						
Sysmex pocH-100i	12	70.84	1.80	2.5	70.4	65.4 - 76.3						
Sysmex XP-300	19	67.66	1.46	2.2	67.6	63.2 - 72.1						

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

Specimen HD-11							Specimen HD-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	544	20.51	0.91	4.5	20.5	17.4 - 23.6	550	2.20	0.20	9.0	2.2	1.8 - 2.6
All Abbott Cell-Dyn Instruments	161	19.85	0.88	4.5	19.8	16.8 - 22.9	160	2.19	0.14	6.3	2.2	1.8 - 2.6
All ABX Instruments	91	20.40	0.44	2.2	20.4	17.3 - 23.5	89	2.13	0.07	3.3	2.1	1.8 - 2.5
All Boule (CDS) Instruments	106	20.20	0.54	2.7	20.2	17.1 - 23.3	107	1.95	0.10	4.9	1.9	1.6 - 2.3
All COULTER Instruments	172	21.35	0.57	2.7	21.4	18.1 - 24.6	176	2.39	0.12	4.9	2.4	2.0 - 2.8
Abbott Cell-Dyn 1700	11	21.54	0.72	3.4	21.4	18.3 - 24.8	11	2.38	0.06	2.5	2.4	2.0 - 2.8
Abbott Cell-Dyn 1800	57	20.01	0.74	3.7	20.0	17.0 - 23.1	56	2.10	0.12	5.8	2.1	1.7 - 2.5
Abbott Cell-Dyn Emerald	92	19.53	0.73	3.7	19.6	16.6 - 22.5	93	2.22	0.11	5.0	2.2	1.8 - 2.6
ABX Diagnostics Micros/45/60	91	20.40	0.44	2.2	20.4	17.3 - 23.5	89	2.13	0.07	3.3	2.1	1.8 - 2.5
Boule (CDS) Medonic M series	102	20.17	0.52	2.6	20.2	17.1 - 23.2	102	1.95	0.09	4.7	1.9	1.6 - 2.3
COULTER AcT diff/diff 2	168	21.34	0.58	2.7	21.4	18.1 - 24.6	172	2.39	0.12	4.9	2.4	2.0 - 2.8

Specimen HD-13							Specimen HD-14					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	547	7.84	0.40	5.1	7.8	6.6 - 9.1	545	20.55	0.97	4.7	20.5	17.4 - 23.7
All Abbott Cell-Dyn Instruments	163	7.72	0.38	4.9	7.7	6.5 - 8.9	162	19.87	0.88	4.4	19.8	16.8 - 22.9
All ABX Instruments	88	7.74	0.17	2.2	7.7	6.5 - 9.0	89	20.39	0.40	2.0	20.4	17.3 - 23.5
All Boule (CDS) Instruments	107	7.47	0.24	3.3	7.5	6.3 - 8.6	106	20.20	0.52	2.6	20.2	17.1 - 23.3
All COULTER Instruments	174	8.22	0.21	2.6	8.2	6.9 - 9.5	173	21.53	0.54	2.5	21.5	18.2 - 24.8
Abbott Cell-Dyn 1700	11	8.53	0.28	3.3	8.5	7.2 - 9.9	11	21.45	0.94	4.4	21.2	18.2 - 24.7
Abbott Cell-Dyn 1800	57	7.57	0.32	4.3	7.6	6.4 - 8.8	57	20.11	0.62	3.1	20.0	17.0 - 23.2
Abbott Cell-Dyn Emerald	93	7.72	0.27	3.5	7.7	6.5 - 8.9	93	19.52	0.78	4.0	19.6	16.5 - 22.5
ABX Diagnostics Micros/45/60	88	7.74	0.17	2.2	7.7	6.5 - 9.0	89	20.39	0.40	2.0	20.4	17.3 - 23.5
Boule (CDS) Medonic M series	102	7.45	0.23	3.1	7.5	6.3 - 8.6	101	20.18	0.53	2.6	20.2	17.1 - 23.3
COULTER AcT diff/diff 2	170	8.23	0.21	2.6	8.2	6.9 - 9.5	170	21.54	0.57	2.6	21.5	18.3 - 24.8

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

Specimen HD-15

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	548	2.20	0.20	8.9	2.2	1.8 - 2.6
All Abbott Cell-Dyn Instruments	162	2.20	0.14	6.6	2.2	1.8 - 2.6
All ABX Instruments	90	2.11	0.07	3.5	2.1	1.7 - 2.5
All Boule (CDS) Instruments	107	1.96	0.09	4.6	2.0	1.6 - 2.3
All COULTER Instruments	174	2.39	0.11	4.6	2.4	2.0 - 2.8
Abbott Cell-Dyn 1700	11	2.37	0.09	3.8	2.4	2.0 - 2.8
Abbott Cell-Dyn 1800	56	2.10	0.10	4.9	2.1	1.7 - 2.5
Abbott Cell-Dyn Emerald	92	2.23	0.11	5.0	2.2	1.8 - 2.6
ABX Diagnostics Micros/45/60	90	2.11	0.07	3.5	2.1	1.7 - 2.5
Boule (CDS) Medonic M series	101	1.95	0.09	4.4	2.0	1.6 - 2.3
COULTER AcT diff/diff 2	170	2.40	0.11	4.6	2.4	2.0 - 2.8

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

Specimen HD-11

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	541	5.672	0.183	3.2	5.70	5.33 - 6.02
All Abbott Cell-Dyn Instruments	162	5.454	0.178	3.3	5.47	5.12 - 5.79
All ABX Instruments	91	5.730	0.104	1.8	5.72	5.38 - 6.08
All Boule (CDS) Instruments	108	5.783	0.097	1.7	5.78	5.43 - 6.13
All COULTER Instruments	175	5.737	0.137	2.4	5.73	5.39 - 6.09
Abbott Cell-Dyn 1700	11	5.612	0.111	2.0	5.60	5.27 - 5.95
Abbott Cell-Dyn 1800	55	5.493	0.094	1.7	5.47	5.16 - 5.83
Abbott Cell-Dyn Emerald	94	5.415	0.201	3.7	5.44	5.09 - 5.75
ABX Diagnostics Micros/45/60	91	5.730	0.104	1.8	5.72	5.38 - 6.08
Boule (CDS) Medonic M series	102	5.787	0.093	1.6	5.78	5.43 - 6.14
COULTER AcT diff/diff 2	171	5.736	0.138	2.4	5.73	5.39 - 6.08

Specimen HD-12

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
544	2.254	0.069	3.1	2.25	2.11 - 2.39
164	2.235	0.094	4.2	2.24	2.10 - 2.37
92	2.228	0.040	1.8	2.23	2.09 - 2.37
107	2.232	0.035	1.6	2.23	2.09 - 2.37
174	2.295	0.060	2.6	2.29	2.15 - 2.44
11	2.285	0.043	1.9	2.28	2.14 - 2.43
55	2.320	0.058	2.5	2.32	2.18 - 2.46
95	2.185	0.072	3.3	2.19	2.05 - 2.32
92	2.228	0.040	1.8	2.23	2.09 - 2.37
102	2.230	0.037	1.7	2.23	2.09 - 2.37
170	2.296	0.060	2.6	2.30	2.15 - 2.44

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

Specimen HD-13							Specimen HD-14					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	542	4.669	0.128	2.7	4.69	4.38 - 4.95	542	5.665	0.188	3.3	5.69	5.32 - 6.01
All Abbott Cell-Dyn Instruments	164	4.536	0.132	2.9	4.55	4.26 - 4.81	163	5.450	0.161	3.0	5.47	5.12 - 5.78
All ABX Instruments	89	4.688	0.073	1.6	4.69	4.40 - 4.97	91	5.724	0.098	1.7	5.72	5.38 - 6.07
All Boule (CDS) Instruments	107	4.707	0.067	1.4	4.71	4.42 - 4.99	107	5.790	0.102	1.8	5.80	5.44 - 6.14
All COULTER Instruments	176	4.746	0.103	2.2	4.75	4.46 - 5.04	174	5.751	0.131	2.3	5.75	5.40 - 6.10
Abbott Cell-Dyn 1700	11	4.675	0.092	2.0	4.66	4.39 - 4.96	11	5.578	0.096	1.7	5.57	5.24 - 5.92
Abbott Cell-Dyn 1800	57	4.585	0.110	2.4	4.59	4.30 - 4.86	54	5.480	0.104	1.9	5.48	5.15 - 5.81
Abbott Cell-Dyn Emerald	95	4.492	0.128	2.8	4.50	4.22 - 4.77	95	5.423	0.175	3.2	5.42	5.09 - 5.75
ABX Diagnostics Micros/45/60	89	4.688	0.073	1.6	4.69	4.40 - 4.97	91	5.724	0.098	1.7	5.72	5.38 - 6.07
Boule (CDS) Medonic M series	101	4.710	0.065	1.4	4.71	4.42 - 5.00	100	5.800	0.095	1.6	5.81	5.45 - 6.15
COULTER AcT diff/diff 2	172	4.745	0.103	2.2	4.75	4.46 - 5.04	170	5.750	0.132	2.3	5.75	5.40 - 6.10
Specimen HD-15												
All Method	545	2.251	0.069	3.1	2.25	2.11 - 2.39						
All Abbott Cell-Dyn Instruments	164	2.244	0.089	4.0	2.25	2.10 - 2.38						
All ABX Instruments	92	2.224	0.048	2.2	2.23	2.09 - 2.36						
All Boule (CDS) Instruments	106	2.223	0.035	1.6	2.22	2.08 - 2.36						
All COULTER Instruments	173	2.293	0.053	2.3	2.29	2.15 - 2.44						
Abbott Cell-Dyn 1700	11	2.285	0.054	2.3	2.28	2.14 - 2.43						
Abbott Cell-Dyn 1800	56	2.311	0.072	3.1	2.32	2.17 - 2.46						
Abbott Cell-Dyn Emerald	95	2.202	0.074	3.4	2.20	2.07 - 2.34						
ABX Diagnostics Micros/45/60	92	2.224	0.048	2.2	2.23	2.09 - 2.36						
Boule (CDS) Medonic M series	100	2.222	0.035	1.6	2.22	2.08 - 2.36						
COULTER AcT diff/diff 2	169	2.294	0.053	2.3	2.29	2.15 - 2.44						

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

Specimen HD-11							Specimen HD-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	548	18.23	0.37	2.0	18.2	16.9 - 19.6	548	5.80	0.14	2.5	5.8	5.3 - 6.3
All Abbott Cell-Dyn Instruments	163	18.39	0.40	2.2	18.4	17.1 - 19.7	163	5.86	0.19	3.3	5.9	5.4 - 6.3
All ABX Instruments	91	18.09	0.24	1.3	18.1	16.8 - 19.4	91	5.75	0.09	1.6	5.8	5.3 - 6.2
All Boule (CDS) Instruments	108	18.29	0.31	1.7	18.3	17.0 - 19.6	106	5.79	0.09	1.5	5.8	5.3 - 6.2
All COULTER Instruments	171	18.14	0.33	1.8	18.2	16.8 - 19.5	173	5.76	0.13	2.2	5.8	5.3 - 6.2
Abbott Cell-Dyn 1700	11	18.39	0.20	1.1	18.4	17.1 - 19.7	11	6.16	0.09	1.5	6.1	5.7 - 6.6
Abbott Cell-Dyn 1800	57	18.52	0.37	2.0	18.5	17.2 - 19.9	56	5.99	0.12	1.9	6.0	5.5 - 6.5
Abbott Cell-Dyn Emerald	94	18.31	0.41	2.2	18.3	17.0 - 19.6	94	5.75	0.13	2.3	5.7	5.3 - 6.2
ABX Diagnostics Micros/45/60	91	18.09	0.24	1.3	18.1	16.8 - 19.4	91	5.75	0.09	1.6	5.8	5.3 - 6.2
Boule (CDS) Medonic M series	101	18.31	0.29	1.6	18.3	17.0 - 19.6	100	5.80	0.08	1.4	5.8	5.3 - 6.3
COULTER AcT diff/diff 2	167	18.13	0.33	1.8	18.1	16.8 - 19.5	169	5.76	0.12	2.2	5.8	5.3 - 6.2

Specimen HD-13							Specimen HD-14					
All Method	545	13.66	0.24	1.8	13.7	12.7 - 14.7	545	18.29	0.37	2.0	18.3	17.0 - 19.6
All Abbott Cell-Dyn Instruments	162	13.76	0.28	2.0	13.8	12.7 - 14.8	161	18.48	0.39	2.1	18.4	17.1 - 19.8
All ABX Instruments	89	13.62	0.16	1.2	13.6	12.6 - 14.6	91	18.09	0.24	1.3	18.1	16.8 - 19.4
All Boule (CDS) Instruments	106	13.58	0.18	1.3	13.6	12.6 - 14.6	107	18.28	0.33	1.8	18.3	16.9 - 19.6
All COULTER Instruments	173	13.65	0.24	1.8	13.6	12.6 - 14.7	174	18.26	0.34	1.9	18.2	16.9 - 19.6
Abbott Cell-Dyn 1700	11	13.87	0.08	0.6	13.9	12.9 - 14.9	11	18.45	0.19	1.0	18.4	17.1 - 19.8
Abbott Cell-Dyn 1800	57	13.85	0.30	2.2	13.9	12.8 - 14.9	57	18.65	0.38	2.0	18.7	17.3 - 20.0
Abbott Cell-Dyn Emerald	93	13.69	0.25	1.9	13.7	12.7 - 14.7	93	18.36	0.39	2.1	18.4	17.0 - 19.7
ABX Diagnostics Micros/45/60	89	13.62	0.16	1.2	13.6	12.6 - 14.6	91	18.09	0.24	1.3	18.1	16.8 - 19.4
Boule (CDS) Medonic M series	99	13.60	0.16	1.2	13.6	12.6 - 14.6	99	18.33	0.28	1.5	18.4	17.0 - 19.7
COULTER AcT diff/diff 2	169	13.65	0.24	1.8	13.6	12.6 - 14.7	170	18.26	0.34	1.9	18.2	16.9 - 19.6

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

<u>Instrument</u>	Specimen HD-15					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	544	5.81	0.14	2.5	5.8	5.4 - 6.3
All Abbott Cell-Dyn Instruments	162	5.87	0.20	3.4	5.9	5.4 - 6.3
All ABX Instruments	92	5.77	0.09	1.6	5.8	5.3 - 6.2
All Boule (CDS) Instruments	107	5.79	0.09	1.6	5.8	5.3 - 6.2
All COULTER Instruments	173	5.78	0.13	2.2	5.8	5.3 - 6.2
Abbott Cell-Dyn 1700	11	6.14	0.09	1.5	6.2	5.7 - 6.6
Abbott Cell-Dyn 1800	56	6.00	0.15	2.4	6.0	5.5 - 6.5
Abbott Cell-Dyn Emerald	93	5.77	0.15	2.5	5.8	5.3 - 6.2
ABX Diagnostics Micros/45/60	92	5.77	0.09	1.6	5.8	5.3 - 6.2
Boule (CDS) Medonic M series	100	5.80	0.09	1.5	5.8	5.3 - 6.3
COULTER AcT diff/diff 2	169	5.78	0.13	2.2	5.8	5.3 - 6.2

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

<u>Instrument</u>	Specimen HD-11						Specimen HD-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	545	51.69	1.65	3.2	51.5	48.5 - 54.8	547	16.54	0.97	5.9	16.6	15.5 - 17.6
All Abbott Cell-Dyn Instruments	162	52.84	1.75	3.3	53.0	49.6 - 56.1	161	17.43	0.65	3.7	17.5	16.3 - 18.5
All ABX Instruments	91	50.71	0.97	1.9	50.7	47.6 - 53.8	92	15.46	0.29	1.9	15.4	14.5 - 16.4
All Boule (CDS) Instruments	108	50.59	1.30	2.6	50.6	47.5 - 53.7	109	15.51	0.38	2.4	15.5	14.5 - 16.5
All COULTER Instruments	174	51.78	1.28	2.5	51.7	48.6 - 54.9	173	16.89	0.45	2.6	16.9	15.8 - 18.0
Abbott Cell-Dyn 1700	11	51.75	1.86	3.6	52.1	48.6 - 54.9	11	17.08	0.82	4.8	17.0	16.0 - 18.2
Abbott Cell-Dyn 1800	55	52.85	1.10	2.1	53.1	49.6 - 56.1	55	17.67	0.63	3.6	17.8	16.6 - 18.8
Abbott Cell-Dyn Emerald	95	53.01	1.97	3.7	53.1	49.8 - 56.2	95	17.33	0.59	3.4	17.4	16.2 - 18.4
ABX Diagnostics Micros/45/60	91	50.71	0.97	1.9	50.7	47.6 - 53.8	92	15.46	0.29	1.9	15.4	14.5 - 16.4
Boule (CDS) Medonic M series	102	50.69	1.25	2.5	50.6	47.6 - 53.8	103	15.51	0.38	2.5	15.5	14.5 - 16.5
COULTER AcT diff/diff 2	169	51.75	1.29	2.5	51.6	48.6 - 54.9	168	16.90	0.44	2.6	16.9	15.8 - 18.0

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

Specimen HD-13							Specimen HD-14					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	550	38.84	1.56	4.0	38.8	36.5 - 41.2	543	51.83	1.64	3.2	51.7	48.7 - 55.0
All Abbott Cell-Dyn Instruments	164	40.16	1.18	2.9	40.3	37.7 - 42.6	160	52.83	1.70	3.2	52.8	49.6 - 56.0
All ABX Instruments	89	37.91	0.57	1.5	37.9	35.6 - 40.2	90	50.66	0.87	1.7	50.7	47.6 - 53.7
All Boule (CDS) Instruments	108	36.88	0.83	2.2	36.9	34.6 - 39.1	107	51.00	1.48	2.9	51.0	47.9 - 54.1
All COULTER Instruments	176	39.25	0.89	2.3	39.2	36.8 - 41.7	174	51.99	1.23	2.4	52.0	48.8 - 55.2
Abbott Cell-Dyn 1700	11	39.35	1.28	3.3	39.7	36.9 - 41.8	11	51.73	1.68	3.2	52.1	48.6 - 54.9
Abbott Cell-Dyn 1800	57	40.08	1.11	2.8	40.3	37.6 - 42.5	56	52.62	1.49	2.8	52.7	49.4 - 55.8
Abbott Cell-Dyn Emerald	95	40.30	1.19	2.9	40.5	37.8 - 42.8	93	53.09	1.76	3.3	53.3	49.9 - 56.3
ABX Diagnostics Micros/45/60	89	37.91	0.57	1.5	37.9	35.6 - 40.2	90	50.66	0.87	1.7	50.7	47.6 - 53.7
Boule (CDS) Medonic M series	102	36.94	0.79	2.2	36.9	34.7 - 39.2	101	51.16	1.36	2.7	51.2	48.0 - 54.3
COULTER AcT diff/diff 2	171	39.24	0.89	2.3	39.2	36.8 - 41.6	169	51.98	1.23	2.4	51.9	48.8 - 55.1
Specimen HD-15												
All Method	545	16.53	0.99	6.0	16.6	15.5 - 17.6						
All Abbott Cell-Dyn Instruments	161	17.49	0.62	3.5	17.5	16.4 - 18.6						
All ABX Instruments	92	15.43	0.35	2.3	15.5	14.4 - 16.4						
All Boule (CDS) Instruments	107	15.47	0.36	2.3	15.5	14.5 - 16.4						
All COULTER Instruments	174	16.85	0.41	2.4	16.8	15.8 - 17.9						
Abbott Cell-Dyn 1700	10	17.07	0.80	4.7	17.0	16.0 - 18.1						
Abbott Cell-Dyn 1800	56	17.62	0.61	3.5	17.7	16.5 - 18.7						
Abbott Cell-Dyn Emerald	95	17.45	0.58	3.3	17.4	16.4 - 18.5						
ABX Diagnostics Micros/45/60	92	15.43	0.35	2.3	15.5	14.4 - 16.4						
Boule (CDS) Medonic M series	101	15.48	0.36	2.3	15.5	14.5 - 16.5						
COULTER AcT diff/diff 2	169	16.86	0.41	2.4	16.8	15.8 - 17.9						

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

Specimen HD-11							Specimen HD-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	546	553.5	37.3	6.7	558	415 - 692	533	67.2	8.0	11.8	66	50 - 85
All Abbott Cell-Dyn Instruments	162	563.1	43.1	7.7	568	422 - 704	161	70.1	10.9	15.5	68	52 - 88
All ABX Instruments	92	556.8	22.4	4.0	557	417 - 697	92	74.9	6.6	8.8	75	56 - 94
All Boule (CDS) Instruments	108	507.7	19.4	3.8	508	380 - 635	107	59.9	4.6	7.7	60	44 - 75
All COULTER Instruments	176	570.8	22.8	4.0	570	428 - 714	173	66.4	5.0	7.6	66	49 - 84
Abbott Cell-Dyn 1700	11	582.1	69.0	11.9	592	436 - 728	11	63.0	7.9	12.6	64	47 - 79
Abbott Cell-Dyn 1800	57	589.8	30.3	5.1	587	442 - 738	56	65.3	4.8	7.4	66	48 - 82
Abbott Cell-Dyn Emerald	93	541.9	37.4	6.9	536	406 - 678	92	73.8	12.3	16.6	74	55 - 93
ABX Diagnostics Micros/45/60	92	556.8	22.4	4.0	557	417 - 697	92	74.9	6.6	8.8	75	56 - 94
Boule (CDS) Medonic M series	102	506.4	18.9	3.7	507	379 - 634	101	59.7	4.3	7.3	60	44 - 75
COULTER AcT diff/diff 2	173	570.6	22.9	4.0	570	427 - 714	169	66.5	5.0	7.5	66	49 - 84

