

MEDICAL LABORATORY EVALUATION

PARTICIPANT SUMMARY

2 • 0 • 0 • 8

**Hematology, Coagulation,
Blood Bank, Urinalysis, PPM
MLE – M3**



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

Table of Contents

2008 Evaluation Criteria	5
Hematology	
HemoCue	6
Hemoglobin.....	6
Glucose.....	6
Sedimentation Rate.....	6
Body Fluid/CSF Cell Count.....	6
WBC Count.....	6
RBC Count.....	6
Crystal Identification.....	6
Hematology with 5-part Automated Differential (CL Samples).....	7
White Blood Cell Count.....	7
Red Blood Cell Count.....	7
Hemoglobin.....	7
Hematocrit.....	8
Platelet Count.....	8
Automated Differential.....	8
Sysmex Hematology with Automated Differential.....	10
White Blood Cell Count.....	11
Red Blood Cell Count.....	11
Hemoglobin.....	12
Hematocrit.....	13
Platelet Count.....	13
Automated Differential.....	14
Basic Hematology with 3-part Automated Differential.....	14
White Blood Cell Count.....	15
Red Blood Cell Count.....	17
Hemoglobin.....	18
Hematocrit.....	19
Platelet Count.....	20
Automated Differential.....	21
Waived Hematology	24
Hemoglobin.....	24
Hematocrit.....	24
Hematology with 5-part Automated Differential (DIF Samples).....	24
White Blood Cell Count.....	24
Red Blood Cell Count.....	25
Hemoglobin.....	25
Hematocrit.....	26
Platelet Count.....	27
Automated Differential.....	28
QBC Hematology.....	32
Hematocrit.....	32
Hemoglobin.....	32
White Blood Cell Count.....	32
Platelet Count.....	33
Automated Differential.....	33

Table of Contents (cont'd)

Hematology

Reticulocyte Count	34
Hematology with 5-part Automated Differential (BCX Samples)	35
White Blood Cell Count	35
Red Blood Cell Count	35
Hemoglobin.....	36
Hematocrit.....	37
Platelet Count	37
Automated Differential	38
Blood Cell Identification	41

Blood Bank

ABO Group	44
Rh Factor (D Type)	44
Unexpected Antibody Detection	44
Antibody Identification	44
Compatibility Testing	44

Coagulation

Prothrombin Time	45
International Normalized Ratio (INR)	46
Activated Partial Thromboplastin Time	47
Fibrinogen	47
CoaguChek Prothrombin Time	47
International Normalized Ratio (INR)	48
i-Stat Prothrombin Time	48
International Normalized Ratio (INR)	48
ITC Protime Microcoagulation System Prothrombin Time	48
International Normalized Ratio (INR)	48

Urinalysis

Microalbumin	49
Dipstick	49
Quantitative.....	49
Creatinine, Dipstick (mg/dL)	49
Creatinine, Urine (mg/dL)	49
Creatinine, Urine (mmol/L)	49
Urinalysis Dipstick	50
Specific Gravity	50
pH	50
Protein	51
Glucose or Reducing Substance.....	52
Ketones.....	53
Bilirubin	53
Urobilinogen.....	54
Blood or Hemoglobin	55
Leukocyte Esterase	56
Nitrite	56
Microalbumin (Dipstick Only)	57

Table of Contents (cont'd)

Urinalysis

Urine hCG	57
Fecal Occult Blood.....	58
KOH Skin Preparation.....	58
Urine Sediment Identification.....	58

Provider-Performed Microscopy (PPM)

Provider-Performed Microscopy (PPM).....	60
--	----

2008 EVALUATION CRITERIA

The evaluation criteria used in the 2008 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.

Quantitative

For quantitative procedures, a mean and standard deviation (SD) are calculated for each peer group consisting 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 pages 39-40 under the heading "Acceptable Ranges for Quantitative Results."

Hemoglobin	\pm 7 percent
Hemoglobin, Waived	\pm 3 SD
Hematocrit	\pm 6 percent
Hematocrit, Waived	\pm 3 SD
White Blood Cell Count	\pm 15 percent
Red Blood Cell Count	\pm 6 percent
Platelet Count	\pm 25 percent
Automated Differential	\pm 3 SD
Body Fluid - White Cell Count	\pm 3 SD
Body Fluid - Red Cell Count	\pm 3 SD
Sedimentation Rate	\pm 3 SD
Prothrombin Time	\pm 15 percent
Activated Partial Thromboplastin Time	\pm 15 percent
Fibrinogen	\pm 20 percent
Whole Blood Prothrombin Time (IT samples)	\pm 3 SD
Whole Blood Prothrombin Time (All other samples)	\pm 15 percent
International Normalized Ratio	\pm 3 SD
Specific Gravity	\pm 0.010
Reticulocyte Count	\pm 3 SD
Whole Blood Glucose – HemoCue	\pm 3 SD
Microalbumin (Quantitative)	\pm 3 SD
Creatinine, Urine (Quantitative)	\pm 3 SD

Qualitative

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

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

HEMOCUE HEMATOLOGY–HEMOGLOBIN (g/dL)

<u>Instruments</u>	Specimen HQ-5					Specimen HQ-6				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
HemoCue	119	5.02	0.12	2.4	5.0	121	17.22	0.42	2.4	17.2

HEMOCUE HEMATOLOGY–GLUCOSE (mg/dL)

<u>Instruments</u>	Specimen HQ-5					Specimen HQ-6				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Methods	112	62.7	7.5	12.0	62	111	342.5	17.1	5.0	342
HemoCue	10	59.3	7.4	12.5	59	9	333.9	11.9	3.6	337
HemoCue Glucose 201	96	63.2	7.6	12.1	62	96	344.0	17.2	5.0	345

SEDIMENTATION RATE (MM/HR)

<u>Instruments</u>	Specimen ES-5					Specimen ES-6				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	270	29.1	18.7	64.2	20	260	4.0	3.3	84.0	3
Clinical Data Excyte M/10	24	45.6	5.6	12.2	46	24	3.2	1.7	54.8	2
HiChem Ves-Matic/Mini-Ves	23	60.9	8.1	13.3	59	23	7.6	3.9	51.5	6
Modified Westergren - Plastic	50	17.8	6.2	34.5	18	51	2.7	1.4	52.4	2
Polymedco Sedimat	23	17.0	4.2	24.4	17	22	2.7	1.5	55.6	3
Polymedco Sedimat 15	19	58.6	10.0	17.0	54	21	15.2	4.6	30.2	16
Streck ESR-Auto Plus	17	48.5	4.9	10.2	48	17	8.1	1.9	23.4	8
Westergren - Glass	5	9.4	4.3	45.5	10	6	2.3	0.8	35.0	2
Westergren - Plastic	80	18.8	7.0	37.0	17	80	2.6	1.6	59.8	2
Wintrobe - Glass	14	9.5	3.5	36.4	9	13	1.8	0.7	41.0	2

BODY FLUID/CSF COUNT–WHITE BLOOD CELL COUNT (uL)

<u>Instruments</u>	Specimen BF-5					Specimen BF-6				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Methods	9	344.1	74.5	21.7	300	10	0.0	0.0	0.0	0

BODY FLUID/CSF COUNT–RED BLOOD CELL COUNT (uL)

<u>Instruments</u>	Specimen BF-5					Specimen BF-6				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Methods	8	356.2	48.4	13.6	360	9	0.0	0.0	0.0	0

BODY FLUID/CSF COUNT–CRYSTAL IDENTIFICATION

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BF-5	Cholesterol crystals	5	55.56%	Not graded
	Other, not listed	2	22.22%	
	ID Unknown – Referred	1	11.11%	
	CPPD	1	11.11%	

Specimen BF-5 is an ungraded challenge due to less than 80% participant consensus.

BF-6	MSU (Monosodium Urate)	7	77.78%	Acceptable
	ID Unknown-Referred	1	11.11%	Acceptable
	Other, not listed	1	11.11%	

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

<u>Instruments</u>	<u>Specimen CL-11</u>					<u>Specimen CL-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	3.09	0.13	4.1	3.1	27	20.38	0.75	3.7	20.3
All Method	28	3.09	0.13	4.1	3.1	27	20.38	0.75	3.7	20.3
Abbott Cell-Dyn 3200	23	3.12	0.12	3.8	3.1	22	20.55	0.72	3.5	20.6
Abbott Cell-Dyn Ruby	5	2.98	0.11	3.7	2.9	5	19.62	0.33	1.7	19.7

<u>Instruments</u>	<u>Specimen CL-13</u>					<u>Specimen CL-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	7.72	0.26	3.4	7.7	28	3.06	0.13	4.4	3.1
All Method	28	7.72	0.26	3.4	7.7	28	3.06	0.13	4.4	3.1
Abbott Cell-Dyn 3200	23	7.79	0.24	3.1	7.8	23	3.10	0.12	3.8	3.1
Abbott Cell-Dyn Ruby	5	7.42	0.08	1.1	7.4	5	2.90	0.07	2.4	2.9

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	20.00	1.44	7.2	20.3
All Method	28	20.00	1.44	7.2	20.3
Abbott Cell-Dyn 3200	23	20.09	1.57	7.8	20.3
Abbott Cell-Dyn Ruby	5	19.58	0.39	2.0	19.7

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

<u>Instruments</u>	<u>Specimen CL-11</u>					<u>Specimen CL-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	2.075	0.048	2.3	2.08	28	5.012	0.102	2.0	5.01
All Method	28	2.075	0.048	2.3	2.08	28	5.012	0.102	2.0	5.01
Abbott Cell-Dyn 3200	23	2.076	0.041	2.0	2.08	23	4.987	0.086	1.7	5.00
Abbott Cell-Dyn Ruby	5	2.066	0.078	3.8	2.07	5	5.124	0.099	1.9	5.10

<u>Instruments</u>	<u>Specimen CL-13</u>					<u>Specimen CL-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	4.549	0.107	2.3	4.55	27	2.066	0.045	2.2	2.06
All Method	28	4.549	0.107	2.3	4.55	27	2.066	0.045	2.2	2.06
Abbott Cell-Dyn 3200	23	4.526	0.100	2.2	4.53	23	2.061	0.047	2.3	2.05
Abbott Cell-Dyn Ruby	5	4.656	0.068	1.5	4.67	4	-	-	-	2.11

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	4.980	0.108	2.2	4.96
All Method	28	4.980	0.108	2.2	4.96
Abbott Cell-Dyn 3200	23	4.955	0.095	1.9	4.93
Abbott Cell-Dyn Ruby	5	5.096	0.096	1.9	5.12

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

<u>Instruments</u>	<u>Specimen CL-11</u>					<u>Specimen CL-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	5.54	0.15	2.7	5.6	27	16.29	0.33	2.0	16.3
All Method	28	5.54	0.15	2.7	5.6	27	16.29	0.33	2.0	16.3
Abbott Cell-Dyn 3200	23	5.54	0.15	2.8	5.6	22	16.26	0.35	2.2	16.4
Abbott Cell-Dyn Ruby	5	5.52	0.13	2.4	5.5	5	16.42	0.22	1.3	16.3

<u>Instruments</u>	<u>Specimen CL-13</u>					<u>Specimen CL-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	27	13.24	0.28	2.1	13.2	28	5.53	0.15	2.7	5.6
All Method	27	13.24	0.28	2.1	13.2	28	5.53	0.15	2.7	5.6
Abbott Cell-Dyn 3200	22	13.24	0.31	2.3	13.3	23	5.54	0.15	2.8	5.6
Abbott Cell-Dyn Ruby	5	13.26	0.13	1.0	13.2	5	5.50	0.14	2.6	5.4

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	27	16.23	0.34	2.1	
All Method	27	16.23	0.34	2.1	
Abbott Cell-Dyn 3200	23	16.27	0.45	2.8	
Abbott Cell-Dyn Ruby	5	16.34	0.21	1.3	

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

<u><i>Instruments</i></u>	Specimen CL-11					Specimen CL-12				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All Abbott Cell-Dyn Instruments	28	14.99	0.47	3.1	15.1	28	42.14	1.18	2.8	42.2
All Method	28	14.99	0.47	3.1	15.1	28	42.14	1.18	2.8	42.2
Abbott Cell-Dyn 3200	23	15.02	0.44	2.9	15.1	23	41.97	1.21	2.9	42.0
Abbott Cell-Dyn Ruby	5	14.84	0.63	4.3	15.1	5	42.90	0.71	1.7	43.0

<u><i>Instruments</i></u>	Specimen CL-13					Specimen CL-14				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All Abbott Cell-Dyn Instruments	28	35.80	1.02	2.9	35.9	28	14.98	0.44	2.9	15.0
All Method	28	35.80	1.02	2.9	35.9	28	14.98	0.44	2.9	15.0
Abbott Cell-Dyn 3200	23	35.66	1.04	2.9	35.8	23	14.97	0.47	3.2	15.0
Abbott Cell-Dyn Ruby	5	36.46	0.65	1.8	36.5	5	15.00	0.26	1.7	15.0

<u><i>Instruments</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>
All Abbott Cell-Dyn Instruments	28	41.84	1.24	3.0	42.1
All Method	28	41.84	1.24	3.0	42.1
Abbott Cell-Dyn 3200	23	41.64	1.22	2.9	41.7
Abbott Cell-Dyn Ruby	5	42.72	1.04	2.4	42.7

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

<u><i>Instruments</i></u>	Specimen CL-11					Specimen CL-12				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All Abbott Cell-Dyn Instruments	28	88.5	7.7	8.6	89	28	547.6	31.0	5.7	552
All Method	28	88.5	7.7	8.6	89	28	547.6	31.0	5.7	552
Abbott Cell-Dyn 3200	23	87.7	7.6	8.7	87	23	542.4	28.5	5.3	552
Abbott Cell-Dyn Ruby	5	92.6	7.0	7.6	90	5	571.6	33.9	5.9	586

<u><i>Instruments</i></u>	Specimen CL-13					Specimen CL-14				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All Abbott Cell-Dyn Instruments	28	294.3	15.9	5.4	298	27	88.5	7.1	8.0	88
All Method	28	294.3	15.9	5.4	298	27	88.5	7.1	8.0	88
Abbott Cell-Dyn 3200	23	291.9	15.1	5.2	295	23	87.5	6.9	7.9	86
Abbott Cell-Dyn Ruby	5	305.2	16.3	5.4	312	4	-	-	-	98

<u><i>Instruments</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>
All Abbott Cell-Dyn Instruments	28	550.2	33.1	6.0	547
All Method	28	550.2	33.1	6.0	547
Abbott Cell-Dyn 3200	23	542.3	27.2	5.0	540
Abbott Cell-Dyn Ruby	5	586.8	36.3	6.2	597

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

<u>Instruments</u>	Specimen CL-11					Specimen CL-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	50.29	1.52	3.0	50.3	27	74.98	0.78	1.0	74.8
All Method	28	50.29	1.52	3.0	50.3	27	74.98	0.78	1.0	74.8
Abbott Cell-Dyn 3200	23	50.37	1.33	2.6	50.0	22	74.88	0.71	0.9	74.8
Abbott Cell-Dyn Ruby	5	49.96	2.38	4.8	50.3	5	75.42	1.04	1.4	75.8
Specimen CL-13										
All Abbott Cell-Dyn Instruments	28	64.39	0.82	1.3	64.4	28	50.52	1.12	2.2	50.7
All Method	28	64.39	0.82	1.3	64.4	28	50.52	1.12	2.2	50.7
Abbott Cell-Dyn 3200	23	64.43	0.78	1.2	64.4	23	50.42	1.14	2.3	50.6
Abbott Cell-Dyn Ruby	5	64.20	1.08	1.7	64.3	5	50.98	0.97	1.9	51.3
Specimen CL-14										
All Abbott Cell-Dyn Instruments	26	74.89	0.54	0.7	74.9					
All Method	26	74.89	0.54	0.7	74.9					
Abbott Cell-Dyn 3200	21	75.00	0.49	0.7	74.9					
Abbott Cell-Dyn Ruby	5	74.44	0.57	0.8	74.4					
Specimen CL-15										
All Abbott Cell-Dyn Instruments	26	74.89	0.54	0.7	74.9					
All Method	26	74.89	0.54	0.7	74.9					
Abbott Cell-Dyn 3200	21	75.00	0.49	0.7	74.9					
Abbott Cell-Dyn Ruby	5	74.44	0.57	0.8	74.4					

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

<u>Instruments</u>	Specimen CL-11					Specimen CL-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	38.71	2.54	6.6	38.0	27	17.60	1.38	7.8	17.4
All Method	28	38.71	2.54	6.6	38.0	27	17.60	1.38	7.8	17.4
Abbott Cell-Dyn 3200	23	38.96	2.55	6.5	37.9	22	17.87	1.32	7.4	17.6
Abbott Cell-Dyn Ruby	5	37.56	2.38	6.3	38.0	5	16.42	0.99	6.0	16.0
Specimen CL-13										
All Abbott Cell-Dyn Instruments	28	25.36	1.35	5.3	25.2	28	38.39	1.84	4.8	38.2
All Method	28	25.36	1.35	5.3	25.2	28	38.39	1.84	4.8	38.2
Abbott Cell-Dyn 3200	23	25.62	1.26	4.9	25.3	23	38.84	1.67	4.3	38.4
Abbott Cell-Dyn Ruby	5	24.20	1.22	5.0	24.8	5	36.32	0.93	2.6	36.5
Specimen CL-14										
All Abbott Cell-Dyn Instruments	26	17.72	1.28	7.2	17.7					
All Method	26	17.72	1.28	7.2	17.7					
Abbott Cell-Dyn 3200	21	17.92	1.26	7.0	17.8					
Abbott Cell-Dyn Ruby	5	16.88	1.09	6.5	17.0					
Specimen CL-15										
All Abbott Cell-Dyn Instruments	26	17.72	1.28	7.2	17.7					
All Method	26	17.72	1.28	7.2	17.7					
Abbott Cell-Dyn 3200	21	17.92	1.26	7.0	17.8					
Abbott Cell-Dyn Ruby	5	16.88	1.09	6.5	17.0					

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

<u>Instruments</u>	Specimen CL-11					Specimen CL-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	4.96	1.96	39.5	5.6	28	3.28	1.31	39.9	3.8
All Method	28	4.96	1.96	39.5	5.6	28	3.28	1.31	39.9	3.8
Abbott Cell-Dyn 3200	23	4.80	2.06	43.0	5.5	23	3.19	1.43	44.9	3.8
Abbott Cell-Dyn Ruby	5	5.72	1.28	22.4	5.7	5	3.72	0.18	4.8	3.7

<u>Instruments</u>	Specimen CL-13					Specimen CL-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	27	4.14	0.72	17.4	4.4	28	5.12	1.58	30.9	5.4
All Method	27	4.14	0.72	17.4	4.4	28	5.12	1.58	30.9	5.4
Abbott Cell-Dyn 3200	22	4.07	0.76	18.8	4.4	23	4.93	1.64	33.3	5.3
Abbott Cell-Dyn Ruby	5	4.42	0.44	10.0	4.6	5	6.00	0.99	16.5	5.8

<u>Instruments</u>	Specimen CL-15				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	3.29	1.11	33.6	3.4
All Method	28	3.29	1.11	33.6	3.4
Abbott Cell-Dyn 3200	23	3.11	1.10	35.3	3.2
Abbott Cell-Dyn Ruby	5	4.12	0.76	18.4	3.8

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

<u>Instruments</u>	Specimen CL-11					Specimen CL-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	4.86	0.41	8.5	4.9	28	3.63	0.19	5.3	3.7
All Method	28	4.86	0.41	8.5	4.9	28	3.63	0.19	5.3	3.7
Abbott Cell-Dyn 3200	23	4.92	0.41	8.4	5.0	23	3.62	0.20	5.6	3.6
Abbott Cell-Dyn Ruby	5	4.56	0.30	6.7	4.6	5	3.68	0.15	4.0	3.7

<u>Instruments</u>	Specimen CL-13					Specimen CL-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	5.55	0.27	4.8	5.6	28	4.82	0.33	6.9	4.7
All Method	28	5.55	0.27	4.8	5.6	28	4.82	0.33	6.9	4.7
Abbott Cell-Dyn 3200	23	5.54	0.29	5.2	5.5	23	4.83	0.36	7.5	4.7
Abbott Cell-Dyn Ruby	5	5.60	0.16	2.8	5.6	5	4.78	0.18	3.7	4.9

<u>Instruments</u>	Specimen CL-15				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	28	3.61	0.30	8.2	3.6
All Method	28	3.61	0.30	8.2	3.6
Abbott Cell-Dyn 3200	23	3.61	0.30	8.4	3.7
Abbott Cell-Dyn Ruby	5	3.60	0.31	8.6	3.6

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

<u>Instruments</u>	Specimen CL-11					Specimen CL-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	27	1.03	0.57	55.0	1.2	27	0.40	0.25	63.6	0.4
All Method	27	1.03	0.57	55.0	1.2	27	0.40	0.25	63.6	0.4
Abbott Cell-Dyn 3200	22	1.01	0.55	54.5	1.2	22	0.40	0.27	68.7	0.4
Abbott Cell-Dyn Ruby	5	1.10	0.69	62.7	1.2	5	0.40	0.16	39.5	0.4
Specimen CL-13										
All Abbott Cell-Dyn Instruments	27	0.56	0.30	53.6	0.6	27	1.08	0.45	41.6	1.1
All Method	27	0.56	0.30	53.6	0.6	27	1.08	0.45	41.6	1.1
Abbott Cell-Dyn 3200	22	0.53	0.32	60.0	0.6	22	1.09	0.49	45.2	1.2
Abbott Cell-Dyn Ruby	5	0.68	0.16	24.2	0.7	5	1.02	0.16	16.1	1.1
Specimen CL-14										
All Abbott Cell-Dyn Instruments	27	0.56	0.30	53.6	0.6	27	1.08	0.45	41.6	1.1
All Method	27	0.56	0.30	53.6	0.6	27	1.08	0.45	41.6	1.1
Abbott Cell-Dyn 3200	22	0.53	0.32	60.0	0.6	22	1.09	0.49	45.2	1.2
Abbott Cell-Dyn Ruby	5	0.68	0.16	24.2	0.7	5	1.02	0.16	16.1	1.1
Specimen CL-15										
All Abbott Cell-Dyn Instruments	27	0.31	0.23	73.0	0.3					
All Method	27	0.31	0.23	73.0	0.3					
Abbott Cell-Dyn 3200	22	0.28	0.21	76.2	0.2					
Abbott Cell-Dyn Ruby	5	0.48	0.26	53.9	0.4					

