

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.

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

Quantitative

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

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

*Whichever is greater

HEMOCUE HEMATOLOGY–HEMOGLOBIN (g/dL)

Specimen HQ-1							Specimen HQ-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>
HemoCue	41	12.84	0.31	2.4	12.8	11.9 - 13.8	41	5.98	0.12	2.0	6.0	5.5 - 6.4

HEMOCUE HEMATOLOGY–GLUCOSE (mg/dL)

Specimen HQ-1							Specimen HQ-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	42	113.6	6.0	5.3	113	90 - 137	42	66.3	4.3	6.5	67	53 - 80
All HemoCue Methods	38	113.9	5.8	5.1	113	91 - 137	38	66.4	4.4	6.6	67	53 - 80
HemoCue Glucose 201/+	38	113.9	5.8	5.1	113	91 - 137	38	66.4	4.4	6.6	67	53 - 80

SEDIMENTATION RATE (MM/HR)

Specimen ES-1							Specimen ES-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	168	69.5	21.1	30.3	66	6 - 133	166	6.2	2.5	40.8	6	0 - 14
All HiChem Methods	11	102.2	19.0	18.6	97	45 - 160	11	5.9	3.8	63.5	4	0 - 18
All Vital Diagnostics Methods	17	91.6	22.7	24.8	99	23 - 160	17	5.8	1.4	24.9	6	1 - 11
HiChem Mini-Ves	11	102.2	19.0	18.6	97	45 - 160	11	5.9	3.8	63.5	4	0 - 18
Polymedco Sedimat	12	63.9	15.7	24.5	64	16 - 111	12	3.4	2.7	78.4	3	0 - 12
Streck ESR-Auto Plus	13	92.0	19.0	20.7	101	35 - 149	13	9.2	1.7	18.8	9	3 - 15
Vital Diagnostics Excyte M/10	16	93.4	22.2	23.8	100	26 - 160	16	5.8	1.5	25.3	6	1 - 11
Westergren - diluted	93	62.5	14.9	23.8	63	17 - 108	90	6.0	2.1	35.4	6	0 - 13
Westergren - undiluted	10	60.7	21.9	36.1	58	0 - 127	10	10.2	11.5	65.9	7	0 - 45
Wintrobe	10	59.0	19.0	32.2	61	2 - 116	10	7.7	1.6	21.3	7	2 - 13

SEDIMAT SEDIMENTATION RATE (MM/HR)

Specimen MAT-1							Specimen MAT-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>
Polymedco Sedimat 15	10	64.4	6.1	9.4	64	46 - 83	10	2.2	2.0	90.4	2	0 - 9

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	25	21.44	0.72	3.3	21.4	18.2 - 24.7	26	7.91	0.32	4.1	8.0	6.7 - 9.1
All Abbott Cell-Dyn Instruments	25	21.44	0.72	3.3	21.4	18.2 - 24.7	25	7.92	0.33	4.1	8.0	6.7 - 9.2
Abbott Cell-Dyn Ruby	13	21.53	0.83	3.8	21.4	18.3 - 24.8	13	7.96	0.34	4.2	8.0	6.7 - 9.2
Specimen CL-3							Specimen CL-4					
All Method	25	3.13	0.12	3.8	3.1	2.6 - 3.7	25	3.13	0.13	4.3	3.2	2.6 - 3.7
All Abbott Cell-Dyn Instruments	24	3.13	0.12	3.8	3.1	2.6 - 3.7	24	3.13	0.14	4.4	3.2	2.6 - 3.7
Abbott Cell-Dyn Ruby	13	3.15	0.12	3.8	3.1	2.6 - 3.7	13	3.15	0.14	4.4	3.2	2.6 - 3.7
Specimen CL-5												
All Method	25	7.82	0.30	3.9	7.9	6.6 - 9.0						
All Abbott Cell-Dyn Instruments	24	7.82	0.31	3.9	7.9	6.6 - 9.0						
Abbott Cell-Dyn Ruby	13	7.84	0.34	4.3	7.8	6.6 - 9.1						

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	26	5.262	0.105	2.0	5.28	4.94 - 5.58	26	4.690	0.142	3.0	4.69	4.40 - 4.98
All Abbott Cell-Dyn Instruments	25	5.266	0.106	2.0	5.28	4.94 - 5.59	25	4.694	0.144	3.1	4.69	4.41 - 4.98
Abbott Cell-Dyn Ruby	13	5.312	0.099	1.9	5.31	4.99 - 5.64	13	4.718	0.140	3.0	4.75	4.43 - 5.01
Specimen CL-3							Specimen CL-4					
All Method	26	2.103	0.032	1.5	2.12	1.97 - 2.23	26	2.106	0.030	1.4	2.10	1.97 - 2.24
All Abbott Cell-Dyn Instruments	25	2.104	0.032	1.5	2.12	1.97 - 2.24	25	2.106	0.030	1.4	2.10	1.98 - 2.24
Abbott Cell-Dyn Ruby	13	2.101	0.035	1.7	2.10	1.97 - 2.23	13	2.104	0.026	1.3	2.10	1.97 - 2.24
Specimen CL-5												
All Method	26	4.677	0.123	2.6	4.70	4.39 - 4.96						
All Abbott Cell-Dyn Instruments	25	4.680	0.124	2.6	4.70	4.39 - 4.97						
Abbott Cell-Dyn Ruby	13	4.695	0.158	3.4	4.71	4.41 - 4.98						

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	26	16.73	0.38	2.3	16.7	15.5 - 17.9	26	13.55	0.36	2.7	13.6	12.6 - 14.5
All Abbott Cell-Dyn Instruments	25	16.74	0.38	2.3	16.7	15.5 - 18.0	25	13.55	0.37	2.7	13.6	12.6 - 14.6
Abbott Cell-Dyn Ruby	13	16.91	0.34	2.0	16.9	15.7 - 18.1	13	13.63	0.42	3.1	13.7	12.6 - 14.6
Specimen CL-3							Specimen CL-4					
All Method	26	5.55	0.11	1.9	5.6	5.1 - 6.0	26	5.56	0.11	2.0	5.6	5.1 - 6.0
All Abbott Cell-Dyn Instruments	25	5.55	0.11	2.0	5.6	5.1 - 6.0	25	5.56	0.12	2.1	5.6	5.1 - 6.0
Abbott Cell-Dyn Ruby	13	5.51	0.13	2.3	5.5	5.1 - 5.9	13	5.52	0.11	2.1	5.5	5.1 - 6.0
Specimen CL-5												
All Method	26	13.55	0.30	2.2	13.6	12.5 - 14.5						
All Abbott Cell-Dyn Instruments	25	13.55	0.30	2.2	13.6	12.5 - 14.5						
Abbott Cell-Dyn Ruby	13	13.59	0.35	2.5	13.6	12.6 - 14.6						

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	26	45.93	2.97	6.5	44.9	43.1 - 48.7	26	38.38	2.71	7.1	37.3	36.0 - 40.7
All Abbott Cell-Dyn Instruments	21	44.60	1.03	2.3	44.3	41.9 - 47.3	21	37.19	0.89	2.4	37.2	34.9 - 39.5
Abbott Cell-Dyn Ruby	13	44.92	1.12	2.5	45.0	42.2 - 47.7	13	37.43	0.86	2.3	37.3	35.1 - 39.7
Specimen CL-3							Specimen CL-4					
All Method	26	15.43	1.04	6.7	15.1	14.5 - 16.4	26	15.46	1.07	6.9	15.0	14.5 - 16.4
All Abbott Cell-Dyn Instruments	21	14.96	0.27	1.8	14.9	14.0 - 15.9	21	14.97	0.30	2.0	15.0	14.0 - 15.9
Abbott Cell-Dyn Ruby	13	14.93	0.32	2.1	14.9	14.0 - 15.9	13	14.95	0.28	1.9	15.0	14.0 - 15.9
Specimen CL-5												
All Method	26	38.26	2.40	6.3	37.5	35.9 - 40.6						
All Abbott Cell-Dyn Instruments	21	37.18	0.88	2.4	37.4	34.9 - 39.5						
Abbott Cell-Dyn Ruby	13	37.31	1.03	2.8	37.4	35.0 - 39.6						

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	26	509.5	23.2	4.6	516	382 - 637	26	258.2	18.8	7.3	256	193 - 323
All Abbott Cell-Dyn Instruments	25	511.6	20.8	4.1	516	383 - 640	25	259.3	18.2	7.0	259	194 - 325
Abbott Cell-Dyn Ruby	13	513.5	23.0	4.5	515	385 - 642	13	258.5	18.6	7.2	259	193 - 324
Specimen CL-3							Specimen CL-4					
All Method	26	74.7	6.3	8.5	75	55 - 94	26	75.8	4.6	6.1	75	56 - 95
All Abbott Cell-Dyn Instruments	25	74.2	6.1	8.2	74	55 - 93	25	75.6	4.5	6.0	75	56 - 95
Abbott Cell-Dyn Ruby	13	71.8	5.0	6.9	73	53 - 90	13	73.8	3.6	4.9	73	55 - 93
Specimen CL-5												
All Method	25	254.8	18.2	7.2	253	191 - 319						
All Abbott Cell-Dyn Instruments	24	256.0	17.6	6.9	253	191 - 320						
Abbott Cell-Dyn Ruby	13	252.7	19.2	7.6	252	189 - 316						

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	26	75.22	0.89	1.2	75.2	72.5 - 77.9	26	66.31	0.72	1.1	66.5	64.1 - 68.5
All Abbott Cell-Dyn Instruments	25	75.22	0.90	1.2	75.1	72.5 - 78.0	25	66.30	0.73	1.1	66.5	64.1 - 68.5
Abbott Cell-Dyn Ruby	13	75.36	0.94	1.3	75.3	72.5 - 78.2	13	66.40	0.63	0.9	66.5	64.5 - 68.3
Specimen CL-3							Specimen CL-4					
All Method	25	52.23	1.02	2.0	52.2	49.1 - 55.3	25	51.78	1.28	2.5	51.6	47.9 - 55.7
All Abbott Cell-Dyn Instruments	24	52.14	0.93	1.8	52.2	49.3 - 55.0	24	51.64	1.07	2.1	51.6	48.4 - 54.9
Abbott Cell-Dyn Ruby	13	52.09	1.13	2.2	51.9	48.6 - 55.5	13	51.62	0.80	1.5	51.6	49.2 - 54.1
Specimen CL-5												
All Method	25	66.21	0.74	1.1	66.3	63.9 - 68.5						
All Abbott Cell-Dyn Instruments	24	66.20	0.75	1.1	66.3	63.9 - 68.5						
Abbott Cell-Dyn Ruby	13	66.20	0.67	1.0	66.3	64.1 - 68.3						

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	26	16.38	0.76	4.6	16.4	14.1 - 18.7	25	24.29	0.74	3.1	24.1	22.0 - 26.6
All Abbott Cell-Dyn Instruments	25	16.39	0.77	4.7	16.4	14.0 - 18.8	24	24.33	0.73	3.0	24.2	22.1 - 26.6
Abbott Cell-Dyn Ruby	13	16.32	0.85	5.2	16.3	13.7 - 18.9	13	24.18	0.65	2.7	24.3	22.2 - 26.2
Specimen CL-3							Specimen CL-4					
All Method	25	38.24	1.50	3.9	38.7	33.7 - 42.8	24	39.14	1.08	2.8	39.2	35.8 - 42.4
All Abbott Cell-Dyn Instruments	24	38.36	1.40	3.6	38.8	34.1 - 42.6	24	39.14	1.08	2.8	39.2	35.8 - 42.4
Abbott Cell-Dyn Ruby	13	38.15	1.62	4.3	38.8	33.2 - 43.1	13	39.09	0.88	2.3	38.9	36.4 - 41.8
Specimen CL-5												
All Method	25	24.49	0.83	3.4	24.4	21.9 - 27.0						
All Abbott Cell-Dyn Instruments	24	24.53	0.83	3.4	24.5	22.0 - 27.1						
Abbott Cell-Dyn Ruby	13	24.46	0.61	2.5	24.4	22.6 - 26.3						

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	24	3.14	0.23	7.3	3.2	2.4 - 3.9	25	6.31	0.49	7.8	6.3	4.8 - 7.8
All Abbott Cell-Dyn Instruments	23	3.13	0.23	7.4	3.2	2.4 - 3.9	24	6.30	0.50	7.9	6.3	4.8 - 7.8
Abbott Cell-Dyn Ruby	13	3.15	0.44	14.0	3.0	1.8 - 4.5	13	6.35	0.54	8.5	6.3	4.7 - 8.0
Specimen CL-3							Specimen CL-4					
All Method	25	6.17	0.86	13.9	6.0	3.5 - 8.8	25	5.84	0.56	9.6	5.8	4.1 - 7.6
All Abbott Cell-Dyn Instruments	24	6.18	0.88	14.2	6.1	3.5 - 8.9	24	5.86	0.57	9.7	5.8	4.1 - 7.6
Abbott Cell-Dyn Ruby	13	6.38	0.92	14.4	6.2	3.6 - 9.2	13	5.99	0.53	8.9	5.9	4.3 - 7.6
Specimen CL-5												
All Method	26	6.20	0.75	12.1	6.0	3.9 - 8.5						
All Abbott Cell-Dyn Instruments	25	6.20	0.77	12.4	6.0	3.8 - 8.5						
Abbott Cell-Dyn Ruby	13	6.28	0.53	8.4	6.3	4.7 - 7.9						

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	26	4.90	0.25	5.1	4.9	4.1 - 5.7	26	2.72	0.23	8.4	2.7	2.0 - 3.5
All Abbott Cell-Dyn Instruments	25	4.90	0.25	5.1	4.9	4.1 - 5.7	25	2.71	0.23	8.6	2.7	2.0 - 3.5
Abbott Cell-Dyn Ruby	13	4.87	0.27	5.5	4.9	4.0 - 5.7	13	2.77	0.28	9.9	2.8	1.9 - 3.6
Specimen CL-3							Specimen CL-4					
All Method	26	2.56	0.38	15.0	2.5	1.4 - 3.8	26	2.57	0.28	11.0	2.5	1.7 - 3.5
All Abbott Cell-Dyn Instruments	25	2.55	0.39	15.2	2.5	1.3 - 3.8	24	2.50	0.17	6.7	2.5	1.9 - 3.1
Abbott Cell-Dyn Ruby	13	2.55	0.26	10.1	2.5	1.7 - 3.4	13	2.54	0.19	7.5	2.6	1.9 - 3.2
Specimen CL-5												
All Method	24	2.68	0.18	6.7	2.7	2.1 - 3.3						
All Abbott Cell-Dyn Instruments	23	2.69	0.17	6.4	2.7	2.1 - 3.3						
Abbott Cell-Dyn Ruby	13	2.80	0.25	8.9	2.7	2.0 - 3.6						

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	26	0.37	0.17	45.8	0.4	0.0 - 0.9	26	0.27	0.15	56.3	0.2	0.0 - 0.8
All Abbott Cell-Dyn Instruments	25	0.36	0.15	42.2	0.3	0.0 - 0.9	25	0.26	0.13	50.5	0.2	0.0 - 0.7
Abbott Cell-Dyn Ruby	13	0.34	0.11	33.1	0.3	0.0 - 0.7	13	0.28	0.11	40.2	0.2	0.0 - 0.7
Specimen CL-3							Specimen CL-4					
All Method	26	0.78	0.33	41.9	0.8	0.0 - 1.8	25	0.80	0.33	41.0	0.7	0.0 - 1.8
All Abbott Cell-Dyn Instruments	25	0.76	0.31	40.8	0.8	0.0 - 1.7	24	0.77	0.29	37.8	0.7	0.0 - 1.7
Abbott Cell-Dyn Ruby	13	0.79	0.26	33.2	0.8	0.0 - 1.6	13	0.73	0.19	26.4	0.7	0.1 - 1.4
Specimen CL-5												
All Method	26	0.32	0.25	79.6	0.3	0.0 - 1.1						
All Abbott Cell-Dyn Instruments	25	0.29	0.21	73.9	0.2	0.0 - 1.0						
Abbott Cell-Dyn Ruby	13	0.27	0.18	68.5	0.2	0.0 - 0.9						

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

<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	57	20.59	0.51	2.5	20.6	17.5 - 23.7	56	8.09	0.22	2.7	8.1	6.8 - 9.4
All Sysmex Instruments	57	20.59	0.51	2.5	20.6	17.5 - 23.7	56	8.09	0.22	2.7	8.1	6.8 - 9.4
Sysmex KX-21N & K-800, 1000, 4500	26	20.33	0.35	1.7	20.3	17.2 - 23.4	25	8.00	0.15	1.9	8.0	6.8 - 9.3
Sysmex pocH-100i	19	20.58	0.51	2.5	20.6	17.4 - 23.7	19	8.05	0.19	2.4	8.0	6.8 - 9.3
Sysmex XP-300	12	21.17	0.32	1.5	21.2	17.9 - 24.4	12	8.34	0.18	2.2	8.3	7.0 - 9.6
	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	57	2.87	0.10	3.5	2.9	2.4 - 3.4	55	2.87	0.12	4.2	2.9	2.4 - 3.4
All Sysmex Instruments	57	2.87	0.10	3.5	2.9	2.4 - 3.4	55	2.87	0.12	4.2	2.9	2.4 - 3.4
Sysmex KX-21N & K-800, 1000, 4500	26	2.85	0.09	3.0	2.8	2.4 - 3.3	25	2.83	0.09	3.1	2.8	2.4 - 3.3
Sysmex pocH-100i	19	2.84	0.11	3.8	2.8	2.4 - 3.3	18	2.86	0.13	4.5	2.9	2.4 - 3.3
Sysmex XP-300	12	2.97	0.05	1.7	3.0	2.5 - 3.5	12	2.98	0.09	3.1	3.0	2.5 - 3.5
	Specimen SYX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	55	8.07	0.22	2.7	8.1	6.8 - 9.3						
All Sysmex Instruments	55	8.07	0.22	2.7	8.1	6.8 - 9.3						
Sysmex KX-21N & K-800, 1000, 4500	25	7.97	0.18	2.3	8.0	6.7 - 9.2						
Sysmex pocH-100i	19	8.08	0.21	2.6	8.1	6.8 - 9.3						
Sysmex XP-300	12	8.33	0.24	2.9	8.4	7.0 - 9.6						

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

<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	57	5.744	0.087	1.5	5.73	5.39 - 6.09	56	3.980	0.064	1.6	3.97	3.74 - 4.22
All Sysmex Instruments	57	5.744	0.087	1.5	5.73	5.39 - 6.09	56	3.980	0.064	1.6	3.97	3.74 - 4.22
Sysmex KX-21N & K-800, 1000, 4500	26	5.718	0.053	0.9	5.72	5.37 - 6.07	26	3.962	0.042	1.0	3.96	3.72 - 4.21
Sysmex pocH-100i	19	5.808	0.103	1.8	5.80	5.45 - 6.16	19	4.038	0.086	2.1	4.02	3.79 - 4.29
Sysmex XP-300	12	5.699	0.061	1.1	5.69	5.35 - 6.05	12	3.948	0.036	0.9	3.96	3.71 - 4.19
	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	56	2.468	0.033	1.3	2.46	2.31 - 2.62	55	2.468	0.034	1.4	2.47	2.31 - 2.62
All Sysmex Instruments	56	2.468	0.033	1.3	2.46	2.31 - 2.62	55	2.468	0.034	1.4	2.47	2.31 - 2.62
Sysmex KX-21N & K-800, 1000, 4500	26	2.460	0.027	1.1	2.46	2.31 - 2.61	25	2.462	0.028	1.2	2.46	2.31 - 2.61
Sysmex pocH-100i	19	2.493	0.040	1.6	2.49	2.34 - 2.65	19	2.493	0.043	1.7	2.50	2.34 - 2.65
Sysmex XP-300	12	2.452	0.028	1.1	2.45	2.30 - 2.60	12	2.451	0.029	1.2	2.46	2.30 - 2.60
	Specimen SYX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	55	3.985	0.067	1.7	3.98	3.74 - 4.23						
All Sysmex Instruments	55	3.985	0.067	1.7	3.98	3.74 - 4.23						
Sysmex KX-21N & K-800, 1000, 4500	25	3.961	0.038	1.0	3.96	3.72 - 4.20						
Sysmex pocH-100i	19	4.044	0.067	1.7	4.05	3.80 - 4.29						
Sysmex XP-300	12	3.918	0.074	1.9	3.94	3.68 - 4.16						

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

<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	56	18.09	0.25	1.4	18.1	16.8 - 19.4	57	12.08	0.20	1.7	12.1	11.2 - 13.0
All Sysmex Instruments	56	18.09	0.25	1.4	18.1	16.8 - 19.4	57	12.08	0.20	1.7	12.1	11.2 - 13.0
Sysmex KX-21N & K-800, 1000, 4500	26	18.11	0.21	1.2	18.1	16.8 - 19.4	26	12.12	0.13	1.1	12.1	11.2 - 13.0
Sysmex pocH-100i	19	18.10	0.40	2.2	18.0	16.8 - 19.4	19	11.98	0.27	2.3	12.0	11.1 - 12.9
Sysmex XP-300	12	18.12	0.19	1.0	18.1	16.8 - 19.4	12	12.16	0.15	1.2	12.2	11.3 - 13.1
	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	57	6.19	0.10	1.7	6.2	5.7 - 6.7	56	6.20	0.12	2.0	6.2	5.7 - 6.7
All Sysmex Instruments	57	6.19	0.10	1.7	6.2	5.7 - 6.7	56	6.20	0.12	2.0	6.2	5.7 - 6.7
Sysmex KX-21N & K-800, 1000, 4500	26	6.23	0.10	1.5	6.2	5.7 - 6.7	25	6.22	0.12	2.0	6.2	5.7 - 6.7
Sysmex pocH-100i	19	6.17	0.12	2.0	6.2	5.7 - 6.7	19	6.18	0.14	2.3	6.2	5.7 - 6.7
Sysmex XP-300	12	6.17	0.08	1.3	6.2	5.7 - 6.6	12	6.18	0.09	1.4	6.2	5.7 - 6.7
	Specimen SYX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	55	12.05	0.20	1.7	12.1	11.2 - 12.9						
All Sysmex Instruments	55	12.05	0.20	1.7	12.1	11.2 - 12.9						
Sysmex KX-21N & K-800, 1000, 4500	25	12.08	0.12	1.0	12.1	11.2 - 13.0						
Sysmex pocH-100i	19	11.93	0.24	2.0	12.0	11.0 - 12.8						
Sysmex XP-300	12	12.10	0.34	2.8	12.2	11.2 - 13.0						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–HEMATOCRIT (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	57	49.90	1.66	3.3	49.4	46.9 - 52.9	57	32.83	1.25	3.8	32.4	30.8 - 34.9
All Sysmex Instruments	57	49.90	1.66	3.3	49.4	46.9 - 52.9	57	32.83	1.25	3.8	32.4	30.8 - 34.9
Sysmex KX-21N & K-800, 1000, 4500	26	48.85	0.73	1.5	49.0	45.9 - 51.8	26	32.03	0.56	1.7	32.2	30.1 - 34.0
Sysmex pocH-100i	19	51.87	1.23	2.4	51.6	48.7 - 55.0	19	34.35	0.86	2.5	34.2	32.2 - 36.5
Sysmex XP-300	12	49.06	0.52	1.1	49.0	46.1 - 52.1	12	32.16	0.32	1.0	32.2	30.2 - 34.1
	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	57	18.05	0.64	3.5	17.8	16.9 - 19.2	56	18.08	0.63	3.5	17.9	16.9 - 19.2
All Sysmex Instruments	57	18.05	0.64	3.5	17.8	16.9 - 19.2	56	18.08	0.63	3.5	17.9	16.9 - 19.2
Sysmex KX-21N & K-800, 1000, 4500	26	17.64	0.24	1.4	17.7	16.5 - 18.7	25	17.68	0.29	1.7	17.7	16.6 - 18.8
Sysmex pocH-100i	19	18.83	0.43	2.3	18.7	17.6 - 20.0	19	18.81	0.45	2.4	18.8	17.6 - 20.0
Sysmex XP-300	12	17.72	0.23	1.3	17.7	16.6 - 18.8	12	17.76	0.26	1.5	17.8	16.6 - 18.9
	Specimen SYX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	56	32.78	1.29	3.9	32.3	30.8 - 34.8						
All Sysmex Instruments	56	32.78	1.29	3.9	32.3	30.8 - 34.8						
Sysmex KX-21N & K-800, 1000, 4500	25	32.01	0.49	1.5	32.1	30.0 - 34.0						
Sysmex pocH-100i	19	34.35	0.73	2.1	34.3	32.2 - 36.5						
Sysmex XP-300	12	31.88	0.65	2.1	32.0	29.9 - 33.8						