Specimen HD-13							Specimen HD-14					
All Method	544	258.1	17.8	6.9	260	193 - 323	544	553.3	37.7	6.8	557	414 - 692
All Abbott Cell-Dyn Instruments	161	263.7	17.8	6.7	264	197 - 330	162	564.4	43.1	7.6	565	423 - 706
All ABX Instruments	91	266.1	10.3	3.9	267	199 - 333	92	557.5	21.0	3.8	555	418 - 697
All Boule (CDS) Instruments	106	235.3	11.3	4.8	234	176 - 295	107	505.6	19.4	3.8	505	379 - 632
All COULTER Instruments	172	263.0	10.8	4.1	263	197 - 329	174	570.8	22.8	4.0	571	428 - 714
Abbott Cell-Dyn 1700	11	257.7	31.3	12.1	260	193 - 323	11	585.7	65.3	11.1	588	439 - 733
Abbott Cell-Dyn 1800	55	262.3	13.5	5.1	264	196 - 328	57	590.8	33.4	5.7	593	443 - 739
Abbott Cell-Dyn Emerald	94	265.3	19.0	7.2	265	198 - 332	92	542.5	34.1	6.3	540	406 - 679
ABX Diagnostics Micros/45/60	91	266.1	10.3	3.9	267	199 - 333	92	557.5	21.0	3.8	555	418 - 697
Boule (CDS) Medonic M series	101	234.9	10.8	4.6	234	176 - 294	101	504.5	18.8	3.7	505	378 - 631
COULTER AcT diff/diff 2	169	262.9	10.8	4.1	263	197 - 329	170	570.4	22.4	3.9	571	427 - 713

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

Specimen HD-15						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	535	67.4	8.1	12.1	66	50 - 85
All Abbott Cell-Dyn Instruments	159	69.6	10.8	15.5	67	52 - 88
All ABX Instruments	90	74.3	6.2	8.4	73	55 - 93
All Boule (CDS) Instruments	108	60.0	5.0	8.4	60	45 - 75
All COULTER Instruments	174	67.2	5.5	8.1	67	50 - 85
Abbott Cell-Dyn 1700	11	60.3	8.8	14.6	60	45 - 76
Abbott Cell-Dyn 1800	57	65.8	3.8	5.8	66	49 - 83
Abbott Cell-Dyn Emerald	92	73.9	13.2	17.8	73	55 - 93
ABX Diagnostics Micros/45/60	90	74.3	6.2	8.4	73	55 - 93
Boule (CDS) Medonic M series	102	59.8	5.0	8.4	60	44 - 75
COULTER AcT diff/diff 2	170	67.3	5.4	8.1	67	50 - 85

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

Specimen HD-11							Specimen HD-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	527	13.63	1.52	11.2	14.1	9.0 - 18.2	531	55.41	6.82	12.3	57.7	34.9 - 75.9
All Abbott Cell-Dyn Instruments	155	12.87	1.57	12.2	13.2	8.1 - 17.6	159	51.58	3.41	6.6	52.0	41.3 - 61.8
All ABX Instruments	86	11.88	1.02	8.6	11.7	8.8 - 15.0	86	44.97	4.22	9.4	44.5	32.3 - 57.7
All Boule (CDS) Instruments	106	14.80	0.59	4.0	14.8	13.0 - 16.6	105	60.55	2.34	3.9	60.7	53.5 - 67.6
All COULTER Instruments	165	14.44	0.54	3.8	14.4	12.8 - 16.1	167	60.97	1.52	2.5	60.9	56.4 - 65.6
Abbott Cell-Dyn 1700	12	12.73	0.64	5.1	13.0	10.7 - 14.7	12	54.02	1.11	2.1	54.2	50.6 - 57.4
Abbott Cell-Dyn 1800	53	11.14	0.53	4.7	11.1	9.5 - 12.8	55	48.13	2.21	4.6	47.7	41.4 - 54.8
Abbott Cell-Dyn Emerald	88	13.99	1.15	8.2	13.8	10.5 - 17.5	91	53.35	2.45	4.6	53.2	46.0 - 60.8
ABX Diagnostics Micros/45/60	86	11.88	1.02	8.6	11.7	8.8 - 15.0	86	44.97	4.22	9.4	44.5	32.3 - 57.7
Boule (CDS) Medonic M series	101	14.76	0.56	3.8	14.7	13.0 - 16.5	100	60.36	2.23	3.7	60.6	53.6 - 67.1
COULTER AcT diff/diff 2	165	14.44	0.54	3.8	14.4	12.8 - 16.1	167	60.97	1.52	2.5	60.9	56.4 - 65.6

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

Specimen HD-13							Specimen HD-14					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	531	29.95	3.13	10.4	30.9	20.5 - 39.4	526	13.58	1.54	11.3	14.0	8.9 - 18.2
All Abbott Cell-Dyn Instruments	158	28.47	2.12	7.5	29.0	22.1 - 34.9	156	12.95	1.66	12.8	13.1	7.9 - 18.0
All ABX Instruments	87	25.27	1.99	7.9	25.1	19.2 - 31.3	86	11.76	1.07	9.1	11.7	8.5 - 15.0
All Boule (CDS) Instruments	105	31.71	0.96	3.0	31.7	28.8 - 34.6	105	14.68	0.64	4.4	14.6	12.7 - 16.7
All COULTER Instruments	165	32.53	0.78	2.4	32.6	30.2 - 34.9	166	14.40	0.56	3.9	14.4	12.7 - 16.1
Abbott Cell-Dyn 1700	12	29.21	1.39	4.8	29.4	25.0 - 33.4	12	12.82	0.65	5.1	12.7	10.8 - 14.8
Abbott Cell-Dyn 1800	54	26.09	1.06	4.1	25.9	22.9 - 29.3	53	11.18	0.41	3.7	11.2	9.9 - 12.4
Abbott Cell-Dyn Emerald	88	29.75	1.07	3.6	29.8	26.5 - 33.0	88	14.02	1.28	9.1	13.7	10.1 - 17.9
ABX Diagnostics Micros/45/60	87	25.27	1.99	7.9	25.1	19.2 - 31.3	86	11.76	1.07	9.1	11.7	8.5 - 15.0
Boule (CDS) Medonic M series	99	31.60	0.85	2.7	31.6	29.0 - 34.2	100	14.63	0.60	4.1	14.6	12.8 - 16.5
COULTER AcT diff/diff 2	165	32.53	0.78	2.4	32.6	30.2 - 34.9	166	14.40	0.56	3.9	14.4	12.7 - 16.1

Specimen HD-15						
All Method	532	55.42	7.06	12.7	58.1	34.2 - 76.7
All Abbott Cell-Dyn Instruments	159	51.59	3.62	7.0	52.0	40.7 - 62.5
All ABX Instruments	87	44.65	4.58	10.3	44.2	30.9 - 58.4
All Boule (CDS) Instruments	105	60.39	2.19	3.6	60.6	53.8 - 67.0
All COULTER Instruments	166	61.19	1.61	2.6	61.1	56.3 - 66.1
Abbott Cell-Dyn 1700	12	54.09	2.37	4.4	54.1	46.9 - 61.2
Abbott Cell-Dyn 1800	55	47.97	2.40	5.0	47.7	40.7 - 55.2
Abbott Cell-Dyn Emerald	90	53.37	2.41	4.5	53.9	46.1 - 60.7
ABX Diagnostics Micros/45/60	87	44.65	4.58	10.3	44.2	30.9 - 58.4
Boule (CDS) Medonic M series	100	60.26	2.12	3.5	60.6	53.9 - 66.7
COULTER AcT diff/diff 2	166	61.19	1.61	2.6	61.1	56.3 - 66.1

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

Specimen HD-11							Specimen HD-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	526	4.72	1.14	24.3	4.7	1.2 - 8.2	526	11.68	5.14	44.0	10.3	0.0 - 27.2
All Abbott Cell-Dyn Instruments	157	4.47	1.68	37.5	3.5	0.0 - 9.6	157	14.02	2.95	21.1	13.4	5.1 - 22.9
All ABX Instruments	84	4.17	0.31	7.5	4.2	3.2 - 5.2	87	19.93	3.12	15.6	20.2	10.5 - 29.3
All Boule (CDS) Instruments	105	5.49	0.89	16.2	5.6	2.8 - 8.2	105	8.63	2.15	24.9	8.6	2.1 - 15.1
All COULTER Instruments	167	4.79	0.42	8.8	4.8	3.5 - 6.1	167	7.36	1.20	16.4	7.3	3.7 - 11.0
Abbott Cell-Dyn 1700	12	5.53	0.28	5.1	5.5	4.6 - 6.4	12	12.72	1.16	9.1	12.7	9.2 - 16.2
Abbott Cell-Dyn 1800	53	6.57	0.30	4.6	6.5	5.6 - 7.5	53	17.46	1.32	7.6	17.6	13.5 - 21.5
Abbott Cell-Dyn Emerald	88	3.08	0.26	8.5	3.0	2.2 - 3.9	88	12.02	1.52	12.7	11.8	7.4 - 16.6
ABX Diagnostics Micros/45/60	84	4.17	0.31	7.5	4.2	3.2 - 5.2	87	19.93	3.12	15.6	20.2	10.5 - 29.3
Boule (CDS) Medonic M series	100	5.40	0.79	14.6	5.6	3.0 - 7.8	98	8.66	2.18	25.1	8.6	2.1 - 15.2
COULTER AcT diff/diff 2	167	4.79	0.42	8.8	4.8	3.5 - 6.1	167	7.36	1.20	16.4	7.3	3.7 - 11.0

Specimen HD-13							Specimen HD-14					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	529	7.34	2.05	27.9	6.6	1.1 - 13.5	524	4.68	1.11	23.7	4.6	1.3 - 8.1
All Abbott Cell-Dyn Instruments	157	7.96	2.57	32.3	6.7	0.2 - 15.7	157	4.44	1.63	36.7	3.5	0.0 - 9.4
All ABX Instruments	87	9.52	1.09	11.4	9.5	6.2 - 12.8	85	4.15	0.32	7.6	4.1	3.1 - 5.1
All Boule (CDS) Instruments	107	6.94	1.24	17.8	6.9	3.2 - 10.7	104	5.43	0.96	17.7	5.3	2.5 - 8.4
All COULTER Instruments	169	5.95	0.70	11.7	6.0	3.8 - 8.1	165	4.79	0.38	7.9	4.8	3.6 - 6.0
Abbott Cell-Dyn 1700	12	8.56	0.70	8.2	8.7	6.4 - 10.7	12	5.47	0.21	3.8	5.5	4.8 - 6.1
Abbott Cell-Dyn 1800	53	11.27	0.64	5.6	11.3	9.3 - 13.2	53	6.48	0.31	4.7	6.5	5.5 - 7.5
Abbott Cell-Dyn Emerald	90	5.92	0.70	11.7	5.8	3.8 - 8.1	89	3.08	0.28	9.1	3.0	2.2 - 4.0
ABX Diagnostics Micros/45/60	87	9.52	1.09	11.4	9.5	6.2 - 12.8	85	4.15	0.32	7.6	4.1	3.1 - 5.1
Boule (CDS) Medonic M series	100	6.88	1.22	17.7	6.8	3.2 - 10.6	98	5.31	0.82	15.5	5.3	2.8 - 7.8
COULTER AcT diff/diff 2	169	5.95	0.70	11.7	6.0	3.8 - 8.1	165	4.79	0.38	7.9	4.8	3.6 - 6.0

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

Specimen HD-15						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	529	11.93	5.19	43.5	10.4	0.0 - 27.5
All Abbott Cell-Dyn Instruments	157	14.20	3.10	21.8	13.5	4.9 - 23.5
All ABX Instruments	86	20.29	2.89	14.3	20.5	11.6 - 29.0
All Boule (CDS) Instruments	104	9.30	1.74	18.8	9.3	4.0 - 14.6
All COULTER Instruments	168	7.34	1.22	16.6	7.3	3.6 - 11.0
Abbott Cell-Dyn 1700	12	12.38	1.26	10.2	12.5	8.5 - 16.2
Abbott Cell-Dyn 1800	53	17.93	1.50	8.4	17.6	13.4 - 22.5
Abbott Cell-Dyn Emerald	91	12.31	1.65	13.4	12.0	7.3 - 17.3
ABX Diagnostics Micros/45/60	86	20.29	2.89	14.3	20.5	11.6 - 29.0
Boule (CDS) Medonic M series	97	9.40	1.74	18.5	9.4	4.1 - 14.7
COULTER AcT diff/diff 2	168	7.34	1.22	16.6	7.3	3.6 - 11.0

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

Specimen HD-11							Specimen HD-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	529	81.62	1.80	2.2	81.4	76.2 - 87.1	524	32.89	2.47	7.5	32.7	25.4 - 40.4
All Abbott Cell-Dyn Instruments	154	82.61	1.01	1.2	82.6	79.5 - 85.7	156	34.35	1.51	4.4	34.4	29.8 - 38.9
All ABX Instruments	86	83.99	0.96	1.1	84.1	81.1 - 86.9	87	35.01	1.84	5.2	35.2	29.4 - 40.6
All Boule (CDS) Instruments	105	79.71	1.20	1.5	79.8	76.1 - 83.3	103	30.81	2.75	8.9	30.3	22.5 - 39.1
All COULTER Instruments	166	80.76	0.64	0.8	80.7	78.8 - 82.7	167	31.67	1.30	4.1	31.6	27.7 - 35.6
Abbott Cell-Dyn 1700	12	81.74	0.95	1.2	81.7	78.9 - 84.6	12	33.26	0.74	2.2	33.1	31.0 - 35.5
Abbott Cell-Dyn 1800	54	82.25	0.59	0.7	82.3	80.4 - 84.1	53	34.27	1.50	4.4	34.3	29.7 - 38.8
Abbott Cell-Dyn Emerald	88	82.88	1.25	1.5	83.2	79.1 - 86.7	89	34.56	1.41	4.1	34.8	30.3 - 38.9
ABX Diagnostics Micros/45/60	86	83.99	0.96	1.1	84.1	81.1 - 86.9	87	35.01	1.84	5.2	35.2	29.4 - 40.6
Boule (CDS) Medonic M series	100	79.81	0.98	1.2	79.8	76.8 - 82.8	98	30.95	2.74	8.8	30.5	22.7 - 39.2
COULTER AcT diff/diff 2	166	80.76	0.64	0.8	80.7	78.8 - 82.7	167	31.67	1.30	4.1	31.6	27.7 - 35.6

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

Specimen HD-13							Specimen HD-14					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	524	62.72	1.94	3.1	62.4	56.9 - 68.6	524	81.71	1.79	2.2	81.4	76.3 - 87.1
All Abbott Cell-Dyn Instruments	156	63.51	1.38	2.2	63.6	59.3 - 67.7	154	82.58	1.14	1.4	82.6	79.1 - 86.0
All ABX Instruments	86	65.16	1.33	2.0	65.2	61.1 - 69.2	86	84.12	0.92	1.1	84.4	81.3 - 86.9
All Boule (CDS) Instruments	103	61.41	1.51	2.5	61.4	56.8 - 66.0	105	79.90	1.36	1.7	79.9	75.8 - 84.0
All COULTER Instruments	167	61.51	0.99	1.6	61.5	58.5 - 64.5	164	80.79	0.58	0.7	80.8	79.0 - 82.6
Abbott Cell-Dyn 1700	12	62.22	1.04	1.7	62.1	59.0 - 65.4	12	81.68	0.58	0.7	81.9	79.9 - 83.5
Abbott Cell-Dyn 1800	54	62.61	0.79	1.3	62.7	60.2 - 65.0	54	82.30	0.53	0.6	82.4	80.7 - 83.9
Abbott Cell-Dyn Emerald	88	64.32	1.09	1.7	64.6	61.0 - 67.6	89	82.74	1.57	1.9	83.3	78.0 - 87.5
ABX Diagnostics Micros/45/60	86	65.16	1.33	2.0	65.2	61.1 - 69.2	86	84.12	0.92	1.1	84.4	81.3 - 86.9
Boule (CDS) Medonic M series	98	61.51	1.42	2.3	61.4	57.2 - 65.8	99	80.11	1.06	1.3	80.0	76.9 - 83.3
COULTER AcT diff/diff 2	167	61.51	0.99	1.6	61.5	58.5 - 64.5	164	80.79	0.58	0.7	80.8	79.0 - 82.6

Specimen HD-15						
All Method	524	32.70	2.57	7.9	32.6	24.9 - 40.5
All Abbott Cell-Dyn Instruments	156	34.24	1.50	4.4	34.4	29.7 - 38.8
All ABX Instruments	87	35.05	2.23	6.4	35.0	28.3 - 41.8
All Boule (CDS) Instruments	105	30.30	2.64	8.7	30.1	22.3 - 38.3
All COULTER Instruments	165	31.43	1.29	4.1	31.3	27.5 - 35.4
Abbott Cell-Dyn 1700	12	33.58	1.62	4.8	33.7	28.7 - 38.5
Abbott Cell-Dyn 1800	55	34.11	1.65	4.9	33.9	29.1 - 39.1
Abbott Cell-Dyn Emerald	89	34.40	1.35	3.9	34.5	30.3 - 38.5
ABX Diagnostics Micros/45/60	87	35.05	2.23	6.4	35.0	28.3 - 41.8
Boule (CDS) Medonic M series	100	30.35	2.68	8.8	30.1	22.3 - 38.4
COULTER AcT diff/diff 2	165	31.43	1.29	4.1	31.3	27.5 - 35.4

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

<u>Instrument</u>	Specimen DIF-11						Specimen DIF-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	23.48	0.34	1.4	23.4	19.9 - 27.0	17	3.87	0.10	2.5	3.9	3.2 - 4.5
All COULTER Instruments	17	23.48	0.34	1.4	23.4	19.9 - 27.0	17	3.87	0.10	2.5	3.9	3.2 - 4.5
COULTER UniCel DxH 600	12	23.43	0.36	1.5	23.4	19.9 - 27.0	12	3.88	0.08	1.9	3.9	3.3 - 4.5
	Specimen DIF-13						Specimen DIF-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	10.32	0.28	2.7	10.3	8.7 - 11.9	17	23.31	0.53	2.3	23.2	19.8 - 26.9
All COULTER Instruments	17	10.32	0.28	2.7	10.3	8.7 - 11.9	17	23.31	0.53	2.3	23.2	19.8 - 26.9
COULTER UniCel DxH 600	12	10.50	0.20	1.9	10.5	8.9 - 12.1	12	23.42	0.44	1.9	23.4	19.9 - 27.0
	Specimen DIF-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	17	3.93	0.10	2.5	3.9	3.3 - 4.6						
All COULTER Instruments	17	3.93	0.10	2.5	3.9	3.3 - 4.6						
COULTER UniCel DxH 600	12	3.90	0.06	1.6	3.9	3.3 - 4.5						

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

<u>Instrument</u>	Specimen DIF-11						Specimen DIF-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	5.459	0.091	1.7	5.45	5.13 - 5.79	17	2.606	0.041	1.6	2.62	2.44 - 2.77
All COULTER Instruments	17	5.459	0.091	1.7	5.45	5.13 - 5.79	17	2.606	0.041	1.6	2.62	2.44 - 2.77
COULTER UniCel DxH 600	12	5.413	0.071	1.3	5.43	5.08 - 5.74	12	2.585	0.029	1.1	2.59	2.42 - 2.75
	Specimen DIF-13						Specimen DIF-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	4.107	0.068	1.6	4.11	3.86 - 4.36	17	5.463	0.077	1.4	5.47	5.13 - 5.80
All COULTER Instruments	17	4.107	0.068	1.6	4.11	3.86 - 4.36	17	5.463	0.077	1.4	5.47	5.13 - 5.80
COULTER UniCel DxH 600	12	4.082	0.061	1.5	4.09	3.83 - 4.33	12	5.402	0.043	0.8	5.40	5.07 - 5.73
	Specimen DIF-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	17	2.617	0.047	1.8	2.61	2.45 - 2.78						
All COULTER Instruments	17	2.617	0.047	1.8	2.61	2.45 - 2.78						
COULTER UniCel DxH 600	12	2.585	0.024	0.9	2.59	2.42 - 2.75						

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

Specimen DIF-11							Specimen DIF-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	17.03	0.33	1.9	17.1	15.8 - 18.3	17	6.60	0.15	2.3	6.6	6.1 - 7.1
All COULTER Instruments	17	17.03	0.33	1.9	17.1	15.8 - 18.3	17	6.60	0.15	2.3	6.6	6.1 - 7.1
COULTER UniCel DxH 600	12	16.85	0.21	1.2	16.9	15.6 - 18.1	12	6.53	0.10	1.6	6.5	6.0 - 7.0
Specimen DIF-13							Specimen DIF-14					
All Method	17	11.83	0.15	1.3	11.9	10.9 - 12.7	17	16.98	0.33	2.0	16.9	15.7 - 18.2
All COULTER Instruments	17	11.83	0.15	1.3	11.9	10.9 - 12.7	17	16.98	0.33	2.0	16.9	15.7 - 18.2
COULTER UniCel DxH 600	12	11.77	0.15	1.3	11.8	10.9 - 12.6	12	16.82	0.18	1.1	16.8	15.6 - 18.0
Specimen DIF-15												
All Method	17	6.62	0.13	2.0	6.6	6.1 - 7.1						
All COULTER Instruments	17	6.62	0.13	2.0	6.6	6.1 - 7.1						
COULTER UniCel DxH 600	12	6.53	0.05	0.8	6.5	6.0 - 7.0						