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

<u>Instruments</u>	Specimen SYX-11					Specimen SYX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	32	2.28	0.09	3.8	2.3	32	6.76	0.17	2.6	6.8
All Method	32	2.28	0.09	3.8	2.3	32	6.76	0.17	2.6	6.8
Sysmex K - 800,1000,4500,KX-21	23	2.29	0.08	3.5	2.3	23	6.81	0.16	2.3	6.8
Sysmex pocH-100i	9	2.24	0.10	4.5	2.2	9	6.63	0.15	2.3	6.6
Specimen SYX-13										
All Sysmex Instruments	32	7.86	0.24	3.0	7.9	32	12.09	0.32	2.7	12.2
All Method	32	7.86	0.24	3.0	7.9	32	12.09	0.32	2.7	12.2
Sysmex K - 800,1000,4500,KX-21	23	7.89	0.26	3.3	7.9	23	12.17	0.29	2.4	12.2
Sysmex pocH-100i	9	7.79	0.16	2.1	7.9	9	11.88	0.31	2.6	12.0
Specimen SYX-14										
All Sysmex Instruments	32	7.86	0.24	3.0	7.9	32	12.09	0.32	2.7	12.2
All Method	32	7.86	0.24	3.0	7.9	32	12.09	0.32	2.7	12.2
Sysmex K - 800,1000,4500,KX-21	23	7.89	0.26	3.3	7.9	23	12.17	0.29	2.4	12.2
Sysmex pocH-100i	9	7.79	0.16	2.1	7.9	9	11.88	0.31	2.6	12.0
Specimen SYX-15										
All Sysmex Instruments	31	17.80	0.43	2.4	17.8					
All Method	31	17.80	0.43	2.4	17.8					
Sysmex K - 800,1000,4500,KX-21	23	17.81	0.45	2.5	17.9					
Sysmex pocH-100i	9	17.98	0.73	4.0	17.7					

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

<u>Instruments</u>	Specimen SYX-11					Specimen SYX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	31	2.339	0.038	1.6	2.34	32	4.404	0.074	1.7	4.40
All Method	31	2.339	0.038	1.6	2.34	32	4.404	0.074	1.7	4.40
Sysmex K - 800,1000,4500,KX-21	23	2.327	0.032	1.4	2.33	23	4.391	0.046	1.0	4.38
Sysmex poch-100i	9	2.352	0.065	2.8	2.36	9	4.438	0.118	2.7	4.46

<u>Instruments</u>	Specimen SYX-13					Specimen SYX-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	32	3.744	0.058	1.6	3.74	32	5.230	0.075	1.4	5.23
All Method	32	3.744	0.058	1.6	3.74	32	5.230	0.075	1.4	5.23
Sysmex K - 800,1000,4500,KX-21	23	3.732	0.042	1.1	3.73	23	5.214	0.049	0.9	5.22
Sysmex poch-100i	9	3.774	0.084	2.2	3.79	9	5.271	0.112	2.1	5.29

<u>Instruments</u>	Specimen SYX-15				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	30	5.238	0.063	1.2	5.23
All Method	30	5.238	0.063	1.2	5.23
Sysmex K - 800,1000,4500,KX-21	23	5.230	0.048	0.9	5.22
Sysmex poch-100i	9	5.287	0.218	4.1	5.24

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

<u>Instruments</u>	Specimen SYX-11					Specimen SYX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	32	6.51	0.10	1.5	6.5	32	13.12	0.16	1.3	13.1
All Method	32	6.51	0.10	1.5	6.5	32	13.12	0.16	1.3	13.1
Sysmex K - 800,1000,4500,KX-21	22	6.51	0.06	0.9	6.5	23	13.17	0.16	1.2	13.2
Sysmex poch-100i	9	6.48	0.13	2.0	6.5	9	13.01	0.14	1.0	13.0

<u>Instruments</u>	Specimen SYX-13					Specimen SYX-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	31	10.77	0.12	1.1	10.7	32	16.62	0.20	1.2	16.6
All Method	31	10.77	0.12	1.1	10.7	32	16.62	0.20	1.2	16.6
Sysmex K - 800,1000,4500,KX-21	23	10.80	0.11	1.0	10.8	23	16.69	0.16	1.0	16.7
Sysmex poch-100i	9	10.62	0.13	1.2	10.7	9	16.44	0.18	1.1	16.5

<u>Instruments</u>	Specimen SYX-15				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	31	16.69	0.19	1.1	16.7
All Method	31	16.69	0.19	1.1	16.7
Sysmex K - 800,1000,4500,KX-21	23	16.74	0.16	1.0	16.7
Sysmex poch-100i	9	16.71	0.55	3.3	16.6

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–HEMATOCRIT (percent)

<u>Instruments</u>	Specimen SYX-11					Specimen SYX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	32	17.96	0.66	3.7	17.8	32	35.92	1.26	3.5	35.5
All Method	32	17.96	0.66	3.7	17.8	32	35.92	1.26	3.5	35.5
Sysmex K - 800,1000,4500,KX-21	23	17.63	0.30	1.7	17.6	23	35.29	0.56	1.6	35.3
Sysmex poch-100i	9	18.81	0.56	3.0	19.0	9	37.52	1.13	3.0	37.9
Specimen SYX-13										
All Sysmex Instruments	32	29.25	0.98	3.3	29.0	32	44.88	1.49	3.3	44.5
All Method	32	29.25	0.98	3.3	29.0	32	44.88	1.49	3.3	44.5
Sysmex K - 800,1000,4500,KX-21	23	28.77	0.50	1.7	28.6	23	44.11	0.74	1.7	44.0
Sysmex poch-100i	9	30.48	0.80	2.6	30.6	9	46.82	1.10	2.3	47.0
Specimen SYX-15										
All Sysmex Instruments	30	44.71	1.04	2.3	44.5					
All Method	30	44.71	1.04	2.3	44.5					
Sysmex K - 800,1000,4500,KX-21	23	44.30	0.52	1.2	44.1					
Sysmex poch-100i	8	46.36	1.44	3.1	46.8					

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

<u>Instruments</u>	Specimen SYX-11					Specimen SYX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	31	57.2	4.6	8.0	57	32	203.2	12.9	6.3	204
All Method	31	57.2	4.6	8.0	57	32	203.2	12.9	6.3	204
Sysmex K - 800,1000,4500,KX-21	23	57.6	3.5	6.1	57	23	207.3	10.9	5.3	206
Sysmex poch-100i	9	58.3	9.1	15.6	57	9	192.4	11.6	6.0	193
Specimen SYX-13										
All Sysmex Instruments	31	318.0	14.7	4.6	318	32	120.3	6.0	5.0	119
All Method	31	318.0	14.7	4.6	318	32	120.3	6.0	5.0	119
Sysmex K - 800,1000,4500,KX-21	23	324.0	11.1	3.4	326	23	122.5	5.1	4.2	121
Sysmex poch-100i	9	296.2	15.5	5.2	300	9	114.8	4.1	3.6	116
Specimen SYX-15										
All Sysmex Instruments	32	493.5	27.9	5.6	499					
All Method	32	493.5	27.9	5.6	499					
Sysmex K - 800,1000,4500,KX-21	23	504.7	20.1	4.0	503					
Sysmex poch-100i	9	464.9	24.9	5.4	470					

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

Specimen SYX-11

Specimen SYX-12

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	31	25.09	0.89	3.6	25.1	31	28.85	1.05	3.6	29.0
All Method	31	25.09	0.89	3.6	25.1	31	28.85	1.05	3.6	29.0
Sysmex K - 800,1000,4500,KX-21	22	25.14	0.77	3.1	25.2	22	28.71	0.98	3.4	29.0
Sysmex poch-100i	9	24.98	1.18	4.7	25.0	9	29.19	1.22	4.2	29.3

Specimen SYX-13

Specimen SYX-14

All Sysmex Instruments	31	30.23	0.93	3.1	30.3	31	34.14	0.90	2.6	34.0
All Method	31	30.23	0.93	3.1	30.3	31	34.14	0.90	2.6	34.0
Sysmex K - 800,1000,4500,KX-21	22	29.99	0.77	2.6	30.0	22	33.90	0.90	2.6	33.9
Sysmex poch-100i	9	30.80	1.08	3.5	30.9	9	34.72	0.64	1.8	34.7

Specimen SYX-15

All Sysmex Instruments	31	33.74	0.60	1.8	33.7
All Method	31	33.74	0.60	1.8	33.7
Sysmex K - 800,1000,4500,KX-21	22	33.70	0.64	1.9	33.7
Sysmex poch-100i	9	33.81	0.49	1.4	33.7

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

Specimen SYX-11

Specimen SYX-12

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	30	6.59	1.22	18.6	7.0	30	10.79	1.18	11.0	10.8
All Method	30	6.59	1.22	18.6	7.0	30	10.79	1.18	11.0	10.8
Sysmex K - 800,1000,4500,KX-21	21	6.61	1.21	18.3	7.0	21	10.92	1.02	9.3	11.0
Sysmex poch-100i	9	6.52	1.32	20.2	6.7	9	10.48	1.53	14.6	10.4

Specimen SYX-13

Specimen SYX-14

All Sysmex Instruments	30	10.74	1.19	11.1	10.8	29	15.84	1.26	8.0	15.8
All Method	30	10.74	1.19	11.1	10.8	29	15.84	1.26	8.0	15.8
Sysmex K - 800,1000,4500,KX-21	21	10.82	1.08	9.9	10.8	21	16.06	1.20	7.5	16.1
Sysmex poch-100i	9	10.53	1.47	14.0	10.8	8	15.28	1.34	8.8	15.8

Specimen SYX-15

All Sysmex Instruments	30	15.59	1.00	6.4	15.9
All Method	30	15.59	1.00	6.4	15.9
Sysmex K - 800,1000,4500,KX-21	21	15.92	0.85	5.3	16.0
Sysmex poch-100i	9	14.82	0.94	6.4	14.7

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

<u>Instruments</u>	Specimen SYX-11					Specimen SYX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Sysmex Instruments	29	68.38	1.15	1.7	68.4	29	60.23	1.42	2.4	60.2
All Method	29	68.38	1.15	1.7	68.4	29	60.23	1.42	2.4	60.2
Sysmex K - 800,1000,4500,KX-21	21	68.27	0.91	1.3	68.3	21	60.26	0.99	1.6	60.2
Sysmex poch-100i	8	68.66	1.66	2.4	69.5	8	60.16	2.28	3.8	60.6
Specimen SYX-13										
Specimen SYX-14										
All Sysmex Instruments	29	58.97	1.31	2.2	59.0	29	49.97	1.20	2.4	50.1
All Method	29	58.97	1.31	2.2	59.0	29	49.97	1.20	2.4	50.1
Sysmex K - 800,1000,4500,KX-21	20	59.33	0.97	1.6	59.4	21	50.03	1.14	2.3	50.2
Sysmex poch-100i	8	58.55	1.26	2.2	58.5	8	49.80	1.42	2.9	49.8
Specimen SYX-15										
All Sysmex Instruments	29	50.62	0.98	1.9	50.4					
All Method	29	50.62	0.98	1.9	50.4					
Sysmex K - 800,1000,4500,KX-21	21	50.33	0.82	1.6	50.3					
Sysmex poch-100i	8	51.38	1.01	2.0	51.7					

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

<u>Instruments</u>	Specimen HD-11					Specimen HD-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	476	18.05	0.58	3.2	18.0	482	9.24	0.32	3.4	9.2
All ABX Instruments	130	17.88	0.44	2.4	17.8	130	9.02	0.23	2.5	9.0
All COULTER Instruments	443	18.45	0.52	2.8	18.5	444	9.47	0.27	2.9	9.5
All Danam/Drew Scientific Instruments	10	18.04	0.24	1.3	18.0	10	9.17	0.16	1.7	9.3
All Method	1081	18.19	0.58	3.2	18.2	1090	9.31	0.33	3.6	9.3
Abbott Cell-Dyn 1600	17	17.66	0.54	3.1	17.6	17	9.28	0.18	2.0	9.3
Abbott Cell-Dyn 1700	195	18.19	0.57	3.2	18.1	196	9.33	0.31	3.3	9.3
Abbott Cell-Dyn 1800	262	17.98	0.56	3.1	18.0	265	9.18	0.31	3.3	9.2
ABX Diagnostics Micros/45/60	130	17.88	0.44	2.4	17.8	130	9.02	0.23	2.5	9.0
Bayer ADVIA 60	10	17.76	0.32	1.8	17.8	10	9.08	0.24	2.7	9.1
CDS Medonic CA 620	14	17.10	1.37	8.0	17.6	15	8.79	0.95	10.8	9.0
COULTER AcT 8/10	43	18.63	0.48	2.6	18.7	44	9.57	0.30	3.1	9.5
COULTER AcT diff/diff 2	376	18.42	0.52	2.8	18.4	376	9.46	0.27	2.9	9.5
COULTER MD8, MD16,MDII 8,16	15	18.35	0.47	2.6	18.5	15	9.41	0.25	2.7	9.5
COULTER S880,T540,T660,T890	9	18.87	0.42	2.2	18.8	9	9.42	0.22	2.4	9.4
Danam DC-16,1600,Excel,1800MS	10	18.04	0.24	1.3	18.0	10	9.17	0.16	1.7	9.3
Specimen HD-13										
Specimen HD-14										
All Abbott Cell-Dyn Instruments	483	5.37	0.20	3.7	5.4	477	7.43	0.25	3.4	7.4
All ABX Instruments	131	5.20	0.15	2.8	5.2	129	7.22	0.19	2.6	7.2
All COULTER Instruments	439	5.51	0.16	2.9	5.5	441	7.54	0.20	2.7	7.5
All Danam/Drew Scientific Instruments	10	5.36	0.12	2.2	5.4	10	7.43	0.32	4.4	7.3
All Method	1087	5.41	0.21	3.8	5.4	1082	7.44	0.25	3.4	7.5
Abbott Cell-Dyn 1600	18	5.49	0.23	4.2	5.5	18	7.47	0.35	4.7	7.4
Abbott Cell-Dyn 1700	196	5.47	0.18	3.2	5.5	196	7.54	0.24	3.2	7.5
Abbott Cell-Dyn 1800	266	5.29	0.17	3.2	5.3	262	7.34	0.22	3.0	7.3
ABX Diagnostics Micros/45/60	131	5.20	0.15	2.8	5.2	129	7.22	0.19	2.6	7.2
Bayer ADVIA 60	10	5.20	0.17	3.3	5.2	10	7.19	0.22	3.1	7.2
CDS Medonic CA 620	15	5.16	0.47	9.1	5.3	15	7.00	0.73	10.5	7.2
COULTER AcT 8/10	44	5.54	0.16	2.9	5.5	44	7.60	0.24	3.2	7.6
COULTER AcT diff/diff 2	371	5.52	0.16	2.9	5.5	373	7.54	0.20	2.6	7.5
COULTER MD8, MD16,MDII 8,16	15	5.39	0.17	3.1	5.4	15	7.49	0.20	2.6	7.5
COULTER S880,T540,T660,T890	9	5.42	0.13	2.4	5.5	9	7.51	0.24	3.2	7.5
Danam DC-16,1600,Excel,1800MS	10	5.36	0.12	2.2	5.4	10	7.43	0.32	4.4	7.3

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

Specimen HD-15

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	481	21.00	0.68	3.2	21.0
All ABX Instruments	130	20.81	0.52	2.5	20.8
All COULTER Instruments	440	21.57	0.58	2.7	21.6
All Danam/Drew Scientific Instruments	10	20.94	0.33	1.6	20.9
All Method	1082	21.21	0.69	3.3	21.3
Abbott Cell-Dyn 1600	18	20.55	0.63	3.1	20.5
Abbott Cell-Dyn 1700	198	21.09	0.68	3.2	21.1
Abbott Cell-Dyn 1800	263	20.97	0.67	3.2	21.0
ABX Diagnostics Micros/45/60	130	20.81	0.52	2.5	20.8
Bayer ADVIA 60	10	20.74	0.43	2.1	20.8
CDS Medonic CA 620	14	20.12	1.48	7.4	20.4
COULTER AcT 8/10	44	21.86	0.57	2.6	21.9
COULTER AcT diff/diff 2	372	21.55	0.58	2.7	21.6
COULTER MD8, MD16,MDII 8,16	15	21.35	0.52	2.4	21.4
COULTER S880,T540,T660,T890	9	21.38	0.55	2.6	21.5
Danam DC-16,1600,Excel,1800MS	10	20.94	0.33	1.6	20.9

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

<u>Instruments</u>	<u>Specimen HD-11</u>					<u>Specimen HD-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	479	4.695	0.128	2.7	4.69	476	5.575	0.149	2.7	5.58
All ABX Instruments	129	4.703	0.087	1.8	4.70	130	5.672	0.103	1.8	5.67
All COULTER Instruments	434	4.683	0.121	2.6	4.68	435	5.650	0.145	2.6	5.65
All Danam/Drew Scientific Instruments	10	4.740	0.078	1.6	4.79	10	5.691	0.067	1.2	5.67
All Method	1083	4.691	0.120	2.6	4.69	1078	5.622	0.146	2.6	5.63
Abbott Cell-Dyn 1600	17	4.716	0.097	2.1	4.73	17	5.638	0.141	2.5	5.69
Abbott Cell-Dyn 1700	196	4.715	0.136	2.9	4.71	193	5.619	0.153	2.7	5.63
Abbott Cell-Dyn 1800	263	4.677	0.119	2.6	4.68	264	5.539	0.137	2.5	5.54
ABX Diagnostics Micros/45/60	129	4.703	0.087	1.8	4.70	130	5.672	0.103	1.8	5.67
Bayer ADVIA 60	10	4.768	0.045	0.9	4.77	10	5.797	0.121	2.1	5.80
CDS Medonic CA 620	15	4.669	0.084	1.8	4.67	15	5.623	0.083	1.5	5.65
COULTER AcT 8/10	42	4.690	0.094	2.0	4.69	43	5.674	0.138	2.4	5.69
COULTER AcT diff/diff 2	371	4.679	0.128	2.7	4.68	368	5.646	0.147	2.6	5.64
COULTER MD8, MD16,MDII 8,16	14	4.739	0.084	1.8	4.73	15	5.693	0.140	2.5	5.66
COULTER S880,T540,T660,T890	9	4.713	0.094	2.0	4.72	9	5.667	0.098	1.7	5.66
Danam DC-16,1600,Excel,1800MS	10	4.740	0.078	1.6	4.79	10	5.691	0.067	1.2	5.67

<u>Instruments</u>	<u>Specimen HD-13</u>					<u>Specimen HD-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	481	4.351	0.109	2.5	4.36	477	2.704	0.072	2.7	2.71
All ABX Instruments	130	4.316	0.078	1.8	4.32	129	2.605	0.055	2.1	2.61
All COULTER Instruments	435	4.346	0.104	2.4	4.35	437	2.636	0.064	2.4	2.64
All Danam/Drew Scientific Instruments	10	4.365	0.065	1.5	4.33	10	2.638	0.037	1.4	2.65
All Method	1087	4.346	0.104	2.4	4.35	1088	2.661	0.078	2.9	2.66
Abbott Cell-Dyn 1600	17	4.358	0.101	2.3	4.37	17	2.686	0.058	2.1	2.70
Abbott Cell-Dyn 1700	196	4.352	0.116	2.7	4.35	197	2.669	0.077	2.9	2.67
Abbott Cell-Dyn 1800	265	4.349	0.103	2.4	4.36	263	2.728	0.063	2.3	2.73
ABX Diagnostics Micros/45/60	130	4.316	0.078	1.8	4.32	129	2.605	0.055	2.1	2.61
Bayer ADVIA 60	10	4.436	0.075	1.7	4.44	10	2.651	0.057	2.2	2.66
CDS Medonic CA 620	15	4.335	0.073	1.7	4.34	15	2.592	0.047	1.8	2.60
COULTER AcT 8/10	42	4.358	0.086	2.0	4.35	42	2.642	0.062	2.3	2.64
COULTER AcT diff/diff 2	370	4.344	0.106	2.5	4.34	371	2.634	0.064	2.4	2.63
COULTER MD8, MD16,MDII 8,16	15	4.365	0.116	2.7	4.37	15	2.661	0.080	3.0	2.66
COULTER S880,T540,T660,T890	9	4.358	0.100	2.3	4.41	9	2.664	0.054	2.0	2.69
Danam DC-16,1600,Excel,1800MS	10	4.365	0.065	1.5	4.33	10	2.638	0.037	1.4	2.65

<u>Instruments</u>	<u>Specimen HD-15</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	479	5.210	0.143	2.7	5.21
All ABX Instruments	131	5.270	0.098	1.9	5.27
All COULTER Instruments	436	5.267	0.136	2.6	5.26
All Danam/Drew Scientific Instruments	10	5.243	0.097	1.8	5.28
All Method	1085	5.242	0.137	2.6	5.25
Abbott Cell-Dyn 1600	17	5.276	0.104	2.0	5.28
Abbott Cell-Dyn 1700	197	5.247	0.156	3.0	5.26
Abbott Cell-Dyn 1800	263	5.177	0.127	2.5	5.18
ABX Diagnostics Micros/45/60	131	5.270	0.098	1.9	5.27
Bayer ADVIA 60	10	5.372	0.080	1.5	5.37
CDS Medonic CA 620	15	5.235	0.105	2.0	5.25
COULTER AcT 8/10	43	5.295	0.127	2.4	5.28
COULTER AcT diff/diff 2	370	5.262	0.136	2.6	5.26
COULTER MD8, MD16,MDII 8,16	15	5.322	0.197	3.7	5.31
COULTER S880,T540,T660,T890	9	5.296	0.112	2.1	5.36
Danam DC-16,1600,Excel,1800MS	10	5.243	0.097	1.8	5.28

