

MEDICAL LABORATORY EVALUATION

PARTICIPANT SUMMARY

2 • 0 • 1 • 8

Hematology, Coagulation,
Blood Bank, Urinalysis, PPM
2018 MLE-M1

**ACP | Medical Laboratory
Evaluation** 

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

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EVALUATION CRITERIA

The evaluation criteria used in the MLE Program is in accordance with the Clinical Laboratory Improvement Amendments of 1988 (CLIA '88) federal requirements for proficiency testing. The criteria are included below.

Qualitative

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

| | |
|----------------------------------|---|
| ABO Group | 95% Participant or 100% Referee Consensus |
| Antibody Identification | 95% Consensus |
| Blood Cell Identification | 80% Consensus |
| Compatibility Testing | 95% Participant or 100% Referee Consensus |
| Creatinine (Semi-Quantitative) | 80% Consensus |
| Crystal Identification | 80% Consensus |
| Fecal Occult Blood | 80% Consensus |
| KOH Skin Preparation | 80% Consensus |
| Microalbumin (Semi-Quantitative) | 80% Consensus |
| Provider-Performed Microscopy | 80% Consensus |
| Rh Factor (D Type) | 95% Participant or 100% Referee Consensus |
| Unexpected Antibody Detection | 95% Consensus |
| Urine Dipstick | 80% Consensus |
| Urine hCG | 80% Consensus |
| Urine Sediment Identification | 80% Consensus |

Quantitative

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

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

*Whichever is greater

HEMOCUE HEMATOLOGY–HEMOGLOBIN (g/dL)

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen HQ-1</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen HQ-2</u> | | | |
|-------------------|-------------|-------------|----------------------|-----------|---------------|--------------|--------------|-------------|-------------|----------------------|-----------|---------------|--------------|
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| HemoCue | 38 | 15.26 | 0.24 | 1.6 | 15.3 | 14.1 - 16.4 | 37 | 12.89 | 0.29 | 2.3 | 13.0 | 11.9 - 13.8 | |

HEMOCUE HEMATOLOGY–GLUCOSE (mg/dL)

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen HQ-1</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen HQ-2</u> | | | |
|-----------------------|-------------|-------------|----------------------|-----------|---------------|--------------|--------------|-------------|-------------|----------------------|-----------|---------------|--------------|
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 31 | 290.5 | 10.6 | 3.7 | 291 | 232 - 349 | 33 | 86.3 | 7.8 | 9.0 | 84 | 69 - 104 | |
| All HemoCue Methods | 31 | 290.5 | 10.6 | 3.7 | 291 | 232 - 349 | 33 | 86.3 | 7.8 | 9.0 | 84 | 69 - 104 | |
| HemoCue Glucose 201/+ | 31 | 288.5 | 15.5 | 5.4 | 290 | 230 - 347 | 32 | 86.5 | 7.8 | 9.0 | 84 | 69 - 104 | |

SEDIMENTATION RATE (MM/HR)

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen ES-1</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen ES-2</u> | | | |
|-------------------------------|-------------|-------------|----------------------|-----------|---------------|--------------|--------------|-------------|-------------|----------------------|-----------|---------------|--------------|
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 125 | 47.9 | 12.8 | 26.7 | 45 | 22 - 74 | 124 | 6.5 | 2.4 | 37.4 | 6 | 1 - 12 | |
| All Automated Methods | 32 | 59.9 | 10.0 | 16.7 | 59 | 39 - 80 | 33 | 6.4 | 2.6 | 40.4 | 6 | 1 - 12 | |
| All Manual Methods | 90 | 42.8 | 8.8 | 20.5 | 41 | 25 - 61 | 90 | 6.5 | 2.4 | 36.6 | 7 | 1 - 12 | |
| All Vital Diagnostics Methods | 20 | 60.6 | 6.6 | 10.9 | 58 | 47 - 74 | 21 | 5.8 | 1.5 | 25.9 | 6 | 2 - 9 | |
| Vital Diagnostics Excyte M/10 | 13 | 59.2 | 5.4 | 9.2 | 58 | 48 - 71 | 13 | 5.9 | 1.4 | 24.3 | 6 | 3 - 9 | |
| Westergren - diluted | 74 | 43.1 | 8.2 | 19.0 | 40 | 26 - 60 | 73 | 6.2 | 2.4 | 38.2 | 6 | 1 - 11 | |
| Westergren - undiluted | 10 | 48.9 | 18.3 | 37.4 | 47 | 12 - 86 | 10 | 7.4 | 2.3 | 31.3 | 8 | 2 - 13 | |

SEDIMAT SEDIMENTATION RATE (MM/HR)

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen MAT-1</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen MAT-2</u> | | | |
|----------------------|-------------|-------------|-----------------------|-----------|---------------|--------------|--------------|-------------|-------------|-----------------------|-----------|---------------|--------------|
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| Polymedco Sedimat 15 | 12 | 61.8 | 4.1 | 6.7 | 62 | 53 - 71 | 12 | 1.9 | 1.0 | 52.0 | 2 | 0 - 4 | |

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

| <u>Instrument</u> | Specimen CL-1 | | | | | | Specimen CL-2 | | | | | |
|---------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 20.37 | 0.63 | 3.1 | 20.7 | 17.3 - 23.5 | 11 | 3.44 | 0.21 | 6.2 | 3.4 | 2.9 - 4.0 |
| All Abbott Cell-Dyn Instruments | 11 | 20.37 | 0.63 | 3.1 | 20.7 | 17.3 - 23.5 | 11 | 3.44 | 0.21 | 6.2 | 3.4 | 2.9 - 4.0 |
| Abbott Cell-Dyn Ruby | 10 | 20.30 | 0.66 | 3.3 | 20.7 | 17.2 - 23.4 | 10 | 3.43 | 0.23 | 6.8 | 3.4 | 2.9 - 4.0 |
| <u>Instrument</u> | Specimen CL-3 | | | | | | Specimen CL-4 | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 7.56 | 0.13 | 1.7 | 7.6 | 6.4 - 8.7 | 11 | 3.30 | 0.13 | 3.9 | 3.3 | 2.8 - 3.8 |
| All Abbott Cell-Dyn Instruments | 11 | 7.56 | 0.13 | 1.7 | 7.6 | 6.4 - 8.7 | 11 | 3.30 | 0.13 | 3.9 | 3.3 | 2.8 - 3.8 |
| Abbott Cell-Dyn Ruby | 10 | 7.55 | 0.14 | 1.8 | 7.6 | 6.4 - 8.7 | 10 | 3.27 | 0.10 | 3.2 | 3.3 | 2.7 - 3.8 |
| <u>Instrument</u> | Specimen CL-5 | | | | | | | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 20.40 | 0.41 | 2.0 | 20.5 | 17.3 - 23.5 | | | | | | |
| All Abbott Cell-Dyn Instruments | 11 | 20.40 | 0.41 | 2.0 | 20.5 | 17.3 - 23.5 | | | | | | |
| Abbott Cell-Dyn Ruby | 10 | 20.36 | 0.44 | 2.2 | 20.3 | 17.3 - 23.5 | | | | | | |

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

| <u>Instrument</u> | Specimen CL-1 | | | | | | Specimen CL-2 | | | | | |
|---------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 5.353 | 0.114 | 2.1 | 5.34 | 5.03 - 5.68 | 11 | 2.190 | 0.049 | 2.3 | 2.20 | 2.05 - 2.33 |
| All Abbott Cell-Dyn Instruments | 11 | 5.353 | 0.114 | 2.1 | 5.34 | 5.03 - 5.68 | 11 | 2.190 | 0.049 | 2.3 | 2.20 | 2.05 - 2.33 |
| Abbott Cell-Dyn Ruby | 10 | 5.357 | 0.125 | 2.3 | 5.35 | 5.03 - 5.68 | 10 | 2.187 | 0.053 | 2.4 | 2.19 | 2.05 - 2.32 |
| <u>Instrument</u> | Specimen CL-3 | | | | | | Specimen CL-4 | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 4.477 | 0.122 | 2.7 | 4.50 | 4.20 - 4.75 | 11 | 2.170 | 0.053 | 2.5 | 2.17 | 2.03 - 2.31 |
| All Abbott Cell-Dyn Instruments | 11 | 4.477 | 0.122 | 2.7 | 4.50 | 4.20 - 4.75 | 11 | 2.170 | 0.053 | 2.5 | 2.17 | 2.03 - 2.31 |
| Abbott Cell-Dyn Ruby | 10 | 4.518 | 0.060 | 1.3 | 4.52 | 4.24 - 4.79 | 10 | 2.160 | 0.051 | 2.3 | 2.17 | 2.03 - 2.29 |
| <u>Instrument</u> | Specimen CL-5 | | | | | | | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 5.326 | 0.121 | 2.3 | 5.35 | 5.00 - 5.65 | | | | | | |
| All Abbott Cell-Dyn Instruments | 11 | 5.326 | 0.121 | 2.3 | 5.35 | 5.00 - 5.65 | | | | | | |
| Abbott Cell-Dyn Ruby | 10 | 5.347 | 0.117 | 2.2 | 5.37 | 5.02 - 5.67 | | | | | | |

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

| <u>Instrument</u> | Specimen CL-1 | | | | | | Specimen CL-2 | | | | | |
|---------------------------------|----------------------|-------------|-----------|-----------|---------------|----------------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 16.76 | 0.57 | 3.4 | 16.6 | 15.5 - 18.0 | 11 | 5.59 | 0.16 | 2.8 | 5.5 | 5.1 - 6.0 |
| All Abbott Cell-Dyn Instruments | 11 | 16.76 | 0.57 | 3.4 | 16.6 | 15.5 - 18.0 | 11 | 5.59 | 0.16 | 2.8 | 5.5 | 5.1 - 6.0 |
| Abbott Cell-Dyn Ruby | 10 | 16.73 | 0.63 | 3.7 | 16.6 | 15.5 - 18.0 | 10 | 5.55 | 0.14 | 2.5 | 5.5 | 5.1 - 6.0 |
| Specimen CL-3 | | | | | | Specimen CL-4 | | | | | | |
| All Method | 11 | 13.39 | 0.35 | 2.6 | 13.4 | 12.4 - 14.4 | 11 | 5.60 | 0.16 | 2.9 | 5.6 | 5.2 - 6.0 |
| All Abbott Cell-Dyn Instruments | 11 | 13.39 | 0.35 | 2.6 | 13.4 | 12.4 - 14.4 | 11 | 5.60 | 0.16 | 2.9 | 5.6 | 5.2 - 6.0 |
| Abbott Cell-Dyn Ruby | 10 | 13.40 | 0.38 | 2.9 | 13.4 | 12.4 - 14.4 | 10 | 5.55 | 0.10 | 1.9 | 5.6 | 5.1 - 6.0 |
| Specimen CL-5 | | | | | | | | | | | | |
| All Method | 11 | 16.59 | 0.32 | 2.0 | 16.7 | 15.4 - 17.8 | | | | | | |
| All Abbott Cell-Dyn Instruments | 11 | 16.59 | 0.32 | 2.0 | 16.7 | 15.4 - 17.8 | | | | | | |
| Abbott Cell-Dyn Ruby | 10 | 16.60 | 0.35 | 2.1 | 16.8 | 15.4 - 17.8 | | | | | | |

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

| <u>Instrument</u> | Specimen CL-1 | | | | | | Specimen CL-2 | | | | | |
|---------------------------------|----------------------|-------------|-----------|-----------|---------------|----------------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 45.49 | 1.39 | 3.1 | 45.8 | 42.7 - 48.3 | 11 | 15.37 | 0.34 | 2.2 | 15.4 | 14.4 - 16.3 |
| All Abbott Cell-Dyn Instruments | 11 | 45.49 | 1.39 | 3.1 | 45.8 | 42.7 - 48.3 | 11 | 15.37 | 0.34 | 2.2 | 15.4 | 14.4 - 16.3 |
| Abbott Cell-Dyn Ruby | 10 | 45.43 | 1.51 | 3.3 | 45.2 | 42.7 - 48.2 | 10 | 15.35 | 0.37 | 2.4 | 15.4 | 14.4 - 16.3 |
| Specimen CL-3 | | | | | | Specimen CL-4 | | | | | | |
| All Method | 11 | 37.00 | 1.18 | 3.2 | 36.6 | 34.7 - 39.3 | 11 | 15.19 | 0.32 | 2.1 | 15.3 | 14.2 - 16.1 |
| All Abbott Cell-Dyn Instruments | 11 | 37.00 | 1.18 | 3.2 | 36.6 | 34.7 - 39.3 | 11 | 15.19 | 0.32 | 2.1 | 15.3 | 14.2 - 16.1 |
| Abbott Cell-Dyn Ruby | 10 | 37.30 | 0.96 | 2.6 | 37.1 | 35.0 - 39.6 | 10 | 15.13 | 0.31 | 2.1 | 15.3 | 14.2 - 16.1 |
| Specimen CL-5 | | | | | | | | | | | | |
| All Method | 11 | 45.34 | 1.00 | 2.2 | 44.9 | 42.6 - 48.1 | | | | | | |
| All Abbott Cell-Dyn Instruments | 11 | 45.34 | 1.00 | 2.2 | 44.9 | 42.6 - 48.1 | | | | | | |
| Abbott Cell-Dyn Ruby | 10 | 45.45 | 1.05 | 2.3 | 45.4 | 42.7 - 48.2 | | | | | | |

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

| <u>Instrument</u> | Specimen CL-1 | | | | | | Specimen CL-2 | | | | | |
|---------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 486.6 | 21.6 | 4.4 | 492 | 364 - 609 | 11 | 79.4 | 8.0 | 10.0 | 79 | 59 - 100 |
| All Abbott Cell-Dyn Instruments | 11 | 486.6 | 21.6 | 4.4 | 492 | 364 - 609 | 11 | 79.4 | 8.0 | 10.0 | 79 | 59 - 100 |
| Abbott Cell-Dyn Ruby | 10 | 483.3 | 21.7 | 4.5 | 488 | 362 - 605 | 10 | 77.2 | 5.8 | 7.5 | 77 | 57 - 97 |
| <u>Instrument</u> | Specimen CL-3 | | | | | | Specimen CL-4 | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 272.3 | 12.3 | 4.5 | 270 | 204 - 341 | 11 | 79.0 | 9.1 | 11.5 | 79 | 59 - 99 |
| All Abbott Cell-Dyn Instruments | 11 | 272.3 | 12.3 | 4.5 | 270 | 204 - 341 | 11 | 79.0 | 9.1 | 11.5 | 79 | 59 - 99 |
| Abbott Cell-Dyn Ruby | 10 | 272.8 | 13.4 | 4.9 | 271 | 204 - 342 | 10 | 77.2 | 8.4 | 10.9 | 76 | 57 - 97 |
| <u>Instrument</u> | Specimen CL-5 | | | | | | | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | | | |
| All Method | 11 | 486.1 | 23.9 | 4.9 | 489 | 364 - 608 | | | | | | |
| All Abbott Cell-Dyn Instruments | 11 | 486.1 | 23.9 | 4.9 | 489 | 364 - 608 | | | | | | |
| Abbott Cell-Dyn Ruby | 10 | 483.7 | 25.2 | 5.2 | 481 | 362 - 605 | | | | | | |

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

| <u>Instrument</u> | Specimen CL-1 | | | | | | Specimen CL-2 | | | | | |
|---------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 77.34 | 0.47 | 0.6 | 77.3 | 75.9 - 78.8 | 11 | 47.64 | 2.15 | 4.5 | 47.2 | 41.1 - 54.1 |
| All Abbott Cell-Dyn Instruments | 11 | 77.34 | 0.47 | 0.6 | 77.3 | 75.9 - 78.8 | 11 | 47.64 | 2.15 | 4.5 | 47.2 | 41.1 - 54.1 |
| Abbott Cell-Dyn Ruby | 10 | 77.40 | 0.49 | 0.6 | 77.4 | 75.9 - 78.9 | 10 | 48.07 | 2.01 | 4.2 | 48.1 | 42.0 - 54.1 |
| <u>Instrument</u> | Specimen CL-3 | | | | | | Specimen CL-4 | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 63.53 | 0.52 | 0.8 | 63.5 | 61.9 - 65.1 | 11 | 46.24 | 0.98 | 2.1 | 46.3 | 43.2 - 49.2 |
| All Abbott Cell-Dyn Instruments | 11 | 63.53 | 0.52 | 0.8 | 63.5 | 61.9 - 65.1 | 11 | 46.24 | 0.98 | 2.1 | 46.3 | 43.2 - 49.2 |
| Abbott Cell-Dyn Ruby | 10 | 63.63 | 0.48 | 0.8 | 63.6 | 62.1 - 65.1 | 10 | 46.45 | 0.89 | 1.9 | 46.5 | 43.7 - 49.2 |
| <u>Instrument</u> | Specimen CL-5 | | | | | | | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | | | |
| All Method | 11 | 76.97 | 1.13 | 1.5 | 76.8 | 73.5 - 80.4 | | | | | | |
| All Abbott Cell-Dyn Instruments | 11 | 76.97 | 1.13 | 1.5 | 76.8 | 73.5 - 80.4 | | | | | | |
| Abbott Cell-Dyn Ruby | 10 | 77.12 | 1.19 | 1.5 | 77.4 | 73.5 - 80.8 | | | | | | |

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

| <u>Instrument</u> | Specimen CL-1 | | | | | | Specimen CL-2 | | | | | |
|---------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 16.36 | 0.94 | 5.7 | 16.8 | 13.5 - 19.2 | 11 | 42.36 | 2.36 | 5.6 | 42.1 | 35.2 - 49.5 |
| All Abbott Cell-Dyn Instruments | 11 | 16.36 | 0.94 | 5.7 | 16.8 | 13.5 - 19.2 | 11 | 42.36 | 2.36 | 5.6 | 42.1 | 35.2 - 49.5 |
| Abbott Cell-Dyn Ruby | 10 | 16.20 | 0.92 | 5.7 | 16.5 | 13.4 - 19.0 | 10 | 41.78 | 1.98 | 4.7 | 41.6 | 35.8 - 47.8 |
| <u>Instrument</u> | Specimen CL-3 | | | | | | Specimen CL-4 | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 28.57 | 1.61 | 5.6 | 29.2 | 23.7 - 33.5 | 11 | 43.24 | 2.44 | 5.6 | 44.3 | 35.9 - 50.6 |
| All Abbott Cell-Dyn Instruments | 11 | 28.57 | 1.61 | 5.6 | 29.2 | 23.7 - 33.5 | 11 | 43.24 | 2.44 | 5.6 | 44.3 | 35.9 - 50.6 |
| Abbott Cell-Dyn Ruby | 10 | 28.50 | 1.75 | 6.2 | 29.2 | 23.2 - 33.8 | 10 | 42.85 | 2.42 | 5.6 | 43.2 | 35.5 - 50.2 |
| <u>Instrument</u> | Specimen CL-5 | | | | | | | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | | | |
| All Method | 11 | 17.33 | 1.63 | 9.4 | 17.3 | 12.4 - 22.3 | | | | | | |
| All Abbott Cell-Dyn Instruments | 11 | 17.33 | 1.63 | 9.4 | 17.3 | 12.4 - 22.3 | | | | | | |
| Abbott Cell-Dyn Ruby | 10 | 17.18 | 1.77 | 10.3 | 16.5 | 11.8 - 22.5 | | | | | | |

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

| <u>Instrument</u> | Specimen CL-1 | | | | | | Specimen CL-2 | | | | | |
|---------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 2.88 | 0.56 | 19.4 | 2.8 | 1.2 - 4.6 | 11 | 5.61 | 0.54 | 9.7 | 5.6 | 3.9 - 7.3 |
| All Abbott Cell-Dyn Instruments | 11 | 2.88 | 0.56 | 19.4 | 2.8 | 1.2 - 4.6 | 11 | 5.61 | 0.54 | 9.7 | 5.6 | 3.9 - 7.3 |
| Abbott Cell-Dyn Ruby | 10 | 2.88 | 0.63 | 21.7 | 2.6 | 1.0 - 4.8 | 10 | 5.77 | 0.40 | 6.9 | 5.7 | 4.5 - 7.0 |
| <u>Instrument</u> | Specimen CL-3 | | | | | | Specimen CL-4 | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 11 | 3.68 | 0.50 | 13.6 | 3.8 | 2.1 - 5.2 | 11 | 6.40 | 1.60 | 25.1 | 6.3 | 1.5 - 11.3 |
| All Abbott Cell-Dyn Instruments | 11 | 3.68 | 0.50 | 13.6 | 3.8 | 2.1 - 5.2 | 11 | 6.40 | 1.60 | 25.1 | 6.3 | 1.5 - 11.3 |
| Abbott Cell-Dyn Ruby | 10 | 3.60 | 0.51 | 14.2 | 3.5 | 2.0 - 5.2 | 10 | 6.62 | 1.64 | 24.8 | 6.4 | 1.6 - 11.6 |
| <u>Instrument</u> | Specimen CL-5 | | | | | | | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | | | |
| All Method | 11 | 2.77 | 0.55 | 19.8 | 2.9 | 1.1 - 4.5 | | | | | | |
| All Abbott Cell-Dyn Instruments | 11 | 2.77 | 0.55 | 19.8 | 2.9 | 1.1 - 4.5 | | | | | | |
| Abbott Cell-Dyn Ruby | 10 | 2.80 | 0.60 | 21.6 | 3.1 | 0.9 - 4.7 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen CL-1 | | | | | | Specimen CL-2 | | | | | |
|---------------------------------|----------------------|--------------------|------------------|------------------|----------------------|----------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 11 | 2.71 | 0.07 | 2.5 | 2.7 | 2.5 - 3.0 | 11 | 3.90 | 0.48 | 12.4 | 4.1 | 2.4 - 5.4 |
| All Abbott Cell-Dyn Instruments | 11 | 2.71 | 0.07 | 2.5 | 2.7 | 2.5 - 3.0 | 11 | 3.90 | 0.48 | 12.4 | 4.1 | 2.4 - 5.4 |
| Abbott Cell-Dyn Ruby | 10 | 2.73 | 0.05 | 1.9 | 2.7 | 2.5 - 2.9 | 10 | 3.85 | 0.51 | 13.2 | 3.8 | 2.3 - 5.4 |
| Specimen CL-3 | | | | | | Specimen CL-4 | | | | | | |
| All Method | 11 | 3.61 | 0.23 | 6.3 | 3.7 | 2.9 - 4.3 | 11 | 3.66 | 0.40 | 11.0 | 3.7 | 2.4 - 4.9 |
| All Abbott Cell-Dyn Instruments | 11 | 3.61 | 0.23 | 6.3 | 3.7 | 2.9 - 4.3 | 11 | 3.66 | 0.40 | 11.0 | 3.7 | 2.4 - 4.9 |
| Abbott Cell-Dyn Ruby | 10 | 3.60 | 0.24 | 6.8 | 3.7 | 2.8 - 4.4 | 10 | 3.60 | 0.41 | 11.4 | 3.6 | 2.3 - 4.9 |
| Specimen CL-5 | | | | | | | | | | | | |
| All Method | 11 | 2.72 | 0.19 | 7.1 | 2.8 | 2.1 - 3.3 | | | | | | |
| All Abbott Cell-Dyn Instruments | 11 | 2.72 | 0.19 | 7.1 | 2.8 | 2.1 - 3.3 | | | | | | |
| Abbott Cell-Dyn Ruby | 10 | 2.68 | 0.19 | 7.2 | 2.7 | 2.1 - 3.3 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen CL-1 | | | | | | Specimen CL-2 | | | | | |
|---------------------------------|----------------------|--------------------|------------------|------------------|----------------------|----------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 11 | 0.47 | 0.27 | 57.1 | 0.4 | 0.0 - 1.3 | 11 | 0.44 | 0.44 | 98.3 | 0.3 | 0.0 - 1.8 |
| All Abbott Cell-Dyn Instruments | 11 | 0.47 | 0.27 | 57.1 | 0.4 | 0.0 - 1.3 | 11 | 0.44 | 0.44 | 98.3 | 0.3 | 0.0 - 1.8 |
| Abbott Cell-Dyn Ruby | 10 | 0.52 | 0.26 | 51.1 | 0.6 | 0.0 - 1.4 | 10 | 0.50 | 0.45 | 89.4 | 0.4 | 0.0 - 1.9 |
| Specimen CL-3 | | | | | | Specimen CL-4 | | | | | | |
| All Method | 11 | 0.29 | 0.32 | 113.3 | 0.2 | 0.0 - 1.3 | 11 | 0.30 | 0.37 | 122.9 | 0.2 | 0.0 - 1.5 |
| All Abbott Cell-Dyn Instruments | 11 | 0.29 | 0.32 | 113.3 | 0.2 | 0.0 - 1.3 | 11 | 0.30 | 0.37 | 122.9 | 0.2 | 0.0 - 1.5 |
| Abbott Cell-Dyn Ruby | 10 | 0.28 | 0.35 | 125.1 | 0.2 | 0.0 - 1.4 | 10 | 0.28 | 0.41 | 145.9 | 0.1 | 0.0 - 1.6 |
| Specimen CL-5 | | | | | | | | | | | | |
| All Method | 11 | 0.22 | 0.10 | 45.4 | 0.3 | 0.0 - 0.6 | | | | | | |
| All Abbott Cell-Dyn Instruments | 11 | 0.22 | 0.10 | 45.4 | 0.3 | 0.0 - 0.6 | | | | | | |
| Abbott Cell-Dyn Ruby | 10 | 0.24 | 0.09 | 37.3 | 0.3 | 0.0 - 0.6 | | | | | | |