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

Specimen DIF-11							Specimen DIF-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	54.18	1.05	1.9	54.3	50.9 - 57.5	17	20.33	0.40	2.0	20.4	19.1 - 21.6
All COULTER Instruments	17	54.18	1.05	1.9	54.3	50.9 - 57.5	17	20.33	0.40	2.0	20.4	19.1 - 21.6
COULTER UniCel DxH 600	12	54.78	0.49	0.9	54.8	51.4 - 58.1	12	20.53	0.19	0.9	20.5	19.3 - 21.8
Specimen DIF-13							Specimen DIF-14					
All Method	17	36.61	0.88	2.4	36.8	34.4 - 38.9	17	54.42	0.89	1.6	54.6	51.1 - 57.7
All COULTER Instruments	17	36.61	0.88	2.4	36.8	34.4 - 38.9	17	54.42	0.89	1.6	54.6	51.1 - 57.7
COULTER UniCel DxH 600	12	37.17	0.58	1.6	37.4	34.9 - 39.4	12	54.90	0.43	0.8	54.8	51.6 - 58.2
Specimen DIF-15												
All Method	17	20.41	0.39	1.9	20.4	19.1 - 21.7						
All COULTER Instruments	17	20.41	0.39	1.9	20.4	19.1 - 21.7						
COULTER UniCel DxH 600	12	20.55	0.21	1.0	20.6	19.3 - 21.8						

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

Specimen DIF-11							Specimen DIF-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	456.3	23.8	5.2	457	342 - 571	17	83.9	7.5	9.0	81	62 - 105
All COULTER Instruments	17	456.3	23.8	5.2	457	342 - 571	17	83.9	7.5	9.0	81	62 - 105
COULTER UniCel DxH 600	12	440.0	16.7	3.8	441	330 - 550	12	78.0	2.0	2.6	77	58 - 98
Specimen DIF-13							Specimen DIF-14					
All Method	17	263.1	13.5	5.1	261	197 - 329	17	453.6	23.8	5.2	453	340 - 567
All COULTER Instruments	17	263.1	13.5	5.1	261	197 - 329	17	453.6	23.8	5.2	453	340 - 567
COULTER UniCel DxH 600	12	257.7	13.5	5.2	255	193 - 323	12	438.3	17.3	3.9	437	328 - 548
Specimen DIF-15												
All Method	17	83.1	5.8	7.0	82	62 - 104						
All COULTER Instruments	17	83.1	5.8	7.0	82	62 - 104						
COULTER UniCel DxH 600	12	78.3	2.1	2.6	79	58 - 98						

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

Specimen DIF-11							Specimen DIF-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	66.49	2.25	3.4	65.9	59.7 - 73.3	17	53.25	1.97	3.7	53.2	47.3 - 59.2
All COULTER Instruments	17	66.49	2.25	3.4	65.9	59.7 - 73.3	17	53.25	1.97	3.7	53.2	47.3 - 59.2
COULTER UniCel DxH 600	12	65.40	1.51	2.3	65.1	60.8 - 70.0	12	54.15	1.83	3.4	53.7	48.6 - 59.7
Specimen DIF-13							Specimen DIF-14					
All Method	17	56.79	1.98	3.5	57.1	50.8 - 62.8	17	66.32	1.34	2.0	66.1	62.2 - 70.4
All COULTER Instruments	17	56.79	1.98	3.5	57.1	50.8 - 62.8	17	66.32	1.34	2.0	66.1	62.2 - 70.4
COULTER UniCel DxH 600	12	55.77	1.70	3.0	55.2	50.6 - 60.9	12	65.77	0.57	0.9	65.9	64.0 - 67.5
Specimen DIF-15												
All Method	17	53.07	1.49	2.8	52.4	48.5 - 57.6						
All COULTER Instruments	17	53.07	1.49	2.8	52.4	48.5 - 57.6						
COULTER UniCel DxH 600	12	53.27	1.32	2.5	53.4	49.3 - 57.3						

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

Specimen DIF-11							Specimen DIF-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	18.88	1.35	7.2	18.7	14.8 - 23.0	17	34.59	2.57	7.4	34.7	26.8 - 42.3
All COULTER Instruments	17	18.88	1.35	7.2	18.7	14.8 - 23.0	17	34.59	2.57	7.4	34.7	26.8 - 42.3
COULTER UniCel DxH 600	12	18.37	0.99	5.4	18.6	15.3 - 21.4	12	33.25	1.85	5.6	33.8	27.7 - 38.8
Specimen DIF-13							Specimen DIF-14					
All Method	17	25.79	1.63	6.3	25.4	20.8 - 30.7	17	18.59	2.07	11.1	18.0	12.3 - 24.8
All COULTER Instruments	17	25.79	1.63	6.3	25.4	20.8 - 30.7	17	18.59	2.07	11.1	18.0	12.3 - 24.8
COULTER UniCel DxH 600	12	24.88	1.03	4.2	25.2	21.7 - 28.0	12	17.97	1.70	9.5	17.4	12.8 - 23.1
Specimen DIF-15												
All Method	17	35.05	2.58	7.3	35.1	27.3 - 42.8						
All COULTER Instruments	17	35.05	2.58	7.3	35.1	27.3 - 42.8						
COULTER UniCel DxH 600	12	34.13	2.32	6.8	34.6	27.1 - 41.2						

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

Specimen DIF-11							Specimen DIF-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	8.57	1.36	15.9	8.9	4.4 - 12.7	17	2.57	0.34	13.1	2.6	1.5 - 3.6
All COULTER Instruments	17	8.57	1.36	15.9	8.9	4.4 - 12.7	17	2.57	0.34	13.1	2.6	1.5 - 3.6
COULTER UniCel DxH 600	12	9.28	0.44	4.8	9.3	7.9 - 10.7	12	2.47	0.33	13.2	2.6	1.4 - 3.5
Specimen DIF-13							Specimen DIF-14					
All Method	17	8.76	1.66	18.9	9.2	3.7 - 13.8	17	8.68	1.58	18.2	9.0	3.9 - 13.5
All COULTER Instruments	17	8.76	1.66	18.9	9.2	3.7 - 13.8	17	8.68	1.58	18.2	9.0	3.9 - 13.5
COULTER UniCel DxH 600	12	9.83	0.61	6.2	9.9	7.9 - 11.7	12	8.92	2.11	23.6	9.3	2.5 - 15.3
Specimen DIF-15												
All Method	17	2.37	0.54	22.8	2.4	0.7 - 4.0						
All COULTER Instruments	17	2.37	0.54	22.8	2.4	0.7 - 4.0						
COULTER UniCel DxH 600	12	2.22	0.43	19.2	2.2	0.9 - 3.5						

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

Specimen DIF-11							Specimen DIF-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	5.14	0.51	10.0	5.2	3.5 - 6.7	17	8.86	1.00	11.2	9.0	5.8 - 11.9
All COULTER Instruments	17	5.14	0.51	10.0	5.2	3.5 - 6.7	17	8.86	1.00	11.2	9.0	5.8 - 11.9
COULTER UniCel DxH 600	12	5.48	0.38	6.9	5.6	4.3 - 6.7	12	9.22	1.22	13.2	9.6	5.5 - 12.9
Specimen DIF-13							Specimen DIF-14					
All Method	17	7.38	0.68	9.2	7.6	5.3 - 9.5	17	5.52	0.52	9.5	5.6	3.9 - 7.1
All COULTER Instruments	17	7.38	0.68	9.2	7.6	5.3 - 9.5	17	5.52	0.52	9.5	5.6	3.9 - 7.1
COULTER UniCel DxH 600	12	7.75	0.34	4.4	7.7	6.7 - 8.8	12	5.65	0.63	11.1	5.9	3.7 - 7.6
Specimen DIF-15												
All Method	17	8.83	0.91	10.3	8.9	6.0 - 11.6						
All COULTER Instruments	17	8.83	0.91	10.3	8.9	6.0 - 11.6						
COULTER UniCel DxH 600	12	9.55	0.51	5.3	9.6	8.0 - 11.1						

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

Specimen DIF-11							Specimen DIF-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	0.75	0.77	103.2	0.4	0.0 - 3.1	17	0.46	0.79	173.4	0.0	0.0 - 2.9
All COULTER Instruments	17	0.75	0.77	103.2	0.4	0.0 - 3.1	17	0.46	0.79	173.4	0.0	0.0 - 2.9
COULTER UniCel DxH 600	12	1.13	0.86	76.2	0.8	0.0 - 3.8	12	0.37	0.90	244.9	0.0	0.0 - 3.1
Specimen DIF-13							Specimen DIF-14					
All Method	17	1.28	1.22	95.3	0.9	0.0 - 5.0	17	0.75	1.01	135.0	0.3	0.0 - 3.8
All COULTER Instruments	17	1.28	1.22	95.3	0.9	0.0 - 5.0	17	0.75	1.01	135.0	0.3	0.0 - 3.8
COULTER UniCel DxH 600	12	1.77	1.29	72.8	2.2	0.0 - 5.7	12	1.33	1.19	89.3	1.4	0.0 - 5.0
Specimen DIF-15												
All Method	17	0.53	0.82	154.5	0.2	0.0 - 3.1						
All COULTER Instruments	17	0.53	0.82	154.5	0.2	0.0 - 3.1						
COULTER UniCel DxH 600	12	0.52	1.07	207.9	0.1	0.0 - 3.8						

BLOOD LEAD (µg/dL)

<u>Instrument</u>	Specimen LED-11						Specimen LED-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	21	4.09	0.86	21.0	3.9	0.0 - 8.1	21	15.28	1.74	11.4	15.6	11.2 - 19.3
All Magellan Diagnostics Methods	21	4.09	0.86	21.0	3.9	0.0 - 8.1	21	15.28	1.74	11.4	15.6	11.2 - 19.3
Magellan Diagnostics LeadCare II	20	4.05	0.86	21.2	3.8	0.0 - 8.1	20	15.19	1.74	11.4	15.4	11.1 - 19.2
	Specimen LED-13						Specimen LED-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	5	42.50	1.27	3.0	42.5	38.2 - 46.8	5	4.70	0.42	9.0	4.7	0.7 - 8.7
All Magellan Diagnostics Methods	5	42.50	1.27	3.0	42.5	38.2 - 46.8	5	4.70	0.42	9.0	4.7	0.7 - 8.7
	Specimen LED-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	5	16.45	0.78	4.7	16.5	12.4 - 20.5						
All Magellan Diagnostics Methods	5	16.45	0.78	4.7	16.5	12.4 - 20.5						

RETICULOCYTE COUNT (percent)

<u>Instrument</u>	Specimen RT-5						Specimen RT-6					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	31	7.19	1.91	26.6	6.7	3.3 - 11.1	30	1.11	0.22	19.4	1.1	0.6 - 1.6
All Automated Methods	19	6.12	1.24	20.3	5.9	3.6 - 8.7	19	1.09	0.21	19.1	1.1	0.6 - 1.6
All Manual Methods	12	8.90	1.51	17.0	8.9	5.8 - 12.0	12	1.29	0.52	40.6	1.2	0.2 - 2.4
Sysmex XN-1000	11	5.85	0.91	15.5	5.8	4.0 - 7.7	11	1.14	0.11	9.9	1.2	0.7 - 1.5

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

Specimen BCX-11							Specimen BCX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	120	4.90	0.15	3.1	4.9	4.1 - 5.7	121	27.17	0.68	2.5	27.3	23.0 - 31.3
All ABX Instruments	83	4.89	0.15	3.1	4.9	4.1 - 5.7	83	27.08	0.64	2.4	27.2	23.0 - 31.2
All COULTER Instruments	37	4.92	0.15	3.0	4.9	4.1 - 5.7	38	27.37	0.74	2.7	27.4	23.2 - 31.5
ABX Diagnostics Pentra 60C+	73	4.88	0.15	3.0	4.9	4.1 - 5.7	73	27.12	0.59	2.2	27.2	23.0 - 31.2
ABX Diagnostics Pentra 80 / XL 80	10	4.97	0.18	3.6	5.1	4.2 - 5.8	10	26.79	0.88	3.3	27.1	22.7 - 30.9
COULTER AcT 5diff	37	4.92	0.15	3.0	4.9	4.1 - 5.7	38	27.37	0.74	2.7	27.4	23.2 - 31.5
Specimen BCX-13							Specimen BCX-14					
All Method	122	6.52	0.18	2.8	6.5	5.5 - 7.5	122	6.97	0.20	2.8	7.0	5.9 - 8.1
All ABX Instruments	84	6.51	0.18	2.8	6.5	5.5 - 7.5	84	6.94	0.20	2.8	6.9	5.9 - 8.0
All COULTER Instruments	38	6.54	0.19	2.8	6.5	5.5 - 7.6	38	7.02	0.18	2.6	7.0	5.9 - 8.1
ABX Diagnostics Pentra 60C+	74	6.50	0.17	2.6	6.5	5.5 - 7.5	73	6.92	0.17	2.5	6.9	5.8 - 8.0
ABX Diagnostics Pentra 80 / XL 80	10	6.61	0.22	3.3	6.6	5.6 - 7.7	10	7.02	0.26	3.7	7.1	5.9 - 8.1
COULTER AcT 5diff	38	6.54	0.19	2.8	6.5	5.5 - 7.6	38	7.02	0.18	2.6	7.0	5.9 - 8.1
Specimen BCX-15												
All Method	122	3.89	0.13	3.3	3.9	3.3 - 4.5						
All ABX Instruments	84	3.88	0.13	3.3	3.9	3.2 - 4.5						
All COULTER Instruments	38	3.92	0.12	3.2	3.9	3.3 - 4.6						
ABX Diagnostics Pentra 60C+	74	3.87	0.12	3.2	3.9	3.2 - 4.5						
ABX Diagnostics Pentra 80 / XL 80	10	3.92	0.15	4.0	4.0	3.3 - 4.6						
COULTER AcT 5diff	38	3.92	0.12	3.2	3.9	3.3 - 4.6						

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

<u>Instrument</u>	Specimen BCX-11						Specimen BCX-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	122	4.253	0.068	1.6	4.25	3.99 - 4.51	120	3.067	0.042	1.4	3.07	2.88 - 3.26
All ABX Instruments	84	4.253	0.069	1.6	4.25	3.99 - 4.51	83	3.065	0.043	1.4	3.07	2.88 - 3.25
All COULTER Instruments	38	4.253	0.067	1.6	4.26	3.99 - 4.51	37	3.073	0.040	1.3	3.08	2.88 - 3.26
ABX Diagnostics Pentra 60C+	74	4.246	0.068	1.6	4.24	3.99 - 4.51	73	3.068	0.043	1.4	3.07	2.88 - 3.26
ABX Diagnostics Pentra 80 / XL 80	10	4.299	0.052	1.2	4.30	4.04 - 4.56	10	3.037	0.036	1.2	3.04	2.85 - 3.22
COULTER AcT 5diff	38	4.253	0.067	1.6	4.26	3.99 - 4.51	37	3.073	0.040	1.3	3.08	2.88 - 3.26
	Specimen BCX-13						Specimen BCX-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	122	4.537	0.066	1.5	4.54	4.26 - 4.81	122	4.522	0.070	1.5	4.53	4.25 - 4.80
All ABX Instruments	84	4.536	0.067	1.5	4.54	4.26 - 4.81	84	4.524	0.074	1.6	4.53	4.25 - 4.80
All COULTER Instruments	38	4.538	0.065	1.4	4.54	4.26 - 4.82	38	4.519	0.062	1.4	4.53	4.24 - 4.80
ABX Diagnostics Pentra 60C+	74	4.534	0.070	1.5	4.53	4.26 - 4.81	74	4.520	0.075	1.6	4.52	4.24 - 4.80
ABX Diagnostics Pentra 80 / XL 80	10	4.556	0.033	0.7	4.56	4.28 - 4.83	10	4.550	0.065	1.4	4.57	4.27 - 4.83
COULTER AcT 5diff	38	4.538	0.065	1.4	4.54	4.26 - 4.82	38	4.519	0.062	1.4	4.53	4.24 - 4.80
	Specimen BCX-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	121	3.856	0.053	1.4	3.85	3.62 - 4.09						
All ABX Instruments	83	3.854	0.054	1.4	3.85	3.62 - 4.09						
All COULTER Instruments	38	3.861	0.052	1.4	3.87	3.62 - 4.10						
ABX Diagnostics Pentra 60C+	73	3.855	0.057	1.5	3.85	3.62 - 4.09						
ABX Diagnostics Pentra 80 / XL 80	10	3.842	0.028	0.7	3.85	3.61 - 4.08						
COULTER AcT 5diff	38	3.861	0.052	1.4	3.87	3.62 - 4.10						

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

	Specimen BCX-11						Specimen BCX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	122	12.54	0.18	1.4	12.5	11.6 - 13.5	121	7.70	0.12	1.6	7.7	7.1 - 8.3
All ABX Instruments	83	12.53	0.16	1.3	12.5	11.6 - 13.5	83	7.67	0.10	1.3	7.7	7.1 - 8.3
All COULTER Instruments	38	12.56	0.20	1.6	12.6	11.6 - 13.5	36	7.78	0.11	1.4	7.8	7.2 - 8.4
ABX Diagnostics Pentra 60C+	74	12.52	0.18	1.4	12.5	11.6 - 13.4	74	7.67	0.11	1.5	7.7	7.1 - 8.3
ABX Diagnostics Pentra 80 / XL 80	10	12.57	0.16	1.3	12.6	11.6 - 13.5	10	7.65	0.07	0.9	7.6	7.1 - 8.2
COULTER AcT 5diff	38	12.56	0.20	1.6	12.6	11.6 - 13.5	36	7.78	0.11	1.4	7.8	7.2 - 8.4
	Specimen BCX-13						Specimen BCX-14					
All Method	120	13.38	0.18	1.4	13.4	12.4 - 14.4	122	13.35	0.20	1.5	13.3	12.4 - 14.3
All ABX Instruments	83	13.39	0.20	1.5	13.4	12.4 - 14.4	84	13.37	0.20	1.5	13.4	12.4 - 14.4
All COULTER Instruments	38	13.34	0.18	1.3	13.4	12.4 - 14.3	38	13.32	0.19	1.5	13.3	12.3 - 14.3
ABX Diagnostics Pentra 60C+	73	13.39	0.20	1.5	13.4	12.4 - 14.4	74	13.36	0.20	1.5	13.4	12.4 - 14.4
ABX Diagnostics Pentra 80 / XL 80	10	13.40	0.16	1.2	13.4	12.4 - 14.4	10	13.42	0.15	1.2	13.4	12.4 - 14.4
COULTER AcT 5diff	38	13.34	0.18	1.3	13.4	12.4 - 14.3	38	13.32	0.19	1.5	13.3	12.3 - 14.3
	Specimen BCX-15											
All Method	122	9.69	0.15	1.5	9.7	9.0 - 10.4						
All ABX Instruments	84	9.66	0.14	1.4	9.6	8.9 - 10.4						
All COULTER Instruments	38	9.75	0.14	1.5	9.8	9.0 - 10.5						
ABX Diagnostics Pentra 60C+	74	9.66	0.14	1.5	9.6	8.9 - 10.4						
ABX Diagnostics Pentra 80 / XL 80	10	9.64	0.10	1.0	9.7	8.9 - 10.4						
COULTER AcT 5diff	38	9.75	0.14	1.5	9.8	9.0 - 10.5						

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

<u>Instrument</u>	Specimen BCX-11						Specimen BCX-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	122	35.61	0.64	1.8	35.6	33.4 - 37.8	121	22.82	0.37	1.6	22.8	21.4 - 24.2
All ABX Instruments	84	35.72	0.61	1.7	35.7	33.5 - 37.9	84	22.86	0.39	1.7	22.8	21.4 - 24.3
All COULTER Instruments	38	35.38	0.64	1.8	35.4	33.2 - 37.5	37	22.73	0.33	1.5	22.7	21.3 - 24.1
ABX Diagnostics Pentra 60C+	74	35.63	0.58	1.6	35.6	33.4 - 37.8	74	22.79	0.35	1.5	22.8	21.4 - 24.2
ABX Diagnostics Pentra 80 / XL 80	10	36.39	0.47	1.3	36.5	34.2 - 38.6	10	23.31	0.34	1.5	23.3	21.9 - 24.8
COULTER AcT 5diff	38	35.38	0.64	1.8	35.4	33.2 - 37.5	37	22.73	0.33	1.5	22.7	21.3 - 24.1
	Specimen BCX-13						Specimen BCX-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	121	38.07	0.60	1.6	38.0	35.7 - 40.4	122	37.94	0.66	1.7	37.9	35.6 - 40.3
All ABX Instruments	83	38.15	0.59	1.5	38.1	35.8 - 40.5	84	38.04	0.65	1.7	38.0	35.7 - 40.4
All COULTER Instruments	38	37.89	0.61	1.6	37.9	35.6 - 40.2	38	37.71	0.62	1.6	37.7	35.4 - 40.0
ABX Diagnostics Pentra 60C+	73	38.11	0.60	1.6	38.0	35.8 - 40.4	74	37.98	0.63	1.6	37.9	35.6 - 40.3
ABX Diagnostics Pentra 80 / XL 80	10	38.44	0.41	1.1	38.4	36.1 - 40.8	10	38.54	0.63	1.6	38.6	36.2 - 40.9
COULTER AcT 5diff	38	37.89	0.61	1.6	37.9	35.6 - 40.2	38	37.71	0.62	1.6	37.7	35.4 - 40.0
	Specimen BCX-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	121	28.28	0.44	1.5	28.3	26.5 - 30.0						
All ABX Instruments	83	28.33	0.41	1.5	28.3	26.6 - 30.1						
All COULTER Instruments	38	28.18	0.48	1.7	28.2	26.4 - 29.9						
ABX Diagnostics Pentra 60C+	73	28.28	0.41	1.4	28.3	26.5 - 30.0						
ABX Diagnostics Pentra 80 / XL 80	10	28.68	0.23	0.8	28.8	26.9 - 30.5						
COULTER AcT 5diff	38	28.18	0.48	1.7	28.2	26.4 - 29.9						