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

Specimen HD-11

Specimen HD-12

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	478	15.90	0.35	2.2	15.9	480	18.44	0.42	2.3	18.5
All ABX Instruments	130	15.25	0.25	1.6	15.2	128	17.69	0.28	1.6	17.7
All COULTER Instruments	441	15.39	0.38	2.5	15.4	435	18.02	0.40	2.2	18.0
All Danam/Drew Scientific Instruments	10	15.66	0.22	1.4	15.7	10	18.21	0.22	1.2	18.2
All Method	1105	15.60	0.45	2.9	15.6	1101	18.16	0.49	2.7	18.1
Abbott Cell-Dyn 1600	17	15.80	0.44	2.8	15.9	18	18.36	0.35	1.9	18.4
Abbott Cell-Dyn 1700	196	15.65	0.28	1.8	15.6	195	18.12	0.32	1.7	18.1
Abbott Cell-Dyn 1800	263	16.09	0.27	1.7	16.1	263	18.70	0.30	1.6	18.7
ABX Diagnostics Micros/45/60	130	15.25	0.25	1.6	15.2	128	17.69	0.28	1.6	17.7
Bayer ADVIA 60	10	15.53	0.23	1.5	15.5	10	18.17	0.38	2.1	18.2
CDS Medonic CA 620	15	15.45	0.22	1.4	15.4	15	17.93	0.30	1.7	18.0
COULTER AcT 8/10	42	15.48	0.27	1.8	15.4	43	18.03	0.40	2.2	18.0
COULTER AcT diff/diff 2	373	15.37	0.38	2.5	15.4	369	18.03	0.42	2.3	18.0
COULTER MD8, MD16,MDII 8,16	15	15.40	0.45	2.9	15.5	15	17.99	0.38	2.1	17.9
COULTER S880,T540,T660,T890	9	15.40	0.44	2.9	15.5	9	17.90	0.33	1.9	17.9
Danam DC-16,1600,Excel,1800MS	10	15.66	0.22	1.4	15.7	10	18.21	0.22	1.2	18.2
HemoCue	8	15.20	0.46	3.0	15.3	8	17.74	0.36	2.0	17.8

Specimen HD-13

Specimen HD-14

All Abbott Cell-Dyn Instruments	486	14.01	0.31	2.2	14.0	481	8.63	0.22	2.5	8.6
All ABX Instruments	130	13.51	0.22	1.6	13.5	130	8.23	0.16	1.9	8.2
All COULTER Instruments	436	13.68	0.30	2.2	13.7	437	8.32	0.19	2.3	8.3
All Danam/Drew Scientific Instruments	10	13.71	0.14	1.1	13.7	10	8.33	0.09	1.1	8.3
All Method	1106	13.81	0.35	2.6	13.8	1101	8.45	0.26	3.1	8.4
Abbott Cell-Dyn 1600	18	13.92	0.24	1.7	14.0	18	8.54	0.17	2.0	8.5
Abbott Cell-Dyn 1700	195	13.77	0.21	1.5	13.8	195	8.45	0.14	1.6	8.4
Abbott Cell-Dyn 1800	268	14.19	0.22	1.6	14.2	263	8.77	0.15	1.7	8.8
ABX Diagnostics Micros/45/60	130	13.51	0.22	1.6	13.5	130	8.23	0.16	1.9	8.2
Bayer ADVIA 60	10	13.88	0.22	1.6	13.9	10	8.47	0.18	2.2	8.4
CDS Medonic CA 620	15	13.67	0.14	1.0	13.7	15	8.40	0.09	1.1	8.4
COULTER AcT 8/10	41	13.76	0.25	1.8	13.7	43	8.46	0.19	2.3	8.4
COULTER AcT diff/diff 2	370	13.67	0.30	2.2	13.7	370	8.30	0.18	2.2	8.3
COULTER MD8, MD16,MDII 8,16	15	13.65	0.30	2.2	13.7	15	8.35	0.25	3.0	8.4
COULTER S880,T540,T660,T890	9	13.74	0.31	2.3	13.7	9	8.39	0.27	3.2	8.4
Danam DC-16,1600,Excel,1800MS	10	13.71	0.14	1.1	13.7	10	8.33	0.09	1.1	8.3
HemoCue	8	13.64	0.36	2.6	13.6	8	8.15	0.38	4.7	8.2

Specimen HD-15

All Abbott Cell-Dyn Instruments	480	17.08	0.38	2.2	17.1
All ABX Instruments	129	16.32	0.25	1.6	16.3
All COULTER Instruments	434	16.59	0.36	2.2	16.6
All Danam/Drew Scientific Instruments	10	16.74	0.18	1.1	16.7
All Method	1099	16.77	0.46	2.8	16.7
Abbott Cell-Dyn 1600	18	17.06	0.34	2.0	17.1
Abbott Cell-Dyn 1700	195	16.77	0.27	1.6	16.8
Abbott Cell-Dyn 1800	264	17.30	0.28	1.6	17.3
ABX Diagnostics Micros/45/60	129	16.32	0.25	1.6	16.3
Bayer ADVIA 60	10	16.78	0.24	1.5	16.7
CDS Medonic CA 620	15	16.43	0.27	1.7	16.5
COULTER AcT 8/10	43	16.68	0.35	2.1	16.6
COULTER AcT diff/diff 2	367	16.58	0.37	2.2	16.6
COULTER MD8, MD16,MDII 8,16	15	16.59	0.33	2.0	16.5
COULTER S880,T540,T660,T890	9	16.67	0.38	2.3	16.6
Danam DC-16,1600,Excel,1800MS	10	16.74	0.18	1.1	16.7
HemoCue	8	16.25	0.46	2.8	16.3

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

Specimen HD-11

Specimen HD-12

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	479	46.27	1.37	3.0	46.2	477	53.67	1.61	3.0	53.7
All ABX Instruments	131	44.29	0.86	1.9	44.3	128	52.55	0.98	1.9	52.5
All COULTER Instruments	439	45.29	1.32	2.9	45.3	434	53.36	1.48	2.8	53.3
All Danam/Drew Scientific Instruments	10	46.26	0.89	1.9	46.4	10	54.30	0.96	1.8	54.4
All Method	1089	45.56	1.45	3.2	45.6	1084	53.40	1.56	2.9	53.3
Abbott Cell-Dyn 1600	17	47.06	1.26	2.7	46.8	18	54.39	2.39	4.4	54.7
Abbott Cell-Dyn 1700	197	46.26	1.42	3.1	46.3	194	53.93	1.57	2.9	54.0
Abbott Cell-Dyn 1800	262	46.20	1.31	2.8	46.2	265	53.42	1.61	3.0	53.5
ABX Diagnostics Micros/45/60	131	44.29	0.86	1.9	44.3	128	52.55	0.98	1.9	52.5
Bayer ADVIA 60	10	44.86	0.34	0.8	44.8	10	53.70	1.35	2.5	53.6
CDS Medonic CA 620	16	44.24	1.46	3.3	43.9	16	52.12	1.36	2.6	51.7
COULTER AcT 8/10	41	45.88	0.94	2.0	45.9	42	54.30	1.52	2.8	54.4
COULTER AcT diff/diff 2	374	45.21	1.34	3.0	45.2	369	53.24	1.47	2.8	53.1
COULTER MD8, MD16,MDII 8,16	15	45.87	1.27	2.8	45.9	15	53.86	1.58	2.9	53.6
COULTER S880,T540,T660,T890	9	44.21	2.80	6.3	44.9	9	52.20	3.69	7.1	53.2
Danam DC-16,1600,Excel,1800MS	10	46.26	0.89	1.9	46.4	10	54.30	0.96	1.8	54.4

Specimen HD-13

Specimen HD-14

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	483	41.42	1.16	2.8	41.5	481	25.22	0.79	3.1	25.3
All ABX Instruments	130	39.24	0.80	2.0	39.3	129	23.00	0.48	2.1	23.0
All COULTER Instruments	438	40.60	1.09	2.7	40.6	435	24.25	0.66	2.7	24.2
All Danam/Drew Scientific Instruments	10	41.28	0.59	1.4	41.2	10	24.64	0.42	1.7	24.7
All Method	1095	40.78	1.31	3.2	40.8	1094	24.51	1.04	4.3	24.5
Abbott Cell-Dyn 1600	18	41.70	1.54	3.7	42.2	18	25.26	0.80	3.2	25.5
Abbott Cell-Dyn 1700	195	41.34	1.16	2.8	41.4	197	24.89	0.77	3.1	24.9
Abbott Cell-Dyn 1800	267	41.47	1.12	2.7	41.5	263	25.47	0.69	2.7	25.5
ABX Diagnostics Micros/45/60	130	39.24	0.80	2.0	39.3	129	23.00	0.48	2.1	23.0
Bayer ADVIA 60	10	40.37	0.76	1.9	40.3	10	23.39	0.59	2.5	23.4
CDS Medonic CA 620	16	39.58	1.16	2.9	39.4	16	23.16	0.67	2.9	23.1
COULTER AcT 8/10	41	41.09	0.82	2.0	41.1	41	24.53	0.57	2.3	24.6
COULTER AcT diff/diff 2	373	40.53	1.10	2.7	40.5	371	24.20	0.65	2.7	24.2
COULTER MD8, MD16,MDII 8,16	15	40.93	1.22	3.0	41.1	15	24.61	0.90	3.7	24.5
COULTER S880,T540,T660,T890	9	39.76	2.95	7.4	40.8	9	23.99	1.63	6.8	24.4
Danam DC-16,1600,Excel,1800MS	10	41.28	0.59	1.4	41.2	10	24.64	0.42	1.7	24.7

Specimen HD-15

All Abbott Cell-Dyn Instruments	481	48.91	1.54	3.2	49.1
All ABX Instruments	129	47.65	0.96	2.0	47.7
All COULTER Instruments	435	48.62	1.37	2.8	48.6
All Danam/Drew Scientific Instruments	10	48.86	1.08	2.2	48.9
All Method	1087	48.61	1.48	3.0	48.6
Abbott Cell-Dyn 1600	18	49.88	1.58	3.2	50.5
Abbott Cell-Dyn 1700	196	49.27	1.53	3.1	49.4
Abbott Cell-Dyn 1800	264	48.58	1.44	3.0	48.7
ABX Diagnostics Micros/45/60	129	47.65	0.96	2.0	47.7
Bayer ADVIA 60	10	48.49	0.86	1.8	48.7
CDS Medonic CA 620	16	47.26	1.56	3.3	47.3
COULTER AcT 8/10	42	49.56	1.36	2.7	49.5
COULTER AcT diff/diff 2	371	48.51	1.36	2.8	48.5
COULTER MD8, MD16,MDII 8,16	15	49.27	2.02	4.1	49.0
COULTER S880,T540,T660,T890	9	47.93	3.30	6.9	48.7
Danam DC-16,1600,Excel,1800MS	10	48.86	1.08	2.2	48.9

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

<u>Instruments</u>	<u>Specimen HD-11</u>					<u>Specimen HD-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	484	570.1	39.2	6.9	566	483	402.9	28.8	7.1	402
All ABX Instruments	130	536.0	25.3	4.7	535	132	350.8	18.9	5.4	348
All COULTER Instruments	440	475.0	28.4	6.0	472	437	304.1	21.2	7.0	303
All Danam/Drew Scientific Instruments	10	522.8	24.8	4.7	526	10	362.2	25.0	6.9	354
All Method	1099	525.7	55.4	10.5	526	1100	355.3	52.0	14.6	353
Abbott Cell-Dyn 1600	18	534.7	30.5	5.7	535	18	377.4	22.7	6.0	376
Abbott Cell-Dyn 1700	198	589.3	41.6	7.1	594	199	413.3	32.1	7.8	418
Abbott Cell-Dyn 1800	262	557.1	27.9	5.0	556	262	396.2	22.2	5.6	396
ABX Diagnostics Micros/45/60	130	536.0	25.3	4.7	535	132	350.8	18.9	5.4	348
Bayer ADVIA 60	10	535.8	32.0	6.0	533	10	360.0	18.3	5.1	361
CDS Medonic CA 620	15	502.6	29.1	5.8	494	15	338.3	25.4	7.5	333
COULTER AcT 8/10	43	465.8	25.5	5.5	464	43	303.4	24.2	8.0	301
COULTER AcT diff/diff 2	375	474.7	28.0	5.9	472	373	303.0	19.8	6.5	303
COULTER MD8, MD16,MDII 8,16	14	500.1	33.1	6.6	512	14	320.9	33.6	10.5	325
COULTER S880,T540,T660,T890	8	492.4	23.1	4.7	497	8	339.9	14.1	4.1	346
Danam DC-16,1600,Excel,1800MS	10	522.8	24.8	4.7	526	10	362.2	25.0	6.9	354

<u>Instruments</u>	<u>Specimen HD-13</u>					<u>Specimen HD-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	480	166.4	12.8	7.7	166	482	293.6	21.0	7.1	291
All ABX Instruments	131	156.5	10.2	6.5	157	131	296.5	14.6	4.9	296
All COULTER Instruments	436	130.6	8.5	6.5	130	440	243.7	14.8	6.1	243
All Danam/Drew Scientific Instruments	10	157.8	13.1	8.3	159	10	273.5	12.6	4.6	276
All Method	1097	150.4	20.1	13.3	151	1096	273.2	30.3	11.1	275
Abbott Cell-Dyn 1600	18	156.8	10.7	6.8	156	18	277.7	11.9	4.3	278
Abbott Cell-Dyn 1700	197	170.3	14.7	8.6	171	198	304.1	24.0	7.9	307
Abbott Cell-Dyn 1800	261	164.0	10.0	6.1	163	264	286.8	14.9	5.2	287
ABX Diagnostics Micros/45/60	131	156.5	10.2	6.5	157	131	296.5	14.6	4.9	296
Bayer ADVIA 60	10	159.1	12.9	8.1	161	10	299.6	16.4	5.5	298
CDS Medonic CA 620	15	146.6	11.8	8.1	144	15	262.4	15.5	5.9	259
COULTER AcT 8/10	42	129.5	7.1	5.5	129	43	246.4	16.3	6.6	245
COULTER AcT diff/diff 2	373	130.2	8.3	6.4	130	374	242.9	14.1	5.8	243
COULTER MD8, MD16,MDII 8,16	15	138.6	12.4	8.9	139	15	252.7	22.8	9.0	253
COULTER S880,T540,T660,T890	8	143.1	9.4	6.6	148	8	252.4	14.5	5.8	262
Danam DC-16,1600,Excel,1800MS	10	157.8	13.1	8.3	159	10	273.5	12.6	4.6	276

<u>Instruments</u>	<u>Specimen HD-15</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	482	667.0	47.8	7.2	660
All ABX Instruments	130	600.6	25.7	4.3	597
All COULTER Instruments	437	507.7	34.7	6.8	504
All Danam/Drew Scientific Instruments	10	600.3	33.8	5.6	596
All Method	1095	592.5	83.7	14.1	597
Abbott Cell-Dyn 1600	18	637.1	26.3	4.1	633
Abbott Cell-Dyn 1700	198	695.3	50.7	7.3	702
Abbott Cell-Dyn 1800	262	647.8	32.8	5.1	644
ABX Diagnostics Micros/45/60	130	600.6	25.7	4.3	597
Bayer ADVIA 60	10	613.9	35.3	5.8	612
CDS Medonic CA 620	15	569.9	29.0	5.1	569
COULTER AcT 8/10	43	511.7	37.5	7.3	501
COULTER AcT diff/diff 2	369	504.4	31.3	6.2	502
COULTER MD8, MD16,MDII 8,16	15	536.9	50.3	9.4	540
COULTER S880,T540,T660,T890	8	561.2	35.3	6.3	570
Danam DC-16,1600,Excel,1800MS	10	600.3	33.8	5.6	596

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

<u><i>Instruments</i></u>	Specimen HD-11					Specimen HD-12				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All Abbott Cell-Dyn Instruments	442	43.17	1.99	4.6	43.0	441	23.79	1.29	5.4	23.7
All ABX Instruments	124	41.96	1.19	2.8	41.8	125	23.23	0.72	3.1	23.2
All COULTER Instruments	370	47.52	1.04	2.2	47.6	382	25.86	0.84	3.3	25.9
All Danam/Drew Scientific Instruments	10	45.78	2.18	4.8	47.3	10	25.15	1.67	6.6	26.0
All Method	996	44.62	2.92	6.5	44.8	995	24.54	1.56	6.4	24.7
Abbott Cell-Dyn 1600	16	43.93	1.45	3.3	44.2	17	24.49	1.12	4.6	24.7
Abbott Cell-Dyn 1700	176	45.01	1.18	2.6	45.0	174	24.84	0.87	3.5	24.8
Abbott Cell-Dyn 1800	247	41.81	1.18	2.8	41.9	245	22.98	0.85	3.7	22.9
ABX Diagnostics Micros/45/60	124	41.96	1.19	2.8	41.8	125	23.23	0.72	3.1	23.2
Bayer ADVIA 60	10	42.52	1.17	2.7	41.9	10	23.27	0.45	1.9	23.5
CDS Medonic CA 620	14	51.90	3.82	7.4	53.7	14	29.03	2.92	10.1	29.5
COULTER AcT 8/10	29	39.15	1.15	2.9	39.4	29	22.54	0.74	3.3	22.6
COULTER AcT diff/diff 2	347	47.64	0.55	1.1	47.6	347	25.95	0.56	2.2	25.9
COULTER MD8, MD16,MDII 8,16	13	47.74	1.08	2.3	47.7	13	26.55	0.63	2.4	26.6
Danam DC-16,1600,Excel,1800MS	10	45.78	2.18	4.8	47.3	10	25.15	1.67	6.6	26.0
Specimen HD-13										
All Abbott Cell-Dyn Instruments	443	33.47	1.74	5.2	33.4	439	25.70	1.32	5.1	25.7
All ABX Instruments	126	32.83	1.16	3.5	32.9	125	25.52	0.89	3.5	25.4
All COULTER Instruments	382	36.12	1.04	2.9	36.2	381	28.25	0.90	3.2	28.3
All Danam/Drew Scientific Instruments	10	35.62	1.51	4.2	35.9	10	27.54	1.76	6.4	28.7
All Method	996	34.48	2.04	5.9	34.7	991	26.72	1.73	6.5	26.8
Abbott Cell-Dyn 1600	17	33.83	1.94	5.7	34.0	16	26.48	0.59	2.2	26.5
Abbott Cell-Dyn 1700	175	34.97	1.06	3.0	35.0	174	26.79	0.87	3.3	26.8
Abbott Cell-Dyn 1800	248	32.39	1.18	3.7	32.5	244	24.85	0.90	3.6	24.8
ABX Diagnostics Micros/45/60	126	32.83	1.16	3.5	32.9	125	25.52	0.89	3.5	25.4
Bayer ADVIA 60	10	32.98	0.93	2.8	32.9	10	25.70	0.69	2.7	25.7
CDS Medonic CA 620	14	40.18	3.16	7.9	40.7	13	30.98	2.77	9.0	31.5
COULTER AcT 8/10	29	32.65	0.92	2.8	32.7	29	25.00	0.65	2.6	25.0
COULTER AcT diff/diff 2	342	36.29	0.72	2.0	36.3	345	28.39	0.64	2.2	28.4
COULTER MD8, MD16,MDII 8,16	13	36.48	0.87	2.4	36.1	13	28.68	0.72	2.5	28.9
Danam DC-16,1600,Excel,1800MS	10	35.62	1.51	4.2	35.9	10	27.54	1.76	6.4	28.7
Specimen HD-15										
All Abbott Cell-Dyn Instruments	440	42.22	1.91	4.5	42.1					
All ABX Instruments	124	41.78	1.16	2.8	41.7					
All COULTER Instruments	367	46.88	1.14	2.4	47.0					
All Danam/Drew Scientific Instruments	10	45.43	1.70	3.7	46.5					
All Method	990	43.88	2.96	6.7	43.8					
Abbott Cell-Dyn 1600	17	43.27	1.62	3.7	43.7					
Abbott Cell-Dyn 1700	175	43.99	1.03	2.3	43.9					
Abbott Cell-Dyn 1800	245	40.85	1.11	2.7	40.9					
ABX Diagnostics Micros/45/60	124	41.78	1.16	2.8	41.7					
Bayer ADVIA 60	10	42.11	0.85	2.0	42.1					
CDS Medonic CA 620	14	50.82	3.49	6.9	50.2					
COULTER AcT 8/10	28	38.19	1.22	3.2	38.2					
COULTER AcT diff/diff 2	343	47.03	0.50	1.1	47.0					
COULTER MD8, MD16,MDII 8,16	13	47.36	1.26	2.7	47.8					
Danam DC-16,1600,Excel,1800MS	10	45.43	1.70	3.7	46.5					

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

<u>Instruments</u>	<u>Specimen HD-11</u>					<u>Specimen HD-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	436	7.54	1.50	19.9	7.7	435	6.07	1.08	17.7	6.3
All ABX Instruments	127	6.18	0.76	12.3	6.2	125	3.86	0.36	9.2	3.9
All COULTER Instruments	351	6.15	0.31	5.0	6.2	357	5.30	0.41	7.8	5.3
All Danam/Drew Scientific Instruments	10	4.45	0.15	3.4	4.5	10	3.97	0.29	7.3	4.1
All Method	954	6.74	1.27	18.9	6.3	959	5.45	1.09	20.1	5.3
Abbott Cell-Dyn 1600	17	5.59	1.56	27.8	4.8	17	3.64	0.55	15.1	3.6
Abbott Cell-Dyn 1700	172	6.09	0.38	6.2	6.0	173	5.11	0.33	6.4	5.1
Abbott Cell-Dyn 1800	241	8.64	0.73	8.4	8.6	243	6.90	0.48	6.9	6.9
ABX Diagnostics Micros/45/60	127	6.18	0.76	12.3	6.2	125	3.86	0.36	9.2	3.9
Bayer ADVIA 60	10	5.72	0.57	9.9	5.8	10	3.74	0.30	7.9	3.9
CDS Medonic CA 620	14	5.79	0.72	12.4	5.8	14	5.99	0.75	12.5	5.8
COULTER AcT diff/diff 2	338	6.15	0.31	5.0	6.2	344	5.29	0.40	7.7	5.3
COULTER MD8, MD16,MDII 8,16	13	6.23	0.30	4.9	6.3	13	5.67	0.45	8.0	5.5
Danam DC-16,1600,Excel,1800MS	10	4.45	0.15	3.4	4.5	10	3.97	0.29	7.3	4.1

<u>Instruments</u>	<u>Specimen HD-13</u>					<u>Specimen HD-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	437	8.97	1.49	16.6	9.2	434	6.26	1.10	17.6	6.5
All ABX Instruments	126	5.90	0.54	9.1	5.9	126	4.00	0.43	10.6	4.0
All COULTER Instruments	355	9.19	0.52	5.7	9.2	356	6.29	0.37	6.0	6.3
All Danam/Drew Scientific Instruments	10	6.35	0.34	5.4	6.4	10	4.22	0.25	5.9	4.2
All Method	959	8.56	1.58	18.5	8.9	957	5.94	1.16	19.5	6.2
Abbott Cell-Dyn 1600	17	5.36	0.70	13.0	5.2	17	3.61	0.50	13.9	3.5
Abbott Cell-Dyn 1700	172	7.70	0.53	6.9	7.7	171	5.33	0.34	6.4	5.3
Abbott Cell-Dyn 1800	245	10.06	0.70	6.9	10.1	243	7.08	0.55	7.7	7.0
ABX Diagnostics Micros/45/60	126	5.90	0.54	9.1	5.9	126	4.00	0.43	10.6	4.0
Bayer ADVIA 60	10	5.65	0.56	10.0	5.7	10	3.92	0.33	8.4	4.0
CDS Medonic CA 620	14	7.74	0.95	12.3	7.7	13	7.14	1.16	16.3	7.5
COULTER AcT diff/diff 2	342	9.18	0.52	5.6	9.2	343	6.28	0.36	5.8	6.3
COULTER MD8, MD16,MDII 8,16	13	9.39	0.65	6.9	9.3	13	6.52	0.58	8.8	6.6
Danam DC-16,1600,Excel,1800MS	10	6.35	0.34	5.4	6.4	10	4.22	0.25	5.9	4.2

