

MEDICAL LABORATORY EVALUATION

PARTICIPANT SUMMARY

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



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.

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

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

*Whichever is greater

HEMOCUE HEMATOLOGY–HEMOGLOBIN (g/dL)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen HQ-1				<u>Labs</u>	<u>Mean</u>	Specimen HQ-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
HemoCue	49	17.11	0.44	2.6	17.1	15.9 - 18.4	49	12.90	0.35	2.7	12.9	11.9 - 13.9

HEMOCUE HEMATOLOGY–GLUCOSE (mg/dL)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen HQ-1				<u>Labs</u>	<u>Mean</u>	Specimen HQ-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	57	323.2	12.4	3.8	324	258 - 388	56	94.1	7.5	8.0	95	75 - 113
HemoCue Glucose 201/+	54	322.9	12.6	3.9	323	258 - 388	53	94.2	7.7	8.1	95	75 - 114

SEDIMENTATION RATE (MM/HR)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen ES-1				<u>Labs</u>	<u>Mean</u>	Specimen ES-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	189	40.9	11.5	28.2	38	6 - 76	189	6.7	2.4	35.4	7	0 - 14
All Vital Diagnostic Methods	18	49.2	5.7	11.5	49	32 - 67	19	6.4	0.8	11.9	6	4 - 9
HiChem Mini-Ves	10	68.1	7.4	10.8	68	46 - 91	10	5.4	2.1	38.3	5	0 - 12
Polymedco Sedimat	15	41.3	7.7	18.6	41	18 - 65	15	5.8	2.8	47.5	6	0 - 15
Streck ESR-Auto Plus	12	58.8	6.2	10.5	59	40 - 78	12	10.9	1.9	17.2	10	5 - 17
Vital Diagnostics Excyte M/10	13	47.5	5.0	10.4	48	32 - 63	14	6.6	0.8	11.5	6	4 - 9
Westergren - diluted	106	35.7	6.2	17.3	35	17 - 55	108	6.4	2.3	35.1	7	0 - 14
Westergren - undiluted	13	36.5	6.5	17.9	35	16 - 57	14	8.6	3.0	34.5	7	0 - 18

SEDIMAT SEDIMENTATION RATE (MM/HR)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen MAT-1				<u>Labs</u>	<u>Mean</u>	Specimen MAT-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Polymedco Sedimat 15	17	55.0	7.8	14.2	56	31 - 79	17	1.4	0.6	43.8	1	0 - 4

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

Specimen CL-1							Specimen CL-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	32	3.22	0.13	4.2	3.2	2.7 - 3.8	33	7.66	0.28	3.6	7.7	6.5 - 8.9
All Abbott Cell-Dyn Instruments	30	3.22	0.13	4.1	3.2	2.7 - 3.8	31	7.65	0.27	3.6	7.7	6.5 - 8.9
Abbott Cell-Dyn 3200	12	3.18	0.22	6.8	3.2	2.7 - 3.7	12	7.68	0.34	4.4	7.7	6.5 - 8.9
Abbott Cell-Dyn Ruby	14	3.24	0.11	3.4	3.2	2.7 - 3.8	14	7.66	0.24	3.1	7.7	6.5 - 8.9
Specimen CL-3							Specimen CL-4					
All Method	31	20.92	0.75	3.6	20.9	17.7 - 24.1	33	3.32	0.16	4.7	3.3	2.8 - 3.9
All Abbott Cell-Dyn Instruments	29	20.80	0.61	2.9	20.7	17.6 - 24.0	31	3.32	0.15	4.6	3.3	2.8 - 3.9
Abbott Cell-Dyn 3200	11	20.79	0.69	3.3	20.9	17.6 - 24.0	12	3.23	0.15	4.6	3.3	2.7 - 3.8
Abbott Cell-Dyn Ruby	13	20.86	0.65	3.1	20.6	17.7 - 24.0	14	3.38	0.15	4.4	3.4	2.8 - 3.9
Specimen CL-5												
All Method	33	7.65	0.30	3.9	7.6	6.5 - 8.8						
All Abbott Cell-Dyn Instruments	31	7.64	0.30	3.9	7.6	6.4 - 8.8						
Abbott Cell-Dyn 3200	12	7.58	0.30	3.9	7.7	6.4 - 8.8						
Abbott Cell-Dyn Ruby	14	7.70	0.36	4.6	7.6	6.5 - 8.9						

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

Specimen CL-1							Specimen CL-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	32	2.240	0.051	2.3	2.24	2.10 - 2.38	33	4.750	0.083	1.7	4.74	4.46 - 5.04	
All Abbott Cell-Dyn Instruments	30	2.241	0.052	2.3	2.24	2.10 - 2.38	31	4.754	0.084	1.8	4.75	4.46 - 5.04	
Abbott Cell-Dyn 3200	12	2.218	0.050	2.2	2.22	2.08 - 2.36	12	4.714	0.075	1.6	4.73	4.43 - 5.00	
Abbott Cell-Dyn Ruby	14	2.251	0.045	2.0	2.25	2.11 - 2.39	14	4.777	0.087	1.8	4.77	4.49 - 5.07	
Specimen CL-3							Specimen CL-4						
All Method	31	5.375	0.105	2.0	5.35	5.05 - 5.70	32	2.226	0.046	2.1	2.23	2.09 - 2.36	
All Abbott Cell-Dyn Instruments	29	5.377	0.108	2.0	5.35	5.05 - 5.70	30	2.228	0.044	2.0	2.23	2.09 - 2.37	
Abbott Cell-Dyn 3200	12	5.349	0.155	2.9	5.33	5.02 - 5.68	12	2.223	0.048	2.2	2.22	2.08 - 2.36	
Abbott Cell-Dyn Ruby	14	5.422	0.119	2.2	5.41	5.09 - 5.75	14	2.209	0.080	3.6	2.22	2.07 - 2.35	
Specimen CL-5													
All Method	32	4.719	0.088	1.9	4.72	4.43 - 5.01							
All Abbott Cell-Dyn Instruments	30	4.723	0.089	1.9	4.73	4.43 - 5.01							
Abbott Cell-Dyn 3200	12	4.691	0.070	1.5	4.68	4.40 - 4.98							
Abbott Cell-Dyn Ruby	14	4.762	0.094	2.0	4.79	4.47 - 5.05							

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

Specimen CL-1							Specimen CL-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	33	5.63	0.14	2.5	5.6	5.2 - 6.1	33	13.86	0.26	1.9	13.9	12.8 - 14.9
All Abbott Cell-Dyn Instruments	31	5.64	0.14	2.5	5.6	5.2 - 6.1	31	13.88	0.26	1.9	13.9	12.9 - 14.9
Abbott Cell-Dyn 3200	12	5.64	0.16	2.8	5.7	5.2 - 6.1	12	13.88	0.27	1.9	14.0	12.9 - 14.9
Abbott Cell-Dyn Ruby	14	5.61	0.13	2.3	5.6	5.2 - 6.1	14	13.88	0.24	1.7	13.9	12.9 - 14.9
Specimen CL-3							Specimen CL-4					
All Method	33	16.94	0.35	2.0	16.9	15.7 - 18.2	33	5.58	0.15	2.6	5.6	5.1 - 6.0
All Abbott Cell-Dyn Instruments	31	16.95	0.35	2.1	17.0	15.7 - 18.2	31	5.60	0.14	2.5	5.6	5.2 - 6.0
Abbott Cell-Dyn 3200	12	16.93	0.38	2.3	16.9	15.7 - 18.2	12	5.65	0.14	2.4	5.7	5.2 - 6.1
Abbott Cell-Dyn Ruby	14	16.97	0.36	2.1	17.1	15.7 - 18.2	14	5.53	0.13	2.3	5.5	5.1 - 6.0
Specimen CL-5												
All Method	33	13.82	0.26	1.9	13.9	12.8 - 14.8						
All Abbott Cell-Dyn Instruments	31	13.84	0.26	1.9	13.9	12.8 - 14.9						
Abbott Cell-Dyn 3200	12	13.82	0.27	1.9	13.9	12.8 - 14.8						
Abbott Cell-Dyn Ruby	14	13.80	0.24	1.8	13.9	12.8 - 14.8						

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

Specimen CL-1							Specimen CL-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	33	15.88	1.03	6.5	15.6	14.9 - 16.9	33	39.98	2.61	6.5	39.2	37.5 - 42.4	
All Abbott Cell-Dyn Instruments	26	15.42	0.44	2.8	15.4	14.4 - 16.4	26	38.79	1.20	3.1	38.9	36.4 - 41.2	
Abbott Cell-Dyn 3200	12	15.29	0.43	2.8	15.3	14.3 - 16.3	12	38.38	1.15	3.0	38.6	36.0 - 40.7	
Abbott Cell-Dyn Ruby	14	15.53	0.43	2.8	15.6	14.5 - 16.5	14	39.14	1.16	3.0	39.1	36.7 - 41.5	
Specimen CL-3							Specimen CL-4						
All Method	33	46.57	3.28	7.1	45.8	43.7 - 49.4	33	15.77	1.12	7.1	15.5	14.8 - 16.8	
All Abbott Cell-Dyn Instruments	26	45.41	1.61	3.6	45.4	42.6 - 48.2	26	15.27	0.60	3.9	15.3	14.3 - 16.2	
Abbott Cell-Dyn 3200	12	44.97	1.62	3.6	45.3	42.2 - 47.7	12	15.28	0.59	3.9	15.4	14.3 - 16.3	
Abbott Cell-Dyn Ruby	14	45.79	1.56	3.4	45.8	43.0 - 48.6	14	15.26	0.62	4.1	15.2	14.3 - 16.2	
Specimen CL-5													
All Method	33	39.72	2.33	5.9	39.1	37.3 - 42.2							
All Abbott Cell-Dyn Instruments	26	38.67	1.16	3.0	38.7	36.3 - 41.0							
Abbott Cell-Dyn 3200	12	38.26	1.18	3.1	38.6	35.9 - 40.6							
Abbott Cell-Dyn Ruby	14	39.02	1.07	2.7	39.1	36.6 - 41.4							

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

Specimen CL-1							Specimen CL-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	32	75.4	7.2	9.6	77	56 - 95	33	261.2	12.5	4.8	260	195 - 327
All Abbott Cell-Dyn Instruments	30	75.2	7.2	9.6	77	56 - 94	31	262.5	11.5	4.4	260	196 - 329
Abbott Cell-Dyn 3200	13	73.0	6.7	9.2	76	54 - 92	13	256.8	7.4	2.9	257	192 - 321
Abbott Cell-Dyn Ruby	13	74.6	6.4	8.6	76	55 - 94	13	263.2	10.3	3.9	265	197 - 329
Specimen CL-3							Specimen CL-4					
All Method	32	528.6	23.7	4.5	536	396 - 661	33	74.5	6.9	9.2	74	55 - 94
All Abbott Cell-Dyn Instruments	30	532.5	18.3	3.4	540	399 - 666	31	74.5	7.1	9.5	74	55 - 94
Abbott Cell-Dyn 3200	13	522.5	19.2	3.7	519	391 - 654	13	71.8	6.0	8.3	70	53 - 90
Abbott Cell-Dyn Ruby	13	539.8	15.8	2.9	544	404 - 675	13	73.0	4.2	5.7	74	54 - 92
Specimen CL-5												
All Method	31	258.2	12.7	4.9	256	193 - 323						
All Abbott Cell-Dyn Instruments	29	259.3	11.8	4.6	258	194 - 325						
Abbott Cell-Dyn 3200	13	252.5	7.0	2.8	252	189 - 316						
Abbott Cell-Dyn Ruby	13	262.6	11.3	4.3	265	196 - 329						

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

Specimen CL-1							Specimen CL-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	31	53.66	1.63	3.0	53.4	48.7 - 58.6	32	67.54	0.93	1.4	67.4	64.7 - 70.4	
All Abbott Cell-Dyn Instruments	30	53.58	1.60	3.0	53.4	48.7 - 58.4	30	67.40	0.78	1.2	67.3	65.0 - 69.8	
Abbott Cell-Dyn 3200	12	55.34	4.39	7.9	54.7	42.1 - 68.6	12	68.08	2.53	3.7	67.9	60.4 - 75.7	
Abbott Cell-Dyn Ruby	14	52.96	1.19	2.2	53.2	49.3 - 56.6	14	67.45	0.81	1.2	67.4	65.0 - 69.9	
Specimen CL-3							Specimen CL-4						
All Method	32	75.26	1.70	2.3	74.9	70.1 - 80.4	33	54.51	1.56	2.9	54.2	49.8 - 59.2	
All Abbott Cell-Dyn Instruments	29	74.81	0.98	1.3	74.9	71.8 - 77.8	31	54.36	1.50	2.8	54.0	49.8 - 58.9	
Abbott Cell-Dyn 3200	12	75.48	1.92	2.5	75.0	69.7 - 81.3	12	54.54	1.86	3.4	54.4	48.9 - 60.2	
Abbott Cell-Dyn Ruby	13	74.68	0.80	1.1	74.8	72.2 - 77.1	14	54.49	1.40	2.6	54.6	50.2 - 58.8	
Specimen CL-5													
All Method	32	67.50	0.81	1.2	67.3	65.0 - 70.0							
All Abbott Cell-Dyn Instruments	29	67.33	0.61	0.9	67.1	65.4 - 69.2							
Abbott Cell-Dyn 3200	12	68.50	2.39	3.5	67.9	61.3 - 75.7							
Abbott Cell-Dyn Ruby	14	67.03	0.48	0.7	67.0	65.5 - 68.5							

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

Specimen CL-1							Specimen CL-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	31	39.07	1.50	3.8	39.4	34.5 - 43.6	32	26.03	1.30	5.0	26.3	22.1 - 30.0
All Abbott Cell-Dyn Instruments	30	39.18	1.40	3.6	39.5	34.9 - 43.4	30	26.15	1.25	4.8	26.3	22.3 - 30.0
Abbott Cell-Dyn 3200	12	38.64	1.47	3.8	38.7	34.2 - 43.1	13	26.02	1.91	7.3	26.3	20.2 - 31.8
Abbott Cell-Dyn Ruby	13	39.48	1.21	3.1	39.7	35.8 - 43.2	13	25.66	1.30	5.1	25.9	21.7 - 29.6
Specimen CL-3							Specimen CL-4					
All Method	32	14.18	1.17	8.2	14.0	10.6 - 17.7	32	38.15	1.87	4.9	38.6	32.5 - 43.8
All Abbott Cell-Dyn Instruments	30	14.26	1.16	8.1	14.1	10.7 - 17.8	29	38.55	1.36	3.5	38.8	34.4 - 42.7
Abbott Cell-Dyn 3200	13	14.25	1.60	11.2	13.6	9.4 - 19.1	12	38.43	1.27	3.3	38.4	34.6 - 42.3
Abbott Cell-Dyn Ruby	12	14.37	0.82	5.7	14.6	11.9 - 16.9	13	37.74	2.04	5.4	38.2	31.6 - 43.9
Specimen CL-5												
All Method	32	26.19	0.86	3.3	26.4	23.6 - 28.8						
All Abbott Cell-Dyn Instruments	30	26.30	0.76	2.9	26.4	24.0 - 28.6						
Abbott Cell-Dyn 3200	13	25.73	1.44	5.6	26.2	21.4 - 30.1						
Abbott Cell-Dyn Ruby	13	26.44	0.62	2.3	26.5	24.5 - 28.4						

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

Specimen CL-1							Specimen CL-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	33	4.03	1.05	26.0	4.1	0.8 - 7.2	31	3.58	0.69	19.4	3.4	1.5 - 5.7	
All Abbott Cell-Dyn Instruments	31	3.99	1.07	26.8	4.0	0.7 - 7.3	31	3.37	1.07	31.8	3.4	0.1 - 6.6	
Abbott Cell-Dyn 3200	12	3.84	1.37	35.8	4.1	0.0 - 8.0	12	3.10	1.46	47.0	3.4	0.0 - 7.5	
Abbott Cell-Dyn Ruby	14	4.19	0.86	20.4	4.2	1.6 - 6.8	14	3.60	0.83	23.0	3.4	1.1 - 6.1	
Specimen CL-3							Specimen CL-4						
All Method	30	2.42	0.35	14.5	2.4	1.3 - 3.5	31	4.17	0.68	16.2	4.1	2.1 - 6.3	
All Abbott Cell-Dyn Instruments	28	2.43	0.36	14.7	2.5	1.3 - 3.6	29	4.16	0.68	16.5	4.1	2.1 - 6.3	
Abbott Cell-Dyn 3200	12	1.97	0.88	44.7	2.2	0.0 - 4.7	11	3.82	1.15	30.1	4.2	0.3 - 7.3	
Abbott Cell-Dyn Ruby	13	2.49	0.28	11.0	2.5	1.6 - 3.4	14	4.26	0.80	18.9	4.2	1.8 - 6.7	
Specimen CL-5													
All Method	31	3.56	0.38	10.5	3.5	2.4 - 4.7							
All Abbott Cell-Dyn Instruments	29	3.52	0.35	9.9	3.5	2.4 - 4.6							
Abbott Cell-Dyn 3200	12	2.98	1.28	42.9	3.5	0.0 - 6.9							
Abbott Cell-Dyn Ruby	14	3.54	0.29	8.1	3.5	2.6 - 4.4							

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

Specimen CL-1							Specimen CL-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	32	2.36	0.35	14.9	2.4	1.3 - 3.5	33	2.37	0.34	14.4	2.4	1.3 - 3.4
All Abbott Cell-Dyn Instruments	30	2.39	0.33	13.7	2.4	1.4 - 3.4	30	2.45	0.23	9.4	2.4	1.7 - 3.2
Abbott Cell-Dyn 3200	12	2.55	0.55	21.4	2.5	0.9 - 4.2	12	2.36	0.31	13.1	2.4	1.4 - 3.3
Abbott Cell-Dyn Ruby	14	2.36	0.39	16.5	2.4	1.1 - 3.6	14	2.49	0.22	8.9	2.5	1.8 - 3.2
Specimen CL-3							Specimen CL-4					
All Method	30	7.72	0.33	4.2	7.7	6.7 - 8.7	33	2.46	0.35	14.3	2.4	1.4 - 3.6
All Abbott Cell-Dyn Instruments	30	7.72	0.33	4.2	7.7	6.7 - 8.7	31	2.51	0.30	12.0	2.4	1.6 - 3.5
Abbott Cell-Dyn 3200	12	7.72	0.26	3.3	7.7	6.9 - 8.5	12	2.52	0.32	12.5	2.5	1.5 - 3.5
Abbott Cell-Dyn Ruby	13	7.62	0.33	4.4	7.6	6.6 - 8.7	14	2.55	0.28	10.8	2.5	1.7 - 3.4
Specimen CL-5												
All Method	33	2.32	0.29	12.4	2.4	1.4 - 3.2						
All Abbott Cell-Dyn Instruments	29	2.37	0.13	5.7	2.4	1.9 - 2.8						
Abbott Cell-Dyn 3200	12	2.35	0.29	12.2	2.4	1.4 - 3.3						
Abbott Cell-Dyn Ruby	14	2.36	0.14	5.9	2.4	1.9 - 2.8						

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

Specimen CL-1							Specimen CL-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	33	0.68	0.38	55.5	0.8	0.0 - 1.9	33	0.51	0.34	67.0	0.4	0.0 - 1.6
All Abbott Cell-Dyn Instruments	31	0.63	0.31	49.3	0.7	0.0 - 1.6	31	0.47	0.32	68.4	0.4	0.0 - 1.5
Abbott Cell-Dyn 3200	12	0.67	0.31	47.1	0.9	0.0 - 1.7	12	0.57	0.37	65.3	0.5	0.0 - 1.7
Abbott Cell-Dyn Ruby	14	0.74	0.23	30.9	0.8	0.0 - 1.5	14	0.47	0.31	66.8	0.4	0.0 - 1.5
Specimen CL-3							Specimen CL-4					
All Method	32	0.66	0.31	47.2	0.7	0.0 - 1.6	32	0.74	0.35	47.6	0.8	0.0 - 1.8
All Abbott Cell-Dyn Instruments	30	0.67	0.31	46.6	0.8	0.0 - 1.7	31	0.73	0.35	48.0	0.8	0.0 - 1.8
Abbott Cell-Dyn 3200	12	0.59	0.37	63.0	0.7	0.0 - 1.8	12	0.79	0.37	46.8	0.8	0.0 - 2.0
Abbott Cell-Dyn Ruby	13	0.65	0.24	37.3	0.6	0.0 - 1.4	14	0.70	0.35	49.8	0.8	0.0 - 1.8
Specimen CL-5												
All Method	33	0.47	0.26	54.0	0.4	0.0 - 1.3						
All Abbott Cell-Dyn Instruments	31	0.44	0.22	50.5	0.4	0.0 - 1.2						
Abbott Cell-Dyn 3200	12	0.53	0.21	40.7	0.6	0.0 - 1.2						
Abbott Cell-Dyn Ruby	14	0.39	0.13	33.8	0.4	0.0 - 0.8						

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

Specimen SYX-1							Specimen SYX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	56	3.09	0.12	4.0	3.1	2.6 - 3.6	56	7.83	0.17	2.2	7.8	6.6 - 9.1
All Sysmex Instruments	55	3.08	0.12	4.0	3.1	2.6 - 3.6	55	7.83	0.17	2.1	7.8	6.6 - 9.0
Sysmex K - 800,1000,4500,KX-21	34	3.03	0.11	3.8	3.0	2.5 - 3.5	34	7.76	0.14	1.8	7.8	6.5 - 9.0
Sysmex pocH-100i	21	3.17	0.09	2.7	3.2	2.6 - 3.7	21	7.93	0.16	2.0	8.0	6.7 - 9.2
Specimen SYX-3							Specimen SYX-4					
All Method	55	20.59	0.39	1.9	20.6	17.4 - 23.7	55	3.07	0.10	3.3	3.1	2.6 - 3.6
All Sysmex Instruments	54	20.58	0.39	1.9	20.6	17.4 - 23.7	54	3.06	0.10	3.3	3.1	2.6 - 3.6
Sysmex K - 800,1000,4500,KX-21	34	20.69	0.28	1.3	20.7	17.5 - 23.8	33	3.03	0.09	3.1	3.0	2.5 - 3.5
Sysmex pocH-100i	21	20.47	0.58	2.9	20.4	17.4 - 23.6	21	3.12	0.08	2.7	3.1	2.6 - 3.6
Specimen SYX-5												
All Method	56	7.85	0.19	2.4	7.8	6.6 - 9.1						
All Sysmex Instruments	55	7.85	0.18	2.4	7.8	6.6 - 9.1						
Sysmex K - 800,1000,4500,KX-21	34	7.77	0.14	1.8	7.8	6.6 - 9.0						
Sysmex pocH-100i	21	7.98	0.18	2.2	8.0	6.7 - 9.2						

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

Specimen SYX-1							Specimen SYX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	56	2.480	0.034	1.4	2.48	2.33 - 2.63	54	4.051	0.057	1.4	4.05	3.80 - 4.30	
All Sysmex Instruments	55	2.480	0.035	1.4	2.48	2.33 - 2.63	54	4.055	0.062	1.5	4.05	3.81 - 4.30	
Sysmex K - 800,1000,4500,KX-21	34	2.476	0.028	1.1	2.47	2.32 - 2.63	32	4.031	0.035	0.9	4.04	3.78 - 4.28	
Sysmex pocH-100i	21	2.486	0.043	1.7	2.49	2.33 - 2.64	21	4.101	0.058	1.4	4.11	3.85 - 4.35	
Specimen SYX-3							Specimen SYX-4						
All Method	54	5.928	0.099	1.7	5.93	5.57 - 6.29	56	2.484	0.039	1.6	2.48	2.33 - 2.64	
All Sysmex Instruments	53	5.928	0.100	1.7	5.93	5.57 - 6.29	55	2.484	0.039	1.6	2.48	2.33 - 2.64	
Sysmex K - 800,1000,4500,KX-21	34	5.901	0.077	1.3	5.92	5.54 - 6.26	34	2.472	0.031	1.3	2.47	2.32 - 2.63	
Sysmex pocH-100i	19	5.978	0.119	2.0	6.01	5.61 - 6.34	21	2.503	0.043	1.7	2.50	2.35 - 2.66	
Specimen SYX-5													
All Method	55	4.050	0.065	1.6	4.06	3.80 - 4.30							
All Sysmex Instruments	54	4.051	0.065	1.6	4.06	3.80 - 4.30							
Sysmex K - 800,1000,4500,KX-21	33	4.030	0.055	1.4	4.04	3.78 - 4.28							
Sysmex pocH-100i	21	4.082	0.068	1.7	4.09	3.83 - 4.33							