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

| <u>Instrument</u> | Specimen SYX-1 | | | | | | | Specimen SYX-2 | | | | | |
|-----------------------------------|-----------------------|--------------------|------------------|----------------------|----------------------|---------------------|-----------------------|-----------------------|--------------------|------------------|----------------------|----------------------|---------------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 84 | 20.41 | 0.71 | 3.5 | 20.4 | 17.3 - 23.5 | 82 | 2.75 | 0.09 | 3.2 | 2.8 | 2.3 - 3.2 | |
| All Sysmex Instruments | 82 | 20.38 | 0.69 | 3.4 | 20.4 | 17.3 - 23.5 | 80 | 2.75 | 0.09 | 3.1 | 2.8 | 2.3 - 3.2 | |
| Sysmex KX-21N & K-800, 1000, 4500 | 30 | 20.19 | 0.51 | 2.5 | 20.1 | 17.1 - 23.3 | 30 | 2.73 | 0.07 | 2.7 | 2.7 | 2.3 - 3.2 | |
| Sysmex pocH-100i | 16 | 19.88 | 0.65 | 3.3 | 20.0 | 16.8 - 22.9 | 16 | 2.69 | 0.09 | 3.2 | 2.7 | 2.2 - 3.1 | |
| Sysmex XP-300 | 33 | 20.82 | 0.43 | 2.1 | 20.8 | 17.6 - 24.0 | 33 | 2.79 | 0.07 | 2.7 | 2.8 | 2.3 - 3.3 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Specimen SYX-3 | | | | | | | Specimen SYX-4 | | | | | | |
| <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | |
| All Method | 84 | 8.11 | 0.26 | 3.2 | 8.1 | 6.8 - 9.4 | 83 | 2.75 | 0.09 | 3.4 | 2.8 | 2.3 - 3.2 | |
| All Sysmex Instruments | 82 | 8.11 | 0.26 | 3.2 | 8.1 | 6.8 - 9.4 | 81 | 2.75 | 0.09 | 3.4 | 2.8 | 2.3 - 3.2 | |
| Sysmex KX-21N & K-800, 1000, 4500 | 31 | 8.00 | 0.21 | 2.6 | 8.0 | 6.8 - 9.2 | 30 | 2.73 | 0.09 | 3.4 | 2.7 | 2.3 - 3.2 | |
| Sysmex pocH-100i | 16 | 7.98 | 0.21 | 2.6 | 8.0 | 6.7 - 9.2 | 16 | 2.69 | 0.09 | 3.4 | 2.7 | 2.2 - 3.1 | |
| Sysmex XP-300 | 34 | 8.27 | 0.23 | 2.8 | 8.3 | 7.0 - 9.6 | 34 | 2.80 | 0.08 | 2.7 | 2.8 | 2.3 - 3.3 | |
| Specimen SYX-5 | | | | | | | | | | | | | |
| <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | | | | | |
| All Method | 84 | 20.39 | 0.64 | 3.2 | 20.4 | 17.3 - 23.5 | | | | | | | |
| All Sysmex Instruments | 82 | 20.37 | 0.63 | 3.1 | 20.4 | 17.3 - 23.5 | | | | | | | |
| Sysmex KX-21N & K-800, 1000, 4500 | 31 | 20.25 | 0.47 | 2.3 | 20.3 | 17.2 - 23.3 | | | | | | | |
| Sysmex pocH-100i | 16 | 19.86 | 0.40 | 2.0 | 19.8 | 16.8 - 22.9 | | | | | | | |
| Sysmex XP-300 | 33 | 20.80 | 0.52 | 2.5 | 20.8 | 17.6 - 24.0 | | | | | | | |

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

| <u>Instrument</u> | Specimen SYX-1 | | | | | | Specimen SYX-2 | | | | | |
|-----------------------------------|-----------------------|-------------|-----------|-----------|---------------|--------------|-----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 82 | 5.608 | 0.088 | 1.6 | 5.59 | 5.27 - 5.95 | 84 | 2.494 | 0.038 | 1.5 | 2.50 | 2.34 - 2.65 |
| All Sysmex Instruments | 80 | 5.607 | 0.086 | 1.5 | 5.59 | 5.27 - 5.95 | 82 | 2.495 | 0.037 | 1.5 | 2.50 | 2.34 - 2.65 |
| Sysmex KX-21N & K-800, 1000, 4500 | 30 | 5.596 | 0.079 | 1.4 | 5.60 | 5.26 - 5.94 | 31 | 2.476 | 0.033 | 1.3 | 2.48 | 2.32 - 2.63 |
| Sysmex pocH-100i | 16 | 5.705 | 0.085 | 1.5 | 5.72 | 5.36 - 6.05 | 16 | 2.531 | 0.042 | 1.7 | 2.53 | 2.37 - 2.69 |
| Sysmex XP-300 | 33 | 5.571 | 0.052 | 0.9 | 5.56 | 5.23 - 5.91 | 34 | 2.497 | 0.023 | 0.9 | 2.50 | 2.34 - 2.65 |
| | | | | | | | | | | | | |
| | Specimen SYX-3 | | | | | | Specimen SYX-4 | | | | | |
| All Method | 84 | 4.188 | 0.063 | 1.5 | 4.18 | 3.93 - 4.44 | 82 | 2.497 | 0.035 | 1.4 | 2.49 | 2.34 - 2.65 |
| All Sysmex Instruments | 82 | 4.189 | 0.064 | 1.5 | 4.18 | 3.93 - 4.45 | 81 | 2.498 | 0.038 | 1.5 | 2.50 | 2.34 - 2.65 |
| Sysmex KX-21N & K-800, 1000, 4500 | 31 | 4.171 | 0.042 | 1.0 | 4.17 | 3.92 - 4.43 | 31 | 2.489 | 0.036 | 1.5 | 2.49 | 2.33 - 2.64 |
| Sysmex pocH-100i | 16 | 4.271 | 0.064 | 1.5 | 4.29 | 4.01 - 4.53 | 16 | 2.529 | 0.059 | 2.3 | 2.52 | 2.37 - 2.69 |
| Sysmex XP-300 | 34 | 4.168 | 0.048 | 1.2 | 4.15 | 3.91 - 4.42 | 34 | 2.497 | 0.025 | 1.0 | 2.50 | 2.34 - 2.65 |
| | | | | | | | | | | | | |
| | Specimen SYX-5 | | | | | | | | | | | |
| All Method | 84 | 5.589 | 0.083 | 1.5 | 5.58 | 5.25 - 5.93 | | | | | | |
| All Sysmex Instruments | 82 | 5.590 | 0.084 | 1.5 | 5.58 | 5.25 - 5.93 | | | | | | |
| Sysmex KX-21N & K-800, 1000, 4500 | 31 | 5.584 | 0.074 | 1.3 | 5.58 | 5.24 - 5.92 | | | | | | |
| Sysmex pocH-100i | 16 | 5.669 | 0.097 | 1.7 | 5.68 | 5.32 - 6.01 | | | | | | |
| Sysmex XP-300 | 34 | 5.564 | 0.057 | 1.0 | 5.56 | 5.22 - 5.90 | | | | | | |

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

| <i>Instrument</i> | Specimen SYX-1 | | | | | | Specimen SYX-2 | | | | | |
|-----------------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i>Labs</i> | <i>Mean</i> | <i>SD</i> | <i>CV</i> | <i>Median</i> | <i>Range</i> | <i>Labs</i> | <i>Mean</i> | <i>SD</i> | <i>CV</i> | <i>Median</i> | <i>Range</i> |
| All Method | 83 | 18.11 | 0.27 | 1.5 | 18.1 | 16.8 - 19.4 | 83 | 6.27 | 0.12 | 1.9 | 6.3 | 5.8 - 6.8 |
| All Sysmex Instruments | 79 | 18.08 | 0.24 | 1.3 | 18.1 | 16.8 - 19.4 | 81 | 6.27 | 0.12 | 1.9 | 6.3 | 5.8 - 6.8 |
| Sysmex KX-21N & K-800, 1000, 4500 | 31 | 18.06 | 0.23 | 1.3 | 18.1 | 16.8 - 19.4 | 31 | 6.29 | 0.12 | 1.9 | 6.3 | 5.8 - 6.8 |
| Sysmex pocH-100i | 16 | 18.36 | 0.43 | 2.4 | 18.4 | 17.0 - 19.7 | 15 | 6.30 | 0.14 | 2.2 | 6.3 | 5.8 - 6.8 |
| Sysmex XP-300 | 34 | 18.06 | 0.17 | 0.9 | 18.1 | 16.7 - 19.4 | 34 | 6.24 | 0.10 | 1.6 | 6.2 | 5.8 - 6.7 |
| Specimen SYX-3 | | | | | | | Specimen SYX-4 | | | | | |
| All Method | 83 | 12.18 | 0.16 | 1.4 | 12.2 | 11.3 - 13.1 | 84 | 6.28 | 0.12 | 1.9 | 6.3 | 5.8 - 6.8 |
| All Sysmex Instruments | 81 | 12.18 | 0.17 | 1.4 | 12.2 | 11.3 - 13.1 | 82 | 6.28 | 0.12 | 1.9 | 6.3 | 5.8 - 6.8 |
| Sysmex KX-21N & K-800, 1000, 4500 | 31 | 12.13 | 0.16 | 1.3 | 12.2 | 11.2 - 13.0 | 31 | 6.29 | 0.13 | 2.0 | 6.3 | 5.8 - 6.8 |
| Sysmex pocH-100i | 16 | 12.23 | 0.22 | 1.8 | 12.3 | 11.3 - 13.1 | 16 | 6.29 | 0.15 | 2.5 | 6.3 | 5.8 - 6.8 |
| Sysmex XP-300 | 34 | 12.21 | 0.13 | 1.1 | 12.2 | 11.3 - 13.1 | 34 | 6.26 | 0.08 | 1.3 | 6.3 | 5.8 - 6.8 |
| Specimen SYX-5 | | | | | | | | | | | | |
| All Method | 84 | 18.11 | 0.24 | 1.3 | 18.1 | 16.8 - 19.4 | | | | | | |
| All Sysmex Instruments | 82 | 18.11 | 0.24 | 1.3 | 18.1 | 16.8 - 19.4 | | | | | | |
| Sysmex KX-21N & K-800, 1000, 4500 | 30 | 18.11 | 0.18 | 1.0 | 18.1 | 16.8 - 19.4 | | | | | | |
| Sysmex pocH-100i | 16 | 18.19 | 0.33 | 1.8 | 18.3 | 16.9 - 19.5 | | | | | | |
| Sysmex XP-300 | 33 | 18.09 | 0.17 | 0.9 | 18.1 | 16.8 - 19.4 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen SYX-1 | | | | | | Specimen SYX-2 | | | | | |
|-----------------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 82 | 393.0 | 19.0 | 4.8 | 393 | 294 - 492 | 84 | 60.3 | 4.3 | 7.1 | 60 | 45 - 76 |
| All Sysmex Instruments | 80 | 392.6 | 19.0 | 4.8 | 393 | 294 - 491 | 82 | 60.2 | 4.2 | 7.0 | 60 | 45 - 76 |
| Sysmex KX-21N & K-800, 1000, 4500 | 30 | 396.3 | 16.4 | 4.1 | 394 | 297 - 496 | 31 | 61.0 | 3.7 | 6.0 | 60 | 45 - 77 |
| Sysmex pocH-100i | 16 | 369.8 | 14.7 | 4.0 | 370 | 277 - 463 | 16 | 59.6 | 3.7 | 6.2 | 59 | 44 - 75 |
| Sysmex XP-300 | 33 | 400.6 | 14.0 | 3.5 | 401 | 300 - 501 | 34 | 59.9 | 5.0 | 8.3 | 59 | 44 - 75 |
| | Specimen SYX-3 | | | | | | Specimen SYX-4 | | | | | |
| All Method | 83 | 204.2 | 9.2 | 4.5 | 206 | 153 - 256 | 84 | 59.9 | 4.6 | 7.7 | 60 | 44 - 75 |
| All Sysmex Instruments | 81 | 204.0 | 9.1 | 4.5 | 206 | 152 - 255 | 82 | 59.8 | 4.7 | 7.8 | 60 | 44 - 75 |
| Sysmex KX-21N & K-800, 1000, 4500 | 31 | 203.2 | 9.5 | 4.7 | 206 | 152 - 255 | 31 | 60.4 | 5.1 | 8.5 | 60 | 45 - 76 |
| Sysmex pocH-100i | 16 | 198.9 | 11.4 | 5.7 | 201 | 149 - 249 | 16 | 59.8 | 5.3 | 8.9 | 60 | 44 - 75 |
| Sysmex XP-300 | 34 | 206.2 | 8.3 | 4.0 | 207 | 154 - 258 | 34 | 59.5 | 3.9 | 6.6 | 60 | 44 - 75 |
| | Specimen SYX-5 | | | | | | | | | | | |
| All Method | 83 | 391.1 | 18.2 | 4.6 | 394 | 293 - 489 | | | | | | |
| All Sysmex Instruments | 81 | 390.5 | 17.9 | 4.6 | 392 | 292 - 489 | | | | | | |
| Sysmex KX-21N & K-800, 1000, 4500 | 30 | 393.7 | 16.3 | 4.1 | 396 | 295 - 493 | | | | | | |
| Sysmex pocH-100i | 16 | 370.8 | 16.1 | 4.3 | 373 | 278 - 464 | | | | | | |
| Sysmex XP-300 | 34 | 397.4 | 13.3 | 3.3 | 395 | 298 - 497 | | | | | | |

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

| <i><u>Instrument</u></i> | Specimen SYX-1 | | | | | | Specimen SYX-2 | | | | | |
|-----------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 75 | 62.05 | 0.98 | 1.6 | 62.2 | 59.1 - 65.0 | 75 | 12.51 | 1.21 | 9.7 | 12.4 | 8.8 - 16.2 |
| All Sysmex Instruments | 73 | 62.03 | 0.98 | 1.6 | 62.1 | 59.0 - 65.0 | 73 | 12.47 | 1.20 | 9.6 | 12.4 | 8.8 - 16.1 |
| Sysmex KX-21N & K-800, 1000, 4500 | 29 | 62.25 | 1.06 | 1.7 | 62.5 | 59.0 - 65.5 | 29 | 12.78 | 1.16 | 9.1 | 12.8 | 9.3 - 16.3 |
| Sysmex pocH-100i | 14 | 62.56 | 0.51 | 0.8 | 62.5 | 61.0 - 64.2 | 14 | 11.15 | 0.81 | 7.2 | 11.3 | 8.7 - 13.6 |
| Sysmex XP-300 | 29 | 61.60 | 0.88 | 1.4 | 61.4 | 58.9 - 64.3 | 29 | 12.82 | 0.97 | 7.5 | 12.6 | 9.9 - 15.8 |

| <i><u>Instrument</u></i> | Specimen SYX-3 | | | | | | Specimen SYX-4 | | | | | |
|-----------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 75 | 31.69 | 0.97 | 3.1 | 31.7 | 28.7 - 34.7 | 75 | 12.69 | 1.25 | 9.8 | 12.7 | 8.9 - 16.5 |
| All Sysmex Instruments | 73 | 31.70 | 0.96 | 3.0 | 31.7 | 28.8 - 34.6 | 73 | 12.69 | 1.26 | 9.9 | 12.7 | 8.9 - 16.5 |
| Sysmex KX-21N & K-800, 1000, 4500 | 29 | 31.86 | 1.03 | 3.2 | 32.0 | 28.7 - 35.0 | 29 | 13.20 | 1.30 | 9.9 | 13.3 | 9.2 - 17.2 |
| Sysmex pocH-100i | 14 | 31.51 | 0.94 | 3.0 | 31.7 | 28.6 - 34.4 | 14 | 11.51 | 0.86 | 7.5 | 11.7 | 8.9 - 14.1 |
| Sysmex XP-300 | 29 | 31.64 | 0.92 | 2.9 | 31.6 | 28.8 - 34.5 | 29 | 12.80 | 1.01 | 7.9 | 13.0 | 9.7 - 15.9 |

| <i><u>Instrument</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
|-----------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method | 74 | 62.01 | 0.72 | 1.2 | 62.1 | 59.8 - 64.2 |
| All Sysmex Instruments | 72 | 61.99 | 0.72 | 1.2 | 62.0 | 59.8 - 64.2 |
| Sysmex KX-21N & K-800, 1000, 4500 | 28 | 61.76 | 0.67 | 1.1 | 61.8 | 59.7 - 63.8 |
| Sysmex pocH-100i | 14 | 62.74 | 0.43 | 0.7 | 62.8 | 61.4 - 64.1 |
| Sysmex XP-300 | 29 | 61.87 | 0.66 | 1.1 | 61.8 | 59.8 - 63.9 |

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

| <u>Instrument</u> | Specimen SYX-1 | | | | | | Specimen SYX-2 | | | | | |
|-----------------------------------|-----------------------|-------------|-----------|-----------|---------------|--------------|-----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 73 | 13.00 | 0.83 | 6.3 | 13.0 | 10.5 - 15.5 | 74 | 17.36 | 1.18 | 6.8 | 17.3 | 13.8 - 21.0 |
| All Sysmex Instruments | 71 | 13.00 | 0.83 | 6.4 | 13.0 | 10.4 - 15.6 | 72 | 17.36 | 1.20 | 6.9 | 17.4 | 13.7 - 21.0 |
| Sysmex KX-21N & K-800, 1000, 4500 | 28 | 13.11 | 0.66 | 5.0 | 13.2 | 11.1 - 15.1 | 29 | 17.61 | 1.00 | 5.7 | 17.5 | 14.6 - 20.7 |
| Sysmex pocH-100i | 14 | 12.22 | 0.85 | 6.9 | 12.2 | 9.6 - 14.8 | 14 | 16.12 | 1.40 | 8.7 | 16.3 | 11.9 - 20.4 |
| Sysmex XP-300 | 29 | 13.35 | 0.90 | 6.7 | 13.3 | 10.6 - 16.1 | 29 | 17.54 | 1.25 | 7.1 | 17.6 | 13.8 - 21.3 |
| | | | | | | | | | | | | |
| | Specimen SYX-3 | | | | | | Specimen SYX-4 | | | | | |
| All Method | 74 | 15.71 | 1.21 | 7.7 | 15.9 | 12.0 - 19.4 | 74 | 17.54 | 1.56 | 8.9 | 17.6 | 12.8 - 22.3 |
| All Sysmex Instruments | 72 | 15.69 | 1.22 | 7.8 | 15.8 | 12.0 - 19.4 | 73 | 17.46 | 1.67 | 9.6 | 17.5 | 12.4 - 22.5 |
| Sysmex KX-21N & K-800, 1000, 4500 | 28 | 15.72 | 1.04 | 6.6 | 15.7 | 12.5 - 18.9 | 29 | 17.88 | 1.38 | 7.7 | 17.7 | 13.7 - 22.1 |
| Sysmex pocH-100i | 14 | 14.62 | 0.97 | 6.6 | 14.7 | 11.7 - 17.6 | 14 | 15.53 | 1.41 | 9.1 | 15.4 | 11.2 - 19.8 |
| Sysmex XP-300 | 29 | 16.16 | 1.20 | 7.4 | 16.1 | 12.5 - 19.8 | 29 | 18.00 | 1.41 | 7.8 | 17.8 | 13.7 - 22.3 |
| | | | | | | | | | | | | |
| | Specimen SYX-5 | | | | | | | | | | | |
| All Method | 75 | 13.05 | 0.85 | 6.5 | 13.0 | 10.4 - 15.7 | | | | | | |
| All Sysmex Instruments | 73 | 13.05 | 0.86 | 6.6 | 13.0 | 10.4 - 15.7 | | | | | | |
| Sysmex KX-21N & K-800, 1000, 4500 | 29 | 13.28 | 0.81 | 6.1 | 13.2 | 10.8 - 15.8 | | | | | | |
| Sysmex pocH-100i | 14 | 12.24 | 0.65 | 5.4 | 12.4 | 10.2 - 14.2 | | | | | | |
| Sysmex XP-300 | 29 | 13.21 | 0.80 | 6.1 | 13.0 | 10.8 - 15.7 | | | | | | |