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	57	368.7	17.8	4.8	369	276 - 461	55	192.8	7.4	3.9	194	144 - 241
All Sysmex Instruments	57	368.7	17.8	4.8	369	276 - 461	55	192.8	7.4	3.9	194	144 - 241
Sysmex KX-21N & K-800, 1000, 4500	26	373.0	14.8	4.0	371	279 - 467	26	193.1	7.7	4.0	193	144 - 242
Sysmex pocH-100i	19	357.1	19.3	5.4	359	267 - 447	19	187.2	10.3	5.5	189	140 - 234
Sysmex XP-300	12	377.8	12.1	3.2	377	283 - 473	12	196.3	5.8	2.9	196	147 - 246
Specimen SYX-3							Specimen SYX-4					
All Method	56	58.7	4.1	6.9	58	44 - 74	54	58.8	3.4	5.8	59	44 - 74
All Sysmex Instruments	56	58.7	4.1	6.9	58	44 - 74	54	58.8	3.4	5.8	59	44 - 74
Sysmex KX-21N & K-800, 1000, 4500	26	58.0	3.9	6.8	58	43 - 73	24	58.1	3.4	5.9	58	43 - 73
Sysmex pocH-100i	18	58.2	3.5	6.0	58	43 - 73	18	59.4	3.6	6.0	59	44 - 75
Sysmex XP-300	12	60.8	4.8	7.9	62	45 - 76	12	59.2	3.3	5.6	59	44 - 74
Specimen SYX-5												
All Method	55	190.7	10.8	5.6	191	143 - 239						
All Sysmex Instruments	55	190.7	10.8	5.6	191	143 - 239						
Sysmex KX-21N & K-800, 1000, 4500	24	193.2	8.0	4.2	194	144 - 242						
Sysmex pocH-100i	19	185.6	10.8	5.8	187	139 - 232						
Sysmex XP-300	12	194.1	13.2	6.8	196	145 - 243						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–LYMPH W/SCR (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	51	61.75	0.71	1.2	61.8	59.6 - 63.9	52	29.51	1.25	4.2	29.7	25.7 - 33.3
All Sysmex Instruments	51	61.75	0.71	1.2	61.8	59.6 - 63.9	52	29.51	1.25	4.2	29.7	25.7 - 33.3
Sysmex KX-21N & K-800, 1000, 4500	23	61.87	0.63	1.0	61.9	59.9 - 63.8	24	29.95	0.89	3.0	30.1	27.2 - 32.7
Sysmex pocH-100i	18	61.74	0.76	1.2	61.6	59.4 - 64.1	18	28.56	1.13	4.0	28.4	25.1 - 32.0
Sysmex XP-300	10	61.50	0.82	1.3	61.7	59.0 - 64.0	10	30.17	1.26	4.2	30.5	26.3 - 34.0
	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	12.58	1.24	9.8	12.9	8.8 - 16.3	51	12.28	1.33	10.9	12.2	8.2 - 16.3
All Sysmex Instruments	52	12.58	1.24	9.8	12.9	8.8 - 16.3	51	12.28	1.33	10.9	12.2	8.2 - 16.3
Sysmex KX-21N & K-800, 1000, 4500	24	13.23	0.85	6.4	13.2	10.6 - 15.8	23	12.77	0.89	7.0	13.1	10.0 - 15.5
Sysmex pocH-100i	18	11.47	1.06	9.2	11.3	8.2 - 14.7	18	11.51	1.54	13.4	11.3	6.8 - 16.2
Sysmex XP-300	10	13.02	0.93	7.1	13.1	10.2 - 15.9	10	12.52	1.26	10.1	12.4	8.7 - 16.3
	Specimen SYX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	51	29.97	1.41	4.7	30.0	25.7 - 34.2						
All Sysmex Instruments	51	29.97	1.41	4.7	30.0	25.7 - 34.2						
Sysmex KX-21N & K-800, 1000, 4500	23	30.69	1.14	3.7	30.6	27.2 - 34.2						
Sysmex pocH-100i	18	28.68	0.80	2.8	28.5	26.2 - 31.1						
Sysmex XP-300	10	30.64	1.20	3.9	30.4	27.0 - 34.3						

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

Specimen SYX-1							Specimen SYX-2					
<i><u>Instrument</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	51	12.80	0.71	5.6	12.8	10.6 - 15.0	51	15.53	1.00	6.4	15.3	12.5 - 18.6
All Sysmex Instruments	51	12.80	0.71	5.6	12.8	10.6 - 15.0	51	15.53	1.00	6.4	15.3	12.5 - 18.6
Sysmex KX-21N & K-800, 1000, 4500	24	13.20	0.64	4.8	13.2	11.2 - 15.2	24	16.08	0.79	4.9	16.1	13.7 - 18.5
Sysmex pocH-100i	18	12.27	0.58	4.7	12.3	10.5 - 14.1	18	14.91	0.87	5.8	15.0	12.2 - 17.6
Specimen SYX-3							Specimen SYX-4					
All Method	50	18.56	1.58	8.5	18.8	13.8 - 23.4	51	18.83	1.58	8.4	19.0	14.0 - 23.6
All Sysmex Instruments	50	18.56	1.58	8.5	18.8	13.8 - 23.4	51	18.83	1.58	8.4	19.0	14.0 - 23.6
Sysmex KX-21N & K-800, 1000, 4500	24	18.70	1.48	7.9	18.8	14.2 - 23.2	24	18.94	1.68	8.9	19.4	13.9 - 24.0
Sysmex pocH-100i	18	17.83	1.54	8.7	18.1	13.1 - 22.5	18	18.38	1.36	7.4	18.2	14.2 - 22.5
Specimen SYX-5												
All Method	50	15.34	1.10	7.1	15.3	12.0 - 18.7						
All Sysmex Instruments	50	15.34	1.10	7.1	15.3	12.0 - 18.7						
Sysmex KX-21N & K-800, 1000, 4500	23	15.27	1.12	7.3	15.3	11.9 - 18.7						
Sysmex pocH-100i	18	14.93	0.74	5.0	15.0	12.6 - 17.2						

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	51	25.48	0.90	3.5	25.3	22.7 - 28.2	51	54.92	1.59	2.9	54.5	50.1 - 59.7
All Sysmex Instruments	51	25.48	0.90	3.5	25.3	22.7 - 28.2	51	54.92	1.59	2.9	54.5	50.1 - 59.7
Sysmex KX-21N & K-800, 1000, 4500	23	24.93	0.50	2.0	24.9	23.4 - 26.5	24	53.92	1.07	2.0	53.9	50.6 - 57.2
Sysmex pocH-100i	18	25.99	0.75	2.9	25.9	23.7 - 28.3	18	56.53	1.13	2.0	56.7	53.1 - 60.0
	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	50	68.85	1.91	2.8	68.7	63.1 - 74.6	50	68.81	1.98	2.9	68.3	62.8 - 74.8
All Sysmex Instruments	50	68.85	1.91	2.8	68.7	63.1 - 74.6	50	68.81	1.98	2.9	68.3	62.8 - 74.8
Sysmex KX-21N & K-800, 1000, 4500	24	68.07	1.28	1.9	68.1	64.2 - 71.9	23	68.12	1.38	2.0	67.9	63.9 - 72.3
Sysmex pocH-100i	18	70.71	1.27	1.8	70.9	66.8 - 74.6	18	70.11	2.30	3.3	70.6	63.2 - 77.1
	Specimen SYX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	50	54.67	1.81	3.3	54.7	49.2 - 60.1						
All Sysmex Instruments	50	54.67	1.81	3.3	54.7	49.2 - 60.1						
Sysmex KX-21N & K-800, 1000, 4500	23	54.00	1.35	2.5	54.0	49.9 - 58.1						
Sysmex pocH-100i	18	56.39	0.92	1.6	56.5	53.6 - 59.2						

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	684	20.85	0.88	4.2	20.9	17.7 - 24.0	685	7.84	0.34	4.4	7.8	6.6 - 9.1
All Abbott Cell-Dyn Instruments	228	20.27	0.87	4.3	20.2	17.2 - 23.4	227	7.72	0.28	3.6	7.7	6.5 - 8.9
All ABX Instruments	117	20.51	0.43	2.1	20.5	17.4 - 23.6	117	7.63	0.19	2.5	7.7	6.4 - 8.8
All COULTER Instruments	216	21.52	0.54	2.5	21.6	18.2 - 24.8	217	8.16	0.24	2.9	8.1	6.9 - 9.4
All Danam/Drew Scientific Instruments	11	19.87	0.72	3.6	20.0	16.8 - 22.9	11	7.65	0.27	3.5	7.6	6.4 - 8.8
Abbott Cell-Dyn 1700	18	20.09	1.17	5.8	20.1	17.0 - 23.2	19	7.92	0.33	4.2	7.9	6.7 - 9.2
Abbott Cell-Dyn 1800	105	20.74	0.66	3.2	20.8	17.6 - 23.9	103	7.73	0.24	3.2	7.7	6.5 - 8.9
Abbott Cell-Dyn Emerald	102	19.76	0.63	3.2	19.8	16.7 - 22.8	105	7.67	0.29	3.8	7.7	6.5 - 8.9
ABX Diagnostics Micros/45/60	117	20.51	0.43	2.1	20.5	17.4 - 23.6	117	7.63	0.19	2.5	7.7	6.4 - 8.8
Boule Medonic CA 620	11	21.75	0.50	2.3	21.8	18.4 - 25.1	11	8.12	0.18	2.3	8.1	6.9 - 9.4
Boule Medonic M series	86	21.17	0.56	2.6	21.1	17.9 - 24.4	86	7.62	0.21	2.7	7.6	6.4 - 8.8
COULTER AcT diff/diff 2	209	21.51	0.55	2.5	21.5	18.2 - 24.8	209	8.16	0.23	2.9	8.1	6.9 - 9.4
Drew Scientific D3	11	19.87	0.72	3.6	20.0	16.8 - 22.9	11	7.65	0.27	3.5	7.6	6.4 - 8.8

Specimen HD-3							Specimen HD-4					
All Method	678	2.03	0.17	8.1	2.0	1.7 - 2.4	684	2.01	0.16	7.9	2.0	1.7 - 2.4
All Abbott Cell-Dyn Instruments	225	2.02	0.10	5.1	2.0	1.7 - 2.4	225	2.00	0.12	5.8	2.0	1.7 - 2.3
All ABX Instruments	116	1.94	0.07	3.7	1.9	1.6 - 2.3	119	1.94	0.07	3.6	1.9	1.6 - 2.3
All COULTER Instruments	215	2.19	0.11	5.2	2.2	1.8 - 2.6	216	2.14	0.11	5.2	2.1	1.8 - 2.5
All Danam/Drew Scientific Instruments	10	1.98	0.09	4.6	2.0	1.6 - 2.3	11	1.97	0.13	6.4	2.0	1.6 - 2.3
Abbott Cell-Dyn 1700	18	2.01	0.07	3.6	2.0	1.7 - 2.4	19	2.08	0.14	6.9	2.1	1.7 - 2.4
Abbott Cell-Dyn 1800	104	1.97	0.09	4.4	2.0	1.6 - 2.3	104	1.94	0.10	5.3	1.9	1.6 - 2.3
Abbott Cell-Dyn Emerald	102	2.06	0.10	4.7	2.1	1.7 - 2.4	103	2.05	0.10	5.1	2.0	1.7 - 2.4
ABX Diagnostics Micros/45/60	116	1.94	0.07	3.7	1.9	1.6 - 2.3	119	1.94	0.07	3.6	1.9	1.6 - 2.3
Boule Medonic CA 620	11	1.96	0.09	4.7	2.0	1.6 - 2.3	11	2.00	0.06	3.2	2.0	1.7 - 2.3
Boule Medonic M series	85	1.79	0.08	4.7	1.8	1.5 - 2.1	86	1.79	0.09	4.8	1.8	1.5 - 2.1
COULTER AcT diff/diff 2	207	2.19	0.11	5.2	2.2	1.8 - 2.6	208	2.14	0.11	5.2	2.1	1.8 - 2.5
Drew Scientific D3	10	1.98	0.09	4.6	2.0	1.6 - 2.3	11	1.97	0.13	6.4	2.0	1.6 - 2.3

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	683	7.79	0.32	4.2	7.8	6.6 - 9.0
All Abbott Cell-Dyn Instruments	227	7.69	0.31	4.0	7.7	6.5 - 8.9
All ABX Instruments	118	7.59	0.18	2.4	7.6	6.4 - 8.8
All COULTER Instruments	217	8.05	0.22	2.7	8.1	6.8 - 9.3
All Danam/Drew Scientific Instruments	11	7.60	0.26	3.4	7.6	6.4 - 8.8
Abbott Cell-Dyn 1700	19	7.88	0.39	4.9	7.9	6.7 - 9.1
Abbott Cell-Dyn 1800	103	7.67	0.28	3.7	7.7	6.5 - 8.9
Abbott Cell-Dyn Emerald	105	7.68	0.31	4.0	7.6	6.5 - 8.9
ABX Diagnostics Micros/45/60	118	7.59	0.18	2.4	7.6	6.4 - 8.8
Boule Medonic CA 620	11	7.97	0.19	2.4	7.9	6.7 - 9.2
Boule Medonic M series	86	7.59	0.21	2.8	7.6	6.4 - 8.8
COULTER AcT diff/diff 2	209	8.05	0.22	2.7	8.1	6.8 - 9.3
Drew Scientific D3	11	7.60	0.26	3.4	7.6	6.4 - 8.8

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	674	5.622	0.178	3.2	5.64	5.28 - 5.96	678	4.575	0.132	2.9	4.59	4.30 - 4.85
All Abbott Cell-Dyn Instruments	225	5.480	0.187	3.4	5.49	5.15 - 5.81	227	4.513	0.163	3.6	4.52	4.24 - 4.79
All ABX Instruments	120	5.673	0.115	2.0	5.66	5.33 - 6.02	118	4.573	0.099	2.2	4.57	4.29 - 4.85
All COULTER Instruments	216	5.678	0.156	2.7	5.69	5.33 - 6.02	217	4.628	0.117	2.5	4.64	4.35 - 4.91
All Danam/Drew Scientific Instruments	11	5.670	0.102	1.8	5.67	5.32 - 6.02	11	4.580	0.068	1.5	4.59	4.30 - 4.86
Abbott Cell-Dyn 1700	18	5.652	0.178	3.1	5.66	5.31 - 6.00	19	4.720	0.110	2.3	4.73	4.43 - 5.01
Abbott Cell-Dyn 1800	102	5.563	0.134	2.4	5.56	5.22 - 5.90	102	4.598	0.102	2.2	4.60	4.32 - 4.88
Abbott Cell-Dyn Emerald	103	5.368	0.159	3.0	5.35	5.04 - 5.69	103	4.391	0.111	2.5	4.40	4.12 - 4.66
ABX Diagnostics Micros/45/60	120	5.673	0.115	2.0	5.66	5.33 - 6.02	118	4.573	0.099	2.2	4.57	4.29 - 4.85
Boule Medonic CA 620	11	5.645	0.081	1.4	5.62	5.30 - 5.99	11	4.591	0.086	1.9	4.58	4.31 - 4.87
Boule Medonic M series	87	5.738	0.103	1.8	5.73	5.39 - 6.09	87	4.600	0.068	1.5	4.60	4.32 - 4.88
COULTER AcT diff/diff 2	208	5.679	0.155	2.7	5.68	5.33 - 6.02	210	4.628	0.118	2.6	4.64	4.35 - 4.91
Drew Scientific D3	11	5.670	0.102	1.8	5.67	5.32 - 6.02	11	4.580	0.068	1.5	4.59	4.30 - 4.86

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	680	2.332	0.079	3.4	2.33	2.19 - 2.48	680	2.332	0.079	3.4	2.33	2.19 - 2.48
All Abbott Cell-Dyn Instruments	228	2.344	0.108	4.6	2.34	2.20 - 2.49	229	2.341	0.108	4.6	2.34	2.20 - 2.49
All ABX Instruments	120	2.296	0.049	2.1	2.29	2.15 - 2.44	118	2.300	0.051	2.2	2.30	2.16 - 2.44
All COULTER Instruments	218	2.355	0.059	2.5	2.36	2.21 - 2.50	216	2.356	0.058	2.5	2.36	2.21 - 2.50
All Danam/Drew Scientific Instruments	10	2.334	0.032	1.4	2.33	2.19 - 2.48	11	2.342	0.047	2.0	2.35	2.20 - 2.49
Abbott Cell-Dyn 1700	19	2.415	0.051	2.1	2.41	2.27 - 2.57	19	2.395	0.046	1.9	2.39	2.25 - 2.54
Abbott Cell-Dyn 1800	102	2.425	0.072	2.9	2.44	2.27 - 2.58	102	2.422	0.077	3.2	2.43	2.27 - 2.57
Abbott Cell-Dyn Emerald	105	2.256	0.062	2.7	2.26	2.12 - 2.40	104	2.261	0.061	2.7	2.25	2.12 - 2.40
ABX Diagnostics Micros/45/60	120	2.296	0.049	2.1	2.29	2.15 - 2.44	118	2.300	0.051	2.2	2.30	2.16 - 2.44
Boule Medonic CA 620	11	2.304	0.025	1.1	2.30	2.16 - 2.45	11	2.295	0.024	1.0	2.30	2.15 - 2.44
Boule Medonic M series	87	2.293	0.043	1.9	2.29	2.15 - 2.44	86	2.298	0.045	1.9	2.30	2.16 - 2.44
COULTER AcT diff/diff 2	210	2.356	0.059	2.5	2.36	2.21 - 2.50	208	2.356	0.058	2.5	2.36	2.21 - 2.50
Drew Scientific D3	10	2.334	0.032	1.4	2.33	2.19 - 2.48	11	2.342	0.047	2.0	2.35	2.20 - 2.49
Specimen HD-5												
All Method	676	4.557	0.128	2.8	4.57	4.28 - 4.84						
All Abbott Cell-Dyn Instruments	228	4.488	0.163	3.6	4.50	4.21 - 4.76						
All ABX Instruments	120	4.563	0.091	2.0	4.56	4.28 - 4.84						
All COULTER Instruments	216	4.602	0.112	2.4	4.60	4.32 - 4.88						
All Danam/Drew Scientific Instruments	11	4.605	0.056	1.2	4.61	4.32 - 4.89						
Abbott Cell-Dyn 1700	19	4.678	0.103	2.2	4.67	4.39 - 4.96						
Abbott Cell-Dyn 1800	104	4.562	0.130	2.8	4.58	4.28 - 4.84						
Abbott Cell-Dyn Emerald	104	4.383	0.119	2.7	4.39	4.11 - 4.65						
ABX Diagnostics Micros/45/60	120	4.563	0.091	2.0	4.56	4.28 - 4.84						
Boule Medonic CA 620	11	4.554	0.063	1.4	4.54	4.28 - 4.83						
Boule Medonic M series	85	4.591	0.074	1.6	4.60	4.31 - 4.87						
COULTER AcT diff/diff 2	208	4.602	0.114	2.5	4.60	4.32 - 4.88						
Drew Scientific D3	11	4.605	0.056	1.2	4.61	4.32 - 4.89						

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	681	18.23	0.42	2.3	18.2	16.9 - 19.6	680	13.50	0.29	2.2	13.5	12.5 - 14.5
All Abbott Cell-Dyn Instruments	226	18.49	0.42	2.2	18.5	17.1 - 19.8	225	13.71	0.29	2.1	13.7	12.7 - 14.7
All ABX Instruments	118	18.19	0.27	1.5	18.2	16.9 - 19.5	118	13.47	0.23	1.7	13.5	12.5 - 14.5
All COULTER Instruments	214	18.02	0.37	2.1	18.0	16.7 - 19.3	213	13.37	0.24	1.8	13.4	12.4 - 14.4
All Danam/Drew Scientific Instruments	11	18.30	0.40	2.2	18.2	17.0 - 19.6	11	13.61	0.24	1.8	13.5	12.6 - 14.6
Abbott Cell-Dyn 1700	18	18.45	0.42	2.3	18.5	17.1 - 19.8	19	13.83	0.28	2.0	13.8	12.8 - 14.8
Abbott Cell-Dyn 1800	105	18.54	0.46	2.5	18.5	17.2 - 19.9	102	13.78	0.27	2.0	13.8	12.8 - 14.8
Abbott Cell-Dyn Emerald	102	18.44	0.34	1.8	18.5	17.1 - 19.8	102	13.61	0.27	1.9	13.6	12.6 - 14.6
ABX Diagnostics Micros/45/60	118	18.19	0.27	1.5	18.2	16.9 - 19.5	118	13.47	0.23	1.7	13.5	12.5 - 14.5
Boule Medonic CA 620	11	17.56	0.28	1.6	17.6	16.3 - 18.8	11	13.15	0.20	1.5	13.1	12.2 - 14.1
Boule Medonic M series	85	18.26	0.26	1.4	18.3	16.9 - 19.6	86	13.39	0.18	1.3	13.4	12.4 - 14.4
COULTER AcT diff/diff 2	206	18.01	0.36	2.0	18.0	16.7 - 19.3	206	13.37	0.24	1.8	13.4	12.4 - 14.4
Drew Scientific D3	11	18.30	0.40	2.2	18.2	17.0 - 19.6	11	13.61	0.24	1.8	13.5	12.6 - 14.6

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	680	5.95	0.16	2.7	5.9	5.5 - 6.4	681	5.95	0.16	2.8	5.9	5.5 - 6.4
All Abbott Cell-Dyn Instruments	227	6.05	0.20	3.3	6.0	5.6 - 6.5	226	6.03	0.20	3.3	6.0	5.6 - 6.5
All ABX Instruments	117	5.95	0.10	1.7	5.9	5.5 - 6.4	118	5.97	0.10	1.7	6.0	5.5 - 6.4
All COULTER Instruments	215	5.88	0.13	2.2	5.9	5.4 - 6.3	214	5.88	0.14	2.3	5.9	5.4 - 6.3
All Danam/Drew Scientific Instruments	10	5.99	0.16	2.7	5.9	5.5 - 6.5	11	6.00	0.13	2.1	5.9	5.5 - 6.5
Abbott Cell-Dyn 1700	19	6.28	0.15	2.3	6.2	5.8 - 6.8	19	6.21	0.16	2.6	6.2	5.7 - 6.7
Abbott Cell-Dyn 1800	103	6.14	0.17	2.8	6.1	5.7 - 6.6	103	6.11	0.18	2.9	6.1	5.6 - 6.6
Abbott Cell-Dyn Emerald	103	5.92	0.13	2.2	5.9	5.5 - 6.4	102	5.92	0.15	2.4	5.9	5.5 - 6.4
ABX Diagnostics Micros/45/60	117	5.95	0.10	1.7	5.9	5.5 - 6.4	118	5.97	0.10	1.7	6.0	5.5 - 6.4
Boule Medonic CA 620	11	5.81	0.12	2.1	5.8	5.4 - 6.3	11	5.81	0.10	1.8	5.8	5.4 - 6.3
Boule Medonic M series	87	5.93	0.09	1.6	5.9	5.5 - 6.4	86	5.93	0.10	1.6	5.9	5.5 - 6.4
COULTER AcT diff/diff 2	207	5.88	0.12	2.1	5.9	5.4 - 6.3	206	5.88	0.13	2.3	5.9	5.4 - 6.3
Drew Scientific D3	10	5.99	0.16	2.7	5.9	5.5 - 6.5	11	6.00	0.13	2.1	5.9	5.5 - 6.5

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	685	13.49	0.31	2.3	13.5	12.5 - 14.5
All Abbott Cell-Dyn Instruments	228	13.70	0.30	2.2	13.7	12.7 - 14.7
All ABX Instruments	120	13.49	0.21	1.5	13.5	12.5 - 14.5
All COULTER Instruments	217	13.34	0.25	1.9	13.3	12.4 - 14.3
All Danam/Drew Scientific Instruments	11	13.62	0.27	2.0	13.6	12.6 - 14.6
Abbott Cell-Dyn 1700	19	13.78	0.26	1.9	13.8	12.8 - 14.8
Abbott Cell-Dyn 1800	104	13.79	0.30	2.2	13.8	12.8 - 14.8
Abbott Cell-Dyn Emerald	101	13.58	0.23	1.7	13.6	12.6 - 14.6
ABX Diagnostics Micros/45/60	120	13.49	0.21	1.5	13.5	12.5 - 14.5
Boule Medonic CA 620	11	13.07	0.25	1.9	13.1	12.1 - 14.0
Boule Medonic M series	85	13.36	0.20	1.5	13.4	12.4 - 14.4
COULTER AcT diff/diff 2	209	13.34	0.25	1.9	13.3	12.4 - 14.3
Drew Scientific D3	11	13.62	0.27	2.0	13.6	12.6 - 14.6