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

Specimen SYX-1							Specimen SYX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	55	6.21	0.10	1.6	6.2	5.7 - 6.7	56	12.08	0.20	1.6	12.1	11.2 - 13.0
All Sysmex Instruments	54	6.21	0.10	1.7	6.2	5.7 - 6.7	55	12.08	0.20	1.6	12.1	11.2 - 13.0
Sysmex K - 800,1000,4500,KX-21	33	6.21	0.09	1.4	6.2	5.7 - 6.7	34	12.17	0.12	1.0	12.2	11.3 - 13.1
Sysmex pocH-100i	21	6.20	0.12	2.0	6.2	5.7 - 6.7	21	11.94	0.22	1.8	11.9	11.1 - 12.8
Specimen SYX-3							Specimen SYX-4					
All Method	54	18.82	0.26	1.4	18.8	17.5 - 20.2	54	6.21	0.11	1.8	6.2	5.7 - 6.7
All Sysmex Instruments	53	18.82	0.26	1.4	18.8	17.5 - 20.2	53	6.22	0.11	1.8	6.2	5.7 - 6.7
Sysmex K - 800,1000,4500,KX-21	34	18.93	0.19	1.0	18.9	17.6 - 20.3	34	6.26	0.09	1.4	6.3	5.8 - 6.8
Sysmex pocH-100i	20	18.58	0.32	1.7	18.6	17.2 - 19.9	20	6.11	0.12	2.0	6.1	5.6 - 6.6
Specimen SYX-5												
All Method	54	12.08	0.17	1.4	12.1	11.2 - 13.0						
All Sysmex Instruments	53	12.08	0.17	1.4	12.1	11.2 - 13.0						
Sysmex K - 800,1000,4500,KX-21	33	12.18	0.09	0.8	12.2	11.3 - 13.1						
Sysmex pocH-100i	21	11.90	0.17	1.4	11.9	11.0 - 12.8						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–HEMATOCRIT (percent)

Specimen SYX-1							Specimen SYX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	56	18.09	0.57	3.2	18.0	17.0 - 19.2	56	33.05	1.28	3.9	32.5	31.0 - 35.1
All Sysmex Instruments	55	18.09	0.58	3.2	18.0	17.0 - 19.2	55	33.05	1.29	3.9	32.4	31.0 - 35.1
Sysmex K - 800,1000,4500,KX-21	34	17.73	0.27	1.5	17.7	16.6 - 18.8	34	32.14	0.43	1.3	32.2	30.2 - 34.1
Sysmex pocH-100i	21	18.67	0.46	2.4	18.8	17.5 - 19.8	21	34.54	0.67	1.9	34.7	32.4 - 36.7
Specimen SYX-3							Specimen SYX-4					
All Method	54	52.84	1.38	2.6	52.5	49.6 - 56.1	55	18.14	0.65	3.6	18.0	17.0 - 19.3
All Sysmex Instruments	53	52.84	1.39	2.6	52.5	49.6 - 56.1	54	18.14	0.65	3.6	18.0	17.0 - 19.3
Sysmex K - 800,1000,4500,KX-21	34	52.04	0.80	1.5	52.1	48.9 - 55.2	34	17.72	0.31	1.7	17.7	16.6 - 18.8
Sysmex pocH-100i	20	54.45	1.23	2.3	54.6	51.1 - 57.8	20	18.84	0.44	2.3	18.8	17.7 - 20.0
Specimen SYX-5												
All Method	56	33.02	1.20	3.6	32.7	31.0 - 35.1						
All Sysmex Instruments	55	33.03	1.21	3.7	32.6	31.0 - 35.1						
Sysmex K - 800,1000,4500,KX-21	34	32.19	0.49	1.5	32.2	30.2 - 34.2						
Sysmex pocH-100i	21	34.39	0.66	1.9	34.6	32.3 - 36.5						

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

Specimen SYX-1							Specimen SYX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	56	60.1	4.4	7.2	60	45 - 76	55	181.5	9.3	5.1	182	136 - 227	
All Sysmex Instruments	55	59.9	4.1	6.8	60	44 - 75	54	181.5	9.4	5.2	182	136 - 227	
Sysmex K - 800,1000,4500,KX-21	34	60.4	4.3	7.1	60	45 - 76	33	185.3	7.9	4.3	186	138 - 232	
Sysmex pocH-100i	21	59.2	3.7	6.2	59	44 - 74	21	175.5	8.5	4.9	177	131 - 220	
Specimen SYX-3							Specimen SYX-4						
All Method	55	363.3	19.7	5.4	366	272 - 455	56	60.3	4.3	7.1	60	45 - 76	
All Sysmex Instruments	54	363.4	19.8	5.4	367	272 - 455	54	59.9	3.9	6.5	59	44 - 75	
Sysmex K - 800,1000,4500,KX-21	33	373.9	13.9	3.7	375	280 - 468	34	61.2	3.6	5.9	62	45 - 77	
Sysmex pocH-100i	21	347.0	16.3	4.7	349	260 - 434	20	57.8	3.3	5.8	58	43 - 73	
Specimen SYX-5													
All Method	55	179.8	7.6	4.2	182	134 - 225							
All Sysmex Instruments	54	179.7	7.6	4.2	182	134 - 225							
Sysmex K - 800,1000,4500,KX-21	32	183.1	5.1	2.8	183	137 - 229							
Sysmex pocH-100i	21	175.4	7.7	4.4	175	131 - 220							

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

Specimen SYX-1							Specimen SYX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	52	13.48	1.00	7.4	13.4	10.4 - 16.5	53	30.57	0.91	3.0	30.5	27.8 - 33.4	
All Sysmex Instruments	51	13.50	1.00	7.4	13.4	10.5 - 16.5	52	30.58	0.92	3.0	30.6	27.8 - 33.4	
Sysmex K - 800,1000,4500,KX-21	32	13.84	1.00	7.2	13.7	10.8 - 16.9	32	30.84	0.88	2.9	31.0	28.1 - 33.5	
Sysmex pocH-100i	19	12.92	0.69	5.4	12.8	10.8 - 15.0	20	30.17	0.84	2.8	30.1	27.6 - 32.7	
Specimen SYX-3							Specimen SYX-4						
All Method	53	61.59	0.76	1.2	61.6	59.3 - 63.9	53	13.53	1.40	10.4	13.5	9.3 - 17.8	
All Sysmex Instruments	52	61.62	0.74	1.2	61.6	59.4 - 63.9	52	13.54	1.42	10.5	13.6	9.2 - 17.8	
Sysmex K - 800,1000,4500,KX-21	32	61.88	0.62	1.0	61.8	60.0 - 63.8	32	14.21	1.27	8.9	14.3	10.4 - 18.1	
Sysmex pocH-100i	20	61.20	0.73	1.2	61.3	59.0 - 63.4	20	12.48	0.91	7.3	12.4	9.7 - 15.2	
Specimen SYX-5													
All Method	53	30.43	1.02	3.4	30.4	27.3 - 33.5							
All Sysmex Instruments	52	30.40	1.01	3.3	30.4	27.3 - 33.5							
Sysmex K - 800,1000,4500,KX-21	32	30.72	0.97	3.2	30.9	27.7 - 33.7							
Sysmex pocH-100i	20	29.90	0.88	3.0	29.9	27.2 - 32.6							

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

<u>Instrument</u>	Specimen SYX-1						Specimen SYX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	52	18.10	1.63	9.0	18.2	13.2 - 23.0	52	17.36	1.19	6.8	17.1	13.8 - 21.0
All Sysmex Instruments	51	18.10	1.64	9.1	18.1	13.1 - 23.1	51	17.35	1.20	6.9	16.9	13.7 - 21.0
Sysmex K - 800,1000,4500,KX-21	31	18.85	1.22	6.5	18.8	15.1 - 22.6	31	17.98	1.11	6.1	18.1	14.6 - 21.4
Sysmex pocH-100i	20	16.93	1.54	9.1	17.1	12.2 - 21.6	20	16.38	0.43	2.6	16.4	15.0 - 17.7
	Specimen SYX-3						Specimen SYX-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	52	13.22	0.76	5.7	13.3	10.9 - 15.5	52	18.47	1.32	7.1	18.7	14.5 - 22.5
All Sysmex Instruments	51	13.21	0.76	5.8	13.3	10.9 - 15.5	51	18.44	1.30	7.1	18.7	14.5 - 22.4
Sysmex K - 800,1000,4500,KX-21	30	13.64	0.52	3.8	13.7	12.0 - 15.2	31	19.03	1.03	5.4	19.0	15.9 - 22.2
Sysmex pocH-100i	20	12.65	0.60	4.7	12.7	10.8 - 14.5	20	17.51	1.14	6.5	17.6	14.0 - 21.0
	Specimen SYX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	52	17.38	1.34	7.7	17.3	13.3 - 21.4						
All Sysmex Instruments	51	17.40	1.34	7.7	17.3	13.3 - 21.5						
Sysmex K - 800,1000,4500,KX-21	31	18.09	1.12	6.2	17.9	14.7 - 21.5						
Sysmex pocH-100i	20	16.35	0.88	5.4	16.3	13.7 - 19.0						

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

<u>Instrument</u>	Specimen SYX-1						Specimen SYX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	52	68.50	2.08	3.0	68.6	62.2 - 74.8	52	52.13	1.63	3.1	52.1	47.2 - 57.1
All Sysmex Instruments	51	68.49	2.10	3.1	68.6	62.1 - 74.9	51	52.13	1.65	3.2	52.1	47.1 - 57.1
Sysmex K - 800,1000,4500,KX-21	31	67.32	1.56	2.3	67.2	62.6 - 72.0	31	51.27	1.43	2.8	51.4	46.9 - 55.6
Sysmex pocH-100i	20	70.30	1.46	2.1	70.2	65.9 - 74.7	20	53.46	0.94	1.8	53.6	50.6 - 56.3
	Specimen SYX-3						Specimen SYX-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	51	25.21	1.04	4.1	25.1	22.0 - 28.4	52	67.88	2.32	3.4	67.7	60.9 - 74.9
All Sysmex Instruments	50	25.19	1.04	4.1	25.0	22.0 - 28.4	51	67.90	2.34	3.4	67.7	60.8 - 75.0
Sysmex K - 800,1000,4500,KX-21	30	24.55	0.69	2.8	24.5	22.4 - 26.7	31	66.54	1.67	2.5	67.0	61.5 - 71.6
Sysmex pocH-100i	20	26.16	0.65	2.5	26.1	24.2 - 28.2	20	70.02	1.51	2.2	70.2	65.4 - 74.6
	Specimen SYX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	52	52.24	1.70	3.2	52.0	47.1 - 57.4						
All Sysmex Instruments	51	52.24	1.71	3.3	51.9	47.0 - 57.4						
Sysmex K - 800,1000,4500,KX-21	31	51.26	1.19	2.3	51.3	47.6 - 54.9						
Sysmex pocH-100i	20	53.76	1.23	2.3	54.1	50.0 - 57.5						

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

Specimen HD-1							Specimen HD-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	812	3.32	0.16	4.7	3.3	2.8 - 3.9	803	7.50	0.29	3.8	7.5	6.3 - 8.7
All Abbott Cell-Dyn Instruments	309	3.34	0.15	4.5	3.3	2.8 - 3.9	304	7.53	0.33	4.4	7.5	6.4 - 8.7
All ABX Instruments	116	3.22	0.10	3.1	3.2	2.7 - 3.8	113	7.31	0.19	2.6	7.3	6.2 - 8.5
All COULTER Instruments	295	3.36	0.13	3.7	3.4	2.8 - 3.9	292	7.55	0.21	2.7	7.6	6.4 - 8.7
All Danam/Drew Scientific Instruments	15	3.29	0.15	4.5	3.3	2.7 - 3.8	15	7.41	0.34	4.6	7.4	6.2 - 8.6
Abbott Cell-Dyn 1700	40	3.42	0.14	4.2	3.4	2.9 - 4.0	40	7.67	0.36	4.7	7.7	6.5 - 8.9
Abbott Cell-Dyn 1800	161	3.34	0.13	3.9	3.3	2.8 - 3.9	158	7.60	0.26	3.5	7.6	6.4 - 8.8
Abbott Cell-Dyn Emerald	103	3.30	0.16	4.7	3.3	2.8 - 3.8	101	7.34	0.34	4.6	7.3	6.2 - 8.5
ABX Diagnostics Micros/45/60	116	3.22	0.10	3.1	3.2	2.7 - 3.8	113	7.31	0.19	2.6	7.3	6.2 - 8.5
Boule Medonic CA 620	13	3.48	0.11	3.1	3.5	2.9 - 4.0	13	7.89	0.19	2.5	7.9	6.7 - 9.1
Boule Medonic M series	58	3.10	0.12	3.9	3.1	2.6 - 3.6	58	7.34	0.21	2.9	7.3	6.2 - 8.5
COULTER AcT 8/10	19	3.36	0.12	3.5	3.4	2.8 - 3.9	19	7.57	0.18	2.3	7.5	6.4 - 8.8
COULTER AcT diff/diff 2	273	3.37	0.13	3.8	3.4	2.8 - 3.9	269	7.55	0.21	2.8	7.6	6.4 - 8.7
Drew Scientific D3	15	3.29	0.15	4.5	3.3	2.7 - 3.8	15	7.41	0.34	4.6	7.4	6.2 - 8.6

Specimen HD-3							Specimen HD-4					
All Method	809	16.06	0.67	4.2	16.1	13.6 - 18.5	813	7.82	0.30	3.8	7.8	6.6 - 9.0
All Abbott Cell-Dyn Instruments	311	16.10	0.69	4.3	16.1	13.6 - 18.6	310	7.89	0.34	4.3	7.9	6.7 - 9.1
All ABX Instruments	116	16.36	0.61	3.7	16.4	13.9 - 18.9	116	7.64	0.21	2.8	7.7	6.4 - 8.8
All COULTER Instruments	299	16.07	0.48	3.0	16.1	13.6 - 18.5	295	7.87	0.20	2.5	7.9	6.6 - 9.1
All Danam/Drew Scientific Instruments	14	16.17	0.62	3.8	16.1	13.7 - 18.6	15	7.65	0.25	3.3	7.7	6.4 - 8.8
Abbott Cell-Dyn 1700	40	16.12	0.69	4.3	16.1	13.6 - 18.6	41	7.98	0.42	5.3	8.0	6.7 - 9.2
Abbott Cell-Dyn 1800	163	16.09	0.64	4.0	16.1	13.6 - 18.6	163	7.99	0.26	3.3	8.0	6.7 - 9.2
Abbott Cell-Dyn Emerald	102	16.10	0.76	4.7	16.1	13.6 - 18.6	103	7.64	0.32	4.1	7.6	6.4 - 8.8
ABX Diagnostics Micros/45/60	116	16.36	0.61	3.7	16.4	13.9 - 18.9	116	7.64	0.21	2.8	7.7	6.4 - 8.8
Boule Medonic CA 620	13	16.11	0.63	3.9	16.1	13.6 - 18.6	13	8.12	0.15	1.9	8.1	6.9 - 9.4
Boule Medonic M series	56	14.86	0.56	3.8	14.9	12.6 - 17.1	57	7.50	0.24	3.2	7.5	6.3 - 8.7
COULTER AcT 8/10	19	16.34	0.52	3.2	16.3	13.8 - 18.8	19	7.88	0.27	3.4	7.9	6.6 - 9.1
COULTER AcT diff/diff 2	274	16.05	0.45	2.8	16.1	13.6 - 18.5	273	7.87	0.19	2.4	7.9	6.6 - 9.1
Drew Scientific D3	14	16.17	0.62	3.8	16.1	13.7 - 18.6	15	7.65	0.25	3.3	7.7	6.4 - 8.8

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

Specimen HD-5						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	814	3.40	0.16	4.7	3.4	2.8 - 4.0
All Abbott Cell-Dyn Instruments	311	3.41	0.16	4.8	3.4	2.8 - 4.0
All ABX Instruments	115	3.27	0.10	2.9	3.3	2.7 - 3.8
All COULTER Instruments	298	3.47	0.12	3.5	3.5	2.9 - 4.0
All Danam/Drew Scientific Instruments	15	3.33	0.15	4.6	3.3	2.8 - 3.9
Abbott Cell-Dyn 1700	41	3.47	0.21	6.0	3.5	2.9 - 4.0
Abbott Cell-Dyn 1800	163	3.40	0.13	3.8	3.4	2.8 - 4.0
Abbott Cell-Dyn Emerald	103	3.40	0.18	5.3	3.4	2.8 - 4.0
ABX Diagnostics Micros/45/60	115	3.27	0.10	2.9	3.3	2.7 - 3.8
Boule Medonic CA 620	13	3.51	0.10	2.7	3.5	2.9 - 4.1
Boule Medonic M series	58	3.25	0.13	4.1	3.3	2.7 - 3.8
COULTER AcT 8/10	19	3.45	0.12	3.5	3.5	2.9 - 4.0
COULTER AcT diff/diff 2	274	3.47	0.12	3.4	3.5	2.9 - 4.0
Drew Scientific D3	15	3.33	0.15	4.6	3.3	2.8 - 3.9

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

Specimen HD-1							Specimen HD-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	811	2.775	0.103	3.7	2.76	2.60 - 2.95	804	5.419	0.144	2.7	5.43	5.09 - 5.75
All Abbott Cell-Dyn Instruments	311	2.850	0.105	3.7	2.87	2.67 - 3.03	310	5.437	0.154	2.8	5.45	5.11 - 5.77
All ABX Instruments	115	2.707	0.062	2.3	2.72	2.54 - 2.87	113	5.403	0.103	1.9	5.41	5.07 - 5.73
All COULTER Instruments	296	2.739	0.075	2.7	2.74	2.57 - 2.91	293	5.402	0.147	2.7	5.40	5.07 - 5.73
All Danam/Drew Scientific Instruments	15	2.822	0.092	3.3	2.82	2.65 - 3.00	15	5.509	0.192	3.5	5.50	5.17 - 5.84
Abbott Cell-Dyn 1700	41	2.851	0.091	3.2	2.86	2.67 - 3.03	39	5.510	0.141	2.6	5.53	5.17 - 5.85
Abbott Cell-Dyn 1800	161	2.905	0.066	2.3	2.90	2.73 - 3.08	162	5.448	0.140	2.6	5.46	5.12 - 5.78
Abbott Cell-Dyn Emerald	102	2.754	0.090	3.3	2.75	2.58 - 2.92	104	5.386	0.165	3.1	5.41	5.06 - 5.71
ABX Diagnostics Micros/45/60	115	2.707	0.062	2.3	2.72	2.54 - 2.87	113	5.403	0.103	1.9	5.41	5.07 - 5.73
Boule Medonic CA 620	13	2.755	0.044	1.6	2.75	2.58 - 2.92	13	5.444	0.091	1.7	5.46	5.11 - 5.78
Boule Medonic M series	58	2.700	0.047	1.7	2.70	2.53 - 2.87	56	5.426	0.097	1.8	5.44	5.10 - 5.76
COULTER AcT 8/10	18	2.758	0.061	2.2	2.76	2.59 - 2.93	19	5.449	0.116	2.1	5.42	5.12 - 5.78
COULTER AcT diff/diff 2	274	2.738	0.076	2.8	2.74	2.57 - 2.91	271	5.399	0.149	2.8	5.40	5.07 - 5.73
Drew Scientific D3	15	2.822	0.092	3.3	2.82	2.65 - 3.00	15	5.509	0.192	3.5	5.50	5.17 - 5.84

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

Specimen HD-3							Specimen HD-4					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	798	6.082	0.147	2.4	6.08	5.71 - 6.45	806	2.547	0.104	4.1	2.54	2.39 - 2.70
All Abbott Cell-Dyn Instruments	303	6.053	0.147	2.4	6.05	5.68 - 6.42	310	2.624	0.099	3.8	2.64	2.46 - 2.79
All ABX Instruments	114	6.129	0.137	2.2	6.13	5.76 - 6.50	115	2.473	0.059	2.4	2.48	2.32 - 2.63
All COULTER Instruments	295	6.079	0.142	2.3	6.08	5.71 - 6.45	285	2.521	0.062	2.4	2.52	2.36 - 2.68
All Danam/Drew Scientific Instruments	15	6.161	0.194	3.2	6.14	5.79 - 6.54	14	2.564	0.061	2.4	2.56	2.40 - 2.72
Abbott Cell-Dyn 1700	38	6.137	0.154	2.5	6.16	5.76 - 6.51	39	2.628	0.080	3.0	2.63	2.47 - 2.79
Abbott Cell-Dyn 1800	160	6.047	0.123	2.0	6.06	5.68 - 6.41	162	2.672	0.079	2.9	2.68	2.51 - 2.84
Abbott Cell-Dyn Emerald	101	6.018	0.172	2.9	6.00	5.65 - 6.38	102	2.549	0.079	3.1	2.54	2.39 - 2.71
ABX Diagnostics Micros/45/60	114	6.129	0.137	2.2	6.13	5.76 - 6.50	115	2.473	0.059	2.4	2.48	2.32 - 2.63
Boule Medonic CA 620	13	6.099	0.167	2.7	6.11	5.73 - 6.47	13	2.515	0.053	2.1	2.52	2.36 - 2.67
Boule Medonic M series	55	6.131	0.130	2.1	6.16	5.76 - 6.50	55	2.478	0.052	2.1	2.48	2.32 - 2.63
COULTER AcT 8/10	19	6.130	0.154	2.5	6.11	5.76 - 6.50	18	2.526	0.075	3.0	2.52	2.37 - 2.68
COULTER AcT diff/diff 2	273	6.078	0.145	2.4	6.08	5.71 - 6.45	263	2.521	0.060	2.4	2.52	2.37 - 2.68
Drew Scientific D3	15	6.161	0.194	3.2	6.14	5.79 - 6.54	14	2.564	0.061	2.4	2.56	2.40 - 2.72
Specimen HD-5												
All Method	812	4.654	0.122	2.6	4.66	4.37 - 4.94						
All Abbott Cell-Dyn Instruments	312	4.688	0.131	2.8	4.70	4.40 - 4.97						
All ABX Instruments	115	4.626	0.106	2.3	4.64	4.34 - 4.91						
All COULTER Instruments	298	4.633	0.114	2.5	4.64	4.35 - 4.92						
All Danam/Drew Scientific Instruments	15	4.660	0.168	3.6	4.64	4.38 - 4.94						
Abbott Cell-Dyn 1700	40	4.762	0.118	2.5	4.79	4.47 - 5.05						
Abbott Cell-Dyn 1800	160	4.731	0.091	1.9	4.73	4.44 - 5.02						
Abbott Cell-Dyn Emerald	104	4.601	0.132	2.9	4.61	4.32 - 4.88						
ABX Diagnostics Micros/45/60	115	4.626	0.106	2.3	4.64	4.34 - 4.91						
Boule Medonic CA 620	13	4.650	0.089	1.9	4.66	4.37 - 4.93						
Boule Medonic M series	57	4.641	0.086	1.8	4.64	4.36 - 4.92						
COULTER AcT 8/10	18	4.665	0.072	1.5	4.67	4.38 - 4.95						
COULTER AcT diff/diff 2	276	4.631	0.116	2.5	4.64	4.35 - 4.91						
Drew Scientific D3	15	4.660	0.168	3.6	4.64	4.38 - 4.94						

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

Specimen HD-1							Specimen HD-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	821	8.60	0.27	3.2	8.6	8.0 - 9.3	823	16.91	0.47	2.8	16.9	15.7 - 18.1
All Abbott Cell-Dyn Instruments	312	8.82	0.24	2.7	8.8	8.2 - 9.5	314	17.30	0.36	2.1	17.3	16.0 - 18.6
All ABX Instruments	115	8.44	0.13	1.6	8.4	7.8 - 9.1	116	16.47	0.24	1.4	16.5	15.3 - 17.7
All COULTER Instruments	296	8.46	0.20	2.3	8.5	7.8 - 9.1	298	16.69	0.36	2.2	16.7	15.5 - 17.9
All Danam/Drew Scientific Instruments	15	8.60	0.28	3.2	8.6	7.9 - 9.3	15	16.87	0.47	2.8	16.8	15.6 - 18.1
Abbott Cell-Dyn 1700	41	8.74	0.20	2.2	8.8	8.1 - 9.4	40	17.03	0.33	1.9	17.1	15.8 - 18.3
Abbott Cell-Dyn 1800	165	8.96	0.17	1.9	9.0	8.3 - 9.6	162	17.44	0.25	1.5	17.5	16.2 - 18.7
Abbott Cell-Dyn Emerald	102	8.61	0.20	2.4	8.6	8.0 - 9.3	103	17.16	0.36	2.1	17.2	15.9 - 18.4
ABX Diagnostics Micros/45/60	115	8.44	0.13	1.6	8.4	7.8 - 9.1	116	16.47	0.24	1.4	16.5	15.3 - 17.7
Boule Medonic CA 620	13	8.62	0.12	1.4	8.6	8.0 - 9.3	13	16.73	0.16	1.0	16.7	15.5 - 18.0
Boule Medonic M series	58	8.57	0.15	1.8	8.6	7.9 - 9.2	58	16.86	0.29	1.7	16.9	15.6 - 18.1
COULTER AcT 8/10	19	8.57	0.20	2.3	8.6	7.9 - 9.2	19	16.71	0.38	2.3	16.7	15.5 - 17.9
COULTER AcT diff/diff 2	273	8.44	0.19	2.3	8.4	7.8 - 9.1	275	16.68	0.36	2.2	16.7	15.5 - 17.9
Drew Scientific D3	15	8.60	0.28	3.2	8.6	7.9 - 9.3	15	16.87	0.47	2.8	16.8	15.6 - 18.1