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

| <u>Instrument</u> | Specimen SYX-1 | | | | | | Specimen SYX-2 | | | | | |
|-----------------------------------|-----------------------|-------------|-----------|-----------|---------------|--------------|-----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 74 | 24.94 | 0.99 | 4.0 | 25.0 | 21.9 - 28.0 | 75 | 70.09 | 1.82 | 2.6 | 70.1 | 64.6 - 75.6 |
| All Sysmex Instruments | 72 | 24.95 | 0.99 | 4.0 | 25.0 | 21.9 - 28.0 | 73 | 70.13 | 1.83 | 2.6 | 70.1 | 64.6 - 75.7 |
| Sysmex KX-21N & K-800, 1000, 4500 | 28 | 24.66 | 0.99 | 4.0 | 24.7 | 21.6 - 27.7 | 29 | 69.61 | 1.63 | 2.3 | 69.6 | 64.7 - 74.6 |
| Sysmex pocH-100i | 14 | 25.21 | 0.81 | 3.2 | 25.5 | 22.7 - 27.7 | 14 | 72.32 | 1.51 | 2.1 | 72.2 | 67.7 - 76.9 |
| Sysmex XP-300 | 29 | 25.07 | 1.03 | 4.1 | 25.0 | 21.9 - 28.2 | 29 | 69.57 | 1.36 | 2.0 | 69.6 | 65.4 - 73.7 |
| Specimen SYX-3 | | | | | | | | | | | | |
| All Method | 74 | 52.58 | 1.34 | 2.5 | 52.6 | 48.5 - 56.6 | 74 | 69.85 | 1.95 | 2.8 | 69.5 | 63.9 - 75.8 |
| All Sysmex Instruments | 72 | 52.59 | 1.34 | 2.6 | 52.6 | 48.5 - 56.7 | 72 | 69.85 | 1.98 | 2.8 | 69.4 | 63.9 - 75.8 |
| Sysmex KX-21N & K-800, 1000, 4500 | 28 | 52.37 | 1.19 | 2.3 | 52.4 | 48.8 - 56.0 | 29 | 68.92 | 1.18 | 1.7 | 69.0 | 65.3 - 72.5 |
| Sysmex pocH-100i | 14 | 53.86 | 1.41 | 2.6 | 54.1 | 49.6 - 58.1 | 14 | 72.97 | 1.40 | 1.9 | 73.0 | 68.7 - 77.2 |
| Sysmex XP-300 | 29 | 52.20 | 1.13 | 2.2 | 52.0 | 48.8 - 55.7 | 28 | 69.19 | 1.17 | 1.7 | 69.0 | 65.6 - 72.8 |
| Specimen SYX-5 | | | | | | | | | | | | |
| All Method | 75 | 24.91 | 0.66 | 2.7 | 24.9 | 22.9 - 26.9 | | | | | | |
| All Sysmex Instruments | 73 | 24.93 | 0.66 | 2.6 | 25.0 | 22.9 - 27.0 | | | | | | |
| Sysmex KX-21N & K-800, 1000, 4500 | 29 | 24.91 | 0.70 | 2.8 | 24.9 | 22.7 - 27.1 | | | | | | |
| Sysmex pocH-100i | 14 | 25.02 | 0.48 | 1.9 | 25.0 | 23.5 - 26.5 | | | | | | |
| Sysmex XP-300 | 29 | 24.90 | 0.70 | 2.8 | 25.1 | 22.7 - 27.0 | | | | | | |

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

| <u>Instrument</u> | Specimen HD-1 | | | | | | Specimen HD-2 | | | | | |
|---------------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 540 | 20.47 | 0.84 | 4.1 | 20.5 | 17.3 - 23.6 | 548 | 2.03 | 0.19 | 9.2 | 2.0 | 1.7 - 2.4 |
| All Abbott Cell-Dyn Instruments | 149 | 19.91 | 0.95 | 4.8 | 19.8 | 16.9 - 22.9 | 152 | 2.05 | 0.16 | 7.6 | 2.0 | 1.7 - 2.4 |
| All ABX Instruments | 85 | 20.58 | 0.43 | 2.1 | 20.6 | 17.4 - 23.7 | 89 | 1.97 | 0.08 | 3.9 | 2.0 | 1.6 - 2.3 |
| All Boule (CDS) Instruments | 133 | 20.25 | 0.52 | 2.5 | 20.2 | 17.2 - 23.3 | 129 | 1.82 | 0.08 | 4.2 | 1.8 | 1.5 - 2.1 |
| All COULTER Instruments | 155 | 21.17 | 0.57 | 2.7 | 21.2 | 17.9 - 24.4 | 157 | 2.21 | 0.11 | 5.0 | 2.2 | 1.8 - 2.6 |
| All Danam/Drew Scientific Instruments | 10 | 19.95 | 0.54 | 2.7 | 20.0 | 16.9 - 23.0 | 10 | 2.11 | 0.07 | 3.5 | 2.1 | 1.7 - 2.5 |
| Abbott Cell-Dyn 1700 | 16 | 21.43 | 0.96 | 4.5 | 21.4 | 18.2 - 24.7 | 16 | 2.25 | 0.06 | 2.8 | 2.2 | 1.9 - 2.6 |
| Abbott Cell-Dyn 1800 | 49 | 19.98 | 0.85 | 4.3 | 20.0 | 16.9 - 23.0 | 48 | 1.94 | 0.10 | 5.2 | 1.9 | 1.6 - 2.3 |
| Abbott Cell-Dyn Emerald | 84 | 19.66 | 0.80 | 4.1 | 19.6 | 16.7 - 22.7 | 85 | 2.08 | 0.12 | 5.8 | 2.1 | 1.7 - 2.4 |
| Boule (CDS) Medonic M series | 127 | 20.22 | 0.50 | 2.5 | 20.2 | 17.1 - 23.3 | 126 | 1.81 | 0.07 | 3.9 | 1.8 | 1.5 - 2.1 |
| COULTER AcT diff/diff 2 | 150 | 21.16 | 0.58 | 2.7 | 21.2 | 17.9 - 24.4 | 152 | 2.22 | 0.11 | 5.0 | 2.2 | 1.8 - 2.6 |
| Drew Scientific D3 | 10 | 19.95 | 0.54 | 2.7 | 20.0 | 16.9 - 23.0 | 10 | 2.11 | 0.07 | 3.5 | 2.1 | 1.7 - 2.5 |
| Horiba ABX Micros/45/60 | 85 | 20.58 | 0.43 | 2.1 | 20.6 | 17.4 - 23.7 | 89 | 1.97 | 0.08 | 3.9 | 2.0 | 1.6 - 2.3 |
| | | | | | | | | | | | | |
| | Specimen HD-3 | | | | | | Specimen HD-4 | | | | | |
| All Method | 537 | 7.74 | 0.37 | 4.8 | 7.7 | 6.5 - 9.0 | 545 | 2.00 | 0.18 | 8.7 | 2.0 | 1.7 - 2.4 |
| All Abbott Cell-Dyn Instruments | 146 | 7.67 | 0.37 | 4.8 | 7.7 | 6.5 - 8.9 | 150 | 2.03 | 0.16 | 8.0 | 2.0 | 1.7 - 2.4 |
| All ABX Instruments | 85 | 7.74 | 0.17 | 2.2 | 7.7 | 6.5 - 8.9 | 90 | 1.97 | 0.09 | 4.6 | 2.0 | 1.6 - 2.3 |
| All Boule (CDS) Instruments | 132 | 7.44 | 0.23 | 3.2 | 7.4 | 6.3 - 8.6 | 132 | 1.81 | 0.08 | 4.4 | 1.8 | 1.5 - 2.1 |
| All COULTER Instruments | 154 | 8.06 | 0.24 | 2.9 | 8.1 | 6.8 - 9.3 | 155 | 2.15 | 0.10 | 4.8 | 2.1 | 1.8 - 2.5 |
| All Danam/Drew Scientific Instruments | 10 | 7.83 | 0.26 | 3.3 | 7.8 | 6.6 - 9.1 | 10 | 2.06 | 0.08 | 4.1 | 2.1 | 1.7 - 2.4 |
| Abbott Cell-Dyn 1700 | 16 | 8.52 | 0.53 | 6.2 | 8.4 | 7.2 - 9.8 | 16 | 2.18 | 0.11 | 5.2 | 2.2 | 1.8 - 2.6 |
| Abbott Cell-Dyn 1800 | 48 | 7.52 | 0.29 | 3.9 | 7.5 | 6.3 - 8.7 | 47 | 1.89 | 0.11 | 5.8 | 1.9 | 1.6 - 2.2 |
| Abbott Cell-Dyn Emerald | 84 | 7.68 | 0.29 | 3.7 | 7.7 | 6.5 - 8.9 | 85 | 2.07 | 0.13 | 6.4 | 2.1 | 1.7 - 2.4 |
| Boule (CDS) Medonic M series | 126 | 7.42 | 0.21 | 2.8 | 7.4 | 6.3 - 8.6 | 127 | 1.80 | 0.08 | 4.3 | 1.8 | 1.5 - 2.1 |
| COULTER AcT diff/diff 2 | 149 | 8.07 | 0.24 | 2.9 | 8.1 | 6.8 - 9.3 | 150 | 2.15 | 0.10 | 4.7 | 2.1 | 1.8 - 2.5 |
| Drew Scientific D3 | 10 | 7.83 | 0.26 | 3.3 | 7.8 | 6.6 - 9.1 | 10 | 2.06 | 0.08 | 4.1 | 2.1 | 1.7 - 2.4 |
| Horiba ABX Micros/45/60 | 85 | 7.74 | 0.17 | 2.2 | 7.7 | 6.5 - 8.9 | 90 | 1.97 | 0.09 | 4.6 | 2.0 | 1.6 - 2.3 |

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

Specimen HD-5

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method | 539 | 20.49 | 0.83 | 4.0 | 20.5 | 17.4 - 23.6 |
| All Abbott Cell-Dyn Instruments | 148 | 19.85 | 0.89 | 4.5 | 19.7 | 16.8 - 22.9 |
| All ABX Instruments | 88 | 20.45 | 0.43 | 2.1 | 20.5 | 17.3 - 23.6 |
| All Boule (CDS) Instruments | 130 | 20.25 | 0.46 | 2.3 | 20.3 | 17.2 - 23.3 |
| All COULTER Instruments | 157 | 21.25 | 0.52 | 2.4 | 21.2 | 18.0 - 24.5 |
| All Danam/Drew Scientific Instruments | 10 | 19.95 | 0.60 | 3.0 | 19.8 | 16.9 - 23.0 |
| Abbott Cell-Dyn 1700 | 16 | 21.29 | 1.15 | 5.4 | 21.3 | 18.0 - 24.5 |
| Abbott Cell-Dyn 1800 | 48 | 19.93 | 0.77 | 3.9 | 19.8 | 16.9 - 23.0 |
| Abbott Cell-Dyn Emerald | 84 | 19.62 | 0.72 | 3.6 | 19.5 | 16.6 - 22.6 |
| Boule (CDS) Medonic M series | 124 | 20.21 | 0.44 | 2.2 | 20.2 | 17.1 - 23.3 |
| COULTER AcT diff/diff 2 | 152 | 21.25 | 0.52 | 2.5 | 21.2 | 18.0 - 24.5 |
| Drew Scientific D3 | 10 | 19.95 | 0.60 | 3.0 | 19.8 | 16.9 - 23.0 |
| Horiba ABX Micros/45/60 | 88 | 20.45 | 0.43 | 2.1 | 20.5 | 17.3 - 23.6 |

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

Specimen HD-1

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method | 541 | 5.719 | 0.178 | 3.1 | 5.74 | 5.37 - 6.07 |
| All Abbott Cell-Dyn Instruments | 151 | 5.530 | 0.152 | 2.8 | 5.53 | 5.19 - 5.87 |
| All ABX Instruments | 87 | 5.766 | 0.110 | 1.9 | 5.77 | 5.42 - 6.12 |
| All Boule (CDS) Instruments | 132 | 5.841 | 0.088 | 1.5 | 5.84 | 5.49 - 6.20 |
| All COULTER Instruments | 157 | 5.767 | 0.149 | 2.6 | 5.78 | 5.42 - 6.12 |
| All Danam/Drew Scientific Instruments | 10 | 5.678 | 0.129 | 2.3 | 5.66 | 5.33 - 6.02 |
| Abbott Cell-Dyn 1700 | 16 | 5.660 | 0.153 | 2.7 | 5.67 | 5.32 - 6.00 |
| Abbott Cell-Dyn 1800 | 49 | 5.537 | 0.122 | 2.2 | 5.54 | 5.20 - 5.87 |
| Abbott Cell-Dyn Emerald | 87 | 5.508 | 0.165 | 3.0 | 5.50 | 5.17 - 5.84 |
| Boule (CDS) Medonic M series | 126 | 5.845 | 0.086 | 1.5 | 5.85 | 5.49 - 6.20 |
| COULTER AcT diff/diff 2 | 152 | 5.768 | 0.151 | 2.6 | 5.79 | 5.42 - 6.12 |
| Drew Scientific D3 | 10 | 5.678 | 0.129 | 2.3 | 5.66 | 5.33 - 6.02 |
| Horiba ABX Micros/45/60 | 87 | 5.766 | 0.110 | 1.9 | 5.77 | 5.42 - 6.12 |

Specimen HD-2

| <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------|-------------|-----------|-----------|---------------|--------------|
| 542 | 2.353 | 0.073 | 3.1 | 2.35 | 2.21 - 2.50 |
| 152 | 2.336 | 0.100 | 4.3 | 2.34 | 2.19 - 2.48 |
| 90 | 2.322 | 0.048 | 2.1 | 2.33 | 2.18 - 2.47 |
| 131 | 2.334 | 0.039 | 1.7 | 2.33 | 2.19 - 2.48 |
| 158 | 2.396 | 0.063 | 2.6 | 2.40 | 2.25 - 2.54 |
| 10 | 2.373 | 0.051 | 2.1 | 2.37 | 2.23 - 2.52 |
| 16 | 2.414 | 0.066 | 2.7 | 2.40 | 2.26 - 2.56 |
| 48 | 2.421 | 0.054 | 2.2 | 2.42 | 2.27 - 2.57 |
| 87 | 2.277 | 0.079 | 3.5 | 2.29 | 2.14 - 2.42 |
| 125 | 2.333 | 0.039 | 1.7 | 2.33 | 2.19 - 2.48 |
| 153 | 2.398 | 0.062 | 2.6 | 2.40 | 2.25 - 2.55 |
| 10 | 2.373 | 0.051 | 2.1 | 2.37 | 2.23 - 2.52 |
| 90 | 2.322 | 0.048 | 2.1 | 2.33 | 2.18 - 2.47 |

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

| <u>Instrument</u> | Specimen HD-3 | | | | | | Specimen HD-4 | | | | | |
|---------------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 539 | 4.635 | 0.127 | 2.7 | 4.66 | 4.35 - 4.92 | 541 | 2.346 | 0.066 | 2.8 | 2.34 | 2.20 - 2.49 |
| All Abbott Cell-Dyn Instruments | 150 | 4.518 | 0.137 | 3.0 | 4.52 | 4.24 - 4.79 | 152 | 2.337 | 0.093 | 4.0 | 2.34 | 2.19 - 2.48 |
| All ABX Instruments | 89 | 4.643 | 0.078 | 1.7 | 4.65 | 4.36 - 4.93 | 90 | 2.321 | 0.049 | 2.1 | 2.32 | 2.18 - 2.47 |
| All Boule (CDS) Instruments | 131 | 4.683 | 0.062 | 1.3 | 4.69 | 4.40 - 4.97 | 130 | 2.328 | 0.036 | 1.5 | 2.33 | 2.18 - 2.47 |
| All COULTER Instruments | 155 | 4.701 | 0.114 | 2.4 | 4.70 | 4.41 - 4.99 | 159 | 2.383 | 0.060 | 2.5 | 2.38 | 2.24 - 2.53 |
| All Danam/Drew Scientific Instruments | 10 | 4.638 | 0.126 | 2.7 | 4.63 | 4.35 - 4.92 | 10 | 2.335 | 0.064 | 2.7 | 2.34 | 2.19 - 2.48 |
| Abbott Cell-Dyn 1700 | 16 | 4.643 | 0.136 | 2.9 | 4.64 | 4.36 - 4.93 | 16 | 2.389 | 0.058 | 2.4 | 2.40 | 2.24 - 2.54 |
| Abbott Cell-Dyn 1800 | 49 | 4.563 | 0.099 | 2.2 | 4.58 | 4.28 - 4.84 | 49 | 2.401 | 0.076 | 3.2 | 2.41 | 2.25 - 2.55 |
| Abbott Cell-Dyn Emerald | 84 | 4.464 | 0.125 | 2.8 | 4.47 | 4.19 - 4.74 | 85 | 2.290 | 0.071 | 3.1 | 2.30 | 2.15 - 2.43 |
| Boule (CDS) Medonic M series | 125 | 4.684 | 0.061 | 1.3 | 4.69 | 4.40 - 4.97 | 124 | 2.328 | 0.036 | 1.6 | 2.33 | 2.18 - 2.47 |
| COULTER AcT diff/diff 2 | 151 | 4.699 | 0.119 | 2.5 | 4.70 | 4.41 - 4.99 | 154 | 2.385 | 0.060 | 2.5 | 2.39 | 2.24 - 2.53 |
| Drew Scientific D3 | 10 | 4.638 | 0.126 | 2.7 | 4.63 | 4.35 - 4.92 | 10 | 2.335 | 0.064 | 2.7 | 2.34 | 2.19 - 2.48 |
| Horiba ABX Micros/45/60 | 89 | 4.643 | 0.078 | 1.7 | 4.65 | 4.36 - 4.93 | 90 | 2.321 | 0.049 | 2.1 | 2.32 | 2.18 - 2.47 |
| Specimen HD-5 | | | | | | | | | | | | |
| All Method | 540 | 5.717 | 0.175 | 3.1 | 5.75 | 5.37 - 6.06 | | | | | | |
| All Abbott Cell-Dyn Instruments | 146 | 5.512 | 0.139 | 2.5 | 5.52 | 5.18 - 5.85 | | | | | | |
| All ABX Instruments | 90 | 5.748 | 0.119 | 2.1 | 5.76 | 5.40 - 6.10 | | | | | | |
| All Boule (CDS) Instruments | 131 | 5.838 | 0.085 | 1.5 | 5.84 | 5.48 - 6.19 | | | | | | |
| All COULTER Instruments | 157 | 5.772 | 0.124 | 2.1 | 5.78 | 5.42 - 6.12 | | | | | | |
| All Danam/Drew Scientific Instruments | 10 | 5.668 | 0.176 | 3.1 | 5.61 | 5.32 - 6.01 | | | | | | |
| Abbott Cell-Dyn 1700 | 15 | 5.655 | 0.088 | 1.6 | 5.64 | 5.31 - 6.00 | | | | | | |
| Abbott Cell-Dyn 1800 | 46 | 5.526 | 0.101 | 1.8 | 5.52 | 5.19 - 5.86 | | | | | | |
| Abbott Cell-Dyn Emerald | 84 | 5.473 | 0.140 | 2.6 | 5.49 | 5.14 - 5.81 | | | | | | |
| Boule (CDS) Medonic M series | 125 | 5.843 | 0.082 | 1.4 | 5.85 | 5.49 - 6.20 | | | | | | |
| COULTER AcT diff/diff 2 | 152 | 5.774 | 0.123 | 2.1 | 5.78 | 5.42 - 6.13 | | | | | | |
| Drew Scientific D3 | 10 | 5.668 | 0.176 | 3.1 | 5.61 | 5.32 - 6.01 | | | | | | |
| Horiba ABX Micros/45/60 | 90 | 5.748 | 0.119 | 2.1 | 5.76 | 5.40 - 6.10 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen HD-1 | | | | | | Specimen HD-2 | | | | | |
|---------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 539 | 18.15 | 0.35 | 2.0 | 18.1 | 16.8 - 19.5 | 540 | 6.02 | 0.15 | 2.5 | 6.0 | 5.5 - 6.5 |
| All Abbott Cell-Dyn Instruments | 151 | 18.24 | 0.40 | 2.2 | 18.3 | 16.9 - 19.6 | 152 | 6.05 | 0.23 | 3.8 | 6.1 | 5.6 - 6.5 |
| All ABX Instruments | 87 | 18.12 | 0.29 | 1.6 | 18.1 | 16.8 - 19.4 | 88 | 6.01 | 0.12 | 2.0 | 6.0 | 5.5 - 6.5 |
| All Boule (CDS) Instruments | 133 | 18.16 | 0.30 | 1.7 | 18.2 | 16.8 - 19.5 | 130 | 6.02 | 0.10 | 1.7 | 6.0 | 5.5 - 6.5 |
| All COULTER Instruments | 156 | 18.05 | 0.38 | 2.1 | 18.1 | 16.7 - 19.4 | 155 | 6.01 | 0.12 | 2.0 | 6.0 | 5.5 - 6.5 |
| All Danam/Drew Scientific Instruments | 10 | 18.45 | 0.76 | 4.1 | 18.3 | 17.1 - 19.8 | 10 | 6.05 | 0.25 | 4.1 | 6.1 | 5.6 - 6.5 |
| Abbott Cell-Dyn 1700 | 16 | 18.18 | 0.41 | 2.3 | 18.1 | 16.9 - 19.5 | 16 | 6.36 | 0.13 | 2.0 | 6.3 | 5.9 - 6.9 |
| Abbott Cell-Dyn 1800 | 49 | 18.43 | 0.40 | 2.1 | 18.4 | 17.1 - 19.8 | 48 | 6.18 | 0.13 | 2.2 | 6.2 | 5.7 - 6.7 |
| Abbott Cell-Dyn Emerald | 86 | 18.14 | 0.36 | 2.0 | 18.2 | 16.8 - 19.5 | 87 | 5.92 | 0.18 | 3.0 | 5.9 | 5.5 - 6.4 |
| Boule (CDS) Medonic M series | 126 | 18.17 | 0.29 | 1.6 | 18.2 | 16.8 - 19.5 | 124 | 6.02 | 0.10 | 1.6 | 6.0 | 5.5 - 6.5 |
| COULTER AcT diff/diff 2 | 151 | 18.05 | 0.38 | 2.1 | 18.1 | 16.7 - 19.4 | 151 | 6.01 | 0.12 | 2.1 | 6.0 | 5.5 - 6.5 |
| Drew Scientific D3 | 10 | 18.45 | 0.76 | 4.1 | 18.3 | 17.1 - 19.8 | 10 | 6.05 | 0.25 | 4.1 | 6.1 | 5.6 - 6.5 |
| Horiba ABX Micros/45/60 | 87 | 18.12 | 0.29 | 1.6 | 18.1 | 16.8 - 19.4 | 88 | 6.01 | 0.12 | 2.0 | 6.0 | 5.5 - 6.5 |
| | | | | | | | | | | | | |
| <u><i>Instrument</i></u> | Specimen HD-3 | | | | | | Specimen HD-4 | | | | | |
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 539 | 13.50 | 0.23 | 1.7 | 13.5 | 12.5 - 14.5 | 539 | 6.02 | 0.13 | 2.2 | 6.0 | 5.5 - 6.5 |
| All Abbott Cell-Dyn Instruments | 150 | 13.53 | 0.27 | 2.0 | 13.5 | 12.5 - 14.5 | 150 | 6.07 | 0.19 | 3.1 | 6.0 | 5.6 - 6.5 |
| All ABX Instruments | 87 | 13.53 | 0.18 | 1.3 | 13.5 | 12.5 - 14.5 | 88 | 6.04 | 0.10 | 1.7 | 6.0 | 5.6 - 6.5 |
| All Boule (CDS) Instruments | 130 | 13.44 | 0.19 | 1.4 | 13.4 | 12.4 - 14.4 | 130 | 6.02 | 0.10 | 1.6 | 6.0 | 5.5 - 6.5 |
| All COULTER Instruments | 154 | 13.52 | 0.21 | 1.6 | 13.5 | 12.5 - 14.5 | 157 | 5.99 | 0.11 | 1.8 | 6.0 | 5.5 - 6.5 |
| All Danam/Drew Scientific Instruments | 10 | 13.66 | 0.57 | 4.2 | 13.7 | 12.7 - 14.7 | 10 | 5.96 | 0.32 | 5.4 | 6.0 | 5.5 - 6.4 |
| Abbott Cell-Dyn 1700 | 16 | 13.61 | 0.27 | 2.0 | 13.6 | 12.6 - 14.6 | 16 | 6.31 | 0.15 | 2.3 | 6.3 | 5.8 - 6.8 |
| Abbott Cell-Dyn 1800 | 49 | 13.69 | 0.27 | 2.0 | 13.7 | 12.7 - 14.7 | 48 | 6.18 | 0.14 | 2.3 | 6.2 | 5.7 - 6.7 |
| Abbott Cell-Dyn Emerald | 86 | 13.44 | 0.24 | 1.8 | 13.4 | 12.5 - 14.4 | 84 | 5.95 | 0.12 | 2.0 | 6.0 | 5.5 - 6.4 |
| Boule (CDS) Medonic M series | 124 | 13.43 | 0.19 | 1.4 | 13.4 | 12.4 - 14.4 | 123 | 6.02 | 0.08 | 1.4 | 6.0 | 5.5 - 6.5 |
| COULTER AcT diff/diff 2 | 149 | 13.52 | 0.21 | 1.6 | 13.5 | 12.5 - 14.5 | 152 | 5.99 | 0.11 | 1.8 | 6.0 | 5.5 - 6.5 |
| Drew Scientific D3 | 10 | 13.66 | 0.57 | 4.2 | 13.7 | 12.7 - 14.7 | 10 | 5.96 | 0.32 | 5.4 | 6.0 | 5.5 - 6.4 |
| Horiba ABX Micros/45/60 | 87 | 13.53 | 0.18 | 1.3 | 13.5 | 12.5 - 14.5 | 88 | 6.04 | 0.10 | 1.7 | 6.0 | 5.6 - 6.5 |