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	675	51.42	1.73	3.4	51.4	48.3 - 54.6	684	38.26	1.56	4.1	38.3	35.9 - 40.6
All Abbott Cell-Dyn Instruments	225	52.14	1.75	3.4	52.3	49.0 - 55.3	229	39.26	1.31	3.3	39.4	36.9 - 41.7
All ABX Instruments	118	49.89	1.07	2.1	49.8	46.8 - 52.9	118	36.85	0.86	2.3	36.8	34.6 - 39.1
All COULTER Instruments	216	51.57	1.52	3.0	51.7	48.4 - 54.7	216	38.72	1.00	2.6	38.8	36.3 - 41.1
All Danam/Drew Scientific Instruments	11	52.54	0.86	1.6	52.5	49.3 - 55.7	11	39.22	0.52	1.3	39.4	36.8 - 41.6
Abbott Cell-Dyn 1700	17	51.11	1.70	3.3	51.0	48.0 - 54.2	18	39.38	0.98	2.5	39.6	37.0 - 41.8
Abbott Cell-Dyn 1800	102	52.90	1.46	2.8	53.0	49.7 - 56.1	103	39.91	1.11	2.8	40.0	37.5 - 42.4
Abbott Cell-Dyn Emerald	105	51.55	1.73	3.4	51.6	48.4 - 54.7	106	38.65	1.20	3.1	38.7	36.3 - 41.0
ABX Diagnostics Micros/45/60	118	49.89	1.07	2.1	49.8	46.8 - 52.9	118	36.85	0.86	2.3	36.8	34.6 - 39.1
Boule Medonic CA 620	11	48.21	1.19	2.5	47.9	45.3 - 51.2	11	35.56	1.05	3.0	35.4	33.4 - 37.7
Boule Medonic M series	87	51.59	1.34	2.6	51.6	48.4 - 54.7	88	36.74	1.00	2.7	36.9	34.5 - 39.0
COULTER AcT diff/diff 2	208	51.52	1.53	3.0	51.6	48.4 - 54.7	208	38.70	1.01	2.6	38.7	36.3 - 41.1
Drew Scientific D3	11	52.54	0.86	1.6	52.5	49.3 - 55.7	11	39.22	0.52	1.3	39.4	36.8 - 41.6

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	681	17.03	0.94	5.5	17.1	16.0 - 18.1	682	17.03	0.94	5.5	17.2	16.0 - 18.1
All Abbott Cell-Dyn Instruments	228	17.77	0.66	3.7	17.8	16.7 - 18.9	227	17.75	0.67	3.8	17.8	16.6 - 18.9
All ABX Instruments	120	15.82	0.35	2.2	15.8	14.8 - 16.8	120	15.84	0.40	2.5	15.8	14.8 - 16.8
All COULTER Instruments	217	17.32	0.47	2.7	17.3	16.2 - 18.4	216	17.32	0.44	2.5	17.3	16.2 - 18.4
All Danam/Drew Scientific Instruments	10	17.68	0.23	1.3	17.7	16.6 - 18.8	11	17.65	0.31	1.7	17.6	16.5 - 18.8
Abbott Cell-Dyn 1700	18	17.54	0.42	2.4	17.6	16.4 - 18.6	18	17.33	0.36	2.1	17.3	16.2 - 18.4
Abbott Cell-Dyn 1800	103	18.10	0.63	3.5	18.2	17.0 - 19.2	101	18.08	0.64	3.5	18.1	16.9 - 19.2
Abbott Cell-Dyn Emerald	106	17.49	0.58	3.3	17.5	16.4 - 18.6	105	17.54	0.54	3.1	17.6	16.4 - 18.6
ABX Diagnostics Micros/45/60	120	15.82	0.35	2.2	15.8	14.8 - 16.8	120	15.84	0.40	2.5	15.8	14.8 - 16.8
Boule Medonic CA 620	11	15.59	0.35	2.3	15.4	14.6 - 16.6	11	15.46	0.34	2.2	15.4	14.5 - 16.4
Boule Medonic M series	87	16.11	0.42	2.6	16.1	15.1 - 17.1	85	16.19	0.43	2.7	16.2	15.2 - 17.2
COULTER AcT diff/diff 2	208	17.32	0.48	2.8	17.3	16.2 - 18.4	208	17.31	0.45	2.6	17.3	16.2 - 18.4
Drew Scientific D3	10	17.68	0.23	1.3	17.7	16.6 - 18.8	11	17.65	0.31	1.7	17.6	16.5 - 18.8

Specimen HD-5						
All Method	684	38.07	1.52	4.0	38.1	35.7 - 40.4
All Abbott Cell-Dyn Instruments	226	39.10	1.21	3.1	39.2	36.7 - 41.5
All ABX Instruments	120	36.71	0.82	2.2	36.7	34.5 - 39.0
All COULTER Instruments	215	38.48	1.01	2.6	38.5	36.1 - 40.8
All Danam/Drew Scientific Instruments	11	39.39	0.41	1.0	39.4	37.0 - 41.8
Abbott Cell-Dyn 1700	18	39.09	1.11	2.8	38.9	36.7 - 41.5
Abbott Cell-Dyn 1800	102	39.58	1.15	2.9	39.6	37.2 - 42.0
Abbott Cell-Dyn Emerald	105	38.62	1.12	2.9	38.8	36.3 - 41.0
ABX Diagnostics Micros/45/60	120	36.71	0.82	2.2	36.7	34.5 - 39.0
Boule Medonic CA 620	11	35.12	0.68	1.9	35.2	33.0 - 37.3
Boule Medonic M series	87	36.67	0.87	2.4	36.8	34.4 - 38.9
COULTER AcT diff/diff 2	206	38.46	1.02	2.6	38.5	36.1 - 40.8
Drew Scientific D3	11	39.39	0.41	1.0	39.4	37.0 - 41.8

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–PLATELET 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	681	518.3	33.7	6.5	521	388 - 648	680	245.6	16.6	6.8	246	184 - 307
All Abbott Cell-Dyn Instruments	227	532.8	34.2	6.4	533	399 - 667	225	254.4	13.8	5.4	255	190 - 319
All ABX Instruments	118	517.9	19.2	3.7	518	388 - 648	118	254.4	11.6	4.5	253	190 - 319
All COULTER Instruments	217	525.4	23.0	4.4	527	394 - 657	218	240.5	10.9	4.5	241	180 - 301
All Danam/Drew Scientific Instruments	11	528.3	20.7	3.9	532	396 - 661	11	260.8	14.6	5.6	261	195 - 327
Abbott Cell-Dyn 1700	18	526.4	31.1	5.9	528	394 - 659	19	251.3	13.9	5.5	251	188 - 315
Abbott Cell-Dyn 1800	103	554.1	31.2	5.6	555	415 - 693	102	252.4	13.3	5.3	254	189 - 316
Abbott Cell-Dyn Emerald	104	514.6	23.0	4.5	516	385 - 644	104	257.0	14.0	5.4	257	192 - 322
ABX Diagnostics Micros/45/60	118	517.9	19.2	3.7	518	388 - 648	118	254.4	11.6	4.5	253	190 - 319
Boule Medonic CA 620	11	478.0	25.5	5.3	487	358 - 598	11	233.8	20.2	8.6	238	175 - 293
Boule Medonic M series	88	468.2	21.6	4.6	471	351 - 586	88	223.0	12.7	5.7	224	167 - 279
COULTER AcT diff/diff 2	211	525.1	23.1	4.4	526	393 - 657	210	240.7	10.8	4.5	241	180 - 301
Drew Scientific D3	11	528.3	20.7	3.9	532	396 - 661	11	260.8	14.6	5.6	261	195 - 327

Specimen HD-3							Specimen HD-4					
All Method	671	68.8	8.2	12.0	67	51 - 87	671	67.3	7.9	11.8	66	50 - 85
All Abbott Cell-Dyn Instruments	222	70.8	9.9	14.0	69	53 - 89	219	68.5	9.0	13.1	66	51 - 86
All ABX Instruments	115	76.0	5.4	7.1	75	56 - 95	119	75.5	4.9	6.5	75	56 - 95
All COULTER Instruments	217	65.8	5.3	8.0	65	49 - 83	217	64.3	5.2	8.1	64	48 - 81
All Danam/Drew Scientific Instruments	11	88.3	47.4	53.7	74	66 - 111	11	74.7	8.5	11.4	74	56 - 94
Abbott Cell-Dyn 1700	19	63.8	4.0	6.3	63	47 - 80	19	63.2	5.6	8.8	62	47 - 80
Abbott Cell-Dyn 1800	104	66.3	4.9	7.5	67	49 - 83	103	64.2	4.3	6.8	65	48 - 81
Abbott Cell-Dyn Emerald	106	79.3	13.9	17.5	76	59 - 100	106	77.2	13.9	18.1	74	57 - 97
ABX Diagnostics Micros/45/60	115	76.0	5.4	7.1	75	56 - 95	119	75.5	4.9	6.5	75	56 - 95
Boule Medonic CA 620	11	64.6	4.8	7.5	65	48 - 81	11	62.6	5.1	8.2	64	46 - 79
Boule Medonic M series	87	62.3	4.4	7.0	63	46 - 78	87	61.1	4.1	6.8	61	45 - 77
COULTER AcT diff/diff 2	209	65.8	5.3	8.0	65	49 - 83	209	64.3	5.2	8.1	64	48 - 81
Drew Scientific D3	11	88.3	47.4	53.7	74	66 - 111	11	74.7	8.5	11.4	74	56 - 94

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	677	243.8	16.1	6.6	244	182 - 305
All Abbott Cell-Dyn Instruments	223	250.8	13.6	5.4	250	188 - 314
All ABX Instruments	120	254.7	11.5	4.5	255	191 - 319
All COULTER Instruments	217	239.4	11.4	4.7	240	179 - 300
All Danam/Drew Scientific Instruments	11	251.3	13.5	5.4	256	188 - 315
Abbott Cell-Dyn 1700	19	247.8	14.7	5.9	247	185 - 310
Abbott Cell-Dyn 1800	101	249.3	11.9	4.8	249	187 - 312
Abbott Cell-Dyn Emerald	102	253.1	14.3	5.7	254	189 - 317
ABX Diagnostics Micros/45/60	120	254.7	11.5	4.5	255	191 - 319
Boule Medonic CA 620	11	233.0	12.5	5.4	232	174 - 292
Boule Medonic M series	88	222.1	12.8	5.8	222	166 - 278
COULTER AcT diff/diff 2	209	239.5	11.2	4.7	240	179 - 300
Drew Scientific D3	11	251.3	13.5	5.4	256	188 - 315

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–LYMPHOCYTES (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	651	13.52	1.41	10.4	13.9	9.2 - 17.8	653	28.90	2.94	10.2	29.4	20.0 - 37.8
All Abbott Cell-Dyn Instruments	214	12.79	1.58	12.3	12.5	8.0 - 17.6	215	27.48	2.40	8.8	28.1	20.2 - 34.7
All ABX Instruments	116	12.33	0.77	6.3	12.3	10.0 - 14.7	116	25.32	1.46	5.8	25.3	20.9 - 29.8
All COULTER Instruments	199	14.54	0.47	3.3	14.6	13.1 - 16.0	198	31.83	0.69	2.2	31.9	29.7 - 33.9
All Danam/Drew Scientific Instruments	11	13.98	0.81	5.8	13.6	11.5 - 16.5	11	30.01	1.19	4.0	30.1	26.4 - 33.6
Abbott Cell-Dyn 1700	18	12.59	0.71	5.7	12.4	10.4 - 14.8	19	28.79	1.22	4.2	28.7	25.1 - 32.5
Abbott Cell-Dyn 1800	95	11.32	0.41	3.6	11.4	10.1 - 12.6	96	25.17	1.12	4.4	25.1	21.8 - 28.6
Abbott Cell-Dyn Emerald	98	14.18	0.96	6.8	14.0	11.3 - 17.1	98	29.39	1.18	4.0	29.3	25.8 - 33.0
ABX Diagnostics Micros/45/60	116	12.33	0.77	6.3	12.3	10.0 - 14.7	116	25.32	1.46	5.8	25.3	20.9 - 29.8
Boule Medonic CA 620	11	15.38	1.25	8.2	15.7	11.6 - 19.2	11	31.69	2.10	6.6	32.4	25.3 - 38.0
Boule Medonic M series	84	14.30	0.54	3.8	14.3	12.6 - 16.0	84	29.57	0.86	2.9	29.6	26.9 - 32.2
COULTER AcT diff/diff 2	198	14.54	0.47	3.3	14.6	13.1 - 16.0	197	31.83	0.69	2.2	31.9	29.7 - 33.9
Drew Scientific D3	11	13.98	0.81	5.8	13.6	11.5 - 16.5	11	30.01	1.19	4.0	30.1	26.4 - 33.6

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	655	54.32	5.24	9.6	55.7	38.6 - 70.1	654	54.43	5.34	9.8	55.7	38.4 - 70.5
All Abbott Cell-Dyn Instruments	217	51.58	3.91	7.6	52.2	39.8 - 63.4	218	51.65	3.86	7.5	52.1	40.0 - 63.3
All ABX Instruments	116	47.78	2.73	5.7	47.7	39.5 - 56.0	118	47.87	2.95	6.2	47.4	39.0 - 56.8
All COULTER Instruments	202	59.12	1.42	2.4	59.2	54.8 - 63.4	201	59.46	1.54	2.6	59.5	54.8 - 64.1
All Danam/Drew Scientific Instruments	11	54.43	8.24	15.1	56.7	29.7 - 79.2	11	57.31	1.91	3.3	56.8	51.5 - 63.1
Abbott Cell-Dyn 1700	19	53.08	1.82	3.4	53.1	47.6 - 58.6	19	53.24	2.57	4.8	53.2	45.5 - 61.0
Abbott Cell-Dyn 1800	96	47.99	2.25	4.7	48.2	41.2 - 54.8	97	48.16	2.25	4.7	48.1	41.3 - 55.0
Abbott Cell-Dyn Emerald	97	54.46	1.59	2.9	54.2	49.6 - 59.3	102	54.67	2.14	3.9	54.6	48.2 - 61.1
ABX Diagnostics Micros/45/60	116	47.78	2.73	5.7	47.7	39.5 - 56.0	118	47.87	2.95	6.2	47.4	39.0 - 56.8
Boule Medonic CA 620	11	62.05	2.11	3.4	63.0	55.7 - 68.4	11	60.95	2.97	4.9	61.8	52.0 - 69.9
Boule Medonic M series	83	57.29	1.55	2.7	57.3	52.6 - 62.0	82	57.51	1.89	3.3	57.5	51.8 - 63.2
COULTER AcT diff/diff 2	201	59.12	1.42	2.4	59.2	54.8 - 63.4	200	59.45	1.54	2.6	59.5	54.8 - 64.1
Drew Scientific D3	11	54.43	8.24	15.1	56.7	29.7 - 79.2	11	57.31	1.91	3.3	56.8	51.5 - 63.1

Specimen HD-5						
All Method	652	28.99	3.01	10.4	29.5	19.9 - 38.1
All Abbott Cell-Dyn Instruments	216	27.64	2.49	9.0	27.9	20.1 - 35.2
All ABX Instruments	116	25.33	1.61	6.3	25.4	20.5 - 30.2
All COULTER Instruments	201	31.93	0.83	2.6	32.0	29.4 - 34.5
All Danam/Drew Scientific Instruments	11	29.86	0.71	2.4	29.9	27.7 - 32.0
Abbott Cell-Dyn 1700	19	28.81	1.22	4.2	28.8	25.1 - 32.5
Abbott Cell-Dyn 1800	94	25.20	0.86	3.4	25.3	22.6 - 27.8
Abbott Cell-Dyn Emerald	99	29.57	1.40	4.7	29.3	25.3 - 33.8
ABX Diagnostics Micros/45/60	116	25.33	1.61	6.3	25.4	20.5 - 30.2
Boule Medonic CA 620	11	32.09	2.17	6.8	32.6	25.5 - 38.6
Boule Medonic M series	82	29.63	1.11	3.7	29.6	26.3 - 33.0
COULTER AcT diff/diff 2	200	31.92	0.82	2.6	32.0	29.4 - 34.4
Drew Scientific D3	11	29.86	0.71	2.4	29.9	27.7 - 32.0

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–MONO/MID/MIXED/MCR (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	643	4.25	1.42	33.3	4.3	0.0 - 8.6	644	7.50	1.97	26.3	7.2	1.5 - 13.5
All Abbott Cell-Dyn Instruments	215	4.09	1.86	45.6	4.7	0.0 - 9.7	215	7.57	2.84	37.5	8.0	0.0 - 16.1
All ABX Instruments	110	3.19	0.21	6.6	3.2	2.5 - 3.9	112	7.55	0.75	10.0	7.5	5.2 - 9.9
All COULTER Instruments	203	4.43	0.42	9.6	4.4	3.1 - 5.8	202	6.76	0.50	7.4	6.8	5.2 - 8.3
All Danam/Drew Scientific Instruments	11	2.37	0.16	6.6	2.4	1.9 - 2.9	11	4.88	0.35	7.3	5.0	3.8 - 6.0
Abbott Cell-Dyn 1700	19	4.93	0.47	9.5	4.8	3.5 - 6.4	19	8.47	0.59	7.0	8.5	6.6 - 10.3
Abbott Cell-Dyn 1800	93	5.96	0.40	6.7	6.0	4.7 - 7.2	94	10.50	0.54	5.2	10.5	8.8 - 12.2
Abbott Cell-Dyn Emerald	99	2.18	0.22	9.9	2.1	1.5 - 2.9	100	4.69	0.51	10.8	4.6	3.1 - 6.3
ABX Diagnostics Micros/45/60	110	3.19	0.21	6.6	3.2	2.5 - 3.9	112	7.55	0.75	10.0	7.5	5.2 - 9.9
Boule Medonic CA 620	10	7.38	1.57	21.3	7.9	2.6 - 12.1	10	11.08	0.83	7.5	11.1	8.5 - 13.6
Boule Medonic M series	83	5.71	0.53	9.3	5.7	4.1 - 7.4	83	9.14	1.06	11.6	9.2	5.9 - 12.4
COULTER AcT diff/diff 2	201	4.43	0.42	9.4	4.4	3.1 - 5.7	201	6.76	0.50	7.4	6.8	5.2 - 8.3
Drew Scientific D3	11	2.37	0.16	6.6	2.4	1.9 - 2.9	11	4.88	0.35	7.3	5.0	3.8 - 6.0

Specimen HD-3							Specimen HD-4					
All Method	644	10.30	3.78	36.7	8.9	0.0 - 21.7	646	10.39	3.88	37.3	9.0	0.0 - 22.1
All Abbott Cell-Dyn Instruments	214	11.79	3.47	29.4	10.8	1.3 - 22.3	215	11.99	3.62	30.2	11.0	1.1 - 22.9
All ABX Instruments	110	15.05	1.97	13.1	15.2	9.1 - 21.0	112	15.07	1.98	13.2	15.2	9.1 - 21.1
All COULTER Instruments	203	7.06	1.04	14.7	7.1	3.9 - 10.2	204	7.03	1.01	14.3	7.0	4.0 - 10.1
All Danam/Drew Scientific Instruments	11	7.65	1.28	16.7	7.6	3.8 - 11.5	11	7.53	0.65	8.6	7.5	5.5 - 9.5
Abbott Cell-Dyn 1700	19	11.24	1.32	11.7	11.1	7.2 - 15.2	19	11.25	1.11	9.9	11.2	7.9 - 14.6
Abbott Cell-Dyn 1800	92	15.35	1.36	8.8	15.4	11.2 - 19.5	94	15.74	1.34	8.5	15.6	11.7 - 19.8
Abbott Cell-Dyn Emerald	101	8.62	1.01	11.7	8.5	5.5 - 11.7	101	8.67	1.28	14.7	8.5	4.8 - 12.6
ABX Diagnostics Micros/45/60	110	15.05	1.97	13.1	15.2	9.1 - 21.0	112	15.07	1.98	13.2	15.2	9.1 - 21.1
Boule Medonic CA 620	10	8.37	1.70	20.3	8.4	3.2 - 13.5	10	9.54	0.71	7.5	9.6	7.3 - 11.7
Boule Medonic M series	84	9.31	1.90	20.4	9.2	3.6 - 15.1	84	9.03	1.98	21.9	9.2	3.0 - 15.0
COULTER AcT diff/diff 2	201	7.06	1.04	14.7	7.1	3.9 - 10.2	202	7.04	1.01	14.3	7.0	4.0 - 10.1
Drew Scientific D3	11	7.65	1.28	16.7	7.6	3.8 - 11.5	11	7.53	0.65	8.6	7.5	5.5 - 9.5

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	639	7.56	2.03	26.9	7.2	1.4 - 13.7
All Abbott Cell-Dyn Instruments	215	7.59	2.93	38.7	8.0	0.0 - 16.4
All ABX Instruments	109	7.53	0.69	9.2	7.5	5.4 - 9.7
All COULTER Instruments	203	6.74	0.53	7.8	6.7	5.1 - 8.4
All Danam/Drew Scientific Instruments	11	4.95	0.34	6.8	5.0	3.9 - 6.0
Abbott Cell-Dyn 1700	19	8.41	0.62	7.3	8.4	6.5 - 10.3
Abbott Cell-Dyn 1800	93	10.49	0.54	5.2	10.5	8.8 - 12.2
Abbott Cell-Dyn Emerald	99	4.68	0.58	12.3	4.6	2.9 - 6.5
ABX Diagnostics Micros/45/60	109	7.53	0.69	9.2	7.5	5.4 - 9.7
Boule Medonic CA 620	10	11.17	1.28	11.5	11.2	7.3 - 15.1
Boule Medonic M series	82	9.44	1.11	11.8	9.5	6.1 - 12.8
COULTER AcT diff/diff 2	201	6.74	0.52	7.7	6.7	5.1 - 8.3
Drew Scientific D3	11	4.95	0.34	6.8	5.0	3.9 - 6.0

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	641	82.23	1.82	2.2	82.2	76.7 - 87.7	647	63.56	2.71	4.3	63.4	55.4 - 71.7
All Abbott Cell-Dyn Instruments	210	83.14	0.96	1.2	83.1	80.2 - 86.1	214	64.97	1.44	2.2	65.0	60.6 - 69.4
All ABX Instruments	112	84.48	0.79	0.9	84.5	82.1 - 86.9	112	67.09	1.13	1.7	67.3	63.6 - 70.5
All COULTER Instruments	201	81.05	0.73	0.9	81.0	78.8 - 83.3	203	61.41	0.87	1.4	61.3	58.7 - 64.1
All Danam/Drew Scientific Instruments	11	83.64	0.91	1.1	83.9	80.8 - 86.4	11	65.11	1.33	2.0	65.0	61.1 - 69.1
Abbott Cell-Dyn 1700	17	82.49	0.96	1.2	82.6	79.6 - 85.4	18	62.59	1.49	2.4	62.8	58.1 - 67.1
Abbott Cell-Dyn 1800	96	82.71	0.60	0.7	82.7	80.8 - 84.6	94	64.40	0.90	1.4	64.5	61.6 - 67.2
Abbott Cell-Dyn Emerald	98	83.68	1.06	1.3	84.0	80.4 - 86.9	98	65.98	0.98	1.5	66.0	63.0 - 69.0
ABX Diagnostics Micros/45/60	112	84.48	0.79	0.9	84.5	82.1 - 86.9	112	67.09	1.13	1.7	67.3	63.6 - 70.5
Boule Medonic CA 620	11	77.65	3.23	4.2	76.6	67.9 - 87.4	10	57.86	3.93	6.8	56.6	46.0 - 69.7
Boule Medonic M series	83	80.02	0.74	0.9	80.0	77.7 - 82.3	83	61.24	1.41	2.3	61.3	57.0 - 65.5
COULTER AcT diff/diff 2	199	81.04	0.72	0.9	81.0	78.8 - 83.3	201	61.41	0.87	1.4	61.3	58.7 - 64.1
Drew Scientific D3	11	83.64	0.91	1.1	83.9	80.8 - 86.4	11	65.11	1.33	2.0	65.0	61.1 - 69.1

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–GRANULOCYTES/NEUT (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	643	35.26	2.41	6.8	35.3	28.0 - 42.5	640	35.10	2.41	6.9	35.2	27.8 - 42.4
All Abbott Cell-Dyn Instruments	211	36.79	1.48	4.0	36.9	32.3 - 41.3	215	36.44	1.63	4.5	36.6	31.5 - 41.4
All ABX Instruments	112	37.05	1.61	4.3	37.2	32.2 - 41.9	113	36.98	1.57	4.2	37.1	32.2 - 41.7
All COULTER Instruments	201	33.77	1.50	4.4	33.8	29.2 - 38.3	201	33.47	1.43	4.3	33.4	29.1 - 37.8
All Danam/Drew Scientific Instruments	10	35.17	1.31	3.7	34.8	31.2 - 39.2	11	35.15	1.87	5.3	35.4	29.5 - 40.8
Abbott Cell-Dyn 1700	18	35.61	1.81	5.1	35.9	30.1 - 41.1	18	35.44	2.33	6.6	35.5	28.4 - 42.5
Abbott Cell-Dyn 1800	95	36.73	1.43	3.9	36.8	32.4 - 41.1	97	36.19	1.51	4.2	36.3	31.6 - 40.8
Abbott Cell-Dyn Emerald	98	37.01	1.47	4.0	37.1	32.5 - 41.5	100	36.79	1.61	4.4	36.8	31.9 - 41.7
ABX Diagnostics Micros/45/60	112	37.05	1.61	4.3	37.2	32.2 - 41.9	113	36.98	1.57	4.2	37.1	32.2 - 41.7
Boule Medonic CA 620	11	29.14	1.60	5.5	28.8	24.3 - 34.0	11	29.25	3.09	10.6	29.0	19.9 - 38.6
Boule Medonic M series	82	33.46	2.13	6.4	33.2	27.0 - 39.9	82	33.56	2.68	8.0	33.1	25.5 - 41.7
COULTER AcT diff/diff 2	199	33.76	1.50	4.4	33.8	29.2 - 38.3	199	33.48	1.43	4.3	33.4	29.1 - 37.8
Drew Scientific D3	10	35.17	1.31	3.7	34.8	31.2 - 39.2	11	35.15	1.87	5.3	35.4	29.5 - 40.8