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

Specimen BCX-11							Specimen BCX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	122	252.8	9.5	3.8	253	189 - 317	122	409.2	13.9	3.4	411	306 - 512
All ABX Instruments	84	254.6	8.5	3.3	254	190 - 319	84	413.4	11.8	2.8	413	310 - 517
All COULTER Instruments	38	248.8	10.5	4.2	248	186 - 311	38	399.9	13.9	3.5	402	299 - 500
ABX Diagnostics Pentra 60C+	74	254.1	8.3	3.3	254	190 - 318	74	414.0	12.1	2.9	414	310 - 518
ABX Diagnostics Pentra 80 / XL 80	10	258.9	8.4	3.2	256	194 - 324	10	408.3	7.5	1.8	411	306 - 511
COULTER AcT 5diff	38	248.8	10.5	4.2	248	186 - 311	38	399.9	13.9	3.5	402	299 - 500
Specimen BCX-13							Specimen BCX-14					
All Method	122	258.6	10.1	3.9	260	193 - 324	122	249.2	9.8	4.0	250	186 - 312
All ABX Instruments	84	260.5	9.9	3.8	263	195 - 326	84	250.7	8.8	3.5	251	188 - 314
All COULTER Instruments	38	254.4	9.6	3.8	255	190 - 318	38	245.9	11.2	4.6	246	184 - 308
ABX Diagnostics Pentra 60C+	74	259.8	9.7	3.7	262	194 - 325	74	250.3	8.9	3.6	251	187 - 313
ABX Diagnostics Pentra 80 / XL 80	10	265.6	10.3	3.9	266	199 - 332	10	254.1	7.8	3.1	257	190 - 318
COULTER AcT 5diff	38	254.4	9.6	3.8	255	190 - 318	38	245.9	11.2	4.6	246	184 - 308
Specimen BCX-15												
All Method	121	109.2	5.5	5.1	109	81 - 137						
All ABX Instruments	84	109.6	4.9	4.5	110	82 - 137						
All COULTER Instruments	38	108.7	7.2	6.6	109	81 - 136						
ABX Diagnostics Pentra 60C+	74	109.7	5.1	4.6	111	82 - 138						
ABX Diagnostics Pentra 80 / XL 80	10	108.8	4.0	3.7	107	81 - 136						
COULTER AcT 5diff	38	108.7	7.2	6.6	109	81 - 136						

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

<u>Instrument</u>	Specimen BCX-11						Specimen BCX-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	120	65.86	4.10	6.2	66.2	53.5 - 78.2	120	71.51	3.38	4.7	72.7	61.3 - 81.7
All ABX Instruments	84	67.82	2.92	4.3	67.9	59.0 - 76.6	81	73.38	2.08	2.8	73.5	67.1 - 79.7
All COULTER Instruments	36	61.29	2.49	4.1	61.5	53.8 - 68.8	36	67.80	1.82	2.7	67.9	62.3 - 73.3
ABX Diagnostics Pentra 60C+	74	68.11	2.54	3.7	68.1	60.4 - 75.8	72	73.71	1.79	2.4	73.7	68.3 - 79.1
ABX Diagnostics Pentra 80 / XL 80	10	65.72	4.56	6.9	65.0	52.0 - 79.4	10	70.16	2.96	4.2	70.3	61.2 - 79.1
COULTER AcT 5diff	36	61.29	2.49	4.1	61.5	53.8 - 68.8	36	67.80	1.82	2.7	67.9	62.3 - 73.3
	Specimen BCX-13						Specimen BCX-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	120	59.56	3.43	5.8	59.8	49.2 - 69.9	119	59.41	3.42	5.8	59.5	49.1 - 69.7
All ABX Instruments	83	60.17	3.25	5.4	60.4	50.4 - 70.0	81	60.42	3.01	5.0	60.5	51.3 - 69.5
All COULTER Instruments	38	57.94	3.75	6.5	57.7	46.6 - 69.3	38	57.12	3.56	6.2	58.3	46.4 - 67.9
ABX Diagnostics Pentra 60C+	73	60.59	2.99	4.9	60.7	51.6 - 69.6	73	60.68	2.87	4.7	60.8	52.0 - 69.3
ABX Diagnostics Pentra 80 / XL 80	10	57.12	3.55	6.2	57.2	46.4 - 67.8	10	56.48	4.63	8.2	56.8	42.5 - 70.4
COULTER AcT 5diff	38	57.94	3.75	6.5	57.7	46.6 - 69.3	38	57.12	3.56	6.2	58.3	46.4 - 67.9
	Specimen BCX-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	120	59.09	2.96	5.0	59.2	50.2 - 68.0						
All ABX Instruments	83	59.41	2.99	5.0	59.3	50.4 - 68.4						
All COULTER Instruments	38	58.13	3.15	5.4	58.7	48.6 - 67.6						
ABX Diagnostics Pentra 60C+	73	59.52	2.94	4.9	59.3	50.6 - 68.4						
ABX Diagnostics Pentra 80 / XL 80	10	58.67	3.37	5.7	58.8	48.5 - 68.8						
COULTER AcT 5diff	38	58.13	3.15	5.4	58.7	48.6 - 67.6						

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

<u>Instrument</u>	Specimen BCX-11						Specimen BCX-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	122	24.15	3.65	15.1	24.2	13.1 - 35.2	119	19.88	2.13	10.7	19.7	13.4 - 26.3
All ABX Instruments	84	25.32	3.01	11.9	25.3	16.2 - 34.4	82	20.62	1.95	9.5	20.4	14.7 - 26.5
All COULTER Instruments	37	21.24	3.11	14.7	20.8	11.8 - 30.6	37	18.26	1.53	8.4	18.4	13.6 - 22.9
ABX Diagnostics Pentra 60C+	74	25.01	2.61	10.4	25.0	17.1 - 32.9	74	20.39	1.80	8.8	20.1	14.9 - 25.8
ABX Diagnostics Pentra 80 / XL 80	10	27.65	4.64	16.8	28.5	13.7 - 41.6	10	23.95	3.13	13.1	23.6	14.5 - 33.4
COULTER AcT 5diff	37	21.24	3.11	14.7	20.8	11.8 - 30.6	37	18.26	1.53	8.4	18.4	13.6 - 22.9
	Specimen BCX-13						Specimen BCX-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	121	30.49	3.71	12.2	30.1	19.3 - 41.7	121	30.58	3.41	11.1	30.5	20.3 - 40.9
All ABX Instruments	82	31.69	3.18	10.0	31.6	22.1 - 41.3	84	31.23	3.49	11.2	31.0	20.7 - 41.8
All COULTER Instruments	38	28.17	3.34	11.9	27.9	18.1 - 38.2	38	29.43	3.33	11.3	28.9	19.4 - 39.5
ABX Diagnostics Pentra 60C+	73	31.32	2.93	9.4	31.3	22.5 - 40.2	74	30.71	3.05	9.9	30.9	21.5 - 39.9
ABX Diagnostics Pentra 80 / XL 80	10	35.69	4.69	13.1	35.7	21.6 - 49.8	10	35.07	4.34	12.4	34.4	22.0 - 48.1
COULTER AcT 5diff	38	28.17	3.34	11.9	27.9	18.1 - 38.2	38	29.43	3.33	11.3	28.9	19.4 - 39.5
	Specimen BCX-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	121	28.30	3.64	12.9	28.4	17.3 - 39.3						
All ABX Instruments	84	29.49	3.26	11.1	29.5	19.7 - 39.3						
All COULTER Instruments	38	25.36	3.30	13.0	25.5	15.4 - 35.3						
ABX Diagnostics Pentra 60C+	74	29.35	3.21	10.9	29.5	19.7 - 39.0						
ABX Diagnostics Pentra 80 / XL 80	10	30.48	3.63	11.9	30.4	19.5 - 41.4						
COULTER AcT 5diff	38	25.36	3.30	13.0	25.5	15.4 - 35.3						

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

Specimen BCX-11							Specimen BCX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	119	1.13	0.59	52.7	1.0	0.0 - 3.0	116	0.88	0.24	27.5	0.9	0.1 - 1.6
All ABX Instruments	82	1.05	0.54	51.3	1.0	0.0 - 2.7	82	0.87	0.22	25.6	0.9	0.2 - 1.6
All COULTER Instruments	37	1.31	0.68	51.7	1.3	0.0 - 3.4	38	1.06	0.56	53.1	1.0	0.0 - 2.8
ABX Diagnostics Pentra 60C+	72	1.03	0.52	50.1	1.0	0.0 - 2.6	72	0.88	0.23	25.6	0.9	0.2 - 1.6
ABX Diagnostics Pentra 80 / XL 80	10	1.16	0.69	59.1	1.3	0.0 - 3.3	10	0.78	0.19	24.0	0.7	0.2 - 1.4
COULTER AcT 5diff	37	1.31	0.68	51.7	1.3	0.0 - 3.4	38	1.06	0.56	53.1	1.0	0.0 - 2.8
Specimen BCX-13							Specimen BCX-14					
All Method	118	1.22	0.58	48.0	1.1	0.0 - 3.0	120	1.09	0.61	56.4	1.1	0.0 - 3.0
All ABX Instruments	82	1.22	0.61	49.6	1.2	0.0 - 3.1	82	0.93	0.52	56.2	0.9	0.0 - 2.5
All COULTER Instruments	36	1.20	0.53	44.4	1.1	0.0 - 2.8	37	1.40	0.64	45.4	1.3	0.0 - 3.4
ABX Diagnostics Pentra 60C+	72	1.24	0.61	49.5	1.2	0.0 - 3.1	72	0.95	0.54	56.8	0.9	0.0 - 2.6
ABX Diagnostics Pentra 80 / XL 80	10	1.13	0.59	52.3	1.1	0.0 - 3.0	10	0.81	0.39	48.5	0.8	0.0 - 2.0
COULTER AcT 5diff	36	1.20	0.53	44.4	1.1	0.0 - 2.8	37	1.40	0.64	45.4	1.3	0.0 - 3.4
Specimen BCX-15												
All Method	120	0.77	0.42	55.1	0.7	0.0 - 2.1						
All ABX Instruments	83	0.75	0.42	56.3	0.7	0.0 - 2.1						
All COULTER Instruments	38	0.86	0.49	57.1	0.8	0.0 - 2.4						
ABX Diagnostics Pentra 60C+	73	0.77	0.42	54.8	0.7	0.0 - 2.1						
ABX Diagnostics Pentra 80 / XL 80	10	0.58	0.39	67.9	0.6	0.0 - 1.8						
COULTER AcT 5diff	38	0.86	0.49	57.1	0.8	0.0 - 2.4						

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

Specimen BCX-11							Specimen BCX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	120	4.96	1.18	23.8	4.8	1.4 - 8.6	119	4.63	0.56	12.1	4.6	2.9 - 6.4
All ABX Instruments	83	5.10	1.12	22.0	4.8	1.7 - 8.5	82	4.68	0.61	13.1	4.6	2.8 - 6.6
All COULTER Instruments	37	4.65	1.26	27.1	4.5	0.8 - 8.5	37	4.53	0.43	9.5	4.6	3.2 - 5.9
ABX Diagnostics Pentra 60C+	74	5.18	1.21	23.4	4.9	1.5 - 8.9	72	4.68	0.63	13.4	4.6	2.8 - 6.6
ABX Diagnostics Pentra 80 / XL 80	10	4.89	1.00	20.4	4.7	1.9 - 7.9	10	4.71	0.55	11.7	4.9	3.0 - 6.4
COULTER AcT 5diff	37	4.65	1.26	27.1	4.5	0.8 - 8.5	37	4.53	0.43	9.5	4.6	3.2 - 5.9
Specimen BCX-13							Specimen BCX-14					
All Method	122	6.24	1.41	22.6	6.3	2.0 - 10.5	121	7.31	1.35	18.5	7.3	3.2 - 11.4
All ABX Instruments	84	6.37	1.51	23.7	6.5	1.8 - 10.9	83	7.43	1.33	17.9	7.4	3.4 - 11.5
All COULTER Instruments	37	5.87	0.99	16.8	5.8	2.9 - 8.9	38	7.02	1.37	19.5	6.8	2.9 - 11.2
ABX Diagnostics Pentra 60C+	74	6.45	1.49	23.0	6.5	1.9 - 11.0	73	7.44	1.38	18.6	7.4	3.2 - 11.6
ABX Diagnostics Pentra 80 / XL 80	10	5.76	1.60	27.7	6.6	0.9 - 10.6	10	7.41	0.94	12.7	7.4	4.5 - 10.3
COULTER AcT 5diff	37	5.87	0.99	16.8	5.8	2.9 - 8.9	38	7.02	1.37	19.5	6.8	2.9 - 11.2
Specimen BCX-15												
All Method	118	9.44	1.57	16.6	9.5	4.7 - 14.2						
All ABX Instruments	80	9.82	1.27	12.9	9.8	6.0 - 13.7						
All COULTER Instruments	37	8.47	1.55	18.3	8.4	3.8 - 13.2						
ABX Diagnostics Pentra 60C+	70	9.80	1.25	12.7	9.7	6.0 - 13.6						
ABX Diagnostics Pentra 80 / XL 80	10	9.97	1.48	14.9	10.3	5.5 - 14.5						
COULTER AcT 5diff	37	8.47	1.55	18.3	8.4	3.8 - 13.2						

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

<u>Instrument</u>	Specimen BCX-11						Specimen BCX-12					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	83	0.58	0.04	7.0	0.6	0.4 - 0.8	82	0.40	0.01	0.0	0.4	0.3 - 0.5
All ABX Instruments	83	0.58	0.04	7.0	0.6	0.4 - 0.8	82	0.40	0.01	0.0	0.4	0.3 - 0.5
All COULTER Instruments	37	11.62	0.59	5.1	11.6	9.8 - 13.4	38	8.34	0.33	3.9	8.4	7.3 - 9.4
ABX Diagnostics Pentra 60C+	73	0.58	0.04	7.0	0.6	0.4 - 0.8	72	0.40	0.01	0.0	0.4	0.3 - 0.5
ABX Diagnostics Pentra 80 / XL 80	10	0.58	0.04	7.3	0.6	0.4 - 0.8	10	0.40	0.01	0.0	0.4	0.3 - 0.5
COULTER AcT 5diff	37	11.62	0.59	5.1	11.6	9.8 - 13.4	38	8.34	0.33	3.9	8.4	7.3 - 9.4
	Specimen BCX-13						Specimen BCX-14					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	78	0.30	0.01	0.0	0.3	0.2 - 0.4	84	0.24	0.05	20.5	0.3	0.0 - 0.4
All ABX Instruments	78	0.30	0.01	0.0	0.3	0.2 - 0.4	84	0.24	0.05	20.5	0.2	0.0 - 0.4
All COULTER Instruments	38	6.59	0.41	6.3	6.5	5.3 - 7.9	38	4.94	0.28	5.6	5.0	4.1 - 5.8
ABX Diagnostics Pentra 60C+	68	0.30	0.01	0.0	0.3	0.2 - 0.4	74	0.24	0.05	20.6	0.2	0.0 - 0.4
ABX Diagnostics Pentra 80 / XL 80	10	0.30	0.01	0.0	0.3	0.2 - 0.4	10	0.23	0.05	21.0	0.2	0.0 - 0.4
COULTER AcT 5diff	38	6.59	0.41	6.3	6.5	5.3 - 7.9	38	4.94	0.28	5.6	5.0	4.1 - 5.8
	Specimen BCX-15											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	84	0.34	0.05	15.2	0.4	0.1 - 0.6						
All ABX Instruments	84	0.34	0.05	15.2	0.3	0.1 - 0.6						
All COULTER Instruments	37	6.97	0.57	8.1	7.0	5.2 - 8.7						
ABX Diagnostics Pentra 60C+	74	0.35	0.05	15.1	0.3	0.1 - 0.6						
ABX Diagnostics Pentra 80 / XL 80	10	0.30	0.01	0.0	0.3	0.2 - 0.4						
COULTER AcT 5diff	37	6.97	0.57	8.1	7.0	5.2 - 8.7						

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

Specimen MX-11							Specimen MX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	72	21.04	0.71	3.4	20.9	17.8 - 24.3	71	3.94	0.13	3.4	4.0	3.3 - 4.6
All Sysmex XE/XT Instruments	10	20.54	0.67	3.3	20.4	17.4 - 23.7	10	3.88	0.19	4.8	3.9	3.2 - 4.5
All Sysmex XN/XS Instruments	63	21.12	0.69	3.3	21.0	17.9 - 24.3	62	3.95	0.13	3.2	4.0	3.3 - 4.6
Sysmex XN-1000	15	20.95	0.42	2.0	20.8	17.8 - 24.1	15	3.82	0.09	2.5	3.8	3.2 - 4.4
Sysmex XS-1000i	46	21.18	0.76	3.6	21.0	18.0 - 24.4	44	4.01	0.08	2.1	4.0	3.4 - 4.7
Specimen MX-13							Specimen MX-14					
All Method	72	7.41	0.46	6.2	7.4	6.2 - 8.6	72	21.11	0.80	3.8	20.9	17.9 - 24.3
All Sysmex XE/XT Instruments	10	7.60	0.30	3.9	7.6	6.4 - 8.8	10	20.42	0.94	4.6	20.2	17.3 - 23.5
All Sysmex XN/XS Instruments	63	7.38	0.47	6.4	7.4	6.2 - 8.5	63	21.20	0.74	3.5	20.9	18.0 - 24.4
Sysmex XN-1000	15	7.63	0.14	1.8	7.6	6.4 - 8.8	15	20.79	0.30	1.4	20.8	17.6 - 24.0
Sysmex XS-1000i	46	7.30	0.52	7.2	7.1	6.2 - 8.4	46	21.37	0.79	3.7	21.2	18.1 - 24.6
Specimen MX-15												
All Method	72	3.95	0.14	3.6	4.0	3.3 - 4.6						
All Sysmex XE/XT Instruments	10	3.90	0.17	4.4	3.9	3.3 - 4.5						
All Sysmex XN/XS Instruments	63	3.96	0.14	3.5	4.0	3.3 - 4.6						
Sysmex XN-1000	15	3.81	0.08	2.1	3.8	3.2 - 4.4						
Sysmex XS-1000i	46	4.01	0.11	2.9	4.0	3.4 - 4.7						

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

Specimen MX-11							Specimen MX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	72	5.577	0.052	0.9	5.58	5.24 - 5.92	72	2.353	0.045	1.9	2.35	2.21 - 2.50
All Sysmex XE/XT Instruments	10	5.558	0.050	0.9	5.55	5.22 - 5.90	10	2.421	0.056	2.3	2.42	2.27 - 2.57
All Sysmex XN/XS Instruments	63	5.580	0.052	0.9	5.58	5.24 - 5.92	63	2.343	0.034	1.4	2.34	2.20 - 2.49
Sysmex XN-1000	15	5.593	0.055	1.0	5.59	5.25 - 5.93	15	2.336	0.036	1.5	2.32	2.19 - 2.48
Sysmex XS-1000i	46	5.574	0.051	0.9	5.58	5.23 - 5.91	46	2.347	0.031	1.3	2.35	2.20 - 2.49
Specimen MX-13							Specimen MX-14					
All Method	72	4.714	0.055	1.2	4.70	4.43 - 5.00	71	5.584	0.054	1.0	5.59	5.24 - 5.92
All Sysmex XE/XT Instruments	10	4.760	0.064	1.3	4.77	4.47 - 5.05	10	5.570	0.090	1.6	5.60	5.23 - 5.91
All Sysmex XN/XS Instruments	63	4.707	0.051	1.1	4.70	4.42 - 4.99	63	5.583	0.053	0.9	5.58	5.24 - 5.92
Sysmex XN-1000	15	4.729	0.052	1.1	4.74	4.44 - 5.02	15	5.623	0.052	0.9	5.64	5.28 - 5.97
Sysmex XS-1000i	46	4.699	0.045	1.0	4.70	4.41 - 4.99	46	5.572	0.048	0.9	5.58	5.23 - 5.91
Specimen MX-15												
All Method	70	2.357	0.036	1.5	2.36	2.21 - 2.50						
All Sysmex XE/XT Instruments	10	2.437	0.045	1.8	2.43	2.29 - 2.59						
All Sysmex XN/XS Instruments	63	2.350	0.031	1.3	2.35	2.20 - 2.50						
Sysmex XN-1000	15	2.343	0.032	1.3	2.34	2.20 - 2.49						
Sysmex XS-1000i	46	2.352	0.029	1.2	2.35	2.21 - 2.50						

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

Specimen MX-11							Specimen MX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	72	17.53	0.17	1.0	17.5	16.3 - 18.8	72	5.82	0.06	1.1	5.8	5.4 - 6.3
All Sysmex XE/XT Instruments	10	17.41	0.20	1.2	17.4	16.1 - 18.7	10	5.87	0.05	0.9	5.9	5.4 - 6.3
All Sysmex XN/XS Instruments	63	17.55	0.16	0.9	17.6	16.3 - 18.8	63	5.81	0.06	1.1	5.8	5.4 - 6.3
Sysmex XN-1000	15	17.45	0.15	0.9	17.5	16.2 - 18.7	15	5.81	0.06	1.1	5.8	5.4 - 6.3
Sysmex XS-1000i	46	17.58	0.15	0.9	17.6	16.3 - 18.9	46	5.81	0.06	1.1	5.8	5.4 - 6.3
Specimen MX-13							Specimen MX-14					
All Method	72	13.15	0.13	1.0	13.2	12.2 - 14.1	72	17.53	0.19	1.1	17.5	16.3 - 18.8
All Sysmex XE/XT Instruments	10	13.23	0.09	0.7	13.2	12.3 - 14.2	10	17.38	0.29	1.7	17.4	16.1 - 18.6
All Sysmex XN/XS Instruments	63	13.14	0.13	1.0	13.1	12.2 - 14.1	63	17.55	0.16	0.9	17.6	16.3 - 18.8
Sysmex XN-1000	15	13.10	0.14	1.0	13.1	12.1 - 14.1	15	17.49	0.17	1.0	17.5	16.2 - 18.8
Sysmex XS-1000i	46	13.15	0.12	0.9	13.1	12.2 - 14.1	46	17.58	0.14	0.8	17.6	16.3 - 18.9
Specimen MX-15												
All Method	72	5.83	0.07	1.2	5.8	5.4 - 6.3						
All Sysmex XE/XT Instruments	10	5.87	0.07	1.2	5.9	5.4 - 6.3						
All Sysmex XN/XS Instruments	63	5.83	0.07	1.2	5.8	5.4 - 6.3						
Sysmex XN-1000	15	5.85	0.06	1.1	5.8	5.4 - 6.3						
Sysmex XS-1000i	46	5.82	0.07	1.2	5.8	5.4 - 6.3						