Specimen HD-3							Specimen HD-4					
All Method	822	18.65	0.51	2.7	18.6	17.3 - 20.0	823	8.06	0.29	3.6	8.0	7.4 - 8.7
All Abbott Cell-Dyn Instruments	311	19.03	0.40	2.1	19.1	17.6 - 20.4	314	8.31	0.24	2.9	8.3	7.7 - 8.9
All ABX Instruments	115	18.22	0.28	1.5	18.2	16.9 - 19.5	115	7.82	0.14	1.7	7.8	7.2 - 8.4
All COULTER Instruments	295	18.43	0.39	2.1	18.4	17.1 - 19.8	297	7.88	0.17	2.1	7.9	7.3 - 8.5
All Danam/Drew Scientific Instruments	15	18.61	0.56	3.0	18.4	17.3 - 20.0	15	7.99	0.19	2.3	8.0	7.4 - 8.6
Abbott Cell-Dyn 1700	40	18.73	0.43	2.3	18.8	17.4 - 20.1	40	8.26	0.16	1.9	8.2	7.6 - 8.9
Abbott Cell-Dyn 1800	162	19.12	0.33	1.7	19.1	17.7 - 20.5	165	8.47	0.14	1.7	8.5	7.8 - 9.1
Abbott Cell-Dyn Emerald	103	19.01	0.43	2.3	19.0	17.6 - 20.4	102	8.06	0.17	2.1	8.1	7.4 - 8.7
ABX Diagnostics Micros/45/60	115	18.22	0.28	1.5	18.2	16.9 - 19.5	115	7.82	0.14	1.7	7.8	7.2 - 8.4
Boule Medonic CA 620	13	18.35	0.29	1.6	18.4	17.0 - 19.7	13	8.04	0.16	1.9	8.0	7.4 - 8.7
Boule Medonic M series	56	18.67	0.33	1.8	18.7	17.3 - 20.0	57	8.11	0.14	1.8	8.1	7.5 - 8.7
COULTER AcT 8/10	19	18.38	0.56	3.1	18.3	17.0 - 19.7	19	7.97	0.21	2.6	7.9	7.4 - 8.6
COULTER AcT diff/diff 2	273	18.44	0.39	2.1	18.4	17.1 - 19.8	274	7.88	0.16	2.1	7.9	7.3 - 8.5
Drew Scientific D3	15	18.61	0.56	3.0	18.4	17.3 - 20.0	15	7.99	0.19	2.3	8.0	7.4 - 8.6

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

Specimen HD-5						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	825	14.11	0.35	2.5	14.1	13.1 - 15.1
All Abbott Cell-Dyn Instruments	314	14.39	0.27	1.9	14.4	13.3 - 15.4
All ABX Instruments	114	13.84	0.22	1.6	13.9	12.8 - 14.9
All COULTER Instruments	301	13.95	0.29	2.1	13.9	12.9 - 15.0
All Danam/Drew Scientific Instruments	15	14.07	0.43	3.0	14.1	13.0 - 15.1
Abbott Cell-Dyn 1700	41	14.21	0.28	2.0	14.2	13.2 - 15.3
Abbott Cell-Dyn 1800	164	14.45	0.23	1.6	14.4	13.4 - 15.5
Abbott Cell-Dyn Emerald	104	14.36	0.29	2.0	14.4	13.3 - 15.4
ABX Diagnostics Micros/45/60	114	13.84	0.22	1.6	13.9	12.8 - 14.9
Boule Medonic CA 620	13	14.03	0.19	1.4	14.1	13.0 - 15.1
Boule Medonic M series	58	14.05	0.24	1.7	14.1	13.0 - 15.1
COULTER AcT 8/10	19	13.96	0.25	1.8	14.0	12.9 - 15.0
COULTER AcT diff/diff 2	278	13.94	0.29	2.1	13.9	12.9 - 15.0
Drew Scientific D3	15	14.07	0.43	3.0	14.1	13.0 - 15.1

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

Specimen HD-1							Specimen HD-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	818	26.60	1.47	5.5	26.5	25.0 - 28.2	811	52.15	1.94	3.7	52.1	49.0 - 55.3
All Abbott Cell-Dyn Instruments	314	27.96	0.99	3.5	28.0	26.2 - 29.7	311	53.49	1.67	3.1	53.6	50.2 - 56.7
All ABX Instruments	115	24.74	0.64	2.6	24.8	23.2 - 26.3	113	50.40	1.08	2.1	50.3	47.3 - 53.5
All COULTER Instruments	296	26.08	0.78	3.0	26.1	24.5 - 27.7	297	51.55	1.56	3.0	51.5	48.4 - 54.7
All Danam/Drew Scientific Instruments	15	27.77	0.99	3.6	27.9	26.1 - 29.5	15	53.83	2.06	3.8	53.8	50.5 - 57.1
Abbott Cell-Dyn 1700	40	27.39	1.13	4.1	27.7	25.7 - 29.1	38	53.13	1.68	3.2	53.5	49.9 - 56.4
Abbott Cell-Dyn 1800	163	28.29	0.74	2.6	28.3	26.5 - 30.0	162	53.35	1.33	2.5	53.4	50.1 - 56.6
Abbott Cell-Dyn Emerald	102	27.70	1.00	3.6	27.9	26.0 - 29.4	104	53.86	2.02	3.8	54.0	50.6 - 57.1
ABX Diagnostics Micros/45/60	115	24.74	0.64	2.6	24.8	23.2 - 26.3	113	50.40	1.08	2.1	50.3	47.3 - 53.5
Boule Medonic CA 620	13	25.20	0.41	1.6	25.2	23.6 - 26.8	13	49.88	0.90	1.8	49.6	46.8 - 52.9
Boule Medonic M series	58	25.67	0.58	2.2	25.7	24.1 - 27.3	57	52.01	1.43	2.8	52.1	48.8 - 55.2
COULTER AcT 8/10	18	26.55	0.85	3.2	26.5	24.9 - 28.2	19	52.69	1.49	2.8	52.7	49.5 - 55.9
COULTER AcT diff/diff 2	274	26.05	0.77	2.9	26.1	24.4 - 27.7	275	51.48	1.54	3.0	51.5	48.3 - 54.6
Drew Scientific D3	15	27.77	0.99	3.6	27.9	26.1 - 29.5	15	53.83	2.06	3.8	53.8	50.5 - 57.1

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

Specimen HD-3							Specimen HD-4					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	798	61.96	2.80	4.5	61.9	58.2 - 65.7	809	24.60	1.53	6.2	24.5	23.1 - 26.1
All Abbott Cell-Dyn Instruments	305	63.30	2.83	4.5	62.9	59.4 - 67.1	300	26.08	0.84	3.2	26.1	24.5 - 27.7
All ABX Instruments	115	60.91	2.19	3.6	60.8	57.2 - 64.6	114	22.70	0.74	3.2	22.9	21.3 - 24.1
All COULTER Instruments	294	61.53	2.53	4.1	61.3	57.8 - 65.3	288	24.23	0.67	2.8	24.2	22.7 - 25.7
All Danam/Drew Scientific Instruments	15	63.32	2.84	4.5	63.0	59.5 - 67.2	14	25.44	0.33	1.3	25.5	23.9 - 27.0
Abbott Cell-Dyn 1700	37	64.21	2.88	4.5	64.0	60.3 - 68.1	38	25.62	1.08	4.2	25.7	24.0 - 27.2
Abbott Cell-Dyn 1800	161	63.89	2.83	4.4	63.5	60.0 - 67.8	157	26.27	0.72	2.7	26.3	24.6 - 27.9
Abbott Cell-Dyn Emerald	100	61.85	2.18	3.5	61.8	58.1 - 65.6	99	25.93	0.85	3.3	25.9	24.3 - 27.5
ABX Diagnostics Micros/45/60	115	60.91	2.19	3.6	60.8	57.2 - 64.6	114	22.70	0.74	3.2	22.9	21.3 - 24.1
Boule Medonic CA 620	13	58.65	2.49	4.2	59.0	55.1 - 62.2	12	23.17	0.36	1.6	23.1	21.7 - 24.6
Boule Medonic M series	55	60.31	2.62	4.3	60.5	56.6 - 64.0	57	23.64	0.77	3.2	23.8	22.2 - 25.1
COULTER AcT 8/10	19	62.59	3.02	4.8	62.1	58.8 - 66.4	18	24.59	0.95	3.8	24.6	23.1 - 26.1
COULTER AcT diff/diff 2	271	61.50	2.48	4.0	61.3	57.8 - 65.2	266	24.21	0.65	2.7	24.2	22.7 - 25.7
Drew Scientific D3	15	63.32	2.84	4.5	63.0	59.5 - 67.2	14	25.44	0.33	1.3	25.5	23.9 - 27.0
Specimen HD-5												
All Method	819	43.83	1.72	3.9	43.8	41.1 - 46.5						
All Abbott Cell-Dyn Instruments	310	45.18	1.24	2.7	45.2	42.4 - 47.9						
All ABX Instruments	114	42.28	1.04	2.5	42.3	39.7 - 44.9						
All COULTER Instruments	299	43.38	1.18	2.7	43.4	40.7 - 46.0						
All Danam/Drew Scientific Instruments	15	45.15	1.56	3.5	45.0	42.4 - 47.9						
Abbott Cell-Dyn 1700	40	45.18	1.60	3.5	45.2	42.4 - 47.9						
Abbott Cell-Dyn 1800	161	45.19	1.03	2.3	45.2	42.4 - 48.0						
Abbott Cell-Dyn Emerald	103	45.23	1.37	3.0	45.2	42.5 - 48.0						
ABX Diagnostics Micros/45/60	114	42.28	1.04	2.5	42.3	39.7 - 44.9						
Boule Medonic CA 620	13	40.69	0.94	2.3	40.5	38.2 - 43.2						
Boule Medonic M series	57	42.51	1.11	2.6	42.5	39.9 - 45.1						
COULTER AcT 8/10	18	43.97	1.10	2.5	44.0	41.3 - 46.7						
COULTER AcT diff/diff 2	277	43.35	1.17	2.7	43.3	40.7 - 46.0						
Drew Scientific D3	15	45.15	1.56	3.5	45.0	42.4 - 47.9						

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

<u><i>Instrument</i></u>	Specimen HD-1						Specimen HD-2					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	807	134.2	16.1	12.0	132	100 - 168	781	275.1	38.7	14.1	276	206 - 344
All Abbott Cell-Dyn Instruments	308	143.2	15.1	10.6	141	107 - 180	296	310.4	21.7	7.0	310	232 - 388
All ABX Instruments	112	140.8	10.0	7.1	141	105 - 176	111	277.1	13.2	4.8	276	207 - 347
All COULTER Instruments	294	123.9	10.1	8.1	123	92 - 155	284	243.1	26.8	11.0	236	182 - 304
All Danam/Drew Scientific Instruments	15	159.0	7.6	4.8	160	119 - 199	14	308.9	17.6	5.7	305	231 - 387
Abbott Cell-Dyn 1700	41	131.9	15.2	11.5	130	98 - 165	39	289.4	30.9	10.7	282	217 - 362
Abbott Cell-Dyn 1800	161	136.8	7.9	5.8	137	102 - 171	155	314.6	18.1	5.7	315	235 - 394
Abbott Cell-Dyn Emerald	101	159.2	13.8	8.7	158	119 - 199	97	312.6	18.6	6.0	309	234 - 391
ABX Diagnostics Micros/45/60	112	140.8	10.0	7.1	141	105 - 176	111	277.1	13.2	4.8	276	207 - 347
Boule Medonic CA 620	12	118.3	16.7	14.1	118	88 - 148	12	247.3	18.3	7.4	245	185 - 310
Boule Medonic M series	57	120.9	11.3	9.3	120	90 - 152	55	241.8	19.5	8.1	241	181 - 303
COULTER AcT 8/10	19	123.1	11.6	9.4	121	92 - 154	19	238.2	29.3	12.3	228	178 - 298
COULTER AcT diff/diff 2	271	123.8	9.8	7.9	123	92 - 155	262	243.0	26.4	10.9	236	182 - 304
Drew Scientific D3	15	159.0	7.6	4.8	160	119 - 199	14	308.9	17.6	5.7	305	231 - 387
<u><i>Instrument</i></u>	Specimen HD-3						Specimen HD-4					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	806	524.3	107.5	20.5	545	393 - 656	779	347.6	39.3	11.3	349	260 - 435
All Abbott Cell-Dyn Instruments	305	626.6	43.5	6.9	629	469 - 784	297	371.7	27.4	7.4	369	278 - 465
All ABX Instruments	114	552.6	21.6	3.9	551	414 - 691	111	375.0	17.1	4.6	375	281 - 469
All COULTER Instruments	286	403.7	50.2	12.4	392	302 - 505	285	315.3	30.2	9.6	320	236 - 395
All Danam/Drew Scientific Instruments	15	617.7	34.0	5.5	612	463 - 773	15	397.3	21.7	5.5	398	297 - 497
Abbott Cell-Dyn 1700	36	555.9	56.9	10.2	557	416 - 695	38	358.5	29.6	8.3	356	268 - 449
Abbott Cell-Dyn 1800	164	649.1	31.0	4.8	650	486 - 812	156	359.8	18.0	5.0	359	269 - 450
Abbott Cell-Dyn Emerald	103	611.2	34.0	5.6	607	458 - 764	98	396.4	22.0	5.5	396	297 - 496
ABX Diagnostics Micros/45/60	114	552.6	21.6	3.9	551	414 - 691	111	375.0	17.1	4.6	375	281 - 469
Boule Medonic CA 620	12	477.9	33.3	7.0	475	358 - 598	12	311.7	25.4	8.2	305	233 - 390
Boule Medonic M series	56	498.9	36.1	7.2	499	374 - 624	54	321.2	17.8	5.5	324	240 - 402
COULTER AcT 8/10	18	394.1	43.1	10.9	389	295 - 493	18	318.3	39.0	12.3	321	238 - 398
COULTER AcT diff/diff 2	265	403.6	50.0	12.4	392	302 - 505	263	315.2	29.4	9.3	320	236 - 395
Drew Scientific D3	15	617.7	34.0	5.5	612	463 - 773	15	397.3	21.7	5.5	398	297 - 497

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

Specimen HD-5

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	794	116.3	19.5	16.7	118	87 - 146
All Abbott Cell-Dyn Instruments	303	132.1	11.3	8.5	131	99 - 166
All ABX Instruments	112	123.9	10.6	8.5	122	92 - 155
All COULTER Instruments	286	95.8	7.7	8.0	95	71 - 120
All Danam/Drew Scientific Instruments	13	128.7	8.7	6.8	131	96 - 161
Abbott Cell-Dyn 1700	40	132.8	12.4	9.3	132	99 - 167
Abbott Cell-Dyn 1800	160	129.0	9.6	7.4	128	96 - 162
Abbott Cell-Dyn Emerald	99	136.6	11.7	8.6	135	102 - 171
ABX Diagnostics Micros/45/60	112	123.9	10.6	8.5	122	92 - 155
Boule Medonic CA 620	13	121.4	11.5	9.5	119	91 - 152
Boule Medonic M series	57	111.0	10.8	9.7	112	83 - 139
COULTER AcT 8/10	18	95.7	9.0	9.4	94	71 - 120
COULTER AcT diff/diff 2	265	95.6	7.4	7.7	95	71 - 120
Drew Scientific D3	13	128.7	8.7	6.8	131	96 - 161

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

Specimen HD-1

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	763	42.16	1.57	3.7	42.1	37.4 - 46.9
All Abbott Cell-Dyn Instruments	289	41.66	1.52	3.6	41.5	37.1 - 46.3
All ABX Instruments	113	41.35	1.11	2.7	41.3	38.0 - 44.7
All COULTER Instruments	272	42.85	1.23	2.9	42.9	39.1 - 46.6
All Danam/Drew Scientific Instruments	15	41.63	0.91	2.2	41.7	38.8 - 44.4
Abbott Cell-Dyn 1700	39	42.95	1.57	3.7	42.9	38.2 - 47.7
Abbott Cell-Dyn 1800	151	41.19	1.39	3.4	41.3	37.0 - 45.4
Abbott Cell-Dyn Emerald	95	41.89	1.45	3.5	41.7	37.5 - 46.3
ABX Diagnostics Micros/45/60	113	41.35	1.11	2.7	41.3	38.0 - 44.7
Boule Medonic CA 620	13	45.26	1.37	3.0	45.4	41.1 - 49.4
Boule Medonic M series	55	42.53	1.70	4.0	42.5	37.4 - 47.7
COULTER AcT 8/10	12	39.90	1.19	3.0	39.7	36.3 - 43.5
COULTER AcT diff/diff 2	262	42.94	1.14	2.7	43.0	39.5 - 46.4
Drew Scientific D3	15	41.63	0.91	2.2	41.7	38.8 - 44.4

Specimen HD-2

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
750	33.37	1.40	4.2	33.4	29.1 - 37.6
280	32.87	1.30	4.0	32.8	28.9 - 36.8
108	32.78	0.71	2.2	32.7	30.6 - 34.9
262	34.35	0.85	2.5	34.3	31.7 - 36.9
14	33.43	1.31	3.9	33.0	29.4 - 37.4
37	33.51	1.12	3.3	33.5	30.1 - 36.9
145	32.22	0.98	3.0	32.2	29.2 - 35.2
92	33.54	1.22	3.6	33.3	29.8 - 37.3
108	32.78	0.71	2.2	32.7	30.6 - 34.9
13	35.07	1.75	5.0	35.1	29.8 - 40.4
55	32.66	1.39	4.3	32.4	28.4 - 36.9
12	30.38	0.71	2.3	30.5	28.2 - 32.6
254	34.32	0.73	2.1	34.3	32.1 - 36.6
14	33.43	1.31	3.9	33.0	29.4 - 37.4

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

Specimen HD-3							Specimen HD-4					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	765	48.58	1.73	3.6	48.9	43.3 - 53.8	755	25.39	1.18	4.7	25.3	21.8 - 29.0
All Abbott Cell-Dyn Instruments	291	47.41	1.60	3.4	47.1	42.6 - 52.3	283	25.05	0.95	3.8	24.9	22.1 - 28.0
All ABX Instruments	114	49.03	1.47	3.0	49.1	44.6 - 53.5	111	25.09	0.65	2.6	25.1	23.1 - 27.1
All COULTER Instruments	263	49.50	0.78	1.6	49.5	47.1 - 51.9	268	26.21	0.71	2.7	26.2	24.0 - 28.4
All Danam/Drew Scientific Instruments	15	48.77	1.26	2.6	49.1	44.9 - 52.6	15	25.26	0.54	2.1	25.1	23.6 - 26.9
Abbott Cell-Dyn 1700	37	47.61	1.06	2.2	47.5	44.4 - 50.8	38	25.56	1.14	4.4	25.4	22.1 - 29.0
Abbott Cell-Dyn 1800	151	46.27	0.81	1.8	46.3	43.8 - 48.8	147	24.59	0.69	2.8	24.5	22.5 - 26.7
Abbott Cell-Dyn Emerald	95	49.15	0.94	1.9	49.2	46.3 - 52.0	93	25.55	0.90	3.5	25.3	22.8 - 28.3
ABX Diagnostics Micros/45/60	114	49.03	1.47	3.0	49.1	44.6 - 53.5	111	25.09	0.65	2.6	25.1	23.1 - 27.1
Boule Medonic CA 620	13	51.01	1.03	2.0	51.0	47.9 - 54.1	13	25.54	1.17	4.6	25.8	22.0 - 29.1
Boule Medonic M series	55	49.49	1.45	2.9	49.4	45.1 - 53.9	55	22.86	1.49	6.5	22.9	18.3 - 27.4
COULTER AcT 8/10	12	43.44	0.79	1.8	43.4	41.0 - 45.9	12	23.68	0.41	1.7	23.8	22.4 - 25.0
COULTER AcT diff/diff 2	261	49.51	0.77	1.6	49.5	47.1 - 51.9	262	26.25	0.66	2.5	26.3	24.2 - 28.3
Drew Scientific D3	15	48.77	1.26	2.6	49.1	44.9 - 52.6	15	25.26	0.54	2.1	25.1	23.6 - 26.9
Specimen HD-5												
All Method	757	33.61	1.66	4.9	33.5	28.6 - 38.7						
All Abbott Cell-Dyn Instruments	283	32.89	1.54	4.7	32.8	28.2 - 37.6						
All ABX Instruments	112	33.07	1.03	3.1	33.0	29.9 - 36.2						
All COULTER Instruments	272	33.89	0.93	2.7	33.9	31.1 - 36.7						
All Danam/Drew Scientific Instruments	15	33.71	1.52	4.5	33.6	29.1 - 38.3						
Abbott Cell-Dyn 1700	38	34.14	1.99	5.8	34.0	28.1 - 40.2						
Abbott Cell-Dyn 1800	150	32.36	1.31	4.0	32.4	28.4 - 36.3						
Abbott Cell-Dyn Emerald	94	33.45	1.68	5.0	33.2	28.4 - 38.5						
ABX Diagnostics Micros/45/60	112	33.07	1.03	3.1	33.0	29.9 - 36.2						
Boule Medonic CA 620	13	36.73	1.51	4.1	37.1	32.2 - 41.3						
Boule Medonic M series	55	36.45	1.98	5.4	36.7	30.5 - 42.4						
COULTER AcT 8/10	12	31.84	0.84	2.6	31.9	29.3 - 34.4						
COULTER AcT diff/diff 2	261	33.96	0.86	2.5	33.9	31.3 - 36.6						
Drew Scientific D3	15	33.71	1.52	4.5	33.6	29.1 - 38.3						

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

<u>Instrument</u>	Specimen HD-1						Specimen HD-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	753	11.43	3.36	29.4	12.3	1.3 - 21.6	753	6.57	1.59	24.2	7.2	1.8 - 11.4
All Abbott Cell-Dyn Instruments	290	10.64	2.77	26.0	11.9	2.3 - 19.0	289	6.45	1.68	26.1	7.0	1.4 - 11.5
All ABX Instruments	112	6.54	1.28	19.6	6.3	2.7 - 10.4	113	4.31	0.78	18.2	4.1	1.9 - 6.7
All COULTER Instruments	261	14.67	0.71	4.8	14.7	12.5 - 16.8	259	7.54	0.47	6.3	7.6	6.1 - 9.0
All Danam/Drew Scientific Instruments	15	10.69	0.88	8.3	10.8	8.0 - 13.4	15	5.97	0.67	11.2	5.9	3.9 - 8.0
Abbott Cell-Dyn 1700	39	11.51	0.76	6.6	11.6	9.2 - 13.9	38	6.82	0.42	6.2	6.8	5.5 - 8.1
Abbott Cell-Dyn 1800	148	12.80	0.77	6.0	12.8	10.4 - 15.2	147	7.80	0.55	7.0	7.8	6.1 - 9.5
Abbott Cell-Dyn Emerald	96	6.99	0.62	8.9	7.0	5.1 - 8.9	94	4.29	0.31	7.3	4.3	3.3 - 5.3
ABX Diagnostics Micros/45/60	112	6.54	1.28	19.6	6.3	2.7 - 10.4	113	4.31	0.78	18.2	4.1	1.9 - 6.7
Boule Medonic CA 620	13	10.92	1.21	11.1	11.3	7.2 - 14.6	13	7.25	0.49	6.8	7.3	5.7 - 8.8
Boule Medonic M series	52	10.22	1.21	11.8	10.4	6.5 - 13.9	54	7.06	0.61	8.6	7.1	5.2 - 8.9
COULTER AcT diff/diff 2	260	14.67	0.71	4.8	14.7	12.5 - 16.8	258	7.54	0.47	6.3	7.6	6.1 - 9.0
Drew Scientific D3	15	10.69	0.88	8.3	10.8	8.0 - 13.4	15	5.97	0.67	11.2	5.9	3.9 - 8.0