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

Specimen HD-5

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method | 539 | 18.19 | 0.32 | 1.8 | 18.2 | 16.9 - 19.5 |
| All Abbott Cell-Dyn Instruments | 148 | 18.25 | 0.36 | 2.0 | 18.3 | 16.9 - 19.6 |
| All ABX Instruments | 89 | 18.11 | 0.27 | 1.5 | 18.1 | 16.8 - 19.4 |
| All Boule (CDS) Instruments | 131 | 18.20 | 0.28 | 1.5 | 18.2 | 16.9 - 19.5 |
| All COULTER Instruments | 156 | 18.16 | 0.31 | 1.7 | 18.2 | 16.8 - 19.5 |
| All Danam/Drew Scientific Instruments | 10 | 18.31 | 0.79 | 4.3 | 18.3 | 17.0 - 19.6 |
| Abbott Cell-Dyn 1700 | 16 | 18.19 | 0.34 | 1.9 | 18.2 | 16.9 - 19.5 |
| Abbott Cell-Dyn 1800 | 47 | 18.48 | 0.33 | 1.8 | 18.5 | 17.1 - 19.8 |
| Abbott Cell-Dyn Emerald | 85 | 18.14 | 0.33 | 1.8 | 18.2 | 16.8 - 19.5 |
| Boule (CDS) Medonic M series | 124 | 18.22 | 0.26 | 1.5 | 18.2 | 16.9 - 19.5 |
| COULTER AcT diff/diff 2 | 151 | 18.15 | 0.32 | 1.7 | 18.2 | 16.8 - 19.5 |
| Drew Scientific D3 | 10 | 18.31 | 0.79 | 4.3 | 18.3 | 17.0 - 19.6 |
| Horiba ABX Micros/45/60 | 89 | 18.11 | 0.27 | 1.5 | 18.1 | 16.8 - 19.4 |

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

Specimen HD-1

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method | 539 | 51.91 | 1.51 | 2.9 | 51.9 | 48.7 - 55.1 |
| All Abbott Cell-Dyn Instruments | 151 | 52.91 | 1.64 | 3.1 | 52.8 | 49.7 - 56.1 |
| All ABX Instruments | 87 | 50.86 | 1.07 | 2.1 | 50.8 | 47.8 - 54.0 |
| All Boule (CDS) Instruments | 132 | 51.69 | 1.11 | 2.2 | 51.7 | 48.5 - 54.8 |
| All COULTER Instruments | 157 | 51.78 | 1.45 | 2.8 | 51.9 | 48.6 - 54.9 |
| All Danam/Drew Scientific Instruments | 10 | 52.92 | 0.89 | 1.7 | 52.8 | 49.7 - 56.1 |
| Abbott Cell-Dyn 1700 | 15 | 51.80 | 1.91 | 3.7 | 51.7 | 48.6 - 55.0 |
| Abbott Cell-Dyn 1800 | 49 | 52.84 | 1.38 | 2.6 | 52.8 | 49.6 - 56.1 |
| Abbott Cell-Dyn Emerald | 86 | 53.15 | 1.67 | 3.1 | 53.0 | 49.9 - 56.4 |
| Boule (CDS) Medonic M series | 127 | 51.76 | 1.07 | 2.1 | 51.8 | 48.6 - 54.9 |
| COULTER AcT diff/diff 2 | 152 | 51.79 | 1.47 | 2.8 | 51.9 | 48.6 - 54.9 |
| Drew Scientific D3 | 10 | 52.92 | 0.89 | 1.7 | 52.8 | 49.7 - 56.1 |
| Horiba ABX Micros/45/60 | 87 | 50.86 | 1.07 | 2.1 | 50.8 | 47.8 - 54.0 |

Specimen HD-2

| <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------|-------------|-----------|-----------|---------------|--------------|
| 546 | 17.17 | 0.95 | 5.5 | 17.2 | 16.1 - 18.2 |
| 152 | 18.03 | 0.68 | 3.8 | 18.1 | 16.9 - 19.2 |
| 90 | 16.18 | 0.35 | 2.2 | 16.2 | 15.2 - 17.2 |
| 132 | 16.28 | 0.40 | 2.5 | 16.3 | 15.3 - 17.3 |
| 157 | 17.58 | 0.48 | 2.7 | 17.6 | 16.5 - 18.7 |
| 10 | 18.17 | 0.35 | 1.9 | 18.1 | 17.0 - 19.3 |
| 15 | 17.80 | 0.67 | 3.8 | 17.8 | 16.7 - 18.9 |
| 49 | 18.34 | 0.61 | 3.3 | 18.4 | 17.2 - 19.5 |
| 87 | 17.89 | 0.67 | 3.8 | 18.0 | 16.8 - 19.0 |
| 126 | 16.29 | 0.40 | 2.5 | 16.4 | 15.3 - 17.3 |
| 152 | 17.61 | 0.47 | 2.7 | 17.6 | 16.5 - 18.7 |
| 10 | 18.17 | 0.35 | 1.9 | 18.1 | 17.0 - 19.3 |
| 90 | 16.18 | 0.35 | 2.2 | 16.2 | 15.2 - 17.2 |

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

| <u><i>Instrument</i></u> | Specimen HD-3 | | | | | | Specimen HD-4 | | | | | |
|---------------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 543 | 38.35 | 1.46 | 3.8 | 38.3 | 36.0 - 40.7 | 545 | 17.10 | 0.94 | 5.5 | 17.1 | 16.0 - 18.2 |
| All Abbott Cell-Dyn Instruments | 149 | 39.53 | 1.25 | 3.2 | 39.6 | 37.1 - 42.0 | 149 | 18.01 | 0.66 | 3.6 | 18.1 | 16.9 - 19.1 |
| All ABX Instruments | 90 | 37.45 | 0.73 | 1.9 | 37.5 | 35.1 - 39.7 | 90 | 16.15 | 0.35 | 2.2 | 16.2 | 15.1 - 17.2 |
| All Boule (CDS) Instruments | 131 | 36.98 | 0.76 | 2.1 | 37.0 | 34.7 - 39.2 | 132 | 16.20 | 0.37 | 2.3 | 16.2 | 15.2 - 17.2 |
| All COULTER Instruments | 159 | 38.79 | 1.07 | 2.8 | 38.8 | 36.4 - 41.2 | 158 | 17.46 | 0.46 | 2.6 | 17.5 | 16.4 - 18.6 |
| All Danam/Drew Scientific Instruments | 10 | 39.74 | 0.86 | 2.2 | 39.4 | 37.3 - 42.2 | 10 | 17.88 | 0.57 | 3.2 | 17.9 | 16.8 - 19.0 |
| Abbott Cell-Dyn 1700 | 15 | 38.95 | 1.30 | 3.3 | 39.1 | 36.6 - 41.3 | 15 | 17.57 | 0.65 | 3.7 | 17.7 | 16.5 - 18.7 |
| Abbott Cell-Dyn 1800 | 49 | 39.70 | 1.23 | 3.1 | 39.7 | 37.3 - 42.1 | 49 | 18.20 | 0.70 | 3.8 | 18.2 | 17.1 - 19.3 |
| Abbott Cell-Dyn Emerald | 84 | 39.53 | 1.25 | 3.2 | 39.5 | 37.1 - 42.0 | 84 | 17.98 | 0.60 | 3.3 | 18.1 | 16.9 - 19.1 |
| Boule (CDS) Medonic M series | 126 | 37.00 | 0.76 | 2.1 | 37.0 | 34.7 - 39.3 | 125 | 16.22 | 0.35 | 2.1 | 16.2 | 15.2 - 17.2 |
| COULTER AcT diff/diff 2 | 154 | 38.79 | 1.08 | 2.8 | 38.8 | 36.4 - 41.2 | 153 | 17.48 | 0.45 | 2.6 | 17.5 | 16.4 - 18.6 |
| Drew Scientific D3 | 10 | 39.74 | 0.86 | 2.2 | 39.4 | 37.3 - 42.2 | 10 | 17.88 | 0.57 | 3.2 | 17.9 | 16.8 - 19.0 |
| Horiba ABX Micros/45/60 | 90 | 37.45 | 0.73 | 1.9 | 37.5 | 35.1 - 39.7 | 90 | 16.15 | 0.35 | 2.2 | 16.2 | 15.1 - 17.2 |
| Specimen HD-5 | | | | | | | | | | | | |
| All Method | 536 | 51.78 | 1.47 | 2.8 | 51.8 | 48.6 - 54.9 | | | | | | |
| All Abbott Cell-Dyn Instruments | 148 | 52.63 | 1.67 | 3.2 | 52.8 | 49.4 - 55.8 | | | | | | |
| All ABX Instruments | 90 | 50.65 | 1.14 | 2.3 | 50.8 | 47.6 - 53.7 | | | | | | |
| All Boule (CDS) Instruments | 130 | 51.67 | 1.21 | 2.3 | 51.8 | 48.5 - 54.8 | | | | | | |
| All COULTER Instruments | 158 | 51.78 | 1.25 | 2.4 | 51.8 | 48.6 - 54.9 | | | | | | |
| All Danam/Drew Scientific Instruments | 10 | 52.67 | 1.61 | 3.1 | 52.2 | 49.5 - 55.9 | | | | | | |
| Abbott Cell-Dyn 1700 | 15 | 52.10 | 2.05 | 3.9 | 52.2 | 48.9 - 55.3 | | | | | | |
| Abbott Cell-Dyn 1800 | 47 | 52.54 | 1.58 | 3.0 | 52.8 | 49.3 - 55.7 | | | | | | |
| Abbott Cell-Dyn Emerald | 85 | 52.77 | 1.64 | 3.1 | 52.8 | 49.6 - 56.0 | | | | | | |
| Boule (CDS) Medonic M series | 125 | 51.78 | 1.08 | 2.1 | 51.8 | 48.6 - 54.9 | | | | | | |
| COULTER AcT diff/diff 2 | 153 | 51.80 | 1.26 | 2.4 | 51.8 | 48.6 - 55.0 | | | | | | |
| Drew Scientific D3 | 10 | 52.67 | 1.61 | 3.1 | 52.2 | 49.5 - 55.9 | | | | | | |
| Horiba ABX Micros/45/60 | 90 | 50.65 | 1.14 | 2.3 | 50.8 | 47.6 - 53.7 | | | | | | |

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

| <u>Instrument</u> | Specimen HD-1 | | | | | | Specimen HD-2 | | | | | |
|---------------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 543 | 515.1 | 38.3 | 7.4 | 519 | 386 - 644 | 537 | 71.4 | 8.9 | 12.4 | 71 | 53 - 90 |
| All Abbott Cell-Dyn Instruments | 150 | 529.4 | 39.8 | 7.5 | 529 | 397 - 662 | 148 | 73.7 | 11.2 | 15.3 | 71 | 55 - 93 |
| All ABX Instruments | 88 | 521.5 | 17.7 | 3.4 | 523 | 391 - 652 | 90 | 78.9 | 6.1 | 7.8 | 78 | 59 - 99 |
| All Boule (CDS) Instruments | 131 | 470.1 | 19.2 | 4.1 | 469 | 352 - 588 | 131 | 62.8 | 5.0 | 8.0 | 63 | 47 - 79 |
| All COULTER Instruments | 156 | 537.6 | 24.2 | 4.5 | 537 | 403 - 673 | 159 | 72.6 | 6.2 | 8.5 | 72 | 54 - 91 |
| All Danam/Drew Scientific Instruments | 10 | 524.0 | 23.6 | 4.5 | 529 | 393 - 655 | 10 | 76.5 | 9.3 | 12.2 | 76 | 57 - 96 |
| Abbott Cell-Dyn 1700 | 16 | 535.4 | 28.5 | 5.3 | 534 | 401 - 670 | 16 | 64.3 | 5.3 | 8.3 | 64 | 48 - 81 |
| Abbott Cell-Dyn 1800 | 49 | 557.9 | 29.7 | 5.3 | 560 | 418 - 698 | 49 | 69.4 | 5.2 | 7.5 | 69 | 52 - 87 |
| Abbott Cell-Dyn Emerald | 83 | 508.8 | 31.9 | 6.3 | 510 | 381 - 636 | 85 | 79.0 | 14.1 | 17.9 | 77 | 59 - 99 |
| Boule (CDS) Medonic M series | 127 | 469.2 | 18.8 | 4.0 | 468 | 351 - 587 | 126 | 62.5 | 4.9 | 7.8 | 63 | 46 - 79 |
| COULTER AcT diff/diff 2 | 152 | 537.9 | 24.4 | 4.5 | 537 | 403 - 673 | 152 | 72.8 | 5.7 | 7.8 | 73 | 54 - 92 |
| Drew Scientific D3 | 10 | 524.0 | 23.6 | 4.5 | 529 | 393 - 655 | 10 | 76.5 | 9.3 | 12.2 | 76 | 57 - 96 |
| Horiba ABX Micros/45/60 | 88 | 521.5 | 17.7 | 3.4 | 523 | 391 - 652 | 90 | 78.9 | 6.1 | 7.8 | 78 | 59 - 99 |
| | | | | | | | | | | | | |
| <u>Instrument</u> | Specimen HD-3 | | | | | | Specimen HD-4 | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 543 | 261.1 | 20.0 | 7.7 | 264 | 195 - 327 | 541 | 71.2 | 8.7 | 12.3 | 71 | 53 - 90 |
| All Abbott Cell-Dyn Instruments | 147 | 268.9 | 16.8 | 6.2 | 269 | 201 - 337 | 147 | 72.0 | 9.8 | 13.6 | 71 | 53 - 90 |
| All ABX Instruments | 88 | 271.7 | 11.5 | 4.2 | 271 | 203 - 340 | 90 | 78.3 | 6.5 | 8.3 | 78 | 58 - 98 |
| All Boule (CDS) Instruments | 131 | 236.2 | 11.6 | 4.9 | 237 | 177 - 296 | 131 | 63.3 | 4.8 | 7.6 | 63 | 47 - 80 |
| All COULTER Instruments | 158 | 268.6 | 13.2 | 4.9 | 269 | 201 - 336 | 157 | 72.4 | 6.1 | 8.5 | 72 | 54 - 91 |
| All Danam/Drew Scientific Instruments | 10 | 272.6 | 11.8 | 4.3 | 274 | 204 - 341 | 10 | 76.3 | 7.8 | 10.2 | 75 | 57 - 96 |
| Abbott Cell-Dyn 1700 | 16 | 258.6 | 21.4 | 8.3 | 260 | 193 - 324 | 16 | 64.7 | 5.5 | 8.5 | 64 | 48 - 81 |
| Abbott Cell-Dyn 1800 | 48 | 269.4 | 15.3 | 5.7 | 271 | 202 - 337 | 49 | 67.5 | 5.0 | 7.4 | 68 | 50 - 85 |
| Abbott Cell-Dyn Emerald | 84 | 269.7 | 18.0 | 6.7 | 270 | 202 - 338 | 84 | 77.0 | 12.1 | 15.7 | 76 | 57 - 97 |
| Boule (CDS) Medonic M series | 127 | 235.7 | 11.2 | 4.7 | 237 | 176 - 295 | 126 | 63.2 | 4.8 | 7.6 | 63 | 47 - 79 |
| COULTER AcT diff/diff 2 | 154 | 268.6 | 13.4 | 5.0 | 269 | 201 - 336 | 152 | 72.5 | 6.1 | 8.4 | 73 | 54 - 91 |
| Drew Scientific D3 | 10 | 272.6 | 11.8 | 4.3 | 274 | 204 - 341 | 10 | 76.3 | 7.8 | 10.2 | 75 | 57 - 96 |
| Horiba ABX Micros/45/60 | 88 | 271.7 | 11.5 | 4.2 | 271 | 203 - 340 | 90 | 78.3 | 6.5 | 8.3 | 78 | 58 - 98 |

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

Specimen HD-5

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method | 543 | 514.0 | 38.3 | 7.5 | 517 | 385 - 643 |
| All Abbott Cell-Dyn Instruments | 150 | 528.5 | 38.4 | 7.3 | 528 | 396 - 661 |
| All ABX Instruments | 89 | 518.6 | 21.9 | 4.2 | 518 | 388 - 649 |
| All Boule (CDS) Instruments | 130 | 467.1 | 17.9 | 3.8 | 466 | 350 - 584 |
| All COULTER Instruments | 157 | 535.4 | 22.3 | 4.2 | 536 | 401 - 670 |
| All Danam/Drew Scientific Instruments | 10 | 530.2 | 31.4 | 5.9 | 518 | 397 - 663 |
| Abbott Cell-Dyn 1700 | 16 | 544.0 | 35.6 | 6.5 | 539 | 408 - 680 |
| Abbott Cell-Dyn 1800 | 49 | 554.1 | 42.3 | 7.6 | 562 | 415 - 693 |
| Abbott Cell-Dyn Emerald | 85 | 511.5 | 28.4 | 5.5 | 508 | 383 - 640 |
| Boule (CDS) Medonic M series | 125 | 465.8 | 16.8 | 3.6 | 465 | 349 - 583 |
| COULTER AcT diff/diff 2 | 153 | 535.6 | 22.2 | 4.1 | 536 | 401 - 670 |
| Drew Scientific D3 | 10 | 530.2 | 31.4 | 5.9 | 518 | 397 - 663 |
| Horiba ABX Micros/45/60 | 89 | 518.6 | 21.9 | 4.2 | 518 | 388 - 649 |

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

Specimen HD-1

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method | 525 | 13.43 | 1.45 | 10.8 | 13.8 | 9.0 - 17.8 |
| All Abbott Cell-Dyn Instruments | 144 | 13.06 | 1.89 | 14.4 | 13.2 | 7.4 - 18.8 |
| All ABX Instruments | 86 | 11.66 | 1.03 | 8.8 | 11.3 | 8.5 - 14.8 |
| All Boule (CDS) Instruments | 127 | 14.07 | 0.53 | 3.8 | 14.1 | 12.4 - 15.7 |
| All COULTER Instruments | 150 | 14.25 | 0.44 | 3.1 | 14.3 | 12.9 - 15.6 |
| All Danam/Drew Scientific Instruments | 10 | 13.33 | 0.25 | 1.8 | 13.4 | 12.5 - 14.1 |
| Abbott Cell-Dyn 1700 | 15 | 12.49 | 0.64 | 5.2 | 12.4 | 10.5 - 14.5 |
| Abbott Cell-Dyn 1800 | 46 | 10.96 | 0.59 | 5.4 | 10.9 | 9.1 - 12.8 |
| Abbott Cell-Dyn Emerald | 80 | 14.21 | 1.19 | 8.4 | 14.0 | 10.6 - 17.8 |
| Boule (CDS) Medonic M series | 123 | 14.02 | 0.46 | 3.3 | 14.1 | 12.6 - 15.5 |
| COULTER AcT diff/diff 2 | 149 | 14.25 | 0.44 | 3.1 | 14.3 | 12.9 - 15.6 |
| Drew Scientific D3 | 10 | 13.33 | 0.25 | 1.8 | 13.4 | 12.5 - 14.1 |
| Horiba ABX Micros/45/60 | 86 | 11.66 | 1.03 | 8.8 | 11.3 | 8.5 - 14.8 |

Specimen HD-2

| <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------|-------------|-----------|-----------|---------------|--------------|
| 530 | 55.34 | 6.96 | 12.6 | 57.8 | 34.4 - 76.3 |
| 147 | 51.17 | 3.18 | 6.2 | 51.4 | 41.6 - 60.8 |
| 84 | 44.23 | 4.41 | 10.0 | 43.4 | 30.9 - 57.5 |
| 129 | 59.46 | 1.81 | 3.0 | 59.3 | 54.0 - 65.0 |
| 151 | 61.68 | 1.69 | 2.7 | 61.7 | 56.6 - 66.8 |
| 10 | 56.96 | 1.23 | 2.2 | 57.1 | 53.2 - 60.7 |
| 15 | 52.51 | 2.51 | 4.8 | 51.5 | 44.9 - 60.1 |
| 49 | 48.22 | 2.49 | 5.2 | 47.5 | 40.7 - 55.7 |
| 83 | 52.67 | 2.34 | 4.4 | 52.5 | 45.6 - 59.7 |
| 124 | 59.39 | 1.75 | 2.9 | 59.3 | 54.1 - 64.7 |
| 150 | 61.69 | 1.69 | 2.7 | 61.7 | 56.6 - 66.8 |
| 10 | 56.96 | 1.23 | 2.2 | 57.1 | 53.2 - 60.7 |
| 84 | 44.23 | 4.41 | 10.0 | 43.4 | 30.9 - 57.5 |