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

Specimen MX-11							Specimen MX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	72	51.78	0.99	1.9	51.8	48.6 - 54.9	71	17.82	0.47	2.7	17.9	16.7 - 18.9
All Sysmex XE/XT Instruments	10	52.09	0.68	1.3	51.9	48.9 - 55.3	10	18.42	0.30	1.6	18.3	17.3 - 19.6
All Sysmex XN/XS Instruments	63	51.73	1.03	2.0	51.7	48.6 - 54.9	62	17.74	0.43	2.4	17.9	16.6 - 18.8
Sysmex XN-1000	15	50.87	0.52	1.0	50.9	47.8 - 54.0	14	17.22	0.24	1.4	17.3	16.1 - 18.3
Sysmex XS-1000i	46	52.04	0.97	1.9	52.3	48.9 - 55.2	46	17.92	0.29	1.6	18.0	16.8 - 19.0
Specimen MX-13							Specimen MX-14					
All Method	72	39.07	0.63	1.6	39.1	36.7 - 41.5	71	51.84	0.92	1.8	51.9	48.7 - 55.0
All Sysmex XE/XT Instruments	10	39.57	0.63	1.6	39.4	37.1 - 42.0	10	52.16	0.65	1.2	52.0	49.0 - 55.3
All Sysmex XN/XS Instruments	63	39.00	0.61	1.6	39.0	36.6 - 41.4	62	51.80	0.95	1.8	51.9	48.6 - 55.0
Sysmex XN-1000	15	38.71	0.55	1.4	38.6	36.3 - 41.1	14	51.19	0.54	1.0	51.1	48.1 - 54.3
Sysmex XS-1000i	46	39.10	0.53	1.4	39.1	36.7 - 41.5	46	52.02	0.95	1.8	52.2	48.9 - 55.2
Specimen MX-15												
All Method	72	17.92	0.45	2.5	18.0	16.8 - 19.0						
All Sysmex XE/XT Instruments	10	18.49	0.27	1.5	18.4	17.3 - 19.6						
All Sysmex XN/XS Instruments	63	17.84	0.41	2.3	17.9	16.7 - 19.0						
Sysmex XN-1000	15	17.39	0.29	1.7	17.3	16.3 - 18.5						
Sysmex XS-1000i	46	18.00	0.27	1.5	18.0	16.9 - 19.1						

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

Specimen MX-11							Specimen MX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	71	454.1	16.9	3.7	453	340 - 568	72	62.8	4.9	7.8	63	47 - 79
All Sysmex XE/XT Instruments	10	435.7	25.4	5.8	433	326 - 545	10	64.1	6.2	9.6	66	48 - 81
All Sysmex XN/XS Instruments	63	455.8	15.3	3.4	455	341 - 570	63	62.6	4.7	7.6	62	46 - 79
Sysmex XN-1000	15	470.1	10.6	2.3	469	352 - 588	15	59.1	3.6	6.0	59	44 - 74
Sysmex XS-1000i	45	450.7	10.4	2.3	450	338 - 564	46	64.0	4.3	6.8	64	48 - 81
Specimen MX-13							Specimen MX-14					
All Method	69	242.0	6.4	2.7	242	181 - 303	71	455.3	16.6	3.6	455	341 - 570
All Sysmex XE/XT Instruments	10	234.6	13.7	5.8	238	175 - 294	10	435.7	24.2	5.6	438	326 - 545
All Sysmex XN/XS Instruments	62	242.2	6.3	2.6	242	181 - 303	63	457.3	14.9	3.3	457	342 - 572
Sysmex XN-1000	15	242.9	6.6	2.7	243	182 - 304	15	470.0	13.5	2.9	470	352 - 588
Sysmex XS-1000i	45	241.9	6.4	2.6	242	181 - 303	46	452.4	12.7	2.8	451	339 - 566
Specimen MX-15												
All Method	72	63.7	5.0	7.8	64	47 - 80						
All Sysmex XE/XT Instruments	10	66.6	6.5	9.8	68	49 - 84						
All Sysmex XN/XS Instruments	63	63.2	4.6	7.3	64	47 - 80						
Sysmex XN-1000	15	58.7	2.7	4.6	59	44 - 74						
Sysmex XS-1000i	46	64.9	4.0	6.2	66	48 - 82						

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

Specimen MX-11							Specimen MX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	67	58.77	5.06	8.6	57.2	43.5 - 74.0	64	63.09	2.24	3.6	63.1	56.3 - 69.9
All Sysmex XE/XT Instruments	10	58.63	1.89	3.2	58.7	52.9 - 64.3	10	65.31	1.89	2.9	65.6	59.6 - 71.0
All Sysmex XN/XS Instruments	58	58.79	5.40	9.2	56.8	42.5 - 75.1	55	62.65	1.91	3.0	62.6	56.9 - 68.4
Sysmex XN-1000	15	59.38	5.42	9.1	57.6	43.1 - 75.7	9	62.08	3.08	5.0	61.5	52.8 - 71.4
Sysmex XS-1000i	41	58.40	5.32	9.1	56.6	42.4 - 74.4	46	62.93	1.91	3.0	63.2	57.1 - 68.7
Specimen MX-13							Specimen MX-14					
All Method	69	50.00	2.89	5.8	49.8	41.3 - 58.7	66	58.65	5.27	9.0	56.7	42.8 - 74.5
All Sysmex XE/XT Instruments	10	50.89	2.11	4.2	50.9	44.5 - 57.3	10	58.10	2.34	4.0	58.2	51.0 - 65.2
All Sysmex XN/XS Instruments	60	49.87	2.98	6.0	49.8	40.9 - 58.9	57	58.74	5.61	9.5	56.4	41.9 - 75.6
Sysmex XN-1000	13	48.56	3.83	7.9	48.1	37.0 - 60.1	14	59.24	5.58	9.4	56.7	42.4 - 76.0
Sysmex XS-1000i	46	50.26	2.65	5.3	50.0	42.3 - 58.3	41	58.35	5.54	9.5	56.2	41.7 - 75.0
Specimen MX-15												
All Method	64	62.92	2.20	3.5	62.5	56.3 - 69.6						
All Sysmex XE/XT Instruments	10	65.00	2.14	3.3	64.8	58.5 - 71.5						
All Sysmex XN/XS Instruments	55	62.58	2.03	3.2	62.2	56.4 - 68.7						
Sysmex XN-1000	10	61.92	4.96	8.0	61.8	47.0 - 76.9						
Sysmex XS-1000i	46	62.82	2.08	3.3	62.5	56.5 - 69.1						

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

Specimen MX-11							Specimen MX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	68	18.93	3.08	16.3	19.3	9.6 - 28.2	70	12.02	3.55	29.5	10.6	1.3 - 22.7
All Sysmex XE/XT Instruments	10	25.12	3.26	13.0	26.1	15.3 - 35.0	10	17.12	3.26	19.0	17.6	7.3 - 26.9
All Sysmex XN/XS Instruments	60	18.18	2.19	12.0	18.8	11.6 - 24.8	61	11.27	2.93	26.0	10.5	2.4 - 20.1
Sysmex XN-1000	12	17.05	2.94	17.2	15.1	8.2 - 25.9	13	12.59	4.46	35.5	10.5	0.0 - 26.0
Sysmex XS-1000i	46	18.48	1.86	10.1	19.0	12.9 - 24.1	46	10.76	2.15	19.9	10.2	4.3 - 17.2
Specimen MX-13							Specimen MX-14					
All Method	71	27.80	3.92	14.1	28.2	16.0 - 39.6	69	19.19	3.00	15.6	19.3	10.1 - 28.2
All Sysmex XE/XT Instruments	10	32.58	3.46	10.6	33.1	22.2 - 43.0	10	24.74	2.78	11.2	24.9	16.4 - 33.1
All Sysmex XN/XS Instruments	62	27.11	3.49	12.9	27.7	16.6 - 37.6	61	18.54	2.42	13.1	18.9	11.2 - 25.9
Sysmex XN-1000	15	28.15	5.14	18.3	30.1	12.7 - 43.6	13	18.22	4.20	23.0	15.5	5.6 - 30.9
Sysmex XS-1000i	46	27.03	3.40	12.6	27.7	16.8 - 37.3	46	18.61	1.73	9.3	18.9	13.4 - 23.8
Specimen MX-15												
All Method	69	12.31	3.41	27.7	11.0	2.0 - 22.6						
All Sysmex XE/XT Instruments	10	17.28	3.55	20.6	18.3	6.6 - 28.0						
All Sysmex XN/XS Instruments	60	11.56	2.71	23.5	10.7	3.4 - 19.7						
Sysmex XN-1000	12	12.79	3.67	28.7	11.8	1.7 - 23.8						
Sysmex XS-1000i	46	11.21	2.25	20.1	10.6	4.4 - 18.0						

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

Specimen MX-11							Specimen MX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	64	2.39	1.68	70.4	1.5	0.0 - 7.5	69	1.56	1.47	94.2	0.8	0.0 - 6.0
All Sysmex XE/XT Instruments	10	2.24	0.87	38.8	2.1	0.0 - 4.9	10	1.72	0.56	32.3	1.8	0.0 - 3.4
All Sysmex XN/XS Instruments	55	2.41	1.78	74.0	1.4	0.0 - 7.8	61	1.62	1.68	103.8	0.7	0.0 - 6.7
Sysmex XN-1000	10	3.58	3.20	89.3	2.7	0.0 - 13.2	13	2.31	2.36	102.4	1.1	0.0 - 9.4
Sysmex XS-1000i	46	2.43	1.90	78.4	1.4	0.0 - 8.2	46	1.42	1.44	101.0	0.7	0.0 - 5.8
Specimen MX-13							Specimen MX-14					
All Method	68	4.29	2.74	63.9	2.9	0.0 - 12.6	64	2.37	1.47	62.0	2.0	0.0 - 6.8
All Sysmex XE/XT Instruments	10	3.62	0.95	26.2	4.0	0.7 - 6.5	10	2.67	1.03	38.7	2.4	0.0 - 5.8
All Sysmex XN/XS Instruments	59	4.39	2.91	66.3	2.6	0.0 - 13.2	57	2.54	1.88	74.1	1.6	0.0 - 8.2
Sysmex XN-1000	11	6.14	3.12	50.9	4.3	0.0 - 15.6	11	3.73	3.57	95.8	2.9	0.0 - 14.5
Sysmex XS-1000i	46	3.94	2.77	70.4	2.5	0.0 - 12.3	46	2.42	1.60	66.3	1.6	0.0 - 7.3
Specimen MX-15												
All Method	69	1.31	1.10	83.8	0.8	0.0 - 4.7						
All Sysmex XE/XT Instruments	10	1.60	0.41	25.8	1.6	0.3 - 2.9						
All Sysmex XN/XS Instruments	60	1.27	1.17	91.8	0.8	0.0 - 4.8						
Sysmex XN-1000	13	1.40	1.16	82.8	0.8	0.0 - 4.9						
Sysmex XS-1000i	46	1.25	1.19	95.6	0.7	0.0 - 4.9						

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

Specimen MX-11							Specimen MX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	64	12.48	3.16	25.3	13.9	2.9 - 22.0	65	17.33	2.73	15.8	16.3	9.1 - 25.6
All Sysmex XE/XT Instruments	10	13.07	0.71	5.5	13.6	10.9 - 15.3	10	15.03	0.93	6.2	14.9	12.2 - 17.9
All Sysmex XN/XS Instruments	55	12.39	3.39	27.4	14.0	2.2 - 22.6	56	17.70	2.75	15.5	16.5	9.4 - 26.0
Sysmex XN-1000	12	9.90	4.71	47.6	11.8	0.0 - 24.1	10	15.30	4.33	28.3	16.0	2.3 - 28.3
Sysmex XS-1000i	41	13.25	2.22	16.7	14.1	6.5 - 20.0	46	18.00	2.76	15.3	16.6	9.7 - 26.3
Specimen MX-13							Specimen MX-14					
All Method	65	12.99	1.51	11.6	12.5	8.4 - 17.6	59	13.49	1.85	13.7	14.0	7.9 - 19.1
All Sysmex XE/XT Instruments	10	12.03	0.77	6.4	12.1	9.7 - 14.4	10	13.56	0.69	5.1	14.0	11.4 - 15.7
All Sysmex XN/XS Instruments	56	13.14	1.55	11.8	12.6	8.4 - 17.8	50	13.47	2.00	14.8	14.2	7.4 - 19.5
Sysmex XN-1000	10	11.67	2.94	25.2	12.1	2.8 - 20.6	11	12.19	3.79	31.1	13.8	0.8 - 23.6
Sysmex XS-1000i	46	13.29	1.59	12.0	12.8	8.5 - 18.1	40	13.38	2.13	16.0	14.1	6.9 - 19.8
Specimen MX-15												
All Method	65	17.32	2.83	16.3	16.2	8.8 - 25.8						
All Sysmex XE/XT Instruments	10	15.10	0.56	3.7	15.2	13.4 - 16.8						
All Sysmex XN/XS Instruments	56	17.67	2.88	16.3	16.4	9.0 - 26.4						
Sysmex XN-1000	10	15.27	4.46	29.2	16.0	1.8 - 28.7						
Sysmex XS-1000i	46	17.93	2.99	16.7	16.5	8.9 - 27.0						

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

Specimen MX-11							Specimen MX-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Sysmex XE/XT Instruments	10	82.04	2.25	2.7	82.1	75.3 - 88.8	10	87.43	1.03	1.2	87.6	84.3 - 90.6
All Sysmex XN/XS Instruments	63	5.50	4.02	73.1	7.9	0.0 - 17.6	63	5.74	4.30	74.9	8.5	0.0 - 18.7
Sysmex XN-1000	15	2.73	2.39	87.8	4.7	0.0 - 10.0	15	2.69	2.36	87.6	4.7	0.0 - 9.8
Sysmex XS-1000i	46	6.53	4.02	61.5	8.5	0.0 - 18.6	46	6.88	4.31	62.7	9.0	0.0 - 19.9
Specimen MX-13							Specimen MX-14					
All Sysmex XE/XT Instruments	10	71.05	1.93	2.7	70.5	65.2 - 76.9	10	81.88	2.90	3.5	81.8	73.1 - 90.6
All Sysmex XN/XS Instruments	63	4.70	3.44	73.0	6.5	0.0 - 15.1	63	5.44	3.97	73.0	7.6	0.0 - 17.4
Sysmex XN-1000	15	2.67	2.43	91.2	4.7	0.0 - 10.0	15	2.68	2.33	87.1	4.7	0.0 - 9.7
Sysmex XS-1000i	46	5.47	3.46	63.3	7.2	0.0 - 15.9	46	6.46	3.97	61.5	8.3	0.0 - 18.4
Specimen MX-15												
All Sysmex XE/XT Instruments	10	87.44	0.89	1.0	87.7	84.7 - 90.2						
All Sysmex XN/XS Instruments	63	5.66	4.19	74.0	8.2	0.0 - 18.3						
Sysmex XN-1000	15	2.65	2.33	88.1	4.6	0.0 - 9.7						
Sysmex XS-1000i	46	6.78	4.19	61.8	8.7	0.0 - 19.4						

2017 M3
BLOOD CELL IDENTIFICATION
Specimens BC-13 through BC-18

CASE HISTORY:

A 19-year-old male presented to his university's infirmary 2 weeks after returning to school. The patient complained of recurring headaches, body aches, fevers, and diarrhea. He had just spent his summer break backpacking in Peru, where he consumed the local food and water, and did not take any medications despite experiencing some flu-like symptoms. Upon physical examination, his temperature was normal but his spleen was slightly enlarged. A CBC was performed, and significant results appear below.

Test	Results	Normal Range
WBC	5.6 $\times 10^9/L$	3.6 - 10.6 $\times 10^9/L$
RBC	3.88 $\times 10^{12}/L$	4.2 - 6.0 $\times 10^{12}/L$
Hgb	11.0 g/dL	13.5 - 18.0 g/dL
Hct	32.2 %	40 - 54 %
MCV	83 fL	78 - 94 fL
MCH	28 pg	26 - 34 pg
MCHC	34 g/dL	32-36 g/dL
RDW	16 %	11.5 - 14.5 %
Plt	105 $\times 10^9/L$	150 - 450 $\times 10^9/L$

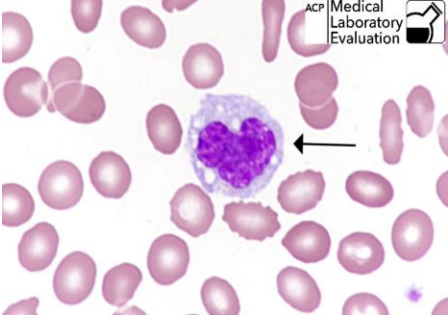
This patient was diagnosed with malaria. Malaria is an acute febrile illness caused by Plasmodium parasites. Malaria is common in tropical areas of developing countries, which are endemic for the insect carrier of malaria. Occasionally, infected international travelers will import malaria to areas where it does not naturally occur.

There are five Plasmodium species that cause human malaria (*P. vivax*, *P. falciparum*, *P. malariae*, *P. ovale* and *P. knowlesi*); all are transmitted through the bite of female Anopheles mosquitoes. The parasites invade circulating red blood cells, where they feed, grow, and multiply. Emerging parasites rupture infected red cells, then spread to other red cells and repeat the growth cycle. Early symptoms may be mild and difficult to diagnose as malaria. The main symptoms of malaria generally include cyclical fever and chills, headache, weakness, vomiting and diarrhea. Splenomegaly may be present. Nearly all patients with malaria present with headache. In a non-immune individual, symptoms appear seven days or more after the infective mosquito bite. Immune individuals may be completely asymptomatic or may present with mild anemia.

Testing for malaria includes examination of thick and thin peripheral blood smears. The thick smear is a quantitative test in which the parasitemia can be calculated based on the number of infected RBCs. Thick smears are 20 times more sensitive than thin smears in detecting malaria parasites, but one negative smear does not exclude malaria as a diagnosis. The thin smear is considered a qualitative test and is better for identification of the species than the thick smear. In the United States, only about 1500 cases of malaria are diagnosed and reported each year, therefore most laboratorians in the US do not perform this testing regularly. However, any laboratory that performs routine peripheral smears is equipped to perform a thin and thick smear for malaria. The microscopic examination should be considered a "STAT" procedure, and performed immediately when ordered. Health-care providers need to receive the results within hours in order to appropriately treat a patient infected with malaria. The test should not be saved for the most qualified staff to perform, or sent out to a reference laboratory that takes days to report the results.

BLOOD CELL IDENTIFICATION

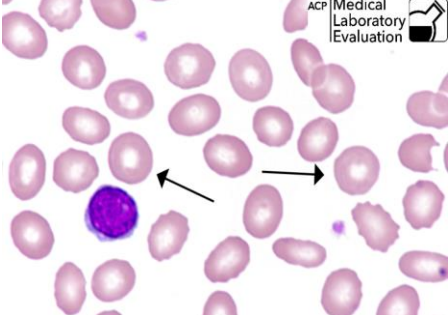
Specimen BC-13



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

<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Monocyte	184	99.46%	Acceptable

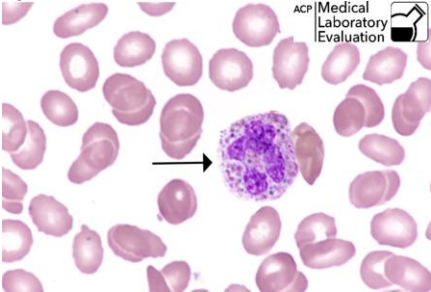
Specimen BC-14



The arrows in this photograph point to **normal erythrocytes** (red blood cells.) The arrowed cells are approximately the same size as the nucleus of the mature lymphocyte nearby. In a normochromic cell the area of central pallor takes up about one third of the diameter of the cell. A hypochromic cell would have a larger area of central pallor. To view another photo of normal red cells, see 2016 M3 Specimen BC-14.

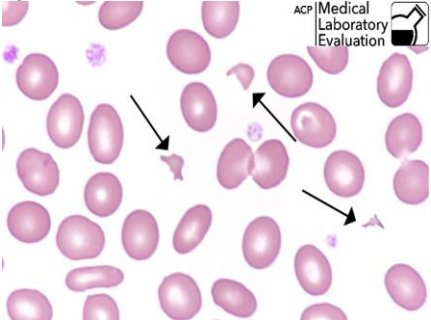
<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Erythrocyte, normal	151	81.62%	Acceptable
Hypochromic red cell	28	15.14%	
Macrocyte	4	2.16%	

Specimen BC-15



The arrow in this photograph points to a segmented **neutrophil with toxic granulation**. Normal neutrophils contain fine pink, lilac, and light blue granules in their cytoplasm. Toxic granulation is the appearance of many large dark blue to purple granules in the cytoplasm of neutrophils. The granules vary in size, shape and distribution. It is important to identify the presence of toxic granulation, as it is a clear sign of a reaction to stress. Toxic granulation is associated with acute infection, trauma, burn, or ingestion of a toxic substance. *Technical tip:* one way to distinguish real toxic granulation from an overly stained smear is that true toxic granulation will vary in intensity from cell to cell, with some cells on the slide showing no toxic granulation. A poorly stained smear will have a more consistent look to all of the neutrophils. To view another photo of toxic granulation, see 2016 M1 specimen BC-1.