<u>Instrument</u>	Specimen HD-3						Specimen HD-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	753	9.36	2.91	31.0	10.2	0.6 - 18.1	752	6.22	1.82	29.3	7.0	0.7 - 11.7
All Abbott Cell-Dyn Instruments	289	8.62	2.52	29.2	10.0	1.0 - 16.2	288	6.13	1.83	29.9	7.0	0.6 - 11.7
All ABX Instruments	114	5.35	1.17	21.8	5.1	1.8 - 8.9	111	3.36	0.83	24.8	3.2	0.8 - 5.9
All COULTER Instruments	260	12.19	0.50	4.1	12.2	10.7 - 13.7	255	7.38	0.54	7.3	7.4	5.7 - 9.1
All Danam/Drew Scientific Instruments	15	8.69	0.81	9.3	8.8	6.2 - 11.2	15	6.44	0.49	7.6	6.4	4.9 - 8.0
Abbott Cell-Dyn 1700	38	10.10	0.59	5.8	10.1	8.3 - 11.9	39	7.01	0.51	7.2	6.9	5.4 - 8.6
Abbott Cell-Dyn 1800	147	10.49	0.59	5.6	10.5	8.7 - 12.3	147	7.49	0.55	7.3	7.5	5.8 - 9.2
Abbott Cell-Dyn Emerald	94	5.22	0.49	9.3	5.3	3.7 - 6.7	96	3.68	0.34	9.3	3.7	2.6 - 4.8
ABX Diagnostics Micros/45/60	114	5.35	1.17	21.8	5.1	1.8 - 8.9	111	3.36	0.83	24.8	3.2	0.8 - 5.9
Boule Medonic CA 620	13	8.84	0.99	11.2	8.8	5.8 - 11.9	13	6.38	1.47	23.0	7.3	1.9 - 10.8
Boule Medonic M series	53	8.23	0.76	9.2	8.1	5.9 - 10.6	54	6.99	0.59	8.5	7.0	5.2 - 8.8
COULTER AcT diff/diff 2	259	12.19	0.50	4.1	12.2	10.7 - 13.7	254	7.38	0.54	7.3	7.4	5.7 - 9.0
Drew Scientific D3	15	8.69	0.81	9.3	8.8	6.2 - 11.2	15	6.44	0.49	7.6	6.4	4.9 - 8.0

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

Specimen HD-5						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	754	12.59	4.05	32.1	13.6	0.4 - 24.8
All Abbott Cell-Dyn Instruments	290	11.48	3.22	28.1	13.1	1.8 - 21.2
All ABX Instruments	110	7.15	1.51	21.1	6.9	2.6 - 11.7
All COULTER Instruments	259	16.79	0.78	4.7	16.8	14.4 - 19.2
All Danam/Drew Scientific Instruments	15	12.08	1.08	8.9	12.2	8.8 - 15.4
Abbott Cell-Dyn 1700	39	13.17	0.74	5.6	13.1	10.9 - 15.5
Abbott Cell-Dyn 1800	146	13.86	0.84	6.1	13.9	11.3 - 16.4
Abbott Cell-Dyn Emerald	96	7.19	0.70	9.8	7.3	5.0 - 9.3
ABX Diagnostics Micros/45/60	110	7.15	1.51	21.1	6.9	2.6 - 11.7
Boule Medonic CA 620	13	11.62	1.68	14.5	11.8	6.5 - 16.7
Boule Medonic M series	54	10.08	1.39	13.8	10.0	5.9 - 14.3
COULTER AcT diff/diff 2	258	16.78	0.78	4.6	16.8	14.4 - 19.2
Drew Scientific D3	15	12.08	1.08	8.9	12.2	8.8 - 15.4

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

Specimen HD-1							Specimen HD-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	758	46.34	4.08	8.8	45.7	34.1 - 58.6	740	59.93	2.24	3.7	59.6	53.1 - 66.7	
All Abbott Cell-Dyn Instruments	293	47.60	2.95	6.2	46.9	38.7 - 56.5	279	60.68	1.57	2.6	60.4	55.9 - 65.4	
All ABX Instruments	113	52.13	2.04	3.9	52.3	46.0 - 58.3	110	62.82	1.36	2.2	63.1	58.7 - 67.0	
All COULTER Instruments	260	42.37	1.13	2.7	42.3	38.9 - 45.8	253	58.12	0.81	1.4	58.1	55.7 - 60.6	
All Danam/Drew Scientific Instruments	15	47.68	1.34	2.8	47.5	43.6 - 51.8	14	60.86	1.02	1.7	61.1	57.7 - 64.0	
Abbott Cell-Dyn 1700	38	45.46	1.89	4.2	45.8	39.7 - 51.2	36	59.73	1.09	1.8	59.7	56.4 - 63.1	
Abbott Cell-Dyn 1800	148	45.99	1.35	2.9	46.0	41.9 - 50.1	143	59.98	0.87	1.4	60.0	57.3 - 62.6	
Abbott Cell-Dyn Emerald	96	51.13	1.48	2.9	51.4	46.6 - 55.6	92	62.23	1.32	2.1	62.4	58.2 - 66.2	
ABX Diagnostics Micros/45/60	113	52.13	2.04	3.9	52.3	46.0 - 58.3	110	62.82	1.36	2.2	63.1	58.7 - 67.0	
Boule Medonic CA 620	13	43.83	2.17	5.0	43.8	37.3 - 50.4	13	57.99	1.08	1.9	57.9	54.7 - 61.3	
Boule Medonic M series	55	47.11	2.40	5.1	46.9	39.9 - 54.4	54	60.29	1.58	2.6	60.4	55.5 - 65.1	
COULTER AcT diff/diff 2	259	42.38	1.13	2.7	42.3	38.9 - 45.8	252	58.12	0.81	1.4	58.1	55.6 - 60.6	
Drew Scientific D3	15	47.68	1.34	2.8	47.5	43.6 - 51.8	14	60.86	1.02	1.7	61.1	57.7 - 64.0	

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

<u>Instrument</u>	Specimen HD-3						Specimen HD-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	754	42.02	3.25	7.7	42.6	32.2 - 51.8	752	68.40	2.27	3.3	67.9	61.6 - 75.2
All Abbott Cell-Dyn Instruments	291	43.98	1.61	3.7	43.8	39.1 - 48.9	290	68.74	1.79	2.6	68.3	63.3 - 74.2
All ABX Instruments	114	45.59	2.03	4.5	45.8	39.4 - 51.7	110	71.53	1.20	1.7	71.7	67.9 - 75.2
All COULTER Instruments	257	38.31	0.78	2.0	38.3	35.9 - 40.7	261	66.42	0.81	1.2	66.4	63.9 - 68.9
All Danam/Drew Scientific Instruments	15	42.54	1.18	2.8	42.5	38.9 - 46.1	15	68.30	0.87	1.3	68.5	65.7 - 70.9
Abbott Cell-Dyn 1700	36	42.57	1.20	2.8	42.7	38.9 - 46.2	38	67.34	1.59	2.4	67.6	62.5 - 72.2
Abbott Cell-Dyn 1800	150	43.25	0.92	2.1	43.2	40.4 - 46.0	146	67.91	0.79	1.2	67.9	65.5 - 70.3
Abbott Cell-Dyn Emerald	98	45.66	1.00	2.2	45.8	42.6 - 48.7	95	70.74	1.04	1.5	70.8	67.6 - 73.9
ABX Diagnostics Micros/45/60	114	45.59	2.03	4.5	45.8	39.4 - 51.7	110	71.53	1.20	1.7	71.7	67.9 - 75.2
Boule Medonic CA 620	13	40.16	1.70	4.2	40.0	35.0 - 45.3	13	68.08	1.90	2.8	67.8	62.3 - 73.8
Boule Medonic M series	55	42.25	1.42	3.4	42.3	37.9 - 46.6	55	70.16	1.70	2.4	70.3	65.0 - 75.3
COULTER AcT diff/diff 2	256	38.31	0.78	2.0	38.3	35.9 - 40.7	260	66.42	0.81	1.2	66.4	63.9 - 68.9
Drew Scientific D3	15	42.54	1.18	2.8	42.5	38.9 - 46.1	15	68.30	0.87	1.3	68.5	65.7 - 70.9
Specimen HD-5												
All Method	757	53.60	4.46	8.3	53.0	40.2 - 67.0						
All Abbott Cell-Dyn Instruments	289	55.46	3.26	5.9	54.6	45.6 - 65.3						
All ABX Instruments	112	59.57	2.08	3.5	59.6	53.3 - 65.9						
All COULTER Instruments	258	49.24	1.02	2.1	49.2	46.1 - 52.4						
All Danam/Drew Scientific Instruments	15	54.21	1.76	3.2	54.3	48.9 - 59.5						
Abbott Cell-Dyn 1700	37	52.80	1.84	3.5	52.9	47.2 - 58.4						
Abbott Cell-Dyn 1800	148	53.79	1.39	2.6	53.8	49.6 - 58.0						
Abbott Cell-Dyn Emerald	94	59.42	1.68	2.8	59.8	54.3 - 64.5						
ABX Diagnostics Micros/45/60	112	59.57	2.08	3.5	59.6	53.3 - 65.9						
Boule Medonic CA 620	13	51.89	2.62	5.0	51.1	44.0 - 59.8						
Boule Medonic M series	55	53.46	1.75	3.3	53.2	48.1 - 58.8						
COULTER AcT diff/diff 2	257	49.25	1.02	2.1	49.2	46.2 - 52.4						
Drew Scientific D3	15	54.21	1.76	3.2	54.3	48.9 - 59.5						

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

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen DIF-1				<u>Labs</u>	<u>Mean</u>	Specimen DIF-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	21	4.12	0.16	3.9	4.2	3.5 - 4.8	21	10.42	0.23	2.2	10.5	8.8 - 12.0
All COULTER Instruments	21	4.12	0.16	3.9	4.2	3.5 - 4.8	21	10.42	0.23	2.2	10.5	8.8 - 12.0
			Specimen DIF-3						Specimen DIF-4			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	21	23.28	0.54	2.3	23.4	19.7 - 26.8	21	4.24	0.14	3.4	4.2	3.6 - 4.9
All COULTER Instruments	21	23.28	0.54	2.3	23.4	19.7 - 26.8	21	4.24	0.14	3.4	4.2	3.6 - 4.9
			Specimen DIF-5									
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	21	10.41	0.24	2.3	10.4	8.8 - 12.0						
All COULTER Instruments	21	10.41	0.24	2.3	10.4	8.8 - 12.0						

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

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen DIF-1				<u>Labs</u>	<u>Mean</u>	Specimen DIF-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	21	2.607	0.036	1.4	2.61	2.45 - 2.77	21	4.038	0.068	1.7	4.02	3.79 - 4.28
All COULTER Instruments	21	2.607	0.036	1.4	2.61	2.45 - 2.77	21	4.038	0.068	1.7	4.02	3.79 - 4.28
			Specimen DIF-3						Specimen DIF-4			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	21	5.288	0.076	1.4	5.27	4.97 - 5.61	21	2.600	0.033	1.3	2.60	2.44 - 2.76
All COULTER Instruments	21	5.288	0.076	1.4	5.27	4.97 - 5.61	21	2.600	0.033	1.3	2.60	2.44 - 2.76
			Specimen DIF-5									
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	21	4.035	0.054	1.3	4.03	3.79 - 4.28						
All COULTER Instruments	21	4.035	0.054	1.3	4.03	3.79 - 4.28						

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

Specimen DIF-1							Specimen DIF-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	20	6.49	0.11	1.7	6.5	6.0 - 7.0	20	11.36	0.12	1.0	11.4	10.5 - 12.2
All COULTER Instruments	20	6.49	0.11	1.7	6.5	6.0 - 7.0	20	11.36	0.12	1.0	11.4	10.5 - 12.2
Specimen DIF-3							Specimen DIF-4					
All Method	20	16.67	0.26	1.5	16.7	15.4 - 17.9	20	6.51	0.08	1.3	6.5	6.0 - 7.0
All COULTER Instruments	20	16.67	0.26	1.5	16.7	15.4 - 17.9	20	6.51	0.08	1.3	6.5	6.0 - 7.0
Specimen DIF-5												
All Method	20	11.35	0.19	1.7	11.4	10.5 - 12.2						
All COULTER Instruments	20	11.35	0.19	1.7	11.4	10.5 - 12.2						

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

Specimen DIF-1							Specimen DIF-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	21	20.12	0.28	1.4	20.1	18.9 - 21.4	21	35.20	0.66	1.9	35.3	33.0 - 37.4
All COULTER Instruments	21	20.12	0.28	1.4	20.1	18.9 - 21.4	21	35.20	0.66	1.9	35.3	33.0 - 37.4
Specimen DIF-3							Specimen DIF-4					
All Method	21	52.35	0.75	1.4	52.3	49.2 - 55.5	21	20.14	0.32	1.6	20.0	18.9 - 21.4
All COULTER Instruments	21	52.35	0.75	1.4	52.3	49.2 - 55.5	21	20.14	0.32	1.6	20.0	18.9 - 21.4
Specimen DIF-5												
All Method	21	35.25	0.71	2.0	35.1	33.1 - 37.4						
All COULTER Instruments	21	35.25	0.71	2.0	35.1	33.1 - 37.4						

HEMATOLOGY W/ 5-PART DIFFERENTIAL-PLATELET COUNT ($\times 10^9/L$)

<u><i>Instrument</i></u>	Specimen DIF-1						Specimen DIF-2					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	21	76.8	4.4	5.7	77	57 - 96	21	234.1	8.3	3.5	233	175 - 293
All COULTER Instruments	21	76.8	4.4	5.7	77	57 - 96	21	234.1	8.3	3.5	233	175 - 293
	Specimen DIF-3						Specimen DIF-4					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	21	423.3	15.5	3.7	421	317 - 530	20	75.7	3.5	4.6	75	56 - 95
All COULTER Instruments	21	423.3	15.5	3.7	421	317 - 530	20	75.7	3.5	4.6	75	56 - 95
	Specimen DIF-5											
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>						
All Method	21	234.2	7.0	3.0	235	175 - 293						
All COULTER Instruments	21	234.2	7.0	3.0	235	175 - 293						

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

<u><i>Instrument</i></u>	Specimen DIF-1						Specimen DIF-2					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	20	52.16	1.13	2.2	52.2	48.7 - 55.6	20	60.49	1.25	2.1	60.3	56.7 - 64.3
All COULTER Instruments	20	52.16	1.13	2.2	52.2	48.7 - 55.6	20	60.49	1.25	2.1	60.3	56.7 - 64.3
	Specimen DIF-3						Specimen DIF-4					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	20	65.69	1.88	2.9	65.8	60.0 - 71.4	19	52.70	0.75	1.4	52.8	50.4 - 55.0
All COULTER Instruments	20	65.69	1.88	2.9	65.8	60.0 - 71.4	19	52.70	0.75	1.4	52.8	50.4 - 55.0
	Specimen DIF-5											
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>						
All Method	20	60.63	1.50	2.5	60.8	56.1 - 65.2						
All COULTER Instruments	20	60.63	1.50	2.5	60.8	56.1 - 65.2						

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

Specimen DIF-1							Specimen DIF-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	20	38.63	1.08	2.8	38.7	35.3 - 41.9	20	29.65	1.10	3.7	29.5	26.3 - 33.0
All COULTER Instruments	20	38.63	1.08	2.8	38.7	35.3 - 41.9	20	29.65	1.10	3.7	29.5	26.3 - 33.0
Specimen DIF-3							Specimen DIF-4					
All Method	20	20.85	0.88	4.2	20.7	18.2 - 23.5	20	38.24	1.13	2.9	38.4	34.8 - 41.7
All COULTER Instruments	20	20.85	0.88	4.2	20.7	18.2 - 23.5	20	38.24	1.13	2.9	38.4	34.8 - 41.7
Specimen DIF-5												
All Method	20	29.27	1.07	3.7	29.3	26.0 - 32.5						
All COULTER Instruments	20	29.27	1.07	3.7	29.3	26.0 - 32.5						

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

Specimen DIF-1							Specimen DIF-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	20	0.52	0.34	66.2	0.4	0.0 - 1.6	20	3.67	1.18	32.2	4.2	0.1 - 7.3
All COULTER Instruments	20	0.52	0.34	66.2	0.4	0.0 - 1.6	20	3.67	1.18	32.2	4.2	0.1 - 7.3
Specimen DIF-3							Specimen DIF-4					
All Method	20	8.56	1.74	20.3	8.2	3.3 - 13.8	20	0.54	0.38	70.7	0.4	0.0 - 1.7
All COULTER Instruments	20	8.56	1.74	20.3	8.2	3.3 - 13.8	20	0.54	0.38	70.7	0.4	0.0 - 1.7
Specimen DIF-5												
All Method	20	3.87	0.96	24.8	4.0	0.9 - 6.8						
All COULTER Instruments	20	3.87	0.96	24.8	4.0	0.9 - 6.8						

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

Specimen DIF-1							Specimen DIF-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	20	8.41	0.59	7.1	8.4	6.6 - 10.2	20	6.00	0.58	9.6	5.9	4.2 - 7.8
All COULTER Instruments	20	8.41	0.59	7.1	8.4	6.6 - 10.2	20	6.00	0.58	9.6	5.9	4.2 - 7.8
Specimen DIF-3							Specimen DIF-4					
All Method	20	4.48	0.60	13.5	4.5	2.6 - 6.3	20	8.38	0.49	5.9	8.3	6.9 - 9.9
All COULTER Instruments	20	4.48	0.60	13.5	4.5	2.6 - 6.3	20	8.38	0.49	5.9	8.3	6.9 - 9.9
Specimen DIF-5												
All Method	20	5.94	0.48	8.2	5.8	4.4 - 7.4						
All COULTER Instruments	20	5.94	0.48	8.2	5.8	4.4 - 7.4						

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

Specimen DIF-1							Specimen DIF-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	20	0.29	0.22	77.4	0.3	0.0 - 1.0	20	0.22	0.18	83.0	0.2	0.0 - 0.8
All COULTER Instruments	20	0.29	0.22	77.4	0.3	0.0 - 1.0	20	0.22	0.18	83.0	0.2	0.0 - 0.8
Specimen DIF-3							Specimen DIF-4					
All Method	20	0.46	0.30	65.5	0.4	0.0 - 1.4	19	0.27	0.27	97.3	0.2	0.0 - 1.1
All COULTER Instruments	20	0.46	0.30	65.5	0.4	0.0 - 1.4	19	0.27	0.27	97.3	0.2	0.0 - 1.1
Specimen DIF-5												
All Method	20	0.28	0.21	76.3	0.2	0.0 - 1.0						
All COULTER Instruments	20	0.28	0.21	76.3	0.2	0.0 - 1.0						

QBC HEMATOLOGY–HEMATOCRIT (percent)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen QBC-1				<u>Labs</u>	<u>Mean</u>	Specimen QBC-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	29.07	1.29	4.4	29.1	27.3 - 30.9	9	34.46	1.50	4.4	34.7	32.3 - 36.6
QBC STAR - QBC STAR Tubes	5	29.24	0.87	3.0	29.3	27.4 - 31.0	5	34.82	1.04	3.0	35.2	32.7 - 37.0
			Specimen QBC-3						Specimen QBC-4			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	22.36	1.52	6.8	22.4	21.0 - 23.7	9	36.84	1.21	3.3	37.1	34.6 - 39.1
QBC STAR - QBC STAR Tubes	5	22.32	0.55	2.5	22.4	20.9 - 23.7	5	37.44	0.73	2.0	37.3	35.1 - 39.7
			Specimen QBC-5									
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	9	34.24	1.58	4.6	34.2	32.1 - 36.3						
QBC STAR - QBC STAR Tubes	5	34.64	1.14	3.3	34.0	32.5 - 36.8						

QBC HEMATOLOGY–HEMOGLOBIN (g/dL)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen QBC-1				<u>Labs</u>	<u>Mean</u>	Specimen QBC-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	9.77	0.36	3.7	9.9	9.0 - 10.5	9	11.63	0.40	3.5	11.7	10.8 - 12.5
QBC STAR - QBC STAR Tubes	5	9.70	0.25	2.6	9.8	9.0 - 10.4	5	11.60	0.25	2.2	11.6	10.7 - 12.5
			Specimen QBC-3						Specimen QBC-4			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	8	7.58	0.38	5.0	7.4	7.0 - 8.2	9	12.47	0.25	2.0	12.5	11.5 - 13.4
QBC STAR - QBC STAR Tubes	5	7.32	0.04	0.6	7.3	6.8 - 7.9	5	12.54	0.15	1.2	12.5	11.6 - 13.5
			Specimen QBC-5									
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	9	11.58	0.39	3.3	11.6	10.7 - 12.4						
QBC STAR - QBC STAR Tubes	5	11.58	0.19	1.7	11.5	10.7 - 12.4						

QBC HEMATOLOGY–WHITE BLOOD CELL COUNT (x 10⁹/L)

<u>Instrument</u>	Specimen QBC-1						Specimen QBC-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	9.02	0.44	4.9	8.9	7.6 - 10.4	9	19.54	1.35	6.9	20.2	16.6 - 22.5
QBC STAR - QBC STAR Tubes	5	9.02	0.44	4.9	8.9	7.6 - 10.4	5	19.54	1.35	6.9	20.2	16.6 - 22.5
	Specimen QBC-3						Specimen QBC-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	7.74	0.34	4.4	7.8	6.5 - 9.0	9	28.82	0.61	2.1	28.9	24.4 - 33.2
QBC STAR - QBC STAR Tubes	5	7.74	0.34	4.4	7.8	6.5 - 9.0	5	28.82	0.61	2.1	28.9	24.4 - 33.2
	Specimen QBC-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	9	19.46	2.00	10.3	20.6	16.5 - 22.4						
QBC STAR - QBC STAR Tubes	5	19.46	2.00	10.3	20.6	16.5 - 22.4						

QBC HEMATOLOGY–PLATELET COUNT (x 10⁹/L)

<u>Instrument</u>	Specimen QBC-1						Specimen QBC-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	354.8	17.9	5.0	352	266 - 444	9	169.4	17.3	10.2	162	127 - 212
QBC STAR - QBC STAR Tubes	5	354.8	17.9	5.0	352	266 - 444	5	169.4	17.3	10.2	162	127 - 212
	Specimen QBC-3						Specimen QBC-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	721.0	49.3	6.8	729	540 - 902	9	174.0	12.0	6.9	169	130 - 218
QBC STAR - QBC STAR Tubes	5	721.0	49.3	6.8	729	540 - 902	5	174.0	12.0	6.9	169	130 - 218
	Specimen QBC-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	9	172.0	21.9	12.7	165	129 - 215						
QBC STAR - QBC STAR Tubes	5	172.0	21.9	12.7	165	129 - 215						

QBC HEMATOLOGY–GRANULOCYTES (x 10⁹/L)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen QBC-1				<u>Labs</u>	<u>Mean</u>	Specimen QBC-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	5.13	1.20	23.4	4.9	1.5 - 8.8	9	7.83	2.27	29.0	7.4	1.0 - 14.7
QBC STAR - QBC STAR Tubes	5	5.02	0.22	4.3	5.1	4.3 - 5.7	5	8.22	0.97	11.8	8.3	5.3 - 11.2
			Specimen QBC-3						Specimen QBC-4			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	4.93	1.62	32.9	4.4	0.0 - 9.9	9	7.83	2.98	38.0	7.6	0.0 - 16.8
QBC STAR - QBC STAR Tubes	5	5.46	1.75	32.0	5.0	0.2 - 10.8	5	7.76	1.68	21.6	8.2	2.7 - 12.8
			Specimen QBC-5									
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	9	7.62	1.95	25.6	7.9	1.7 - 13.5						
QBC STAR - QBC STAR Tubes	5	8.24	0.78	9.5	7.9	5.9 - 10.6						

QBC HEMATOLOGY–LYMPHS/MONO (x 10⁹/L)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen QBC-1				<u>Labs</u>	<u>Mean</u>	Specimen QBC-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	3.64	0.54	14.8	3.8	2.0 - 5.3	9	10.17	1.47	14.5	10.2	5.7 - 14.6
QBC STAR - QBC STAR Tubes	5	3.98	0.29	7.4	3.9	3.0 - 4.9	5	11.16	1.01	9.1	10.7	8.1 - 14.3
			Specimen QBC-3						Specimen QBC-4			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	2.64	0.61	23.1	2.9	0.8 - 4.5	9	16.21	5.10	31.5	18.7	0.9 - 31.6
QBC STAR - QBC STAR Tubes	5	3.08	0.29	9.6	3.0	2.1 - 4.0	5	20.36	1.17	5.8	20.6	16.8 - 23.9
			Specimen QBC-5									
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	9	10.66	2.43	22.8	9.6	3.3 - 18.0						
QBC STAR - QBC STAR Tubes	5	12.02	2.53	21.0	12.2	4.4 - 19.7						

RETICULOCYTE COUNT (percent)

<u>Instrument</u>	Specimen RT-1						Specimen RT-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	34	1.12	0.41	36.5	1.0	0.0 - 2.4	35	4.15	1.23	29.6	4.1	0.4 - 7.9
All Automated Methods	18	0.93	0.17	18.0	1.0	0.4 - 1.5	19	3.46	0.96	27.7	3.5	0.5 - 6.4
All Manual Methods	16	1.41	0.60	42.9	1.4	0.0 - 3.3	16	4.98	0.99	19.9	4.9	2.0 - 8.0
Manual-New Methylen Blue Stain	10	1.56	0.68	43.6	1.7	0.0 - 3.7	10	5.28	1.12	21.2	5.1	1.9 - 8.7