Specimen HD-5						
All Method	642	63.48	2.80	4.4	63.4	55.0 - 71.9
All Abbott Cell-Dyn Instruments	212	64.85	1.52	2.3	64.9	60.2 - 69.5
All ABX Instruments	111	67.10	1.08	1.6	67.2	63.8 - 70.4
All COULTER Instruments	200	61.33	0.95	1.5	61.3	58.4 - 64.2
All Danam/Drew Scientific Instruments	11	65.17	0.86	1.3	65.2	62.6 - 67.8
Abbott Cell-Dyn 1700	18	62.71	1.53	2.4	62.4	58.1 - 67.3
Abbott Cell-Dyn 1800	95	64.29	0.83	1.3	64.2	61.7 - 66.8
Abbott Cell-Dyn Emerald	98	65.77	1.47	2.2	66.1	61.3 - 70.2
ABX Diagnostics Micros/45/60	111	67.10	1.08	1.6	67.2	63.8 - 70.4
Boule Medonic CA 620	11	57.25	3.84	6.7	56.3	45.7 - 68.8
Boule Medonic M series	83	60.93	1.78	2.9	60.9	55.6 - 66.3
COULTER AcT diff/diff 2	198	61.34	0.95	1.5	61.3	58.5 - 64.2
Drew Scientific D3	11	65.17	0.86	1.3	65.2	62.6 - 67.8

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

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	17	22.62	0.74	3.3	22.6	19.2 - 26.1	16	10.61	0.44	4.1	10.7	9.0 - 12.3
All COULTER Instruments	17	22.62	0.74	3.3	22.6	19.2 - 26.1	16	10.61	0.44	4.1	10.7	9.0 - 12.3
Specimen DIF-3							Specimen DIF-4					
All Method	16	4.03	0.19	4.7	4.1	3.4 - 4.7	17	4.06	0.19	4.6	4.1	3.4 - 4.7
All COULTER Instruments	16	4.03	0.19	4.7	4.1	3.4 - 4.7	17	4.06	0.19	4.6	4.1	3.4 - 4.7
Specimen DIF-5												
All Method	17	10.49	0.47	4.5	10.5	8.9 - 12.1						
All COULTER Instruments	17	10.49	0.47	4.5	10.5	8.9 - 12.1						

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

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	17	5.445	0.086	1.6	5.43	5.11 - 5.78	16	4.184	0.076	1.8	4.19	3.93 - 4.44
All COULTER Instruments	17	5.445	0.086	1.6	5.43	5.11 - 5.78	16	4.184	0.076	1.8	4.19	3.93 - 4.44
Specimen DIF-3							Specimen DIF-4					
All Method	16	2.636	0.041	1.6	2.63	2.47 - 2.80	17	2.635	0.050	1.9	2.64	2.47 - 2.80
All COULTER Instruments	16	2.636	0.041	1.6	2.63	2.47 - 2.80	17	2.635	0.050	1.9	2.64	2.47 - 2.80
Specimen DIF-5												
All Method	17	4.150	0.075	1.8	4.14	3.90 - 4.40						
All COULTER Instruments	17	4.150	0.075	1.8	4.14	3.90 - 4.40						

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	17	16.60	0.27	1.6	16.6	15.4 - 17.8	16	11.64	0.19	1.7	11.6	10.8 - 12.5
All COULTER Instruments	17	16.60	0.27	1.6	16.6	15.4 - 17.8	16	11.64	0.19	1.7	11.6	10.8 - 12.5
Specimen DIF-3							Specimen DIF-4					
All Method	16	6.55	0.13	2.0	6.5	6.0 - 7.1	17	6.54	0.11	1.7	6.5	6.0 - 7.0
All COULTER Instruments	16	6.55	0.13	2.0	6.5	6.0 - 7.1	17	6.54	0.11	1.7	6.5	6.0 - 7.0
Specimen DIF-5												
All Method	17	11.60	0.18	1.6	11.5	10.7 - 12.5						
All COULTER Instruments	17	11.60	0.18	1.6	11.5	10.7 - 12.5						

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	17	53.44	0.94	1.8	53.4	50.2 - 56.7	16	36.64	0.76	2.1	36.6	34.4 - 38.9
All COULTER Instruments	17	53.44	0.94	1.8	53.4	50.2 - 56.7	16	36.64	0.76	2.1	36.6	34.4 - 38.9
Specimen DIF-3							Specimen DIF-4					
All Method	16	20.58	0.45	2.2	20.7	19.3 - 21.9	17	20.60	0.63	3.1	20.5	19.3 - 21.9
All COULTER Instruments	16	20.58	0.45	2.2	20.7	19.3 - 21.9	17	20.60	0.63	3.1	20.5	19.3 - 21.9
Specimen DIF-5												
All Method	17	36.42	0.91	2.5	36.4	34.2 - 38.7						
All COULTER Instruments	17	36.42	0.91	2.5	36.4	34.2 - 38.7						

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

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	17	480.6	22.9	4.8	475	360 - 601	16	235.0	8.6	3.7	237	176 - 294
All COULTER Instruments	17	480.6	22.9	4.8	475	360 - 601	16	235.0	8.6	3.7	237	176 - 294
Specimen DIF-3							Specimen DIF-4					
All Method	15	77.1	4.1	5.3	77	57 - 97	17	77.4	2.3	3.0	77	58 - 97
All COULTER Instruments	15	77.1	4.1	5.3	77	57 - 97	17	77.4	2.3	3.0	77	58 - 97
Specimen DIF-5												
All Method	17	230.0	10.3	4.5	234	172 - 288						
All COULTER Instruments	17	230.0	10.3	4.5	234	172 - 288						

HEMATOLOGY W/ 5-PART DIFFERENTIAL–NEUTROPHILS (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	17	69.13	3.56	5.2	70.8	58.4 - 79.9	17	58.95	3.15	5.3	60.2	49.5 - 68.4
All COULTER Instruments	17	69.13	3.56	5.2	70.8	58.4 - 79.9	17	58.95	3.15	5.3	60.2	49.5 - 68.4
Specimen DIF-3							Specimen DIF-4					
All Method	17	51.34	2.40	4.7	51.4	44.1 - 58.6	17	50.47	1.35	2.7	50.3	46.4 - 54.6
All COULTER Instruments	17	51.34	2.40	4.7	51.4	44.1 - 58.6	17	50.47	1.35	2.7	50.3	46.4 - 54.6
Specimen DIF-5												
All Method	17	58.85	2.14	3.6	59.2	52.4 - 65.3						
All COULTER Instruments	17	58.85	2.14	3.6	59.2	52.4 - 65.3						

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	17	19.28	1.20	6.2	19.0	15.6 - 22.9	17	31.48	3.59	11.4	30.6	20.7 - 42.3
All COULTER Instruments	17	19.28	1.20	6.2	19.0	15.6 - 22.9	17	31.48	3.59	11.4	30.6	20.7 - 42.3
Specimen DIF-3							Specimen DIF-4					
All Method	16	41.52	0.74	1.8	41.2	39.3 - 43.8	17	41.46	1.00	2.4	41.5	38.4 - 44.5
All COULTER Instruments	16	41.52	0.74	1.8	41.2	39.3 - 43.8	17	41.46	1.00	2.4	41.5	38.4 - 44.5
Specimen DIF-5												
All Method	17	30.73	1.28	4.2	30.9	26.8 - 34.6						
All COULTER Instruments	17	30.73	1.28	4.2	30.9	26.8 - 34.6						

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	15	5.56	2.10	37.8	4.6	0.0 - 11.9	17	4.26	1.26	29.5	4.4	0.4 - 8.1
All COULTER Instruments	15	5.56	2.10	37.8	4.6	0.0 - 11.9	17	4.26	1.26	29.5	4.4	0.4 - 8.1
Specimen DIF-3							Specimen DIF-4					
All Method	16	1.68	0.49	29.2	1.7	0.2 - 3.2	17	1.69	0.45	26.6	1.6	0.3 - 3.1
All COULTER Instruments	16	1.68	0.49	29.2	1.7	0.2 - 3.2	17	1.69	0.45	26.6	1.6	0.3 - 3.1
Specimen DIF-5												
All Method	17	4.42	0.81	18.3	4.5	2.0 - 6.9						
All COULTER Instruments	17	4.42	0.81	18.3	4.5	2.0 - 6.9						

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

<u>Instrument</u>	Specimen DIF-1						Specimen DIF-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	4.84	0.51	10.6	4.8	3.2 - 6.4	16	5.33	0.62	11.6	5.2	3.4 - 7.2
All COULTER Instruments	17	4.84	0.51	10.6	4.8	3.2 - 6.4	16	5.33	0.62	11.6	5.2	3.4 - 7.2
	Specimen DIF-3						Specimen DIF-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	16	6.13	0.79	12.9	6.0	3.7 - 8.6	17	6.22	0.99	15.9	6.2	3.2 - 9.2
All COULTER Instruments	16	6.13	0.79	12.9	6.0	3.7 - 8.6	17	6.22	0.99	15.9	6.2	3.2 - 9.2
	Specimen DIF-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	17	5.87	0.98	16.6	5.8	2.9 - 8.9						
All COULTER Instruments	17	5.87	0.98	16.6	5.8	2.9 - 8.9						

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

<u>Instrument</u>	Specimen DIF-1						Specimen DIF-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	0.60	0.46	76.1	0.6	0.0 - 2.0	17	0.15	0.18	120.4	0.1	0.0 - 0.8
All COULTER Instruments	17	0.60	0.46	76.1	0.6	0.0 - 2.0	17	0.15	0.18	120.4	0.1	0.0 - 0.8
	Specimen DIF-3						Specimen DIF-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	0.09	0.14	147.8	0.0	0.0 - 0.6	17	0.11	0.19	167.0	0.0	0.0 - 0.7
All COULTER Instruments	17	0.09	0.14	147.8	0.0	0.0 - 0.6	17	0.11	0.19	167.0	0.0	0.0 - 0.7
	Specimen DIF-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	17	0.14	0.17	122.8	0.1	0.0 - 0.7						
All COULTER Instruments	17	0.14	0.17	122.8	0.1	0.0 - 0.7						

BLOOD LEAD (µg/dL)

<u>Instrument</u>	Specimen LED-1						Specimen LED-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	3.30	0.01	0.0	3.3	0.0 - 7.3	10	60.89	2.94	4.8	62.0	54.8 - 67.0
All Magellan Diagnostics Methods	10	3.30	0.01	0.0	3.3	0.0 - 7.3	10	60.89	2.94	4.8	62.0	54.8 - 67.0
Magellan Diagnostics LeadCare II	10	3.30	0.01	0.0	3.3	0.0 - 7.3	10	60.89	2.94	4.8	62.0	54.8 - 67.0
	Specimen LED-3						Specimen LED-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	2	-	-	-	10.0	Not graded	2	-	-	-	16.0	Not graded
	Specimen LED-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	2	-	-	-	10.0	Not graded						

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	35	1.24	0.46	37.1	1.1	0.0 - 2.7	33	8.12	2.02	24.8	8.2	2.0 - 14.2
All Automated Methods	18	1.05	0.13	12.8	1.1	0.6 - 1.5	19	7.51	1.48	19.7	8.1	3.0 - 12.0
All Manual Methods	16	1.51	0.51	34.0	1.5	0.0 - 3.1	15	9.48	3.06	32.3	8.9	0.3 - 18.7
Manual-New Methylen Blue Stain	11	1.68	0.49	29.1	1.7	0.2 - 3.2	11	12.19	7.24	59.4	10.2	0.0 - 34.0

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	87	2.48	0.08	3.2	2.5	2.1 - 2.9	85	4.82	0.12	2.5	4.8	4.1 - 5.6
All ABX Instruments	48	2.47	0.09	3.8	2.5	2.1 - 2.9	48	4.79	0.16	3.3	4.8	4.0 - 5.6
All COULTER Instruments	39	2.48	0.06	2.4	2.5	2.1 - 2.9	39	4.85	0.09	1.9	4.8	4.1 - 5.6
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	35	2.44	0.07	2.8	2.4	2.0 - 2.9	36	4.77	0.14	3.0	4.7	4.0 - 5.5
ABX Diagnostics Pentra 80 / XL 80	12	2.55	0.09	3.5	2.6	2.1 - 3.0	12	4.84	0.19	3.9	4.9	4.1 - 5.6
COULTER AcT 5diff (version 2.01)	39	2.48	0.06	2.4	2.5	2.1 - 2.9	39	4.85	0.09	1.9	4.8	4.1 - 5.6
	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	86	27.59	0.63	2.3	27.6	23.4 - 31.8	87	6.92	0.18	2.6	6.9	5.8 - 8.0
All ABX Instruments	47	27.44	0.67	2.4	27.4	23.3 - 31.6	48	6.86	0.19	2.8	6.9	5.8 - 7.9
All COULTER Instruments	39	27.77	0.53	1.9	27.8	23.6 - 32.0	39	6.99	0.13	1.8	7.0	5.9 - 8.1
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	27.39	0.66	2.4	27.4	23.2 - 31.6	36	6.83	0.17	2.5	6.8	5.8 - 7.9
ABX Diagnostics Pentra 80 / XL 80	12	27.81	0.99	3.6	27.8	23.6 - 32.0	12	6.96	0.22	3.2	7.0	5.9 - 8.1
COULTER AcT 5diff (version 2.01)	39	27.77	0.53	1.9	27.8	23.6 - 32.0	39	6.99	0.13	1.8	7.0	5.9 - 8.1
	Specimen BCX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	85	9.98	0.28	2.9	10.0	8.4 - 11.5						
All ABX Instruments	46	9.86	0.27	2.8	9.8	8.3 - 11.4						
All COULTER Instruments	38	10.10	0.20	2.0	10.1	8.5 - 11.7						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	35	9.83	0.26	2.7	9.8	8.3 - 11.3						
ABX Diagnostics Pentra 80 / XL 80	12	10.06	0.37	3.7	10.1	8.5 - 11.6						
COULTER AcT 5diff (version 2.01)	38	10.10	0.20	2.0	10.1	8.5 - 11.7						

HEMATOLOGY W/ 5-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10¹²/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	88	2.054	0.040	2.0	2.05	1.93 - 2.18	88	4.264	0.064	1.5	4.27	4.00 - 4.53
All ABX Instruments	48	2.049	0.046	2.2	2.05	1.92 - 2.18	48	4.259	0.072	1.7	4.27	4.00 - 4.52
All COULTER Instruments	40	2.060	0.032	1.5	2.07	1.93 - 2.19	40	4.271	0.054	1.3	4.27	4.01 - 4.53
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	2.054	0.042	2.1	2.05	1.93 - 2.18	36	4.252	0.069	1.6	4.26	3.99 - 4.51
ABX Diagnostics Pentra 80 / XL 80	12	2.033	0.054	2.7	2.02	1.91 - 2.16	12	4.278	0.080	1.9	4.27	4.02 - 4.54
COULTER AcT 5diff (version 2.01)	40	2.060	0.032	1.5	2.07	1.93 - 2.19	40	4.271	0.054	1.3	4.27	4.01 - 4.53
	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	86	3.022	0.047	1.5	3.01	2.84 - 3.21	88	4.594	0.073	1.6	4.58	4.31 - 4.87
All ABX Instruments	46	3.019	0.049	1.6	3.01	2.83 - 3.20	48	4.591	0.081	1.8	4.58	4.31 - 4.87
All COULTER Instruments	40	3.026	0.045	1.5	3.02	2.84 - 3.21	40	4.597	0.063	1.4	4.59	4.32 - 4.88
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	35	3.023	0.048	1.6	3.02	2.84 - 3.21	36	4.581	0.080	1.7	4.58	4.30 - 4.86
ABX Diagnostics Pentra 80 / XL 80	12	2.986	0.078	2.6	3.00	2.80 - 3.17	12	4.624	0.077	1.7	4.63	4.34 - 4.91
COULTER AcT 5diff (version 2.01)	40	3.026	0.045	1.5	3.02	2.84 - 3.21	40	4.597	0.063	1.4	4.59	4.32 - 4.88
	Specimen BCX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	88	2.586	0.041	1.6	2.58	2.43 - 2.75						
All ABX Instruments	48	2.578	0.045	1.7	2.58	2.42 - 2.74						
All COULTER Instruments	40	2.596	0.035	1.3	2.60	2.43 - 2.76						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	2.587	0.045	1.7	2.58	2.43 - 2.75						
ABX Diagnostics Pentra 80 / XL 80	12	2.553	0.035	1.4	2.56	2.39 - 2.71						
COULTER AcT 5diff (version 2.01)	40	2.596	0.035	1.3	2.60	2.43 - 2.76						

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

<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	88	6.68	0.14	2.0	6.7	6.2 - 7.2	88	12.99	0.20	1.5	13.0	12.0 - 13.9
All ABX Instruments	48	6.61	0.12	1.8	6.6	6.1 - 7.1	48	12.95	0.20	1.5	12.9	12.0 - 13.9
All COULTER Instruments	40	6.77	0.10	1.5	6.8	6.2 - 7.3	40	13.03	0.19	1.4	13.1	12.1 - 14.0
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	6.61	0.12	1.8	6.6	6.1 - 7.1	36	12.93	0.20	1.5	12.9	12.0 - 13.9
ABX Diagnostics Pentra 80 / XL 80	12	6.62	0.12	1.8	6.6	6.1 - 7.1	12	13.01	0.21	1.6	12.9	12.0 - 14.0
COULTER AcT 5diff (version 2.01)	40	6.77	0.10	1.5	6.8	6.2 - 7.3	40	13.03	0.19	1.4	13.1	12.1 - 14.0
	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	87	7.83	0.13	1.6	7.8	7.2 - 8.4	88	14.03	0.21	1.5	14.0	13.0 - 15.1
All ABX Instruments	47	7.77	0.11	1.5	7.8	7.2 - 8.4	48	14.02	0.20	1.4	14.0	13.0 - 15.1
All COULTER Instruments	40	7.91	0.10	1.3	7.9	7.3 - 8.5	40	14.05	0.21	1.5	14.1	13.0 - 15.1
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	7.76	0.12	1.5	7.8	7.2 - 8.4	36	14.01	0.21	1.5	14.0	13.0 - 15.0
ABX Diagnostics Pentra 80 / XL 80	12	7.74	0.16	2.1	7.8	7.1 - 8.3	12	14.06	0.18	1.3	14.0	13.0 - 15.1
COULTER AcT 5diff (version 2.01)	40	7.91	0.10	1.3	7.9	7.3 - 8.5	40	14.05	0.21	1.5	14.1	13.0 - 15.1
	Specimen BCX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	88	7.85	0.14	1.7	7.9	7.2 - 8.4						
All ABX Instruments	48	7.78	0.11	1.5	7.8	7.2 - 8.4						
All COULTER Instruments	40	7.94	0.11	1.4	8.0	7.3 - 8.5						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	7.78	0.12	1.5	7.8	7.2 - 8.4						
ABX Diagnostics Pentra 80 / XL 80	12	7.78	0.10	1.3	7.8	7.2 - 8.4						
COULTER AcT 5diff (version 2.01)	40	7.94	0.11	1.4	8.0	7.3 - 8.5						

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

<u>Instrument</u>	Specimen BCX-1						Specimen BCX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	86	18.75	0.41	2.2	18.7	17.6 - 19.9	87	36.51	0.69	1.9	36.5	34.3 - 38.8
All ABX Instruments	48	18.85	0.52	2.8	18.9	17.7 - 20.0	47	36.58	0.73	2.0	36.6	34.3 - 38.8
All COULTER Instruments	40	18.69	0.37	2.0	18.7	17.5 - 19.9	40	36.43	0.64	1.8	36.5	34.2 - 38.7
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	18.70	0.43	2.3	18.7	17.5 - 19.9	35	36.45	0.74	2.0	36.4	34.2 - 38.7
ABX Diagnostics Pentra 80 / XL 80	12	19.31	0.51	2.7	19.1	18.1 - 20.5	12	36.96	0.59	1.6	36.9	34.7 - 39.2
COULTER AcT 5diff (version 2.01)	40	18.69	0.37	2.0	18.7	17.5 - 19.9	40	36.43	0.64	1.8	36.5	34.2 - 38.7
	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	87	23.37	0.46	2.0	23.3	21.9 - 24.8	88	39.47	0.76	1.9	39.4	37.1 - 41.9
All ABX Instruments	48	23.45	0.53	2.3	23.4	22.0 - 24.9	48	39.53	0.80	2.0	39.5	37.1 - 41.9
All COULTER Instruments	40	23.24	0.38	1.6	23.3	21.8 - 24.7	39	39.35	0.61	1.6	39.2	36.9 - 41.8
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	23.36	0.49	2.1	23.3	21.9 - 24.8	36	39.40	0.84	2.1	39.4	37.0 - 41.8
ABX Diagnostics Pentra 80 / XL 80	12	23.74	0.57	2.4	23.8	22.3 - 25.2	12	39.90	0.57	1.4	39.8	37.5 - 42.3
COULTER AcT 5diff (version 2.01)	40	23.24	0.38	1.6	23.3	21.8 - 24.7	39	39.35	0.61	1.6	39.2	36.9 - 41.8
	Specimen BCX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	88	22.16	0.43	2.0	22.1	20.8 - 23.5						
All ABX Instruments	48	22.24	0.45	2.0	22.2	20.9 - 23.6						
All COULTER Instruments	40	22.07	0.40	1.8	22.0	20.7 - 23.4						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	22.11	0.41	1.9	22.0	20.7 - 23.5						
ABX Diagnostics Pentra 80 / XL 80	12	22.63	0.35	1.5	22.6	21.2 - 24.0						
COULTER AcT 5diff (version 2.01)	40	22.07	0.40	1.8	22.0	20.7 - 23.4						

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	87	67.0	3.8	5.6	66	50 - 84	87	232.1	9.7	4.2	232	174 - 291
All ABX Instruments	47	65.8	3.2	4.8	66	49 - 83	48	229.3	9.4	4.1	230	171 - 287
All COULTER Instruments	40	68.5	3.9	5.7	69	51 - 86	39	235.4	9.1	3.9	235	176 - 295
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	65.6	3.7	5.7	66	49 - 82	36	227.1	9.3	4.1	229	170 - 284
ABX Diagnostics Pentra 80 / XL 80	12	65.7	2.9	4.4	66	49 - 83	12	235.8	6.3	2.7	237	176 - 295
COULTER AcT 5diff (version 2.01)	40	68.5	3.9	5.7	69	51 - 86	39	235.4	9.1	3.9	235	176 - 295
Specimen BCX-3							Specimen BCX-4					
All Method	87	392.7	12.8	3.3	392	294 - 491	86	241.5	10.2	4.2	242	181 - 302
All ABX Instruments	47	392.0	12.6	3.2	392	293 - 490	48	239.9	10.8	4.5	238	179 - 300
All COULTER Instruments	40	393.5	13.3	3.4	392	295 - 492	38	243.5	9.2	3.8	242	182 - 305
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	35	391.2	12.5	3.2	390	293 - 490	36	237.1	10.5	4.4	235	177 - 297
ABX Diagnostics Pentra 80 / XL 80	12	394.2	13.1	3.3	396	295 - 493	12	248.4	6.5	2.6	249	186 - 311
COULTER AcT 5diff (version 2.01)	40	393.5	13.3	3.4	392	295 - 492	38	243.5	9.2	3.8	242	182 - 305
Specimen BCX-5												
All Method	87	74.7	4.3	5.7	75	56 - 94						
All ABX Instruments	48	73.4	4.2	5.7	74	55 - 92						
All COULTER Instruments	39	76.3	3.9	5.1	76	57 - 96						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	72.7	4.2	5.8	73	54 - 91						
ABX Diagnostics Pentra 80 / XL 80	12	75.4	3.5	4.6	76	56 - 95						
COULTER AcT 5diff (version 2.01)	39	76.3	3.9	5.1	76	57 - 96						