Specimen BC-16



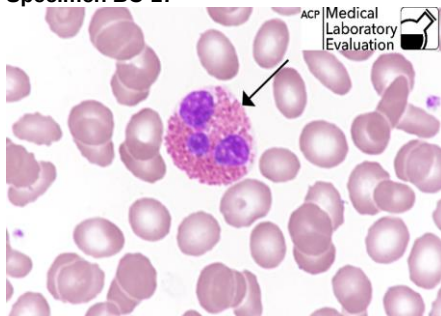
The arrows in this photograph point to **fragmented red blood cells (schistocytes)**. Ragged pieces of broken red blood cells in the peripheral smear are a sign of intravascular hemolysis. Red blood cell fragments are smaller than normal cells, and appear in many sizes and shapes, usually with pointed ends. Some fragmented cells are called by other terms that describe their shape. For example, the cell at the top of this photo might be called a "helmet cell." A few participants identified these cells incorrectly as acanthocytes. Acanthocytes are whole, contracted red cells with irregularly spaced long, thin, thorn-like projections, often in combination with rounded projections. Acanthocytes are never helmet shaped. To view another photo of schistocytes, see 2014 M3 Specimen BC-17. To view a photo of acanthocytes, see 2017 M1 Specimen BC-5.

<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Neutrophil-seg/band w/toxic granulation	176	95.14%	Acceptable
Neutrophil-Segmented or band	5	2.70%	
Leukocyte w/phago bacteria	3	1.62%	

<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Fragmented cell	177	95.68%	Acceptable
Acanthocyte	4	2.16%	
Echinocyte	2	1.08%	
Erythrocyte, normal	1	0.54%	

BLOOD CELL IDENTIFICATION

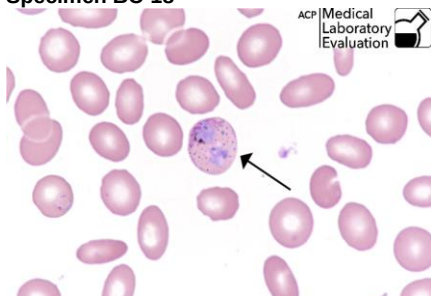
Specimen BC-17



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Eosinophil, any stage	184	99.46%	Acceptable

The arrow in this photograph points to an **eosinophil**. These cells are easily identified by their characteristic orange color, imparted by the dye eosin. The cytoplasm of an eosinophil is filled with large round red-orange granules which surround the nucleus but do not obscure it. To view another photo of an eosinophil, see 2016 M3 Specimen BC-15.

Specimen BC-18



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Malaria	107	57.84%	Not graded – Educational Challenge
Immature/abnormal cell – refer	57	30.81%	
Basophilic stippling	13	7.03%	
Protozoan, non-malarial	6	3.24%	
Leukocyte w/phago bacteria	2	1.08%	

The arrow in this ungraded educational challenge points to a **malaria parasite**. The parasites in this photo were identified as ***Plasmodium vivax***. *P. vivax* enlarges the RBCs it infects, which can help with species ID. Infected cells are 1.5-2 times the size of a normal cell, and may be distorted. Among the five Plasmodium species, *P. vivax* has the widest distribution in the world, and is the major cause of malaria outside of Africa. Unlike *P. falciparum* malaria, *P. vivax* malaria is rarely fatal or complicated. The incubation period for *P. vivax* usually ranges from 10 to 21 days, but might reach up to a year. *P. vivax* relapses often occur months to years after treatment because the parasite can develop dormant forms that remain in the liver. To view another photo of malaria parasites, see 2012 M2 Specimen BC-12.

References:

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

"Malaria." DPDx - Laboratory Identification of Parasitic Diseases of Public Health Concern. Centers for Disease Control and Prevention. May 03, 2016. Accessed October 20, 2017. Available at: <http://www.cdc.gov/dpdx/malaria/index.html>

Perez-Jorge, E.V. *Malaria Workup*. Copyright WebMD LLC, 1994-2017. Available at: <http://emedicine.medscape.com/article/221134-workup#aw2aab6b5b2>
Page updated: Oct 26, 2016.

BLOOD BANK

ABO GROUP

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-11	Group A	7	100%	Acceptable
BB-12	Group AB	7	100%	Acceptable
BB-13	Group B	7	100%	Acceptable
BB-14	Group O	7	100%	Acceptable
BB-15	Group A	7	100%	Acceptable

RH FACTOR (D TYPE)

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-11	Rh Negative	19	95.00%	Acceptable
	Rh Positive	1	5.00%	
BB-12	Rh Positive	19	95.00%	Acceptable
	Rh Negative	1	5.00%	
BB-13	Rh Negative	19	95.00%	Acceptable
	Rh Positive	1	5.00%	
BB-14	Rh Positive	19	95.00%	Acceptable
	Rh Negative	1	5.00%	
BB-15	Rh Negative	19	95.00%	Acceptable
	Rh Positive	1	5.00%	

UNEXPECTED ANTIBODY DETECTION

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-11	No unexpected antibody detected	7	100%	Acceptable
AB-12	No unexpected antibody detected	7	100%	Acceptable
AB-13	Unexpected antibody detected	7	100%	Acceptable
AB-14	Unexpected antibody detected	7	100%	Acceptable
AB-15	Unexpected antifbody detected	7	100%	Acceptable

BLOOD BANK

ANTIBODY IDENTIFICATION

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-11	No antibody detected	1	100%	Acceptable
AB-12	No antibody detected	1	100%	Acceptable
AB-13	Anti-D	1	100%	Acceptable
AB-14	Anti-Jk ^a	1	100%	Acceptable
AB-15	Anti-s	1	100%	Acceptable

COMPATIBILITY TESTING

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-11	Compatible	5	100%	Acceptable
AB-12	Compatible	5	100%	Acceptable
AB-13	Not Compatible	5	100%	Acceptable
AB-14	Not Compatible	5	100%	Acceptable
AB-15	Compatible	5	100%	Acceptable

PROTHROMBIN TIME (seconds)

Specimen CG-11							Specimen CG-12					
<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	40	11.15	0.81	7.2	11.0	9.4 - 12.9	40	19.63	1.86	9.5	19.6	16.6 - 22.6
Dade Innovin												
Dade Behring BFT II	5	10.03	0.21	2.1	10.1	8.5 - 11.6	5	20.03	1.03	5.1	20.5	17.0 - 23.1
Sysmex CA-500/600 series	18	11.19	0.49	4.4	11.1	9.5 - 12.9	18	19.93	0.98	4.9	19.7	16.9 - 23.0
All Coagulation Instruments	24	10.91	0.66	6.1	11.0	9.2 - 12.6	24	19.83	1.02	5.1	19.7	16.8 - 22.9
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	10.87	0.15	1.4	10.9	9.2 - 12.5	5	23.57	0.91	3.9	23.2	20.0 - 27.2
IL TEST PT Fibrinogen												
IL ACL, all models	5	12.20	0.60	4.9	12.0	10.3 - 14.1	5	17.40	0.61	3.5	17.6	14.7 - 20.1
PH/CMS Thromboplastin-D												
All Coagulation Instruments	6	11.75	1.48	12.6	11.8	9.9 - 13.6	6	16.85	1.34	8.0	16.9	14.3 - 19.4
Specimen CG-13							Specimen CG-14					
All Method	40	11.60	0.98	8.4	11.4	9.8 - 13.4	40	25.98	3.59	13.8	26.1	22.0 - 29.9
Dade Innovin												
Dade Behring BFT II	5	10.53	0.10	0.9	10.6	8.9 - 12.2	5	28.58	2.32	8.1	29.5	24.2 - 32.9
Sysmex CA-500/600 series	18	11.27	0.30	2.7	11.3	9.5 - 13.0	18	26.28	1.15	4.4	26.1	22.3 - 30.3
All Coagulation Instruments	24	11.11	0.45	4.1	11.2	9.4 - 12.8	24	26.64	1.60	6.0	26.1	22.6 - 30.7
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	12.57	0.46	3.7	12.3	10.6 - 14.5	5	33.07	1.97	5.9	32.3	28.1 - 38.1
IL TEST PT Fibrinogen												
IL ACL, all models	5	13.12	0.82	6.2	12.6	11.1 - 15.1	5	20.72	0.96	4.6	20.8	17.6 - 23.9
PH/CMS Thromboplastin-D												
All Coagulation Instruments	6	12.50	1.56	12.4	12.5	10.6 - 14.4	6	20.25	0.49	2.4	20.3	17.2 - 23.3
Specimen CG-15												
All Method	40	23.34	2.93	12.6	22.3	19.8 - 26.9						
Dade Innovin												
Dade Behring BFT II	5	24.68	2.37	9.6	24.5	20.9 - 28.4						
Sysmex CA-500/600 series	18	21.30	1.71	8.0	20.7	18.1 - 24.5						
All Coagulation Instruments	24	22.20	2.29	10.3	21.6	18.8 - 25.6						
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	28.13	1.96	7.0	27.9	23.9 - 32.4						
IL TEST PT Fibrinogen												
IL ACL, all models	5	24.43	2.17	8.9	24.7	20.7 - 28.1						
PH/CMS Thromboplastin-D												
All Coagulation Instruments	6	22.50	2.83	12.6	22.5	19.1 - 25.9						

PROTHROMBIN TIME–INTERNATIONAL NORMALIZED RATIO (INR)

Specimen CG-11							Specimen CG-12					
<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	40	1.08	0.07	6.9	1.1	0.8 - 1.3	40	2.00	0.15	7.5	2.0	1.5 - 2.4
Dade Innovin												
Dade Behring BFT II	5	1.13	0.05	4.4	1.1	0.9 - 1.4	5	2.08	0.17	8.2	2.1	1.6 - 2.5
Sysmex CA-500/600 series	18	1.09	0.07	6.2	1.1	0.8 - 1.4	18	1.94	0.11	5.5	1.9	1.5 - 2.4
All Coagulation Instruments	24	1.09	0.07	6.0	1.1	0.8 - 1.4	24	1.96	0.12	6.2	1.9	1.5 - 2.4
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	0.97	0.06	6.0	1.0	0.7 - 1.2	5	2.13	0.15	7.2	2.1	1.7 - 2.6
IL TEST PT Fibrinogen												
IL ACL, all models	5	1.06	0.05	5.2	1.1	0.8 - 1.3	5	1.98	0.13	6.6	2.0	1.5 - 2.4
PH/CMS Thromboplastin-D												
All Coagulation Instruments	6	1.10	0.14	12.9	1.1	0.8 - 1.4	6	2.30	0.14	6.1	2.3	1.8 - 2.8
Specimen CG-13							Specimen CG-14					
All Method	40	1.13	0.07	6.0	1.1	0.9 - 1.4	40	2.67	0.30	11.1	2.6	2.1 - 3.3
Dade Innovin												
Dade Behring BFT II	5	1.18	0.05	4.3	1.2	0.9 - 1.5	5	2.80	0.29	10.5	2.8	2.2 - 3.4
Sysmex CA-500/600 series	18	1.10	0.06	5.2	1.1	0.8 - 1.4	18	2.54	0.11	4.3	2.5	2.0 - 3.1
All Coagulation Instruments	24	1.11	0.06	5.4	1.1	0.8 - 1.4	24	2.57	0.12	4.6	2.5	2.0 - 3.1
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	1.13	0.06	5.1	1.1	0.9 - 1.4	5	3.07	0.25	8.2	3.1	2.4 - 3.7
IL TEST PT Fibrinogen												
IL ACL, all models	5	1.22	0.04	3.7	1.2	0.9 - 1.5	5	2.68	0.18	6.7	2.8	2.1 - 3.3
PH/CMS Thromboplastin-D												
All Coagulation Instruments	6	1.20	0.01	0.0	1.2	0.9 - 1.5	6	3.35	0.21	6.3	3.4	2.6 - 4.1
Specimen CG-15												
All Method	38	2.52	0.62	24.8	2.3	2.0 - 3.1						
Dade Innovin												
Dade Behring BFT II	5	2.45	0.26	10.8	2.5	1.9 - 3.0						
Sysmex CA-500/600 series	18	2.06	0.22	10.6	2.1	1.6 - 2.5						
All Coagulation Instruments	24	2.17	0.27	12.5	2.1	1.7 - 2.7						
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	2.57	0.25	9.8	2.6	2.0 - 3.1						
IL TEST PT Fibrinogen												
IL ACL, all models	5	3.60	0.40	11.1	3.8	2.8 - 4.4						
PH/CMS Thromboplastin-D												
All Coagulation Instruments	4	-	-	-	4.2	2.0 - 3.1						

ACTIVATED PARTIAL THROMBOPLASTIN (seconds)

Specimen CG-11							Specimen CG-12					
<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	20	27.8	6.4	23.2	24	23 - 32	20	35.5	2.1	5.9	35	30 - 41
Dade Actin FSL												
Sysmex CA-500/600 series	10	24.1	1.4	6.0	24	20 - 28	10	34.3	1.2	3.4	34	29 - 40
Hemoliance SynthASil												
IL ACL, all models	5	39.7	1.2	2.9	39	33 - 46	5	38.0	1.0	2.6	38	32 - 44
IL TEST APTT-SP												
IL ACL, all models	5	28.5	0.7	2.5	29	24 - 33	5	38.0	1.4	3.7	38	32 - 44
Specimen CG-13							Specimen CG-14					
All Method	20	26.3	2.3	8.8	25	22 - 31	20	40.5	2.7	6.7	40	34 - 47
Dade Actin FSL												
Sysmex CA-500/600 series	10	24.8	0.4	1.7	25	21 - 29	10	38.9	1.1	2.8	39	33 - 45
Hemoliance SynthASil												
IL ACL, all models	5	29.7	0.6	1.9	30	25 - 35	5	43.7	2.1	4.8	43	37 - 51
IL TEST APTT-SP												
IL ACL, all models	5	29.0	1.4	4.9	29	24 - 34	5	44.0	1.4	3.2	44	37 - 51
Specimen CG-15												
All Method	20	58.3	7.4	12.6	56	49 - 68						
Dade Actin FSL												
Sysmex CA-500/600 series	10	54.3	3.8	7.1	55	46 - 63						
Hemoliance SynthASil												
IL ACL, all models	5	67.3	8.0	11.9	68	57 - 78						
IL TEST APTT-SP												
IL ACL, all models	5	65.0	1.4	2.2	65	55 - 75						

Fibrinogen (mg/dL)

One participant reported Fibrinogen. The vendor assay values for specimens CG-11 through CG-15 are: 361 mg/dL, 234 mg/dL, 248 mg/dL, 236 mg/dL, and 86 mg/dL, respectively.

RH FACTOR (Slide Method)

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
RH-11	Rh Negative	5	100%	Acceptable
RH-12	Rh Positive	5	100%	Acceptable
RH-13	Rh Negative	5	100%	Acceptable
RH-14	Rh Positive	5	100%	Acceptable
RH-15	Rh Negative	5	100%	Acceptable

COAGUCHEK XS PLUS PROTHROMBIN TIME (seconds)

Specimen XS-11							Specimen XS-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	22	20.48	0.65	3.2	20.6	17.4 - 23.6	22	12.67	0.32	2.6	12.7	10.7 - 14.6
All Roche CoaguChek XS Plus Instruments	20	20.54	0.55	2.7	20.6	17.4 - 23.7	21	12.65	0.31	2.4	12.7	10.7 - 14.6
Roche CoaguChek XS Plus - Waived	11	20.33	0.43	2.1	20.3	17.2 - 23.4	12	12.68	0.36	2.8	12.6	10.7 - 14.6
Roche CoaguChek XS Plus	10	20.80	0.58	2.8	20.8	17.6 - 24.0	10	12.61	0.25	2.0	12.7	10.7 - 14.6
Specimen XS-13							Specimen XS-14					
All Method	16	19.42	2.52	13.0	20.5	16.5 - 22.4	16	12.58	0.33	2.6	12.5	10.6 - 14.5
All Roche CoaguChek XS Plus Instruments	15	19.88	2.11	10.6	20.6	16.8 - 22.9	15	13.29	2.57	19.3	12.5	11.2 - 15.3
Roche CoaguChek XS Plus - Waived	5	-	-	-	19.9	16.8 - 22.9	5	-	-	-	12.6	11.2 - 15.3
Roche CoaguChek XS Plus	10	19.81	2.55	12.9	20.6	16.8 - 22.8	10	12.56	0.22	1.8	12.5	10.6 - 14.5
Specimen XS-15												
All Method	14	12.70	0.29	2.3	12.7	10.7 - 14.7						
All Roche CoaguChek XS Plus Instruments	13	12.63	0.25	2.0	12.7	10.7 - 14.6						
Roche CoaguChek XS Plus - Waived	4	-	-	-	12.6	10.7 - 14.6						
Roche CoaguChek XS Plus	9	-	-	-	12.7	10.7 - 14.6						

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

Specimen XS-11							Specimen XS-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	35	1.70	0.06	3.3	1.7	1.3 - 2.1	36	1.05	0.05	4.8	1.1	0.8 - 1.3
All Roche CoaguChek XS Plus Instruments	32	1.71	0.06	3.3	1.7	1.3 - 2.1	33	1.05	0.05	4.8	1.0	0.8 - 1.3
Roche CoaguChek XS Plus - Waived	23	1.70	0.05	3.1	1.7	1.3 - 2.1	24	1.05	0.05	4.9	1.0	0.8 - 1.3
Roche CoaguChek XS Plus	10	1.72	0.07	3.9	1.7	1.3 - 2.1	10	1.06	0.05	5.0	1.1	0.8 - 1.3
Specimen XS-13							Specimen XS-14					
All Method	23	1.59	0.23	14.8	1.7	1.2 - 2.0	23	1.05	0.05	4.9	1.1	0.8 - 1.3
All Roche CoaguChek XS Plus Instruments	22	1.62	0.22	13.3	1.7	1.2 - 2.0	22	1.05	0.05	5.0	1.1	0.8 - 1.3
Roche CoaguChek XS Plus - Waived	10	1.60	0.25	15.8	1.7	1.2 - 2.0	10	1.18	0.31	25.9	1.1	0.9 - 1.5
Roche CoaguChek XS Plus	12	1.63	0.20	12.1	1.7	1.3 - 2.0	12	1.04	0.05	5.1	1.0	0.8 - 1.3
Specimen XS-15												
All Method	22	1.13	0.18	15.9	1.1	0.9 - 1.4						
All Roche CoaguChek XS Plus Instruments	21	1.14	0.19	16.9	1.1	0.9 - 1.4						
Roche CoaguChek XS Plus - Waived	9	-	-	-	1.1	0.9 - 1.4						
Roche CoaguChek XS Plus	12	1.18	0.24	20.2	1.1	0.9 - 1.5						

COAGUCHECK XS - INTERNATIONAL NORMALIZED RATIO (INR)

Specimen INX-5							Specimen INX-6					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Roche CoaguChek XS	143	1.05	0.05	5.0	1.0	0.8 - 1.3	143	1.70	0.07	4.0	1.7	1.3 - 2.1

i-Stat PROTHROMBIN TIME (seconds)

Specimen PTI-11							Specimen PTI-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
i-Stat Prothrombin Time	11	13.72	0.37	2.7	13.6	11.6 - 15.8	11	26.50	1.31	4.9	26.8	22.5 - 30.5
Specimen PTI-13							Specimen PTI-14					
i-Stat Prothrombin Time	11	26.58	1.28	4.8	26.8	22.5 - 30.6	11	13.06	1.01	7.8	13.6	11.1 - 15.1
Specimen PTI-15												
i-Stat Prothrombin Time	11	26.12	1.36	5.2	25.6	22.2 - 30.1						

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

Specimen PTI-11							Specimen PTI-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
i-Stat Prothrombin Time	11	1.14	0.05	4.8	1.1	0.9 - 1.4	11	2.28	0.13	5.7	2.3	1.8 - 2.8
Specimen PTI-13							Specimen PTI-14					
i-Stat Prothrombin Time	11	2.32	0.13	5.6	2.3	1.8 - 2.8	11	1.08	0.11	10.1	1.1	0.8 - 1.3
Specimen PTI-15												
i-Stat Prothrombin Time	11	2.26	0.13	5.9	2.2	1.8 - 2.8						

FLUID CELL COUNT – WHITE BLOOD CELL COUNT (µL)

Specimen BF-5							Specimen BF-6					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	5	6.5	0.7	10.9	7	5 - 8	5	205.0	55.2	26.9	205	94 - 316

FLUID CELL COUNT – RED BLOOD CELL COUNT (µL)

Specimen BF-5							Specimen BF-6					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	5	0.0	0.1	0.0	0	0 - 1	5	1120.0	63.6	5.7	1120	992 - 1248

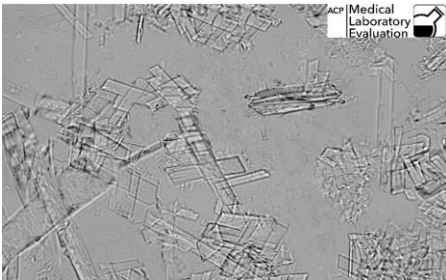
2017 M3
FLUID CRYSTAL IDENTIFICATION
Specimens FC-5 and FC-6

Crystals are classified as being either optically isotropic or anisotropic. Isotropic solids refract light rays equally in all directions throughout the crystalline structure. All isotropic crystals interact with light in a similar manner, regardless of the crystal orientation. If you look at an object through a large isotropic crystal, such as a piece of glass, you see only one image.