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

<u>Instrument</u>	Specimen BCX-1						Specimen BCX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	70	4.84	0.13	2.7	4.8	4.1 - 5.6	71	7.72	0.21	2.7	7.7	6.5 - 8.9
All ABX Instruments	27	4.84	0.13	2.8	4.8	4.1 - 5.6	27	7.71	0.22	2.9	7.8	6.5 - 8.9
All COULTER Instruments	41	4.82	0.11	2.3	4.8	4.0 - 5.6	42	7.71	0.18	2.4	7.7	6.5 - 8.9
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	15	4.81	0.15	3.2	4.8	4.0 - 5.6	15	7.62	0.20	2.7	7.6	6.4 - 8.8
ABX Diagnostics Pentra 80 / XL 80	12	4.88	0.09	1.9	4.9	4.1 - 5.7	12	7.82	0.20	2.5	7.9	6.6 - 9.0
COULTER AcT 5diff (version 2.01)	35	4.83	0.11	2.3	4.8	4.1 - 5.6	36	7.70	0.18	2.4	7.7	6.5 - 8.9

<u>Instrument</u>	Specimen BCX-3						Specimen BCX-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	72	9.68	0.25	2.6	9.7	8.2 - 11.2	69	6.60	0.21	3.2	6.6	5.6 - 7.6
All ABX Instruments	28	9.66	0.24	2.5	9.7	8.2 - 11.2	28	6.56	0.18	2.8	6.5	5.5 - 7.6
All COULTER Instruments	43	9.69	0.26	2.7	9.7	8.2 - 11.2	41	6.65	0.26	4.0	6.6	5.6 - 7.7
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	9.58	0.22	2.3	9.6	8.1 - 11.1	16	6.51	0.17	2.5	6.5	5.5 - 7.5
ABX Diagnostics Pentra 80 / XL 80	12	9.78	0.23	2.4	9.8	8.3 - 11.3	12	6.63	0.19	2.8	6.7	5.6 - 7.7
COULTER AcT 5diff (version 2.01)	37	9.70	0.26	2.7	9.7	8.2 - 11.2	35	6.66	0.27	4.1	6.6	5.6 - 7.7

<u>Instrument</u>	Specimen BCX-5					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	70	3.05	0.09	2.9	3.1	2.5 - 3.6
All ABX Instruments	28	3.05	0.08	2.7	3.1	2.5 - 3.6
All COULTER Instruments	41	3.05	0.10	3.1	3.0	2.5 - 3.6
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	3.02	0.07	2.2	3.0	2.5 - 3.5
ABX Diagnostics Pentra 80 / XL 80	12	3.10	0.09	2.8	3.1	2.6 - 3.6
COULTER AcT 5diff (version 2.01)	35	3.05	0.10	3.2	3.0	2.5 - 3.6

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

Specimen BCX-1							Specimen BCX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	72	4.922	0.078	1.6	4.92	4.62 - 5.22	73	2.047	0.046	2.3	2.05	1.92 - 2.17
All ABX Instruments	28	4.924	0.080	1.6	4.93	4.62 - 5.22	28	2.034	0.045	2.2	2.04	1.91 - 2.16
All COULTER Instruments	43	4.921	0.078	1.6	4.92	4.62 - 5.22	44	2.056	0.046	2.2	2.06	1.93 - 2.18
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	4.903	0.074	1.5	4.92	4.60 - 5.20	16	2.055	0.032	1.6	2.06	1.93 - 2.18
ABX Diagnostics Pentra 80 / XL 80	12	4.953	0.081	1.6	4.94	4.65 - 5.25	12	2.005	0.044	2.2	2.00	1.88 - 2.13
COULTER AcT 5diff (version 2.01)	37	4.922	0.080	1.6	4.92	4.62 - 5.22	38	2.064	0.042	2.0	2.06	1.94 - 2.19
Specimen BCX-3							Specimen BCX-4					
All Method	72	2.535	0.046	1.8	2.54	2.38 - 2.69	70	5.866	0.085	1.4	5.87	5.51 - 6.22
All ABX Instruments	28	2.525	0.042	1.7	2.53	2.37 - 2.68	28	5.870	0.087	1.5	5.86	5.51 - 6.23
All COULTER Instruments	43	2.542	0.048	1.9	2.55	2.38 - 2.70	41	5.864	0.085	1.4	5.88	5.51 - 6.22
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	2.543	0.037	1.4	2.55	2.39 - 2.70	16	5.831	0.076	1.3	5.85	5.48 - 6.19
ABX Diagnostics Pentra 80 / XL 80	12	2.501	0.037	1.5	2.50	2.35 - 2.66	12	5.923	0.074	1.3	5.91	5.56 - 6.28
COULTER AcT 5diff (version 2.01)	37	2.548	0.044	1.7	2.56	2.39 - 2.71	35	5.861	0.087	1.5	5.87	5.50 - 6.22
Specimen BCX-5												
All Method	73	2.570	0.049	1.9	2.57	2.41 - 2.73						
All ABX Instruments	28	2.554	0.048	1.9	2.55	2.40 - 2.71						
All COULTER Instruments	44	2.581	0.048	1.9	2.59	2.42 - 2.74						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	2.573	0.041	1.6	2.58	2.41 - 2.73						
ABX Diagnostics Pentra 80 / XL 80	12	2.529	0.046	1.8	2.52	2.37 - 2.69						
COULTER AcT 5diff (version 2.01)	38	2.587	0.047	1.8	2.60	2.43 - 2.75						

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

Specimen BCX-1							Specimen BCX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	72	14.03	0.19	1.3	14.0	13.0 - 15.1	73	5.11	0.10	1.9	5.1	4.7 - 5.5	
All ABX Instruments	28	14.06	0.21	1.5	14.2	13.0 - 15.1	28	5.04	0.08	1.5	5.0	4.6 - 5.4	
All COULTER Instruments	43	14.00	0.17	1.2	14.0	13.0 - 15.0	44	5.16	0.08	1.5	5.2	4.8 - 5.6	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	14.08	0.19	1.4	14.2	13.0 - 15.1	16	5.07	0.06	1.2	5.1	4.7 - 5.5	
ABX Diagnostics Pentra 80 / XL 80	12	14.05	0.24	1.7	14.2	13.0 - 15.1	12	4.99	0.08	1.6	5.0	4.6 - 5.4	
COULTER AcT 5diff (version 2.01)	37	13.98	0.15	1.1	14.0	12.9 - 15.0	38	5.16	0.07	1.4	5.1	4.7 - 5.6	
Specimen BCX-3							Specimen BCX-4						
All Method	72	7.25	0.10	1.4	7.3	6.7 - 7.8	70	19.42	0.31	1.6	19.4	18.0 - 20.8	
All ABX Instruments	28	7.20	0.11	1.5	7.2	6.6 - 7.8	28	19.65	0.21	1.1	19.6	18.2 - 21.1	
All COULTER Instruments	43	7.28	0.09	1.2	7.3	6.7 - 7.8	41	19.26	0.26	1.4	19.2	17.9 - 20.7	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	7.23	0.09	1.3	7.3	6.7 - 7.8	16	19.68	0.17	0.9	19.7	18.2 - 21.1	
ABX Diagnostics Pentra 80 / XL 80	12	7.16	0.12	1.6	7.2	6.6 - 7.7	12	19.61	0.25	1.3	19.6	18.2 - 21.0	
COULTER AcT 5diff (version 2.01)	37	7.27	0.08	1.2	7.3	6.7 - 7.8	35	19.20	0.21	1.1	19.2	17.8 - 20.6	
Specimen BCX-5													
All Method	73	6.42	0.11	1.6	6.4	5.9 - 6.9							
All ABX Instruments	28	6.35	0.10	1.6	6.3	5.9 - 6.8							
All COULTER Instruments	44	6.47	0.08	1.2	6.5	6.0 - 7.0							
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	6.37	0.11	1.8	6.4	5.9 - 6.9							
ABX Diagnostics Pentra 80 / XL 80	12	6.33	0.09	1.4	6.3	5.8 - 6.8							
COULTER AcT 5diff (version 2.01)	38	6.46	0.08	1.2	6.4	6.0 - 7.0							

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

Specimen BCX-1							Specimen BCX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	71	40.07	0.72	1.8	40.2	37.6 - 42.5	71	15.32	0.30	2.0	15.3	14.4 - 16.3	
All ABX Instruments	27	40.33	0.72	1.8	40.4	37.9 - 42.8	28	15.47	0.37	2.4	15.4	14.5 - 16.4	
All COULTER Instruments	42	39.95	0.59	1.5	40.0	37.5 - 42.4	43	15.24	0.26	1.7	15.3	14.3 - 16.2	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	15	40.07	0.76	1.9	40.4	37.6 - 42.5	16	15.31	0.28	1.8	15.4	14.3 - 16.3	
ABX Diagnostics Pentra 80 / XL 80	12	40.66	0.55	1.4	40.6	38.2 - 43.1	12	15.68	0.37	2.4	15.6	14.7 - 16.7	
COULTER AcT 5diff (version 2.01)	36	39.94	0.62	1.6	40.0	37.5 - 42.4	37	15.22	0.27	1.8	15.2	14.3 - 16.2	
Specimen BCX-3							Specimen BCX-4						
All Method	70	20.66	0.42	2.0	20.7	19.4 - 22.0	70	54.84	0.88	1.6	54.9	51.5 - 58.2	
All ABX Instruments	27	20.87	0.40	1.9	21.0	19.6 - 22.2	28	55.09	0.74	1.3	55.0	51.7 - 58.4	
All COULTER Instruments	42	20.52	0.37	1.8	20.5	19.2 - 21.8	43	54.87	1.21	2.2	54.9	51.5 - 58.2	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	15	20.67	0.35	1.7	20.7	19.4 - 22.0	16	55.01	0.87	1.6	55.1	51.7 - 58.4	
ABX Diagnostics Pentra 80 / XL 80	12	21.13	0.32	1.5	21.1	19.8 - 22.4	12	55.21	0.55	1.0	55.0	51.8 - 58.6	
COULTER AcT 5diff (version 2.01)	36	20.46	0.36	1.8	20.5	19.2 - 21.7	37	54.89	1.30	2.4	54.9	51.5 - 58.2	
Specimen BCX-5													
All Method	72	19.13	0.40	2.1	19.2	17.9 - 20.3							
All ABX Instruments	28	19.28	0.42	2.2	19.4	18.1 - 20.5							
All COULTER Instruments	44	19.00	0.41	2.2	19.1	17.8 - 20.2							
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	19.08	0.32	1.7	19.0	17.9 - 20.3							
ABX Diagnostics Pentra 80 / XL 80	12	19.54	0.39	2.0	19.6	18.3 - 20.8							
COULTER AcT 5diff (version 2.01)	38	18.94	0.40	2.1	19.0	17.8 - 20.1							

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

Specimen BCX-1							Specimen BCX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	72	153.9	7.8	5.1	154	115 - 193	72	92.9	4.6	5.0	92	69 - 117
All ABX Instruments	28	153.6	6.8	4.4	154	115 - 192	28	91.3	4.0	4.4	92	68 - 115
All COULTER Instruments	43	154.3	8.5	5.5	155	115 - 193	44	94.1	5.2	5.5	94	70 - 118
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	150.6	6.7	4.4	150	112 - 189	16	91.4	4.6	5.0	92	68 - 115
ABX Diagnostics Pentra 80 / XL 80	12	157.6	4.8	3.0	159	118 - 197	12	91.1	3.3	3.6	92	68 - 114
COULTER AcT 5diff (version 2.01)	37	154.5	8.4	5.4	155	115 - 194	38	94.6	5.2	5.5	95	70 - 119
Specimen BCX-3							Specimen BCX-4					
All Method	71	80.3	4.6	5.7	80	60 - 101	71	307.3	15.0	4.9	310	230 - 385
All ABX Instruments	28	80.6	3.9	4.8	81	60 - 101	28	310.6	14.8	4.8	312	232 - 389
All COULTER Instruments	42	80.2	5.0	6.2	80	60 - 101	42	304.9	15.1	4.9	305	228 - 382
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	81.1	4.3	5.3	82	60 - 102	16	308.1	17.4	5.6	310	231 - 386
ABX Diagnostics Pentra 80 / XL 80	12	79.9	3.3	4.2	80	59 - 100	12	313.9	10.4	3.3	317	235 - 393
COULTER AcT 5diff (version 2.01)	36	80.5	5.0	6.3	80	60 - 101	37	306.1	17.6	5.8	307	229 - 383
Specimen BCX-5												
All Method	73	126.2	6.5	5.1	125	94 - 158						
All ABX Instruments	28	125.1	5.5	4.4	125	93 - 157						
All COULTER Instruments	44	126.9	7.0	5.5	127	95 - 159						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	124.8	6.0	4.8	125	93 - 157						
ABX Diagnostics Pentra 80 / XL 80	12	125.4	5.0	4.0	125	94 - 157						
COULTER AcT 5diff (version 2.01)	38	127.7	7.2	5.6	129	95 - 160						

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

Specimen BCX-1							Specimen BCX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	73	45.67	3.27	7.2	45.2	35.8 - 55.5	73	60.95	3.24	5.3	60.6	51.2 - 70.7	
All ABX Instruments	28	47.60	3.58	7.5	47.5	36.8 - 58.4	28	63.53	2.73	4.3	63.7	55.3 - 71.8	
All COULTER Instruments	44	44.39	2.38	5.4	44.1	37.2 - 51.6	44	59.27	2.36	4.0	58.9	52.1 - 66.4	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	49.12	3.40	6.9	49.5	38.9 - 59.4	16	64.16	2.80	4.4	64.1	55.7 - 72.6	
ABX Diagnostics Pentra 80 / XL 80	12	45.58	2.82	6.2	45.0	37.1 - 54.1	12	62.69	2.50	4.0	62.3	55.1 - 70.3	
COULTER AcT 5diff (version 2.01)	38	44.34	2.15	4.8	44.1	37.8 - 50.8	38	59.36	2.24	3.8	58.9	52.6 - 66.1	
Specimen BCX-3							Specimen BCX-4						
All Method	72	61.22	4.22	6.9	59.6	48.5 - 73.9	72	50.45	3.55	7.0	50.0	39.7 - 61.2	
All ABX Instruments	27	65.86	2.03	3.1	66.3	59.7 - 72.0	28	52.84	4.13	7.8	53.5	40.4 - 65.3	
All COULTER Instruments	42	58.16	1.77	3.0	58.3	52.8 - 63.5	44	49.31	2.77	5.6	48.9	41.0 - 57.7	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	66.51	1.68	2.5	66.8	61.4 - 71.6	16	54.29	3.08	5.7	53.9	45.0 - 63.6	
ABX Diagnostics Pentra 80 / XL 80	12	64.23	3.15	4.9	64.2	54.7 - 73.7	12	50.90	4.66	9.2	48.2	36.9 - 64.9	
COULTER AcT 5diff (version 2.01)	37	58.37	1.64	2.8	58.3	53.4 - 63.3	38	49.54	2.76	5.6	49.2	41.2 - 57.9	
Specimen BCX-5													
All Method	73	65.58	6.05	9.2	63.2	47.4 - 83.8							
All ABX Instruments	28	72.05	3.30	4.6	72.3	62.1 - 82.0							
All COULTER Instruments	42	61.18	1.81	3.0	61.1	55.7 - 66.7							
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	73.06	2.63	3.6	73.5	65.1 - 81.0							
ABX Diagnostics Pentra 80 / XL 80	12	70.70	3.71	5.3	71.6	59.5 - 81.9							
COULTER AcT 5diff (version 2.01)	38	61.21	1.90	3.1	61.1	55.5 - 67.0							

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

Specimen BCX-1							Specimen BCX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	73	41.31	3.68	8.9	41.1	30.2 - 52.4	73	27.17	2.92	10.7	26.9	18.4 - 36.0	
All ABX Instruments	28	44.21	3.69	8.3	44.3	33.1 - 55.3	28	29.43	2.59	8.8	28.9	21.6 - 37.2	
All COULTER Instruments	44	39.38	2.16	5.5	38.9	32.9 - 45.9	44	25.66	2.04	8.0	25.5	19.5 - 31.8	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	42.93	3.40	7.9	42.7	32.7 - 53.2	16	29.21	2.48	8.5	28.9	21.7 - 36.7	
ABX Diagnostics Pentra 80 / XL 80	12	45.93	3.47	7.6	45.6	35.5 - 56.4	12	29.73	2.81	9.5	29.0	21.2 - 38.2	
COULTER AcT 5diff (version 2.01)	38	39.15	1.91	4.9	38.7	33.4 - 44.9	38	25.41	1.94	7.6	25.3	19.5 - 31.3	
Specimen BCX-3							Specimen BCX-4						
All Method	71	25.76	2.90	11.3	25.6	17.0 - 34.5	72	36.06	5.14	14.3	35.5	20.6 - 51.5	
All ABX Instruments	28	28.30	2.07	7.3	28.0	22.0 - 34.6	28	39.87	4.26	10.7	39.5	27.1 - 52.7	
All COULTER Instruments	41	23.82	1.63	6.9	23.7	18.9 - 28.8	42	33.04	3.10	9.4	33.2	23.7 - 42.4	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	27.65	1.62	5.9	27.4	22.7 - 32.6	16	38.37	2.92	7.6	38.5	29.6 - 47.2	
ABX Diagnostics Pentra 80 / XL 80	12	29.18	2.34	8.0	29.3	22.1 - 36.3	12	41.88	5.02	12.0	43.3	26.8 - 57.0	
COULTER AcT 5diff (version 2.01)	36	23.66	1.47	6.2	23.5	19.2 - 28.1	37	32.81	3.05	9.3	33.1	23.6 - 42.0	
Specimen BCX-5													
All Method	72	16.00	2.70	16.9	15.8	7.8 - 24.2							
All ABX Instruments	27	17.95	2.03	11.3	18.1	11.8 - 24.1							
All COULTER Instruments	43	14.52	1.90	13.1	14.6	8.8 - 20.3							
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	17.66	1.92	10.9	18.1	11.9 - 23.5							
ABX Diagnostics Pentra 80 / XL 80	12	19.05	3.16	16.6	18.8	9.5 - 28.6							
COULTER AcT 5diff (version 2.01)	37	14.18	1.71	12.0	13.8	9.0 - 19.4							

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

Specimen BCX-1							Specimen BCX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	71	0.80	0.54	67.1	0.7	0.0 - 2.5	71	0.35	0.24	67.8	0.3	0.0 - 1.1
All ABX Instruments	28	0.99	0.70	70.5	0.8	0.0 - 3.1	28	0.43	0.28	65.5	0.4	0.0 - 1.3
All COULTER Instruments	42	0.70	0.42	60.3	0.6	0.0 - 2.0	43	0.33	0.23	71.5	0.3	0.0 - 1.1
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	0.79	0.46	57.9	0.8	0.0 - 2.2	16	0.41	0.27	66.3	0.4	0.0 - 1.3
ABX Diagnostics Pentra 80 / XL 80	12	1.25	0.88	70.4	1.0	0.0 - 3.9	12	0.47	0.31	66.1	0.4	0.0 - 1.4
COULTER AcT 5diff (version 2.01)	36	0.64	0.35	54.4	0.6	0.0 - 1.7	38	0.32	0.24	75.1	0.3	0.0 - 1.1
Specimen BCX-3							Specimen BCX-4					
All Method	70	0.32	0.15	46.9	0.3	0.0 - 0.8	71	0.66	0.38	58.2	0.6	0.0 - 1.9
All ABX Instruments	27	0.34	0.14	41.3	0.4	0.0 - 0.8	28	0.74	0.47	63.9	0.6	0.0 - 2.2
All COULTER Instruments	42	0.32	0.16	49.6	0.3	0.0 - 0.8	43	0.63	0.37	58.4	0.6	0.0 - 1.8
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	0.37	0.14	39.3	0.4	0.0 - 0.9	16	0.82	0.55	66.6	0.7	0.0 - 2.5
ABX Diagnostics Pentra 80 / XL 80	12	0.34	0.21	61.7	0.3	0.0 - 1.0	12	0.63	0.34	53.8	0.6	0.0 - 1.7
COULTER AcT 5diff (version 2.01)	36	0.31	0.15	49.9	0.3	0.0 - 0.8	37	0.63	0.34	54.1	0.6	0.0 - 1.7
Specimen BCX-5												
All Method	72	0.32	0.24	75.8	0.2	0.0 - 1.1						
All ABX Instruments	28	0.38	0.21	54.7	0.4	0.0 - 1.1						
All COULTER Instruments	43	0.27	0.25	91.7	0.2	0.0 - 1.1						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	0.41	0.21	52.0	0.4	0.0 - 1.1						
ABX Diagnostics Pentra 80 / XL 80	12	0.35	0.21	60.3	0.3	0.0 - 1.0						
COULTER AcT 5diff (version 2.01)	37	0.27	0.26	95.1	0.2	0.0 - 1.1						

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

Specimen BCX-1							Specimen BCX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	72	6.17	1.05	17.1	6.1	3.0 - 9.4	73	5.27	1.14	21.7	5.4	1.8 - 8.7	
All ABX Instruments	27	6.40	0.90	14.0	6.4	3.7 - 9.1	28	5.82	0.94	16.1	5.8	3.0 - 8.7	
All COULTER Instruments	44	6.02	1.14	18.9	6.0	2.6 - 9.5	44	4.89	1.12	22.9	4.9	1.5 - 8.3	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	15	6.79	0.68	10.0	6.9	4.7 - 8.9	16	5.73	0.94	16.4	5.8	2.9 - 8.6	
ABX Diagnostics Pentra 80 / XL 80	12	5.91	0.91	15.5	5.9	3.1 - 8.7	12	5.95	0.96	16.1	6.1	3.0 - 8.9	
COULTER AcT 5diff (version 2.01)	38	6.21	1.04	16.8	6.0	3.0 - 9.4	38	4.86	1.09	22.3	4.8	1.6 - 8.2	
Specimen BCX-3							Specimen BCX-4						
All Method	72	4.35	0.60	13.7	4.3	2.5 - 6.2	72	5.03	1.13	22.5	5.1	1.6 - 8.5	
All ABX Instruments	28	4.69	0.55	11.8	4.7	3.0 - 6.4	28	5.53	1.24	22.5	5.7	1.7 - 9.3	
All COULTER Instruments	43	4.14	0.52	12.6	4.2	2.5 - 5.8	44	4.81	1.16	24.1	4.8	1.3 - 8.3	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	4.78	0.44	9.2	4.7	3.4 - 6.1	16	5.93	1.35	22.7	5.8	1.8 - 10.0	
ABX Diagnostics Pentra 80 / XL 80	12	4.57	0.68	14.8	4.6	2.5 - 6.6	12	4.98	0.87	17.5	5.0	2.3 - 7.6	
COULTER AcT 5diff (version 2.01)	38	4.09	0.51	12.5	4.1	2.5 - 5.7	38	4.78	1.16	24.3	4.7	1.2 - 8.3	
Specimen BCX-5													
All Method	73	7.04	1.29	18.4	6.8	3.1 - 11.0							
All ABX Instruments	28	7.84	1.25	15.9	8.0	4.0 - 11.6							
All COULTER Instruments	44	6.51	1.05	16.1	6.7	3.3 - 9.7							
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	7.98	1.23	15.4	8.2	4.2 - 11.7							
ABX Diagnostics Pentra 80 / XL 80	12	7.66	1.31	17.1	7.6	3.7 - 11.6							
COULTER AcT 5diff (version 2.01)	38	6.47	1.09	16.9	6.7	3.1 - 9.8							

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

Specimen BCX-1							Specimen BCX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	73	5.98	4.51	75.4	9.2	0.0 - 19.6	73	6.24	4.70	75.4	9.6	0.0 - 20.4	
All ABX Instruments	27	0.49	0.03	6.5	0.5	0.3 - 0.6	26	0.50	0.00	0.0	0.5	0.5 - 0.5	
All COULTER Instruments	42	9.55	0.47	5.0	9.5	8.1 - 11.0	43	10.03	0.46	4.6	10.0	8.6 - 11.5	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	15	0.50	0.00	0.0	0.5	0.5 - 0.5	16	0.50	0.00	0.0	0.5	0.5 - 0.5	
ABX Diagnostics Pentra 80 / XL 80	11	0.48	0.04	8.4	0.5	0.3 - 0.7	10	0.50	0.00	0.0	0.5	0.5 - 0.5	
COULTER AcT 5diff (version 2.01)	36	9.48	0.42	4.4	9.4	8.2 - 10.8	38	10.06	0.43	4.3	10.0	8.7 - 11.4	
Specimen BCX-3							Specimen BCX-4						
All Method	73	8.33	6.29	75.5	12.9	0.0 - 27.2	73	7.48	5.65	75.6	11.5	0.0 - 24.5	
All ABX Instruments	27	0.67	0.06	8.3	0.7	0.5 - 0.9	27	0.60	0.04	7.3	0.6	0.4 - 0.8	
All COULTER Instruments	42	13.44	0.65	4.8	13.4	11.4 - 15.4	43	12.01	0.69	5.8	12.0	9.9 - 14.1	
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	0.67	0.05	7.2	0.7	0.5 - 0.9	16	0.59	0.04	7.5	0.6	0.4 - 0.8	
ABX Diagnostics Pentra 80 / XL 80	11	0.66	0.07	10.2	0.7	0.4 - 0.9	11	0.60	0.04	7.5	0.6	0.4 - 0.8	
COULTER AcT 5diff (version 2.01)	37	13.50	0.58	4.3	13.4	11.7 - 15.3	36	12.00	0.45	3.8	12.0	10.6 - 13.4	
Specimen BCX-5													
All Method	73	11.05	8.42	76.2	16.7	0.0 - 36.4							
All ABX Instruments	27	0.89	0.06	6.8	0.9	0.7 - 1.1							
All COULTER Instruments	42	17.56	1.17	6.6	17.7	14.0 - 21.1							
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	16	0.89	0.06	6.4	0.9	0.7 - 1.1							
ABX Diagnostics Pentra 80 / XL 80	11	0.87	0.06	7.4	0.9	0.6 - 1.1							
COULTER AcT 5diff (version 2.01)	36	17.78	0.79	4.5	17.7	15.3 - 20.2							