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	436	8.00	1.54	19.3	8.3
All ABX Instruments	127	5.86	0.63	10.7	5.8
All COULTER Instruments	356	6.88	0.31	4.5	6.9
All Danam/Drew Scientific Instruments	10	4.87	0.29	6.0	4.9
All Method	955	7.21	1.34	18.6	6.9
Abbott Cell-Dyn 1600	16	5.13	0.67	13.1	4.9
Abbott Cell-Dyn 1700	173	6.56	0.36	5.5	6.5
Abbott Cell-Dyn 1800	242	9.19	0.74	8.0	9.1
ABX Diagnostics Micros/45/60	127	5.86	0.63	10.7	5.8
Bayer ADVIA 60	10	5.52	0.45	8.1	5.7
CDS Medonic CA 620	14	6.56	0.65	9.9	6.7
COULTER AcT diff/diff 2	343	6.87	0.31	4.5	6.9
COULTER MD8, MD16,MDII 8,16	13	7.08	0.20	2.8	7.0
Danam DC-16,1600,Excel,1800MS	10	4.87	0.29	6.0	4.9

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

<u>Instruments</u>	Specimen HD-11					Specimen HD-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	433	49.34	0.88	1.8	49.4	437	70.14	0.94	1.3	70.1
All ABX Instruments	126	51.82	0.71	1.4	51.9	124	72.93	0.67	0.9	73.0
All COULTER Instruments	356	46.22	0.62	1.3	46.2	356	68.72	0.67	1.0	68.8
All Danam/Drew Scientific Instruments	10	49.76	2.14	4.3	49.0	10	70.89	1.59	2.2	70.8
All Method	959	48.47	2.16	4.4	48.8	961	69.96	1.64	2.4	69.7
Abbott Cell-Dyn 1600	16	50.71	0.55	1.1	50.7	17	71.88	0.77	1.1	71.8
Abbott Cell-Dyn 1700	174	48.88	1.08	2.2	49.1	174	70.03	0.98	1.4	70.1
Abbott Cell-Dyn 1800	245	49.53	0.62	1.2	49.5	245	70.14	0.78	1.1	70.1
ABX Diagnostics Micros/45/60	126	51.82	0.71	1.4	51.9	124	72.93	0.67	0.9	73.0
Bayer ADVIA 60	10	51.76	0.82	1.6	51.9	10	72.99	0.61	0.8	73.0
CDS Medonic CA 620	15	42.70	4.33	10.1	43.8	15	65.28	3.48	5.3	65.0
COULTER AcT diff/diff 2	344	46.22	0.62	1.3	46.2	344	68.75	0.65	0.9	68.8
COULTER MD8, MD16,MDII 8,16	13	46.03	1.03	2.2	46.1	13	67.78	0.90	1.3	67.7
Danam DC-16,1600,Excel,1800MS	10	49.76	2.14	4.3	49.0	10	70.89	1.59	2.2	70.8
Specimen HD-13										
All Abbott Cell-Dyn Instruments	435	57.52	1.17	2.0	57.5	432	68.06	0.92	1.4	68.0
All ABX Instruments	125	61.31	1.16	1.9	61.3	125	70.47	0.89	1.3	70.5
All COULTER Instruments	353	54.50	0.83	1.5	54.5	358	65.32	0.69	1.1	65.3
All Danam/Drew Scientific Instruments	10	58.02	1.25	2.2	57.8	10	68.22	1.68	2.5	67.3
All Method	961	56.88	2.59	4.6	56.8	956	67.31	2.03	3.0	67.4
Abbott Cell-Dyn 1600	17	60.84	1.56	2.6	60.7	17	70.14	0.86	1.2	69.9
Abbott Cell-Dyn 1700	175	57.29	1.15	2.0	57.2	173	67.87	0.95	1.4	67.9
Abbott Cell-Dyn 1800	246	57.57	0.97	1.7	57.6	245	68.02	0.86	1.3	68.1
ABX Diagnostics Micros/45/60	125	61.31	1.16	1.9	61.3	125	70.47	0.89	1.3	70.5
Bayer ADVIA 60	10	61.37	0.98	1.6	61.1	10	70.38	0.86	1.2	70.4
CDS Medonic CA 620	15	52.35	3.70	7.1	53.4	14	62.09	3.57	5.7	62.8
COULTER AcT diff/diff 2	340	54.52	0.83	1.5	54.5	346	65.33	0.68	1.0	65.4
COULTER MD8, MD16,MDII 8,16	13	54.13	0.79	1.5	54.2	13	64.78	1.01	1.6	64.7
Danam DC-16,1600,Excel,1800MS	10	58.02	1.25	2.2	57.8	10	68.22	1.68	2.5	67.3
Specimen HD-15										
All Abbott Cell-Dyn Instruments	434	49.82	0.87	1.7	49.9					
All ABX Instruments	124	52.34	0.82	1.6	52.4					
All COULTER Instruments	355	46.10	0.59	1.3	46.1					
All Danam/Drew Scientific Instruments	10	49.70	1.54	3.1	49.1					
All Method	955	48.70	2.41	4.9	49.3					
Abbott Cell-Dyn 1600	17	51.36	0.71	1.4	51.4					
Abbott Cell-Dyn 1700	175	49.44	1.04	2.1	49.6					
Abbott Cell-Dyn 1800	243	49.94	0.60	1.2	50.0					
ABX Diagnostics Micros/45/60	124	52.34	0.82	1.6	52.4					
Bayer ADVIA 60	10	52.37	0.69	1.3	52.5					
CDS Medonic CA 620	15	42.16	3.90	9.3	43.6					
COULTER AcT diff/diff 2	341	46.10	0.55	1.2	46.1					
COULTER MD8, MD16,MDII 8,16	13	45.56	1.21	2.7	45.1					
Danam DC-16,1600,Excel,1800MS	10	49.70	1.54	3.1	49.1					

WAIVED HEMATOLOGY–HEMOGLOBIN (g/dL)

Specimen HD-11

Specimen HD-12

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	36	14.07	2.19	15.5	14.9	37	15.45	3.52	22.8	17.3
HemoCue	24	14.95	0.49	3.3	14.9	25	16.54	2.04	12.4	17.4
Stanbio HemoPoint H2	7	13.84	3.53	25.5	15.4	7	16.99	1.42	8.4	17.4

WAIVED HEMATOLOGY–HEMATOCRIT (percent)

Specimen HD-11

Specimen HD-12

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Microhematocrit Methods	18	46.15	2.82	6.1	46.0	19	54.61	4.87	8.9	54.0
All Method	20	46.18	2.68	5.8	46.0	21	54.49	4.63	8.5	54.0
Clay Adam Auto,Readacrit,Triac	6	49.33	7.58	15.4	50.0	6	58.17	6.62	11.4	57.0
CritSpin/StatSpin	7	47.14	2.34	5.0	48.0	7	54.00	2.89	5.3	54.0
Microhematocrit	6	44.62	1.86	4.2	44.7	6	51.75	2.44	4.7	51.0

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

Specimen DIF-11

Specimen DIF-12

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	5.17	0.14	2.7	5.1	7	11.07	0.24	2.1	11.0
All COULTER Instruments	31	5.07	0.12	2.4	5.0	31	12.02	0.27	2.2	11.9
All Sysmex Instruments	22	4.96	0.16	3.2	5.0	22	11.94	0.36	3.0	12.0
All Method	61	5.04	0.15	3.0	5.0	61	11.87	0.42	3.5	11.9
COULTER HmX	13	5.10	0.14	2.8	5.1	13	12.12	0.29	2.4	12.1
COULTER LH750	6	5.00	0.06	1.3	5.0	6	11.77	0.20	1.7	11.9
COULTER MAXM, MAXM A/L	9	5.07	0.13	2.6	5.0	9	12.04	0.22	1.9	11.9
Sysmex XS-1000i	8	5.04	0.12	2.4	5.1	8	12.22	0.10	0.8	12.2
Sysmex XT-2000i	9	4.88	0.12	2.5	4.8	9	11.67	0.22	1.9	11.7

Specimen DIF-13

Specimen DIF-14

All Abbott Cell-Dyn Instruments	7	3.01	0.15	4.9	2.9	7	5.70	0.24	4.3	5.7
All COULTER Instruments	30	3.13	0.08	2.7	3.1	31	6.10	0.12	1.9	6.1
All Sysmex Instruments	22	2.99	0.11	3.6	3.0	22	5.96	0.18	3.1	5.9
All Method	60	3.06	0.12	3.9	3.1	61	6.00	0.20	3.4	6.0
COULTER HmX	12	3.15	0.05	1.7	3.2	13	6.09	0.12	1.9	6.1
COULTER LH750	6	3.03	0.05	1.7	3.0	6	6.02	0.10	1.6	6.0
COULTER MAXM, MAXM A/L	9	3.14	0.09	2.8	3.1	9	6.14	0.10	1.6	6.2
Sysmex XS-1000i	8	3.05	0.12	3.9	3.0	8	6.11	0.15	2.4	6.2
Sysmex XT-2000i	9	2.93	0.09	3.0	2.9	9	5.81	0.12	2.0	5.8

Specimen DIF-15

All Abbott Cell-Dyn Instruments	7	10.94	0.48	4.4	11.1
All COULTER Instruments	31	12.04	0.23	1.9	12.0
All Sysmex Instruments	22	11.88	0.30	2.6	11.9
All Method	58	11.91	0.33	2.7	12.0
COULTER HmX	13	12.07	0.26	2.1	12.1
COULTER LH750	6	11.88	0.15	1.2	11.9
COULTER MAXM, MAXM A/L	9	12.10	0.24	2.0	12.1
Sysmex XS-1000i	8	12.11	0.18	1.5	12.2
Sysmex XT-2000i	9	11.62	0.19	1.6	11.7

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

<u>Instruments</u>	<u>Specimen DIF-11</u>					<u>Specimen DIF-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	3.317	0.036	1.1	3.32	7	3.976	0.030	0.8	3.97
All COULTER Instruments	31	3.294	0.068	2.1	3.30	30	3.906	0.069	1.8	3.91
All Sysmex Instruments	22	3.331	0.053	1.6	3.33	22	3.974	0.064	1.6	3.98
All Method	61	3.312	0.062	1.9	3.31	60	3.941	0.072	1.8	3.95
COULTER HmX	13	3.305	0.085	2.6	3.31	13	3.905	0.083	2.1	3.93
COULTER LH750	6	3.252	0.028	0.9	3.25	6	3.713	0.409	11.0	3.88
COULTER MAXM, MAXM A/L	9	3.303	0.067	2.0	3.31	9	3.934	0.062	1.6	3.91
Sysmex XS-1000i	8	3.275	0.028	0.8	3.28	8	3.918	0.054	1.4	3.93
Sysmex XT-2000i	9	3.362	0.037	1.1	3.38	9	4.007	0.040	1.0	4.01

<u>Instruments</u>	<u>Specimen DIF-13</u>					<u>Specimen DIF-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	2.849	0.020	0.7	2.84	7	3.400	0.051	1.5	3.37
All COULTER Instruments	31	2.823	0.053	1.9	2.82	31	3.361	0.068	2.0	3.36
All Sysmex Instruments	22	2.867	0.058	2.0	2.89	22	3.419	0.073	2.1	3.43
All Method	61	2.842	0.056	2.0	2.84	61	3.387	0.072	2.1	3.38
COULTER HmX	13	2.834	0.062	2.2	2.85	13	3.368	0.083	2.5	3.38
COULTER LH750	6	2.778	0.023	0.8	2.78	6	3.323	0.018	0.5	3.33
COULTER MAXM, MAXM A/L	9	2.832	0.051	1.8	2.82	9	3.371	0.071	2.1	3.39
Sysmex XS-1000i	8	2.802	0.037	1.3	2.83	8	3.341	0.047	1.4	3.35
Sysmex XT-2000i	9	2.903	0.027	0.9	2.91	9	3.459	0.036	1.0	3.47

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	3.373	0.205	6.1	3.43
All COULTER Instruments	30	3.437	0.066	1.9	3.44
All Sysmex Instruments	22	3.473	0.059	1.7	3.48
All Method	59	3.453	0.063	1.8	3.45
COULTER HmX	12	3.441	0.079	2.3	3.45
COULTER LH750	6	3.405	0.024	0.7	3.41
COULTER MAXM, MAXM A/L	9	3.446	0.076	2.2	3.47
Sysmex XS-1000i	8	3.418	0.042	1.2	3.42
Sysmex XT-2000i	9	3.500	0.042	1.2	3.51

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

<u>Instruments</u>	<u>Specimen DIF-11</u>					<u>Specimen DIF-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	10.36	0.13	1.2	10.3	7	11.07	0.13	1.1	11.1
All COULTER Instruments	31	10.30	0.14	1.4	10.3	31	10.89	0.14	1.3	10.9
All Sysmex Instruments	22	10.35	0.14	1.4	10.4	22	10.99	0.15	1.4	11.0
All Method	61	10.32	0.14	1.4	10.3	61	10.95	0.16	1.4	10.9
COULTER HmX	13	10.35	0.13	1.2	10.3	13	10.94	0.13	1.2	10.9
COULTER LH750	6	10.30	0.11	1.1	10.3	6	10.87	0.10	1.0	10.9
COULTER MAXM, MAXM A/L	9	10.24	0.19	1.9	10.2	9	10.83	0.19	1.7	10.8
Sysmex XS-1000i	8	10.20	0.08	0.7	10.2	8	10.91	0.11	1.0	10.9
Sysmex XT-2000i	9	10.47	0.05	0.5	10.5	9	11.08	0.11	1.0	11.1

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

<u>Instruments</u>	<u>Specimen DIF-13</u>					<u>Specimen DIF-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	7.59	0.13	1.8	7.6	7	8.96	0.20	2.2	9.0
All COULTER Instruments	31	7.48	0.10	1.3	7.5	31	8.83	0.14	1.6	8.9
All Sysmex Instruments	22	7.42	0.11	1.5	7.4	22	8.81	0.12	1.4	8.9
All Method	61	7.47	0.11	1.5	7.5	61	8.84	0.15	1.7	8.9
COULTER HmX	13	7.52	0.10	1.3	7.6	13	8.87	0.14	1.6	8.9
COULTER LH750	6	7.43	0.08	1.1	7.5	6	8.80	0.13	1.4	8.9
COULTER MAXM, MAXM A/L	9	7.46	0.09	1.2	7.4	9	8.78	0.18	2.0	8.7
Sysmex XS-1000i	8	7.32	0.09	1.2	7.3	8	8.70	0.11	1.2	8.7
Sysmex XT-2000i	9	7.46	0.05	0.7	7.5	9	8.87	0.05	0.6	8.9

<u>Specimen DIF-15</u>										
<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	9.71	0.20	2.0	9.7					
All COULTER Instruments	31	9.62	0.15	1.5	9.7					
All Sysmex Instruments	22	9.60	0.13	1.4	9.6					
All Method	60	9.62	0.14	1.4	9.7					
COULTER HmX	13	9.67	0.13	1.4	9.7					
COULTER LH750	6	9.58	0.13	1.4	9.7					
COULTER MAXM, MAXM A/L	9	9.59	0.19	2.0	9.5					
Sysmex XS-1000i	8	9.52	0.16	1.7	9.5					
Sysmex XT-2000i	9	9.66	0.07	0.8	9.6					

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

<u>Instruments</u>	<u>Specimen DIF-11</u>					<u>Specimen DIF-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	30.14	0.59	2.0	29.9	7	32.36	0.36	1.1	32.3
All COULTER Instruments	31	29.12	0.61	2.1	29.1	31	30.80	0.52	1.7	30.8
All Sysmex Instruments	21	30.25	0.62	2.0	30.3	22	31.81	0.93	2.9	32.1
All Method	61	29.63	0.87	2.9	29.6	61	31.37	0.91	2.9	31.3
COULTER HmX	13	29.16	0.67	2.3	29.3	13	30.73	0.58	1.9	30.8
COULTER LH750	6	28.83	0.20	0.7	28.8	6	30.85	0.18	0.6	30.8
COULTER MAXM, MAXM A/L	9	29.21	0.77	2.6	29.0	9	30.93	0.53	1.7	30.9
Sysmex XS-1000i	8	29.85	0.63	2.1	29.9	8	31.51	0.85	2.7	31.4
Sysmex XT-2000i	9	30.72	0.37	1.2	30.7	9	32.37	0.42	1.3	32.5

<u>Instruments</u>	<u>Specimen DIF-13</u>					<u>Specimen DIF-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	22.51	0.21	0.9	22.5	7	26.93	0.45	1.7	26.7
All COULTER Instruments	30	21.59	0.33	1.5	21.6	31	25.82	0.51	2.0	25.8
All Sysmex Instruments	22	22.67	0.62	2.7	22.8	22	26.94	0.75	2.8	27.1
All Method	61	22.13	0.70	3.2	22.0	61	26.38	0.83	3.1	26.5
COULTER HmX	13	21.68	0.41	1.9	21.7	13	25.82	0.53	2.0	25.9
COULTER LH750	6	21.32	0.17	0.8	21.3	6	25.62	0.15	0.6	25.7
COULTER MAXM, MAXM A/L	9	21.76	0.49	2.3	21.6	9	25.92	0.69	2.7	25.8
Sysmex XS-1000i	8	22.35	0.48	2.2	22.5	8	26.52	0.46	1.7	26.5
Sysmex XT-2000i	9	23.10	0.30	1.3	23.2	9	27.40	0.40	1.4	27.6

<u>Specimen DIF-15</u>										
<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	27.93	1.89	6.8	28.6					
All COULTER Instruments	31	27.65	0.48	1.7	27.7					
All Sysmex Instruments	21	28.64	0.64	2.2	28.6					
All Method	60	28.09	0.79	2.8	28.1					
COULTER HmX	13	27.61	0.47	1.7	27.5					
COULTER LH750	6	27.57	0.15	0.5	27.5					
COULTER MAXM, MAXM A/L	9	27.71	0.71	2.6	27.9					
Sysmex XS-1000i	8	28.24	0.73	2.6	28.3					
Sysmex XT-2000i	9	29.03	0.43	1.5	29.2					

HEMATOLOGY W/ 5-PART DIFFERENTIAL-PLATELET COUNT (x 10⁹/L)
Specimen DIF-11

Specimen DIF-12

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	117.0	8.5	7.3	113	7	155.0	9.2	6.0	157
All COULTER Instruments	31	95.1	4.9	5.1	95	31	124.6	6.4	5.1	125
All Sysmex Instruments	22	97.3	7.4	7.6	100	22	132.3	8.7	6.6	134
All Method	59	97.7	7.8	8.0	97	61	131.2	12.2	9.3	129
COULTER HmX	13	95.5	6.0	6.3	97	13	123.0	6.7	5.4	125
COULTER LH750	6	96.3	2.7	2.8	98	6	127.0	4.4	3.5	128
COULTER MAXM, MAXM A/L	9	94.8	4.3	4.6	93	9	126.9	7.1	5.6	125
Sysmex XS-1000i	8	91.9	8.1	8.8	92	8	129.4	11.8	9.1	129
Sysmex XT-2000i	9	101.4	4.3	4.2	101	9	134.2	5.3	4.0	136

Specimen DIF-13

Specimen DIF-14

All Abbott Cell-Dyn Instruments	7	97.3	6.0	6.2	96	7	326.9	20.3	6.2	321
All COULTER Instruments	31	79.4	5.1	6.5	80	31	282.4	13.5	4.8	284
All Sysmex Instruments	22	83.9	6.4	7.6	83	22	303.3	15.3	5.0	302
All Method	60	82.7	7.1	8.6	82	60	294.4	19.4	6.6	294
COULTER HmX	13	79.2	5.8	7.3	80	13	284.7	17.1	6.0	292
COULTER LH750	6	82.5	3.3	4.0	83	6	281.8	7.7	2.7	280
COULTER MAXM, MAXM A/L	9	78.2	5.7	7.3	78	9	280.7	13.0	4.6	282
Sysmex XS-1000i	8	81.0	6.9	8.5	83	8	300.0	19.7	6.6	300
Sysmex XT-2000i	9	88.2	5.2	5.9	88	9	310.8	11.6	3.7	313

Specimen DIF-15

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	505.4	46.7	9.2	517
All COULTER Instruments	31	429.9	21.4	5.0	428
All Sysmex Instruments	22	469.6	21.2	4.5	469
All Method	60	452.0	33.6	7.4	449
COULTER HmX	13	432.2	24.3	5.6	439
COULTER LH750	6	426.5	14.7	3.4	429
COULTER MAXM, MAXM A/L	9	429.3	25.8	6.0	426
Sysmex XS-1000i	8	463.9	21.8	4.7	465
Sysmex XT-2000i	9	470.3	19.2	4.1	474

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

<u><i>Instruments</i></u>	Specimen DIF-11					Specimen DIF-12				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All Abbott Cell-Dyn Instruments	7	64.34	3.37	5.2	65.8	7	68.27	1.35	2.0	68.1
All COULTER Instruments	31	61.96	3.50	5.6	60.7	31	58.12	3.07	5.3	57.5
All Sysmex Instruments	20	49.00	5.19	10.6	50.7	19	51.33	5.57	10.9	53.6
All Method	58	57.78	7.64	13.2	59.8	57	57.10	6.54	11.4	57.0
COULTER HmX	13	60.26	1.15	1.9	60.3	13	57.96	2.69	4.6	57.2
COULTER LH750	6	66.10	2.51	3.8	68.0	6	60.68	3.27	5.4	60.1
COULTER MAXM, MAXM A/L	9	62.02	3.40	5.5	60.3	9	57.81	2.63	4.6	59.3
Sysmex XS-1000i	6	41.85	0.84	2.0	41.4	5	42.86	2.45	5.7	42.6
Sysmex XT-2000i	9	50.97	1.02	2.0	51.1	9	53.64	1.39	2.6	53.9