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

<u>Instrument</u>	Specimen BCX-1						Specimen BCX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	88	62.26	6.08	9.8	61.4	44.0 - 80.5	88	62.39	5.03	8.1	62.6	47.2 - 77.5
All ABX Instruments	48	65.62	5.40	8.2	66.5	49.4 - 81.9	46	64.88	3.88	6.0	65.6	53.2 - 76.6
All COULTER Instruments	40	58.22	4.08	7.0	58.9	45.9 - 70.5	40	60.22	4.10	6.8	60.4	47.9 - 72.6
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	66.33	4.84	7.3	67.3	51.8 - 80.9	36	65.26	3.81	5.8	65.6	53.8 - 76.7
ABX Diagnostics Pentra 80 / XL 80	12	63.48	6.60	10.4	64.8	43.6 - 83.3	12	60.99	6.94	11.4	63.2	40.1 - 81.9
COULTER AcT 5diff (version 2.01)	40	58.22	4.08	7.0	58.9	45.9 - 70.5	40	60.22	4.10	6.8	60.4	47.9 - 72.6
<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	88	66.47	4.79	7.2	66.7	52.0 - 80.9	88	54.49	4.99	9.2	54.6	39.5 - 69.5
All ABX Instruments	46	69.18	3.77	5.5	69.9	57.8 - 80.5	46	56.43	4.11	7.3	57.2	44.0 - 68.8
All COULTER Instruments	40	63.99	3.46	5.4	64.2	53.5 - 74.4	40	53.01	4.27	8.0	52.9	40.2 - 65.9
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	69.92	3.30	4.7	70.3	60.0 - 79.9	36	57.49	3.69	6.4	57.7	46.4 - 68.6
ABX Diagnostics Pentra 80 / XL 80	12	64.43	6.20	9.6	65.1	45.8 - 83.1	12	50.44	5.83	11.5	51.3	32.9 - 68.0
COULTER AcT 5diff (version 2.01)	40	63.99	3.46	5.4	64.2	53.5 - 74.4	40	53.01	4.27	8.0	52.9	40.2 - 65.9
<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	87	58.89	3.95	6.7	59.0	47.0 - 70.8						
All ABX Instruments	47	60.46	3.33	5.5	60.5	50.4 - 70.5						
All COULTER Instruments	39	57.29	3.55	6.2	57.5	46.6 - 68.0						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	61.60	2.50	4.1	61.2	54.1 - 69.1						
ABX Diagnostics Pentra 80 / XL 80	12	55.95	3.99	7.1	56.4	43.9 - 68.0						
COULTER AcT 5diff (version 2.01)	39	57.29	3.55	6.2	57.5	46.6 - 68.0						

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

<u><i>Instrument</i></u>	Specimen BCX-1						Specimen BCX-2					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	87	24.35	4.12	16.9	23.9	11.9 - 36.8	86	22.68	3.37	14.9	22.4	12.5 - 32.8
All ABX Instruments	47	24.74	4.55	18.4	24.2	11.1 - 38.4	46	23.54	2.86	12.1	23.9	14.9 - 32.2
All COULTER Instruments	40	23.88	3.56	14.9	23.7	13.2 - 34.6	40	21.69	3.67	16.9	21.3	10.6 - 32.7
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	24.50	4.51	18.4	23.8	10.9 - 38.1	36	23.02	2.71	11.8	22.7	14.8 - 31.2
ABX Diagnostics Pentra 80 / XL 80	11	25.54	4.82	18.9	24.7	11.0 - 40.0	10	25.41	2.70	10.6	24.9	17.3 - 33.6
COULTER AcT 5diff (version 2.01)	40	23.88	3.56	14.9	23.7	13.2 - 34.6	40	21.69	3.67	16.9	21.3	10.6 - 32.7
	Specimen BCX-3						Specimen BCX-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	84	19.85	2.88	14.5	19.4	11.2 - 28.5	86	32.66	4.24	13.0	32.5	19.9 - 45.4
All ABX Instruments	46	21.04	2.94	14.0	20.6	12.2 - 29.9	46	34.20	4.07	11.9	33.9	21.9 - 46.5
All COULTER Instruments	39	18.69	2.71	14.5	17.7	10.5 - 26.9	39	30.57	3.18	10.4	30.8	21.0 - 40.1
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	35	19.95	1.77	8.9	20.1	14.6 - 25.3	36	33.00	3.08	9.3	32.9	23.7 - 42.3
ABX Diagnostics Pentra 80 / XL 80	10	24.20	3.24	13.4	23.5	14.4 - 34.0	10	38.52	4.41	11.5	39.5	25.2 - 51.8
COULTER AcT 5diff (version 2.01)	39	18.69	2.71	14.5	17.7	10.5 - 26.9	39	30.57	3.18	10.4	30.8	21.0 - 40.1
	Specimen BCX-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	86	30.21	3.73	12.4	29.5	19.0 - 41.5						
All ABX Instruments	47	31.31	3.56	11.4	31.0	20.6 - 42.0						
All COULTER Instruments	38	28.57	2.95	10.3	28.0	19.7 - 37.5						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	29.97	2.35	7.9	30.2	22.9 - 37.1						
ABX Diagnostics Pentra 80 / XL 80	11	35.69	3.36	9.4	35.9	25.6 - 45.8						
COULTER AcT 5diff (version 2.01)	38	28.57	2.95	10.3	28.0	19.7 - 37.5						

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	85	2.00	1.39	69.5	1.8	0.0 - 6.2	85	2.47	1.67	67.9	2.2	0.0 - 7.5
All ABX Instruments	46	1.93	1.30	67.4	1.7	0.0 - 5.9	46	2.11	1.37	64.8	1.9	0.0 - 6.3
All COULTER Instruments	39	2.07	1.50	72.3	1.8	0.0 - 6.6	40	3.04	2.10	69.1	2.5	0.0 - 9.4
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	34	2.01	1.29	64.0	1.9	0.0 - 5.9	34	2.10	1.37	65.2	1.8	0.0 - 6.3
ABX Diagnostics Pentra 80 / XL 80	12	1.72	1.38	80.4	1.4	0.0 - 5.9	12	2.13	1.41	66.6	2.1	0.0 - 6.4
COULTER AcT 5diff (version 2.01)	39	2.07	1.50	72.3	1.8	0.0 - 6.6	40	3.04	2.10	69.1	2.5	0.0 - 9.4
Specimen BCX-3							Specimen BCX-4					
All Method	85	2.25	1.40	61.9	1.9	0.0 - 6.5	86	2.81	1.71	61.0	2.5	0.0 - 8.0
All ABX Instruments	46	2.12	1.15	54.5	1.9	0.0 - 5.6	46	2.55	1.32	51.8	2.5	0.0 - 6.6
All COULTER Instruments	40	2.53	1.76	69.6	2.1	0.0 - 7.8	40	3.10	2.05	66.2	2.6	0.0 - 9.3
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	34	2.12	1.19	56.2	2.0	0.0 - 5.8	34	2.68	1.34	50.1	2.6	0.0 - 6.7
ABX Diagnostics Pentra 80 / XL 80	12	2.09	1.08	51.6	1.7	0.0 - 5.4	12	2.19	1.25	56.9	2.0	0.0 - 6.0
COULTER AcT 5diff (version 2.01)	40	2.53	1.76	69.6	2.1	0.0 - 7.8	40	3.10	2.05	66.2	2.6	0.0 - 9.3
Specimen BCX-5												
All Method	87	1.79	1.20	66.9	1.4	0.0 - 5.4						
All ABX Instruments	47	1.57	0.98	62.7	1.2	0.0 - 4.6						
All COULTER Instruments	40	2.05	1.38	67.1	1.8	0.0 - 6.2						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	35	1.65	1.06	64.0	1.3	0.0 - 4.9						
ABX Diagnostics Pentra 80 / XL 80	12	1.34	0.73	54.4	1.2	0.0 - 3.6						
COULTER AcT 5diff (version 2.01)	40	2.05	1.38	67.1	1.8	0.0 - 6.2						

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	88	5.71	1.68	29.5	5.6	0.6 - 10.8	87	7.98	1.56	19.5	7.7	3.3 - 12.7
All ABX Instruments	48	6.12	1.70	27.7	6.0	1.0 - 11.3	47	8.33	1.59	19.1	8.0	3.5 - 13.2
All COULTER Instruments	38	4.98	1.19	23.8	5.0	1.4 - 8.6	40	7.56	1.43	18.9	7.7	3.2 - 11.9
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	5.98	1.66	27.7	5.9	1.0 - 11.0	35	8.47	1.69	20.0	8.4	3.3 - 13.6
ABX Diagnostics Pentra 80 / XL 80	12	6.52	1.82	28.0	6.6	1.0 - 12.0	12	7.93	1.23	15.5	7.4	4.2 - 11.7
COULTER AcT 5diff (version 2.01)	38	4.98	1.19	23.8	5.0	1.4 - 8.6	40	7.56	1.43	18.9	7.7	3.2 - 11.9
Specimen BCX-3							Specimen BCX-4					
All Method	88	6.46	0.71	11.0	6.5	4.3 - 8.6	87	5.73	1.30	22.7	5.7	1.8 - 9.7
All ABX Instruments	48	6.62	0.74	11.2	6.6	4.3 - 8.9	47	5.85	1.25	21.3	5.7	2.1 - 9.6
All COULTER Instruments	40	6.27	0.62	10.0	6.3	4.3 - 8.2	40	5.58	1.37	24.5	5.6	1.4 - 9.7
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	6.82	0.64	9.4	6.8	4.8 - 8.8	35	5.89	1.20	20.4	5.7	2.2 - 9.5
ABX Diagnostics Pentra 80 / XL 80	12	6.04	0.75	12.4	6.2	3.7 - 8.3	12	5.74	1.43	24.9	5.8	1.4 - 10.1
COULTER AcT 5diff (version 2.01)	40	6.27	0.62	10.0	6.3	4.3 - 8.2	40	5.58	1.37	24.5	5.6	1.4 - 9.7
Specimen BCX-5												
All Method	88	5.76	1.06	18.5	5.7	2.5 - 9.0						
All ABX Instruments	48	5.98	1.11	18.6	6.1	2.6 - 9.4						
All COULTER Instruments	40	5.49	0.95	17.2	5.4	2.6 - 8.4						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	36	6.19	1.06	17.1	6.1	3.0 - 9.4						
ABX Diagnostics Pentra 80 / XL 80	12	5.35	1.07	20.1	5.4	2.1 - 8.6						
COULTER AcT 5diff (version 2.01)	40	5.49	0.95	17.2	5.4	2.6 - 8.4						

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

<u>Instrument</u>	Specimen BCX-1						Specimen BCX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	88	5.31	5.14	96.9	0.6	0.0 - 20.8	88	3.80	3.67	96.6	0.4	0.0 - 14.8
All ABX Instruments	46	0.55	0.05	10.0	0.5	0.3 - 0.8	44	0.40	0.00	0.0	0.4	0.4 - 0.4
All COULTER Instruments	38	10.67	0.53	4.9	10.7	9.0 - 12.3	39	7.68	0.33	4.2	7.7	6.7 - 8.7
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	35	0.55	0.06	10.2	0.5	0.3 - 0.8	33	0.40	0.01	0.0	0.4	0.3 - 0.5
ABX Diagnostics Pentra 80 / XL 80	11	0.55	0.05	9.6	0.5	0.3 - 0.8	11	0.40	0.01	0.0	0.4	0.3 - 0.5
COULTER AcT 5diff (version 2.01)	38	10.67	0.53	4.9	10.7	9.0 - 12.3	39	7.68	0.33	4.2	7.7	6.7 - 8.7
	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	88	4.15	4.03	97.2	0.5	0.0 - 16.3	87	3.47	3.40	97.9	0.4	0.0 - 13.7
All ABX Instruments	42	0.40	0.00	0.0	0.4	0.4 - 0.4	46	0.36	0.05	13.4	0.4	0.2 - 0.6
All COULTER Instruments	38	8.41	0.25	3.0	8.5	7.6 - 9.2	38	7.13	0.39	5.5	7.2	5.9 - 8.3
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	33	0.40	0.01	0.0	0.4	0.3 - 0.5	35	0.37	0.05	13.2	0.4	0.2 - 0.6
ABX Diagnostics Pentra 80 / XL 80	11	0.42	0.04	9.7	0.4	0.2 - 0.6	11	0.35	0.05	14.7	0.4	0.1 - 0.6
COULTER AcT 5diff (version 2.01)	38	8.41	0.25	3.0	8.5	7.6 - 9.2	38	7.13	0.39	5.5	7.2	5.9 - 8.3
	Specimen BCX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	87	3.13	3.08	98.3	0.4	0.0 - 12.4						
All ABX Instruments	46	0.32	0.04	12.1	0.3	0.2 - 0.5						
All COULTER Instruments	38	6.40	0.37	5.7	6.4	5.3 - 7.6						
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	35	0.32	0.04	12.1	0.3	0.2 - 0.5						
ABX Diagnostics Pentra 80 / XL 80	11	0.32	0.04	12.7	0.3	0.1 - 0.5						
COULTER AcT 5diff (version 2.01)	38	6.40	0.37	5.7	6.4	5.3 - 7.6						

HEMATOLOGY W/ 5-PART DIFFERENTIAL–WHITE BLOOD CELL 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	43	20.50	1.05	5.1	20.5	17.4 - 23.6	42	7.44	0.45	6.0	7.6	6.3 - 8.6
All Sysmex XE/XT Instruments	13	19.75	1.03	5.2	19.5	16.7 - 22.8	12	7.48	0.32	4.2	7.5	6.3 - 8.6
All Sysmex XN/XS Instruments	29	20.93	0.70	3.3	20.7	17.7 - 24.1	30	7.42	0.49	6.6	7.7	6.3 - 8.6
Sysmex XS-1000i	27	20.94	0.72	3.4	20.7	17.8 - 24.1	28	7.42	0.51	6.9	7.7	6.3 - 8.6
Specimen MX-3							Specimen MX-4					
All Method	43	3.84	0.12	3.1	3.8	3.2 - 4.5	43	3.84	0.15	3.8	3.8	3.2 - 4.5
All Sysmex XE/XT Instruments	13	3.77	0.13	3.5	3.8	3.2 - 4.4	13	3.73	0.13	3.4	3.7	3.1 - 4.3
All Sysmex XN/XS Instruments	30	3.87	0.10	2.7	3.9	3.2 - 4.5	30	3.89	0.13	3.3	3.9	3.3 - 4.5
Sysmex XS-1000i	28	3.88	0.10	2.6	3.9	3.2 - 4.5	28	3.90	0.13	3.3	3.9	3.3 - 4.5
Specimen MX-5												
All Method	42	7.32	0.52	7.1	7.5	6.2 - 8.5						
All Sysmex XE/XT Instruments	13	7.48	0.31	4.1	7.4	6.3 - 8.7						
All Sysmex XN/XS Instruments	29	7.25	0.58	7.9	7.5	6.1 - 8.4						
Sysmex XS-1000i	27	7.24	0.60	8.2	7.5	6.1 - 8.4						

HEMATOLOGY W/ 5-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10¹²/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	42	5.516	0.070	1.3	5.52	5.18 - 5.85	43	4.679	0.073	1.6	4.67	4.39 - 4.97
All Sysmex XE/XT Instruments	13	5.483	0.105	1.9	5.45	5.15 - 5.82	13	4.712	0.082	1.7	4.70	4.42 - 5.00
All Sysmex XN/XS Instruments	30	5.539	0.060	1.1	5.53	5.20 - 5.88	30	4.665	0.066	1.4	4.66	4.38 - 4.95
Sysmex XS-1000i	28	5.538	0.061	1.1	5.53	5.20 - 5.88	28	4.667	0.067	1.4	4.66	4.38 - 4.95
Specimen MX-3							Specimen MX-4					
All Method	43	2.313	0.048	2.1	2.30	2.17 - 2.46	43	2.315	0.047	2.0	2.31	2.17 - 2.46
All Sysmex XE/XT Instruments	13	2.366	0.026	1.1	2.37	2.22 - 2.51	13	2.365	0.022	0.9	2.36	2.22 - 2.51
All Sysmex XN/XS Instruments	30	2.289	0.035	1.5	2.29	2.15 - 2.43	30	2.293	0.037	1.6	2.29	2.15 - 2.44
Sysmex XS-1000i	28	2.290	0.037	1.6	2.29	2.15 - 2.43	28	2.294	0.038	1.6	2.30	2.15 - 2.44
Specimen MX-5												
All Method	43	4.672	0.056	1.2	4.66	4.39 - 4.96						
All Sysmex XE/XT Instruments	13	4.701	0.051	1.1	4.70	4.41 - 4.99						
All Sysmex XN/XS Instruments	29	4.653	0.045	1.0	4.65	4.37 - 4.94						
Sysmex XS-1000i	28	4.659	0.055	1.2	4.65	4.37 - 4.94						

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	43	17.47	0.25	1.5	17.5	16.2 - 18.7	43	13.27	0.14	1.0	13.3	12.3 - 14.2
All Sysmex XE/XT Instruments	13	17.29	0.29	1.7	17.3	16.0 - 18.6	13	13.30	0.12	0.9	13.3	12.3 - 14.3
All Sysmex XN/XS Instruments	30	17.55	0.19	1.1	17.5	16.3 - 18.8	30	13.25	0.14	1.1	13.3	12.3 - 14.2
Sysmex XS-1000i	28	17.56	0.19	1.1	17.5	16.3 - 18.8	28	13.26	0.15	1.1	13.3	12.3 - 14.2
Specimen MX-3							Specimen MX-4					
All Method	43	5.76	0.09	1.6	5.8	5.3 - 6.2	43	5.76	0.10	1.7	5.8	5.3 - 6.2
All Sysmex XE/XT Instruments	13	5.82	0.08	1.4	5.8	5.4 - 6.3	13	5.83	0.09	1.5	5.8	5.4 - 6.3
All Sysmex XN/XS Instruments	30	5.73	0.09	1.5	5.7	5.3 - 6.2	30	5.73	0.09	1.6	5.7	5.3 - 6.2
Sysmex XS-1000i	28	5.73	0.09	1.6	5.7	5.3 - 6.2	28	5.73	0.09	1.6	5.7	5.3 - 6.2
Specimen MX-5												
All Method	42	13.25	0.13	1.0	13.3	12.3 - 14.2						
All Sysmex XE/XT Instruments	13	13.32	0.11	0.9	13.3	12.3 - 14.3						
All Sysmex XN/XS Instruments	29	13.22	0.12	0.9	13.2	12.2 - 14.2						
Sysmex XS-1000i	27	13.22	0.13	1.0	13.2	12.2 - 14.2						

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	43	52.50	1.26	2.4	52.6	49.3 - 55.7	43	40.22	0.90	2.2	40.2	37.8 - 42.7
All Sysmex XE/XT Instruments	13	52.08	1.15	2.2	52.1	48.9 - 55.3	13	40.25	0.92	2.3	40.2	37.8 - 42.7
All Sysmex XN/XS Instruments	30	52.68	1.28	2.4	52.9	49.5 - 55.9	30	40.21	0.91	2.3	40.3	37.8 - 42.7
Sysmex XS-1000i	28	52.78	1.28	2.4	53.0	49.6 - 56.0	28	40.28	0.91	2.3	40.4	37.8 - 42.7
Specimen MX-3							Specimen MX-4					
All Method	43	18.40	0.42	2.3	18.4	17.2 - 19.6	43	18.39	0.42	2.3	18.4	17.2 - 19.5
All Sysmex XE/XT Instruments	13	18.63	0.30	1.6	18.6	17.5 - 19.8	13	18.59	0.34	1.8	18.6	17.4 - 19.8
All Sysmex XN/XS Instruments	30	18.30	0.43	2.3	18.2	17.1 - 19.4	30	18.30	0.43	2.3	18.3	17.1 - 19.4
Sysmex XS-1000i	28	18.34	0.40	2.2	18.3	17.2 - 19.5	28	18.34	0.40	2.2	18.3	17.2 - 19.5
Specimen MX-5												
All Method	43	40.10	0.76	1.9	40.1	37.6 - 42.6						
All Sysmex XE/XT Instruments	13	40.16	0.72	1.8	40.1	37.7 - 42.6						
All Sysmex XN/XS Instruments	30	40.07	0.79	2.0	40.1	37.6 - 42.5						
Sysmex XS-1000i	28	40.11	0.80	2.0	40.1	37.7 - 42.6						

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	43	415.4	18.2	4.4	417	311 - 520	43	216.0	8.9	4.1	216	161 - 270
All Sysmex XE/XT Instruments	13	397.8	16.1	4.0	396	298 - 498	13	211.5	9.7	4.6	213	158 - 265
All Sysmex XN/XS Instruments	30	423.0	13.3	3.1	421	317 - 529	30	217.9	7.9	3.6	217	163 - 273
Sysmex XS-1000i	28	421.4	12.0	2.8	421	316 - 527	28	217.6	7.9	3.6	217	163 - 273
Specimen MX-3							Specimen MX-4					
All Method	43	59.7	4.5	7.5	60	44 - 75	43	58.9	4.9	8.3	59	44 - 74
All Sysmex XE/XT Instruments	13	60.7	5.8	9.5	62	45 - 76	13	58.6	5.8	9.9	58	43 - 74
All Sysmex XN/XS Instruments	30	59.3	3.8	6.4	60	44 - 75	30	59.1	4.5	7.6	59	44 - 74
Sysmex XS-1000i	28	59.6	3.7	6.1	61	44 - 75	28	59.5	4.4	7.4	59	44 - 75
Specimen MX-5												
All Method	43	217.6	8.8	4.0	219	163 - 272						
All Sysmex XE/XT Instruments	13	209.7	9.3	4.4	208	157 - 263						
All Sysmex XN/XS Instruments	30	221.0	5.9	2.7	221	165 - 277						
Sysmex XS-1000i	28	220.6	5.2	2.4	221	165 - 276						

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	43	59.84	5.64	9.4	58.4	42.9 - 76.8	43	49.93	5.10	10.2	50.7	34.6 - 65.3
All Sysmex XE/XT Instruments	13	60.53	2.99	4.9	60.1	51.5 - 69.6	13	54.67	0.77	1.4	54.8	52.3 - 57.0
All Sysmex XN/XS Instruments	30	59.54	6.48	10.9	56.0	40.0 - 79.0	29	47.33	3.83	8.1	46.3	35.8 - 58.9
Sysmex XS-1000i	28	59.18	6.35	10.7	55.8	40.1 - 78.3	28	47.31	3.90	8.2	46.2	35.6 - 59.1
Specimen MX-3							Specimen MX-4					
All Method	42	60.70	4.21	6.9	59.2	48.0 - 73.4	42	61.04	3.84	6.3	59.8	49.5 - 72.6
All Sysmex XE/XT Instruments	13	66.39	2.44	3.7	67.2	59.0 - 73.8	13	66.15	1.96	3.0	67.0	60.2 - 72.1
All Sysmex XN/XS Instruments	29	58.15	1.28	2.2	58.0	54.3 - 62.0	29	58.75	1.54	2.6	58.9	54.1 - 63.4
Sysmex XS-1000i	28	58.09	1.26	2.2	58.0	54.3 - 61.9	28	58.65	1.46	2.5	58.8	54.2 - 63.1
Specimen MX-5												
All Method	43	49.59	5.21	10.5	50.8	33.9 - 65.3						
All Sysmex XE/XT Instruments	13	54.34	0.78	1.4	54.5	51.9 - 56.7						
All Sysmex XN/XS Instruments	29	47.01	4.09	8.7	45.7	34.7 - 59.3						
Sysmex XS-1000i	28	47.06	4.15	8.8	45.8	34.6 - 59.6						

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	42	20.30	2.80	13.8	20.3	11.8 - 28.8	43	30.43	4.55	15.0	31.0	16.7 - 44.1
All Sysmex XE/XT Instruments	13	23.90	3.68	15.4	24.3	12.8 - 35.0	13	29.88	0.90	3.0	29.8	27.1 - 32.6
All Sysmex XN/XS Instruments	30	19.18	2.08	10.8	20.0	12.9 - 25.5	30	30.66	5.43	17.7	32.1	14.3 - 47.0
Sysmex XS-1000i	28	19.26	2.07	10.7	20.1	13.0 - 25.5	28	30.80	5.45	17.7	32.1	14.4 - 47.2
Specimen MX-3							Specimen MX-4					
All Method	42	15.70	2.04	13.0	16.1	9.5 - 21.9	42	15.50	1.82	11.8	15.7	10.0 - 21.0
All Sysmex XE/XT Instruments	13	17.17	2.72	15.8	16.4	9.0 - 25.4	13	17.13	2.59	15.1	16.4	9.3 - 24.9
All Sysmex XN/XS Instruments	30	15.37	2.13	13.8	16.0	8.9 - 21.8	30	15.08	1.78	11.8	15.0	9.7 - 20.5
Sysmex XS-1000i	28	15.23	2.11	13.8	15.8	8.9 - 21.6	28	15.11	1.75	11.6	15.0	9.8 - 20.4
Specimen MX-5												
All Method	43	31.04	4.72	15.2	31.1	16.8 - 45.2						
All Sysmex XE/XT Instruments	13	30.15	0.77	2.5	30.0	27.8 - 32.5						
All Sysmex XN/XS Instruments	30	31.43	5.61	17.8	32.6	14.6 - 48.3						
Sysmex XS-1000i	28	31.64	5.52	17.5	32.6	15.0 - 48.3						