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

<u>Instrument</u>	Specimen MX-1						Specimen MX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	40	3.95	0.14	3.5	4.0	3.3 - 4.6	40	7.88	0.28	3.5	7.9	6.7 - 9.1
All Sysmex Instruments	39	3.95	0.14	3.5	4.0	3.3 - 4.6	39	7.88	0.28	3.5	7.9	6.6 - 9.1
Sysmex XS-1000i	23	3.97	0.13	3.2	4.0	3.3 - 4.6	23	8.03	0.20	2.5	8.0	6.8 - 9.3
	Specimen MX-3						Specimen MX-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	39	20.89	1.06	5.1	21.4	17.7 - 24.1	40	3.91	0.14	3.5	3.9	3.3 - 4.5
All Sysmex Instruments	38	20.87	1.07	5.1	21.4	17.7 - 24.1	39	3.91	0.14	3.5	3.9	3.3 - 4.5
Sysmex XS-1000i	23	21.65	0.36	1.7	21.7	18.4 - 24.9	23	3.95	0.13	3.4	4.0	3.3 - 4.6
	Specimen MX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	40	7.90	0.25	3.2	7.9	6.7 - 9.1						
All Sysmex Instruments	39	7.89	0.25	3.2	7.9	6.7 - 9.1						
Sysmex XS-1000i	22	7.99	0.15	1.9	8.0	6.7 - 9.2						

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

<u>Instrument</u>	Specimen MX-1						Specimen MX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	40	2.540	0.058	2.3	2.52	2.38 - 2.70	39	4.648	0.049	1.1	4.65	4.36 - 4.93
All Sysmex Instruments	39	2.543	0.056	2.2	2.52	2.39 - 2.70	38	4.649	0.049	1.1	4.65	4.37 - 4.93
Sysmex XS-1000i	23	2.505	0.022	0.9	2.51	2.35 - 2.66	23	4.629	0.041	0.9	4.62	4.35 - 4.91
	Specimen MX-3						Specimen MX-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	39	5.524	0.060	1.1	5.54	5.19 - 5.86	40	2.540	0.058	2.3	2.53	2.38 - 2.70
All Sysmex Instruments	38	5.526	0.060	1.1	5.54	5.19 - 5.86	39	2.543	0.054	2.1	2.53	2.39 - 2.70
Sysmex XS-1000i	23	5.547	0.046	0.8	5.55	5.21 - 5.89	23	2.505	0.023	0.9	2.51	2.35 - 2.66
	Specimen MX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	39	4.645	0.056	1.2	4.64	4.36 - 4.93						
All Sysmex Instruments	38	4.646	0.057	1.2	4.64	4.36 - 4.93						
Sysmex XS-1000i	23	4.628	0.042	0.9	4.63	4.35 - 4.91						

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

Specimen MX-1							Specimen MX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	40	6.13	0.09	1.5	6.1	5.7 - 6.6	39	13.58	0.12	0.9	13.6	12.6 - 14.6
All Sysmex Instruments	39	6.13	0.09	1.5	6.1	5.6 - 6.6	39	13.58	0.12	0.9	13.6	12.6 - 14.6
Sysmex XS-1000i	23	6.08	0.07	1.1	6.1	5.6 - 6.6	23	13.54	0.09	0.7	13.5	12.5 - 14.5
Specimen MX-3							Specimen MX-4					
All Method	39	17.64	0.27	1.5	17.7	16.4 - 18.9	40	6.14	0.08	1.4	6.1	5.7 - 6.6
All Sysmex Instruments	38	17.62	0.24	1.4	17.7	16.3 - 18.9	39	6.13	0.08	1.3	6.1	5.7 - 6.6
Sysmex XS-1000i	23	17.69	0.09	0.5	17.7	16.4 - 19.0	23	6.10	0.07	1.2	6.1	5.6 - 6.6
Specimen MX-5												
All Method	39	13.56	0.14	1.0	13.6	12.6 - 14.6						
All Sysmex Instruments	39	13.56	0.14	1.0	13.6	12.6 - 14.6						
Sysmex XS-1000i	23	13.53	0.11	0.8	13.5	12.5 - 14.5						

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

Specimen MX-1							Specimen MX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	40	18.99	0.41	2.2	18.9	17.8 - 20.2	40	40.35	0.61	1.5	40.4	37.9 - 42.8
All Sysmex Instruments	39	19.01	0.40	2.1	18.9	17.8 - 20.2	39	40.36	0.62	1.5	40.4	37.9 - 42.8
Sysmex XS-1000i	23	18.78	0.22	1.2	18.8	17.6 - 20.0	23	40.17	0.54	1.3	40.1	37.7 - 42.6
Specimen MX-3							Specimen MX-4					
All Method	39	52.05	0.87	1.7	52.2	48.9 - 55.2	40	18.99	0.43	2.2	19.0	17.8 - 20.2
All Sysmex Instruments	38	52.08	0.86	1.7	52.2	48.9 - 55.3	39	19.01	0.41	2.2	19.0	17.8 - 20.2
Sysmex XS-1000i	23	52.10	0.78	1.5	52.3	48.9 - 55.3	23	18.77	0.24	1.3	18.7	17.6 - 19.9
Specimen MX-5												
All Method	40	40.28	0.68	1.7	40.3	37.8 - 42.7						
All Sysmex Instruments	39	40.29	0.69	1.7	40.3	37.8 - 42.8						
Sysmex XS-1000i	23	40.08	0.57	1.4	40.1	37.6 - 42.5						

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

Specimen MX-1							Specimen MX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	40	60.5	6.3	10.3	61	45 - 76	40	220.7	11.4	5.1	222	165 - 276
All Sysmex Instruments	39	60.7	6.2	10.2	61	45 - 76	39	220.9	11.4	5.2	222	165 - 277
Sysmex XS-1000i	23	60.0	4.2	7.0	60	45 - 75	23	221.9	8.4	3.8	221	166 - 278
Specimen MX-3							Specimen MX-4					
All Method	39	423.6	21.1	5.0	430	317 - 530	40	60.6	6.0	9.9	61	45 - 76
All Sysmex Instruments	38	423.4	21.3	5.0	430	317 - 530	39	60.7	6.1	10.0	61	45 - 76
Sysmex XS-1000i	23	427.0	15.8	3.7	432	320 - 534	23	59.4	3.9	6.5	59	44 - 75
Specimen MX-5												
All Method	40	221.8	10.6	4.8	222	166 - 278						
All Sysmex Instruments	39	221.7	10.7	4.8	222	166 - 278						
Sysmex XS-1000i	23	222.0	7.5	3.4	221	166 - 278						

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

Specimen MX-1							Specimen MX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	39	61.76	4.02	6.5	61.0	49.6 - 73.9	39	50.85	3.30	6.5	50.8	40.9 - 60.8	
All Sysmex Instruments	38	61.92	3.96	6.4	61.5	50.0 - 73.8	38	50.84	3.34	6.6	50.7	40.8 - 60.9	
Sysmex XS-1000i	22	59.03	2.19	3.7	59.1	52.4 - 65.6	22	48.32	1.86	3.8	47.5	42.7 - 53.9	
Specimen MX-3							Specimen MX-4						
All Method	39	59.10	4.96	8.4	59.7	44.2 - 74.0	39	61.39	4.06	6.6	61.0	49.2 - 73.6	
All Sysmex Instruments	38	58.90	4.87	8.3	59.5	44.2 - 73.6	38	61.53	4.02	6.5	62.0	49.4 - 73.7	
Sysmex XS-1000i	22	58.31	6.17	10.6	54.4	39.8 - 76.9	22	58.69	2.63	4.5	58.6	50.8 - 66.6	
Specimen MX-5													
All Method	39	51.06	3.59	7.0	51.2	40.2 - 61.9							
All Sysmex Instruments	38	51.08	3.64	7.1	51.6	40.1 - 62.0							
Sysmex XS-1000i	22	48.41	2.28	4.7	47.6	41.5 - 55.3							

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

Specimen MX-1							Specimen MX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	39	14.75	3.22	21.8	15.1	5.0 - 24.5	39	27.41	3.33	12.1	28.2	17.4 - 37.4	
All Sysmex Instruments	38	14.84	3.21	21.6	15.1	5.2 - 24.5	38	27.61	3.14	11.4	28.4	18.1 - 37.1	
Sysmex XS-1000i	22	12.73	2.03	15.9	12.3	6.6 - 18.9	22	27.35	4.03	14.7	29.8	15.2 - 39.5	
Specimen MX-3							Specimen MX-4						
All Method	39	20.47	3.16	15.5	21.3	10.9 - 30.0	39	14.86	3.15	21.2	14.8	5.4 - 24.4	
All Sysmex Instruments	38	20.61	3.09	15.0	21.3	11.3 - 29.9	38	14.94	3.15	21.1	15.0	5.4 - 24.5	
Sysmex XS-1000i	22	19.19	2.85	14.9	21.1	10.6 - 27.8	22	12.89	2.19	17.0	12.1	6.3 - 19.5	
Specimen MX-5													
All Method	39	27.17	3.46	12.7	27.6	16.7 - 37.6							
All Sysmex Instruments	38	27.36	3.28	12.0	27.9	17.5 - 37.3							
Sysmex XS-1000i	22	27.20	4.21	15.5	29.6	14.5 - 39.9							

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

Specimen MX-1							Specimen MX-2						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	39	2.30	1.42	61.8	1.8	0.0 - 6.6	39	5.09	2.66	52.3	5.0	0.0 - 13.1	
All Sysmex Instruments	38	2.19	1.27	57.9	1.8	0.0 - 6.1	38	4.93	2.50	50.7	5.0	0.0 - 12.5	
Sysmex XS-1000i	22	2.60	1.50	57.5	2.0	0.0 - 7.1	22	4.94	3.13	63.3	3.0	0.0 - 14.4	
Specimen MX-3							Specimen MX-4						
All Method	39	3.72	1.70	45.6	3.0	0.0 - 8.9	39	2.35	1.40	59.6	1.8	0.0 - 6.6	
All Sysmex Instruments	38	3.66	1.68	45.9	3.0	0.0 - 8.7	38	2.27	1.32	58.2	1.8	0.0 - 6.3	
Sysmex XS-1000i	22	3.66	2.04	55.6	2.5	0.0 - 9.8	22	2.61	1.60	61.3	1.8	0.0 - 7.5	
Specimen MX-5													
All Method	39	5.22	2.68	51.3	5.1	0.0 - 13.3							
All Sysmex Instruments	38	5.07	2.53	49.9	5.0	0.0 - 12.7							
Sysmex XS-1000i	22	5.12	3.26	63.7	3.0	0.0 - 15.0							

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

Specimen MX-1							Specimen MX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	39	17.79	5.21	29.3	15.4	2.1 - 33.5	39	13.89	2.34	16.8	12.8	6.8 - 21.0
All Sysmex Instruments	38	17.56	5.09	29.0	15.4	2.3 - 32.9	38	13.80	2.29	16.6	12.8	6.9 - 20.7
Sysmex XS-1000i	22	19.73	5.78	29.3	16.0	2.3 - 37.1	22	14.51	2.80	19.3	12.8	6.1 - 23.0
Specimen MX-3							Specimen MX-4					
All Method	39	13.65	1.14	8.3	14.1	10.2 - 17.1	39	18.09	5.30	29.3	15.6	2.1 - 34.0
All Sysmex Instruments	38	13.69	1.12	8.2	14.1	10.3 - 17.1	38	17.87	5.19	29.1	15.6	2.2 - 33.5
Sysmex XS-1000i	22	13.46	1.41	10.5	14.1	9.2 - 17.8	22	19.97	6.03	30.2	16.1	1.8 - 38.1
Specimen MX-5												
All Method	39	13.85	2.23	16.1	12.8	7.1 - 20.6						
All Sysmex Instruments	38	13.73	2.11	15.4	12.8	7.4 - 20.1						
Sysmex XS-1000i	22	14.50	2.51	17.3	13.1	6.9 - 22.1						

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

Specimen MX-1							Specimen MX-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	16	86.03	1.81	2.1	10.0	80.6 - 91.5	16	69.91	0.66	0.9	7.9	67.9 - 71.9
All Sysmex Instruments	16	86.03	1.81	2.1	86.0	80.6 - 91.5	16	69.91	0.66	0.9	69.9	67.9 - 71.9
Sysmex XS-1000i	22	5.91	4.41	74.6	8.4	0.0 - 19.2	22	4.85	3.68	75.9	7.1	0.0 - 15.9
Specimen MX-3							Specimen MX-4					
All Method	15	80.48	1.79	2.2	8.8	75.1 - 85.9	16	85.48	1.68	2.0	9.9	80.4 - 90.6
All Sysmex Instruments	15	80.48	1.79	2.2	80.5	75.1 - 85.9	16	85.48	1.68	2.0	85.3	80.4 - 90.6
Sysmex XS-1000i	22	5.37	4.15	77.2	7.7	0.0 - 17.9	22	5.84	4.34	74.4	8.1	0.0 - 18.9
Specimen MX-5												
All Method	16	70.04	0.83	1.2	8.2	67.5 - 72.6						
All Sysmex Instruments	16	70.04	0.83	1.2	69.8	67.5 - 72.6						
Sysmex XS-1000i	22	4.77	3.67	76.9	6.9	0.0 - 15.8						

2013 M1
BLOOD CELL IDENTIFICATION
Specimens BC-1 through BC-6

CASE HISTORY:

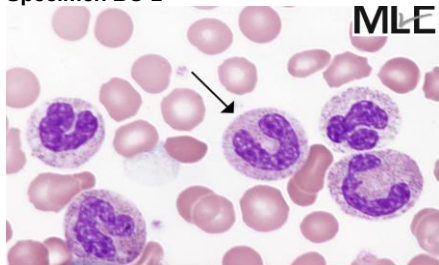
A 46 year-old female presented to her OB/GYN for a routine exam. She complained of constant fatigue and difficulty sleeping due to abdominal discomfort and night sweats that she attributed to symptoms of early menopause. She mentioned that her appetite had decreased, causing her to lose weight without trying. Upon examination, her spleen was tender and appeared enlarged. A CBC was performed, and the results appear below.

Test	Results	Normal Range
WBC	119.8 $\times 10^9/L$	4.5 - 15.0 $\times 10^9/L$
RBC	3.38 $\times 10^{12}/L$	4.0 - 5.4 $\times 10^{12}/L$
Hgb	11.0 g/dL	12.0 - 15.0 g/dL
Hct	32.2 %	35 - 49 %
MCV	95 fL	80 - 100 fL
MCH	33 pg	25 - 35 pg
MCHC	34 g/dL	31 - 38 g/dL
RDW	16 %	11-15 %
PLT	463 $\times 10^9/L$	150 - 450 $\times 10^9/L$

This patient was diagnosed with chronic myelogenous leukemia (CML).

CML is a myeloproliferative disorder in which a genetic mutation leads to excessive production and over-accumulation of granulocytes in the bone marrow. The genetic translocation called "Philadelphia chromosome" is present in 90% of patients with CML. The affected cells produce abnormal proteins that trigger uncontrolled production of myeloid progenitor cells. The myeloid cell line includes myelocytes, neutrophils, basophils, and eosinophils. These malignant leukocytes do not function normally or die like normal cells. They build up in the bone marrow as the disease progresses over 3 to 4 years (the chronic phase), crowding normal cells out of the bone marrow. The disease usually transforms to an accelerated phase (acute leukemia), then to a blastic phase or "blast crisis" (the most severe). The most common symptoms of CML at presentation are fatigue and loss of energy. At diagnosis, most patients are in the chronic or stable phase. As the disease progresses, there is an increase in clinical symptoms, adverse changes in laboratory values, and decreased response to therapy.

BLOOD CELL IDENTIFICATION
Specimen BC-1

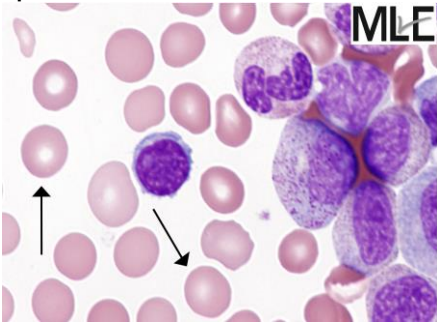


Identification	Labs	Percent	Performance
Neutrophil-Segmented or band	262	97.76%	Acceptable
Neutrophil-seg/band w/toxic granulation	5	1.87%	

The arrow in this photograph points to a **band neutrophil**. To view a photo of a neutrophil with toxic granulation, see 2011 M1, Specimen BC-2.

BLOOD CELL IDENTIFICATION

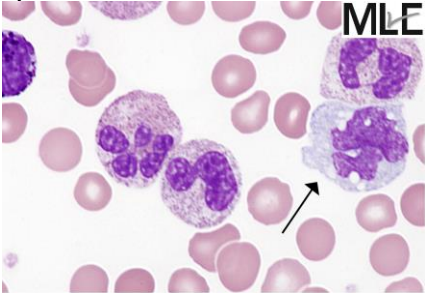
Specimen BC-2



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. To view another photo of normal red cells, see 2012 M1 Specimen BC-3.

<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Erythrocyte, normal	256	95.52%	Acceptable
Hypochromic red cell	8	2.99%	

Specimen BC-3

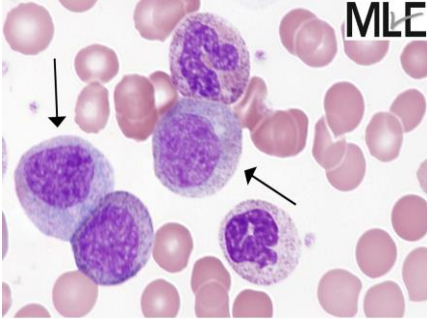


The arrow in this photograph points to a **monocyte**. Monocytes are typically the largest cell in the peripheral blood. They vary greatly in morphology because of their aggressive motility and adherence to surfaces. The nucleus is indented, curved, or folded and the nuclear chromatin is blue-purple with small clumps. The cytoplasm is pale gray-blue with a cloudy/turbid “ground glass” appearance, and contains vacuoles. The cytoplasmic membrane is often irregular, with pseudopods that appear to be pushing away adjacent red blood cells. To view another photo of a monocyte, see 2012 M1 Specimen BC-5

<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Monocyte	264	98.51%	Acceptable

BLOOD CELL IDENTIFICATION

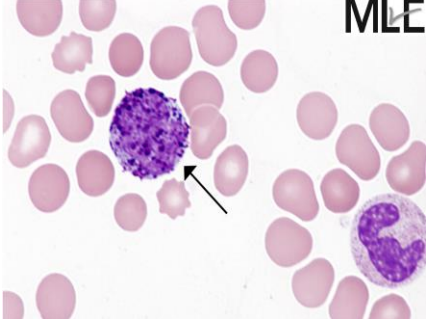
Specimen BC-4



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Myelocyte cell	196	73.13%	Acceptable
Immature/abnormal cell - refer	48	17.91%	Acceptable
Blast cell	6	2.24%	
Prolymphocyte	5	1.87%	
Promonocyte	5	1.87%	

The arrows in this photograph point to **myelocytes**. Myelocytes are immature granulocytes that will develop into either neutrophils, basophils, or eosinophils. The typical myelocyte has fine reddish-purple chromatin, and an eccentric nucleus that is flat on one side. These cells have bluish-pink cytoplasm containing both azurophilic (blue) and neutrophilic (pink) granules. Myelocytes that are destined to become eosinophils or basophils will also contain some specific granules, either eosinophilic (orange), or basophilic (blue-black), respectively. To view another myelocyte, see 2009 M3 Specimen BC-13.

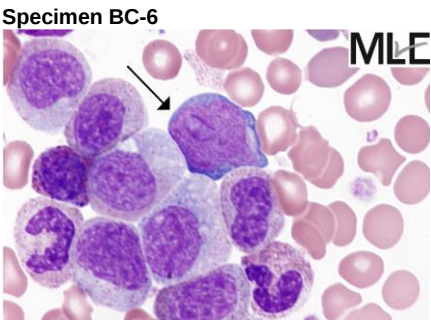
Specimen BC-5



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Basophil, any stage	260	97.01%	Acceptable

The arrow in this photograph points to a **basophil**. The characteristic large, dense, blue-black granules protrude from the cytoplasmic edge and obscure the features of the nucleus. To view another photo of a basophil, see 2012 M3 Specimen BC-13.

BLOOD CELL IDENTIFICATION



Identification	Labs	Percent
Blast cell	173	64.55%
Immature/abnormal cell - refer	56	20.90%
Lymphocyte, reactive	25	9.33%
Prolymphocyte	7	2.61%

Performance
Not graded – Educational Challenge

The arrow in this ungraded educational challenge points to a **blast cell**. The blast is the earliest stage of white blood cell development, normally found only in the bone marrow. Blasts in the peripheral blood are an abnormal finding. This myeloblast has a very high ratio of nucleus to cytoplasm. The scant amount of cytoplasm present is deeply basophilic (blue) and without visible granules. The nucleus is light red-purple, with fine nuclear chromatin and one or more prominent nucleoli. The fact that this cell is surrounded by various stages of granulocytes should provide a clue to its lineage. To view another blast, see 2009 M3 Specimen BC-18.

References:

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

Henderson, L. H.: *The POL Microscopy Atlas*. 2nd ed. American Academy of Family Physicians, Leawood KS, 2003.

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

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

BLOOD BANK

ABO GROUP

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-1	Group O	9	100%	Acceptable
BB-2	Group A	9	100%	Acceptable
BB-3	Group AB	9	100%	Acceptable
BB-4	Group A	9	100%	Acceptable
BB-5	Group B	9	100%	Acceptable

RH FACTOR (D TYPE)

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-1	Rh Positive	13	100%	Acceptable
BB-2	Rh Positive	13	100%	Acceptable
BB-3	Rh Negative	13	100%	Acceptable
BB-4	Rh Negative	13	100%	Acceptable
BB-5	Rh Negative	13	100%	Acceptable

UNEXPECTED ANTIBODY DETECTION

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-1	No unexpected antibody detected	9	100%	Acceptable
AB-2	Unexpected antibody detected	9	100%	Acceptable
AB-3	Unexpected antibody detected	9	100%	Acceptable
AB-4	No unexpected antibody detected	9	100%	Acceptable
AB-5	Unexpected antibody detected	9	100%	Acceptable

BLOOD BANK

ANTIBODY IDENTIFICATION

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-1	No antibody detected	1	100%	Acceptable
AB-2	Anti-E	1	50.0%	Acceptable
	Unable to identify, referred	1	50.0%	Acceptable
AB-3	Anti-Jk ^a	1	50.0%	Acceptable
	Unable to identify, referred	1	50.0%	Acceptable
AB-4	No antibody detected	1	100%	Acceptable
AB-5	Anti-K	1	50.0%	Acceptable
	Unable to identify, referred	1	50.0%	Acceptable

COMPATIBILITY TESTING

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-1	Compatible	9	100%	Acceptable
AB-2	Not Compatible	8	85.71%	Not graded
	Compatible	1	14.29%	
AB-3	Not Compatible	8	85.71%	Not graded
	Compatible	1	14.29%	
AB-4	Compatible	9	100%	Acceptable
AB-5	Compatible	9	100%	Acceptable

Specimens AB-2 and AB-3 are ungraded challenges due to less than 95% consensus.