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

| <u><i>Instrument</i></u> | Specimen HD-3 | | | | | | Specimen HD-4 | | | | | |
|---------------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 530 | 29.57 | 3.67 | 12.4 | 30.8 | 18.5 - 40.6 | 528 | 55.87 | 7.18 | 12.8 | 58.4 | 34.3 - 77.5 |
| All Abbott Cell-Dyn Instruments | 144 | 27.64 | 2.50 | 9.1 | 28.3 | 20.1 - 35.2 | 145 | 51.83 | 3.24 | 6.3 | 52.0 | 42.0 - 61.6 |
| All ABX Instruments | 87 | 23.92 | 2.82 | 11.8 | 23.2 | 15.4 - 32.4 | 84 | 44.20 | 4.47 | 10.1 | 43.1 | 30.7 - 57.7 |
| All Boule (CDS) Instruments | 129 | 31.62 | 1.03 | 3.2 | 31.5 | 28.5 - 34.8 | 131 | 60.13 | 1.98 | 3.3 | 60.1 | 54.1 - 66.1 |
| All COULTER Instruments | 151 | 32.49 | 0.93 | 2.9 | 32.5 | 29.6 - 35.3 | 149 | 62.47 | 1.39 | 2.2 | 62.6 | 58.2 - 66.7 |
| All Danam/Drew Scientific Instruments | 10 | 30.73 | 0.42 | 1.4 | 30.8 | 29.4 - 32.0 | 10 | 57.70 | 1.87 | 3.2 | 57.2 | 52.1 - 63.3 |
| Abbott Cell-Dyn 1700 | 14 | 28.45 | 1.46 | 5.1 | 28.2 | 24.0 - 32.9 | 15 | 53.49 | 2.69 | 5.0 | 53.9 | 45.4 - 61.6 |
| Abbott Cell-Dyn 1800 | 49 | 24.82 | 1.25 | 5.0 | 24.9 | 21.0 - 28.6 | 48 | 48.49 | 1.89 | 3.9 | 48.4 | 42.8 - 54.2 |
| Abbott Cell-Dyn Emerald | 79 | 29.21 | 1.26 | 4.3 | 29.2 | 25.4 - 33.1 | 82 | 53.47 | 2.35 | 4.4 | 53.6 | 46.4 - 60.6 |
| Boule (CDS) Medonic M series | 123 | 31.53 | 0.94 | 3.0 | 31.5 | 28.6 - 34.4 | 125 | 60.00 | 1.91 | 3.2 | 60.1 | 54.2 - 65.8 |
| COULTER AcT diff/diff 2 | 150 | 32.49 | 0.93 | 2.9 | 32.5 | 29.6 - 35.3 | 148 | 62.46 | 1.39 | 2.2 | 62.6 | 58.2 - 66.7 |
| Drew Scientific D3 | 10 | 30.73 | 0.42 | 1.4 | 30.8 | 29.4 - 32.0 | 10 | 57.70 | 1.87 | 3.2 | 57.2 | 52.1 - 63.3 |
| Horiba ABX Micros/45/60 | 87 | 23.92 | 2.82 | 11.8 | 23.2 | 15.4 - 32.4 | 84 | 44.20 | 4.47 | 10.1 | 43.1 | 30.7 - 57.7 |
| Specimen HD-5 | | | | | | | | | | | | |
| All Method | 527 | 13.39 | 1.49 | 11.1 | 13.9 | 8.9 - 17.9 | | | | | | |
| All Abbott Cell-Dyn Instruments | 144 | 12.81 | 1.66 | 12.9 | 13.0 | 7.8 - 17.8 | | | | | | |
| All ABX Instruments | 87 | 11.56 | 1.09 | 9.4 | 11.3 | 8.3 - 14.9 | | | | | | |
| All Boule (CDS) Instruments | 129 | 14.18 | 0.61 | 4.3 | 14.1 | 12.3 - 16.1 | | | | | | |
| All COULTER Instruments | 151 | 14.28 | 0.47 | 3.3 | 14.3 | 12.8 - 15.7 | | | | | | |
| All Danam/Drew Scientific Instruments | 10 | 13.19 | 0.37 | 2.8 | 13.1 | 12.0 - 14.4 | | | | | | |
| Abbott Cell-Dyn 1700 | 15 | 12.45 | 0.73 | 5.9 | 12.2 | 10.2 - 14.7 | | | | | | |
| Abbott Cell-Dyn 1800 | 47 | 10.91 | 0.49 | 4.5 | 10.8 | 9.4 - 12.4 | | | | | | |
| Abbott Cell-Dyn Emerald | 80 | 13.95 | 1.06 | 7.6 | 13.8 | 10.7 - 17.2 | | | | | | |
| Boule (CDS) Medonic M series | 123 | 14.12 | 0.54 | 3.8 | 14.1 | 12.4 - 15.8 | | | | | | |
| COULTER AcT diff/diff 2 | 150 | 14.29 | 0.47 | 3.3 | 14.3 | 12.8 - 15.7 | | | | | | |
| Drew Scientific D3 | 10 | 13.19 | 0.37 | 2.8 | 13.1 | 12.0 - 14.4 | | | | | | |
| Horiba ABX Micros/45/60 | 87 | 11.56 | 1.09 | 9.4 | 11.3 | 8.3 - 14.9 | | | | | | |

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

| <u>Instrument</u> | Specimen HD-1 | | | | | | Specimen HD-2 | | | | | |
|---------------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 522 | 4.28 | 1.21 | 28.3 | 4.1 | 0.6 - 8.0 | 527 | 11.26 | 5.28 | 46.8 | 10.5 | 0.0 - 27.1 |
| All Abbott Cell-Dyn Instruments | 144 | 4.01 | 1.69 | 42.1 | 3.0 | 0.0 - 9.1 | 144 | 13.82 | 2.71 | 19.6 | 13.6 | 5.7 - 22.0 |
| All ABX Instruments | 85 | 3.88 | 0.32 | 8.1 | 3.9 | 2.9 - 4.9 | 85 | 19.62 | 3.11 | 15.8 | 20.2 | 10.2 - 29.0 |
| All Boule (CDS) Instruments | 126 | 5.42 | 0.64 | 11.7 | 5.4 | 3.5 - 7.4 | 130 | 9.72 | 2.09 | 21.5 | 10.0 | 3.4 - 16.0 |
| All COULTER Instruments | 150 | 3.86 | 0.37 | 9.7 | 3.8 | 2.7 - 5.0 | 151 | 5.85 | 1.27 | 21.7 | 5.8 | 2.0 - 9.7 |
| All Danam/Drew Scientific Instruments | 10 | 2.52 | 0.18 | 7.2 | 2.5 | 1.9 - 3.1 | 10 | 9.23 | 1.28 | 13.9 | 9.1 | 5.3 - 13.1 |
| Abbott Cell-Dyn 1700 | 15 | 4.81 | 0.21 | 4.3 | 4.8 | 4.1 - 5.5 | 15 | 12.49 | 1.59 | 12.7 | 12.3 | 7.7 - 17.3 |
| Abbott Cell-Dyn 1800 | 45 | 6.11 | 0.32 | 5.3 | 6.1 | 5.1 - 7.1 | 47 | 16.95 | 1.44 | 8.5 | 16.8 | 12.6 - 21.3 |
| Abbott Cell-Dyn Emerald | 81 | 2.65 | 0.29 | 10.8 | 2.6 | 1.7 - 3.6 | 82 | 12.27 | 1.69 | 13.8 | 12.2 | 7.1 - 17.4 |
| Boule (CDS) Medonic M series | 124 | 5.41 | 0.64 | 11.8 | 5.4 | 3.4 - 7.4 | 123 | 9.82 | 2.05 | 20.9 | 10.0 | 3.6 - 16.0 |
| COULTER AcT diff/diff 2 | 150 | 3.86 | 0.37 | 9.7 | 3.8 | 2.7 - 5.0 | 150 | 5.85 | 1.27 | 21.7 | 5.8 | 2.0 - 9.7 |
| Drew Scientific D3 | 10 | 2.52 | 0.18 | 7.2 | 2.5 | 1.9 - 3.1 | 10 | 9.23 | 1.28 | 13.9 | 9.1 | 5.3 - 13.1 |
| Horiba ABX Micros/45/60 | 85 | 3.88 | 0.32 | 8.1 | 3.9 | 2.9 - 4.9 | 85 | 19.62 | 3.11 | 15.8 | 20.2 | 10.2 - 29.0 |

| <u>Instrument</u> | Specimen HD-3 | | | | | | Specimen HD-4 | | | | | |
|---------------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 527 | 8.29 | 2.14 | 25.9 | 8.0 | 1.8 - 14.8 | 526 | 10.97 | 5.54 | 50.5 | 9.9 | 0.0 - 27.7 |
| All Abbott Cell-Dyn Instruments | 145 | 8.33 | 2.66 | 31.9 | 7.4 | 0.3 - 16.3 | 145 | 13.97 | 2.70 | 19.4 | 13.6 | 5.8 - 22.1 |
| All ABX Instruments | 86 | 10.08 | 1.31 | 13.0 | 10.4 | 6.1 - 14.1 | 84 | 19.86 | 3.10 | 15.6 | 20.9 | 10.5 - 29.2 |
| All Boule (CDS) Instruments | 131 | 9.39 | 1.19 | 12.6 | 9.4 | 5.8 - 13.0 | 132 | 8.61 | 2.20 | 25.5 | 8.7 | 2.0 - 15.3 |
| All COULTER Instruments | 149 | 6.49 | 0.58 | 9.0 | 6.6 | 4.7 - 8.3 | 149 | 5.46 | 1.18 | 21.5 | 5.4 | 1.9 - 9.0 |
| All Danam/Drew Scientific Instruments | 10 | 5.53 | 0.34 | 6.1 | 5.6 | 4.5 - 6.6 | 10 | 8.85 | 0.78 | 8.9 | 9.0 | 6.4 - 11.3 |
| Abbott Cell-Dyn 1700 | 15 | 9.07 | 0.76 | 8.4 | 9.1 | 6.7 - 11.4 | 15 | 12.39 | 1.67 | 13.4 | 12.7 | 7.3 - 17.4 |
| Abbott Cell-Dyn 1800 | 47 | 11.74 | 0.81 | 6.9 | 11.7 | 9.3 - 14.2 | 45 | 17.28 | 1.15 | 6.6 | 17.2 | 13.8 - 20.8 |
| Abbott Cell-Dyn Emerald | 83 | 6.26 | 0.92 | 14.7 | 6.1 | 3.4 - 9.1 | 83 | 12.50 | 1.71 | 13.7 | 12.2 | 7.3 - 17.7 |
| Boule (CDS) Medonic M series | 124 | 9.25 | 1.06 | 11.4 | 9.3 | 6.0 - 12.5 | 125 | 8.65 | 2.22 | 25.6 | 8.7 | 1.9 - 15.4 |
| COULTER AcT diff/diff 2 | 148 | 6.51 | 0.57 | 8.7 | 6.6 | 4.7 - 8.3 | 148 | 5.47 | 1.17 | 21.4 | 5.4 | 1.9 - 9.0 |
| Drew Scientific D3 | 10 | 5.53 | 0.34 | 6.1 | 5.6 | 4.5 - 6.6 | 10 | 8.85 | 0.78 | 8.9 | 9.0 | 6.4 - 11.3 |
| Horiba ABX Micros/45/60 | 86 | 10.08 | 1.31 | 13.0 | 10.4 | 6.1 - 14.1 | 84 | 19.86 | 3.10 | 15.6 | 20.9 | 10.5 - 29.2 |

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

Specimen HD-5

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method | 526 | 4.30 | 1.25 | 29.2 | 4.0 | 0.5 - 8.1 |
| All Abbott Cell-Dyn Instruments | 145 | 3.98 | 1.61 | 40.3 | 3.0 | 0.0 - 8.9 |
| All ABX Instruments | 85 | 3.94 | 0.31 | 7.9 | 3.9 | 2.9 - 4.9 |
| All Boule (CDS) Instruments | 129 | 5.61 | 0.78 | 13.9 | 5.5 | 3.2 - 8.0 |
| All COULTER Instruments | 148 | 3.78 | 0.36 | 9.6 | 3.8 | 2.6 - 4.9 |
| All Danam/Drew Scientific Instruments | 10 | 2.57 | 0.14 | 5.5 | 2.6 | 2.1 - 3.0 |
| Abbott Cell-Dyn 1700 | 15 | 4.93 | 0.28 | 5.7 | 4.9 | 4.0 - 5.8 |
| Abbott Cell-Dyn 1800 | 47 | 6.02 | 0.39 | 6.5 | 6.1 | 4.8 - 7.3 |
| Abbott Cell-Dyn Emerald | 83 | 2.65 | 0.30 | 11.5 | 2.6 | 1.7 - 3.6 |
| Boule (CDS) Medonic M series | 125 | 5.55 | 0.71 | 12.8 | 5.5 | 3.4 - 7.7 |
| COULTER AcT diff/diff 2 | 147 | 3.78 | 0.36 | 9.6 | 3.8 | 2.6 - 4.9 |
| Drew Scientific D3 | 10 | 2.57 | 0.14 | 5.5 | 2.6 | 2.1 - 3.0 |
| Horiba ABX Micros/45/60 | 85 | 3.94 | 0.31 | 7.9 | 3.9 | 2.9 - 4.9 |

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

Specimen HD-1

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method | 518 | 82.30 | 1.61 | 2.0 | 82.2 | 77.4 - 87.2 |
| All Abbott Cell-Dyn Instruments | 140 | 83.00 | 1.16 | 1.4 | 83.1 | 79.5 - 86.5 |
| All ABX Instruments | 85 | 84.38 | 0.90 | 1.1 | 84.6 | 81.6 - 87.1 |
| All Boule (CDS) Instruments | 127 | 80.53 | 0.91 | 1.1 | 80.5 | 77.8 - 83.3 |
| All COULTER Instruments | 150 | 81.89 | 0.52 | 0.6 | 81.9 | 80.3 - 83.5 |
| All Danam/Drew Scientific Instruments | 10 | 84.15 | 0.30 | 0.4 | 84.2 | 83.2 - 85.1 |
| Abbott Cell-Dyn 1700 | 15 | 82.64 | 0.71 | 0.9 | 82.6 | 80.4 - 84.8 |
| Abbott Cell-Dyn 1800 | 45 | 83.01 | 0.57 | 0.7 | 82.9 | 81.3 - 84.8 |
| Abbott Cell-Dyn Emerald | 79 | 83.09 | 1.41 | 1.7 | 83.5 | 78.8 - 87.4 |
| Boule (CDS) Medonic M series | 124 | 80.56 | 0.83 | 1.0 | 80.5 | 78.0 - 83.1 |
| COULTER AcT diff/diff 2 | 150 | 81.89 | 0.52 | 0.6 | 81.9 | 80.3 - 83.5 |
| Drew Scientific D3 | 10 | 84.15 | 0.30 | 0.4 | 84.2 | 83.2 - 85.1 |
| Horiba ABX Micros/45/60 | 85 | 84.38 | 0.90 | 1.1 | 84.6 | 81.6 - 87.1 |

Specimen HD-2

| <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------|-------------|-----------|-----------|---------------|--------------|
| 529 | 33.38 | 2.65 | 7.9 | 33.3 | 25.4 - 41.4 |
| 145 | 35.07 | 1.65 | 4.7 | 35.0 | 30.1 - 40.1 |
| 86 | 35.99 | 2.11 | 5.9 | 36.2 | 29.6 - 42.4 |
| 131 | 30.85 | 2.28 | 7.4 | 30.6 | 24.0 - 37.7 |
| 152 | 32.49 | 1.38 | 4.3 | 32.5 | 28.3 - 36.7 |
| 10 | 33.81 | 1.31 | 3.9 | 33.8 | 29.8 - 37.8 |
| 15 | 35.06 | 2.02 | 5.8 | 34.5 | 28.9 - 41.2 |
| 49 | 34.84 | 1.86 | 5.3 | 34.9 | 29.2 - 40.5 |
| 82 | 35.14 | 1.56 | 4.4 | 35.1 | 30.4 - 39.9 |
| 124 | 30.84 | 2.12 | 6.9 | 30.6 | 24.4 - 37.3 |
| 151 | 32.48 | 1.38 | 4.3 | 32.5 | 28.3 - 36.7 |
| 10 | 33.81 | 1.31 | 3.9 | 33.8 | 29.8 - 37.8 |
| 86 | 35.99 | 2.11 | 5.9 | 36.2 | 29.6 - 42.4 |

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

| <u><i>Instrument</i></u> | Specimen HD-3 | | | | | | Specimen HD-4 | | | | | |
|---------------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 527 | 62.17 | 2.85 | 4.6 | 61.8 | 53.6 - 70.8 | 525 | 33.10 | 2.49 | 7.5 | 33.0 | 25.6 - 40.6 |
| All Abbott Cell-Dyn Instruments | 142 | 63.98 | 1.31 | 2.0 | 64.1 | 60.0 - 68.0 | 147 | 34.22 | 1.64 | 4.8 | 34.3 | 29.3 - 39.2 |
| All ABX Instruments | 84 | 66.13 | 1.42 | 2.1 | 66.3 | 61.8 - 70.4 | 84 | 35.71 | 1.83 | 5.1 | 36.1 | 30.2 - 41.3 |
| All Boule (CDS) Instruments | 129 | 59.06 | 1.60 | 2.7 | 59.2 | 54.2 - 63.9 | 131 | 31.23 | 2.82 | 9.0 | 30.7 | 22.7 - 39.7 |
| All COULTER Instruments | 152 | 61.01 | 0.96 | 1.6 | 61.0 | 58.1 - 63.9 | 148 | 32.05 | 1.20 | 3.8 | 32.1 | 28.4 - 35.7 |
| All Danam/Drew Scientific Instruments | 10 | 63.74 | 0.51 | 0.8 | 63.8 | 62.2 - 65.3 | 10 | 33.45 | 1.66 | 5.0 | 33.8 | 28.4 - 38.5 |
| Abbott Cell-Dyn 1700 | 14 | 62.61 | 1.31 | 2.1 | 62.8 | 58.6 - 66.6 | 15 | 34.09 | 1.68 | 4.9 | 33.9 | 29.0 - 39.2 |
| Abbott Cell-Dyn 1800 | 49 | 63.44 | 0.99 | 1.6 | 63.5 | 60.4 - 66.5 | 49 | 34.58 | 1.61 | 4.7 | 34.5 | 29.7 - 39.5 |
| Abbott Cell-Dyn Emerald | 78 | 64.60 | 1.10 | 1.7 | 64.6 | 61.2 - 68.0 | 83 | 34.03 | 1.63 | 4.8 | 34.2 | 29.1 - 39.0 |
| Boule (CDS) Medonic M series | 124 | 59.21 | 1.41 | 2.4 | 59.3 | 54.9 - 63.5 | 125 | 31.30 | 2.83 | 9.1 | 30.7 | 22.8 - 39.9 |
| COULTER AcT diff/diff 2 | 151 | 60.99 | 0.96 | 1.6 | 61.0 | 58.1 - 63.9 | 147 | 32.05 | 1.21 | 3.8 | 32.0 | 28.4 - 35.7 |
| Drew Scientific D3 | 10 | 63.74 | 0.51 | 0.8 | 63.8 | 62.2 - 65.3 | 10 | 33.45 | 1.66 | 5.0 | 33.8 | 28.4 - 38.5 |
| Horiba ABX Micros/45/60 | 84 | 66.13 | 1.42 | 2.1 | 66.3 | 61.8 - 70.4 | 84 | 35.71 | 1.83 | 5.1 | 36.1 | 30.2 - 41.3 |
| Specimen HD-5 | | | | | | | | | | | | |
| All Method | 523 | 82.30 | 1.79 | 2.2 | 82.2 | 76.9 - 87.7 | | | | | | |
| All Abbott Cell-Dyn Instruments | 141 | 83.21 | 0.99 | 1.2 | 83.4 | 80.2 - 86.2 | | | | | | |
| All ABX Instruments | 84 | 84.50 | 0.89 | 1.1 | 84.6 | 81.8 - 87.2 | | | | | | |
| All Boule (CDS) Instruments | 128 | 80.26 | 1.11 | 1.4 | 80.4 | 76.9 - 83.7 | | | | | | |
| All COULTER Instruments | 150 | 81.91 | 0.54 | 0.7 | 81.9 | 80.2 - 83.6 | | | | | | |
| All Danam/Drew Scientific Instruments | 10 | 84.24 | 0.38 | 0.5 | 84.3 | 83.0 - 85.4 | | | | | | |
| Abbott Cell-Dyn 1700 | 15 | 82.59 | 0.78 | 0.9 | 82.8 | 80.2 - 85.0 | | | | | | |
| Abbott Cell-Dyn 1800 | 47 | 83.07 | 0.61 | 0.7 | 83.1 | 81.2 - 85.0 | | | | | | |
| Abbott Cell-Dyn Emerald | 79 | 83.40 | 1.19 | 1.4 | 83.8 | 79.8 - 87.0 | | | | | | |
| Boule (CDS) Medonic M series | 121 | 80.42 | 0.84 | 1.0 | 80.4 | 77.8 - 83.0 | | | | | | |
| COULTER AcT diff/diff 2 | 149 | 81.91 | 0.53 | 0.7 | 81.9 | 80.3 - 83.6 | | | | | | |
| Drew Scientific D3 | 10 | 84.24 | 0.38 | 0.5 | 84.3 | 83.0 - 85.4 | | | | | | |
| Horiba ABX Micros/45/60 | 84 | 84.50 | 0.89 | 1.1 | 84.6 | 81.8 - 87.2 | | | | | | |