Anisotropic crystals have a different internal structure that will cause a single ray of light entering the crystal to split into two rays, each traveling in a different direction. This property of splitting light is called birefringence or double refraction. If you were to look at this page through a large anisotropic crystal, you would see two images. Anisotropic crystals interact with light in a manner that is dependent upon the orientation of the crystal. A light beam hitting the crystal from one direction or angle will react differently than a beam hitting the crystal at a different angle. Use of a compensator allows this optical property to be used to identify crystals.

Gout is caused by monosodium urate crystals, while pseudogout is caused by calcium pyrophosphate crystals. Synovial fluid analysis offers a valuable diagnostic tool for evaluating patients with gout or pseudogout. An accurate diagnosis can be made by a trained observer by detecting and identifying MSU crystals or CPPD crystals. Crystal analysis is done with compensated polarized light.

Specimen FC-5

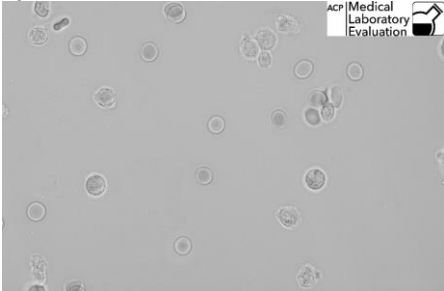


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Cholesterol crystals	7	100%	Acceptable

The crystals in this photograph are **cholesterol crystals**. They appear as large, flat rectangular plates with notched corners. Cholesterol crystals are considered a nonspecific finding, associated with chronic inflammatory conditions. They may be seen in chronic effusions from patients with osteoarthritis or rheumatoid arthritis. To view a photo of cholesterol crystals under compensated, polarized light, see 2016 M3 Specimen FC-6.

2017 M3
FLUID CRYSTAL IDENTIFICATION

Specimen FC-6



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
No crystals observed	6	85.71%	Acceptable

There are **no crystals present** in this photograph of an unstained wet mount preparation of synovial fluid. The objects in this photo are red blood cells and white blood cells.

REFERENCES:

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

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

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

MICROALBUMIN, DIPSTICK

Specimen UM-3

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/L</u>	<u>20 mg/L</u>	<u>30 mg/L</u>	<u>50 mg/L</u>	<u>80 mg/L</u>	<u>100 mg/L</u>	<u>150 mg/L</u>	<u>+ (4 - 8 mg/dL)</u>	<u>++ (>8 mg/dL)</u>
ALL METHODS	42	-	1	-	8	1	30	2	-	-	-
Roche Micral - 1 minute	3	-	-	-	-	1	-	2	-	-	-
Siemens Clinitek Microalbumin	39	-	1	-	8	-	30	-	-	-	-

CREATININE, DIPSTICK

Specimen UM-3

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/dL</u>	<u>30 mg/dL</u>	<u>50 mg/dL</u>	<u>100 mg/dL</u>	<u>200 mg/dL</u>	<u>300 mg/dL</u>
ALL METHODS	40	-	-	-	1	-	18	21
Siemens Clinitek Microalbumin	37	-	-	-	1	-	17	19
Siemens Multistix Pro	2	-	-	-	-	-	-	2

MICROALBUMIN, QUANTITATIVE

Specimen UM-3

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	69	85.00	5.90	6.9	84.5	59.5 - 110.6
Axis-Shield Afinion AS100	11	93.40	11.18	12.0	93.3	65.3 - 121.5
Beckman AU	16	83.03	2.00	2.4	82.9	58.1 - 108.0
Siemens DCA Vantage	11	80.94	6.92	8.6	80.0	56.6 - 105.3
Siemens Dimension/AR/ES/RxL/Xpand	19	83.77	3.63	4.3	84.6	58.6 - 109.0

CREATININE, URINE (mg/dL)

Specimen UM-3

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	66	205.24	11.01	5.4	205.7	170.3 - 240.2
Axis-Shield Afinion AS100	11	203.75	14.42	7.1	203.4	169.1 - 238.4
Beckman AU	16	209.03	6.24	3.0	208.8	173.4 - 244.6
Siemens DCA Vantage	10	211.88	13.77	6.5	213.1	175.8 - 247.9
Siemens Dimension/AR/ES/RxL/Xpand	16	201.61	9.96	4.9	204.6	167.3 - 235.9

WAIVED HEMATOLOGY–HEMOGLOBIN (g/dL)

Specimen HD-11							Specimen HD-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	97	17.47	0.62	3.5	17.5	16.2 - 18.8	101	5.92	0.18	3.0	5.9	5.5 - 6.4
All Stanbio Methods	31	17.70	0.65	3.6	17.8	16.4 - 19.0	32	5.98	0.11	1.9	6.0	5.5 - 6.4
Alere (Stanbio) HemoPoint H2	31	17.70	0.65	3.6	17.8	16.4 - 19.0	32	5.98	0.11	1.9	6.0	5.5 - 6.4
HemoCue	66	17.31	0.70	4.1	17.3	15.9 - 18.8	67	5.89	0.16	2.8	5.9	5.4 - 6.4

WAIVED HEMATOLOGY–HEMATOCRIT (percent)

Specimen HD-11							Specimen HD-12					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	16	48.61	5.29	10.9	50.0	38.0 - 59.2	10	14.74	3.63	24.6	16.3	7.4 - 22.0

KOH SKIN PREPARATION

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
K-5	Yeast/fungal elements present	121	87.05%	Acceptable
	Yeast/fungal elements absent	18	12.95%	
Organism present in specimen K-5: <i>Aspergillus niger</i> .				
K-6	Yeast/fungal elements absent	125	90.58%	Acceptable
	Yeast/fungal elements present	13	9.42%	
Organism present in specimen K-6: <i>Staphylococcus aureus</i> .				

URINALYSIS DIPSTICK–SPECIFIC GRAVITY

Specimen UA-3

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	793	1.0196	0.0041	0.4	1.020	1.009 - 1.030
All Refractive Index Methods	16	1.0263	0.0024	0.2	1.025	1.016 - 1.037
All Roche Methods	37	1.0158	0.0020	0.2	1.015	1.005 - 1.026
All Siemens Methods	468	1.0192	0.0032	0.3	1.020	1.009 - 1.030
Diagnostic Test Group Clarity Urocheck 120	11	1.0268	0.0033	0.3	1.025	1.016 - 1.037
Henry Schein Urispec / Urispec Plus	11	1.0150	0.0001	0.0	1.015	1.005 - 1.025
McKesson 120 Urine Analyzer	18	1.0281	0.0025	0.2	1.030	1.018 - 1.039
Roche Chemstrips	32	1.0163	0.0026	0.3	1.015	1.006 - 1.027
Roche Urisys	28	1.0157	0.0019	0.2	1.015	1.005 - 1.026
Siemens Clinitek 50	22	1.0189	0.0030	0.3	1.020	1.008 - 1.029
Siemens Clinitek Advantus	16	1.0200	0.0001	0.0	1.020	1.010 - 1.030
Siemens Clinitek Status / Status+	406	1.0190	0.0032	0.3	1.020	1.009 - 1.030
Siemens Reagent Strips	138	1.0193	0.0036	0.4	1.020	1.009 - 1.030

URINALYSIS DIPSTICK–pH

Specimen UA-3

Participant Results

<u>Method</u>	<u>Labs</u>	<u>≤3.5</u>	<u>4.0</u>	<u>4.5</u>	<u>5.0</u>	<u>5.5</u>	<u>6.0</u>	<u>6.5</u>	<u>7.0</u>	<u>7.5</u>	<u>8.0</u>	<u>8.5</u>	<u>≥9.0</u>
ALL METHODS	818	-	-	1	388	300	126	3	-	-	-	-	-
Beckman AU	2	-	-	-	-	2	-	-	-	-	-	-	-
BTNX Rapid Response U120/U500	1	-	-	-	-	1	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	2	-	-	-	2	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	3	1	3	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	7	-	-	-	-	2	5	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	2	-	-	-	-	1	1	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	11	-	-	-	1	1	9	-	-	-	-	-	-
Germaine Laboratories AimStrip	4	-	-	-	1	2	1	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	1	-	-	-	-	-	-
Henry Schein One Step Plus	6	-	-	-	6	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	15	-	-	-	14	-	1	-	-	-	-	-	-
Iris Diagnostics iChem Velocity Strips	1	-	-	-	1	-	-	-	-	-	-	-	-
Iris iChem VELOCITY Urine Chemistry System	8	-	-	-	8	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	8	-	-	-	5	2	1	-	-	-	-	-	-
McKesson 120 Urine Analyzer	18	-	-	-	-	4	14	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	-	-	-	-	1	3	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	3	-	-	-	3	-	-	-	-	-	-	-	-
Moore Medical Urine Reagent Strips	2	-	-	-	2	-	-	-	-	-	-	-	-
Other Analyzer Method	2	-	-	1	1	-	-	-	-	-	-	-	-
Other Dipstick Method	8	-	-	-	6	-	1	1	-	-	-	-	-
pH Paper	1	-	-	-	-	-	1	-	-	-	-	-	-
PSS Select Reagent Strips	1	-	-	-	1	-	-	-	-	-	-	-	-
Roche Chemstrip 101	4	-	-	-	4	-	-	-	-	-	-	-	-
Roche Chemstrips	38	-	-	-	37	-	1	-	-	-	-	-	-
Roche cobas u 411	1	-	-	-	1	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	5	-	-	-	3	-	2	-	-	-	-	-	-
Roche Urisys	28	-	-	-	28	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	10	-	-	-	4	6	-	-	-	-	-	-	-
Siemens Clinitek 50	22	-	-	-	15	7	-	-	-	-	-	-	-
Siemens Clinitek 500	6	-	-	-	-	5	1	-	-	-	-	-	-
Siemens Clinitek Advantus	19	-	-	-	4	10	5	-	-	-	-	-	-
Siemens Clinitek Atlas	2	-	-	-	-	2	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	412	-	-	-	166	238	7	1	-	-	-	-	-
Siemens Hemacombistix	1	-	-	-	1	-	-	-	-	-	-	-	-
Siemens Multistix Pro	6	-	-	-	2	2	2	-	-	-	-	-	-
Siemens Reagent Strips	142	-	-	-	64	13	64	1	-	-	-	-	-
UriScan Reagent Strips	3	-	-	-	2	-	1	-	-	-	-	-	-

URINALYSIS DIPSTICK–PROTEIN QUALITATIVE

Specimen UA-3

<u>Method</u>	<i>Participant Results</i>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>10 - 20</u> <u>mg/dL</u>	<u>30 - 70</u> <u>mg/dL</u>	<u>75</u> <u>mg/dL</u>	<u>100 - 200</u> <u>mg/dL</u>	<u>≥300 - 600</u> <u>mg/dL</u>	<u>>600 or ≥1000</u> <u>mg/dL</u>
ALL METHODS	846	829	11	2	-	-	-	3	1	-	-	-	-
BTNX Rapid Response U120/U500	1	1	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	6	1	-	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	2	2	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	11	11	-	-	-	-	-	-	-	-	-	-	-
Germaine Laboratories AimStrip	4	4	-	-	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	6	6	-	-	-	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	15	15	-	-	-	-	-	-	-	-	-	-	-
Iris Diagnostics iChem Velocity Strips	1	1	-	-	-	-	-	-	-	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	8	8	-	-	-	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	8	7	-	1	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	18	18	-	-	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	3	2	1	-	-	-	-	-	-	-	-	-	-
Moore Medical Urine Reagent Strips	2	1	1	-	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	-	-
Other Analyzer Method	1	1	-	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	9	5	-	1	-	-	-	3	-	-	-	-	-
PSS Select Reagent Strips	1	1	-	-	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–PROTEIN QUALITATIVE (cont'd)

Specimen UA-3

<u>Method</u>	<i>Participant Results</i>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>10 - 20</u> <u>mg/dL</u>	<u>30 - 70</u> <u>mg/dL</u>	<u>75</u> <u>mg/dL</u>	<u>100 - 200</u> <u>mg/dL</u>	<u>≥300 - 600</u> <u>mg/dL</u>	<u>>600 or ≥1000</u> <u>mg/dL</u>
Roche Chemstrip 101	4	4	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrips	52	50	2	-	-	-	-	-	-	-	-	-	-
Roche cobas u 411	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	5	5	-	-	-	-	-	-	-	-	-	-	-
Roche Urisys	28	27	-	-	-	-	-	-	1	-	-	-	-
Siemens Albustix	1	1	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	10	10	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	22	22	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	6	6	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	19	19	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	2	2	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	414	414	-	-	-	-	-	-	-	-	-	-	-
Siemens Hemacombistix	1	1	-	-	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	6	6	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	143	138	5	-	-	-	-	-	-	-	-	-	-
Siemens Uristix	13	12	1	-	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–GLUCOSE

Specimen UA-3

<u>Method</u>	<u>Labs</u>	<u>Negative or Normal</u>	<u>Trace</u>	<u>(1+)</u>	<u>Participant Results</u>				<u>30 - 100 mg/dL</u>	<u>150 - 300 mg/dL</u>	<u>500 mg/dL</u>	<u>>500 or ≥1000 or ≥2000 mg/dL</u>
					<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>					
ALL METHODS	838	19	27	184	18	27	6	45	415	6	91	
BTNX Rapid Response U120/U500	1	-	-	-	1	-	-	-	-	-	-	
Consult Diagnostics Reagent Strips	2	-	-	1	-	-	-	-	1	-	-	
Consult Diagnostics Urine Analyzer	7	-	-	3	2	-	-	-	2	-	-	
CTMI CT-120 Urine Analyzer	7	1	-	5	-	-	-	-	1	-	-	
Diagnostic Test Group Clarity Urocheck	2	-	1	1	-	-	-	-	-	-	-	
Diagnostic Test Group Clarity Urocheck 120	11	-	-	6	3	-	-	1	-	-	1	
Germaine Laboratories AimStrip	4	-	-	4	-	-	-	-	-	-	-	
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	1	-	-	-	-	
Henry Schein One Step Plus	6	-	-	-	-	-	-	-	-	-	6	
Henry Schein Urispec / Urispec Plus	15	-	-	-	-	1	-	1	3	1	9	
Iris Diagnostics iChem Velocity Strips	1	-	-	-	-	-	-	-	-	-	1	
Iris Ichem VELOCITY Urine Chemistry System	8	-	-	-	-	8	-	-	-	-	-	
McKesson 10SG Reagent Strips	8	-	-	3	2	-	-	-	2	1	-	
McKesson 120 Urine Analyzer	18	-	1	11	4	-	-	-	1	-	1	
Medline 120 Urine Analyzer	4	-	-	1	2	-	-	-	1	-	-	
Medline Urinalysis Reagent Strips	3	-	-	1	2	-	-	-	-	-	-	
Moore Medical Urine Reagent Strips	2	-	-	1	1	-	-	-	-	-	-	
NDC Pro Advantage	1	-	-	1	-	-	-	-	-	-	-	
Other Analyzer Method	1	-	-	-	-	-	-	-	-	-	1	
Other Dipstick Method	9	-	-	2	-	-	1	-	5	-	1	
PSS Select Reagent Strips	1	-	-	-	-	-	-	-	1	-	-	
Roche Chemstrip 101	4	-	-	-	-	-	-	-	-	-	4	
Roche Chemstrips	53	-	-	-	-	1	4	1	1	-	46	
Roche cobas u 411	1	-	-	-	-	-	-	-	-	-	1	
Roche Criterion Analyzer	5	-	-	-	-	3	-	-	-	-	2	
Roche Urisys	28	-	-	-	-	12	-	-	-	-	16	
Siemens Clinitek 10 / 100	10	-	1	5	-	-	-	1	3	-	-	
Siemens Clinitek 50	22	-	-	10	-	-	-	-	12	-	-	
Siemens Clinitek 500	6	-	1	2	-	-	-	1	2	-	-	
Siemens Clinitek Advantus	19	-	2	11	-	-	-	1	5	-	-	
Siemens Clinitek Atlas	2	-	-	-	-	1	-	-	-	-	1	
Siemens Clinitek Status / Status+	413	7	11	97	-	-	-	19	279	-	-	
Siemens Hemacombistix	1	-	-	-	-	-	-	1	-	-	-	
Siemens Multistix Pro	6	-	-	1	-	-	-	-	5	-	-	
Siemens Reagent Strips	143	10	9	13	1	-	-	19	88	3	-	
Siemens Uristix	5	1	1	2	-	1	-	-	-	-	-	
UriScan Reagent Strips	3	-	-	2	-	-	-	-	-	1	-	

URINALYSIS DIPSTICK–KETONES

Specimen UA-3

<u>Method</u>	<u>Labs</u>	<u>Participant Results</u>													
		<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>5 - 10</u> <u>mg/dL</u>	<u>15 - 25</u> <u>mg/dL</u>	<u>40 - 60</u> <u>mg/dL</u>	<u>80 - 100</u> <u>mg/dL</u>	<u>≥150</u> <u>mg/dL</u>
ALL METHODS	815	11	2	4	58	47	45	190	14	-	4	62	362	15	1
BTNX Rapid Response U120/U500	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	2	-	-	-	-	-	-	1	-	-	-	-	1	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	-	-	-	5	-	-	-	1	1	-	-
CTMI CT-120 Urine Analyzer	7	-	-	-	-	-	2	3	-	-	1	-	1	-	-
Diagnostic Test Group Clarity Urocheck	2	-	-	-	-	-	-	1	-	-	-	1	-	-	-
Diagnostic Test Group Clarity Urocheck 120	11	-	-	-	-	-	3	4	-	-	2	1	1	-	-
Germaine Laboratories AimStrip	5	-	-	1	-	-	2	1	-	-	-	1	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Henry Schein One Step Plus	6	-	-	-	-	-	-	-	-	-	-	6	-	-	-
Henry Schein Urispec / Urispec Plus	15	-	-	-	1	-	1	-	-	-	-	13	-	-	-
Iris Diagnostics iChem Velocity Strips	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	8	-	-	-	-	-	8	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	8	-	-	-	-	2	-	5	-	-	-	-	1	-	-
McKesson 120 Urine Analyzer	18	-	-	-	-	-	2	14	1	-	-	-	1	-	-
Medline 120 Urine Analyzer	4	-	-	-	-	-	-	3	1	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	3	-	-	-	1	-	-	2	-	-	-	-	-	-	-
Moore Medical Urine Reagent Strips	2	-	-	-	-	-	-	1	1	-	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Other Analyzer Method	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Other Dipstick Method	8	-	1	-	1	-	-	1	-	-	-	3	1	1	-
PSS Select Reagent Strips	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Roche Chemstrip 101	4	-	-	-	-	2	-	1	-	-	-	1	-	-	-
Roche Chemstrips	39	8	-	1	7	5	3	10	5	-	-	-	-	-	-
Roche cobas u 411	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Roche Criterion Analyzer	5	-	-	-	-	-	-	3	-	-	-	-	2	-	-
Roche Urisys	27	-	-	-	-	-	6	4	1	-	-	8	8	-	-
Siemens Clinitek 10 / 100	10	-	-	-	-	1	1	4	-	-	-	2	2	-	-
Siemens Clinitek 50	22	-	-	-	1	-	-	10	-	-	-	1	10	-	-
Siemens Clinitek 500	6	-	-	-	-	-	2	1	-	-	-	-	3	-	-
Siemens Clinitek Advantus	18	-	-	-	-	-	8	5	-	-	-	4	1	-	-
Siemens Clinitek Atlas	2	-	-	-	-	-	1	-	-	-	-	-	1	-	-
Siemens Clinitek Status / Status+	414	2	1	1	5	-	5	101	-	-	-	17	282	-	-
Siemens Ketostix	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	6	-	-	-	-	1	-	1	-	-	-	-	3	1	-

URINALYSIS DIPSTICK–BILIRUBIN

Specimen UA-3

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Participant Results</u>					<u>0.5 - 1.0 mg/dL</u>	<u>2.0 - 4.0 mg/dL</u>	<u>6.0 - 10.0 mg/dL</u>	<u>>10.0 mg/dL</u>
						<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>				
ALL METHODS	793	788	-	1	2	1	-	-	-	-	-	-	-	1
BTNX Rapid Response U120/U500	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	11	11	-	-	-	-	-	-	-	-	-	-	-	-
Germaine Laboratories AimStrip	4	4	-	-	-	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	6	6	-	-	-	-	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	15	15	-	-	-	-	-	-	-	-	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	8	8	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	8	8	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	18	18	-	-	-	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Moore Medical Urine Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Other Analyzer Method	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	6	6	-	-	-	-	-	-	-	-	-	-	-	-
PSS Select Reagent Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrip 101	4	4	-	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrips	36	35	-	1	-	-	-	-	-	-	-	-	-	-
Roche cobas u 411	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	5	5	-	-	-	-	-	-	-	-	-	-	-	-
Roche Urisys	28	28	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	10	10	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	22	22	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	6	6	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	18	18	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	407	407	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	5	5	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	135	132	-	-	2	1	-	-	-	-	-	-	-	-
UriScan Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–UROBILINOGEN