PROTHROMBIN TIME (seconds)

Specimen CG-1							Specimen CG-2					
<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	67	11.26	0.77	6.8	11.1	9.5 - 13.0	65	13.68	0.65	4.8	13.7	11.6 - 15.8
Dade Innovin												
Dade Behring BFT II	5	9.92	0.43	4.4	9.9	8.4 - 11.5	5	13.14	0.59	4.5	13.2	11.1 - 15.2
Sysmex CA-500/540/560	26	11.06	0.38	3.5	11.0	9.4 - 12.8	25	13.76	0.44	3.2	13.7	11.6 - 15.9
All Coagulation Instruments	35	10.85	0.55	5.1	10.9	9.2 - 12.5	34	13.62	0.50	3.6	13.6	11.5 - 15.7
IL TEST PT Fibrinogen												
IL ACL, all models	18	11.76	0.49	4.2	11.7	9.9 - 13.6	18	13.92	0.63	4.5	14.0	11.8 - 16.1
PH/CMS Thromboplastin-D												
All Coagulation Instruments	5	11.44	0.44	3.8	11.5	9.7 - 13.2	5	13.26	0.86	6.5	13.0	11.2 - 15.3
Specimen CG-3							Specimen CG-4					
All Method	68	25.57	3.56	13.9	26.6	21.7 - 29.5	67	38.99	6.85	17.6	41.0	33.1 - 44.9
Dade Innovin												
Dade Behring BFT II	5	28.78	0.80	2.8	28.7	24.4 - 33.1	5	46.14	1.84	4.0	46.0	39.2 - 53.1
Sysmex CA-500/540/560	26	27.88	1.41	5.0	27.9	23.6 - 32.1	26	43.12	2.67	6.2	42.9	36.6 - 49.6
All Coagulation Instruments	35	28.15	1.41	5.0	28.1	23.9 - 32.4	35	43.86	2.97	6.8	43.9	37.2 - 50.5
IL TEST PT Fibrinogen												
IL ACL, all models	18	21.70	1.41	6.5	21.7	18.4 - 25.0	18	31.36	2.35	7.5	31.5	26.6 - 36.1
PH/CMS Thromboplastin-D												
All Coagulation Instruments	5	21.94	1.23	5.6	22.3	18.6 - 25.3	5	32.76	2.59	7.9	32.5	27.8 - 37.7
Specimen CG-5												
All Method	66	11.23	0.68	6.1	11.2	9.5 - 13.0						
Dade Innovin												
Dade Behring BFT II	5	9.92	0.69	7.0	9.5	8.4 - 11.5						
Sysmex CA-500/540/560	26	11.00	0.31	2.8	11.0	9.3 - 12.7						
All Coagulation Instruments	35	10.81	0.52	4.8	10.9	9.1 - 12.5						
IL TEST PT Fibrinogen												
IL ACL, all models	18	11.80	0.43	3.6	11.7	10.0 - 13.6						
PH/CMS Thromboplastin-D												
All Coagulation Instruments	5	11.52	0.48	4.2	11.4	9.7 - 13.3						

PROTHROMBIN TIME–INTERNATIONAL NORMALIZED RATIO (INR)

Specimen CG-1							Specimen CG-2					
<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	71	1.03	0.07	7.0	1.0	0.8 - 1.3	69	1.32	0.09	6.6	1.3	1.0 - 1.6
Dade Innovin												
Dade Behring BFT II	5	1.08	0.04	4.1	1.1	0.8 - 1.3	5	1.36	0.05	4.0	1.4	1.0 - 1.7
Sysmex CA-500/540/560	26	1.06	0.06	5.4	1.1	0.8 - 1.3	25	1.34	0.06	4.8	1.3	1.0 - 1.7
All Coagulation Instruments	35	1.07	0.05	5.1	1.1	0.8 - 1.3	34	1.34	0.06	4.8	1.3	1.0 - 1.7
IL TEST PT Fibrinogen												
IL ACL, all models	18	0.96	0.05	5.2	1.0	0.7 - 1.2	18	1.32	0.09	6.6	1.3	1.0 - 1.6
PH/CMS Thromboplastin-D												
All Coagulation Instruments	6	1.07	0.08	7.7	1.1	0.8 - 1.3	6	1.37	0.12	8.9	1.4	1.0 - 1.7
Specimen CG-3							Specimen CG-4					
All Method	69	2.84	0.29	10.3	2.8	2.2 - 3.5	68	4.91	0.94	19.2	4.5	3.9 - 5.9
Dade Innovin												
Dade Behring BFT II	5	2.76	0.22	7.9	2.9	2.2 - 3.4	5	4.18	0.41	9.9	4.3	3.3 - 5.1
Sysmex CA-500/540/560	26	2.71	0.14	5.1	2.7	2.1 - 3.3	26	4.23	0.25	5.9	4.3	3.3 - 5.1
All Coagulation Instruments	35	2.73	0.15	5.6	2.7	2.1 - 3.3	35	4.22	0.26	6.2	4.3	3.3 - 5.1
IL TEST PT Fibrinogen												
IL ACL, all models	18	2.91	0.19	6.4	2.9	2.3 - 3.5	18	5.59	0.50	8.9	5.6	4.4 - 6.8
PH/CMS Thromboplastin-D												
All Coagulation Instruments	6	3.63	0.19	5.1	3.6	2.9 - 4.4	6	7.75	1.02	13.2	7.4	6.2 - 9.3
Specimen CG-5												
All Method	71	1.04	0.06	6.2	1.0	0.8 - 1.3						
Dade Innovin												
Dade Behring BFT II	5	1.08	0.04	4.1	1.1	0.8 - 1.3						
Sysmex CA-500/540/560	26	1.07	0.05	4.6	1.1	0.8 - 1.3						
All Coagulation Instruments	35	1.07	0.05	4.5	1.1	0.8 - 1.3						
IL TEST PT Fibrinogen												
IL ACL, all models	18	0.98	0.04	4.4	1.0	0.7 - 1.2						
PH/CMS Thromboplastin-D												
All Coagulation Instruments	6	1.07	0.05	4.8	1.1	0.8 - 1.3						

ACTIVATED PARTIAL THROMBOPLASTIN (seconds)

<u>Reagent/Instrument</u>	Specimen CG-1						Specimen CG-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	29	27.8	1.2	4.4	27	23 - 32	29	35.1	4.5	12.9	33	29 - 41
Dade Actin FSL												
Sysmex CA-500/540/560	17	27.6	0.9	3.2	27	23 - 32	16	32.1	1.1	3.5	32	27 - 37
All Coagulation Instruments	18	27.5	0.9	3.4	27	23 - 32	17	32.1	1.1	3.4	32	27 - 37
IL TEST APTT-SP												
IL ACL, all models	7	28.0	1.3	4.6	29	23 - 33	7	42.1	7.2	17.1	39	35 - 49
	Specimen CG-3						Specimen CG-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	30	52.5	4.2	7.9	52	44 - 61	30	75.6	6.9	9.2	75	64 - 87
Dade Actin FSL												
Sysmex CA-500/540/560	16	52.1	1.2	2.3	52	44 - 60	17	75.2	2.7	3.5	75	63 - 87
All Coagulation Instruments	17	52.1	1.1	2.2	52	44 - 60	18	75.1	2.6	3.4	75	63 - 87
IL TEST APTT-SP												
IL ACL, all models	7	49.6	1.9	3.8	50	42 - 58	7	70.4	3.9	5.5	70	59 - 81
	Specimen CG-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	29	29.8	1.2	4.2	30	25 - 35						
Dade Actin FSL												
Sysmex CA-500/540/560	17	29.3	1.0	3.4	29	24 - 34						
All Coagulation Instruments	18	29.3	1.0	3.3	30	24 - 34						
IL TEST APTT-SP												
IL ACL, all models	7	30.6	1.5	4.9	30	25 - 36						

Fibrinogen (mg/dL)

One participant reported Fibrinogen. The vendor assay values for specimens CG-1 through CG-5 are: 334 mg/dL, 108 mg/dL, 307 mg/dL, 262 mg/dL and 584 mg/dL respectively.

RH FACTOR (Slide Method)

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

COAGUCHEK XS PLUS PROTHROMBIN TIME (seconds)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen XS-1				<u>Labs</u>	<u>Mean</u>	Specimen XS-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Roche CoaguChek XS Plus	23	25.21	0.63	2.5	25.3	21.4 - 29.0	22	34.41	0.86	2.5	34.5	29.2 - 39.6
			Specimen XS-3						Specimen XS-4			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Roche CoaguChek XS Plus	23	14.52	0.31	2.2	14.5	12.3 - 16.7	23	24.98	0.78	3.1	25.2	21.2 - 28.8
			Specimen XS-5									
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
Roche CoaguChek XS Plus	22	33.98	1.79	5.3	34.3	28.8 - 39.1						

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

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen XS-1				<u>Labs</u>	<u>Mean</u>	Specimen XS-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Roche CoaguChek XS Plus	23	2.09	0.07	3.3	2.1	1.6 - 2.6	22	2.87	0.08	2.7	2.9	2.2 - 3.5
			Specimen XS-3						Specimen XS-4			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Roche CoaguChek XS Plus	23	1.20	0.04	3.0	1.2	0.9 - 1.5	23	2.04	0.10	4.7	2.1	1.6 - 2.5
			Specimen XS-5									
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
Roche CoaguChek XS Plus	23	2.77	0.23	8.2	2.8	2.2 - 3.4						

ITC PROTIME MICROCOAGULATION SYSTEM PROTHROMBIN TIME (seconds)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen IT-1				<u>Labs</u>	<u>Mean</u>	Specimen IT-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	30.22	2.65	8.8	30.7	25.6 - 34.8	10	20.90	1.84	8.8	20.9	17.7 - 24.1

ITC PROTIME MICROCOAGULATION SYSTEM -INTERNATIONAL NORMALIZED RATIO (INR)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen IT-1				<u>Labs</u>	<u>Mean</u>	Specimen IT-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	11	2.34	0.25	10.9	2.3	1.8 - 2.9	12	1.53	0.17	11.2	1.5	1.2 - 1.9

i-Stat PROTHROMBIN TIME (seconds)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen PTI-1				<u>Labs</u>	<u>Mean</u>	Specimen PTI-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
i-Stat Prothrombin Time	10	13.53	0.69	5.1	13.3	11.4 - 15.6	10	28.41	2.63	9.3	29.3	24.1 - 32.7
			Specimen PTI-3						Specimen PTI-4			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
i-Stat Prothrombin Time	10	13.67	0.78	5.7	13.8	11.6 - 15.8	10	27.73	1.08	3.9	27.8	23.5 - 31.9
			Specimen PTI-5									
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method i-Stat Prothrombin Time	10	27.93	1.64	5.9	28.3	23.7 - 32.2						

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

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen PTI-1				<u>Labs</u>	<u>Mean</u>	Specimen PTI-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
i-Stat Prothrombin Time	10	1.13	0.08	7.2	1.2	0.9 - 1.4	10	2.43	0.26	10.6	2.5	1.9 - 3.0
			Specimen PTI-3						Specimen PTI-4			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
i-Stat Prothrombin Time	10	1.15	0.05	4.8	1.2	0.9 - 1.4	10	2.40	0.11	4.6	2.4	1.9 - 2.9
			Specimen PTI-5									
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
i-Stat Prothrombin Time	10	2.40	0.15	6.5	2.5	1.9 - 2.9						

FLUID CELL COUNT/CRYSTALS – WHITE BLOOD CELL COUNT (uL)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen BF-1				<u>Labs</u>	<u>Mean</u>	Specimen BF-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	8	0.0	0.0	0.0	0	0 - 0	8	1654.0	195.8	11.8	1666	1262 - 2046

FLUID CELL COUNT/CRYSTALS – RED BLOOD CELL COUNT (uL)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen BF-1				<u>Labs</u>	<u>Mean</u>	Specimen BF-2			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	9	2239.7	299.2	13.4	2234	1641 - 2839	8	2232.8	186.0	8.3	2200	1860 - 2605

FLUID CELL COUNT/CRYSTALS – CRYSTAL IDENTIFICATION

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BF-1	Cholesterol crystals	11	68.75%	Not graded
	Calcium Oxalate Crystals	2	12.50%	
	Other, not listed	2	12.50%	
	CPPD Crystals	1	6.25%	

BF-1 is an ungraded challenge due to less than 80% referee consensus. The vendor assay is: Cholesterol Crystals.

BF-2	MSU (Monosodium Urate)	15	93.75%	Acceptable
	Other, not listed	1	6.25%	

MICROALBUMIN, DIPSTICK

Specimen UM-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/L(Pos)</u>	<u>20/30 mg/L</u>	<u>50 mg/L (+)</u>	<u>80 mg/L</u>	<u>100 mg/L (++)</u>	<u>150 mg/L</u>
ALL METHODS	41	1	11	25	3	-	1	-
Bayer Clinitek Microalbumin	31	1	9	21	-	-	-	-
Roche Micral - 1 minute	7	-	-	3	3	-	1	-
Siemens DCA Vantage	1	-	1	-	-	-	-	-

CREATININE, DIPSTICK

Specimen UM-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/dL</u>	<u>30 mg/dL</u>	<u>50 mg/dL</u>	<u>100 mg/dL</u>	<u>200 mg/dL</u>	<u>300 mg/dL</u>
ALL METHODS	35	-	-	-	-	-	9	26
Bayer Clinitek Microalbumin	29	-	-	-	-	-	7	22
Bayer Multistix Pro	4	-	-	-	-	-	2	2

MICROALBUMIN, QUANTITATIVE

Specimen UM-1

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	102	26.9	2.8	10.5	27	18 - 36
Axis-Shield Afinion AS100	11	26.9	2.9	11.0	27	18 - 36
Dade Dimension/AR/ES/RxL/Xpand	25	27.4	2.0	7.3	28	21 - 34
Olympus AU	10	26.7	3.0	11.3	27	17 - 36
Siemens DCA Vantage	19	27.5	2.1	7.6	27	21 - 34

CREATININE, URINE (mg/dL)

Specimen UM-1

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	90	223.3	15.3	6.9	224	177 - 270
Axis-Shield Afinion AS100	11	219.5	10.5	4.8	222	188 - 252
Dade Dimension/AR/ES/RxL/Xpand	21	212.2	6.8	3.2	211	191 - 233
Siemens DCA Vantage	19	240.4	10.3	4.3	239	209 - 272

WAIVED HEMATOLOGY–HEMOGLOBIN (g/dL)

Specimen HD-1

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	89	8.27	0.37	4.5	8.3	7.6 - 8.9
All Stanbio Methods	15	8.63	0.25	3.0	8.5	8.0 - 9.3
HemoCue	73	8.21	0.33	4.1	8.2	7.6 - 8.8
Stanbio HemoPoint H2	14	8.53	0.45	5.3	8.5	7.9 - 9.2

Specimen HD-2

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
86	16.18	0.55	3.4	16.2	15.0 - 17.4
15	16.47	0.87	5.3	16.6	15.3 - 17.7
72	16.15	0.52	3.2	16.2	15.0 - 17.3
14	16.60	0.75	4.5	16.7	15.4 - 17.8

WAIVED HEMATOLOGY–HEMATOCRIT (percent)

Specimen HD-1

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	11	22.68	2.59	11.4	24.0	17.4 - 27.9

Specimen HD-2

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
12	49.29	2.90	5.9	48.5	43.5 - 55.1

KOH SKIN PREPARATION

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
K-1	Yeast/fungal elements present	143	83.14%	Acceptable
	Yeast/fungal elements absent	29	16.86%	

Organism present in specimen K-1: *Aspergillus niger*.

K-2	Yeast/fungal elements absent	164	95.35%	Acceptable
	Yeast/fungal elements present	8	4.65%	

Organism present in specimen K-2: *Staphylococcus aureus*.

COAGUCHECK XS - INTERNATIONAL NORMALIZED RATIO (INR)

<u>Instrument</u>	Specimen INX-1						Specimen INX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
CoaguChek XS	64	2.71	0.08	2.9	2.7	2.1 - 3.3	62	1.23	0.05	3.8	1.2	0.9 - 1.5

URINALYSIS DIPSTICK–SPECIFIC GRAVITY

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	951	1.0097	0.0049	0.5	1.010	0.999 - 1.020
All Bayer Instruments	455	1.0124	0.0036	0.4	1.015	1.002 - 1.023
All Roche Instruments	67	1.0139	0.0031	0.3	1.015	1.003 - 1.024
Bayer Clinitek 10 / 100	16	1.0097	0.0038	0.4	1.010	0.999 - 1.020
Bayer Clinitek 50	75	1.0075	0.0031	0.3	1.005	0.997 - 1.018
Bayer Clinitek 500	17	1.0100	0.0000	0.0	1.010	1.000 - 1.020
Bayer Clinitek Advantus	22	1.0093	0.0016	0.2	1.010	0.999 - 1.020
Bayer Clinitek Status / Status+	317	1.0140	0.0020	0.2	1.015	1.004 - 1.025
Bayer Reagent Strips	263	1.0053	0.0019	0.2	1.005	0.995 - 1.016
Consult Diagnostics Urine Analyzer	13	1.0081	0.0032	0.3	1.010	0.998 - 1.019
CTMI CT-120 Urine Analyzer	12	1.0100	0.0000	0.0	1.010	1.000 - 1.020
Diagnostic Test Group Clarity Urocheck 120	13	1.0088	0.0021	0.2	1.010	0.998 - 1.019
Other Dipstick Method	13	1.0119	0.0060	0.6	1.010	1.001 - 1.022
Roche Chemstrip 101	10	1.0105	0.0060	0.6	1.013	1.000 - 1.021
Roche Chemstrips	48	1.0035	0.0029	0.3	1.005	0.993 - 1.014
Roche Criterion Analyzer	18	1.0144	0.0029	0.3	1.015	1.004 - 1.025
Roche Urisys	40	1.0140	0.0030	0.3	1.015	1.004 - 1.024

URINALYSIS DIPSTICK–pH

Specimen UA-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>3.5 or less</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	991	-	-	-	-	-	3	7	5	12	171	632	161
Arkray DiaScreen	7	-	-	-	-	-	-	-	-	-	3	-	4
Arkray DiaScreen 50	3	-	-	-	-	-	-	-	-	-	1	2	-
Bayer Clinitek 10 / 100	16	-	-	-	-	-	-	1	-	-	-	15	-
Bayer Clinitek 200/200+	1	-	-	-	-	-	-	-	-	-	-	1	-
Bayer Clinitek 50	75	-	-	-	-	-	-	-	-	2	28	43	2
Bayer Clinitek 500	19	-	-	-	-	-	-	-	-	-	-	19	-
Bayer Clinitek Advantus	22	-	-	-	-	-	-	-	-	1	-	20	1
Bayer Clinitek Atlas	5	-	-	-	-	-	-	-	-	-	3	2	-
Bayer Clinitek Status / Status+	324	-	-	-	-	-	-	-	1	-	1	258	64
Bayer Hemacombistix	1	-	-	-	-	-	-	-	-	-	-	1	-
Bayer Multistix Pro	1	-	-	-	-	-	-	1	-	-	-	-	-
Bayer Reagent Strips	285	-	-	-	-	-	1	4	2	5	39	229	5
Consult Diagnostics Urine Analyzer	12	-	-	-	-	-	-	-	-	2	10	-	-
CTMI CT-120 Urine Analyzer	12	-	-	-	-	-	-	-	-	-	-	12	-
Diagnostic Test Group Clarity Urocheck	6	-	-	-	-	-	-	-	-	-	1	-	5
Diagnostic Test Group Clarity Urocheck 120	13	-	-	-	-	-	-	-	-	-	-	8	5
Germaine Laboratories AimStrip	2	-	-	-	-	-	-	-	-	-	-	-	2
McKesson 10SG Reagent Strips	5	-	-	-	-	-	-	1	-	-	1	-	3
Other Analyzer Method	5	-	-	-	-	-	-	-	-	1	-	3	1
Other Dipstick Method	15	-	-	-	-	-	-	-	-	-	10	3	2
pH Paper	1	-	-	-	-	-	-	-	-	1	-	-	-
PSS Select Reagent Strips	5	-	-	-	-	-	-	-	-	-	2	-	3
PSS Select Urine Analyzer	4	-	-	-	-	-	-	-	-	-	4	-	-
Roche Chemstrip 101	9	-	-	-	-	-	-	-	-	-	3	-	6
Roche Chemstrips	57	-	-	-	-	-	2	-	1	-	31	6	17
Roche Criterion Analyzer	18	-	-	-	-	-	-	-	-	-	3	-	15
Roche SuperUA/ChemstripUA	2	-	-	-	-	-	-	-	-	-	-	-	2
Roche Urisys	41	-	-	-	-	-	-	-	1	-	19	-	21
Schein Urispec	4	-	-	-	-	-	-	-	-	-	2	-	2
UriScan Reagent Strips	2	-	-	-	-	-	-	-	-	-	2	-	-

URINALYSIS DIPSTICK--PROTEIN QUALITATIVE

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<i>Participant Results</i>				
				<u>30</u> <u>mg/dL</u> <u>(1+)</u>	<u>100</u> <u>mg/dL</u> <u>(2+)</u>	<u>300-500</u> <u>mg/dL</u> <u>(3+)</u>	<u>≥300</u> <u>mg/dL</u>	<u>≥1000</u> <u>mg/dL</u> <u>(4+)</u>
ALL METHODS	1029	11	42	376	582	16	1	1
Arkray DiaScreen	13	-	-	-	11	2	-	-
Arkray DiaScreen 50	3	-	-	2	1	-	-	-
Bayer Albustix	1	-	-	1	-	-	-	-
Bayer Clinitek 10 / 100	16	-	-	3	13	-	-	-
Bayer Clinitek 200/200+	1	-	-	1	-	-	-	-
Bayer Clinitek 50	75	-	-	1	74	-	-	-
Bayer Clinitek 500	19	-	-	16	3	-	-	-
Bayer Clinitek Advantus	21	-	-	18	3	-	-	-
Bayer Clinitek Atlas	5	-	-	1	4	-	-	-
Bayer Clinitek Status / Status+	323	1	-	3	317	2	-	-
Bayer Hemacombistix	1	-	-	1	-	-	-	-
Bayer Multistix Pro	1	-	-	1	-	-	-	-
Bayer Reagent Strips	286	-	5	166	107	6	1	1
Bayer Uristix	17	-	-	4	12	1	-	-
Behring Reagent Strips	1	-	-	1	-	-	-	-
Consult Diagnostics Urine Analyzer	13	-	3	9	1	-	-	-
CTMI CT-120 Urine Analyzer	11	-	-	11	-	-	-	-
Diagnostic Test Group Clarity Urocheck	5	-	-	4	1	-	-	-
Diagnostic Test Group Clarity Urocheck 120	13	-	-	12	1	-	-	-
Germaine Laboratories AimStrip	2	-	1	1	-	-	-	-
McKesson 10SG Reagent Strips	5	-	-	3	1	1	-	-
Other Analyzer Method	5	-	-	5	-	-	-	-
Other Dipstick Method	15	-	-	10	5	-	-	-
PSS Select Reagent Strips	5	-	-	-	4	1	-	-
PSS Select Urine Analyzer	4	4	-	-	-	-	-	-
Roche Chemstrip 101	9	-	1	7	1	-	-	-
Roche Chemstrips	71	2	9	41	17	2	-	-
Roche Criterion Analyzer	18	-	4	14	-	-	-	-
Roche SuperUA/ChemstripUA	2	-	-	2	-	-	-	-
Roche Urisys	41	3	19	19	-	-	-	-
Schein Urispec	4	-	-	4	-	-	-	-
Sulfosalicylic Acid	3	-	-	2	1	-	-	-
UriScan Reagent Strips	2	-	-	2	-	-	-	-

URINALYSIS DIPSTICK–GLUCOSE

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<i>Participant Results</i>						
			<u>50-100 mg/dL (Trace)</u>	<u>150 mg/dL</u>	<u>250 mg/dL</u>	<u>500 mg/dL</u>	<u>1000 mg/dL</u>	<u>>1000 mg/dL</u>	<u>≥2000 mg/dL</u>
ALL METHODS	1026	12	23	45	402	317	130	87	10
Arkray DiaScreen	13	-	1	-	2	10	-	-	-
Arkray DiaScreen 50	3	-	-	-	3	-	-	-	-
Bayer Clinitek 10 / 100	16	-	1	4	4	2	-	2	3
Bayer Clinitek 200/200+	1	-	-	1	-	-	-	-	-
Bayer Clinitek 50	75	-	2	1	14	38	2	18	-
Bayer Clinitek 500	18	-	-	-	3	15	-	-	-
Bayer Clinitek Advantus	21	-	1	-	3	14	2	1	-
Bayer Clinitek Atlas	5	-	-	-	1	4	-	-	-
Bayer Clinitek Status / Status+	323	5	1	28	228	56	3	1	1
Bayer Clinitest, 5 drop	2	-	-	-	1	1	-	-	-
Bayer Hemacombistix	1	-	-	-	1	-	-	-	-
Bayer Multistix Pro	1	-	-	-	-	1	-	-	-
Bayer Reagent Strips	287	2	6	9	98	111	49	10	2
Bayer Uristix	17	-	-	-	2	13	1	1	-
Behring Reagent Strips	1	-	-	-	-	1	-	-	-
Consult Diagnostics Urine Analyzer	12	-	-	-	2	10	-	-	-
CTMI CT-120 Urine Analyzer	12	1	3	-	8	-	-	-	-
Diagnostic Test Group Clarity Urocheck	6	1	1	-	4	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	13	-	1	2	9	1	-	-	-
Germaine Laboratories AimStrip	2	-	1	-	1	-	-	-	-
McKesson 10SG Reagent Strips	4	-	-	-	3	1	-	-	-
Other Analyzer Method	5	-	-	-	1	4	-	-	-
Other Dipstick Method	15	1	2	-	5	4	3	-	-
PSS Select Reagent Strips	5	-	-	-	-	2	1	1	1
PSS Select Urine Analyzer	4	-	-	-	-	2	2	-	-
Roche Chemstrip 101	9	-	-	-	-	2	-	5	2
Roche Chemstrips	70	2	1	-	3	2	48	13	1
Roche Criterion Analyzer	17	-	-	-	-	5	10	2	-
Roche SuperUA/ChemstripUA	2	-	-	-	-	-	1	1	-
Roche Urisys	41	-	-	-	1	9	2	29	-
Schein Urispec	4	-	-	-	-	2	-	2	-
UriScan Reagent Strips	2	-	-	-	-	1	1	-	-