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	41	2.06	1.21	59.0	1.6	0.0 - 5.8	42	2.86	2.18	76.4	1.8	0.0 - 9.5
All Sysmex XE/XT Instruments	13	2.08	0.49	23.6	1.9	0.6 - 3.6	13	2.55	0.69	27.2	2.6	0.4 - 4.7
All Sysmex XN/XS Instruments	28	2.05	1.44	70.3	1.3	0.0 - 6.4	29	3.00	2.59	86.4	1.5	0.0 - 10.8
Sysmex XS-1000i	27	2.04	1.47	72.0	1.2	0.0 - 6.5	27	2.89	2.58	89.3	1.5	0.0 - 10.7
Specimen MX-3							Specimen MX-4					
All Method	41	1.57	1.06	67.2	1.1	0.0 - 4.8	41	1.42	0.78	55.2	1.1	0.0 - 3.8
All Sysmex XE/XT Instruments	13	1.45	0.40	27.5	1.5	0.2 - 2.7	13	1.48	0.49	33.0	1.4	0.0 - 3.0
All Sysmex XN/XS Instruments	30	1.92	1.65	85.9	1.1	0.0 - 6.9	30	1.60	1.17	73.3	1.0	0.0 - 5.2
Sysmex XS-1000i	28	1.93	1.71	88.5	1.0	0.0 - 7.1	28	1.49	1.06	71.2	1.0	0.0 - 4.7
Specimen MX-5												
All Method	43	3.10	2.45	79.1	1.8	0.0 - 10.5						
All Sysmex XE/XT Instruments	13	2.65	0.86	32.5	2.9	0.0 - 5.3						
All Sysmex XN/XS Instruments	30	3.30	2.88	87.2	1.7	0.0 - 12.0						
Sysmex XS-1000i	28	3.14	2.78	88.7	1.6	0.0 - 11.5						

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

<u>Instrument</u>	Specimen MX-1						Specimen MX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	42	13.16	1.71	13.0	13.8	8.0 - 18.3	42	13.19	1.91	14.5	12.7	7.4 - 19.0
All Sysmex XE/XT Instruments	13	13.49	0.72	5.3	13.7	11.3 - 15.7	13	12.91	0.42	3.2	12.9	11.6 - 14.2
All Sysmex XN/XS Instruments	29	13.01	2.00	15.4	13.8	7.0 - 19.1	30	13.06	2.66	20.4	12.6	5.0 - 21.1
Sysmex XS-1000i	28	12.95	2.02	15.6	13.7	6.9 - 19.0	28	13.39	2.30	17.2	12.6	6.4 - 20.3
	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	43	16.59	4.24	25.6	15.4	3.8 - 29.4	42	17.10	3.54	20.7	15.9	6.4 - 27.8
All Sysmex XE/XT Instruments	13	14.99	0.55	3.7	15.1	13.3 - 16.7	13	15.24	0.78	5.1	15.4	12.9 - 17.6
All Sysmex XN/XS Instruments	30	17.29	4.93	28.5	15.6	2.5 - 32.1	30	17.46	4.70	26.9	16.0	3.3 - 31.6
Sysmex XS-1000i	28	17.82	4.39	24.7	15.7	4.6 - 31.1	28	18.04	4.01	22.2	16.0	5.9 - 30.1
	Specimen MX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	42	12.96	1.86	14.4	12.7	7.3 - 18.6						
All Sysmex XE/XT Instruments	13	12.87	0.36	2.8	12.9	11.7 - 14.0						
All Sysmex XN/XS Instruments	30	12.75	2.57	20.2	12.4	5.0 - 20.5						
Sysmex XS-1000i	28	13.01	2.28	17.5	12.4	6.1 - 19.9						

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

<u>Instrument</u>	Specimen MX-1						Specimen MX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	81.87	1.93	2.4	9.1	76.0 - 87.7	13	69.02	1.71	2.5	7.5	63.8 - 74.2
All Sysmex XE/XT Instruments	13	81.87	1.93	2.4	82.2	76.0 - 87.7	13	69.02	1.71	2.5	69.0	63.8 - 74.2
All Sysmex XN/XS Instruments	30	6.09	4.12	67.7	8.2	0.0 - 18.5	30	5.11	3.41	66.7	6.7	0.0 - 15.4
Sysmex XS-1000i	28	6.35	4.10	64.6	8.3	0.0 - 18.7	28	5.30	3.39	64.0	6.7	0.0 - 15.5
	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	13	82.37	0.84	1.0	9.7	79.8 - 84.9	13	82.70	0.82	1.0	9.3	80.2 - 85.2
All Sysmex XE/XT Instruments	13	82.37	0.84	1.0	82.3	79.8 - 84.9	13	82.70	0.82	1.0	82.7	80.2 - 85.2
All Sysmex XN/XS Instruments	30	6.56	4.42	67.3	9.1	0.0 - 19.9	30	6.40	4.30	67.2	8.5	0.0 - 19.4
Sysmex XS-1000i	28	6.86	4.37	63.7	9.2	0.0 - 20.0	28	6.68	4.28	64.1	8.6	0.0 - 19.6
	Specimen MX-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	13	68.39	1.11	1.6	7.3	65.0 - 71.8						
All Sysmex XE/XT Instruments	13	68.39	1.11	1.6	68.9	65.0 - 71.8						
All Sysmex XN/XS Instruments	30	4.98	3.34	67.0	6.5	0.0 - 15.0						
Sysmex XS-1000i	28	5.16	3.32	64.5	6.6	0.0 - 15.2						

2015 M1 BLOOD CELL IDENTIFICATION Specimens BC-1 through BC-6

Case history:

A 51-year-old white male presented to his internist with a persistent respiratory infection. The patient is a jogger and is distressed because he fatigues quickly and has been struggling to keep up with his running partner. Upon physical examination a few enlarged lymph nodes were discovered. A series of laboratory tests, including a CBC, were performed. Significant results appear below.

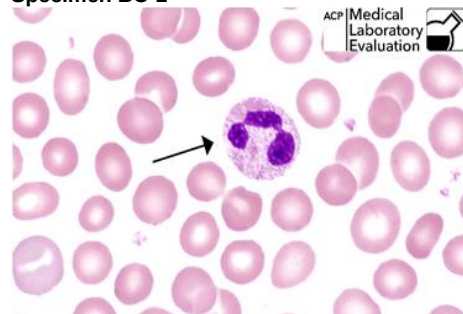
Test	Results	Reference Range
WBC	$46.5 \times 10^9/L$	$5 - 10 \times 10^9/L$
RBC	$4.2 \times 10^{12}/L$	$4.6 - 6.0 \times 10^{12}/L$
Hgb	12.5 g/dL	14.0 - 18.0 g/dL
Hct	38 %	40 - 54 %
Plt	$154 \times 10^9/L$	$150 - 400 \times 10^9/L$
MCV	90 fL	80 - 94 fL
MCH	30 pg	26 - 32 pg
MCHC	33 g/dL	32 - 36 g/dL

This patient was diagnosed with Chronic Lymphocytic Leukemia (CLL).

CLL is a clonal expansion of mature-appearing lymphocytes. The predominant cell is usually a small mature-looking lymphocyte, but may appear abnormal with shredded cytoplasm or a bulging nucleus. CLL is the most common leukemia in adults in Western countries, affecting mostly males over the age of 60. Patients with CLL are often asymptomatic at the time of diagnosis, or have nonspecific symptoms like fatigue, weakness, and weight loss. The disease is often discovered when lymphocytosis is detected upon routine laboratory testing, or during the investigation of other medical problems. As the disease progresses, lymphadenopathy, splenomegaly, anemia, and thrombocytopenia become more common. The prognosis for patients with CLL is highly variable. Some remain stable for decades without treatment and live a normal life span, while others may progress rapidly and die within months of diagnosis. CLL can transform into Richter syndrome, prolymphocytic leukemia, acute lymphocytic leukemia, plasma cell leukemia, multiple myeloma, or Hodgkin disease.

BLOOD CELL IDENTIFICATION

Specimen BC-1

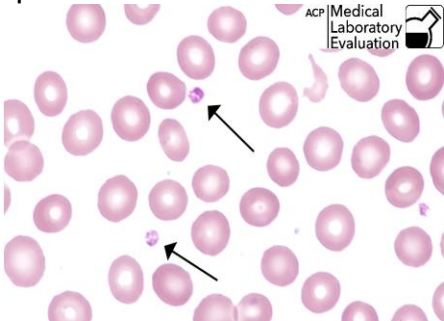


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Neutrophil-Segmented or band	216	91.91%	Acceptable
Neutrophil-seg/band w/toxic granulation	15	6.38%	

The arrow in this photograph points to a **segmented neutrophil**. The cytoplasm of this normal cell is pale pink and filled with fine, violet-pink granules. The nucleus of the cell is divided into two to five segments, or lobes, connected by a thin, thread-like filament. This filament connecting the segments must be visible to classify the cell as segmented. To view another photo of a normal "seg," see 2014 Specimen BC-4. To view a neutrophil with toxic granulation, see 2014 Specimen BC-14.

BLOOD CELL IDENTIFICATION

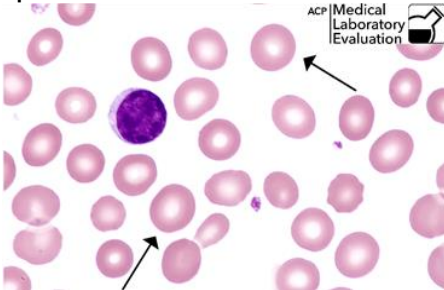
Specimen BC-2



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Platelet, normal	232	98.72%	Acceptable

The arrows in this photograph point to **normal platelets**. Platelets are much smaller than red blood cells. They have a rounded shape with irregular edges. They contain fine, red-violet granules surrounded by bluish cytoplasm. To view another photo of normal platelets, see 2014 Specimen BC-10.

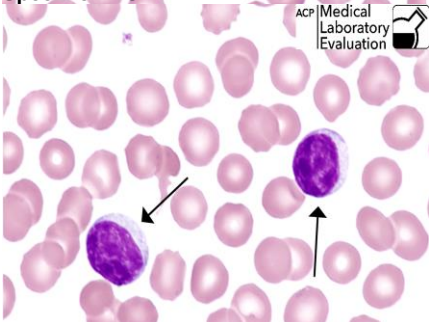
Specimen BC-3



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Erythrocyte, normal	225	95.74%	Acceptable

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. The area of central pallor takes up about one-third of the diameter of the red cell. To view another photo of normal red cells, see 2014 Specimen BC-8.

Specimen BC-4

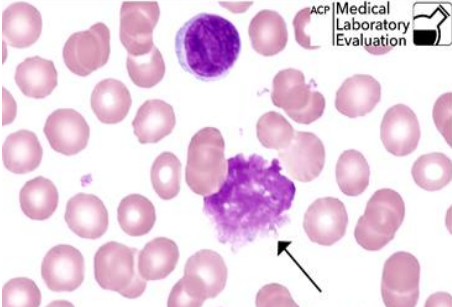


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Lymphocyte	220	93.62%	Acceptable
Lymphocyte, reactive	11	4.68%	

The arrows in this photograph point to **normal lymphocytes**. The nucleus is eccentric (off-center) and round to oval in shape. The nuclear chromatin is condensed. The typical cells in CLL are small lymphocytes with clumped chromatin and scant (small amount) of cytoplasm. To view another photo of a mature, resting lymphocyte, see 2014 Specimen BC-16.

BLOOD CELL IDENTIFICATION

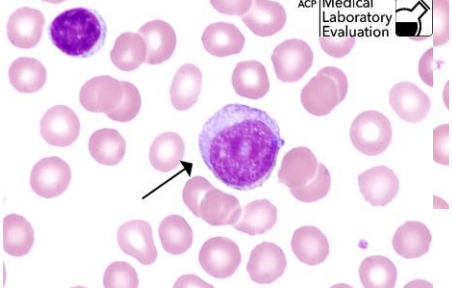
Specimen BC-5



Identification	Labs	Percent	Performance
Basket cell/smudge cell	225	95.74%	Acceptable
Immature/abnormal cell – refer	5	2.13%	

The arrow in this photograph points to a **smudge cell**. Smudge cells, sometimes called “basket cells,” are the remains of ruptured white blood cells. They are often seen in disease states that make the cell walls fragile, such as CLL or infectious mononucleosis. They also occasionally occur as artifacts when too much pressure is applied during slide preparation. To view another smudge/basket cell, see 2010 Specimen BC-11.

Specimen BC-6



Identification	Labs	Percent	Performance
Prolymphocyte	87	37.34%	Not graded – Educational Challenge
Immature/abnormal cell – refer	74	31.76%	
Blast cell	34	14.59%	
Lymphocyte, reactive	20	8.58%	
Myelocyte cell	6	2.58%	
Monocyte	5	2.15%	

The arrow in this ungraded, educational challenge points to a **prolymphocyte**. A prolymphocyte is at a stage of development between a blast and a mature lymph. It is slightly smaller than a blast and has more cytoplasm. It is larger than a lymph, and may have a large, prominent nucleolus. The chromatin structure of the nucleus is more clumped than a blast, but finer than a lymph, with a combination of red-purple (immature) and blue-purple (mature) chromatin. A small proportion of patients with CLL gradually develop a prolymphocytoid transformation. Richter syndrome is a transformation of CLL to a more aggressive large-cell lymphoma. Patients with Richter syndrome have increasing lymphadenopathy, hepatosplenomegaly, fever, abdominal pain, weight loss, progressive anemia, and thrombocytopenia with a rapid rise in the peripheral blood lymph count. They are less responsive to treatment and have a short survival. To view another prolymphocyte, see 2010 M2 Specimen BC-12.

References:

Cheson, B. D. “Chronic Lymphoid Leukemias and Plasma Cell Disorders.” *ACP Medicine*. Ed. D. C. Dale. New York: WebMD, Inc., 2004. 2517-2519.

Reich, P. R.: *Manual of Hematology*. Upjohn, Kalamazoo MI, 1976.

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	7	100%	Acceptable
BB-2	Group O	7	100%	Acceptable
BB-3	Group A	7	100%	Acceptable
BB-4	Group B	7	100%	Acceptable
BB-5	Group A	7	100%	Acceptable

RH FACTOR (D TYPE)

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-1	Rh Positive	12	100%	Acceptable
BB-2	Rh Negative	12	100%	Acceptable
BB-3	Rh Negative	12	100%	Acceptable
BB-4	Rh Positive	12	100%	Acceptable
BB-5	Rh Positive	12	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	7	100%	Acceptable
AB-2	Unexpected antibody detected	7	100%	Acceptable
AB-3	No unexpected antibody detected	7	100%	Acceptable
AB-4	No unexpected antibody detected	7	100%	Acceptable
AB-5	Unexpected antibody detected	7	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-D	1	100%	Acceptable
AB-3	No antibody detected	1	100%	Acceptable
AB-4	No antibody detected	1	100%	Acceptable
AB-5	Anti-K	1	100%	Acceptable

COMPATIBILITY TESTING

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

PROTHROMBIN TIME (seconds)

<u>Reagent/Instrument</u>	Specimen CG-1						Specimen CG-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	56	11.02	0.77	7.0	11.0	9.3 - 12.7	56	10.85	0.86	7.9	11.0	9.2 - 12.5
Dade Innovin												
Dade Behring BFT II	5	9.58	0.26	2.7	9.5	8.1 - 11.1	5	9.28	0.43	4.7	9.2	7.8 - 10.7
Sysmex CA-500/600 series	26	10.81	0.45	4.1	10.8	9.1 - 12.5	26	10.62	0.47	4.4	10.6	9.0 - 12.3
All Coagulation Instruments	33	10.59	0.62	5.8	10.7	9.0 - 12.2	33	10.37	0.69	6.7	10.4	8.8 - 12.0
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	11.44	0.13	1.2	11.5	9.7 - 13.2	5	11.56	0.23	2.0	11.6	9.8 - 13.3
IL TEST PT Fibrinogen												
IL ACL, all models	9	11.59	0.23	2.0	11.6	9.8 - 13.4	9	11.40	0.35	3.1	11.4	9.6 - 13.2
<u>Reagent/Instrument</u>	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	56	25.11	3.52	14.0	25.7	21.3 - 28.9	55	41.69	8.77	21.0	42.9	35.4 - 48.0
Dade Innovin												
Dade Behring BFT II	5	26.68	2.45	9.2	26.4	22.6 - 30.7	5	47.64	3.88	8.1	48.5	40.4 - 54.8
Sysmex CA-500/600 series	25	25.86	1.44	5.6	25.7	21.9 - 29.8	24	43.66	3.19	7.3	43.2	37.1 - 50.3
All Coagulation Instruments	32	25.98	1.58	6.1	25.9	22.0 - 29.9	31	44.34	3.46	7.8	43.7	37.6 - 51.0
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	27.52	3.28	11.9	29.2	23.3 - 31.7	5	47.32	7.78	16.4	50.7	40.2 - 54.5
IL TEST PT Fibrinogen												
IL ACL, all models	9	20.13	0.58	2.9	19.8	17.1 - 23.2	9	30.17	1.23	4.1	30.2	25.6 - 34.7
<u>Reagent/Instrument</u>	Specimen CG-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</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	10.71	0.88	8.3	10.7	9.0 - 12.4						
Dade Innovin												
Dade Behring BFT II	5	9.08	0.34	3.8	9.1	7.7 - 10.5						
Sysmex CA-500/600 series	26	10.50	0.42	4.0	10.4	8.9 - 12.1						
All Coagulation Instruments	33	10.24	0.68	6.7	10.4	8.7 - 11.8						
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	11.54	0.59	5.1	11.7	9.8 - 13.3						
IL TEST PT Fibrinogen												
IL ACL, all models	9	10.96	0.28	2.6	10.9	9.3 - 12.6						

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	57	1.04	0.06	5.7	1.0	0.8 - 1.3	58	1.01	0.07	6.5	1.0	0.8 - 1.3
Dade Innovin												
Dade Behring BFT II	5	1.06	0.05	5.2	1.1	0.8 - 1.3	5	1.06	0.05	5.2	1.1	0.8 - 1.3
Sysmex CA-500/600 series	26	1.04	0.06	5.5	1.0	0.8 - 1.3	26	1.02	0.06	5.6	1.0	0.8 - 1.3
All Coagulation Instruments	33	1.05	0.06	5.4	1.1	0.8 - 1.3	33	1.03	0.06	5.6	1.0	0.8 - 1.3
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	1.02	0.13	12.8	1.1	0.8 - 1.3	5	1.04	0.09	8.6	1.1	0.8 - 1.3
IL TEST PT Fibrinogen												
IL ACL, all models	9	1.03	0.05	4.8	1.0	0.8 - 1.3	9	0.99	0.08	7.9	1.0	0.7 - 1.2
PH/CMS Thromboplastin-D												
All Coagulation Instruments	5	1.04	0.09	8.6	1.0	0.8 - 1.3	5	1.02	0.04	4.4	1.0	0.8 - 1.3
Specimen CG-3							Specimen CG-4					
All Method	58	2.67	0.40	14.9	2.6	2.1 - 3.3	57	4.88	1.36	27.9	4.5	3.9 - 5.9
Dade Innovin												
Dade Behring BFT II	5	2.52	0.22	8.6	2.6	2.0 - 3.1	5	4.14	0.41	9.9	4.3	3.3 - 5.0
Sysmex CA-500/600 series	26	2.45	0.17	7.0	2.4	1.9 - 3.0	25	4.08	0.35	8.6	4.0	3.2 - 4.9
All Coagulation Instruments	33	2.46	0.17	7.0	2.5	1.9 - 3.0	32	4.09	0.36	8.7	4.1	3.2 - 5.0
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	2.76	0.15	5.5	2.8	2.2 - 3.4	5	5.06	0.55	10.8	4.9	4.0 - 6.1
IL TEST PT Fibrinogen												
IL ACL, all models	9	2.80	0.37	13.2	2.9	2.2 - 3.4	9	6.11	0.43	7.0	6.1	4.8 - 7.4
PH/CMS Thromboplastin-D												
All Coagulation Instruments	5	3.52	0.24	6.8	3.5	2.8 - 4.3	5	8.26	0.81	9.9	8.2	6.6 - 10.0
Specimen CG-5												
All Method	57	1.00	0.07	7.2	1.0	0.8 - 1.3						
Dade Innovin												
Dade Behring BFT II	5	1.02	0.08	8.2	1.0	0.8 - 1.3						
Sysmex CA-500/600 series	26	1.02	0.05	5.4	1.0	0.8 - 1.3						
All Coagulation Instruments	33	1.02	0.06	5.7	1.0	0.8 - 1.3						
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	1.02	0.19	18.9	1.1	0.8 - 1.3						
IL TEST PT Fibrinogen												
IL ACL, all models	9	0.91	0.03	3.7	0.9	0.7 - 1.1						
PH/CMS Thromboplastin-D												
All Coagulation Instruments	5	1.02	0.04	4.4	1.0	0.8 - 1.3						

ACTIVATED PARTIAL THROMBOPLASTIN (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	23	26.2	0.7	2.7	26	22 - 31	23	27.9	1.1	3.9	28	23 - 33
Dade Actin FSL												
Sysmex CA-500/600 series	13	26.2	0.7	2.6	26	22 - 31	13	27.4	0.7	2.4	27	23 - 32
IL TEST APTT-SP												
IL ACL, all models	7	26.0	0.8	3.1	26	22 - 30	7	28.1	1.3	4.8	28	23 - 33
Specimen CG-3							Specimen CG-4					
All Method	23	49.2	5.9	12.0	47	41 - 57	23	71.4	10.9	15.2	69	60 - 83
Dade Actin FSL												
Sysmex CA-500/600 series	13	46.5	2.1	4.5	47	39 - 54	13	66.7	7.9	11.8	68	56 - 77
IL TEST APTT-SP												
IL ACL, all models	7	49.1	5.3	10.9	47	41 - 57	7	71.9	8.1	11.3	69	61 - 83
Specimen CG-5												
All Method	23	27.7	1.6	5.6	27	23 - 32						
Dade Actin FSL												
Sysmex CA-500/600 series	13	26.9	1.1	4.1	27	22 - 31						
IL TEST APTT-SP												
IL ACL, all models	7	28.3	1.6	5.7	29	24 - 33						

Fibrinogen (mg/dL)

One participant reported Fibrinogen. The vendor assay values for specimens CG-1 through CG-5 are: 320 mg/dL, 592 mg/dL, 269 mg/dL, 262 mg/dL and 595 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	3	100%	Acceptable
RH-2	Rh Negative	3	100%	Acceptable
RH-3	Rh Negative	3	100%	Acceptable
RH-4	Rh Positive	3	100%	Acceptable
RH-5	Rh Positive	3	100%	Acceptable

COAGUCHEK XS PLUS PROTHROMBIN TIME (seconds)

Specimen XS-1							Specimen XS-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	29	34.58	1.68	4.9	35.0	29.3 - 39.8	29	50.91	3.56	7.0	51.5	43.2 - 58.6
All Roche CoaguChek XS Plus Instruments	27	34.93	1.16	3.3	35.1	29.6 - 40.2	27	51.65	2.46	4.8	51.6	43.9 - 59.4
Roche CoaguChek XS Plus - Waived	15	35.15	1.17	3.3	35.1	29.8 - 40.5	15	51.88	3.52	6.8	51.7	44.1 - 59.7
Roche CoaguChek XS Plus	12	34.70	1.22	3.5	34.9	29.4 - 40.0	12	51.42	0.87	1.7	51.5	43.7 - 59.2
Specimen XS-3							Specimen XS-4					
All Method	25	16.88	0.87	5.1	16.9	14.3 - 19.5	25	34.32	1.00	2.9	34.6	29.1 - 39.5
All Roche CoaguChek XS Plus Instruments	23	16.88	0.87	5.1	16.9	14.3 - 19.5	23	34.32	1.00	2.9	34.6	29.1 - 39.5
Roche CoaguChek XS Plus - Waived	13	17.26	0.75	4.3	17.0	14.6 - 19.9	13	34.24	1.24	3.6	34.5	29.1 - 39.4
Roche CoaguChek XS Plus	10	16.50	0.88	5.4	16.6	14.0 - 19.0	10	34.40	0.83	2.4	34.7	29.2 - 39.6
Specimen XS-5												
All Method	25	43.31	2.07	4.8	42.7	36.8 - 49.9						
All Roche CoaguChek XS Plus Instruments	23	43.31	2.07	4.8	42.7	36.8 - 49.9						
Roche CoaguChek XS Plus - Waived	13	42.56	1.31	3.1	42.4	36.1 - 49.0						
Roche CoaguChek XS Plus	10	44.06	2.56	5.8	44.0	37.4 - 50.7						