<u><i>Instruments</i></u>	Specimen DIF-13					Specimen DIF-14				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All Abbott Cell-Dyn Instruments	7	58.20	1.70	2.9	58.7	7	58.01	1.27	2.2	58.5
All COULTER Instruments	31	54.92	4.52	8.2	53.3	31	53.61	4.79	8.9	52.5
All Sysmex Instruments	19	43.17	5.48	12.7	45.3	19	43.52	5.37	12.3	45.5
All Method	57	51.40	7.52	14.6	51.8	57	50.79	7.11	14.0	50.7
COULTER HmX	13	52.55	1.78	3.4	51.7	13	51.79	3.47	6.7	51.0
COULTER LH750	6	60.23	3.21	5.3	61.4	6	56.92	5.48	9.6	59.5
COULTER MAXM, MAXM A/L	9	55.27	4.64	8.4	54.9	9	54.59	4.56	8.4	53.0
Sysmex XS-1000i	5	34.90	0.93	2.7	35.0	5	35.64	0.80	2.3	35.7
Sysmex XT-2000i	9	45.18	1.34	3.0	45.5	9	46.13	1.18	2.6	46.0

<u><i>Instruments</i></u>	Specimen DIF-15				
<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>Median</i></u>
All Abbott Cell-Dyn Instruments	7	69.00	1.66	2.4	68.5
All COULTER Instruments	31	63.85	4.20	6.6	65.1
All Sysmex Instruments	19	53.04	5.84	11.0	55.5
All Method	57	60.88	7.39	12.1	62.1
COULTER HmX	13	64.05	3.72	5.8	64.5
COULTER LH750	6	64.33	1.85	2.9	65.1
COULTER MAXM, MAXM A/L	9	63.93	3.97	6.2	65.7
Sysmex XS-1000i	5	44.06	1.68	3.8	43.9
Sysmex XT-2000i	9	55.89	2.43	4.3	55.5

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

<u>Instruments</u>	<u>Specimen DIF-11</u>					<u>Specimen DIF-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	30.84	0.40	1.3	31.0	7	27.50	0.65	2.4	27.3
All COULTER Instruments	31	29.07	1.28	4.4	28.9	31	22.53	1.25	5.6	22.7
All Sysmex Instruments	19	34.68	1.86	5.4	35.2	19	28.88	1.31	4.5	28.7
All Method	57	31.16	2.94	9.4	30.6	57	25.26	3.26	12.9	24.3
COULTER HmX	13	29.50	1.36	4.6	29.0	13	22.15	1.14	5.1	22.2
COULTER LH750	6	28.50	1.33	4.6	28.8	6	23.07	1.19	5.2	22.7
COULTER MAXM, MAXM A/L	9	28.79	1.02	3.5	28.4	9	22.17	1.13	5.1	22.0
Sysmex XS-1000i	5	36.44	0.75	2.1	36.4	5	30.22	1.16	3.8	30.6
Sysmex XT-2000i	9	34.93	0.90	2.6	35.1	9	28.96	0.38	1.3	29.1

<u>Instruments</u>	<u>Specimen DIF-13</u>					<u>Specimen DIF-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	37.03	1.39	3.7	37.3	7	37.67	2.11	5.6	38.3
All COULTER Instruments	30	36.18	1.02	2.8	36.5	31	34.15	1.56	4.6	34.1
All Sysmex Instruments	19	41.68	1.79	4.3	41.8	18	40.81	1.48	3.6	40.8
All Method	57	38.03	3.01	7.9	37.1	57	36.68	3.42	9.3	35.7
COULTER HmX	13	36.05	1.25	3.5	35.7	13	34.01	1.56	4.6	33.6
COULTER LH750	6	36.27	0.85	2.3	36.7	6	34.10	1.75	5.1	35.1
COULTER MAXM, MAXM A/L	9	35.82	1.86	5.2	36.5	9	34.12	1.74	5.1	34.9
Sysmex XS-1000i	5	43.74	0.91	2.1	44.0	5	42.14	1.35	3.2	41.9
Sysmex XT-2000i	9	41.57	0.95	2.3	41.8	9	40.07	0.97	2.4	39.9

<u>Instruments</u>	<u>Specimen DIF-15</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	27.04	1.02	3.8	27.2
All COULTER Instruments	31	22.10	1.32	6.0	22.2
All Sysmex Instruments	19	28.58	2.22	7.8	29.0
All Method	57	24.87	3.48	14.0	24.1
COULTER HmX	13	21.93	1.48	6.7	21.3
COULTER LH750	6	22.25	0.99	4.4	22.9
COULTER MAXM, MAXM A/L	9	21.98	1.52	6.9	22.2
Sysmex XS-1000i	5	31.00	0.89	2.9	30.7
Sysmex XT-2000i	9	28.22	1.55	5.5	28.6

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

<u>Instruments</u>	<u>Specimen DIF-11</u>					<u>Specimen DIF-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	1.99	2.25	113.1	1.0	7	0.91	0.35	38.6	1.0
All COULTER Instruments	31	7.49	2.97	39.7	8.5	31	7.57	2.58	34.1	8.4
All Sysmex Instruments	21	3.84	2.14	55.7	3.2	21	7.01	2.66	37.9	6.9
All Method	59	5.54	3.36	60.6	5.6	59	6.58	3.22	48.9	6.9
COULTER HmX	13	8.82	1.00	11.3	9.0	13	8.22	1.79	21.8	8.7
COULTER LH750	6	3.87	3.06	79.0	4.2	6	5.25	3.72	70.9	7.6
COULTER MAXM, MAXM A/L	9	7.68	2.98	38.8	8.9	9	7.52	1.94	25.8	6.5
Sysmex XS-1000i	7	4.94	2.17	44.0	5.0	7	9.74	2.12	21.7	9.8
Sysmex XT-2000i	9	3.06	0.42	13.9	3.0	9	6.13	1.03	16.8	5.7

HEMATOLOGY W/ 5-PART DIFFERENTIAL– MONOCYTES (percent)
Specimen DIF-13

<u>Instruments</u>	Specimen DIF-13					Specimen DIF-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	1.09	0.32	29.3	1.2	7	1.13	0.45	39.5	1.2
All COULTER Instruments	30	7.69	4.24	55.2	9.1	31	6.93	3.87	55.9	7.5
All Sysmex Instruments	21	4.10	2.49	60.8	3.7	21	5.84	3.35	57.4	4.5
All Method	59	5.74	4.25	73.9	4.4	59	5.85	3.87	66.1	5.6
COULTER HmX	13	9.98	1.81	18.2	10.5	13	8.58	2.60	30.3	9.2
COULTER LH750	5	1.08	0.48	44.1	1.1	6	3.93	4.05	102.9	1.9
COULTER MAXM, MAXM A/L	9	7.71	3.52	45.6	8.9	9	6.03	3.56	59.1	7.0
Sysmex XS-1000i	8	6.30	4.79	76.0	8.1	7	9.63	2.97	30.8	10.0
Sysmex XT-2000i	9	3.53	0.54	15.4	3.4	9	4.01	0.80	19.9	3.9

Specimen DIF-15

All Abbott Cell-Dyn Instruments	7	0.86	0.25	29.2	1.0
All COULTER Instruments	31	3.57	3.18	89.0	1.6
All Sysmex Instruments	22	5.49	2.69	49.0	5.5
All Method	60	3.96	3.13	79.1	3.7
COULTER HmX	13	3.21	3.05	95.2	1.6
COULTER LH750	6	3.52	2.69	76.6	5.7
COULTER MAXM, MAXM A/L	9	3.09	2.96	95.9	1.3
Sysmex XS-1000i	8	7.24	3.34	46.1	8.8
Sysmex XT-2000i	9	4.61	1.31	28.4	4.7

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

Specimen DIF-11

<u>Instruments</u>	Specimen DIF-11					Specimen DIF-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Abbott Cell-Dyn Instruments	7	2.11	3.25	153.9	0.1	7	2.13	1.02	47.9	2.2
All COULTER Instruments	31	1.15	0.58	50.3	1.1	31	11.31	0.70	6.2	11.4
All Sysmex Instruments	22	9.53	3.80	39.8	10.7	22	9.90	3.71	37.5	11.0
All Method	60	4.34	4.73	109.0	1.6	60	9.72	3.66	37.7	11.1
COULTER HmX	13	1.09	0.47	42.9	0.9	13	11.16	0.57	5.1	11.2
COULTER LH750	6	1.28	0.67	52.0	1.4	6	10.85	0.95	8.8	11.5
COULTER MAXM, MAXM A/L	9	1.09	0.51	46.9	0.8	9	11.74	0.35	3.0	11.9
Sysmex XS-1000i	8	7.70	4.85	63.0	10.0	8	6.92	4.90	70.8	10.4
Sysmex XT-2000i	9	11.04	0.92	8.3	10.7	9	11.27	0.59	5.2	11.3

Specimen DIF-13

All Abbott Cell-Dyn Instruments	7	1.23	2.02	164.4	0.5
All COULTER Instruments	31	1.12	0.52	46.6	0.9
All Sysmex Instruments	22	8.10	3.50	43.2	9.6
All Method	60	3.69	4.05	109.6	1.4
COULTER HmX	13	1.06	0.44	41.0	0.9
COULTER LH750	6	1.13	0.51	44.9	1.3
COULTER MAXM, MAXM A/L	9	1.00	0.41	40.6	0.8
Sysmex XS-1000i	8	5.92	4.20	70.8	8.2
Sysmex XT-2000i	9	9.72	0.43	4.4	9.7

Specimen DIF-14

All Abbott Cell-Dyn Instruments	7	1.24	0.89	71.8	1.5
All COULTER Instruments	31	5.03	0.90	17.8	5.0
All Sysmex Instruments	22	8.25	3.00	36.4	9.4
All Method	60	5.77	2.95	51.2	5.5
COULTER HmX	13	5.25	0.84	16.0	5.6
COULTER LH750	6	4.87	0.71	14.6	5.0
COULTER MAXM, MAXM A/L	9	5.02	1.11	22.2	4.7
Sysmex XS-1000i	8	6.00	3.81	63.5	8.5
Sysmex XT-2000i	9	9.79	0.63	6.4	9.9

Specimen DIF-15

All Abbott Cell-Dyn Instruments	7	2.01	1.11	55.0	2.3
All COULTER Instruments	30	10.51	0.90	8.6	10.5
All Sysmex Instruments	22	9.79	3.75	38.3	11.1
All Method	60	9.13	3.65	39.9	10.5
COULTER HmX	13	10.52	0.74	7.1	10.4
COULTER LH750	6	9.95	0.92	9.3	9.8
COULTER MAXM, MAXM A/L	9	10.73	1.08	10.1	11.0
Sysmex XS-1000i	8	6.72	4.87	72.5	9.6
Sysmex XT-2000i	9	11.28	0.61	5.4	11.2

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

<u><i>Instruments</i></u>	Specimen DIF-11					Specimen DIF-12				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All Abbott Cell-Dyn Instruments	7	1.67	0.53	31.8	1.5	7	1.27	0.41	32.3	1.0
All COULTER Instruments	31	0.30	0.28	93.1	0.2	31	0.48	0.42	88.3	0.3
All Sysmex Instruments	21	44.34	37.50	84.6	65.3	21	47.58	37.61	79.0	62.4
All Method	59	16.14	30.53	189.2	0.5	59	17.34	31.66	182.6	1.0
COULTER HmX	13	0.32	0.31	96.4	0.2	13	0.51	0.41	80.6	0.4
COULTER LH750	6	0.13	0.15	112.9	0.2	6	0.15	0.14	91.9	0.2
COULTER MAXM, MAXM A/L	9	0.42	0.31	73.7	0.5	9	0.76	0.44	58.5	1.0
Sysmex XS-1000i	8	4.66	2.92	62.6	6.0	8	4.11	3.37	82.0	6.0
Sysmex XT-2000i	9	66.00	0.77	1.2	66.0	9	62.96	0.74	1.2	62.8

<u><i>Instruments</i></u>	Specimen DIF-13					Specimen DIF-14				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All Abbott Cell-Dyn Instruments	7	2.61	1.41	53.8	2.0	7	2.06	1.59	77.1	1.4
All COULTER Instruments	31	0.25	0.28	110.0	0.2	31	0.27	0.23	84.2	0.2
All Sysmex Instruments	21	45.56	37.21	81.7	57.7	21	39.70	35.80	90.2	55.4
All Method	59	16.66	30.79	184.8	0.5	56	9.94	20.57	207.0	0.5
COULTER HmX	13	0.36	0.30	81.8	0.2	13	0.38	0.27	72.0	0.4
COULTER LH750	6	0.13	0.15	112.9	0.2	6	0.18	0.12	63.8	0.2
COULTER MAXM, MAXM A/L	9	0.20	0.32	158.1	0.1	9	0.23	0.22	93.4	0.2
Sysmex XS-1000i	8	3.41	2.77	81.3	5.0	8	3.28	2.54	77.4	4.7
Sysmex XT-2000i	9	58.86	1.34	2.3	58.4	9	56.40	1.03	1.8	57.0

<u><i>Instruments</i></u>	Specimen DIF-15				
	<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>
All Abbott Cell-Dyn Instruments	7	1.39	1.02	73.4	1.0
All COULTER Instruments	31	0.23	0.20	84.9	0.2
All Sysmex Instruments	21	42.83	36.83	86.0	61.9
All Method	59	15.53	29.78	191.7	0.4
COULTER HmX	13	0.29	0.17	58.4	0.3
COULTER LH750	6	0.13	0.15	112.9	0.2
COULTER MAXM, MAXM A/L	9	0.27	0.25	93.7	0.2
Sysmex XS-1000i	8	4.35	3.30	75.8	6.4
Sysmex XT-2000i	9	62.77	0.86	1.4	62.6

QBC HEMATOLOGY–HEMATOCRIT (percent)

<u>Instruments</u>	Specimen QBC-11					Specimen QBC-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	21	34.30	1.00	2.9	34.2	21	31.12	0.89	2.9	31.2
QBC Autoread-Venous Std. Tube	6	33.80	0.75	2.2	34.2	6	31.35	0.40	1.3	31.2
<u>Instruments</u>	Specimen QBC-13					Specimen QBC-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	21	34.56	0.93	2.7	34.5	21	30.60	1.00	3.3	30.7
QBC Autoread-Venous Std. Tube	6	34.18	0.56	1.6	34.4	6	30.52	0.67	2.2	31.0
<u>Instruments</u>	Specimen QBC-15									
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>					
All Method	21	34.12	0.94	2.8	34.2					
QBC Autoread-Venous Std. Tube	6	33.80	0.65	1.9	34.2					

QBC HEMATOLOGY–HEMOGLOBIN (g/dL)

<u>Instruments</u>	Specimen QBC-11					Specimen QBC-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	20	11.58	0.39	3.4	11.7	20	10.52	0.34	3.3	10.6
QBC Autoread-Venous Std. Tube	6	11.17	0.12	1.1	11.2	6	10.40	0.18	1.7	10.4
<u>Instruments</u>	Specimen QBC-13					Specimen QBC-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	20	11.67	0.46	3.9	11.9	20	10.44	0.33	3.1	10.4
QBC Autoread-Venous Std. Tube	6	11.20	0.14	1.3	11.2	6	10.25	0.16	1.6	10.3
<u>Instruments</u>	Specimen QBC-15									
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>					
All Method	20	11.67	0.40	3.4	11.8					
QBC Autoread-Venous Std. Tube	6	11.33	0.36	3.1	11.4					

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

<u>Instruments</u>	Specimen QBC-11					Specimen QBC-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	17	14.86	2.75	18.5	14.5	17	9.54	1.53	16.0	9.2
QBC Autoread-Venous Std. Tube	6	14.00	0.47	3.4	14.1	6	8.53	0.47	5.5	8.6
<u>Instruments</u>	Specimen QBC-13					Specimen QBC-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	16	15.38	2.04	13.3	15.5	17	9.32	1.48	15.9	9.7
QBC Autoread-Venous Std. Tube	6	13.98	1.00	7.2	14.1	6	8.22	0.98	12.0	8.6
<u>Instruments</u>	Specimen QBC-15									
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>					
All Method	16	15.49	2.90	18.7	16.3					
QBC Autoread-Venous Std. Tube	6	13.42	1.20	8.9	13.3					

QBC HEMATOLOGY–PLATELET COUNT (x 10⁹/L)

<u>Instruments</u>	Specimen QBC-11					Specimen QBC-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	11	163.4	35.8	21.9	168	11	354.6	61.7	17.4	375
QBC Autoread-Venous Std. Tube	6	174.8	32.7	18.7	168	6	379.5	33.8	8.9	381
Specimen QBC-13						Specimen QBC-14				
All Method	11	184.8	99.5	53.9	168	11	355.8	65.6	18.4	373
QBC Autoread-Venous Std. Tube	6	160.8	21.2	13.2	168	6	366.7	49.2	13.4	373
Specimen QBC-15										
All Method	10	164.9	41.5	25.2	160					
QBC Autoread-Venous Std. Tube	6	169.7	43.5	25.6	160					

QBC HEMATOLOGY–GRANULOCYTES (x 10⁹/L)

<u>Instruments</u>	Specimen QBC-11					Specimen QBC-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	21	7.99	2.42	30.4	6.9	21	6.21	1.64	26.4	5.9
QBC Autoread-Venous Std. Tube	6	6.82	0.67	9.9	6.9	6	5.00	0.45	8.9	5.0
Specimen QBC-13						Specimen QBC-14				
All Method	20	7.76	2.14	27.5	7.2	21	5.91	1.65	27.9	5.3
QBC Autoread-Venous Std. Tube	6	6.52	0.65	10.0	6.6	6	4.87	0.71	14.5	5.2
Specimen QBC-15										
All Method	20	7.84	2.44	31.1	7.4					
QBC Autoread-Venous Std. Tube	6	6.22	0.72	11.6	6.2					

QBC HEMATOLOGY–LYMPHS/MONO (x 10⁹/L)

Specimen QBC-11

Specimen QBC-12

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	21	7.82	1.52	19.5	7.7	20	3.44	0.68	19.7	3.6
QBC Autoread-Venous Std. Tube	6	7.18	0.70	9.8	7.5	6	3.53	0.15	4.3	3.6

Specimen QBC-13

Specimen QBC-14

All Method	20	8.21	0.91	11.1	8.1	20	3.52	0.65	18.4	3.4
QBC Autoread-Venous Std. Tube	6	7.47	0.39	5.2	7.5	6	3.35	0.30	9.0	3.3

Specimen QBC-15

All Method	20	8.18	1.22	14.9	8.5
QBC Autoread-Venous Std. Tube	6	7.20	0.51	7.0	7.1

RETICULOCYTE COUNT (percent)

Specimen RT-5

Specimen RT-6

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Automated Methods	21	2.60	1.06	40.8	2.2	21	0.53	0.36	67.9	0.4
All Manual Methods	32	3.66	1.38	37.6	3.6	31	0.81	0.48	59.9	0.7
All Method	53	3.24	1.36	41.8	3.1	52	0.70	0.46	65.4	0.6
COULTER LH750	5	3.44	0.54	15.6	3.4	5	0.28	0.15	53.0	0.3
Manual Stain w/Miller Ocular	8	2.69	1.17	43.5	2.9	8	0.82	1.18	143.4	0.6
Manual-New Methylen Blue Stain	24	3.99	1.30	32.7	4.0	24	0.92	0.48	51.9	0.8
Sysmex XT-2000i	6	1.62	0.26	16.3	1.5	6	0.38	0.04	10.7	0.4

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

<u>Instruments</u>	Specimen BCX-11					Specimen BCX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	35	22.75	0.68	3.0	22.8	35	5.03	0.13	2.6	5.1
All COULTER Instruments	41	22.71	0.56	2.5	22.8	42	5.06	0.10	2.0	5.0
All Method	77	22.74	0.62	2.7	22.8	78	5.05	0.12	2.4	5.1
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	22.83	0.67	2.9	22.9	20	5.00	0.13	2.6	5.1
ABX Diagnostics Pentra 80	13	22.50	0.59	2.6	22.5	13	5.05	0.11	2.2	5.1
COULTER AcT 5diff (1.9 and below)	18	22.73	0.53	2.3	22.9	18	5.07	0.11	2.1	5.0
COULTER AcT 5diff (version 2.01)	24	22.60	0.74	3.3	22.7	24	5.05	0.10	1.9	5.1

<u>Instruments</u>	Specimen BCX-13					Specimen BCX-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	35	15.94	0.49	3.1	16.0	35	26.72	0.86	3.2	26.7
All COULTER Instruments	42	15.95	0.34	2.2	15.9	39	26.75	0.49	1.8	26.7
All Method	78	15.96	0.42	2.6	16.0	76	26.73	0.74	2.8	26.7
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	15.94	0.52	3.2	16.0	20	26.70	0.96	3.6	26.8
ABX Diagnostics Pentra 80	13	15.87	0.40	2.5	15.9	13	26.58	0.55	2.1	26.7
COULTER AcT 5diff (1.9 and below)	18	16.02	0.30	1.9	16.0	18	26.70	0.65	2.4	26.7
COULTER AcT 5diff (version 2.01)	24	15.90	0.37	2.3	15.8	22	26.70	0.51	1.9	26.8

<u>Instruments</u>	Specimen BCX-15				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	35	2.89	0.12	4.0	2.9
All COULTER Instruments	41	2.93	0.08	2.9	2.9
All Method	76	2.92	0.10	3.4	2.9
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	2.85	0.11	3.9	2.9
ABX Diagnostics Pentra 80	13	2.92	0.11	3.7	2.9
COULTER AcT 5diff (1.9 and below)	18	2.94	0.08	2.7	2.9
COULTER AcT 5diff (version 2.01)	23	2.92	0.09	3.1	2.9

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

<u>Instruments</u>	Specimen BCX-11					Specimen BCX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	35	5.867	0.088	1.5	5.86	34	4.156	0.065	1.6	4.16
All COULTER Instruments	42	5.906	0.094	1.6	5.89	42	4.168	0.070	1.7	4.17
All Method	78	5.890	0.094	1.6	5.89	77	4.164	0.069	1.7	4.17
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	5.840	0.082	1.4	5.83	20	4.156	0.062	1.5	4.16
ABX Diagnostics Pentra 80	13	5.908	0.091	1.5	5.90	13	4.128	0.106	2.6	4.16
COULTER AcT 5diff (1.9 and below)	18	5.926	0.098	1.7	5.89	18	4.156	0.072	1.7	4.14
COULTER AcT 5diff (version 2.01)	24	5.892	0.090	1.5	5.89	24	4.177	0.069	1.6	4.18