URINALYSIS DIPSTICK–KETONES

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>						
		<u>Negative</u>	<u>Trace</u> <u>(5 mg/dL)</u>	<u>Small</u> <u>(1+, 15</u> <u>mg/dL)</u>	<u>Moderate</u> <u>(2+, 40</u> <u>mg/dL)</u>	<u>Large</u> <u>(3+, 80</u> <u>mg/dL)</u>	<u>150</u> <u>mg/dL</u>	<u>≥ 160 mg/dL</u>
ALL METHODS	986	3	1	1	11	390	47	533
Arkray DiaScreen	7	-	-	-	-	-	-	7
Arkray DiaScreen 50	3	-	-	-	-	1	-	2
Bayer Acetest	1	-	-	-	-	1	-	-
Bayer Clinitek 10 / 100	16	-	-	-	-	11	-	5
Bayer Clinitek 200/200+	1	-	-	-	-	-	-	1
Bayer Clinitek 50	75	-	-	-	-	67	-	8
Bayer Clinitek 500	18	-	-	-	-	18	-	-
Bayer Clinitek Advantus	22	-	-	-	-	21	-	1
Bayer Clinitek Atlas	5	-	-	-	-	4	-	1
Bayer Clinitek Status / Status+	322	-	-	-	3	24	6	289
Bayer Ketostix	1	-	-	-	-	1	-	-
Bayer Multistix Pro	1	-	-	-	-	-	-	1
Bayer Reagent Strips	286	-	1	-	1	83	7	194
Consult Diagnostics Urine Analyzer	12	-	-	-	3	8	-	1
CTMI CT-120 Urine Analyzer	12	-	-	-	-	12	-	-
Diagnostic Test Group Clarity Urocheck	6	-	-	-	-	-	-	6
Diagnostic Test Group Clarity Urocheck 120	13	-	-	-	-	13	-	-
Germaine Laboratories AimStrip	2	-	-	-	-	-	-	2
McKesson 10SG Reagent Strips	5	1	-	-	-	2	-	2
Other Analyzer Method	5	-	-	-	-	4	-	1
Other Dipstick Method	15	-	-	-	-	12	1	2
PSS Select Reagent Strips	4	-	-	-	-	3	1	-
PSS Select Urine Analyzer	4	-	-	-	-	4	-	-
Roche Chemstrip 101	9	-	-	-	-	6	3	-
Roche Chemstrips	57	2	-	1	1	52	1	-
Roche Criterion Analyzer	18	-	-	-	-	8	10	-
Roche SuperUA/ChemstripUA	2	-	-	-	-	2	-	-
Roche Urisys	41	-	-	-	3	20	18	-
Schein Urispec	4	-	-	-	-	3	-	1
UriScan Reagent Strips	1	-	-	-	-	1	-	-

URINALYSIS DIPSTICK–BILIRUBIN

Specimen UA-1

<i><u>Method</u></i>	<i><u>Labs</u></i>	<i><u>Negative</u></i>	<i>Participant Results</i>		
			<i><u>Small (1+)</u></i>	<i><u>Moderate (2+)</u></i>	<i><u>Large (3+)</u></i>
ALL METHODS	953	942	3	4	4
Arkray DiaScreen	7	7	-	-	-
Arkray DiaScreen 50	3	3	-	-	-
Bayer Clinitek 10 / 100	16	16	-	-	-
Bayer Clinitek 200/200+	1	1	-	-	-
Bayer Clinitek 50	72	71	-	-	1
Bayer Clinitek 500	18	18	-	-	-
Bayer Clinitek Advantus	21	21	-	-	-
Bayer Clinitek Atlas	5	5	-	-	-
Bayer Clinitek Status / Status+	308	305	1	2	-
Bayer Ictotest	2	2	-	-	-
Bayer Reagent Strips	274	267	2	2	3
Behring Reagent Strips	1	1	-	-	-
Consult Diagnostics Urine Analyzer	12	12	-	-	-
CTMI CT-120 Urine Analyzer	12	12	-	-	-
Diagnostic Test Group Clarity Urocheck	5	5	-	-	-
Diagnostic Test Group Clarity Urocheck 120	13	13	-	-	-
Germaine Laboratories AimStrip	2	2	-	-	-
McKesson 10SG Reagent Strips	5	5	-	-	-
Other Analyzer Method	5	5	-	-	-
Other Dipstick Method	15	15	-	-	-
PSS Select Reagent Strips	4	4	-	-	-
PSS Select Urine Analyzer	4	4	-	-	-
Roche Chemstrip 101	9	9	-	-	-
Roche Chemstrips	54	54	-	-	-
Roche Criterion Analyzer	18	18	-	-	-
Roche SuperUA/ChemstripUA	2	2	-	-	-
Roche Urisys	40	40	-	-	-
Schein Urispec	4	4	-	-	-
UriScan Reagent Strips	1	1	-	-	-

URINALYSIS DIPSTICK–UROBILINOGEN

Specimen UA-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>0.2/Normal mg/dL</u>	<u>1.0 mg/dL</u>	<u>2.0 mg/dL</u>	<u>4.0 mg/dL</u>	<u>>8.0 mg/dL</u>
ALL METHODS	919	912	3	1	3	-
Arkray DiaScreen	7	7	-	-	-	-
Arkray DiaScreen 50	3	3	-	-	-	-
Bayer Clinitek 10 / 100	16	16	-	-	-	-
Bayer Clinitek 200/200+	1	1	-	-	-	-
Bayer Clinitek 50	70	70	-	-	-	-
Bayer Clinitek 500	12	12	-	-	-	-
Bayer Clinitek Advantus	21	21	-	-	-	-
Bayer Clinitek Atlas	3	3	-	-	-	-
Bayer Clinitek Status / Status+	310	307	-	1	2	-
Bayer Reagent Strips	254	253	1	-	-	-
Consult Diagnostics Urine Analyzer	12	12	-	-	-	-
CTMI CT-120 Urine Analyzer	12	11	-	-	1	-
Diagnostic Test Group Clarity Urocheck	6	6	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	13	13	-	-	-	-
Germaine Laboratories AimStrip	1	1	-	-	-	-
McKesson 10SG Reagent Strips	5	5	-	-	-	-
Other Analyzer Method	5	5	-	-	-	-
Other Dipstick Method	15	14	1	-	-	-
PSS Select Reagent Strips	4	3	1	-	-	-
PSS Select Urine Analyzer	4	4	-	-	-	-
Roche Chemstrip 101	9	9	-	-	-	-
Roche Chemstrips	53	53	-	-	-	-
Roche Criterion Analyzer	18	18	-	-	-	-
Roche SuperUA/ChemstripUA	2	2	-	-	-	-
Roche Urisys	40	40	-	-	-	-
Schein Urispec	4	4	-	-	-	-
UriScan Reagent Strips	1	1	-	-	-	-

URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN

Specimen UA-1

<i>Method</i>	<i>Participant Results</i>					
	<i>Labs</i>	<i>Negative</i>	<i>Trace</i>	<i>Small (5-10 RBC/μL, 1+)</i>	<i>Moderate (50 RBC/μL, 2+)</i>	<i>Large (250 RBC/μL, 3+)</i>
ALL METHODS	999	5	4	7	470	513
Arkray DiaScreen	7	-	-	-	3	4
Arkray DiaScreen 50	3	-	-	-	3	-
Bayer Clinitek 10 / 100	16	-	-	-	10	6
Bayer Clinitek 200/200+	1	-	-	-	-	1
Bayer Clinitek 50	75	-	1	-	62	12
Bayer Clinitek 500	19	-	-	-	12	7
Bayer Clinitek Advantus	22	-	-	-	19	3
Bayer Clinitek Atlas	5	-	-	-	4	1
Bayer Clinitek Status / Status+	323	-	-	1	215	107
Bayer Hemacombistix	1	-	-	-	-	1
Bayer Multistix Pro	1	-	-	-	-	1
Bayer Reagent Strips	285	-	2	2	76	205
BioScan Reagent Strips	1	1	-	-	-	-
Consult Diagnostics Urine Analyzer	12	-	-	1	10	1
CTMI CT-120 Urine Analyzer	12	1	-	-	1	10
Diagnostic Test Group Clarity Urocheck	6	-	-	-	-	6
Diagnostic Test Group Clarity Urocheck 120	13	-	-	-	-	13
Germaine Laboratories AimStrip	2	-	-	-	1	1
McKesson 10SG Reagent Strips	5	1	-	-	1	3
Other Analyzer Method	5	-	-	-	2	3
Other Dipstick Method	15	-	-	2	8	5
PSS Select Reagent Strips	5	-	-	-	4	1
PSS Select Urine Analyzer	4	-	-	-	2	2
Roche Chemstrip 101	9	-	-	-	-	9
Roche Chemstrips	67	1	1	-	6	59
Roche Criterion Analyzer	18	-	-	-	1	17
Roche Mditron Junior/II	1	-	-	-	1	-
Roche SuperUA/ChemstripUA	2	-	-	-	-	2
Roche Urisys	41	-	-	1	17	23
Schein Urispec	4	-	-	-	3	1
UriScan Reagent Strips	2	1	-	-	1	-

URINALYSIS DIPSTICK–LEUKOCYTE ESTERASE

Specimen UA-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small (1+)</u>	<u>Moderate (2+)</u>	<u>Large (3+)</u>
ALL METHODS	1013	993	13	5	2	-
Arkray DiaScreen	12	8	3	1	-	-
Arkray DiaScreen 50	4	4	-	-	-	-
Bayer Clinitek 10 / 100	16	16	-	-	-	-
Bayer Clinitek 200/200+	1	1	-	-	-	-
Bayer Clinitek 50	75	75	-	-	-	-
Bayer Clinitek 500	19	19	-	-	-	-
Bayer Clinitek Advantus	22	22	-	-	-	-
Bayer Clinitek Atlas	5	5	-	-	-	-
Bayer Clinitek Status / Status+	323	322	-	1	-	-
Bayer Multistix Pro	1	1	-	-	-	-
Bayer Reagent Strips	279	273	4	1	1	-
Bayer Uristix	15	15	-	-	-	-
Behring Reagent Strips	1	1	-	-	-	-
Consult Diagnostics Urine Analyzer	12	12	-	-	-	-
CTMI CT-120 Urine Analyzer	12	12	-	-	-	-
Diagnostic Test Group Clarity Urocheck	6	6	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	13	13	-	-	-	-
Germaine Laboratories AimStrip	2	1	1	-	-	-
McKesson 10SG Reagent Strips	5	5	-	-	-	-
Other Analyzer Method	5	5	-	-	-	-
Other Dipstick Method	15	14	-	1	-	-
PSS Select Reagent Strips	5	5	-	-	-	-
PSS Select Urine Analyzer	4	4	-	-	-	-
Roche Chemstrip 101	9	9	-	-	-	-
Roche Chemstrips	68	62	4	1	1	-
Roche Criterion Analyzer	18	18	-	-	-	-
Roche SuperUA/ChemstripUA	2	2	-	-	-	-
Roche Urisys	41	41	-	-	-	-
Schein Urispec	4	4	-	-	-	-
UriScan Reagent Strips	2	2	-	-	-	-

URINALYSIS DIPSTICK--NITRITE

Specimen UA-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	1006	13	993
Arkray DiaScreen	13	1	12
Arkray DiaScreen 50	3	-	3
Bayer Clinitek 10 / 100	16	-	16
Bayer Clinitek 200/200+	1	-	1
Bayer Clinitek 50	74	-	74
Bayer Clinitek 500	19	-	19
Bayer Clinitek Advantus	22	-	22
Bayer Clinitek Atlas	5	-	5
Bayer Clinitek Status / Status+	321	1	320
Bayer Multistix Pro	1	-	1
Bayer Reagent Strips	277	6	271
Bayer Uristix	15	-	15
Consult Diagnostics Urine Analyzer	11	-	11
CTMI CT-120 Urine Analyzer	12	1	11
Diagnostic Test Group Clarity Urocheck	6	-	6
Diagnostic Test Group Clarity Urocheck 120	13	-	13
Germaine Laboratories AimStrip	2	-	2
McKesson 10SG Reagent Strips	5	-	5
Other Analyzer Method	4	-	4
Other Dipstick Method	15	-	15
PSS Select Reagent Strips	4	-	4
PSS Select Urine Analyzer	4	-	4
Roche Chemstrip 101	9	-	9
Roche Chemstrips	67	2	65
Roche Criterion Analyzer	18	-	18
Roche Micral - 1 minute	1	-	1
Roche SuperUA/ChemstripUA	1	-	1
Roche Urisys	40	-	40
Schein Urispec	4	-	4
UriScan Reagent Strips	2	1	1

URINALYSIS –MICROALBUMIN (dipstick only)

Specimen UA-1

<i>Participant Results</i>								
<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/L(Pos)</u>	<u>20/30 mg/L</u>	<u>50 mg/L (+)</u>	<u>80 mg/L</u>	<u>100 mg/L (++)</u>	<u>150 mg/L</u>
ALL METHODS	100	10	2	5	5	1	31	46
Bayer Clinitek Microalbumin	45	1	1	1	1	-	-	41
DCL ImmunoDip	1	-	1	-	-	-	-	-
Micro-Bumintest	4	-	-	-	-	-	4	-
Roche Micral - 1 minute	37	3	-	3	4	1	26	-

URINALYSIS –URINE hCG

Specimen UA-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	566	1	565
AimStep Combo Pregnancy	2	-	2
Alfa Scientific Instant View	5	-	5
Bayer Clinitek 50	1	-	1
Beckman Coulter ICON 25 hCG	42	1	41
Beckman Coulter ICON II/20 HCG	1	-	1
Cardinal Health SP Brand combo	26	-	26
Cardinal Hlth SPBrand-cassette	8	-	8
CONSULT diagnostics hCG Cassette	47	-	47
CONSULT diagnostics hCG Combo	22	-	22
CONSULT diagnostics hCG Dipstick	17	-	17
Diagnostic Test Group Clarity hCG Combo	1	-	1
Diagnostic Test Group Clarity hCG strip/cassette	10	-	10
Genzyme OSOM - Urine Test	4	-	4
Genzyme OSOM Card Pregnancy	3	-	3
Genzyme OSOM hCG Combo Test	15	-	15
Henry Schein One Step	37	-	37
Immunostics Cept-D	1	-	1
Immunostics Detector Combi	1	-	1
Immunostics hCG Detector-urine	16	-	16
Inverness Acceava hCG Combo / II	1	-	1
Inverness Acceva hCG-Urine	4	-	4
Inverness Clearview 25 hCG Combo	1	-	1
Inverness Clearview hCG Cassette	2	-	2
Inverness Clearview hCG Combo II	6	-	6
Ipas QuickCard Pro HCG	1	-	1
McKesson hCG Combo Cassette	14	-	14
McKesson hCG Urine Cassette	24	-	24
McKesson urine hCG-all 20 mIU kits	3	-	3
Meridian ImmunoCard STAT!	1	-	1
NDC Pro Advantage	8	-	8
PEP (Lab Supply) HCG	2	-	2
Polymedco Poly stat hCG	11	-	11
PSS Select hCG Cassette	3	-	3
PSS Select hCG Combo	1	-	1

URINALYSIS –URINE hCG (cont'd)

Specimen UA-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
Quidel QuickVue One-Step Combo	29	-	29
Quidel QuickVue One-Step Urine	84	-	84
Quidel QuickVue+ One-Step Combo	22	-	22
Quidel RapidVue	1	-	1
Stanbio QuPID	6	-	6
Stanbio QuPID Plus	1	-	1
Stanbio QuStick	1	-	1
Stanbio TRUE hCG	8	-	8
Sure-Vue hCG - 25mIU	9	-	9
Sure-Vue hCG-STAT	5	-	5
Wampole UCG-Beta (slide)	1	-	1

FECAL OCCULT BLOOD

<u>Method</u>	Specimen OC-1			Specimen OC-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	466	455	11	466	14	452
Alfa Scientific Instant View	1	1	-	1	-	1
Beckman Coulter Hemocult ICT	39	38	1	39	1	38
Guaiac (slide) Test	304	296	8	304	11	293
Hemosure iFOB	51	50	1	51	1	50
Inverness Clearview iFOBT Complete	3	3	-	3	-	3
Other Immunochemical FOB kit	24	24	-	24	-	24
Polymedco OC Auto Micro 80	7	7	-	7	-	7
Polymedco OC-Light iFOB	16	16	-	16	1	15
Quidel QuickVue iFOB	9	8	1	9	-	9
Wampole Clearview Ultra FOBT	1	1	-	1	-	1

CASE HISTORY:

A 18-year-old female presented to the city health department's free clinic with urinary frequency and discomfort, fever, and abdominal pain. A routine urinalysis was performed, and the results appear below.

Color = Amber
Appearance = Turbid

Dipstick results:

Specific gravity ≥ 1.030
pH = 8.0
Protein = 30 mg/dL (1+)
Glucose = Negative
Ketones = Negative
Bilirubin = Negative
Urobilinogen = Normal/0.2 mg/dL
Blood = Trace
Leukocyte Esterase = Large (3+)
Nitrite = Positive

This patient was diagnosed with a bacterial urinary tract infection (UTI.)

UTIs are commonly caused by fecal bacteria such as *E. coli* entering the opening of the urethra and ascending the normally sterile urinary tract. Positive dipstick urinalysis findings that indicate UTI include leukocyte esterase (due to white blood cells), blood (due to red blood cells), protein (due to inflammation), and sometimes nitrite (due to certain nitrite-producing bacteria).

Many of the common urinary pathogens make enzymes that convert a normal waste product in the urine, nitrate, into nitrite. A positive nitrite test indicates the presence of a significant number of bacteria. However, a negative nitrite result does not rule out the possibility of a urinary tract infection. Some organisms do not convert nitrate to nitrite. In addition, urine must stay in the bladder at least 4 hours for the conversion to take place. Frequent urination is a common symptom of UTI, and can cause a false negative result. This is one of the reasons that a first morning specimen is preferred for urinalysis.

Females are more susceptible to UTIs than males due to the shorter urethra and its closer proximity to the anus and vagina, which contain normal bacterial flora. In addition, sexual activity can cause external bacteria to enter the urethra. Urinating shortly after intercourse helps to flush out any contaminants from the urinary tract.

Specimen US-1

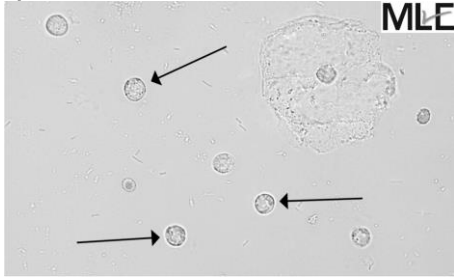


Identification	Labs	Percent	Performance
Squamous epithelial cell	666	96.24%	Acceptable
Transitional epithelial cell	16	2.31%	
White blood cell (WBC)	5	0.72%	

The arrows in this photograph point to **squamous epithelial cells**. 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 sediments from female patients. Their presence in large numbers can indicate contamination 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 2011 M3 Specimen US-6.

URINE SEDIMENT IDENTIFICATION cont'd

Specimen US-2



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
White blood cell (WBC)	651	94.08%	Acceptable
Cellular (WBC) cast	19	2.75%	
Red blood cell (RBC)	17	2.46%	

The arrows in this photograph point to **white blood cells (WBC.)** They are approximately twice as large as the two red blood cells in the photo. White cells appear granular, with visible nuclei, while red cells appear empty and can be crenated or inner-tube shaped. The white cells that respond to infection and inflammation produce enzymes called esterases. A positive result for leukocyte esterase indicates pyuria, the presence of increased white blood cells in the urine. The most common cause of pyuria is an infection in the bladder or kidneys. To view another photo of WBCs, see 2011 M1 Specimen US-1.

References:

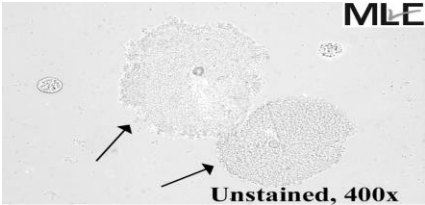
Mundt, L.A, Shanahan, K.: *Graff's Textbook of Routine Urinalysis and Body Fluids*, 2nd ed. Philadelphia: Lippincott Williams & Wilkins, 2011.

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

PROVIDER-PERFORMED MICROSCOPY (PPM)

Wet Mount Preparation

Specimen PPM-1



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Clue cell	569	95.15%	Acceptable
Squamous epithelial cell	23	3.85%	

The arrows in this photograph of a vaginal wet mount point to **clue cells**. Clue cells are squamous epithelial cells encrusted with tiny coccobacilli. They have a characteristic speckled or glittery appearance, and obscured edges that appear ragged or torn. Clue cells are indicative of bacterial vaginosis (BV), the most common vaginal infection in women. BV is often caused by overgrowth of *Gardnerella vaginalis* or other species of small bacilli such as *Mobiluncus* or *Prevotella*. BV is associated with a lack of white blood cells, and a pH of 4.5 or greater.

KOH Preparation

Specimen PPM-2

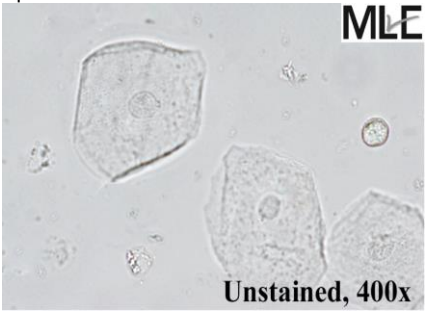


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Yeast/fungal elements present	580	100.00%	Acceptable

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

PROVIDER-PERFORMED MICROSCOPY (PPM)

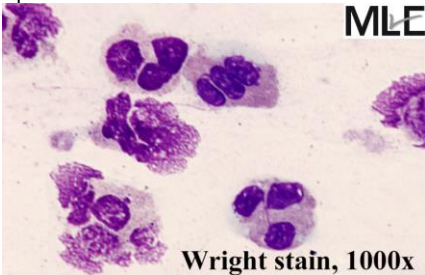
Sperm Identification
Specimen PPM-3



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Sperm absent	566	98.78%	Acceptable
Sperm present	7	1.22%	

Sperm are absent in this photograph of a vaginal wet mount preparation.

Nasal Smear
Specimen PPM-4



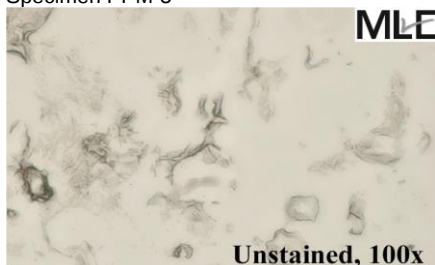
<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Eosinophils absent	148	72.20%	Acceptable
Eosinophils present	57	27.80%	

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 allergic conditions from infections. Eosinophils are a specific type of leukocyte that is increased in allergic conditions. The two nucleated cells shown in this photo are not eosinophils. They are neutrophils, which indicate infection rather than allergy. “Eos” have a unique red-orange color that makes them easy to spot and identify. The color comes from the dye eosin, which is a component of Wright stain. The cytoplasm of an eosinophil is filled with large, round, orange-staining granules that surround the purple nucleus but do not obscure it from view. To view a photo of eosinophils, see 2012 M2 Specimen PPM-10. This challenge was graded by 91% referee consensus.

PROVIDER-PERFORMED MICROSCOPY (PPM)

Pinworm Preparation

Specimen PPM-5



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Pinworms/eggs absent	235	98.33%	Acceptable
Pinworms/eggs present	4	1.67%	

Pinworm eggs are absent in this photograph of a perianal skin prep.

Vaginal Fluid Preparation

Specimen PPM-6



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Ferning present	297	98.02%	Acceptable
Ferning absent	6	1.98%	

Ferning is present in this photograph of air-dried vaginal secretions.

References:

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

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.

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