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

| <i><u>Instrument</u></i> | Specimen DIF-1 | | | | | | Specimen DIF-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 12 | 22.09 | 0.30 | 1.4 | 22.1 | 18.7 - 25.5 | 12 | 4.24 | 0.23 | 5.4 | 4.2 | 3.6 - 4.9 |
| All COULTER Instruments | 12 | 22.09 | 0.30 | 1.4 | 22.1 | 18.7 - 25.5 | 12 | 4.24 | 0.23 | 5.4 | 4.2 | 3.6 - 4.9 |
| COULTER UniCel DxH 600 | 10 | 22.07 | 0.33 | 1.5 | 22.1 | 18.7 - 25.4 | 10 | 4.15 | 0.08 | 2.0 | 4.2 | 3.5 - 4.8 |
| <i><u>Instrument</u></i> | Specimen DIF-3 | | | | | | Specimen DIF-4 | | | | | |
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 12 | 10.00 | 0.57 | 5.7 | 10.2 | 8.5 - 11.5 | 12 | 4.26 | 0.23 | 5.4 | 4.2 | 3.6 - 4.9 |
| All COULTER Instruments | 12 | 10.00 | 0.57 | 5.7 | 10.2 | 8.5 - 11.5 | 12 | 4.26 | 0.23 | 5.4 | 4.2 | 3.6 - 4.9 |
| COULTER UniCel DxH 600 | 10 | 10.15 | 0.25 | 2.5 | 10.2 | 8.6 - 11.7 | 10 | 4.22 | 0.12 | 2.8 | 4.2 | 3.5 - 4.9 |
| <i><u>Instrument</u></i> | Specimen DIF-5 | | | | | | | | | | | |
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | | | | | | |
| All Method | 12 | 22.02 | 0.42 | 1.9 | 22.1 | 18.7 - 25.4 | | | | | | |
| All COULTER Instruments | 12 | 22.02 | 0.42 | 1.9 | 22.1 | 18.7 - 25.4 | | | | | | |
| COULTER UniCel DxH 600 | 10 | 22.05 | 0.33 | 1.5 | 22.1 | 18.7 - 25.4 | | | | | | |

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

| <i><u>Instrument</u></i> | Specimen DIF-1 | | | | | | Specimen DIF-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 12 | 5.519 | 0.094 | 1.7 | 5.50 | 5.18 - 5.86 | 12 | 2.613 | 0.054 | 2.1 | 2.62 | 2.45 - 2.78 |
| All COULTER Instruments | 12 | 5.519 | 0.094 | 1.7 | 5.50 | 5.18 - 5.86 | 12 | 2.613 | 0.054 | 2.1 | 2.62 | 2.45 - 2.78 |
| COULTER UniCel DxH 600 | 10 | 5.490 | 0.074 | 1.3 | 5.47 | 5.16 - 5.82 | 10 | 2.585 | 0.038 | 1.5 | 2.58 | 2.42 - 2.75 |
| <i><u>Instrument</u></i> | Specimen DIF-3 | | | | | | Specimen DIF-4 | | | | | |
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 12 | 4.199 | 0.147 | 3.5 | 4.19 | 3.94 - 4.46 | 12 | 2.599 | 0.065 | 2.5 | 2.59 | 2.44 - 2.76 |
| All COULTER Instruments | 12 | 4.199 | 0.147 | 3.5 | 4.19 | 3.94 - 4.46 | 12 | 2.599 | 0.065 | 2.5 | 2.59 | 2.44 - 2.76 |
| COULTER UniCel DxH 600 | 10 | 4.158 | 0.068 | 1.6 | 4.18 | 3.90 - 4.41 | 10 | 2.575 | 0.027 | 1.0 | 2.57 | 2.42 - 2.73 |
| <i><u>Instrument</u></i> | Specimen DIF-5 | | | | | | | | | | | |
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | | | | | | |
| All Method | 12 | 5.463 | 0.102 | 1.9 | 5.44 | 5.13 - 5.80 | | | | | | |
| All COULTER Instruments | 12 | 5.463 | 0.102 | 1.9 | 5.44 | 5.13 - 5.80 | | | | | | |
| COULTER UniCel DxH 600 | 10 | 5.400 | 0.037 | 0.7 | 5.39 | 5.07 - 5.73 | | | | | | |

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

| <u>Instrument</u> | Specimen DIF-1 | | | | | | Specimen DIF-2 | | | | | |
|-------------------------|-----------------------|-------------|-----------|-----------|---------------|--------------|-----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 12 | 17.15 | 0.27 | 1.6 | 17.1 | 15.9 - 18.4 | 12 | 6.38 | 0.11 | 1.7 | 6.4 | 5.9 - 6.9 |
| All COULTER Instruments | 12 | 17.15 | 0.27 | 1.6 | 17.1 | 15.9 - 18.4 | 12 | 6.38 | 0.11 | 1.7 | 6.4 | 5.9 - 6.9 |
| COULTER UniCel DxH 600 | 10 | 17.02 | 0.24 | 1.4 | 17.0 | 15.8 - 18.3 | 10 | 6.32 | 0.08 | 1.2 | 6.3 | 5.8 - 6.8 |
| <u>Instrument</u> | Specimen DIF-3 | | | | | | Specimen DIF-4 | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 12 | 12.18 | 0.44 | 3.6 | 12.3 | 11.3 - 13.1 | 12 | 6.35 | 0.08 | 1.3 | 6.4 | 5.9 - 6.8 |
| All COULTER Instruments | 12 | 12.18 | 0.44 | 3.6 | 12.3 | 11.3 - 13.1 | 12 | 6.35 | 0.08 | 1.3 | 6.4 | 5.9 - 6.8 |
| COULTER UniCel DxH 600 | 10 | 12.27 | 0.23 | 1.8 | 12.4 | 11.4 - 13.2 | 10 | 6.33 | 0.05 | 0.8 | 6.3 | 5.8 - 6.8 |
| <u>Instrument</u> | Specimen DIF-5 | | | | | | | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | | | |
| All Method | 12 | 17.01 | 0.30 | 1.8 | 17.0 | 15.8 - 18.2 | | | | | | |
| All COULTER Instruments | 12 | 17.01 | 0.30 | 1.8 | 17.0 | 15.8 - 18.2 | | | | | | |
| COULTER UniCel DxH 600 | 10 | 16.92 | 0.19 | 1.1 | 16.9 | 15.7 - 18.2 | | | | | | |

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

| <u>Instrument</u> | Specimen DIF-1 | | | | | | Specimen DIF-2 | | | | | |
|-------------------------|-----------------------|-------------|-----------|-----------|---------------|--------------|-----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 12 | 53.73 | 0.88 | 1.6 | 53.6 | 50.5 - 57.0 | 12 | 19.98 | 0.33 | 1.6 | 20.0 | 18.7 - 21.2 |
| All COULTER Instruments | 12 | 53.73 | 0.88 | 1.6 | 53.6 | 50.5 - 57.0 | 12 | 19.98 | 0.33 | 1.6 | 20.0 | 18.7 - 21.2 |
| COULTER UniCel DxH 600 | 10 | 54.05 | 1.16 | 2.1 | 53.8 | 50.8 - 57.3 | 10 | 20.07 | 0.30 | 1.5 | 20.1 | 18.8 - 21.3 |
| <u>Instrument</u> | Specimen DIF-3 | | | | | | Specimen DIF-4 | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 12 | 38.91 | 1.30 | 3.3 | 39.0 | 36.5 - 41.3 | 12 | 19.91 | 0.39 | 2.0 | 20.0 | 18.7 - 21.2 |
| All COULTER Instruments | 12 | 38.91 | 1.30 | 3.3 | 39.0 | 36.5 - 41.3 | 12 | 19.91 | 0.39 | 2.0 | 20.0 | 18.7 - 21.2 |
| COULTER UniCel DxH 600 | 10 | 39.20 | 0.81 | 2.1 | 39.4 | 36.8 - 41.6 | 10 | 20.02 | 0.21 | 1.1 | 20.0 | 18.8 - 21.3 |
| <u>Instrument</u> | Specimen DIF-5 | | | | | | | | | | | |
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | | | | | | |
| All Method | 12 | 53.35 | 0.57 | 1.1 | 53.2 | 50.1 - 56.6 | | | | | | |
| All COULTER Instruments | 12 | 53.35 | 0.57 | 1.1 | 53.2 | 50.1 - 56.6 | | | | | | |
| COULTER UniCel DxH 600 | 10 | 53.37 | 0.46 | 0.9 | 53.3 | 50.1 - 56.6 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen DIF-1 | | | | | | Specimen DIF-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 12 | 473.6 | 25.6 | 5.4 | 469 | 355 - 592 | 12 | 77.5 | 3.7 | 4.7 | 78 | 58 - 97 |
| All COULTER Instruments | 12 | 473.6 | 25.6 | 5.4 | 469 | 355 - 592 | 12 | 77.5 | 3.7 | 4.7 | 78 | 58 - 97 |
| COULTER UniCel DxH 600 | 10 | 459.7 | 12.7 | 2.8 | 463 | 344 - 575 | 10 | 75.8 | 1.5 | 1.9 | 76 | 56 - 95 |
| <u><i>Instrument</i></u> | Specimen DIF-3 | | | | | | Specimen DIF-4 | | | | | |
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 12 | 237.3 | 13.0 | 5.5 | 234 | 177 - 297 | 12 | 77.5 | 4.5 | 5.8 | 77 | 58 - 97 |
| All COULTER Instruments | 12 | 237.3 | 13.0 | 5.5 | 234 | 177 - 297 | 12 | 77.5 | 4.5 | 5.8 | 77 | 58 - 97 |
| COULTER UniCel DxH 600 | 10 | 233.2 | 2.7 | 1.2 | 233 | 174 - 292 | 10 | 74.8 | 2.6 | 3.4 | 76 | 56 - 94 |
| <u><i>Instrument</i></u> | Specimen DIF-5 | | | | | | | | | | | |
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | | | | | | |
| All Method | 12 | 473.7 | 15.9 | 3.4 | 475 | 355 - 593 | | | | | | |
| All COULTER Instruments | 12 | 473.7 | 15.9 | 3.4 | 475 | 355 - 593 | | | | | | |
| COULTER UniCel DxH 600 | 10 | 470.0 | 10.4 | 2.2 | 475 | 352 - 588 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen DIF-1 | | | | | | Specimen DIF-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 12 | 69.22 | 1.48 | 2.1 | 69.4 | 64.7 - 73.7 | 12 | 49.96 | 2.35 | 4.7 | 50.2 | 42.9 - 57.1 |
| All COULTER Instruments | 12 | 69.22 | 1.48 | 2.1 | 69.4 | 64.7 - 73.7 | 12 | 49.96 | 2.35 | 4.7 | 50.2 | 42.9 - 57.1 |
| COULTER UniCel DxH 600 | 10 | 69.67 | 0.74 | 1.1 | 70.0 | 67.4 - 71.9 | 10 | 50.87 | 1.26 | 2.5 | 51.2 | 47.0 - 54.7 |
| <u><i>Instrument</i></u> | Specimen DIF-3 | | | | | | Specimen DIF-4 | | | | | |
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 12 | 59.54 | 2.59 | 4.4 | 60.0 | 51.7 - 67.4 | 12 | 49.48 | 2.45 | 4.9 | 49.8 | 42.1 - 56.9 |
| All COULTER Instruments | 12 | 59.54 | 2.59 | 4.4 | 60.0 | 51.7 - 67.4 | 12 | 49.48 | 2.45 | 4.9 | 49.8 | 42.1 - 56.9 |
| COULTER UniCel DxH 600 | 10 | 60.27 | 1.45 | 2.4 | 60.3 | 55.9 - 64.7 | 10 | 50.10 | 1.36 | 2.7 | 50.5 | 46.0 - 54.2 |
| <u><i>Instrument</i></u> | Specimen DIF-5 | | | | | | | | | | | |
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | | | | | | |
| All Method | 12 | 68.50 | 1.70 | 2.5 | 68.6 | 63.3 - 73.7 | | | | | | |
| All COULTER Instruments | 12 | 68.50 | 1.70 | 2.5 | 68.6 | 63.3 - 73.7 | | | | | | |
| COULTER UniCel DxH 600 | 10 | 68.62 | 0.60 | 0.9 | 68.7 | 66.8 - 70.5 | | | | | | |

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

| <i><u>Instrument</u></i> | Specimen DIF-1 | | | | | | Specimen DIF-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 12 | 19.28 | 1.73 | 9.0 | 18.9 | 14.0 - 24.5 | 12 | 35.28 | 4.18 | 11.9 | 34.3 | 22.7 - 47.9 |
| All COULTER Instruments | 12 | 19.28 | 1.73 | 9.0 | 18.9 | 14.0 - 24.5 | 12 | 35.28 | 4.18 | 11.9 | 34.3 | 22.7 - 47.9 |
| COULTER UniCel DxH 600 | 10 | 18.55 | 0.91 | 4.9 | 18.3 | 15.8 - 21.3 | 10 | 32.62 | 1.97 | 6.0 | 32.5 | 26.6 - 38.6 |
| <i><u>Instrument</u></i> | Specimen DIF-3 | | | | | | Specimen DIF-4 | | | | | |
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 12 | 27.43 | 3.64 | 13.3 | 25.9 | 16.4 - 38.4 | 12 | 36.08 | 5.00 | 13.9 | 35.8 | 21.0 - 51.1 |
| All COULTER Instruments | 12 | 27.43 | 3.64 | 13.3 | 25.9 | 16.4 - 38.4 | 12 | 36.08 | 5.00 | 13.9 | 35.8 | 21.0 - 51.1 |
| COULTER UniCel DxH 600 | 10 | 25.68 | 2.22 | 8.6 | 25.6 | 19.0 - 32.4 | 10 | 34.18 | 2.90 | 8.5 | 33.6 | 25.4 - 42.9 |
| <i><u>Instrument</u></i> | Specimen DIF-5 | | | | | | | | | | | |
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | | | | | | |
| All Method | 12 | 20.11 | 1.83 | 9.1 | 19.8 | 14.6 - 25.6 | | | | | | |
| All COULTER Instruments | 12 | 20.11 | 1.83 | 9.1 | 19.8 | 14.6 - 25.6 | | | | | | |
| COULTER UniCel DxH 600 | 10 | 19.43 | 0.65 | 3.3 | 19.2 | 17.4 - 21.4 | | | | | | |

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

| <i><u>Instrument</u></i> | Specimen DIF-1 | | | | | | Specimen DIF-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 12 | 7.04 | 0.72 | 10.2 | 7.3 | 4.8 - 9.2 | 12 | 7.70 | 2.15 | 27.9 | 8.5 | 1.2 - 14.2 |
| All COULTER Instruments | 12 | 7.04 | 0.72 | 10.2 | 7.3 | 4.8 - 9.2 | 12 | 7.70 | 2.15 | 27.9 | 8.5 | 1.2 - 14.2 |
| COULTER UniCel DxH 600 | 10 | 7.47 | 0.33 | 4.5 | 7.4 | 6.4 - 8.5 | 10 | 9.33 | 0.93 | 10.0 | 9.3 | 6.5 - 12.2 |
| <i><u>Instrument</u></i> | Specimen DIF-3 | | | | | | Specimen DIF-4 | | | | | |
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 11 | 6.80 | 1.48 | 21.8 | 6.9 | 2.3 - 11.3 | 11 | 6.73 | 2.25 | 33.5 | 7.2 | 0.0 - 13.5 |
| All COULTER Instruments | 11 | 6.80 | 1.48 | 21.8 | 6.9 | 2.3 - 11.3 | 11 | 6.73 | 2.25 | 33.5 | 7.2 | 0.0 - 13.5 |
| COULTER UniCel DxH 600 | 10 | 7.67 | 0.88 | 11.5 | 8.0 | 5.0 - 10.4 | 10 | 8.46 | 1.25 | 14.8 | 8.3 | 4.6 - 12.3 |
| <i><u>Instrument</u></i> | Specimen DIF-5 | | | | | | | | | | | |
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | | | | | | |
| All Method | 12 | 7.04 | 1.07 | 15.3 | 7.2 | 3.8 - 10.3 | | | | | | |
| All COULTER Instruments | 12 | 7.04 | 1.07 | 15.3 | 7.2 | 3.8 - 10.3 | | | | | | |
| COULTER UniCel DxH 600 | 10 | 7.85 | 0.59 | 7.5 | 7.9 | 6.0 - 9.7 | | | | | | |

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

| <u>Instrument</u> | <u>Specimen DIF-1</u> | | | | | | <u>Specimen DIF-2</u> | | | | | |
|-------------------------|-----------------------|-------------|-----------|-----------|---------------|-----------------------|-----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 12 | 4.36 | 0.36 | 8.3 | 4.4 | 3.2 - 5.5 | 12 | 7.01 | 0.37 | 5.3 | 7.2 | 5.8 - 8.2 |
| All COULTER Instruments | 12 | 4.36 | 0.36 | 8.3 | 4.4 | 3.2 - 5.5 | 12 | 7.01 | 0.37 | 5.3 | 7.2 | 5.8 - 8.2 |
| COULTER UniCel DxH 600 | 10 | 4.32 | 0.18 | 4.3 | 4.4 | 3.7 - 4.9 | 10 | 7.18 | 0.12 | 1.6 | 7.2 | 6.8 - 7.6 |
| <u>Specimen DIF-3</u> | | | | | | <u>Specimen DIF-4</u> | | | | | | |
| All Method | 12 | 6.23 | 0.40 | 6.5 | 6.3 | 5.0 - 7.5 | 12 | 6.96 | 0.38 | 5.5 | 7.0 | 5.8 - 8.2 |
| All COULTER Instruments | 12 | 6.23 | 0.40 | 6.5 | 6.3 | 5.0 - 7.5 | 12 | 6.96 | 0.38 | 5.5 | 7.0 | 5.8 - 8.2 |
| COULTER UniCel DxH 600 | 10 | 6.37 | 0.24 | 3.8 | 6.4 | 5.6 - 7.1 | 10 | 6.95 | 0.27 | 3.9 | 7.0 | 6.1 - 7.8 |
| <u>Specimen DIF-5</u> | | | | | | | | | | | | |
| All Method | 12 | 4.24 | 0.30 | 7.1 | 4.2 | 3.3 - 5.2 | | | | | | |
| All COULTER Instruments | 12 | 4.24 | 0.30 | 7.1 | 4.2 | 3.3 - 5.2 | | | | | | |
| COULTER UniCel DxH 600 | 10 | 4.07 | 0.19 | 4.6 | 4.1 | 3.5 - 4.7 | | | | | | |

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

| <u>Instrument</u> | <u>Specimen DIF-1</u> | | | | | | <u>Specimen DIF-2</u> | | | | | |
|-------------------------|-----------------------|-------------|-----------|-----------|---------------|-----------------------|-----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 12 | 0.11 | 0.15 | 138.9 | 0.0 | 0.0 - 0.6 | 12 | 0.05 | 0.12 | 233.5 | 0.0 | 0.0 - 0.5 |
| All COULTER Instruments | 12 | 0.11 | 0.15 | 138.9 | 0.0 | 0.0 - 0.6 | 12 | 0.05 | 0.12 | 233.5 | 0.0 | 0.0 - 0.5 |
| COULTER UniCel DxH 600 | 10 | 0.00 | 0.01 | 0.0 | 0.0 | 0.0 - 0.1 | 10 | 0.00 | 0.01 | 0.0 | 0.0 | 0.0 - 0.1 |
| <u>Specimen DIF-3</u> | | | | | | <u>Specimen DIF-4</u> | | | | | | |
| All Method | 12 | 0.08 | 0.10 | 123.6 | 0.1 | 0.0 - 0.4 | 12 | 0.03 | 0.05 | 147.7 | 0.0 | 0.0 - 0.2 |
| All COULTER Instruments | 12 | 0.08 | 0.10 | 123.6 | 0.1 | 0.0 - 0.4 | 12 | 0.03 | 0.05 | 147.7 | 0.0 | 0.0 - 0.2 |
| COULTER UniCel DxH 600 | 10 | 0.02 | 0.04 | 245.0 | 0.0 | 0.0 - 0.2 | 10 | 0.02 | 0.04 | 245.0 | 0.0 | 0.0 - 0.2 |
| <u>Specimen DIF-5</u> | | | | | | | | | | | | |
| All Method | 12 | 0.11 | 0.13 | 121.0 | 0.1 | 0.0 - 0.6 | | | | | | |
| All COULTER Instruments | 12 | 0.11 | 0.13 | 121.0 | 0.1 | 0.0 - 0.6 | | | | | | |
| COULTER UniCel DxH 600 | 10 | 0.03 | 0.05 | 154.9 | 0.0 | 0.0 - 0.2 | | | | | | |

BLOOD LEAD (µg/dL)

| <u>Instrument</u> | Specimen LED-1 | | | | | | Specimen LED-2 | | | | | |
|----------------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 21 | 13.97 | 1.49 | 10.7 | 14.0 | 9.9 - 18.0 | 21 | 4.09 | 0.68 | 16.7 | 4.0 | 0.0 - 8.1 |
| All Magellan Diagnostics Methods | 21 | 13.97 | 1.49 | 10.7 | 14.0 | 9.9 - 18.0 | 21 | 4.09 | 0.68 | 16.7 | 4.0 | 0.0 - 8.1 |
| Magellan Diagnostics LeadCare II | 21 | 13.97 | 1.49 | 10.7 | 14.0 | 9.9 - 18.0 | 21 | 4.09 | 0.68 | 16.7 | 4.0 | 0.0 - 8.1 |

| <u>Instrument</u> | Specimen LED-3 | | | | | | Specimen LED-4 | | | | | |
|----------------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 5 | 40.70 | 1.27 | 3.1 | 39.8 | 35.8 - 43.8 | 5 | 13.65 | 1.91 | 14.0 | 12.3 | 8.3 - 16.3 |
| All Magellan Diagnostics Methods | 5 | 40.70 | 1.27 | 3.1 | 39.8 | 35.8 - 43.8 | 5 | 13.65 | 1.91 | 14.0 | 12.3 | 8.3 - 16.3 |

| <u>Instrument</u> | Specimen LED-5 | | | | | |
|----------------------------------|----------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 5 | 3.75 | 0.35 | 9.3 | 4.0 | 0.0 - 8.0 |
| All Magellan Diagnostics Methods | 5 | 3.75 | 0.35 | 9.3 | 4.0 | 0.0 - 8.0 |

RETICULOCYTE COUNT (percent)

| <u>Instrument</u> | Specimen RT-1 | | | | | | Specimen RT-2 | | | | | |
|-----------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 31 | 1.06 | 0.35 | 33.1 | 0.9 | 0.3 - 1.8 | 31 | 4.06 | 1.78 | 43.8 | 3.3 | 0.5 - 7.7 |
| All Automated Methods | 19 | 0.87 | 0.13 | 15.4 | 0.8 | 0.6 - 1.2 | 19 | 3.17 | 0.65 | 20.7 | 3.0 | 1.8 - 4.5 |
| All Manual Methods | 14 | 1.59 | 0.66 | 41.5 | 1.5 | 0.2 - 3.0 | 14 | 6.41 | 3.05 | 47.6 | 5.1 | 0.3 - 12.6 |
| Sysmex XN-1000 | 12 | 0.84 | 0.10 | 11.8 | 0.8 | 0.5 - 1.1 | 12 | 2.97 | 0.35 | 11.7 | 3.0 | 2.0 - 3.9 |