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

Specimen XS-1							Specimen XS-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	29	2.89	0.11	3.7	2.9	2.3 - 3.5	29	4.28	0.25	5.9	4.3	3.4 - 5.2
All Roche CoaguChek XS Plus Instruments	27	2.91	0.08	2.9	2.9	2.3 - 3.5	27	4.32	0.19	4.4	4.3	3.4 - 5.2
Roche CoaguChek XS Plus - Waived	15	2.91	0.08	2.9	2.9	2.3 - 3.5	15	4.35	0.25	5.7	4.3	3.4 - 5.3
Roche CoaguChek XS Plus	12	2.91	0.09	3.1	2.9	2.3 - 3.5	12	4.29	0.07	1.6	4.3	3.4 - 5.2
Specimen XS-3							Specimen XS-4					
All Method	25	1.40	0.07	5.1	1.4	1.1 - 1.7	25	2.88	0.08	2.8	2.9	2.3 - 3.5
All Roche CoaguChek XS Plus Instruments	23	1.40	0.07	5.1	1.4	1.1 - 1.7	23	2.88	0.08	2.8	2.9	2.3 - 3.5
Roche CoaguChek XS Plus - Waived	13	1.43	0.05	3.4	1.4	1.1 - 1.8	13	2.89	0.11	3.7	2.9	2.3 - 3.5
Roche CoaguChek XS Plus	10	1.37	0.08	6.0	1.4	1.0 - 1.7	10	2.88	0.04	1.4	2.9	2.3 - 3.5
Specimen XS-5												
All Method	25	3.67	0.20	5.4	3.7	2.9 - 4.5						
All Roche CoaguChek XS Plus Instruments	23	3.67	0.20	5.4	3.7	2.9 - 4.5						
Roche CoaguChek XS Plus - Waived	13	3.63	0.18	5.0	3.6	2.9 - 4.4						
Roche CoaguChek XS Plus	10	3.72	0.22	6.0	3.8	2.9 - 4.5						

COAGUCHECK XS - INTERNATIONAL NORMALIZED RATIO (INR)

Specimen INX-1							Specimen INX-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>
Roche CoaguChek XS	125	3.64	0.19	5.1	3.7	2.9 - 4.4	127	1.34	0.06	4.4	1.3	1.0 - 1.7

i-Stat PROTHROMBIN TIME (seconds)

Specimen PTI-1							Specimen PTI-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>
i-Stat Prothrombin Time	10	37.94	7.19	19.0	33.6	32.2 - 43.7	10	36.10	1.34	3.7	35.5	30.6 - 41.6
Specimen PTI-3							Specimen PTI-4					
i-Stat Prothrombin Time	10	15.40	0.36	2.3	15.3	13.0 - 17.8	10	15.48	0.54	3.5	15.4	13.1 - 17.9
Specimen PTI-5												
i-Stat Prothrombin Time	10	36.62	2.22	6.1	36.4	31.1 - 42.2						

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

Specimen PTI-1							Specimen PTI-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>
i-Stat Prothrombin Time	10	3.36	0.68	20.4	3.0	2.6 - 4.1	10	3.18	0.11	3.4	3.1	2.5 - 3.9
Specimen PTI-3							Specimen PTI-4					
i-Stat Prothrombin Time	10	1.30	0.00	0.0	1.3	1.0 - 1.6	10	1.32	0.04	3.4	1.3	1.0 - 1.6
Specimen PTI-5												
i-Stat Prothrombin Time	10	3.20	0.21	6.6	3.2	2.5 - 3.9						

FLUID CELL COUNT – WHITE BLOOD CELL COUNT (µL)

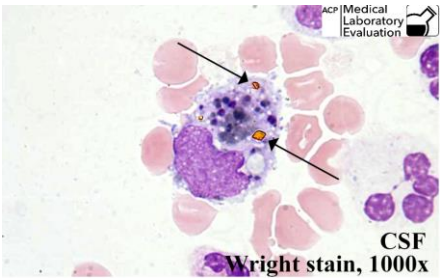
Specimen BF-1							Specimen BF-2					
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	5	4.7	1.5	32.7	5	1 - 8	5	377.3	70.2	18.6	372	237 - 518

FLUID CELL COUNT – RED BLOOD CELL COUNT (µL)

Specimen BF-1							Specimen BF-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	5	0.3	0.6	173.2	0	0 - 2	5	1156.0	87.1	7.5	1152	981 - 1331

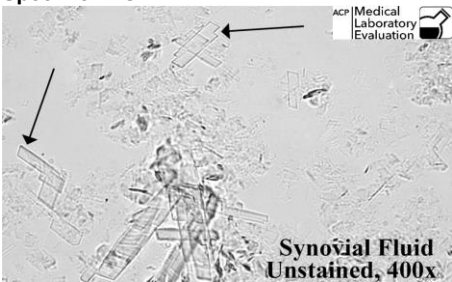
2015 M1
FLUID CRYSTALS
SPECIMENS FC-1 AND FC-2

Specimen FC-1



The arrows in this photograph point to **hematoidin crystals**. Also called *hematin* crystals, these golden intracellular crystals are composed of bilirubin. They are breakdown products from hemoglobin in red blood cells that have been digested by macrophages. Macrophages, like the one shown, are large, actively phagocytic monocytes. They engulf and remove from circulation dead cells, bacteria, fungi and viruses. Hematoidin crystals may remain present for several weeks after a central nervous system hemorrhage, and are often found in conjunction with hemosiderin, the dark blue-gray material seen in the arrowed cell. There are rarely more than two hematoidin crystals seen per cell. Specimen FC-1 is an ungraded challenge due to less than 80% participant consensus.

Specimen FC-2



The arrows in this photograph point to **cholesterol crystals**. They appear as large, flat rectangular plates with notched corners. Cholesterol crystals may be present in chronic effusions from patients with osteoarthritis or rheumatoid arthritis. They are associated with chronic inflammatory conditions, and are considered a nonspecific finding.

References:

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

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

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

MICROALBUMIN, DIPSTICK

Specimen UM-1

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>									
		<u>Negative</u>	<u>10 mg/L</u>	<u>20 mg/L</u>	<u>30 mg/L</u>	<u>50 mg/L</u>	<u>80 mg/L</u>	<u>100 mg/L</u>	<u>150 mg/L</u>	<u>+ (4 - 8 mg/dL)</u>	<u>++ (>8 mg/dL)</u>
ALL METHODS	46	-	-	-	-	3	8	3	32	-	-
Roche Micral - 1 minute	6	-	-	-	-	3	-	3	-	-	-
Siemens Clinitek Microalbumin	40	-	-	-	-	-	8	-	32	-	-

CREATININE, DIPSTICK

Specimen UM-3

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<i>Participant Results</i>					
			<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	41	-	-	1	-	-	18	22
Siemens Clinitek Microalbumin	39	-	-	1	-	-	18	20
Siemens Multistix Pro	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	77	168.3	13.9	8.2	169	117 - 219
Beckman AU	11	158.7	6.2	3.9	157	111 - 207
Siemens DCA Vantage	12	168.5	9.2	5.5	171	117 - 220
Siemens Dimension/AR/ES/RxL/Xpand	25	164.8	14.5	8.8	169	115 - 215

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	75	172.4	7.5	4.4	171	143 - 202
Beckman AU	11	174.9	6.9	3.9	177	145 - 205
Siemens DCA Vantage	11	181.3	5.1	2.8	181	150 - 213
Siemens Dimension/AR/ES/RxL/Xpand	22	168.4	5.5	3.3	169	139 - 197

WAIVED HEMATOLOGY–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	86	17.68	0.78	4.4	17.6	16.4 - 19.0	83	13.34	0.50	3.7	13.4	12.4 - 14.3
All Stanbio Methods	30	18.14	0.89	4.9	18.3	16.8 - 19.5	28	13.63	0.68	5.0	13.8	12.6 - 14.6
HemoCue	53	17.45	0.45	2.6	17.4	16.2 - 18.7	56	13.23	0.39	2.9	13.3	12.3 - 14.2
Stanbio HemoPoint H2	28	18.11	0.86	4.7	18.3	16.8 - 19.4	24	13.74	0.35	2.6	13.8	12.7 - 14.7

WAIVED HEMATOLOGY–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	15	46.97	5.55	11.8	47.0	35.8 - 58.1	16	36.45	4.55	12.5	37.0	27.3 - 45.6
All Microhematocrit Methods	8	44.56	3.02	6.8	44.8	38.5 - 50.6	8	34.75	1.67	4.8	34.5	31.4 - 38.1
Microhematocrit	5	43.90	3.51	8.0	44.5	36.8 - 51.0	5	35.00	2.00	5.7	34.0	31.0 - 39.0

KOH SKIN PREPARATION

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
K-1	Yeast/fungal elements present	157	99.37%	Acceptable
	Yeast/fungal elements absent	1	0.63%	
Organism present in specimen K-1: <i>Trichophyton rubrum</i> .				
K-2	Yeast/fungal elements absent	146	92.41%	Acceptable
	Yeast/fungal elements present	12	7.59%	
Organism present in specimen K-2: <i>Staphylococcus epidermidis</i> .				

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	856	1.0201	0.0052	0.5	1.020	1.010 - 1.031
All Roche Methods	41	1.0111	0.0028	0.3	1.010	1.001 - 1.022
All Siemens Methods	424	1.0237	0.0025	0.2	1.025	1.013 - 1.034
Consult Diagnostics Urine Analyzer	15	1.0143	0.0025	0.2	1.015	1.004 - 1.025
CTMI CT-120 Urine Analyzer	11	1.0173	0.0025	0.3	1.015	1.007 - 1.028
Diagnostic Test Group Clarity Urocheck 120	10	1.0175	0.0035	0.3	1.015	1.007 - 1.028
Henry Schein Urispec	10	1.0155	0.0055	0.5	1.015	1.005 - 1.026
Other Dipstick Method	16	1.0178	0.0052	0.5	1.020	1.007 - 1.028
Roche Chemstrips	46	1.0110	0.0020	0.2	1.010	1.000 - 1.021
Roche Urisys	25	1.0106	0.0021	0.2	1.010	1.000 - 1.021
Siemens Clinitek 10 / 100	13	1.0235	0.0031	0.3	1.025	1.013 - 1.034
Siemens Clinitek 50	41	1.0216	0.0029	0.3	1.020	1.011 - 1.032
Siemens Clinitek 500	11	1.0214	0.0023	0.2	1.020	1.011 - 1.032
Siemens Clinitek Advantus	23	1.0222	0.0026	0.3	1.020	1.012 - 1.033
Siemens Clinitek Status / Status+	332	1.0240	0.0021	0.2	1.025	1.014 - 1.035
Siemens Reagent Strips	229	1.0183	0.0036	0.3	1.020	1.008 - 1.029

URINALYSIS DIPSTICK–pH

Specimen UA-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>≤3.5</u>	<u>4.0</u>	<u>4.5</u>	<u>5.0</u>	<u>5.5</u>	<u>6.0</u>	<u>6.5</u>	<u>7.0</u>	<u>7.5</u>	<u>8.0</u>	<u>8.5</u>	<u>≥9.0</u>
ALL METHODS	878	-	-	-	1	-	1	12	532	299	30	2	1
Arkray DiaScreen	1	-	-	-	-	-	-	-	1	-	-	-	-
Beckman AU	1	-	-	-	-	-	-	-	-	1	-	-	-
Consult Diagnostics Urine Analyzer	17	-	-	-	-	-	-	7	9	-	1	-	-
CTMI CT-120 Urine Analyzer	11	-	-	-	-	-	-	-	6	5	-	-	-
Diagnostic Test Group Clarity Urocheck	10	-	-	-	-	-	-	1	3	6	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	-	-	-	-	2	8	-	-	-
Germaine Laboratories AimStrip	3	-	-	-	-	-	-	-	3	-	-	-	-
Henry Schein One Step Plus	2	-	-	-	-	-	-	-	2	-	-	-	-
Henry Schein Urispec	10	-	-	-	-	-	1	1	8	-	-	-	-
Iris Diagnostics iChem Velocity Strips	1	-	-	-	-	-	-	-	1	-	-	-	-
McKesson 10SG Reagent Strips	9	-	-	-	-	-	-	-	6	3	-	-	-
McKesson 120 Urine Analyzer	1	-	-	-	-	-	-	-	-	1	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-
Other Analyzer Method	5	-	-	-	-	-	-	-	2	3	-	-	-
Other Dipstick Method	17	-	-	-	-	-	-	1	11	3	1	1	-
pH Paper	1	-	-	-	-	-	-	-	-	1	-	-	-
PSS Select Reagent Strips	6	-	-	-	-	-	-	-	4	1	1	-	-
PSS Select Urine Analyzer	1	-	-	-	-	-	-	1	-	-	-	-	-
Roche Chemstrip 101	5	-	-	-	-	-	-	-	5	-	-	-	-
Roche Chemstrips	53	-	-	-	-	-	-	-	42	1	10	-	-
Roche Criterion Analyzer	8	-	-	-	-	-	-	-	3	-	5	-	-
Roche SuperUA/ChemstripUA	3	-	-	-	-	-	-	-	1	1	1	-	-
Roche Urisys	28	-	-	-	-	-	-	-	24	-	4	-	-
Siemens Clinitek 10 / 100	13	-	-	-	-	-	-	-	4	9	-	-	-
Siemens Clinitek 200/200+	1	-	-	-	-	-	-	-	1	-	-	-	-
Siemens Clinitek 50	42	-	-	-	-	-	-	-	8	34	-	-	-
Siemens Clinitek 500	11	-	-	-	-	-	-	-	2	9	-	-	-
Siemens Clinitek Advantus	24	-	-	-	-	-	-	-	-	24	-	-	-
Siemens Clinitek Atlas	5	-	-	-	-	-	-	-	5	-	-	-	-
Siemens Clinitek Status / Status+	336	-	-	-	-	-	-	-	335	1	-	-	-
Siemens Hemacombistix	1	-	-	-	-	-	-	-	-	1	-	-	-
Siemens Multistix Pro	1	-	-	-	-	-	-	-	-	1	-	-	-
Siemens Reagent Strips	233	-	-	-	1	-	-	1	37	185	7	1	1
UriScan Reagent Strips	2	-	-	-	-	-	-	-	1	1	-	-	-

URINALYSIS DIPSTICK--PROTEIN QUALITATIVE

Specimen UA-1

<u>Method</u>	<i>Participant Results</i>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>10 - 20</u> <u>mg/dL</u>	<u>30 - 70</u> <u>mg/dL</u>	<u>75</u> <u>mg/dL</u>	<u>100 - 200</u> <u>mg/dL</u>	<u>300 - 600</u> <u>mg/dL</u>	<u>>600 or</u> <u>≥1000</u> <u>mg/dL</u>
ALL METHODS	915	1	2	5	49	266	60	-	4	-	54	434	40
Arkray DiaScreen	2	-	-	-	-	1	-	-	-	-	-	-	1
Consult Diagnostics Urine Analyzer	16	-	-	-	-	7	1	-	-	-	-	8	-
CTMI CT-120 Urine Analyzer	11	-	-	-	4	3	-	-	-	-	-	4	-
Diagnostic Test Group Clarity Urocheck	9	-	-	-	3	-	1	-	-	-	2	3	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	1	7	-	-	-	-	1	1	-
Germaine Laboratories AimStrip	3	-	-	-	2	1	-	-	-	-	-	-	-
Henry Schein One Step Plus	2	-	-	-	-	-	-	-	-	-	-	2	-
Henry Schein Urispec	10	-	-	-	-	2	1	-	-	-	-	7	-
Iris Diagnostics iChem Velocity Strips	1	-	-	-	-	-	-	-	-	-	1	-	-
McKesson 10SG Reagent Strips	9	-	-	-	1	1	1	-	1	-	1	3	1
McKesson 120 Urine Analyzer	1	-	-	-	-	1	-	-	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	1	-	-	-	-	-	-	-
Other Analyzer Method	5	-	-	-	-	3	-	-	-	-	1	1	-
Other Dipstick Method	18	-	1	-	3	7	1	-	-	-	1	3	2
PSS Select Reagent Strips	6	-	-	-	1	2	1	-	-	-	-	-	2
PSS Select Urine Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	1
Roche Chemstrip 101	5	-	-	-	-	3	-	-	-	-	-	2	-
Roche Chemstrips	67	-	-	1	9	28	-	-	-	-	9	18	2
Roche Criterion Analyzer	8	-	-	-	2	1	-	-	-	-	1	4	-
Roche SuperUA/ChemstripUA	3	-	-	-	-	2	-	-	-	-	1	-	-
Roche Urisys	28	-	-	-	-	11	-	-	-	-	-	17	-
Siemens Albustix	1	-	-	-	1	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	13	-	-	1	1	3	-	-	-	-	-	8	-
Siemens Clinitek 200/200+	1	-	-	-	-	1	-	-	-	-	-	-	-
Siemens Clinitek 50	42	-	1	-	-	10	-	-	1	-	-	30	-
Siemens Clinitek 500	11	-	-	-	-	6	-	-	-	-	-	5	-
Siemens Clinitek Advantus	23	-	-	-	-	15	-	-	-	-	-	8	-
Siemens Clinitek Atlas	5	-	-	-	-	1	-	-	-	-	-	3	1
Siemens Clinitek Status / Status+	336	-	-	-	-	99	-	-	-	-	1	235	1
Siemens Hemacombistix	1	-	-	-	-	1	-	-	-	-	-	-	-
Siemens Multistix Pro	1	-	-	-	-	-	-	-	-	-	-	-	1
Siemens Reagent Strips	235	1	-	2	21	40	51	-	2	-	31	61	26
Siemens Uristix	21	-	-	1	-	5	2	-	-	-	3	8	2
Sulfosalicylic Acid	2	-	-	-	-	1	1	-	-	-	-	-	-
UriScan Reagent Strips	2	-	-	-	-	1	-	-	-	-	-	1	-

URINALYSIS DIPSTICK–GLUCOSE

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>(1+)</u>	<u>Participant Results</u>				<u>30 - 100</u> <u>mg/dL</u>	<u>150 -</u> <u>300</u> <u>mg/dL</u>	<u>500</u> <u>mg/dL</u>	<u>>500 or</u> <u>≥1000 or</u> <u>≥2000</u> <u>mg/dL</u>
					<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>					
ALL METHODS	902	6	4	119	96	42	6	6	200	275	148	
Arkray DiaScreen	2	-	-	-	-	-	-	1	-	1	-	
Consult Diagnostics Urine Analyzer	17	-	-	5	2	1	-	1	-	7	1	
CTMI CT-120 Urine Analyzer	11	-	-	9	-	-	-	-	2	-	-	
Diagnostic Test Group Clarity Urocheck	10	-	-	6	1	1	-	-	2	-	-	
Diagnostic Test Group Clarity Urocheck 120	10	-	-	8	1	-	-	-	1	-	-	
Germaine Laboratories AimStrip	3	-	-	3	-	-	-	-	-	-	-	
Henry Schein One Step Plus	2	-	-	-	-	-	-	-	-	-	2	
Henry Schein Urispec	10	-	-	1	-	-	-	-	2	1	6	
Iris Diagnostics iChem Velocity Strips	1	-	-	-	-	-	-	-	-	-	1	
McKesson 10SG Reagent Strips	9	-	-	1	2	-	-	1	3	1	1	
McKesson 120 Urine Analyzer	1	-	-	-	1	-	-	-	-	-	-	
NDC Pro Advantage	1	-	-	-	1	-	-	-	-	-	-	
Other Analyzer Method	5	-	-	2	2	-	-	-	-	-	1	
Other Dipstick Method	19	1	-	3	3	2	1	1	2	4	2	
PSS Select Reagent Strips	6	-	-	2	1	-	-	-	-	2	1	
PSS Select Urine Analyzer	1	-	-	-	-	1	-	-	-	-	-	
Roche Chemstrip 101	5	-	-	-	-	2	-	-	-	-	3	
Roche Chemstrips	67	-	-	-	1	3	4	-	1	3	55	
Roche Criterion Analyzer	8	-	-	-	-	3	-	-	-	-	5	
Roche SuperUA/ChemstripUA	3	-	-	-	-	-	-	-	-	-	3	
Roche Urisys	28	-	-	-	-	11	-	1	-	-	16	
Siemens Clinitek 10 / 100	13	-	1	-	3	-	-	-	-	8	1	
Siemens Clinitek 200/200+	1	-	-	-	1	-	-	-	-	-	-	
Siemens Clinitek 50	42	-	-	3	5	4	-	1	4	16	9	
Siemens Clinitek 500	11	-	-	-	6	-	-	-	-	4	1	
Siemens Clinitek Advantus	23	-	-	2	11	2	-	-	-	8	-	
Siemens Clinitek Atlas	5	-	-	-	1	-	-	-	-	4	-	
Siemens Clinitek Status / Status+	332	-	-	57	31	2	-	-	131	108	3	
Siemens Clinitest, 5 drop	1	-	1	-	-	-	-	-	-	-	-	
Siemens Hemacombistix	1	-	-	-	-	-	-	-	-	1	-	
Siemens Multistix Pro	1	-	-	-	-	-	-	-	-	1	-	
Siemens Reagent Strips	242	5	2	17	21	9	1	-	50	101	36	
Siemens Uristix	4	-	-	-	1	-	-	-	-	3	-	
UriScan Reagent Strips	2	-	-	-	-	-	-	-	-	2	-	

URINALYSIS DIPSTICK–KETONES

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<u>Participant Results</u>													
		<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>5 - 10</u> <u>mg/dL</u>	<u>15 - 20</u> <u>mg/dL</u>	<u>40 - 60</u> <u>mg/dL</u>	<u>80 - 100</u> <u>mg/dL</u>	<u>≥150</u> <u>mg/dL</u>
ALL METHODS	877	4	1	2	19	99	13	114	136	17	1	3	160	285	23
Arkray DiaScreen	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	17	1	-	-	-	1	-	8	1	-	-	-	5	1	-
CTMI CT-120 Urine Analyzer	11	-	-	-	-	-	6	2	-	-	-	1	2	-	-
Diagnostic Test Group Clarity Urocheck	10	-	-	-	-	-	-	5	1	-	-	-	3	1	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	-	-	3	4	1	-	-	-	2	-	-
Germaine Laboratories AimStrip	3	-	-	-	-	-	1	2	-	-	-	-	-	-	-
Henry Schein One Step Plus	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-
Henry Schein Urispec	10	-	-	-	-	1	-	-	2	1	-	-	-	5	1
Iris Diagnostics iChem Velocity Strips	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-
McKesson 10SG Reagent Strips	9	-	-	-	-	2	-	-	2	-	1	1	2	1	-
McKesson 120 Urine Analyzer	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Other Analyzer Method	5	-	-	-	-	-	-	2	1	-	-	-	1	-	1
Other Dipstick Method	16	-	-	1	-	1	-	3	3	1	-	-	-	7	-
PSS Select Reagent Strips	5	-	-	-	-	-	-	-	3	-	-	-	1	1	-
PSS Select Urine Analyzer	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Roche Chemstrip 101	5	-	-	-	-	1	-	-	3	-	-	-	1	-	-
Roche Chemstrips	53	-	-	-	1	14	-	2	32	2	-	-	-	-	2
Roche Criterion Analyzer	8	-	-	-	1	-	-	-	5	1	-	-	-	-	1
Roche SuperUA/ChemstripUA	3	-	-	-	-	2	-	-	1	-	-	-	-	-	-
Roche Urisys	28	1	-	-	-	1	-	7	5	1	-	-	8	-	5
Siemens Acetest	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Siemens Clinitek 10 / 100	13	-	-	-	-	1	1	2	1	-	-	-	5	3	-
Siemens Clinitek 200/200+	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Siemens Clinitek 50	42	1	-	-	1	-	-	9	2	-	-	-	20	9	-
Siemens Clinitek 500	11	-	-	-	-	-	-	6	-	-	-	-	5	-	-
Siemens Clinitek Advantus	23	-	-	-	-	-	-	14	1	-	-	-	8	-	-
Siemens Clinitek Atlas	5	-	-	-	-	-	-	-	1	-	-	-	-	4	-
Siemens Clinitek Status / Status+	337	-	-	-	4	2	1	34	51	6	-	1	74	161	3
Siemens Ketostix	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Siemens Reagent Strips	234	1	1	1	11	71	1	12	13	5	-	-	19	89	10
UriScan Reagent Strips	2	-	-	-	-	-	-	-	1	-	-	-	1	-	-