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

Specimen BCX-13

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	5.443	0.087	1.6	5.44	35	3.057	0.052	1.7	3.07
All COULTER Instruments	42	5.492	0.088	1.6	5.49	42	3.068	0.053	1.7	3.07
All Method	77	5.472	0.092	1.7	5.45	78	3.064	0.054	1.7	3.07
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	5.417	0.078	1.4	5.42	20	3.074	0.047	1.5	3.07
ABX Diagnostics Pentra 80	13	5.504	0.127	2.3	5.49	13	3.022	0.044	1.5	3.02
COULTER AcT 5diff (1.9 and below)	18	5.488	0.095	1.7	5.46	18	3.048	0.053	1.7	3.05
COULTER AcT 5diff (version 2.01)	24	5.495	0.084	1.5	5.50	24	3.084	0.049	1.6	3.07

Specimen BCX-14

Specimen BCX-15

All ABX Instruments	35	2.384	0.054	2.3	2.39
All COULTER Instruments	42	2.390	0.050	2.1	2.39
All Method	78	2.388	0.052	2.2	2.39
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	2.410	0.048	2.0	2.41
ABX Diagnostics Pentra 80	13	2.342	0.039	1.7	2.34
COULTER AcT 5diff (1.9 and below)	18	2.360	0.036	1.5	2.37
COULTER AcT 5diff (version 2.01)	24	2.413	0.046	1.9	2.41

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

Specimen BCX-11

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	35	18.09	0.22	1.2	18.0	35	12.35	0.15	1.2	12.3
All COULTER Instruments	42	17.87	0.22	1.2	17.9	42	12.40	0.18	1.4	12.4
All Method	77	17.97	0.25	1.4	18.0	78	12.38	0.18	1.4	12.4
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	18.08	0.17	0.9	18.1	20	12.35	0.11	0.9	12.3
ABX Diagnostics Pentra 80	13	18.07	0.26	1.4	18.0	13	12.33	0.20	1.6	12.3
COULTER AcT 5diff (1.9 and below)	18	17.89	0.23	1.3	18.0	18	12.41	0.15	1.2	12.4
COULTER AcT 5diff (version 2.01)	24	17.85	0.22	1.2	17.9	24	12.39	0.20	1.6	12.4

Specimen BCX-12

Specimen BCX-13

All ABX Instruments	35	16.31	0.23	1.4	16.3	35	8.11	0.13	1.6	8.1
All COULTER Instruments	42	16.20	0.18	1.1	16.2	42	8.22	0.12	1.5	8.2
All Method	78	16.26	0.22	1.4	16.2	78	8.18	0.14	1.8	8.2
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	16.33	0.11	0.7	16.3	20	8.12	0.11	1.3	8.1
ABX Diagnostics Pentra 80	13	16.27	0.28	1.7	16.3	13	8.07	0.14	1.7	8.1
COULTER AcT 5diff (1.9 and below)	18	16.20	0.19	1.2	16.2	18	8.22	0.09	1.1	8.2
COULTER AcT 5diff (version 2.01)	24	16.19	0.18	1.1	16.2	24	8.22	0.14	1.7	8.2

Specimen BCX-14

Specimen BCX-15

All ABX Instruments	34	6.32	0.10	1.5	6.3
All COULTER Instruments	42	6.45	0.09	1.5	6.4
All Method	76	6.39	0.12	1.8	6.4
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	6.33	0.07	1.2	6.3
ABX Diagnostics Pentra 80	13	6.28	0.12	1.9	6.3
COULTER AcT 5diff (1.9 and below)	18	6.44	0.09	1.3	6.4
COULTER AcT 5diff (version 2.01)	24	6.45	0.10	1.6	6.5

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

<u><i>Instruments</i></u>	Specimen BCX-11					Specimen BCX-12				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All ABX Instruments	35	51.27	0.79	1.5	51.3	35	35.01	0.73	2.1	35.0
All COULTER Instruments	42	51.49	0.83	1.6	51.6	42	35.24	0.58	1.6	35.2
All Method	78	51.38	0.81	1.6	51.3	77	35.15	0.62	1.8	35.1
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	51.30	0.83	1.6	51.5	20	34.92	0.64	1.8	35.0
ABX Diagnostics Pentra 80	13	51.18	0.78	1.5	51.2	13	35.04	0.85	2.4	35.1
COULTER AcT 5diff (1.9 and below)	18	51.52	0.75	1.5	51.6	18	35.37	0.58	1.6	35.2
COULTER AcT 5diff (version 2.01)	24	51.48	0.90	1.7	51.5	24	35.13	0.57	1.6	35.1

<u><i>Instruments</i></u>	Specimen BCX-13					Specimen BCX-14				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All ABX Instruments	35	46.25	0.95	2.1	46.4	35	23.67	0.39	1.6	23.7
All COULTER Instruments	42	46.55	0.80	1.7	46.4	42	23.96	0.46	1.9	24.0
All Method	78	46.41	0.88	1.9	46.4	77	23.80	0.42	1.8	23.8
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	46.08	0.87	1.9	46.3	20	23.61	0.43	1.8	23.5
ABX Diagnostics Pentra 80	13	46.43	1.13	2.4	46.7	13	23.74	0.35	1.5	23.9
COULTER AcT 5diff (1.9 and below)	18	46.52	0.77	1.7	46.4	18	24.11	0.37	1.5	24.1
COULTER AcT 5diff (version 2.01)	24	46.58	0.84	1.8	46.4	24	23.85	0.49	2.1	23.8

<u><i>Instruments</i></u>	Specimen BCX-15				
	<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>
All ABX Instruments	35	18.25	0.38	2.1	18.3
All COULTER Instruments	41	18.44	0.29	1.6	18.5
All Method	77	18.35	0.35	1.9	18.4
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	18.22	0.42	2.3	18.2
ABX Diagnostics Pentra 80	13	18.33	0.35	1.9	18.4
COULTER AcT 5diff (1.9 and below)	18	18.57	0.20	1.1	18.6
COULTER AcT 5diff (version 2.01)	23	18.34	0.31	1.7	18.4

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

<u><i>Instruments</i></u>	Specimen BCX-11					Specimen BCX-12				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All ABX Instruments	35	465.3	20.1	4.3	461	34	235.3	7.5	3.2	236
All COULTER Instruments	42	461.9	19.1	4.1	459	41	231.9	11.0	4.7	232
All Method	77	464.3	18.3	3.9	461	75	234.1	9.3	4.0	234
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	460.0	18.8	4.1	455	20	234.4	7.7	3.3	235
ABX Diagnostics Pentra 80	13	472.7	21.8	4.6	464	12	236.4	7.9	3.3	238
COULTER AcT 5diff (1.9 and below)	18	459.7	15.0	3.3	459	17	231.9	9.8	4.2	230
COULTER AcT 5diff (version 2.01)	24	463.5	21.9	4.7	463	24	231.9	11.9	5.1	232

<u><i>Instruments</i></u>	Specimen BCX-13					Specimen BCX-14				
	<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>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>
All ABX Instruments	34	295.2	10.7	3.6	294	35	397.4	13.0	3.3	399
All COULTER Instruments	41	293.2	14.0	4.8	294	39	397.2	13.5	3.4	399
All Method	76	294.4	12.7	4.3	294	75	397.5	13.1	3.3	399
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	291.6	10.4	3.6	289	20	395.0	11.7	3.0	399
ABX Diagnostics Pentra 80	12	300.4	9.8	3.3	300	13	397.5	12.7	3.2	395
COULTER AcT 5diff (1.9 and below)	17	290.2	13.2	4.5	291	17	395.5	18.0	4.5	399
COULTER AcT 5diff (version 2.01)	24	295.4	14.5	4.9	296	23	400.6	13.1	3.3	400

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

Specimen BCX-15

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	35	119.5	6.4	5.4	119
All COULTER Instruments	41	117.9	6.2	5.2	117
All Method	77	118.8	6.4	5.4	118
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	20	121.4	7.3	6.0	124
ABX Diagnostics Pentra 80	13	116.9	4.3	3.7	117
COULTER Act 5diff (1.9 and below)	17	116.5	5.0	4.3	116
COULTER Act 5diff (version 2.01)	24	118.9	6.8	5.7	120

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

<u>Instruments</u>	Specimen BCX-11					Specimen BCX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	44.90	5.49	12.2	46.4	33	61.74	3.33	5.4	62.4
All COULTER Instruments	41	42.30	4.73	11.2	41.8	41	54.21	3.64	6.7	54.3
All Method	76	43.46	5.19	11.9	44.8	76	57.49	5.16	9.0	57.1
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	48.20	2.86	5.9	48.2	19	63.51	2.14	3.4	63.8
ABX Diagnostics Pentra 80	13	39.85	5.02	12.6	41.9	13	57.93	3.54	6.1	58.1
COULTER Act 5diff (1.9 and below)	17	38.62	3.54	9.2	38.7	17	52.80	3.50	6.6	53.5
COULTER Act 5diff (version 2.01)	24	44.91	3.62	8.1	45.7	24	55.21	3.46	6.3	55.3

Specimen BCX-13

Specimen BCX-14

All ABX Instruments	34	48.41	5.53	11.4	50.7	34	64.81	5.69	8.8	67.2
All COULTER Instruments	41	45.06	3.97	8.8	45.7	41	59.28	4.78	8.1	60.1
All Method	76	46.60	4.97	10.7	46.6	76	61.83	5.84	9.4	62.3
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	51.65	1.88	3.6	51.6	19	68.01	1.92	2.8	67.9
ABX Diagnostics Pentra 80	13	42.88	4.96	11.6	44.2	13	59.34	5.50	9.3	61.7
COULTER Act 5diff (1.9 and below)	17	42.23	3.35	7.9	41.8	17	55.93	4.39	7.9	56.3
COULTER Act 5diff (version 2.01)	24	47.06	3.09	6.6	46.6	24	61.65	3.49	5.7	62.4

Specimen BCX-15

All ABX Instruments	34	63.23	4.26	6.7	64.6
All COULTER Instruments	41	54.52	2.87	5.3	54.3
All Method	76	58.49	5.59	9.5	57.2
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	65.15	2.13	3.3	65.2
ABX Diagnostics Pentra 80	13	60.36	5.24	8.7	60.2
COULTER Act 5diff (1.9 and below)	17	53.46	2.67	5.0	53.6
COULTER Act 5diff (version 2.01)	24	55.28	2.81	5.1	54.9

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

<u>Instruments</u>	Specimen BCX-11					Specimen BCX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	44.52	5.78	13.0	43.4	34	27.19	4.05	14.9	26.6
All COULTER Instruments	41	43.25	5.41	12.5	42.0	41	25.00	3.67	14.7	24.2
All Method	76	43.80	5.54	12.7	42.4	76	25.93	3.99	15.4	25.1
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	41.47	3.06	7.4	40.6	19	25.92	3.53	13.6	24.8
ABX Diagnostics Pentra 80	13	49.23	6.19	12.6	47.9	13	29.23	4.23	14.5	30.4
COULTER Act 5diff (1.9 and below)	17	47.72	3.99	8.4	48.1	17	27.54	3.54	12.9	27.2
COULTER Act 5diff (version 2.01)	23	39.55	2.83	7.2	39.5	24	23.19	2.56	11.0	22.9

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

<u>Instruments</u>	<u>Specimen BCX-13</u>					<u>Specimen BCX-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	41.04	5.85	14.3	39.9	34	25.74	5.85	22.7	23.4
All COULTER Instruments	41	39.11	4.80	12.3	38.5	41	25.65	5.14	20.1	25.7
All Method	75	39.70	5.03	12.7	38.6	76	25.62	5.44	21.2	24.5
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	37.74	2.24	5.9	37.7	19	22.68	2.14	9.4	22.8
ABX Diagnostics Pentra 80	13	46.58	5.67	12.2	46.1	13	30.89	6.35	20.5	30.0
COULTER AcT 5diff (1.9 and below)	17	42.83	3.67	8.6	42.9	17	29.41	5.07	17.3	28.1
COULTER AcT 5diff (version 2.01)	24	36.48	3.65	10.0	37.2	24	22.99	3.21	14.0	22.1

<u>Specimen BCX-15</u>										
<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	22.47	3.94	17.5	22.5					
All COULTER Instruments	41	19.15	2.59	13.5	18.9					
All Method	75	20.45	3.33	16.3	20.2					
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	21.35	2.95	13.8	21.8					
ABX Diagnostics Pentra 80	13	23.79	4.96	20.9	23.9					
COULTER AcT 5diff (1.9 and below)	17	20.02	1.95	9.7	19.9					
COULTER AcT 5diff (version 2.01)	24	18.52	2.84	15.4	18.7					

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

<u>Instruments</u>	<u>Specimen BCX-11</u>					<u>Specimen BCX-12</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	1.75	0.81	46.3	1.6	33	0.66	0.49	74.0	0.5
All COULTER Instruments	40	1.46	0.66	45.4	1.4	41	0.59	0.42	70.9	0.4
All Method	74	1.58	0.71	44.8	1.5	75	0.63	0.46	72.0	0.5
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	1.76	0.77	43.8	1.6	18	0.58	0.42	71.9	0.4
ABX Diagnostics Pentra 80	13	1.77	0.94	53.2	1.4	13	0.72	0.52	71.2	0.5
COULTER AcT 5diff (1.9 and below)	17	1.33	0.49	36.8	1.3	17	0.64	0.40	62.2	0.5
COULTER AcT 5diff (version 2.01)	23	1.56	0.76	49.0	1.4	24	0.56	0.44	78.7	0.4

<u>Instruments</u>	<u>Specimen BCX-13</u>					<u>Specimen BCX-14</u>				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	1.60	0.87	54.4	1.4	34	0.75	0.34	45.4	0.7
All COULTER Instruments	39	1.27	0.53	42.0	1.2	41	0.78	0.33	43.0	0.7
All Method	74	1.42	0.68	47.7	1.3	76	0.77	0.34	43.7	0.7
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	1.57	0.86	55.1	1.3	19	0.82	0.31	38.4	0.7
ABX Diagnostics Pentra 80	13	1.68	0.96	57.2	1.4	13	0.69	0.37	53.2	0.6
COULTER AcT 5diff (1.9 and below)	17	1.15	0.47	40.9	1.1	17	0.74	0.27	36.0	0.7
COULTER AcT 5diff (version 2.01)	24	1.52	0.79	52.0	1.3	24	0.80	0.38	47.2	0.8

<u>Specimen BCX-15</u>										
<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	33	0.38	0.28	74.1	0.4					
All COULTER Instruments	41	0.31	0.24	75.5	0.3					
All Method	74	0.33	0.24	72.0	0.3					
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	18	0.42	0.31	74.7	0.5					
ABX Diagnostics Pentra 80	13	0.33	0.25	75.5	0.3					
COULTER AcT 5diff (1.9 and below)	17	0.27	0.25	91.2	0.2					
COULTER AcT 5diff (version 2.01)	24	0.34	0.23	66.8	0.3					

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

<u>Instruments</u>	Specimen BCX-11					Specimen BCX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	7.58	1.22	16.1	7.7	34	8.66	1.99	22.9	8.7
All COULTER Instruments	41	6.99	1.17	16.7	7.0	39	7.99	1.64	20.5	7.8
All Method	76	7.27	1.22	16.7	7.2	74	8.27	1.82	22.0	8.5
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	7.97	1.06	13.3	8.1	19	9.40	1.92	20.4	8.7
ABX Diagnostics Pentra 80	13	6.79	1.07	15.8	7.1	13	7.54	1.75	23.2	7.1
COULTER AcT 5diff (1.9 and below)	17	6.54	0.90	13.8	6.6	17	7.31	1.40	19.1	7.4
COULTER AcT 5diff (version 2.01)	24	7.31	1.25	17.1	7.7	23	8.76	1.97	22.4	8.9

<u>Instruments</u>	Specimen BCX-13					Specimen BCX-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	7.65	1.28	16.7	7.7	34	7.22	1.04	14.4	7.3
All COULTER Instruments	41	7.19	1.45	20.2	7.0	40	6.78	1.01	14.9	6.9
All Method	76	7.39	1.38	18.6	7.4	75	6.99	1.03	14.8	7.1
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	8.33	0.81	9.7	8.4	19	7.78	0.69	8.9	8.0
ABX Diagnostics Pentra 80	13	6.54	1.14	17.5	6.5	13	6.32	0.74	11.7	6.5
COULTER AcT 5diff (1.9 and below)	17	6.54	1.42	21.7	6.5	17	6.52	1.31	20.0	6.4
COULTER AcT 5diff (version 2.01)	24	7.65	1.31	17.2	7.5	23	6.98	0.69	9.9	6.9

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	10.87	1.70	15.6	10.9
All COULTER Instruments	41	10.42	1.83	17.6	10.1
All Method	76	10.57	1.82	17.2	10.6
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	19	11.66	1.56	13.4	11.6
ABX Diagnostics Pentra 80	13	9.75	1.35	13.8	9.5
COULTER AcT 5diff (1.9 and below)	17	10.42	1.49	14.3	10.8
COULTER AcT 5diff (version 2.01)	24	10.42	2.07	19.9	10.1

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

<u>Instruments</u>	Specimen BCX-11					Specimen BCX-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	1.26	2.10	167.1	0.3	34	2.44	4.05	166.4	0.6
All COULTER Instruments	41	5.87	0.30	5.2	5.9	41	11.87	0.57	4.8	11.9
All Method	76	3.80	2.70	71.1	5.6	76	7.64	5.44	71.2	11.2
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	18	0.30	0	0	0.3	18	0.59	0.05	9.1	0.6
ABX Diagnostics Pentra 80	13	2.36	2.72	115.1	0.3	13	4.58	5.28	115.3	0.6
COULTER AcT 5diff (1.9 and below)	17	5.84	0.28	4.8	5.7	17	11.76	0.61	5.2	11.9
COULTER AcT 5diff (version 2.01)	24	5.90	0.32	5.5	5.9	24	11.95	0.53	4.4	12.0

<u>Instruments</u>	Specimen BCX-13					Specimen BCX-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	1.30	2.27	174.3	0.4	34	1.48	2.42	163.7	0.4
All COULTER Instruments	41	7.26	0.28	3.9	7.2	41	7.41	0.36	4.9	7.4
All Method	76	4.59	3.34	72.8	7.0	76	4.75	3.38	71.2	7.0
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	18	0.38	0.04	11.3	0.4	18	0.39	0.03	8.3	0.4
ABX Diagnostics Pentra 80	13	2.31	3.04	131.8	0.4	13	2.76	3.19	115.6	0.4
COULTER AcT 5diff (1.9 and below)	17	7.22	0.23	3.1	7.2	17	7.40	0.39	5.2	7.5
COULTER AcT 5diff (version 2.01)	24	7.30	0.31	4.3	7.3	24	7.42	0.35	4.7	7.4

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

Specimen BCX-15

<u>Instruments</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All ABX Instruments	34	3.07	5.08	165.2	0.8
All COULTER Instruments	41	15.58	1.08	6.9	15.8
All Method	76	9.97	7.14	71.6	14.2
ABX Diagnostics Pentra 60C+ (version 2.21 and up)	18	0.78	0.07	9.0	0.8
ABX Diagnostics Pentra 80	13	5.76	6.68	115.9	0.8
COULTER AcT 5diff (1.9 and below)	17	15.78	1.04	6.6	15.8
COULTER AcT 5diff (version 2.01)	24	15.44	1.11	7.2	15.9

BLOOD CELL CASE HISTORY, 2008-M3 Specimens BC-13 through BC-18

A 19-year-old female in her 2nd trimester of pregnancy presented to a community clinic for her first prenatal exam. She had received no prenatal care prior to this visit. A CBC was performed, and significant results appear below.

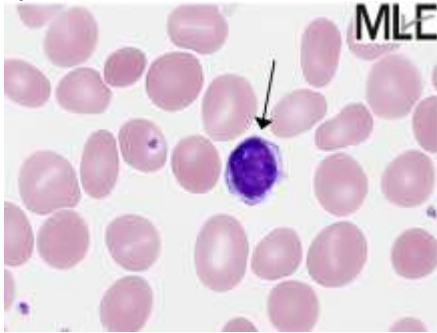
Test	Results	Normal Range
WBC	2.9 x 10 ⁹ /L	5.0 - 17.0 x 10 ⁹ /L
RBC	2.53 x 10 ¹² /L	4.0 - 5.2 x 10 ¹² /L
Hgb	10.0 g/dL	10.2 – 15.2 g/dL
Hct	29.3 %	34 – 48 %
MCV	116 fL	78 - 94 fL
MCH	40 pg	23 - 31 pg
MCHC	34.1 g/dL	32-36 g/dL
RDW	18.1 %	11.5-14.5 %
Plt	76 x 10 ⁹ /L	150 – 450 x 10 ⁹ /L

This patient was diagnosed with megaloblastic anemia.

Megaloblastic anemia is a type of macrocytic anemia, named after the giant abnormal erythroid precursor cell found in the bone marrow. Typical laboratory findings in megaloblastic anemia include: pancytopenia, macrocytic/normochromic anemia with oval macrocytes, neutropenia with hypersegmentation, and increased serum bilirubin and LD. Megaloblastic anemia is associated with a deficiency in folate. Folic acid (folate) is a vitamin found in foods including leafy green vegetables, dried beans, liver, beef, and oranges. Folate deficiency can result from inadequate intake, impaired utilization, or increased need. Folate is essential for DNA replication, so the body's need for it increases during pregnancy, when cell production and growth is increased. If the amount of folate in the diet is not adequate, DNA synthesis will be impaired, which will have the effect of impairing the production of all new cells. Since the bone marrow continuously replaces old blood cells with new ones, the first evidence of this defect may appear in the blood. Folate deficiency in pregnancy can cause neural tube defects such as spina bifida. These defects may occur in the embryo during the very earliest stages of pregnancy, thus it is recommended that all women of child-bearing age get about 400 µg of folic acid per day.

BLOOD CELL IDENTIFICATION

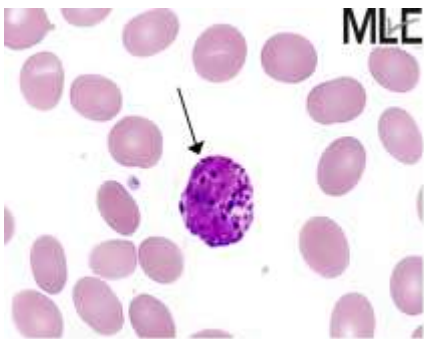
Specimen BC-13



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Lymphocyte	367	98.66%	Acceptable

The arrow in this photograph points to a **lymphocyte**. Its nucleus is round, eccentric (off-center), and about the same size as a red blood cell. The nuclear chromatin is dense, coarse, and clumped. The cytoplasm is scant and pale blue. To view another normal lymphocyte, see 2007 M2 Specimen BC-7.