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

| <u><i>Instrument</i></u> | Specimen BCX-1 | | | | | | Specimen BCX-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 118 | 28.41 | 0.69 | 2.4 | 28.4 | 24.1 - 32.7 | 118 | 7.66 | 0.20 | 2.6 | 7.7 | 6.5 - 8.9 |
| All ABX Instruments | 84 | 28.33 | 0.60 | 2.1 | 28.4 | 24.0 - 32.6 | 84 | 7.64 | 0.19 | 2.4 | 7.6 | 6.4 - 8.8 |
| All COULTER Instruments | 34 | 28.62 | 0.85 | 3.0 | 28.7 | 24.3 - 33.0 | 34 | 7.72 | 0.22 | 2.8 | 7.7 | 6.5 - 8.9 |
| ABX Pentra 60C+ | 74 | 28.38 | 0.58 | 2.1 | 28.4 | 24.1 - 32.7 | 74 | 7.63 | 0.18 | 2.4 | 7.6 | 6.4 - 8.8 |
| ABX Pentra 80 / XL 80 | 10 | 27.80 | 0.92 | 3.3 | 27.9 | 23.6 - 32.0 | 10 | 7.56 | 0.49 | 6.4 | 7.7 | 6.4 - 8.7 |
| COULTER AcT 5diff | 34 | 28.62 | 0.85 | 3.0 | 28.7 | 24.3 - 33.0 | 34 | 7.72 | 0.22 | 2.8 | 7.7 | 6.5 - 8.9 |
| | Specimen BCX-3 | | | | | | Specimen BCX-4 | | | | | |
| All Method | 115 | 17.28 | 0.48 | 2.8 | 17.3 | 14.6 - 19.9 | 117 | 2.65 | 0.07 | 2.8 | 2.6 | 2.2 - 3.1 |
| All ABX Instruments | 82 | 17.20 | 0.44 | 2.6 | 17.2 | 14.6 - 19.8 | 84 | 2.64 | 0.07 | 2.6 | 2.6 | 2.2 - 3.1 |
| All COULTER Instruments | 33 | 17.49 | 0.51 | 2.9 | 17.5 | 14.8 - 20.2 | 34 | 2.65 | 0.09 | 3.5 | 2.7 | 2.2 - 3.1 |
| ABX Pentra 60C+ | 71 | 17.23 | 0.45 | 2.6 | 17.3 | 14.6 - 19.9 | 73 | 2.64 | 0.07 | 2.5 | 2.6 | 2.2 - 3.1 |
| ABX Pentra 80 / XL 80 | 10 | 16.99 | 0.32 | 1.9 | 17.0 | 14.4 - 19.6 | 10 | 2.69 | 0.07 | 2.7 | 2.7 | 2.2 - 3.1 |
| COULTER AcT 5diff | 33 | 17.49 | 0.51 | 2.9 | 17.5 | 14.8 - 20.2 | 34 | 2.65 | 0.09 | 3.5 | 2.7 | 2.2 - 3.1 |
| | Specimen BCX-5 | | | | | | | | | | | |
| All Method | 119 | 5.41 | 0.15 | 2.7 | 5.4 | 4.6 - 6.3 | | | | | | |
| All ABX Instruments | 85 | 5.40 | 0.14 | 2.6 | 5.4 | 4.5 - 6.3 | | | | | | |
| All COULTER Instruments | 34 | 5.44 | 0.16 | 3.0 | 5.4 | 4.6 - 6.3 | | | | | | |
| ABX Pentra 60C+ | 74 | 5.40 | 0.13 | 2.5 | 5.4 | 4.5 - 6.3 | | | | | | |
| ABX Pentra 80 / XL 80 | 10 | 5.44 | 0.18 | 3.3 | 5.5 | 4.6 - 6.3 | | | | | | |
| COULTER AcT 5diff | 34 | 5.44 | 0.16 | 3.0 | 5.4 | 4.6 - 6.3 | | | | | | |

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

| <u>Instrument</u> | Specimen BCX-1 | | | | | | Specimen BCX-2 | | | | | |
|-------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 119 | 2.982 | 0.053 | 1.8 | 2.98 | 2.80 - 3.17 | 118 | 4.495 | 0.076 | 1.7 | 4.49 | 4.22 - 4.77 |
| All ABX Instruments | 85 | 2.970 | 0.049 | 1.6 | 2.97 | 2.79 - 3.15 | 85 | 4.479 | 0.065 | 1.4 | 4.48 | 4.21 - 4.75 |
| All COULTER Instruments | 34 | 3.013 | 0.052 | 1.7 | 3.02 | 2.83 - 3.20 | 33 | 4.538 | 0.088 | 1.9 | 4.55 | 4.26 - 4.81 |
| ABX Pentra 60C+ | 74 | 2.976 | 0.049 | 1.6 | 2.97 | 2.79 - 3.16 | 74 | 4.483 | 0.066 | 1.5 | 4.49 | 4.21 - 4.76 |
| ABX Pentra 80 / XL 80 | 10 | 2.925 | 0.025 | 0.8 | 2.92 | 2.74 - 3.11 | 10 | 4.453 | 0.053 | 1.2 | 4.45 | 4.18 - 4.73 |
| COULTER AcT 5diff | 34 | 3.013 | 0.052 | 1.7 | 3.02 | 2.83 - 3.20 | 33 | 4.538 | 0.088 | 1.9 | 4.55 | 4.26 - 4.81 |
| Specimen BCX-3 | | | | | | | | | | | | |
| All Method | 117 | 5.608 | 0.095 | 1.7 | 5.61 | 5.27 - 5.95 | 116 | 2.059 | 0.045 | 2.2 | 2.06 | 1.93 - 2.19 |
| All ABX Instruments | 84 | 5.593 | 0.088 | 1.6 | 5.60 | 5.25 - 5.93 | 84 | 2.050 | 0.042 | 2.1 | 2.05 | 1.92 - 2.18 |
| All COULTER Instruments | 33 | 5.646 | 0.101 | 1.8 | 5.64 | 5.30 - 5.99 | 32 | 2.083 | 0.044 | 2.1 | 2.09 | 1.95 - 2.21 |
| ABX Pentra 60C+ | 73 | 5.593 | 0.092 | 1.6 | 5.60 | 5.25 - 5.93 | 74 | 2.056 | 0.039 | 1.9 | 2.06 | 1.93 - 2.18 |
| ABX Pentra 80 / XL 80 | 10 | 5.599 | 0.070 | 1.3 | 5.60 | 5.26 - 5.94 | 10 | 1.990 | 0.042 | 2.1 | 1.99 | 1.87 - 2.11 |
| COULTER AcT 5diff | 33 | 5.646 | 0.101 | 1.8 | 5.64 | 5.30 - 5.99 | 32 | 2.083 | 0.044 | 2.1 | 2.09 | 1.95 - 2.21 |
| Specimen BCX-5 | | | | | | | | | | | | |
| All Method | 118 | 4.165 | 0.076 | 1.8 | 4.16 | 3.91 - 4.42 | | | | | | |
| All ABX Instruments | 85 | 4.149 | 0.072 | 1.7 | 4.14 | 3.89 - 4.40 | | | | | | |
| All COULTER Instruments | 33 | 4.208 | 0.071 | 1.7 | 4.21 | 3.95 - 4.47 | | | | | | |
| ABX Pentra 60C+ | 74 | 4.156 | 0.071 | 1.7 | 4.15 | 3.90 - 4.41 | | | | | | |
| ABX Pentra 80 / XL 80 | 10 | 4.093 | 0.059 | 1.5 | 4.09 | 3.84 - 4.34 | | | | | | |
| COULTER AcT 5diff | 33 | 4.208 | 0.071 | 1.7 | 4.21 | 3.95 - 4.47 | | | | | | |

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

| <u>Instrument</u> | Specimen BCX-1 | | | | | | Specimen BCX-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 119 | 7.46 | 0.14 | 1.8 | 7.5 | 6.9 - 8.0 | 118 | 13.14 | 0.17 | 1.3 | 13.1 | 12.2 - 14.1 |
| All ABX Instruments | 85 | 7.42 | 0.11 | 1.4 | 7.4 | 6.8 - 8.0 | 84 | 13.12 | 0.14 | 1.1 | 13.1 | 12.1 - 14.1 |
| All COULTER Instruments | 34 | 7.59 | 0.13 | 1.7 | 7.6 | 7.0 - 8.2 | 33 | 13.19 | 0.22 | 1.7 | 13.2 | 12.2 - 14.2 |
| ABX Pentra 60C+ | 74 | 7.42 | 0.11 | 1.4 | 7.4 | 6.9 - 8.0 | 74 | 13.12 | 0.14 | 1.1 | 13.1 | 12.2 - 14.1 |
| ABX Pentra 80 / XL 80 | 10 | 7.37 | 0.09 | 1.3 | 7.4 | 6.8 - 7.9 | 10 | 13.12 | 0.20 | 1.6 | 13.1 | 12.2 - 14.1 |
| COULTER AcT 5diff | 34 | 7.59 | 0.13 | 1.7 | 7.6 | 7.0 - 8.2 | 33 | 13.19 | 0.22 | 1.7 | 13.2 | 12.2 - 14.2 |

| <u>Instrument</u> | Specimen BCX-3 | | | | | | Specimen BCX-4 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 117 | 16.27 | 0.20 | 1.2 | 16.3 | 15.1 - 17.5 | 118 | 6.71 | 0.12 | 1.8 | 6.7 | 6.2 - 7.2 |
| All ABX Instruments | 84 | 16.29 | 0.20 | 1.2 | 16.3 | 15.1 - 17.5 | 85 | 6.67 | 0.09 | 1.4 | 6.7 | 6.2 - 7.2 |
| All COULTER Instruments | 33 | 16.23 | 0.21 | 1.3 | 16.2 | 15.0 - 17.4 | 33 | 6.84 | 0.11 | 1.5 | 6.8 | 6.3 - 7.4 |
| ABX Pentra 60C+ | 73 | 16.28 | 0.19 | 1.2 | 16.3 | 15.1 - 17.5 | 74 | 6.67 | 0.09 | 1.4 | 6.7 | 6.2 - 7.2 |
| ABX Pentra 80 / XL 80 | 10 | 16.36 | 0.22 | 1.4 | 16.4 | 15.2 - 17.6 | 10 | 6.62 | 0.09 | 1.4 | 6.6 | 6.1 - 7.1 |
| COULTER AcT 5diff | 33 | 16.23 | 0.21 | 1.3 | 16.2 | 15.0 - 17.4 | 33 | 6.84 | 0.11 | 1.5 | 6.8 | 6.3 - 7.4 |

| <u>Instrument</u> | Specimen BCX-5 | | | | | |
|--------------------------|-----------------------|------------------|------------------|----------------------|---------------------|-------------|
| <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | |
| All Method | 118 | 11.99 | 0.16 | 1.3 | 12.0 | 11.1 - 12.9 |
| All ABX Instruments | 85 | 11.96 | 0.15 | 1.3 | 12.0 | 11.1 - 12.9 |
| All COULTER Instruments | 33 | 12.05 | 0.17 | 1.4 | 12.0 | 11.2 - 12.9 |
| ABX Pentra 60C+ | 74 | 11.97 | 0.15 | 1.3 | 12.0 | 11.1 - 12.9 |
| ABX Pentra 80 / XL 80 | 10 | 11.95 | 0.17 | 1.4 | 12.0 | 11.1 - 12.8 |
| COULTER AcT 5diff | 33 | 12.05 | 0.17 | 1.4 | 12.0 | 11.2 - 12.9 |

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

| <u>Instrument</u> | Specimen BCX-1 | | | | | | Specimen BCX-2 | | | | | |
|-------------------------|-----------------------|-------------|-----------|-----------|---------------|--------------|-----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 119 | 21.79 | 0.36 | 1.7 | 21.8 | 20.4 - 23.1 | 117 | 37.44 | 0.57 | 1.5 | 37.4 | 35.1 - 39.7 |
| All ABX Instruments | 85 | 21.73 | 0.34 | 1.6 | 21.7 | 20.4 - 23.1 | 85 | 37.40 | 0.55 | 1.5 | 37.4 | 35.1 - 39.7 |
| All COULTER Instruments | 34 | 21.94 | 0.37 | 1.7 | 21.9 | 20.6 - 23.3 | 32 | 37.56 | 0.62 | 1.6 | 37.5 | 35.3 - 39.9 |
| ABX Pentra 60C+ | 74 | 21.70 | 0.34 | 1.6 | 21.7 | 20.4 - 23.1 | 74 | 37.42 | 0.57 | 1.5 | 37.4 | 35.1 - 39.7 |
| ABX Pentra 80 / XL 80 | 10 | 21.95 | 0.25 | 1.2 | 21.9 | 20.6 - 23.3 | 10 | 37.29 | 0.30 | 0.8 | 37.4 | 35.0 - 39.6 |
| COULTER AcT 5diff | 34 | 21.94 | 0.37 | 1.7 | 21.9 | 20.6 - 23.3 | 32 | 37.56 | 0.62 | 1.6 | 37.5 | 35.3 - 39.9 |
| | Specimen BCX-3 | | | | | | Specimen BCX-4 | | | | | |
| All Method | 116 | 46.31 | 0.71 | 1.5 | 46.3 | 43.5 - 49.1 | 117 | 18.90 | 0.36 | 1.9 | 18.9 | 17.7 - 20.1 |
| All ABX Instruments | 84 | 46.27 | 0.73 | 1.6 | 46.2 | 43.4 - 49.1 | 85 | 18.87 | 0.37 | 1.9 | 18.9 | 17.7 - 20.1 |
| All COULTER Instruments | 32 | 46.43 | 0.66 | 1.4 | 46.5 | 43.6 - 49.3 | 33 | 19.02 | 0.36 | 1.9 | 19.0 | 17.8 - 20.2 |
| ABX Pentra 60C+ | 73 | 46.34 | 0.71 | 1.5 | 46.3 | 43.5 - 49.2 | 74 | 18.86 | 0.36 | 1.9 | 18.9 | 17.7 - 20.0 |
| ABX Pentra 80 / XL 80 | 10 | 45.85 | 0.70 | 1.5 | 45.7 | 43.0 - 48.7 | 10 | 19.00 | 0.37 | 2.0 | 19.2 | 17.8 - 20.2 |
| COULTER AcT 5diff | 32 | 46.43 | 0.66 | 1.4 | 46.5 | 43.6 - 49.3 | 33 | 19.02 | 0.36 | 1.9 | 19.0 | 17.8 - 20.2 |
| | Specimen BCX-5 | | | | | | | | | | | |
| All Method | 115 | 33.98 | 0.55 | 1.6 | 33.9 | 31.9 - 36.1 | | | | | | |
| All ABX Instruments | 83 | 33.92 | 0.55 | 1.6 | 33.9 | 31.8 - 36.0 | | | | | | |
| All COULTER Instruments | 33 | 34.17 | 0.64 | 1.9 | 34.0 | 32.1 - 36.3 | | | | | | |
| ABX Pentra 60C+ | 72 | 33.96 | 0.55 | 1.6 | 33.9 | 31.9 - 36.0 | | | | | | |
| ABX Pentra 80 / XL 80 | 10 | 33.74 | 0.46 | 1.4 | 33.9 | 31.7 - 35.8 | | | | | | |
| COULTER AcT 5diff | 33 | 34.17 | 0.64 | 1.9 | 34.0 | 32.1 - 36.3 | | | | | | |

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

| <i><u>Instrument</u></i> | Specimen BCX-1 | | | | | | Specimen BCX-2 | | | | | |
|-----------------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 117 | 382.6 | 13.6 | 3.6 | 381 | 286 - 479 | 117 | 242.7 | 8.9 | 3.7 | 243 | 182 - 304 |
| All ABX Instruments | 83 | 385.8 | 12.5 | 3.3 | 387 | 289 - 483 | 84 | 243.2 | 8.5 | 3.5 | 245 | 182 - 305 |
| All COULTER Instruments | 33 | 373.6 | 10.6 | 2.8 | 374 | 280 - 467 | 34 | 242.2 | 11.1 | 4.6 | 241 | 181 - 303 |
| ABX Diagnostics Pentra 60C+ | 72 | 385.1 | 13.1 | 3.4 | 385 | 288 - 482 | 73 | 242.6 | 8.4 | 3.5 | 244 | 181 - 304 |
| ABX Diagnostics Pentra 80 / XL 80 | 10 | 391.3 | 6.7 | 1.7 | 391 | 293 - 490 | 10 | 248.6 | 7.7 | 3.1 | 249 | 186 - 311 |
| COULTER AcT 5diff | 33 | 373.6 | 10.6 | 2.8 | 374 | 280 - 467 | 34 | 242.2 | 11.1 | 4.6 | 241 | 181 - 303 |
| | Specimen BCX-3 | | | | | | Specimen BCX-4 | | | | | |
| All Method | 118 | 298.3 | 11.2 | 3.7 | 300 | 223 - 373 | 114 | 72.6 | 4.1 | 5.6 | 72 | 54 - 91 |
| All ABX Instruments | 85 | 300.8 | 10.0 | 3.3 | 303 | 225 - 377 | 81 | 72.4 | 4.3 | 5.9 | 72 | 54 - 91 |
| All COULTER Instruments | 33 | 291.7 | 11.4 | 3.9 | 292 | 218 - 365 | 33 | 73.1 | 3.6 | 4.9 | 73 | 54 - 92 |
| ABX Diagnostics Pentra 60C+ | 74 | 299.9 | 9.7 | 3.2 | 303 | 224 - 375 | 70 | 72.3 | 4.4 | 6.1 | 72 | 54 - 91 |
| ABX Diagnostics Pentra 80 / XL 80 | 10 | 309.4 | 7.2 | 2.3 | 308 | 232 - 387 | 10 | 72.7 | 3.6 | 4.9 | 74 | 54 - 91 |
| COULTER AcT 5diff | 33 | 291.7 | 11.4 | 3.9 | 292 | 218 - 365 | 33 | 73.1 | 3.6 | 4.9 | 73 | 54 - 92 |
| | Specimen BCX-5 | | | | | | | | | | | |
| All Method | 118 | 245.7 | 9.5 | 3.9 | 246 | 184 - 308 | | | | | | |
| All ABX Instruments | 85 | 247.3 | 8.9 | 3.6 | 247 | 185 - 310 | | | | | | |
| All COULTER Instruments | 33 | 241.8 | 10.0 | 4.2 | 241 | 181 - 303 | | | | | | |
| ABX Diagnostics Pentra 60C+ | 74 | 247.0 | 9.0 | 3.7 | 247 | 185 - 309 | | | | | | |
| ABX Diagnostics Pentra 80 / XL 80 | 10 | 250.1 | 8.3 | 3.3 | 249 | 187 - 313 | | | | | | |
| COULTER AcT 5diff | 33 | 241.8 | 10.0 | 4.2 | 241 | 181 - 303 | | | | | | |

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

| <i>Instrument</i> | Specimen BCX-1 | | | | | | Specimen BCX-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i>Labs</i> | <i>Mean</i> | <i>SD</i> | <i>CV</i> | <i>Median</i> | <i>Range</i> | <i>Labs</i> | <i>Mean</i> | <i>SD</i> | <i>CV</i> | <i>Median</i> | <i>Range</i> |
| All Method | 119 | 69.02 | 4.15 | 6.0 | 70.6 | 56.5 - 81.5 | 117 | 60.25 | 3.03 | 5.0 | 60.2 | 51.1 - 69.4 |
| All ABX Instruments | 83 | 71.45 | 1.79 | 2.5 | 71.4 | 66.0 - 76.9 | 85 | 61.32 | 2.62 | 4.3 | 61.4 | 53.4 - 69.2 |
| All COULTER Instruments | 34 | 63.38 | 2.09 | 3.3 | 63.9 | 57.1 - 69.7 | 34 | 56.96 | 2.69 | 4.7 | 57.3 | 48.8 - 65.1 |
| ABX Pentra 60C+ | 72 | 71.73 | 1.59 | 2.2 | 71.6 | 66.9 - 76.6 | 74 | 61.59 | 2.64 | 4.3 | 62.0 | 53.6 - 69.6 |
| ABX Pentra 80 / XL 80 | 10 | 69.26 | 1.70 | 2.5 | 68.8 | 64.1 - 74.4 | 10 | 59.53 | 1.76 | 3.0 | 59.4 | 54.2 - 64.9 |
| COULTER AcT 5diff | 34 | 63.38 | 2.09 | 3.3 | 63.9 | 57.1 - 69.7 | 34 | 56.96 | 2.69 | 4.7 | 57.3 | 48.8 - 65.1 |
| | Specimen BCX-3 | | | | | | Specimen BCX-4 | | | | | |
| All Method | 116 | 51.75 | 3.23 | 6.2 | 52.3 | 42.0 - 61.5 | 116 | 66.49 | 3.72 | 5.6 | 66.8 | 55.3 - 77.7 |
| All ABX Instruments | 84 | 52.42 | 3.25 | 6.2 | 53.0 | 42.6 - 62.2 | 82 | 67.84 | 3.02 | 4.5 | 68.0 | 58.7 - 77.0 |
| All COULTER Instruments | 32 | 50.01 | 2.46 | 4.9 | 49.8 | 42.6 - 57.4 | 33 | 63.42 | 3.12 | 4.9 | 63.9 | 54.0 - 72.8 |
| ABX Pentra 60C+ | 72 | 53.14 | 2.58 | 4.9 | 53.3 | 45.4 - 60.9 | 71 | 68.15 | 2.94 | 4.3 | 68.6 | 59.3 - 77.0 |
| ABX Pentra 80 / XL 80 | 10 | 47.06 | 5.16 | 11.0 | 47.6 | 31.5 - 62.6 | 10 | 66.11 | 2.82 | 4.3 | 66.2 | 57.6 - 74.6 |
| COULTER AcT 5diff | 32 | 50.01 | 2.46 | 4.9 | 49.8 | 42.6 - 57.4 | 33 | 63.42 | 3.12 | 4.9 | 63.9 | 54.0 - 72.8 |
| | Specimen BCX-5 | | | | | | | | | | | |
| All Method | 116 | 65.35 | 2.96 | 4.5 | 65.6 | 56.4 - 74.3 | | | | | | |
| All ABX Instruments | 84 | 66.23 | 2.65 | 4.0 | 66.1 | 58.2 - 74.2 | | | | | | |
| All COULTER Instruments | 32 | 63.04 | 2.45 | 3.9 | 63.0 | 55.6 - 70.4 | | | | | | |
| ABX Pentra 60C+ | 73 | 66.44 | 2.67 | 4.0 | 66.3 | 58.4 - 74.5 | | | | | | |
| ABX Pentra 80 / XL 80 | 10 | 64.40 | 1.60 | 2.5 | 64.7 | 59.5 - 69.3 | | | | | | |
| COULTER AcT 5diff | 32 | 63.04 | 2.45 | 3.9 | 63.0 | 55.6 - 70.4 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen BCX-1 | | | | | | Specimen BCX-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 119 | 21.88 | 2.42 | 11.0 | 22.1 | 14.6 - 29.2 | 119 | 30.81 | 3.14 | 10.2 | 30.9 | 21.3 - 40.3 |
| All ABX Instruments | 85 | 22.79 | 1.87 | 8.2 | 22.7 | 17.1 - 28.5 | 85 | 31.84 | 2.71 | 8.5 | 31.5 | 23.7 - 40.0 |
| All COULTER Instruments | 34 | 19.61 | 2.11 | 10.8 | 19.4 | 13.2 - 26.0 | 34 | 28.25 | 2.67 | 9.5 | 27.9 | 20.2 - 36.3 |
| ABX Pentra 60C+ | 73 | 22.43 | 1.59 | 7.1 | 22.5 | 17.6 - 27.3 | 74 | 31.44 | 2.60 | 8.3 | 31.3 | 23.6 - 39.3 |
| ABX Pentra 80 / XL 80 | 10 | 25.13 | 1.37 | 5.5 | 25.3 | 21.0 - 29.3 | 10 | 34.54 | 2.03 | 5.9 | 34.6 | 28.4 - 40.7 |
| COULTER AcT 5diff | 34 | 19.61 | 2.11 | 10.8 | 19.4 | 13.2 - 26.0 | 34 | 28.25 | 2.67 | 9.5 | 27.9 | 20.2 - 36.3 |
| | Specimen BCX-3 | | | | | | Specimen BCX-4 | | | | | |
| All Method | 117 | 39.66 | 3.66 | 9.2 | 39.7 | 28.6 - 50.7 | 119 | 21.42 | 3.30 | 15.4 | 21.3 | 11.5 - 31.4 |
| All ABX Instruments | 84 | 40.57 | 3.35 | 8.3 | 40.5 | 30.5 - 50.7 | 84 | 22.25 | 2.97 | 13.4 | 22.1 | 13.3 - 31.2 |
| All COULTER Instruments | 32 | 36.97 | 2.69 | 7.3 | 36.5 | 28.8 - 45.1 | 33 | 19.35 | 2.50 | 12.9 | 19.0 | 11.8 - 26.9 |
| ABX Pentra 60C+ | 73 | 39.87 | 2.75 | 6.9 | 40.2 | 31.6 - 48.2 | 73 | 21.93 | 2.81 | 12.8 | 21.8 | 13.5 - 30.4 |
| ABX Pentra 80 / XL 80 | 10 | 46.85 | 6.01 | 12.8 | 45.9 | 28.8 - 64.9 | 10 | 24.01 | 3.27 | 13.6 | 23.1 | 14.1 - 33.9 |
| COULTER AcT 5diff | 32 | 36.97 | 2.69 | 7.3 | 36.5 | 28.8 - 45.1 | 33 | 19.35 | 2.50 | 12.9 | 19.0 | 11.8 - 26.9 |
| | Specimen BCX-5 | | | | | | | | | | | |
| All Method | 118 | 26.33 | 3.25 | 12.4 | 26.3 | 16.5 - 36.1 | | | | | | |
| All ABX Instruments | 84 | 27.00 | 2.94 | 10.9 | 27.1 | 18.1 - 35.9 | | | | | | |
| All COULTER Instruments | 33 | 24.33 | 2.85 | 11.7 | 23.8 | 15.7 - 32.9 | | | | | | |
| ABX Pentra 60C+ | 73 | 26.81 | 2.88 | 10.7 | 27.0 | 18.1 - 35.5 | | | | | | |
| ABX Pentra 80 / XL 80 | 10 | 28.82 | 2.64 | 9.2 | 28.2 | 20.9 - 36.8 | | | | | | |
| COULTER AcT 5diff | 33 | 24.33 | 2.85 | 11.7 | 23.8 | 15.7 - 32.9 | | | | | | |