URINALYSIS DIPSTICK–BILIRUBIN

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Participant Results</u>					<u>0.5 - 1.0 mg/dL</u>	<u>2.0 - 4.0 mg/dL</u>	<u>6.0 - 10.0 mg/dL</u>	<u>>10.0 mg/dL</u>
						<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>				
ALL METHODS	854	8	1	1	9	468	2	10	316	32	-	2	5	-
Arkray DiaScreen	1	-	-	-	-	-	-	-	1	-	-	-	-	-
Consult Diagnostics Urine Analyzer	17	1	-	-	-	1	-	-	15	-	-	-	-	-
CTMI CT-120 Urine Analyzer	11	-	-	-	-	-	-	-	11	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	9	-	-	-	-	1	-	-	5	3	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	-	-	-	-	10	-	-	-	-	-
Germaine Laboratories AimStrip	3	-	-	-	-	1	-	-	2	-	-	-	-	-
Henry Schein One Step Plus	2	-	-	-	-	-	-	-	-	2	-	-	-	-
Henry Schein Urispec	10	1	-	-	-	2	-	-	2	4	-	1	-	-
Iris Diagnostics iChem Velocity Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	9	-	-	-	-	3	-	-	4	2	-	-	-	-
McKesson 120 Urine Analyzer	1	-	-	-	-	-	-	-	1	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-	-
Other Analyzer Method	5	-	-	-	-	-	-	-	4	-	-	1	-	-
Other Dipstick Method	16	-	-	-	-	5	1	1	6	3	-	-	-	-
PSS Select Reagent Strips	5	-	-	-	-	1	-	-	4	-	-	-	-	-
PSS Select Urine Analyzer	1	-	-	-	-	-	-	-	1	-	-	-	-	-
Roche Chemstrip 101	5	-	-	-	-	1	-	-	3	1	-	-	-	-
Roche Chemstrips	51	-	-	-	-	4	-	-	45	2	-	-	-	-
Roche Criterion Analyzer	8	-	-	-	-	1	-	-	5	1	-	-	1	-
Roche SuperUA/ChemstripUA	2	-	-	-	1	-	-	-	-	1	-	-	-	-
Roche Urisys	26	-	-	-	-	3	1	-	14	5	-	-	3	-
Siemens Clinitek 10 / 100	13	-	-	-	-	9	-	-	4	-	-	-	-	-
Siemens Clinitek 200/200+	1	-	-	-	-	-	-	-	1	-	-	-	-	-
Siemens Clinitek 50	40	1	-	-	-	27	-	-	12	-	-	-	-	-
Siemens Clinitek 500	11	-	-	-	-	5	-	2	4	-	-	-	-	-
Siemens Clinitek Advantus	22	-	-	-	3	4	-	4	11	-	-	-	-	-
Siemens Clinitek Atlas	5	-	-	-	-	4	-	-	1	-	-	-	-	-
Siemens Clinitek Status / Status+	328	-	-	-	-	238	-	1	88	-	-	-	1	-
Siemens Ictotest	3	-	-	-	-	1	-	1	1	-	-	-	-	-
Siemens Multistix Pro	1	-	-	-	-	1	-	-	-	-	-	-	-	-
Siemens Reagent Strips	228	4	1	1	5	150	-	1	58	8	-	-	-	-
UriScan Reagent Strips	2	-	-	-	-	1	-	-	1	-	-	-	-	-

URINALYSIS DIPSTICK–UROBILINOGEN

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>				
		<u>Neg or 0.0 - 0.2 mg/dL</u>	<u>1.0 or <2.0 mg/dL</u>	<u>2.0/3.0 mg/dL</u>	<u>4.0 or 4.0/6.0 mg/dL</u>	<u>≥8.0 or ≥12.0 mg/dL</u>
ALL METHODS	826	3	1	7	21	794
Arkray DiaScreen	1	1	-	-	-	-
Consult Diagnostics Urine Analyzer	16	-	-	-	-	16
CTMI CT-120 Urine Analyzer	8	-	-	1	4	3
Diagnostic Test Group Clarity Urocheck	9	-	-	-	1	8
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	1	9
Germaine Laboratories AimStrip	3	-	-	1	-	2
Henry Schein One Step Plus	2	-	-	-	-	2
Henry Schein Urispec	10	-	-	1	2	7
Iris Diagnostics iChem Velocity Strips	1	-	-	-	1	-
McKesson 10SG Reagent Strips	7	-	-	-	-	7
McKesson 120 Urine Analyzer	1	-	-	-	-	1
NDC Pro Advantage	1	-	-	-	-	1
Other Analyzer Method	5	-	-	-	1	4
Other Dipstick Method	16	-	-	-	1	15
PSS Select Reagent Strips	5	-	-	-	-	5
PSS Select Urine Analyzer	1	-	-	-	-	1
Roche Chemstrip 101	5	-	-	-	-	5
Roche Chemstrips	49	-	-	-	4	45
Roche Criterion Analyzer	8	-	-	-	-	8
Roche SuperUA/ChemstripUA	2	-	-	-	-	2
Roche Urisys	28	-	-	-	1	27
Siemens Clinitek 10 / 100	13	-	-	-	-	13
Siemens Clinitek 200/200+	1	-	-	-	-	1
Siemens Clinitek 50	39	-	1	-	-	38
Siemens Clinitek 500	7	-	-	-	-	7
Siemens Clinitek Advantus	21	-	-	-	-	21
Siemens Clinitek Atlas	2	-	-	2	-	-
Siemens Clinitek Status / Status+	325	-	-	-	-	325
Siemens Multistix Pro	1	-	-	-	-	1
Siemens Reagent Strips	222	2	-	2	5	213
UriScan Reagent Strips	2	-	-	-	-	2

URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>																
		<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>(5+)</u>	<u>5 - 25</u> <u>Ery/μL</u>	<u>50 -</u> <u>100</u> <u>Ery/μL</u>	<u>250</u> <u>Ery/μL</u>	<u>±0.03</u> <u>mg/dL</u>	<u>0.06</u> <u>-</u> <u>0.10</u> <u>mg/</u> <u>dL</u>	<u>0.2 -</u> <u>0.5</u> <u>mg/</u> <u>dL</u>	<u>≥ 1.0</u> <u>mg/</u> <u>dL</u>
ALL METHODS	869	3	4	-	5	473	-	20	244	8	5	-	2	105	-	-	-	-
Arkray DiaScreen	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	15	-	-	-	1	-	-	1	7	-	-	-	-	6	-	-	-	-
CTMI CT-120 Urine Analyzer	8	-	-	-	-	-	-	-	7	-	-	-	-	1	-	-	-	-
Diagnostic Test Group Clarity Urocheck	9	-	-	-	1	-	-	-	6	-	1	-	1	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-
Germaine Laboratories AimStrip	3	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	2	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
Henry Schein Urispec	10	-	-	-	-	1	-	-	2	-	-	-	-	7	-	-	-	-
Iris Diagnostics iChem Velocity Strips	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	7	-	-	-	1	2	-	1	2	-	-	-	-	1	-	-	-	-
McKesson 120 Urine Analyzer	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Other Analyzer Method	5	-	-	-	-	-	-	1	3	-	-	-	-	1	-	-	-	-
Other Dipstick Method	17	-	1	-	-	3	-	2	6	1	1	-	-	3	-	-	-	-
PSS Select Reagent Strips	6	-	-	-	-	1	-	-	4	-	-	-	-	1	-	-	-	-
PSS Select Urine Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Roche Chemstrip 101	5	1	-	-	-	-	-	-	1	-	-	-	-	3	-	-	-	-
Roche Chemstrips	61	-	-	-	-	1	-	2	8	-	-	-	1	49	-	-	-	-
Roche Criterion Analyzer	8	-	-	-	-	-	-	-	-	3	-	-	-	5	-	-	-	-
Roche SuperUA/ChemstripUA	3	-	-	-	-	-	-	-	1	-	-	-	-	2	-	-	-	-
Roche Urisys	28	-	-	-	-	-	-	12	-	-	-	-	-	16	-	-	-	-
Siemens Clinitek 10 / 100	13	-	-	-	-	9	-	-	4	-	-	-	-	-	-	-	-	-
Siemens Clinitek 200/200+	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	39	-	3	-	-	26	-	-	10	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	11	-	-	-	-	5	-	-	6	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	23	-	-	-	-	8	-	-	15	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	5	-	-	-	-	4	-	-	1	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	334	-	-	-	1	245	-	-	88	-	-	-	-	-	-	-	-	-
Siemens Hemacombistix	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	227	2	-	-	-	161	-	-	55	3	3	-	-	3	-	-	-	-
UriScan Reagent Strips	2	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-

URINALYSIS DIPSTICK–LEUKOCYTE ESTERASE

Specimen UA-1

<u>Method</u>	<i>Participant Results</i>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>25 µL</u>	<u>75 or 100 µL</u>	<u>250 or 500 µL</u>
ALL METHODS	880	7	16	38	116	347	25	152	160	12	-	-	7
Arkray DiaScreen	1	-	-	-	-	-	1	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	15	1	-	3	-	-	1	8	2	-	-	-	-
CTMI CT-120 Urine Analyzer	8	-	-	-	-	-	-	1	7	-	-	-	-
Diagnostic Test Group Clarity Urocheck	9	-	-	-	1	-	-	4	4	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	-	-	-	-	10	-	-	-	-
Germaine Laboratories AimStrip	3	-	-	-	-	-	-	1	2	-	-	-	-
Henry Schein One Step Plus	2	-	-	-	-	1	-	-	1	-	-	-	-
Henry Schein Urispec	10	-	1	-	1	-	-	3	2	2	-	-	1
Iris Diagnostics iChem Velocity Strips	1	-	-	-	-	-	1	-	-	-	-	-	-
McKesson 10SG Reagent Strips	7	-	-	-	1	1	1	2	1	1	-	-	-
McKesson 120 Urine Analyzer	1	-	-	-	-	-	-	-	1	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-
Other Analyzer Method	4	-	-	-	-	-	-	-	4	-	-	-	-
Other Dipstick Method	16	-	2	1	2	4	-	4	2	-	-	-	1
PSS Select Reagent Strips	6	-	-	-	-	-	-	2	4	-	-	-	-
PSS Select Urine Analyzer	1	-	-	-	-	-	-	1	-	-	-	-	-
Roche Chemstrip 101	4	-	-	-	-	-	1	2	-	1	-	-	-
Roche Chemstrips	59	1	10	-	2	2	8	32	3	1	-	-	-
Roche Criterion Analyzer	8	-	-	-	-	1	-	5	-	1	-	-	1
Roche SuperUA/ChemstripUA	3	1	-	-	1	-	-	1	-	-	-	-	-
Roche Urisys	28	-	-	-	-	5	-	15	-	4	-	-	4
Siemens Clinitek 10 / 100	13	-	-	1	5	3	1	2	1	-	-	-	-
Siemens Clinitek 200/200+	1	-	-	-	-	-	-	-	1	-	-	-	-
Siemens Clinitek 50	40	1	-	-	-	29	-	-	10	-	-	-	-
Siemens Clinitek 500	11	-	-	-	5	-	-	6	-	-	-	-	-
Siemens Clinitek Advantus	23	-	-	-	8	-	-	15	-	-	-	-	-
Siemens Clinitek Atlas	5	-	-	-	-	4	-	-	1	-	-	-	-
Siemens Clinitek Status / Status+	334	1	1	-	1	242	-	-	89	-	-	-	-
Siemens Multistix Pro	1	-	-	-	1	-	-	-	-	-	-	-	-
Siemens Reagent Strips	226	1	2	29	80	48	9	42	13	2	-	-	-
Siemens Uristix	18	-	-	3	8	2	1	4	-	-	-	-	-
UriScan Reagent Strips	1	-	-	-	-	1	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–NITRITE

Specimen UA-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	887	885	2
Arkray DiaScreen	1	1	-
Beckman AU	1	-	1
Consult Diagnostics Urine Analyzer	15	15	-
CTMI CT-120 Urine Analyzer	8	8	-
Diagnostic Test Group Clarity Urocheck	9	9	-
Diagnostic Test Group Clarity Urocheck 120	10	10	-
Germaine Laboratories AimStrip	3	3	-
Henry Schein One Step Plus	2	2	-
Henry Schein Urispec	10	10	-
Iris Diagnostics iChem Velocity Strips	1	1	-
McKesson 10SG Reagent Strips	7	7	-
McKesson 120 Urine Analyzer	1	1	-
NDC Pro Advantage	1	1	-
Other Analyzer Method	5	5	-
Other Dipstick Method	16	16	-
PSS Select Reagent Strips	6	6	-
PSS Select Urine Analyzer	1	1	-
Roche Chemstrip 101	5	5	-
Roche Chemstrips	61	61	-
Roche Criterion Analyzer	8	8	-
Roche SuperUA/ChemstripUA	3	3	-
Roche Urisys	28	28	-
Siemens Clinitek 10 / 100	13	13	-
Siemens Clinitek 200/200+	1	1	-
Siemens Clinitek 50	38	38	-
Siemens Clinitek 500	11	11	-
Siemens Clinitek Advantus	23	23	-
Siemens Clinitek Atlas	5	5	-
Siemens Clinitek Status / Status+	334	334	-
Siemens Multistix Pro	1	1	-
Siemens Reagent Strips	228	227	1
Siemens Uristix	18	18	-
UriScan Reagent Strips	2	2	-

URINALYSIS –MICROALBUMIN (dipstick only)

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<i>Participant Results</i>								
			<u>10 mg/L</u>	<u>20 mg/L</u>	<u>30 mg/L</u>	<u>50 mg/L</u>	<u>80 mg/L</u>	<u>100 mg/L</u>	<u>150 mg/L</u>	<u>+ (4 - 8 mg/dL)</u>	<u>++ (>8 mg/dL)</u>
ALL METHODS	56	12	-	2	-	-	33	2	6	-	1
Micro-Bumintest	2	-	-	-	-	-	-	1	-	-	1
Roche Micral - 1 minute	15	12	-	2	-	-	-	1	-	-	-
Siemens Clinitek Microalbumin	39	-	-	-	-	-	33	-	6	-	-

URINALYSIS –URINE hCG
Specimen UA-1

<u>Method</u>	<i>Participant Results</i>		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	523	515	8
AimStep Combo Pregnancy	2	2	-
Alere Acceva hCG-Urine	3	3	-
Alere Clearview 25 hCG Combo	1	1	-
Alere Clearview hCG Cassette	1	1	-
Alere Clearview hCG Combo II	2	2	-
Alfa Scientific Instant View	4	4	-
Beckman Coulter ICON 25 hCG	28	28	-
Beckman Coulter ICON II/20 HCG	5	5	-
Cardinal Health SP Brand combo	26	26	-
Cardinal Hlth SPBrand-cassette	7	7	-
CONSULT diagnostics hCG Cassette	40	40	-
CONSULT diagnostics hCG Combo	11	10	1
CONSULT diagnostics hCG Dipstick	20	20	-
Diagnostic Test Group Clarity hCG strip/cassette	7	7	-
Germaine Laboratories AimStrip	1	1	-
Germaine Laboratories AimStrip Pregnancy	3	3	-
Henry Schein One Step	53	52	1
Immunostics Cept-D	1	-	1
Immunostics Detector Combi	1	1	-
Immunostics hCG Detector-urine	7	7	-
McKesson hCG Combo Cassette	15	15	-
McKesson hCG Urine Cassette	26	25	1
McKesson urine hCG-all 20 mIU kits	5	5	-
MediChoice hCG Combi Cassette	8	8	-
Meridian ImmunoCard STAT!	1	1	-
NDC Pro Advantage	1	1	-
PEP (Lab Supply) HCG	2	2	-
Polymedco Poly stat hCG	8	8	-
PSS Select hCG Cassette	2	2	-
Quidel QuickVue One-Step Combo	27	27	-
Quidel QuickVue One-Step Urine	72	72	-
Quidel QuickVue+ One-Step Combo	26	26	-
RefuAH hCG Dipstick	12	12	-
Sekisui OSOM - Urine Test	3	1	2
Sekisui OSOM Card Pregnancy	6	6	-
Sekisui OSOM hCG Combo Test	9	9	-
Siemens Clinitek 10 / 100	1	1	-
Siemens Clinitek Status / Status+	2	2	-
Stanbio QuPID	6	6	-
Stanbio QuPID Plus	2	2	-
Stanbio TRUE hCG	7	7	-
Sure-Vue hCG - 25mIU	5	5	-
Sure-Vue hCG-STAT	4	4	-

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	397	3	394	397	393	4
Alere Clearview iFOBT Complete	1	-	1	1	1	-
Alfa Scientific Instant View	1	-	1	1	1	-
Beckman Coulter Hemocult ICT	46	-	46	46	46	-
Guaiac (slide) Test	250	3	247	250	246	4
Hemosure iFOB	40	-	40	40	40	-
Other Immunochemical FOB kit	22	-	22	22	22	-
Polymedco OC Auto Micro 80	6	-	6	6	6	-
Polymedco OC-Light iFOB	11	-	11	11	11	-
Quidel QuickVue iFOB	11	-	11	11	11	-

2015 M1

Urine Sediment Identification

SPECIMENS US-1 AND US-2

CASE HISTORY:

A 36-year-old pregnant female presented to her OB/GYN with dysuria and genital inflammation. A routine urinalysis was performed, and the results appear below.

Color= Straw

Appearance= Hazy

Dipstick results:

Specific gravity = 1.030

pH = 8.5

Blood = Small (1+)

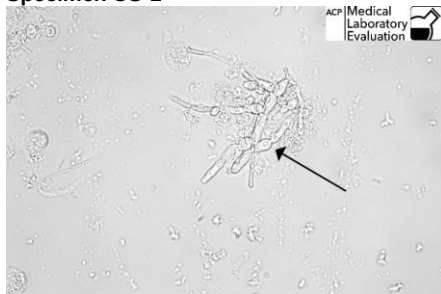
Leukocyte esterase = Moderate (2+)

Protein, Glucose, Ketones, Bilirubin, Urobilinogen, and Nitrite = Negative

This patient was diagnosed with a Candida urinary tract infection.

The species *Candida albicans* causes the majority of yeast infections in women. Yeast are small oval fungi that reproduce by budding and sometimes produce long branching forms. *C. albicans* is the most common yeast to appear in the urine. It is a part of the normal intestinal flora, and can be part of the normal vaginal flora in small amounts. Yeast infections are especially common during pregnancy due to hormonal changes. Yeast in the urine is often a specimen contaminant from the skin or vaginal secretions. *C. albicans* primarily infects the genital tract but it can also cause urinary tract infections. In this case, increased white blood cells and a positive leukocyte esterase test indicate a urinary yeast infection.

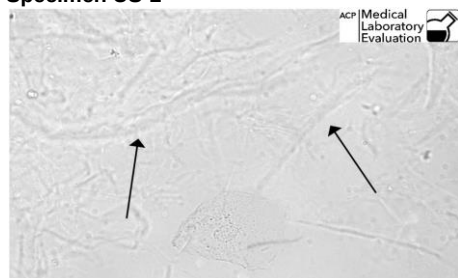
Specimen US-1



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Yeast/fungi	575	97.13%	Acceptable
Cellular (WBC) cast	5	0.84%	

The arrows in this photograph point to **yeast/fungi**. The presence of budding and hyphal forms in this photograph makes the identification of yeast simple. There are two general kinds of fungi- yeasts and molds. Yeasts are single celled fungal organisms that are round to oval in shape. Yeasts reproduce by budding, a process in which a small portion of the cell is pinched off and grows into a new cell. Sometimes yeasts form long chains of buds resembling the hyphae produced by molds. Technically, these are pseudohyphae, but in the clinical lab they are generally referred to simply as hyphae. Technical tip: Yeasts do not always present with buds or hyphae, so if you are unsure whether the cells you see are RBCs or yeast, try adding a drop of acetic acid to the preparation. RBCs will be dissolved (lysed), but yeast cells will not.

Specimen US-2



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Mucus strands	540	91.37%	Acceptable
Fiber/fecal contamination	22	3.72%	
Yeast/fungi	12	2.03%	
Hyaline cast	8	1.35%	

The arrows in this 400x photograph point to **mucus strands**. Mucus is secreted by glands in the terminal urethra and vagina. It is a common non-pathologic finding, especially in females. When two strands run parallel to each other, they can be mistaken for the sides of a hyaline cast because of the similar low refractive index. Mucus appears as long, thin, delicate threads with undefined edges and pointed or frayed ends, while casts are thick and have definite, parallel edges and smooth rounded ends. To view another photo of mucus strands, see 2010 Specimen US-1. To view a photo of a hyaline cast, see 2014 Specimen US-2.

References:

Dixon, D.M., Fromtling, R.A. "Morphology, Taxonomy, and Classification of Fungi." *Manual of Clinical Microbiology*. 6th ed. Ed. P.R. Murray. Washington, D.C.: ASM Press, 1995.

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

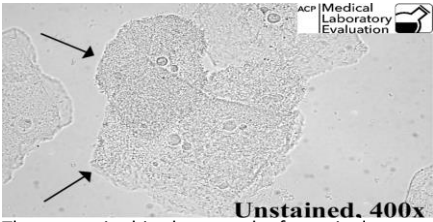
Ringsrud, K. M., Linné, J. J.: *Urinalysis and Body Fluids/ A ColorText and Atlas*. St. Louis, Mosby, 1995.

Warren, N.G., Hazen, K.C. "Candida, Cryptococcus, and Other Yeasts of Medical Importance." *Manual of Clinical Microbiology*. 6th ed. Ed. P.R. Murray. Washington, D.C.: ASM Press, 1995.

PROVIDER-PERFORMED MICROSCOPY (PPM)

Wet Mount Preparation

Specimen PPM-1



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* species or *Prevotella* species. BV is associated with a lack of white blood cells, and a pH of 4.5 or greater. To view another photo of clue cells, see 2013 M1 Specimen PPM-1.

KOH Preparation

Specimen PPM-2



Yeast and fungal elements are absent in this photograph of a KOH vaginal wet mount. The numerous small objects in this photograph are bacteria. To view a photo of yeast in a KOH prep, see 2014 M2 Specimen PPM-8.

Identification	Labs	Percent	Performance
Clue cell	524	92.58%	Acceptable
Squamous epithelial cell	33	5.83%	

Identification	Labs	Percent	Performance
Yeast/fungal elements absent	493	91.64%	Acceptable
Yeast/fungal elements present	45	8.36%	

PROVIDER-PERFORMED MICROSCOPY (PPM)

Scabies Identification

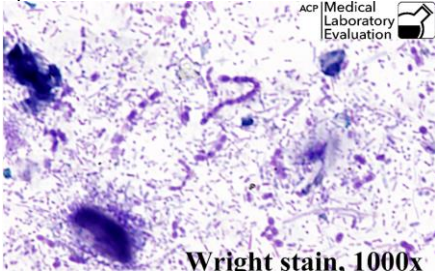
Specimen PPM-3



One scabies mite is present in this photograph of a skin scrapings preparation. The scabies mite, or human itch mite (*Sarcoptes scabiei*), is usually spread by prolonged direct personal contact with an infested person. It can also be spread indirectly by prolonged contact with infested clothing or bedding. The mites burrow into the skin and produce a pimple-like (papular) rash that itches. The diagnosis of scabies is often made from the history and examination of the skin alone. This can be a difficult organism to find by laboratory testing because mites are often few in number. There may be only 10-15 mites on the body of an infested person who is otherwise healthy. Identification of the mite, its burrows, eggs, or feces (called scybala) confirms the clinical suspicion of scabies. A burrow may be seen as a faint, slightly raised, zigzag line extending from a papule for 1-2 cm. The female mite is about 0.4 mm long. It has four pairs of legs with visible spines and bristles on its back surface. The male mite is rarely seen. The eggs are transparent oval bodies about 0.1-0.15 mm long, and the feces appear as clumps of small round debris around the eggs.

Nasal Smear

Specimen PPM-4



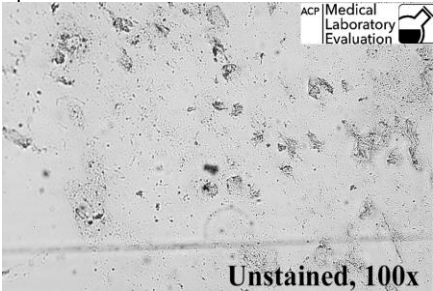
Eosinophils are absent in this photograph of Wright-stained nasal mucus. “Eos” have a unique red-orange color that makes them easy to spot and identify. The orange color comes from the dye eosin, which is a component of Wright stain. To view a photo of eosinophils in a nasal smear, see 2014 M3 Specimen PPM-16.

Identification	Labs	Percent	Performance
Scabies present	267	99.63%	Acceptable
Scabies absent	1	0.37%	

Identification	Labs	Percent	Performance
Eosinophils absent	129	82.64%	Acceptable
Eosinophils present	27	17.31%	

PROVIDER-PERFORMED MICROSCOPY (PPM)

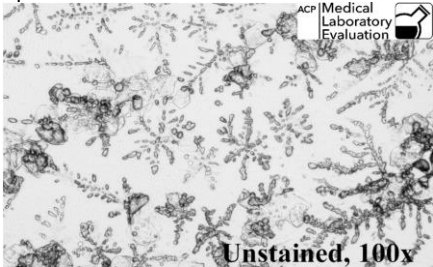
Pinworm Preparation
Specimen PPM-5



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Pinworms/eggs absent	230	98.71%	Acceptable
Pinworms/eggs present	3	1.29%	

Pinworm eggs are absent in this photograph of a perianal skin prep. To view a photo of pinworm eggs, see 2014 M1 Specimen PPM-5.

Vaginal Fluid Preparation
Specimen PPM-6



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Ferning present	254	99.61%	Acceptable
Ferning absent	1	0.39%	

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

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