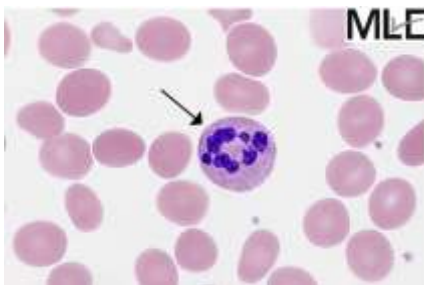
Specimen BC-14



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Basophil, any stage	367	98.66%	Acceptable

The arrow in this photograph points to a **basophil**. The characteristic large, dense, blue-black granules can be so numerous that they obscure the features of the nucleus. Basophils usually make up less than two percent of the peripheral white blood cells. To view another basophil, see 2007 M2 Specimen BC-11.

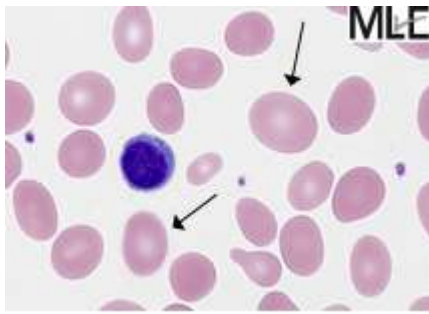
Specimen BC-15



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Hypersegmented neutrophil	361	97.04%	Acceptable
Neutrophil-Segmented or band	7	1.88%	

The arrow in this photograph points to a **hypersegmented neutrophil**. Normal neutrophils have fewer than six nuclear lobes. Neutrophils with six or more lobes are called hypersegmented. These cells are associated with megaloblastic anemias such as pernicious anemia and vitamin B12 and folate deficiencies. To view another photo of a hypersegmented neutrophil, see 2004 M3 BC-14.

Specimen BC-16

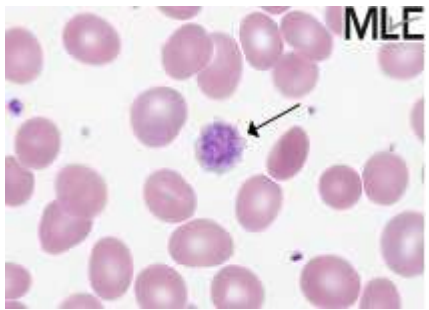


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Macrocyte	279	74.80%	Acceptable
Ovalocyte	73	19.57%	
Erythrocyte, normal	10	2.68%	

Specimen BC-16 is graded by referee consensus.

The arrows in this photograph point to **macrocytes**. Macrocytes are abnormally large red blood cells, and may be round or oval. The oval form is associated with vitamin B12 and folate deficiencies, as well as alcoholism, chronic infection, and toxicity/chemotherapy. Normal red blood cells are about the same size as the nucleus of a small normal lymphocyte. The arrowed cells are larger than the nucleus of the mature lymphocyte in the same field. The MCV and MCH values for this specimen are increased. These macrocytes should not be confused with ovalocytes or elliptocytes. The term ovalocyte is used for normal size oval shaped cells. To view another photo of oval macrocytes, see 2004 M3 Specimen BC-15.

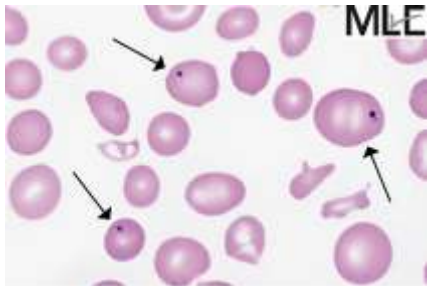
Specimen BC-17



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Platelet, giant	366	98.39%	Acceptable
Platelet, abnormal	5	1.34%	

The arrow in this photograph points to a **giant platelet**. This abnormally large platelet is nearly equal in size to the red blood cells surrounding it, and is more than five times larger than the other (normal size) platelets in the field. Thrombocytopenia with giant platelets is associated with megaloblastic anemia due to the impaired DNA synthesis. To view another photo of a giant platelet, see 2005 M2 Specimen BC-9

Specimen BC-18



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Howell-Jolly body	360	96.77%	Acceptable

The arrows in this ungraded educational challenge point to erythrocytes containing **Howell-Jolly bodies**. Howell-Jolly bodies are very small, round, dense, blue inclusion bodies made of nuclear debris. They are common in hemolytic and megaloblastic anemias. The anisocytosis and poikilocytosis seen here are also typical of this condition. Heinz bodies are also associated with hemoglobinopathies, but are irregularly shaped, and not visible in Wright's stained preparations. To view another photo of Howell-Jolly bodies, see 2006 M2 Specimen BC-7.

References:

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

Rodak, B. F.: *Hematology: Clinical Principles and Applications*. 2nd ed. W. B. Saunders, Philadelphia, 2002

Schrier, S. L. "Anemia: Production Defects." *ACP Medicine*. Ed. D. C. Dale. New York: WebMD, Inc., 2004. 1085-1086.

BLOOD BANK

ABO GROUP

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-11	Group O	10	100%	Acceptable
BB-12	Group A	10	100%	Acceptable
BB-13	Group AB	10	100%	Acceptable
BB-14	Group A	10	100%	Acceptable
BB-15	Group B	10	100%	Acceptable

RH FACTOR (D TYPE)

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-11	Rh Negative	18	100%	Acceptable
BB-12	Rh Negative	18	100%	Acceptable
BB-13	Rh Positive	18	100%	Acceptable
BB-14	Rh Positive	18	100%	Acceptable
BB-15	Rh Positive	18	100%	Acceptable

UNEXPECTED ANTIBODY DETECTION

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-11	Unexpected antibody detected	9	100%	Acceptable
AB-12	No unexpected antibody detected	9	100%	Acceptable
AB-13	No unexpected antibody detected	9	100%	Acceptable
AB-14	Unexpected antibody detected	9	100%	Acceptable
AB-15	No unexpected antibody detected	9	100%	Acceptable

ANTIBODY IDENTIFICATION

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-11	Unable to identify, referred (Anti-D)	1	100%	Acceptable
AB-12	No antibody detected	1	100%	Acceptable
AB-13	No antibody detected	1	100%	Acceptable
AB-14	Unable to identify, referred (Anti-C)	1	100%	Acceptable
AB-15	No antibody detected	1	100%	Acceptable

COMPATIBILITY TESTING

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-11	Not Compatible	6	100%	Acceptable
AB-12	Compatible	6	100%	Acceptable
AB-13	Compatible	6	100%	Acceptable
AB-14	Not Compatible	6	100%	Acceptable
AB-15	Compatible	6	100%	Acceptable

COAGUCHEK PROTHROMBIN TIME–INTERNATIONAL NORMALIZED RATIO (INR)

<u>Instruments</u>	Specimen WPT-11					Specimen WPT-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Roche CoaguChek Instruments	10	3.90	0.42	10.7	4.0	9	2.56	0.35	13.9	2.6
All Roche CoaguChek S Instruments	100	4.74	0.76	16.1	4.7	102	3.00	0.49	16.4	2.9
All Method	111	4.63	0.74	16.1	4.6	114	2.92	0.49	16.6	2.9
Roche CoaguChek	9	3.98	0.36	9.0	4.0	8	2.52	0.37	14.5	2.6
Roche CoaguChek S	74	4.80	0.77	16.1	4.7	75	3.05	0.56	18.2	3.0
Roche CoaguChek S - moderate	25	4.46	0.58	12.9	4.5	28	2.91	0.40	13.6	2.9

<u>Instruments</u>	Specimen WPT-13					Specimen WPT-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Roche CoaguChek S Instruments	57	1.61	0.17	10.8	1.6	58	4.73	0.87	18.4	4.6
All Method	58	1.60	0.17	10.8	1.6	59	4.73	0.86	18.2	4.6
Roche CoaguChek S	32	1.66	0.23	13.6	1.6	34	4.94	1.09	22.0	4.8
Roche CoaguChek S - moderate	26	1.57	0.15	9.7	1.6	25	4.56	0.72	15.8	4.5

<u>Instruments</u>	Specimen WPT-15				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Roche CoaguChek S Instruments	56	1.57	0.18	11.5	1.5
All Method	57	1.58	0.18	11.5	1.5
Roche CoaguChek S	32	1.64	0.22	13.3	1.6
Roche CoaguChek S - moderate	25	1.52	0.18	11.9	1.5

i-Stat PROTHROMBIN TIME (seconds)

<u>Instruments</u>	Specimen PTI-11					Specimen PTI-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
i-Stat Prothrombin Time	21	31.00	1.73	5.6	30.8	21	14.17	0.56	4.0	14.1

<u>Instruments</u>	Specimen PTI-13					Specimen PTI-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
i-Stat Prothrombin Time	21	30.46	1.56	5.1	30.2	21	14.00	0.63	4.5	13.9

<u>Instruments</u>	Specimen PTI-15				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
i-Stat Prothrombin Time	20	14.08	0.62	4.4	14.1

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

<u>Instruments</u>	Specimen PTI-11					Specimen PTI-12				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
i-Stat Prothrombin Time	21	2.71	0.17	6.2	2.7	21	1.20	0.06	4.9	1.2

<u>Instruments</u>	Specimen PTI-13					Specimen PTI-14				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
i-Stat Prothrombin Time	21	2.66	0.15	5.8	2.6	21	1.17	0.07	6.3	1.2

<u>Instruments</u>	Specimen PTI-15				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
i-Stat Prothrombin Time	20	1.20	0.07	5.7	1.2

ITC PROTIME MICROCOAGULATION SYSTEM PROTHROMBIN TIME (seconds)

<u>Instruments</u>	Specimen IT-5					Specimen IT-6				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	46	19.45	3.11	16.0	19.6	52	37.55	3.58	9.5	37.8
ITC ProTime System - 3 Channel	33	19.82	2.32	11.7	19.6	38	37.93	4.02	10.6	37.8
ITC ProTime System - 5 Channel	9	17.27	3.63	21.0	18.3	10	35.72	1.10	3.1	35.2

ITC PROTIME MICROCOAGULATION SYSTEM –INTERNATIONAL NORMALIZED RATIO (INR)

<u>Instruments</u>	Specimen IT-5					Specimen IT-6				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	48	1.49	0.19	12.9	1.5	56	2.87	0.27	9.5	2.8
ITC ProTime System - 3 Channel	35	1.53	0.18	11.8	1.5	40	2.91	0.31	10.5	2.9
ITC ProTime System - 5 Channel	10	1.42	0.22	15.1	1.4	11	2.74	0.08	3.0	2.7

MICROALBUMIN, DIPSTICK

Specimen UM-3

<u>Method</u>	<u>Labs</u>	<u>Participant Results</u>							
		<u>Negative</u>	<u>10 mg/L(Pos)</u>	<u>20/30 mg/L</u>	<u>50 mg/L (+)</u>	<u>80 mg/L</u>	<u>100 mg/L (++)</u>	<u>150 mg/L</u>	
ALL METHODS	62	1	1	54	6	-	-	-	
Bayer Clinitek Microalbumin	49	-	1	48	-	-	-	-	
-Micro-Bumintest	1	1	-	-	-	-	-	-	
Roche Micral - 1 minute	9	-	-	3	6	-	-	-	

CREATININE, DIPSTICK

Specimen UM-3

<u>Method</u>	<u>Labs</u>	<u>Participant Results</u>						
		<u>Negative</u>	<u>10 mg/dL</u>	<u>30 mg/dL</u>	<u>50 mg/dL</u>	<u>100 mg/dL</u>	<u>200 mg/dL</u>	<u>300 mg/dL</u>
ALL METHODS	51	-	-	-	-	-	5	46
Bayer Clinitek Microalbumin	47	-	-	-	-	-	5	42
Bayer Multistix Pro	2	-	-	-	-	-	-	2

MICROALBUMIN, QUANTITATIVE

Specimen UM-3

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	83	40.9	3.8	9.2	41
Bayer DCA 2000(+)	30	38.7	3.6	9.2	40
Beckman Synchron	5	39.8	1.8	4.5	40
Dade Dimension/AR/ES/RxL/Xpand	11	44.9	1.4	3.1	45
Olympus AU	7	41.9	1.8	4.2	42
Roche Integra	9	42.8	3.0	7.1	44
Siemens DCA Vantage	9	38.9	1.7	4.3	39

CREATININE, URINE (mg/dL)

Specimen UM-3

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Method	83	204.5	10.6	5.2	205
Bayer DCA 2000(+)	36	202.2	8.3	4.1	203
Beckman Synchron	6	215.2	8.6	4.0	217
Dade Dimension/AR/ES/RxL/Xpand	7	197.9	12.3	6.2	198
Roche Integra	9	204.7	5.7	2.8	204

CREATININE, URINE (mmol/L)

Two participants reported Creatinine. The Vendor Assay for specimen UM-3 is 19.5 mmol/L.

URINALYSIS DIPSTICK–SPECIFIC GRAVITY

Specimen UA-3

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>
All Refractive Index Methods	14	1.0229	0.0013	0.1	1.023
All Method	1158	1.0091	0.0047	0.5	1.010
Arkray PocketChem UA	15	1.0263	0.0044	0.4	1.025
Bayer Clinitek 10 / 100	55	1.0104	0.0037	0.4	1.010
Bayer Clinitek 50	206	1.0085	0.0024	0.2	1.010
Bayer Clinitek 500	31	1.0100	0.0000	0.0	1.010
Bayer Clinitek Status	220	1.0150	0.0000	0.0	1.015
Bayer Reagent Strips	367	1.0055	0.0014	0.1	1.005
Diagnostic Test Group Clarity Urocheck	9	1.0072	0.0051	0.5	1.005
Hypoguard DiaScreen	11	1.0105	0.0069	0.7	1.010
Other Method Specified	5	1.0042	0.0040	0.4	1.005
PSS Select Reagent Strips	17	1.0132	0.0063	0.6	1.010
Refractometer	10	1.0223	0.0010	0.1	1.023
Roche Chemstrip 101	15	1.0120	0.0032	0.3	1.010
Roche Chemstrips	78	1.0038	0.0038	0.4	1.005
Roche Criterion Analyzer	19	1.0124	0.0026	0.3	1.010
Roche Urisys	48	1.0122	0.0031	0.3	1.010
Schein Urispec	6	1.0050	0.0000	0.0	1.005

URINALYSIS DIPSTICK–pH

Specimen UA-3

Participant Results

<u>Method</u>	<u>Labs</u>	<u>3.5 or less</u>	<u>4.0</u>	<u>4.5</u>	<u>5.0</u>	<u>5.5</u>	<u>6.0</u>	<u>6.5</u>	<u>7.0</u>	<u>7.5</u>	<u>8.0</u>	<u>8.5</u>	<u>9.0</u>
ALL METHODS	1230	-	-	-	-	-	2	5	3	10	260	776	174
Arkray Aution Sticks	2	-	-	-	-	-	-	-	-	-	1	1	-
Arkray PocketChem UA	15	-	-	-	-	-	-	-	-	-	7	6	2
Bayer Clinitek 10 / 100	55	-	-	-	-	-	-	-	-	-	2	47	6
Bayer Clinitek 200/200+	1	-	-	-	-	-	-	-	-	-	-	1	-
Bayer Clinitek 50	211	-	-	-	-	-	1	-	-	-	76	133	1
Bayer Clinitek 500	35	-	-	-	-	-	-	-	1	-	2	31	1
Bayer Clinitek Advantus	3	-	-	-	-	-	-	-	-	-	-	3	-
Bayer Clinitek Atlas	4	-	-	-	-	-	-	-	-	-	2	2	-
Bayer Clinitek Status	236	-	-	-	-	-	-	1	-	1	-	183	51
Bayer Hemacombistix	1	-	-	-	-	-	-	-	-	-	-	1	-
Bayer Multistix Pro	2	-	-	-	-	-	-	-	-	-	1	1	-
Bayer Reagent Strips	416	-	-	-	-	-	1	3	2	7	82	316	5
Diagnostic Test Group Clarity Urocheck	9	-	-	-	-	-	-	-	-	1	2	6	-
Germaine Laboratories AimStrip	3	-	-	-	-	-	-	-	-	-	-	3	-
Hypoguard DiaScreen	12	-	-	-	-	-	-	-	1	-	5	4	2
Iris Diagnostics iChem 100	2	-	-	-	-	-	-	-	-	-	-	1	1
Iris Diagnostics vChem Urine Strips	1	-	-	-	-	-	-	-	-	-	1	-	-
PSS Select Reagent Strips	17	-	-	-	-	-	-	-	-	-	13	-	4
Roche Chemstrip 101	14	-	-	-	-	-	-	-	-	-	5	-	9
Roche Chemstrips	98	-	-	-	-	-	-	-	-	-	32	24	42
Roche Criterion Analyzer	20	-	-	-	-	-	-	-	-	-	1	-	19
Roche SuperUA/ChemstripUA	2	-	-	-	-	-	-	-	-	-	1	-	1
Roche Urisys	48	-	-	-	-	-	-	-	-	-	20	-	28
Schein Urispec	7	-	-	-	-	-	-	-	-	-	6	-	1
UriScan Reagent Strips	2	-	-	-	-	-	-	1	-	-	1	-	-

URINALYSIS DIPSTICK–PROTEIN QUALITATIVE

Specimen UA-3

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>30 mg/dL (1+)</u>	<u>100 mg/dL (2+)</u>	<u>300-500 mg/dL (3+)</u>	<u>≥1000 mg/dL (4+)</u>
ALL METHODS	1244	3	1	11	274	873	81
Arkray Aution Sticks	2	-	-	-	2	-	-
Arkray PocketChem UA	15	-	-	-	13	2	-
Bayer Clinitek 10 / 100	53	-	-	-	13	40	-
Bayer Clinitek 200/200+	1	-	-	-	-	1	-
Bayer Clinitek 50	210	2	1	-	-	205	1
Bayer Clinitek 500	35	-	-	-	19	16	-
Bayer Clinitek Advantus	3	-	-	-	2	1	-
Bayer Clinitek Atlas	4	-	-	-	-	4	-
Bayer Clinitek Status	236	-	-	-	-	236	-
Bayer Hemacombistix	1	-	-	-	-	1	-
Bayer Multistix Pro	3	-	-	-	-	3	-
Bayer Reagent Strips	415	-	-	3	50	288	74
Bayer Uristix	6	-	-	-	3	2	1
Diagnostic Test Group Clarity							
Urocheck	9	-	-	-	4	5	-
Germaine Laboratories AimStrip	3	-	-	-	-	3	-
Hypoguard DiaScreen	12	1	-	1	9	1	-
Iris Diagnostics iChem 100	2	-	-	-	-	2	-
Iris Diagnostics vChem Urine Strips	1	-	-	-	1	-	-
PSS Select Reagent Strips	17	-	-	1	8	8	-
Roche Chemstrip 101	14	-	-	1	13	-	-
Roche Chemstrips	106	-	-	2	73	29	2
Roche Criterion Analyzer	20	-	-	-	20	-	-
Roche SuperUA/ChemstripUA	2	-	-	-	2	-	-
Roche Urisys	48	-	-	3	30	15	-
Schein Urispec	7	-	-	-	6	1	-
Sulfosalicylic Acid	5	-	-	-	2	2	1
UriScan Reagent Strips	2	-	-	-	1	1	-

URINALYSIS DIPSTICK--GLUCOSE OR REDUCING SUBSTANCE

Specimen UA-3

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<i>Participant Results</i>						
			<u>50-100 mg/dL (Trace)</u>	<u>150 mg/dL</u>	<u>250 mg/dL</u>	<u>500 mg/dL</u>	<u>1000 mg/dL</u>	<u>>1000 mg/dL</u>	<u>≥2000 mg/dL</u>
ALL METHODS	1242	10	15	35	377	457	166	150	32
Arkray Aution Sticks	2	-	-	-	-	-	2	-	-
Arkray PocketChem UA	14	-	-	1	-	4	9	-	-
Bayer Clinitek 10 / 100	54	-	1	3	21	20	3	5	1
Bayer Clinitek 200/200+	1	-	-	-	-	-	-	1	-
Bayer Clinitek 50	211	1	1	4	30	119	7	42	7
Bayer Clinitek 500	34	-	-	-	5	26	1	2	-
Bayer Clinitek Advantus	3	-	-	-	2	1	-	-	-
Bayer Clinitek Atlas	4	-	-	-	2	2	-	-	-
Bayer Clinitek Status	236	1	1	17	166	43	3	2	3
Bayer Hemacombistix	1	-	-	-	-	1	-	-	-
Bayer Ketostix	1	-	-	-	1	-	-	-	-
Bayer Multistix Pro	2	-	-	-	-	2	-	-	-
Bayer Reagent Strips	417	5	9	7	135	188	47	12	14
Bayer Uristix	5	-	-	-	-	3	-	1	1
Diagnostic Test Group Clarity Urocheck	9	-	-	2	2	4	-	1	-
Germaine Laboratories AimStrip	3	-	-	1	2	-	-	-	-
Hypoguard DiaScreen	12	-	1	-	4	4	1	2	-
Iris Diagnostics iChem 100	2	-	-	-	-	1	-	1	-
Iris Diagnostics vChem Urine Strips	1	-	-	-	-	-	-	1	-
PSS Select Reagent Strips	17	-	-	-	1	3	7	1	5
Roche Chemstrip 101	14	-	-	-	2	5	-	7	-
Roche Chemstrips	106	1	1	-	-	7	66	30	1
Roche Criterion Analyzer	20	1	-	-	-	5	12	2	-
Roche SuperUA/ChemstripUA	2	-	-	-	-	-	2	-	-
Roche Urisys	48	-	-	-	1	9	3	35	-
Schein Urispec	7	-	-	-	-	1	1	5	-
UriScan Reagent Strips	2	-	1	-	-	-	1	-	-