Specimen UA-3

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>				
		<u>Normal or 0.0 - 0.2 mg/dL</u>	<u>1.0 or <2.0 mg/dL</u>	<u>2.0/3.0 mg/dL</u>	<u>4.0 or 4.0/6.0 mg/dL</u>	<u>≥8.0 or ≥12.0 mg/dL</u>
ALL METHODS	791	779	6	6	-	-
BTNX Rapid Response U120/U500	1	1	-	-	-	-
Consult Diagnostics Reagent Strips	2	2	-	-	-	-
Consult Diagnostics Urine Analyzer	8	8	-	-	-	-
CTMI CT-120 Urine Analyzer	7	7	-	-	-	-
Diagnostic Test Group Clarity Urocheck	2	2	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	11	10	1	-	-	-
Germaine Laboratories AimStrip	4	4	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	1	-	-	-	-
Henry Schein One Step Plus	6	6	-	-	-	-
Henry Schein Urispec / Urispec Plus	15	15	-	-	-	-
Iris Diagnostics iChem Velocity Strips	1	1	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	8	8	-	-	-	-
McKesson 10SG Reagent Strips	8	8	-	-	-	-
McKesson 120 Urine Analyzer	18	16	1	1	-	-
Medline 120 Urine Analyzer	3	2	-	1	-	-
Medline Urinalysis Reagent Strips	3	3	-	-	-	-
Moore Medical Urine Reagent Strips	2	2	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-
Other Analyzer Method	2	1	1	-	-	-
Other Dipstick Method	5	5	-	-	-	-
PSS Select Reagent Strips	1	1	-	-	-	-
Roche Chemstrip 101	4	4	-	-	-	-
Roche Chemstrips	36	36	-	-	-	-
Roche cobas u 411	1	1	-	-	-	-
Roche Criterion Analyzer	5	5	-	-	-	-
Roche Urisys	28	28	-	-	-	-
Siemens Clinitek 10 / 100	10	9	-	1	-	-
Siemens Clinitek 50	21	20	-	1	-	-
Siemens Clinitek 500	6	6	-	-	-	-
Siemens Clinitek Advantus	16	16	-	-	-	-
Siemens Clinitek Atlas	1	1	-	-	-	-
Siemens Clinitek Status / Status+	407	406	-	1	-	-
Siemens Multistix Pro	5	5	-	-	-	-
Siemens Reagent Strips	137	133	3	1	-	-
UriScan Reagent Strips	2	2	-	-	-	-

URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN

Specimen UA-3

<u>Method</u>	<u>Participant Results</u>																	
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>(5+)</u>	<u>5 - 25</u> <u>Ery/μL</u>	<u>50 -</u> <u>100</u> <u>Ery/μL</u>	<u>250</u> <u>Ery/μL</u>	<u>±0.03</u> <u>mg/dL</u>	<u>0.06</u> <u>-</u> <u>0.10</u> <u>mg/</u> <u>dL</u>	<u>0.2 -</u> <u>0.5</u> <u>mg/</u> <u>dL</u>	<u>≥ 1.0</u> <u>mg/</u> <u>dL</u>
ALL METHODS	826	796	21	2	1	-	1	1	-	-	-	3	-	-	-	-	1	-
BTNX Rapid Response U120/U500	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	11	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germaine Laboratories AimStrip	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	15	12	-	-	-	-	1	-	-	-	-	2	-	-	-	-	-	-
Iris Diagnostics iChem Velocity Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iris iChem VELOCITY Urine Chemistry System	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	7	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	17	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Moore Medical Urine Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Analyzer Method	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PSS Select Reagent Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrip 101	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrips	49	47	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Roche cobas u 411	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roche Urisys	28	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	21	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	19	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	415	397	15	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Siemens Hemacombistix	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	142	135	5	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
UriScan Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–LEUKOCYTE ESTERASE

Specimen UA-3

<u>Method</u>	<i>Participant Results</i>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>25 µL</u>	<u>75 or 100 µL</u>	<u>250 or 500 µL</u>
ALL METHODS	835	4	24	149	254	48	93	189	22	-	-	5	47
BTNX Rapid Response U120/U500	1	-	-	-	-	-	-	1	-	-	-	-	-
Consult Diagnostics Reagent Strips	2	-	-	-	-	-	-	1	-	-	-	-	1
Consult Diagnostics Urine Analyzer	8	-	-	-	-	-	3	1	1	-	-	1	2
CTMI CT-120 Urine Analyzer	7	1	-	-	-	-	3	2	-	-	-	1	-
Diagnostic Test Group Clarity Urocheck	2	-	-	-	-	-	-	1	1	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	11	-	-	-	-	-	-	7	3	-	-	-	1
Germaine Laboratories AimStrip	4	-	-	1	-	-	1	2	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	1	-	-	-	-	-	-
Henry Schein One Step Plus	6	-	-	-	-	-	-	-	-	-	-	-	6
Henry Schein Urispec / Urispec Plus	15	-	-	-	1	-	-	-	1	-	-	-	13
Iris Diagnostics iChem Velocity Strips	1	-	-	-	-	-	-	-	-	-	-	-	1
Iris Ichem VELOCITY Urine Chemistry System	8	-	-	-	-	8	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	7	-	-	-	-	-	1	4	1	-	-	-	1
McKesson 120 Urine Analyzer	17	-	-	-	-	-	4	12	-	-	-	1	-
Medline 120 Urine Analyzer	4	-	-	-	-	-	-	3	1	-	-	-	-
Medline Urinalysis Reagent Strips	3	-	-	-	-	-	-	2	1	-	-	-	-
Moore Medical Urine Reagent Strips	2	-	-	-	-	-	-	2	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	1	-	-	-	-	-	-
Other Analyzer Method	1	-	-	-	-	-	-	-	-	-	-	-	1
Other Dipstick Method	9	-	1	3	2	-	-	2	-	-	-	1	-
PSS Select Reagent Strips	1	-	-	-	-	-	-	-	1	-	-	-	-
Roche Chemstrip 101	4	-	-	-	1	-	-	2	-	-	-	-	1
Roche Chemstrips	50	-	-	1	-	5	-	44	-	-	-	-	-
Roche cobas u 411	1	-	-	-	-	-	-	-	-	-	-	-	1
Roche Criterion Analyzer	5	-	-	-	-	-	-	3	-	-	-	-	2
Roche Urisys	28	-	-	-	-	-	-	12	-	-	-	-	16
Siemens Clinitek 10 / 100	10	-	1	2	3	-	1	3	-	-	-	-	-
Siemens Clinitek 2000	1	-	-	-	1	-	-	-	-	-	-	-	-
Siemens Clinitek 50	21	-	3	4	4	1	6	3	-	-	-	-	-
Siemens Clinitek 500	6	-	-	1	2	-	2	1	-	-	-	-	-
Siemens Clinitek Advantus	19	-	-	2	3	-	5	9	-	-	-	-	-
Siemens Clinitek Atlas	2	-	-	-	-	1	-	-	1	-	-	-	-
Siemens Clinitek Status / Status+	415	3	17	114	149	28	51	44	9	-	-	-	-
Siemens Multistix Pro	6	-	-	2	1	2	-	1	-	-	-	-	-
Siemens Reagent Strips	139	-	1	17	78	3	13	27	-	-	-	-	-
Siemens Uristix	10	-	-	2	7	-	1	-	-	-	-	-	-

URINALYSIS DIPSTICK–NITRITE

Specimen UA-3

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Positive</u>
ALL METHODS	836	3	833
BTNX Rapid Response U120/U500	1	-	1
Consult Diagnostics Reagent Strips	2	-	2
Consult Diagnostics Urine Analyzer	8	-	8
CTMI CT-120 Urine Analyzer	7	-	7
Diagnostic Test Group Clarity Urocheck	2	-	2
Diagnostic Test Group Clarity Urocheck 120	11	-	11
Germaine Laboratories AimStrip	4	-	4
Germaine Labs AimStrip Urine Analyzer	1	-	1
Henry Schein One Step Plus	7	-	7
Henry Schein Urispec / Urispec Plus	14	-	14
Iris Diagnostics iChem Velocity Strips	1	-	1
Iris Ichem VELOCITY Urine Chemistry System	8	-	8
McKesson 10SG Reagent Strips	7	-	7
McKesson 120 Urine Analyzer	17	-	17
Medline 120 Urine Analyzer	4	1	3
Medline Urinalysis Reagent Strips	3	-	3
Moore Medical Urine Reagent Strips	2	-	2
NDC Pro Advantage	1	-	1
Other Analyzer Method	1	-	1
Other Dipstick Method	9	-	9
PSS Select Reagent Strips	1	-	1
Roche Chemstrip 101	4	-	4
Roche Chemstrips	50	-	50
Roche cobas u 411	1	-	1
Roche Criterion Analyzer	5	-	5
Roche Urisys	28	-	28
Siemens Clinitek 10 / 100	10	-	10
Siemens Clinitek 50	21	-	21
Siemens Clinitek 500	6	-	6
Siemens Clinitek Advantus	19	-	19
Siemens Clinitek Atlas	2	-	2
Siemens Clinitek Status / Status+	414	2	412
Siemens Multistix Pro	6	-	6
Siemens Reagent Strips	142	-	142
Siemens Uristix	10	-	10
UriScan Reagent Strips	3	-	3

URINALYSIS –MICROALBUMIN (dipstick only)

Specimen UA-3

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<i>Participant Results</i>								
			<u>10 mg/L</u>	<u>20 mg/L</u>	<u>30 mg/L</u>	<u>50 mg/L</u>	<u>80 mg/L</u>	<u>100 mg/L</u>	<u>150 mg/L</u>	<u>+ (4 - 8 mg/dL)</u>	<u>++ (>8 mg/dL)</u>
ALL METHODS	66	8	43	7	3	2	3	-	-	-	-
BTNX Rapid Response											
Microalb/Crea	1	1	-	-	-	-	-	-	-	-	-
Roche Micral - 1 minute	11	2	-	7	-	2	-	-	-	-	-
Siemens Clinitek Microalbumin	43	-	41	-	-	-	2	-	-	-	-

URINALYSIS –URINE hCG

Specimen UA-3

<u>Method</u>	<i>Participant Results</i>		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	468	3	465
AimStep Combo Pregnancy	1	-	1
Alere Aceava hCG-Urine	1	-	1
Alere Clearview 25 hCG Combo	1	-	1
Alere Clearview hCG Cassette	7	1	6
Alere Clearview hCG Combo II	2	-	2
Alfa Scientific Instant View	4	-	4
Beckman Coulter ICON 25 hCG	24	-	24
Beckman Coulter ICON II/20 HCG	9	-	9
BioSign hCG	1	-	1
BTNX Rapid Response hCG	1	-	1
Cardinal Health SP Brand combo	29	-	29
Clarity Diagnostics hCG strip/cassette	8	-	8
CONSULT diagnostics hCG Cassette	60	2	58
CONSULT diagnostics hCG Combo	10	-	10
CONSULT diagnostics hCG Dipstick	29	-	29
Germaine Laboratories AimStrip Pregnancy	1	-	1
Henry Schein One Step	60	-	60
Immunostics Cept-D	2	-	2
Immunostics hCG Detector-urine	1	-	1
Mainline Confirm hCG Urine	1	-	1
McKesson hCG Combo Cassette	4	-	4
McKesson hCG Urine Cassette	10	-	10
McKesson urine hCG-all 20 mIU kits	1	-	1
MediChoice hCG Combi Cassette	8	-	8
Medline hCG Combo Test Cassette	3	-	3
Medline hCG Test Cassette	5	-	5
Medline hCG Test Strip	1	-	1
Moore Medical hCG Urine	3	-	3
NDC Pro Advantage	1	-	1
Other Dipstick Method	1	-	1
PEP (Lab Supply) HCG	2	-	2
Polymedco Poly stat hCG	2	-	2
Quidel QuickVue One-Step Combo	22	-	22
Quidel QuickVue One-Step Urine	52	-	52
Quidel QuickVue+ One-Step Combo	25	-	25
Quidel Sofia hCG	2	-	2
RefuAH hCG Dipstick	7	-	7
Sekisui OSOM - Urine Test	2	-	2

URINALYSIS –URINE hCG (cont'd)**Specimen UA-3**

<u>Method</u>	<i>Participant Results</i>		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
Sekisui OSOM Card Pregnancy	9	-	9
Sekisui OSOM hCG Combo Test	1	-	1
Siemens Clinitek Status / Status+	11	-	11
Stanbio QuPID	9	-	9
Stanbio QuPID Plus	1	-	1
Stanbio TRUE hCG	9	-	9
Sure-Vue hCG - 25mIU	1	-	1
Sure-Vue hCG-STAT	6	-	6

FECAL OCCULT BLOOD

<u>Method</u>	<i>Specimen OC-5</i>			<i>Specimen OC-6</i>		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	314	311	3	314	6	308
Alere Clearview iFOBT Complete	1	1	-	1	-	1
Beckman Coulter Hemoccult ICT	41	41	-	41	3	38
Guaiaac (slide) Test	186	183	3	186	3	183
Hemosure IFOB	38	38	-	38	-	38
Other Immunochemical FOB kit	21	21	-	21	-	21
Polymedco OC Auto Micro 80	4	4	-	4	-	4
Polymedco OC-Light iFOB	11	11	-	11	-	11
Quidel QuickVue iFOB	7	7	-	7	-	7

2017 M3
Urine Sediment Identification
SPECIMENS US-5 AND US-6

CASE HISTORY:

A 40-year-old pregnant female with a history of recurrent urinary tract infections presented to her obstetrician for her first prenatal exam. The patient complained of recent onset of genital itching and urinary pain. A urine specimen was collected, and urinalysis performed. Results appear below.

Color= Yellow

Appearance= Hazy

Dipstick results:

Specific gravity = 1.025

pH = 7.0

Blood = Small

Leukocyte esterase = Small

Protein = 30 mg/dL (1+)

Glucose = Negative

Ketones = Negative

Bilirubin = Negative

Urobilinogen = Negative

Nitrite = Negative

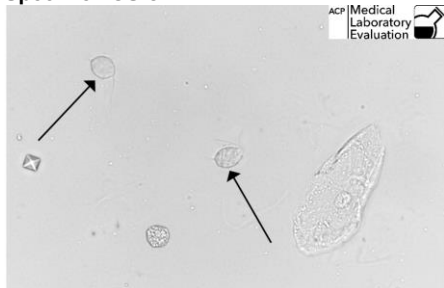
This patient was diagnosed with trichomoniasis. *Trichomonas vaginalis* (TV) is the most common nonviral sexually transmitted infection worldwide. Trichomonas, or trich (pronounced “trick”) is primarily responsible for vaginal infections; however it can also infect the urinary tract of both males and females. Trichomonads (the individual organisms) are often urinary contaminants from the genital tract. 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, and 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.

Urine Sediment Identification

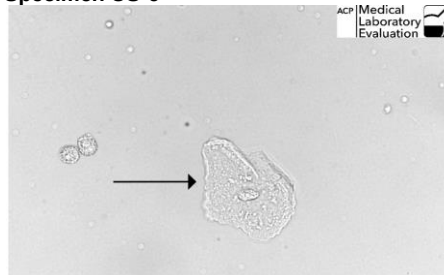
Specimen US-5



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Trichomonas vaginalis	496	96.31%	Acceptable
White blood cell (WBC)	8	1.55%	

The arrows in this photograph point to ***Trichomonas vaginalis***. Trichomonads are oval-shaped, slightly larger than a WBC, and are easily identified in a fresh urine or wet mount preparation by their rapid, irregular, jerky, and rotating motility. Each trichomonad has a single nucleus, four anterior flagella, an undulating membrane extending $\frac{1}{2}$ the length of its body, and a sharp protruding barbed tail (posterior axostyle.) Motile trichomonads are usually detected by microscopic examination of a saline wet mount of vaginal fluid. Addition of a spun urine sediment examination to the routine wet mount examination can improve the rate of detection without adding significant expense. Trichomonads may only remain alive for about 30 minutes in urine, however they can remain alive in saline at room temperature for over 6 hours. To view another photo of trichomonas, see 2014 M3 Specimen US-5.

Specimen US-6



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Squamous epithelial cell	501	97.47%	Acceptable
Transitional epithelial cell	7	1.36%	

The arrow in this photograph points to a **squamous epithelial cell**. Squamous epithelial cells line the lower urinary tract, vaginal mucosa, and external skin surfaces. Squamous cells are large, flat, and irregularly shaped, with a single small nucleus and plentiful cytoplasm. They often appear folded or rolled. They are routinely seen in normal urine specimens from female patients. Large numbers of squamous cells can indicate contamination of the urine from external skin or vaginal secretions during specimen collection. Use of the proper midstream collection technique minimizes contamination. To view another photo of squamous epithelial cells, see 2015 M3 Specimen US-5.

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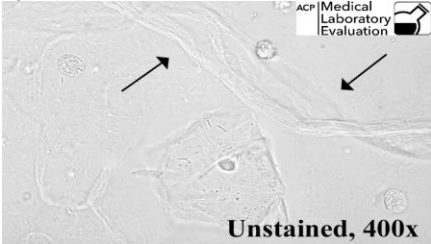
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PROVIDER-PERFORMED MICROSCOPY (PPM)

Wet Mount Preparation

Specimen PPM-13

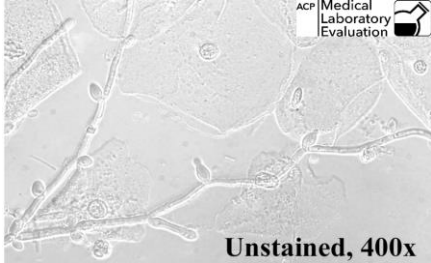


Identification	Labs	Percent	Performance
Mucus strands	361	69.69%	Acceptable
Fiber fecal contamination	114	22.06%	
Yeast fungi	18	3.47%	
Squamous epithelial cell	15	2.90%	
Identification Unknown –refer	5	0.97%	

The arrows in this photograph of a wet mount preparation point to **mucus strands**. Mucus is secreted by glands in the terminal urethra and vagina. It is a very common non-pathologic finding, especially in females. Mucus appears as long thin delicate strands or threads with undefined edges and pointed or frayed ends. Some participants thought this object was a fiber or fecal contamination. Fibers tend to be flat, with dark edges and nodular indentations in the ends and sides. To view another photo of mucus strands, see 2013 M2 Specimen PPM-7. Specimen PPM-13 was graded by 100% referee consensus.

KOH Preparation

Specimen PPM-14

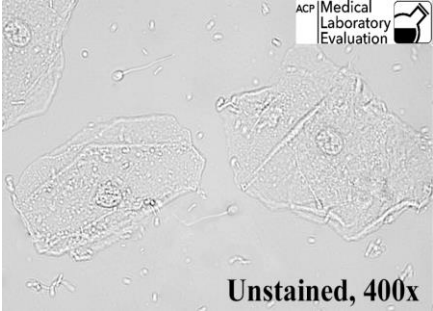


Identification	Labs	Percent	Performance
Yeast/fungal elements present	473	99.16%	Acceptable
Yeast/fungal elements absent	4	0.84%	

Yeast and fungal elements are present in this photograph of a vaginal KOH prep.

PROVIDER-PERFORMED MICROSCOPY (PPM)

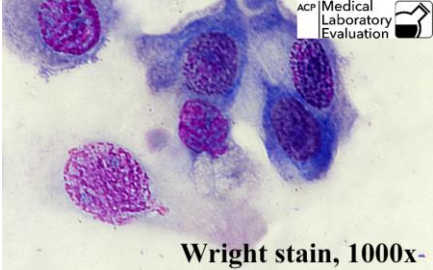
Sperm Detection
Specimen PPM-15



Two **spermatozoa** are **present** in this photograph of a vaginal wet prep.

<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Sperm present	395	98.50%	Acceptable
Sperm absent	6	1.50%	

Nasal Smear
Specimen PPM-16



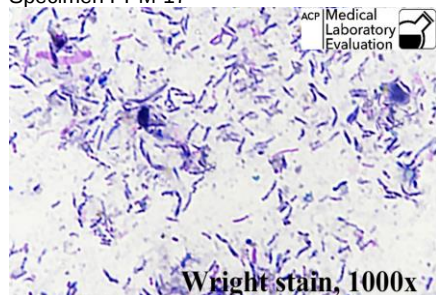
Eosinophils are absent in this photograph of Wright-stained nasal mucus. The purpose of examining the leukocytes (white blood cells) in stained nasal secretions is to differentiate allergy from infection. The eosinophil is a specific type of leukocyte that is increased in allergic conditions. “Eos” have a unique red-orange color that makes them easy to spot and identify. The cytoplasm of an eosinophil is filled with large, round, orange-staining granules that surround the purple nucleus but do not obscure the nucleus from view. The orange color of the eosinophilic granules comes from the dye eosin, which is a component of Wright stain. **The cells shown in this photo are not eosinophilic. They are basophilic (blue.)** Another distinguishing characteristic is the eosinophil nucleus usually has two segments or lobes, in contrast with the mononuclear, unsegmented cells in this photo. To view a photo of eosinophils, see 2017 M2 Specimen PPM-10. Specimen PPM-16 was graded by 82% referee consensus.

<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Eosinophilis absent	52	40.94%	Acceptable
Eosinophils present	75	59.06%	

PROVIDER-PERFORMED MICROSCOPY (PPM)

Fecal Leukocytes

Specimen PPM-17

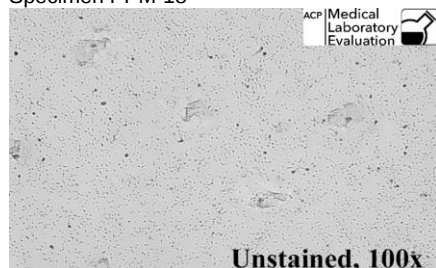


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Leukocytes absent	147	82.12%	Acceptable
Leukocytes present	32	17.88%	

Leukocytes are absent in this photograph of a Wright-stained stool preparation. Leukocytes are white blood cells. The presence of fecal leukocytes indicates inflammation due enteritis or ulcerative colitis. To view a photo of fecal leukocytes, see 2017 M2 Specimen PPM-11.

Vaginal Fluid Preparation

Specimen PPM-18



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Ferning absent	188	97.92%	Acceptable
Ferning present	4	2.08%	

Ferning is absent in this photograph of air-dried vaginal secretions. The fern test is used to test for ruptured membranes. Amniotic fluid crystallizes when dried on a microscope slide to form a pattern resembling a fern leaf, unlike normal vaginal secretions or urine, which do not crystallize. Ferning indicates leakage of amniotic fluid.

References:

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