URINALYSIS DIPSTICK–KETONES

Specimen UA-3

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>				
		<u>Negative</u>	<u>Trace (5 mg/dL)</u>	<u>Small (1+, 15 mg/dL)</u>	<u>Moderate (2+, 40 mg/dL)</u>	<u>Large (3+, 80 mg/dL)</u>
ALL METHODS	1223	4	-	1	8	1210
Arkray Aution Sticks	2	-	-	-	-	2
Arkray PocketChem UA	14	-	-	-	-	14
Bayer Acetest	1	-	-	-	-	1
Bayer Clinitek 10 / 100	55	-	-	-	-	55
Bayer Clinitek 200/200+	1	-	-	-	-	1
Bayer Clinitek 50	211	2	-	-	-	209
Bayer Clinitek 500	34	-	-	-	-	34
Bayer Clinitek Advantus	3	-	-	-	-	3
Bayer Clinitek Atlas	4	-	-	-	-	4
Bayer Clinitek Status	236	1	-	-	1	234
Bayer Ketostix	1	-	-	-	-	1
Bayer Multistix Pro	2	-	-	-	-	2
Bayer Reagent Strips	416	-	-	-	1	415
Diagnostic Test Group Clarity Urocheck	9	-	-	-	1	8
Germaine Laboratories AimStrip	3	-	-	-	-	3
Hypoguard DiaScreen	11	-	-	-	-	11
Iris Diagnostics iChem 100	2	-	-	-	-	2
Iris Diagnostics vChem Urine Strips	1	-	-	-	-	1
PSS Select Reagent Strips	17	-	-	-	-	17
Roche Chemstrip 101	14	-	-	-	3	11
Roche Chemstrips	97	1	-	-	1	95
Roche Criterion Analyzer	20	-	-	1	-	19
Roche SuperUA/ChemstripUA	2	-	-	-	-	2
Roche Urisys	46	-	-	-	1	45
Schein Urispec	7	-	-	-	-	7
UriScan Reagent Strips	2	-	-	-	-	2

URINALYSIS DIPSTICK–BILIRUBIN

Specimen UA-3

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<i>Participant Results</i>		
			<u>Small (1+)</u>	<u>Moderate (2+)</u>	<u>Large (3+)</u>
ALL METHODS	1174	1166	2	2	4
Arkray Aution Sticks	2	2	-	-	-
Arkray PocketChem UA	14	14	-	-	-
Bayer Clinitek 10 / 100	55	55	-	-	-
Bayer Clinitek 200/200+	1	1	-	-	-
Bayer Clinitek 50	209	208	-	-	1
Bayer Clinitek 500	31	31	-	-	-
Bayer Clinitek Advantus	3	3	-	-	-
Bayer Clinitek Atlas	4	4	-	-	-
Bayer Clinitek Status	215	215	-	-	-
Bayer Ictotest	4	4	-	-	-
Bayer Multistix Pro	1	1	-	-	-
Bayer Reagent Strips	396	393	1	-	2
Diagnostic Test Group Clarity Urocheck	9	9	-	-	-
Germaine Laboratories AimStrip	2	2	-	-	-
Hypoguard DiaScreen	12	12	-	-	-
Iris Diagnostics iChem 100	2	2	-	-	-
Iris Diagnostics vChem Urine Strips	1	1	-	-	-
PSS Select Reagent Strips	17	17	-	-	-
Roche Chemstrip 101	14	14	-	-	-
Roche Chemstrips	92	89	1	1	1
Roche Criterion Analyzer	20	20	-	-	-
Roche SuperUA/ChemstripUA	2	2	-	-	-

URINALYSIS DIPSTICK–UROBILINOGEN

Specimen UA-3

Participant Results

<u>Method</u>	<u>Labs</u>	<u>0.2/Normal mg/dL</u>	<u>1.0 mg/dL</u>	<u>2.0 mg/dL</u>	<u>4.0 mg/dL</u>	<u>>8.0 mg/dL</u>
ALL METHODS	1136	1129	1	5	1	-
Arkray Aution Sticks	2	2	-	-	-	-
Arkray PocketChem UA	15	15	-	-	-	-
Bayer Clinitek 10 / 100	54	53	-	1	-	-
Bayer Clinitek 200/200+	1	1	-	-	-	-
Bayer Clinitek 50	207	206	-	1	-	-
Bayer Clinitek 500	24	24	-	-	-	-
Bayer Clinitek Advantus	3	3	-	-	-	-
Bayer Clinitek Atlas	3	3	-	-	-	-
Bayer Clinitek Status	215	215	-	-	-	-
Bayer Multistix Pro	1	1	-	-	-	-
Bayer Reagent Strips	374	369	1	3	1	-
Diagnostic Test Group Clarity						
Urocheck	9	9	-	-	-	-
Germaine Laboratories AimStrip	3	3	-	-	-	-
Hypoguard DiaScreen	11	11	-	-	-	-
Iris Diagnostics iChem 100	2	2	-	-	-	-
Iris Diagnostics vChem Urine Strips	1	1	-	-	-	-
PSS Select Reagent Strips	16	16	-	-	-	-
Roche Chemstrip 101	14	14	-	-	-	-
Roche Chemstrips	90	90	-	-	-	-
Roche Criterion Analyzer	20	20	-	-	-	-
Roche SuperUA/ChemstripUA	2	2	-	-	-	-
Roche Urisys	48	48	-	-	-	-
Schein Urispec	7	7	-	-	-	-
UriScan Reagent Strips	2	2	-	-	-	-

URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN

Specimen UA-3

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small (5-10 RBC/μL, 1+)</u>	<u>Moderate (50 RBC/μL, 2+)</u>	<u>Large (250 RBC/μL, 3+)</u>
ALL METHODS	1235	8	5	9	92	1121
Arkray Aution Sticks	2	-	-	-	-	2
Arkray PocketChem UA	15	-	-	-	5	10
Bayer Clinitek 10 / 100	55	-	-	-	-	55
Bayer Clinitek 200/200+	1	-	-	-	-	1
Bayer Clinitek 2000	1	-	-	-	-	1
Bayer Clinitek 50	211	2	4	-	20	185
Bayer Clinitek 500	35	-	-	-	4	31
Bayer Clinitek Advantus	3	-	-	-	-	3
Bayer Clinitek Atlas	4	-	-	-	-	4
Bayer Clinitek Status	236	-	-	1	7	228
Bayer Hemacombistix	1	-	-	-	-	1
Bayer Multistix Pro	2	-	-	-	-	2
Bayer Reagent Strips	416	3	-	3	15	395
Diagnostic Test Group Clarity Urocheck	9	-	-	-	1	8
Germaine Laboratories AimStrip	3	-	-	-	-	3
Hypoguard DiaScreen	12	-	1	-	5	6
Iris Diagnostics iChem 100	2	-	-	-	1	1
Iris Diagnostics vChem Urine Strips	1	-	-	-	1	-
PSS Select Reagent Strips	17	-	-	2	5	10
Roche Chemstrip 101	14	-	-	1	-	13
Roche Chemstrips	103	1	-	1	9	92
Roche Criterion Analyzer	20	1	-	-	-	19
Roche SuperUA/ChemstripUA	2	-	-	-	-	2
Roche Urisys	48	-	-	-	18	30
Schein Urispec	7	-	-	-	-	7
UriScan Reagent Strips	2	-	-	1	-	1

URINALYSIS DIPSTICK–LEUKOCYTE ESTERASE

Specimen UA-3

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small (1+)</u>	<u>Moderate (2+)</u>	<u>Large (3+)</u>
ALL METHODS	1222	1215	2	2	2	1
Arkray Aution Sticks	2	2	-	-	-	-
Arkray PocketChem UA	15	15	-	-	-	-
Bayer Clinitek 10 / 100	55	55	-	-	-	-
Bayer Clinitek 200/200+	1	1	-	-	-	-
Bayer Clinitek 50	211	211	-	-	-	-
Bayer Clinitek 500	35	35	-	-	-	-
Bayer Clinitek Advantus	3	3	-	-	-	-
Bayer Clinitek Atlas	4	4	-	-	-	-
Bayer Clinitek Status	236	236	-	-	-	-
Bayer Multistix Pro	2	2	-	-	-	-
Bayer Reagent Strips	407	404	1	-	1	1
Bayer Uristix	3	3	-	-	-	-
Diagnostic Test Group Clarity Urocheck	9	9	-	-	-	-
Germaine Laboratories AimStrip	3	3	-	-	-	-
Hypoguard DiaScreen	11	11	-	-	-	-
Iris Diagnostics iChem 100	2	2	-	-	-	-
Iris Diagnostics vChem Urine Strips	1	1	-	-	-	-
PSS Select Reagent Strips	17	15	-	2	-	-
Roche Chemstrip 101	14	14	-	-	-	-
Roche Chemstrips	102	101	-	-	1	-
Roche Criterion Analyzer	20	20	-	-	-	-
Roche SuperUA/ChemstripUA	2	2	-	-	-	-
Roche Urisys	48	48	-	-	-	-
Schein Urispec	6	5	1	-	-	-
UriScan Reagent Strips	2	2	-	-	-	-

URINALYSIS DIPSTICK–NITRITE

Specimen UA-3

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Positive</u>
ALL METHODS	1221	1215	6
Arkray Aution Sticks	2	2	-
Arkray PocketChem UA	15	15	-
Bayer Clinitek 10 / 100	54	54	-
Bayer Clinitek 200/200+	1	1	-
Bayer Clinitek 50	210	210	-
Bayer Clinitek 500	35	35	-
Bayer Clinitek Advantus	3	3	-
Bayer Clinitek Atlas	4	4	-
Bayer Clinitek Status	235	235	-
Bayer Multistix Pro	2	2	-
Bayer Reagent Strips	403	402	1
Bayer Uristix	3	3	-
Diagnostic Test Group Clarity Urocheck	9	9	-
Germaine Laboratories AimStrip	3	3	-
Hypoguard DiaScreen	11	11	-
Iris Diagnostics iChem 100	2	2	-
Iris Diagnostics vChem Urine Strips	1	1	-
PSS Select Reagent Strips	17	17	-
Roche Chemstrip 101	15	15	-
Roche Chemstrips	101	96	5
Roche Criterion Analyzer	20	20	-
Roche SuperUA/ChemstripUA	2	2	-
Roche Urisys	47	47	-
Schein Urispec	7	7	-
UriScan Reagent Strips	2	2	-

URINALYSIS –MICROALBUMIN (dipstick only)**Specimen UA-3****Participant Results**

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/L(Pos)</u>	<u>20/30 mg/L</u>	<u>50 mg/L (+)</u>	<u>80 mg/L</u>	<u>100 mg/L (++)</u>	<u>150 mg/L</u>
ALL METHODS	144	6	2	3	7	-	57	69
Bayer Clinitek Microalbumin	63	1	-	-	-	-	1	61
DCL ImmunoDip	1	-	1	-	-	-	-	-
Micro-Bumintest	5	-	-	-	-	-	5	-
Roche Micral - 1 minute	62	4	-	2	6	-	50	-

URINALYSIS –URINE hCG**Specimen UA-3****Participant Results**

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Positive</u>
ALL METHODS	617	617	-
Acon Laboratories	4	4	-
ASI ProPhase Combo S/U	1	1	-
Bayer Clinitek 50	2	2	-
Bayer Clinitek Status	1	1	-
Beckman Coulter ICON 25 hCG	52	52	-
BioStar Acceava hCG Combo	4	4	-
BioStar Acceva hCG-Urine	4	4	-
Cardinal Health SP Brand combo	23	23	-
Cardinal Hlth SPBrand-cassette	12	12	-
Genzyme OSOM - Urine Test	5	5	-
Genzyme OSOM Card Pregnancy	21	21	-
Genzyme OSOM hCG Combo Test	14	14	-
Henry Schein One Step	21	21	-
Immunostics Cept-D	1	1	-
Immunostics Detector Combi	2	2	-
Immunostics hCG Detector-urine	1	1	-
Instant Tech. i Pregnancy	4	4	-
Inverness Signify hCG combo	6	6	-
Inverness Signify hCG urine	9	9	-
LifeSign Status hCG	2	2	-
Mainline Confirm hCG Combo	3	3	-
Mainline Confirm hCG Urine	6	6	-
Mainline Maxie hCG urine	1	1	-
McKesson urine hCG - all 20 mIU kits	30	30	-
PEP (Lab Supply) HCG	5	5	-
Polymedco Poly stat hCG	20	20	-
PSS Select hCG Cassette	40	40	-
PSS Select hCG Combo	20	20	-
PSS Select hCG Dipstick	5	5	-
Quidel QuickVue One-Step Combo	45	45	-
Quidel QuickVue One-Step Urine	126	126	-
Quidel QuickVue+ One-Step Combo	30	30	-
Ramco Quik-Trak hCG	4	4	-
Stanbio QuPID	10	10	-
Stanbio QuPID Plus	2	2	-
Stanbio QuStick	1	1	-
Stanbio TRUE hCG	7	7	-
Sure-Vue hCG - 25mIU	4	4	-
Sure-Vue hCG-STAT	6	6	-
Wampole Clearview hCG Combo/II	9	9	-
Wampole Clearview hCG II	6	6	-

FECAL OCCULT BLOOD

<u>Method</u>	Specimen OC-5			Specimen OC-6		
	<u>Labs</u>	<u>Negative</u>	<u>Positive</u>	<u>Labs</u>	<u>Negative</u>	<u>Positive</u>
ALL METHODS	416	412	4	415	6	409
Alfa Scientific Instant View	5	5	-	5	-	5
Beckman Coulter Hemoccult ICT	2	2	-	2	1	1
Guiaac (slide) Test	324	321	3	323	1	322
Polymedco OC Auto Micro 80	4	4	-	4	-	4
Quidel QuickVue iFOB	10	10	-	10	-	10
Wampole Clearview Ultra FOBT	23	23	-	23	2	21

KOH SKIN PREPARATION

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
K-5	Yeast/fungal elements present	201	91.36%	Acceptable
	Yeast/fungal elements absent	19	8.64%	
Organism present in specimen K-5: <i>Trichophyton mentagrophytes</i> .				
K-6	Yeast/fungal elements present	209	95.43%	Acceptable
	Yeast/fungal elements absent	10	4.57%	

Organism present in specimen K-6: *Microsporum gypseum*.

URINE SEDIMENT IDENTIFICATION

2008 M3
Urine Sediment ID
Specimens US-5 and US-6

Case History:

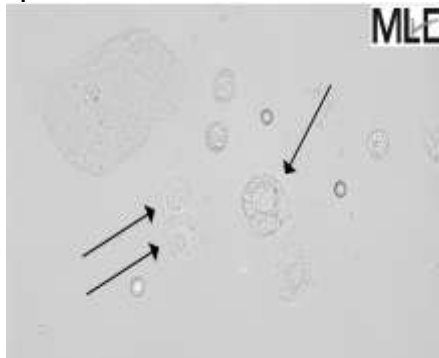
A 16 year old male presented to his family physician with a mild skin rash, itching and fever. He recently had oral surgery and had been given Penicillin V. A urinalysis was performed, and the results appear below.

Color = Yellow
Appearance = Hazy
Dipstick results:
Specific Gravity = 1.025
pH = 6.5
Protein = 1+
Blood = Small
Leukocyte esterase = Small
Glucose, ketones, bilirubin, urobilinogen, and nitrite = Negative

This patient was diagnosed with acute interstitial nephritis (AIN).

Acute interstitial nephritis occurs when an immune response causes inflammation of the renal tubules and the space between the tubules (the interstitium), leading to acute renal failure. The inflammation may be a response to a drug, infection, or immune disorder. Drug-induced AIN occurs when a drug triggers an allergic reaction as it is being filtered through the tubules of the kidney. Patients may present with a classic hypersensitivity reaction including rash, fever, and eosinophilia. Urinalysis results typically include sterile pyuria (presence of WBCs but no bacteria), mild proteinuria, and variable degrees of hematuria, as well as the presence of casts and renal epithelial cells. Most AIN patients have progressive acute renal failure, with increased serum creatinine and BUN. If the condition is recognized early enough, severe renal damage can be prevented. AIN is caused by many antibiotics and other drugs, and sometimes crystals of the drug will be seen in the urine sediment.

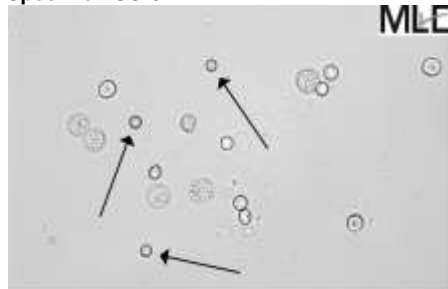
Specimen US-5



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Renal tubular epithelial (RTE)	638	72.42%	Acceptable
Transitional epithelial cell	147	16.69%	Acceptable
White blood cell	67	7.60%	
Squamous epithelial cell	10	1.14%	
RTE with fat globules	9	1.02%	
Cellular (RTE) cast	5	0.57%	

The arrows in this photograph point to **renal tubular epithelial cells (RTE)**. It can often be difficult to differentiate between transitional and renal tubular epithelial cells in urine because the morphology of transitional cells varies depending on the site of origin. *Because of this similarity, and the fact that both findings are clinically significant, we decided to accept “transitional epithelial cell” as an acceptable response for this challenge. However, it is important to learn to tell the difference between these two cell types.* The main distinguishing feature is the nucleus. The ratio of nucleus to cytoplasm within the RTE is higher, due to the relatively larger size of the RTE nucleus. In addition, RTE cells usually have an eccentric nucleus with a clearly defined perimeter, whereas transitional epithelial cells have a central, less distinctive nucleus which often appears to blend in with the cytoplasm of the cell. Transitional epithelial cells tend to absorb water and swell, therefore the most common shape is round or spherical, but they may be oval or triangular if they originate near the kidney or the bladder. Renal tubular epithelial cells originate inside the tubules of the kidney and generally do not swell with water. The RTEs most often seen in urine retain their flat-sided cuboidal or polyhedral shape, like the arrowed cell on the right. To view another photo of a RTE, see 2003 A1 Specimen US-1.

Specimen US-6



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Red blood cell (RBC)	690	78.32%	Not graded
Fat droplets or globules	143	16.23%	
Yeast/fungi	18	2.04%	
RBC/blood/hgb cast	13	1.48%	
Starch (Talc) granules	5	0.57%	

The arrows in this photograph point to **red blood cells (RBC)**. Notice the characteristic biconcave “innetube” shape of the cells, with pale centers surrounded by darker outer edges. They are fairly uniform in size, and all are quite a bit smaller than the five white blood cells seen in the same field. Although small fat droplets may resemble red blood cells in their spherical shape, fat droplets appear in a wide variety of sizes, and are highly refractile and transparent. To view another photo of red blood cells, see 2007 M1 Specimen US-1. To view a photo of fat droplets, see 2007 M3 Specimen US-6. Specimens US-6 is an ungraded challenge due to less than 80% participant consensus.

References:

Appel, G. B. “Tubulointerstitial Diseases.” *ACP Medicine*. Ed. D. C. Dale. New York: WebMD, Inc., 2004. 2027-2028.

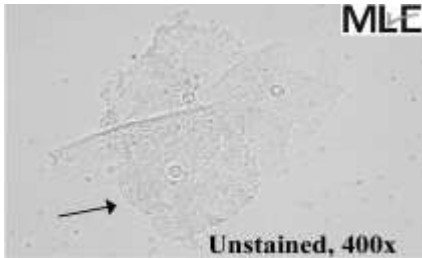
Haber, M.H.: *Urinary Sediment: A Textbook Atlas*. Chicago, American Society of Clinical Pathologists, 1981.

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

PROVIDER-PERFORMED MICROSCOPY (PPM)

Wet Mount Preparation

Specimen PPM-13

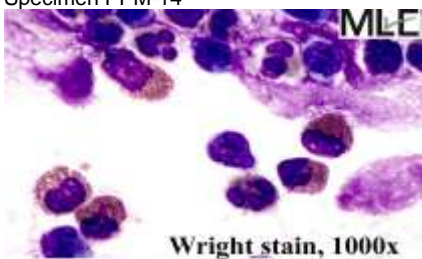


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Clue Cell	560	89.60%	Acceptable
Squamous epithelial cell	56	8.96%	

The arrow in this photograph of a vaginal wet prep points to a **clue cell**. Clue cells are squamous epithelial cells that are covered with the bacterium *Gardnerella vaginalis*. The cells are so encrusted with the tiny bacilli that they have a glittery or granular appearance. The edges of the cell are obscured by the bacteria, making them appear rough, shaggy or torn. To view another photo of a clue cell, see 2007 M3 Specimen PPM-10.

Nasal Smear

Specimen PPM-14

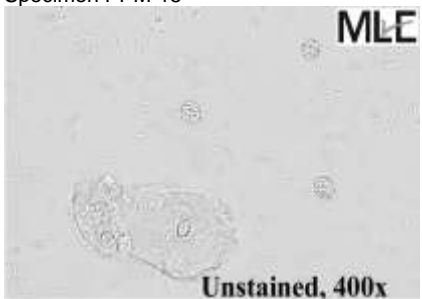


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Eosinophils present	211	96.79%	Acceptable
Eosinophils absent	7	3.21%	

Several **eosinophils are present** in this photograph of stained nasal mucus.

Wet Mount Preparation

Specimen PPM-15



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Sperm absent	615	99.51%	Acceptable
Sperm present	3	0.49%	

Sperm are absent from this photograph of a vaginal wet prep.

Stool Preparation

Specimen PPM-16



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Leukocytes are present	219	97.77%	Acceptable
Leukocytes are absent	5	2.23%	

Three **leukocytes are present** in this photograph of a stained stool preparation.

PROVIDER-PERFORMED MICROSCOPY (PPM)

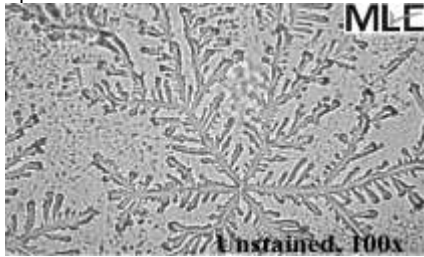
KOH Preparation
Specimen PPM-17



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Yeast/fungal elements absent	585	97.01%	Acceptable
Yeast/fungal elements present	18	2.99%	

Yeast/fungal elements are absent from this photograph of a vaginal KOH preparation.

Vaginal Fluid Preparation
Specimen PPM-18



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Ferning present	311	99.36%	Acceptable
Ferning absent	2	0.64%	

Ferning is present in this photograph of dried vaginal fluid. Unlike urine or normal vaginal secretions, amniotic fluid crystallizes when dried on a microscope slide to form a pattern resembling a fern leaf. The fern test is used to test for ruptured membranes. Ferning indicates leakage of amniotic fluid due to a membrane rupture.

Reference:

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

Medical Laboratory Evaluation
 25 Massachusetts Ave NW Ste 700
 Washington, DC 20001-7401
 800-338-2746 • 202-261-4500 • Fax: 202-835-0440
www.acponline.org/mle