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

| <i>Instrument</i> | Specimen BCX-1 | | | | | | Specimen BCX-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|-----------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i>Labs</i> | <i>Mean</i> | <i>SD</i> | <i>CV</i> | <i>Median</i> | <i>Range</i> | <i>Labs</i> | <i>Mean</i> | <i>SD</i> | <i>CV</i> | <i>Median</i> | <i>Range</i> |
| All Method | 118 | 1.46 | 0.39 | 26.7 | 1.4 | 0.2 - 2.7 | 118 | 1.81 | 0.58 | 32.2 | 1.8 | 0.0 - 3.6 |
| All ABX Instruments | 85 | 1.37 | 0.35 | 25.6 | 1.4 | 0.3 - 2.5 | 85 | 1.70 | 0.54 | 31.9 | 1.7 | 0.0 - 3.4 |
| All COULTER Instruments | 34 | 1.74 | 0.42 | 23.9 | 1.7 | 0.4 - 3.0 | 33 | 2.10 | 0.59 | 28.0 | 2.0 | 0.3 - 3.9 |
| ABX Pentra 60C+ | 74 | 1.39 | 0.36 | 25.8 | 1.4 | 0.3 - 2.5 | 73 | 1.73 | 0.48 | 27.6 | 1.7 | 0.2 - 3.2 |
| ABX Pentra 80 / XL 80 | 10 | 1.25 | 0.27 | 21.4 | 1.3 | 0.4 - 2.1 | 10 | 1.37 | 0.60 | 43.7 | 1.2 | 0.0 - 3.2 |
| COULTER AcT 5diff | 34 | 1.74 | 0.42 | 23.9 | 1.7 | 0.4 - 3.0 | 33 | 2.10 | 0.59 | 28.0 | 2.0 | 0.3 - 3.9 |
| Specimen BCX-3 | | | | | | Specimen BCX-4 | | | | | | |
| All Method | 115 | 1.21 | 0.41 | 33.8 | 1.1 | 0.0 - 2.5 | 119 | 0.61 | 0.41 | 67.8 | 0.4 | 0.0 - 1.9 |
| All ABX Instruments | 82 | 1.13 | 0.35 | 31.2 | 1.1 | 0.0 - 2.2 | 85 | 0.63 | 0.42 | 66.5 | 0.4 | 0.0 - 1.9 |
| All COULTER Instruments | 34 | 1.45 | 0.53 | 36.4 | 1.3 | 0.0 - 3.1 | 34 | 0.58 | 0.42 | 72.1 | 0.6 | 0.0 - 1.9 |
| ABX Pentra 60C+ | 71 | 1.15 | 0.35 | 30.4 | 1.1 | 0.1 - 2.2 | 74 | 0.65 | 0.41 | 62.7 | 0.5 | 0.0 - 1.9 |
| ABX Pentra 80 / XL 80 | 10 | 1.09 | 0.33 | 30.7 | 1.1 | 0.0 - 2.1 | 10 | 0.39 | 0.42 | 107.7 | 0.4 | 0.0 - 1.7 |
| COULTER AcT 5diff | 34 | 1.45 | 0.53 | 36.4 | 1.3 | 0.0 - 3.1 | 34 | 0.58 | 0.42 | 72.1 | 0.6 | 0.0 - 1.9 |
| Specimen BCX-5 | | | | | | | | | | | | |
| All Method | 118 | 0.71 | 0.40 | 55.6 | 0.7 | 0.0 - 1.9 | | | | | | |
| All ABX Instruments | 84 | 0.69 | 0.40 | 57.8 | 0.7 | 0.0 - 1.9 | | | | | | |
| All COULTER Instruments | 34 | 0.76 | 0.39 | 50.8 | 0.8 | 0.0 - 2.0 | | | | | | |
| ABX Pentra 60C+ | 73 | 0.74 | 0.39 | 52.4 | 0.7 | 0.0 - 2.0 | | | | | | |
| ABX Pentra 80 / XL 80 | 10 | 0.32 | 0.30 | 94.1 | 0.3 | 0.0 - 1.3 | | | | | | |
| COULTER AcT 5diff | 34 | 0.76 | 0.39 | 50.8 | 0.8 | 0.0 - 2.0 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen BCX-1 | | | | | | Specimen BCX-2 | | | | | |
|-----------------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 119 | 3.73 | 0.55 | 14.7 | 3.7 | 2.0 - 5.4 | 119 | 4.43 | 0.90 | 20.2 | 4.4 | 1.7 - 7.2 |
| All ABX Instruments | 85 | 3.73 | 0.55 | 14.7 | 3.7 | 2.0 - 5.4 | 85 | 4.55 | 0.89 | 19.5 | 4.5 | 1.8 - 7.3 |
| All COULTER Instruments | 34 | 3.73 | 0.56 | 15.0 | 3.6 | 2.0 - 5.4 | 34 | 4.12 | 0.85 | 20.6 | 4.2 | 1.5 - 6.7 |
| ABX Pentra 60C+ | 74 | 3.72 | 0.54 | 14.5 | 3.7 | 2.1 - 5.4 | 74 | 4.59 | 0.89 | 19.4 | 4.5 | 1.9 - 7.3 |
| ABX Pentra 80 / XL 80 | 10 | 3.81 | 0.66 | 17.2 | 3.8 | 1.8 - 5.8 | 10 | 4.16 | 0.77 | 18.6 | 4.3 | 1.8 - 6.5 |
| COULTER AcT 5diff | 34 | 3.73 | 0.56 | 15.0 | 3.6 | 2.0 - 5.4 | 34 | 4.12 | 0.85 | 20.6 | 4.2 | 1.5 - 6.7 |
| Specimen BCX-3 | | | | | | | | | | | | |
| All Method | 119 | 5.50 | 1.15 | 20.9 | 5.5 | 2.0 - 9.0 | 119 | 8.43 | 1.76 | 20.8 | 8.4 | 3.1 - 13.7 |
| All ABX Instruments | 83 | 5.26 | 0.89 | 16.9 | 5.3 | 2.5 - 8.0 | 85 | 8.75 | 1.64 | 18.8 | 8.7 | 3.8 - 13.7 |
| All COULTER Instruments | 34 | 6.12 | 1.29 | 21.1 | 6.1 | 2.2 - 10.0 | 34 | 7.64 | 1.80 | 23.5 | 7.7 | 2.2 - 13.1 |
| ABX Diagnostics Pentra 60C+ | 74 | 5.34 | 0.93 | 17.5 | 5.4 | 2.5 - 8.2 | 74 | 8.72 | 1.66 | 19.1 | 8.8 | 3.7 - 13.8 |
| ABX Diagnostics Pentra 80 / XL 80 | 10 | 4.70 | 1.30 | 27.7 | 4.7 | 0.8 - 8.6 | 10 | 9.07 | 1.62 | 17.8 | 8.8 | 4.2 - 14.0 |
| COULTER AcT 5diff | 34 | 6.12 | 1.29 | 21.1 | 6.1 | 2.2 - 10.0 | 34 | 7.64 | 1.80 | 23.5 | 7.7 | 2.2 - 13.1 |
| Specimen BCX-4 | | | | | | | | | | | | |
| Specimen BCX-5 | | | | | | | | | | | | |
| All Method | 118 | 5.36 | 1.14 | 21.3 | 5.3 | 1.9 - 8.8 | | | | | | |
| All ABX Instruments | 85 | 5.49 | 1.05 | 19.1 | 5.5 | 2.3 - 8.7 | | | | | | |
| All COULTER Instruments | 34 | 4.94 | 1.41 | 28.6 | 4.7 | 0.6 - 9.2 | | | | | | |
| ABX Diagnostics Pentra 60C+ | 74 | 5.39 | 0.98 | 18.1 | 5.4 | 2.4 - 8.4 | | | | | | |
| ABX Diagnostics Pentra 80 / XL 80 | 10 | 6.09 | 1.35 | 22.1 | 6.1 | 2.0 - 10.2 | | | | | | |
| COULTER AcT 5diff | 34 | 4.94 | 1.41 | 28.6 | 4.7 | 0.6 - 9.2 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen BCX-1 | | | | | | Specimen BCX-2 | | | | | |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 83 | 0.58 | 0.05 | 7.8 | 0.6 | 0.4 - 0.8 | 82 | 0.41 | 0.03 | 7.3 | 0.4 | 0.3 - 0.5 |
| All ABX Instruments | 83 | 0.58 | 0.05 | 7.8 | 0.6 | 0.4 - 0.8 | 82 | 0.41 | 0.03 | 7.3 | 0.4 | 0.3 - 0.5 |
| All COULTER Instruments | 34 | 11.61 | 0.71 | 6.1 | 11.4 | 9.4 - 13.8 | 34 | 8.51 | 0.61 | 7.1 | 8.4 | 6.6 - 10.4 |
| ABX Pentra 60C+ | 72 | 0.59 | 0.04 | 7.3 | 0.6 | 0.4 - 0.8 | 71 | 0.41 | 0.03 | 7.7 | 0.4 | 0.3 - 0.6 |
| ABX Pentra 80 / XL 80 | 10 | 0.55 | 0.05 | 9.6 | 0.6 | 0.3 - 0.8 | 10 | 0.40 | 0.01 | 0.0 | 0.4 | 0.3 - 0.5 |
| COULTER AcT 5diff | 34 | 11.61 | 0.71 | 6.1 | 11.4 | 9.4 - 13.8 | 34 | 8.51 | 0.61 | 7.1 | 8.4 | 6.6 - 10.4 |
| | Specimen BCX-3 | | | | | | Specimen BCX-4 | | | | | |
| All Method | 81 | 0.30 | 0.01 | 0.0 | 0.3 | 0.2 - 0.4 | 83 | 0.44 | 0.05 | 11.2 | 0.5 | 0.2 - 0.6 |
| All ABX Instruments | 81 | 0.30 | 0.01 | 0.0 | 0.3 | 0.2 - 0.4 | 83 | 0.44 | 0.05 | 11.2 | 0.4 | 0.2 - 0.6 |
| All COULTER Instruments | 33 | 5.26 | 0.27 | 5.2 | 5.3 | 4.4 - 6.1 | 32 | 8.90 | 0.39 | 4.4 | 8.9 | 7.7 - 10.1 |
| ABX Pentra 60C+ | 70 | 0.30 | 0.01 | 0.0 | 0.3 | 0.2 - 0.4 | 72 | 0.44 | 0.05 | 11.3 | 0.4 | 0.2 - 0.6 |
| ABX Pentra 80 / XL 80 | 10 | 0.30 | 0.01 | 0.0 | 0.3 | 0.2 - 0.4 | 10 | 0.42 | 0.04 | 10.0 | 0.4 | 0.2 - 0.6 |
| COULTER AcT 5diff | 33 | 5.26 | 0.27 | 5.2 | 5.3 | 4.4 - 6.1 | 32 | 8.90 | 0.39 | 4.4 | 8.9 | 7.7 - 10.1 |
| | Specimen BCX-5 | | | | | | | | | | | |
| All Method | 83 | 0.38 | 0.04 | 10.7 | 0.4 | 0.2 - 0.6 | | | | | | |
| All ABX Instruments | 83 | 0.38 | 0.04 | 10.7 | 0.4 | 0.2 - 0.6 | | | | | | |
| All COULTER Instruments | 33 | 7.23 | 0.49 | 6.8 | 7.1 | 5.7 - 8.8 | | | | | | |
| ABX Pentra 60C+ | 72 | 0.38 | 0.04 | 10.5 | 0.4 | 0.2 - 0.6 | | | | | | |
| ABX Pentra 80 / XL 80 | 10 | 0.37 | 0.05 | 13.1 | 0.4 | 0.2 - 0.6 | | | | | | |
| COULTER AcT 5diff | 33 | 7.23 | 0.49 | 6.8 | 7.1 | 5.7 - 8.8 | | | | | | |

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL—WHITE BLOOD CELL COUNT (x 10⁹/L)

| <u><i>Instrument</i></u> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 73 | 20.82 | 0.63 | 3.0 | 20.7 | 17.6 - 24.0 | 73 | 3.85 | 0.12 | 3.1 | 3.8 | 3.2 - 4.5 |
| All Sysmex XE/XT Instruments | 10 | 20.05 | 0.50 | 2.5 | 20.0 | 17.0 - 23.1 | 10 | 3.79 | 0.10 | 2.6 | 3.8 | 3.2 - 4.4 |
| All Sysmex XN/XS Instruments | 65 | 20.91 | 0.58 | 2.8 | 20.8 | 17.7 - 24.1 | 65 | 3.86 | 0.12 | 3.1 | 3.8 | 3.2 - 4.5 |
| Sysmex XN-1000 | 16 | 20.66 | 0.34 | 1.6 | 20.6 | 17.5 - 23.8 | 16 | 3.76 | 0.08 | 2.2 | 3.8 | 3.1 - 4.4 |
| Sysmex XS-1000i | 47 | 20.99 | 0.63 | 3.0 | 20.8 | 17.8 - 24.2 | 47 | 3.90 | 0.11 | 2.8 | 3.9 | 3.3 - 4.5 |
| | | | | | | | | | | | | |
| | Specimen MX-3 | | | | | | Specimen MX-4 | | | | | |
| All Method | 73 | 7.04 | 0.56 | 8.0 | 7.2 | 5.9 - 8.1 | 73 | 3.85 | 0.13 | 3.3 | 3.9 | 3.2 - 4.5 |
| All Sysmex XE/XT Instruments | 10 | 7.20 | 0.14 | 2.0 | 7.3 | 6.1 - 8.3 | 10 | 3.79 | 0.14 | 3.6 | 3.8 | 3.2 - 4.4 |
| All Sysmex XN/XS Instruments | 65 | 7.02 | 0.59 | 8.4 | 7.2 | 5.9 - 8.1 | 65 | 3.85 | 0.13 | 3.2 | 3.9 | 3.2 - 4.5 |
| Sysmex XN-1000 | 16 | 7.16 | 0.13 | 1.8 | 7.2 | 6.0 - 8.3 | 16 | 3.72 | 0.08 | 2.2 | 3.7 | 3.1 - 4.3 |
| Sysmex XS-1000i | 47 | 6.96 | 0.68 | 9.8 | 7.2 | 5.9 - 8.1 | 47 | 3.90 | 0.10 | 2.5 | 3.9 | 3.3 - 4.5 |
| | | | | | | | | | | | | |
| | Specimen MX-5 | | | | | | | | | | | |
| All Method | 72 | 20.73 | 0.62 | 3.0 | 20.7 | 17.6 - 23.9 | | | | | | |
| All Sysmex XE/XT Instruments | 10 | 20.04 | 0.56 | 2.8 | 20.1 | 17.0 - 23.1 | | | | | | |
| All Sysmex XN/XS Instruments | 64 | 20.81 | 0.57 | 2.7 | 20.7 | 17.6 - 24.0 | | | | | | |
| Sysmex XN-1000 | 16 | 20.67 | 0.32 | 1.6 | 20.6 | 17.5 - 23.8 | | | | | | |
| Sysmex XS-1000i | 47 | 20.90 | 0.70 | 3.4 | 20.8 | 17.7 - 24.1 | | | | | | |

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10¹²/L)

| <u>Instrument</u> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 70 | 5.755 | 0.060 | 1.0 | 5.76 | 5.41 - 6.11 | 71 | 2.364 | 0.037 | 1.6 | 2.36 | 2.22 - 2.51 |
| All Sysmex XE/XT Instruments | 10 | 5.719 | 0.064 | 1.1 | 5.69 | 5.37 - 6.07 | 10 | 2.453 | 0.032 | 1.3 | 2.45 | 2.30 - 2.60 |
| All Sysmex XN/XS Instruments | 62 | 5.760 | 0.058 | 1.0 | 5.77 | 5.41 - 6.11 | 65 | 2.357 | 0.030 | 1.3 | 2.35 | 2.21 - 2.50 |
| Sysmex XN-1000 | 16 | 5.793 | 0.058 | 1.0 | 5.79 | 5.44 - 6.15 | 16 | 2.349 | 0.028 | 1.2 | 2.35 | 2.20 - 2.50 |
| Sysmex XS-1000i | 45 | 5.753 | 0.063 | 1.1 | 5.76 | 5.40 - 6.10 | 46 | 2.362 | 0.027 | 1.1 | 2.36 | 2.22 - 2.51 |
| | | | | | | | | | | | | |
| | Specimen MX-3 | | | | | | Specimen MX-4 | | | | | |
| All Method | 73 | 4.616 | 0.051 | 1.1 | 4.61 | 4.33 - 4.90 | 72 | 2.369 | 0.038 | 1.6 | 2.36 | 2.22 - 2.52 |
| All Sysmex XE/XT Instruments | 10 | 4.673 | 0.053 | 1.1 | 4.69 | 4.39 - 4.96 | 10 | 2.451 | 0.035 | 1.4 | 2.45 | 2.30 - 2.60 |
| All Sysmex XN/XS Instruments | 65 | 4.609 | 0.047 | 1.0 | 4.60 | 4.33 - 4.89 | 65 | 2.360 | 0.028 | 1.2 | 2.36 | 2.21 - 2.51 |
| Sysmex XN-1000 | 16 | 4.633 | 0.040 | 0.9 | 4.63 | 4.35 - 4.92 | 16 | 2.357 | 0.023 | 1.0 | 2.36 | 2.21 - 2.50 |
| Sysmex XS-1000i | 47 | 4.602 | 0.046 | 1.0 | 4.60 | 4.32 - 4.88 | 47 | 2.363 | 0.030 | 1.3 | 2.36 | 2.22 - 2.51 |
| | | | | | | | | | | | | |
| | Specimen MX-5 | | | | | | | | | | | |
| All Method | 71 | 5.765 | 0.061 | 1.1 | 5.76 | 5.41 - 6.12 | | | | | | |
| All Sysmex XE/XT Instruments | 8 | 5.710 | 0.087 | 1.5 | 5.71 | 5.36 - 6.06 | | | | | | |
| All Sysmex XN/XS Instruments | 64 | 5.768 | 0.061 | 1.1 | 5.77 | 5.42 - 6.12 | | | | | | |
| Sysmex XN-1000 | 16 | 5.795 | 0.060 | 1.0 | 5.79 | 5.44 - 6.15 | | | | | | |
| Sysmex XS-1000i | 46 | 5.759 | 0.060 | 1.0 | 5.75 | 5.41 - 6.11 | | | | | | |

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

| <u>Instrument</u> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 73 | 17.71 | 0.20 | 1.1 | 17.7 | 16.4 - 19.0 | 73 | 5.97 | 0.08 | 1.3 | 6.0 | 5.5 - 6.4 |
| All Sysmex XE/XT Instruments | 10 | 17.49 | 0.20 | 1.1 | 17.4 | 16.2 - 18.8 | 10 | 6.01 | 0.06 | 1.1 | 6.0 | 5.5 - 6.5 |
| All Sysmex XN/XS Instruments | 64 | 17.73 | 0.17 | 1.0 | 17.7 | 16.4 - 19.0 | 65 | 5.96 | 0.08 | 1.3 | 6.0 | 5.5 - 6.4 |
| Sysmex XN-1000 | 16 | 17.71 | 0.15 | 0.9 | 17.8 | 16.4 - 19.0 | 16 | 5.99 | 0.08 | 1.3 | 6.0 | 5.5 - 6.5 |
| Sysmex XS-1000i | 47 | 17.75 | 0.19 | 1.1 | 17.7 | 16.5 - 19.0 | 47 | 5.96 | 0.07 | 1.3 | 5.9 | 5.5 - 6.4 |

| <u>Instrument</u> | Specimen MX-3 | | | | | | Specimen MX-4 | | | | | |
|------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 71 | 13.23 | 0.11 | 0.8 | 13.2 | 12.3 - 14.2 | 73 | 5.97 | 0.08 | 1.3 | 6.0 | 5.5 - 6.4 |
| All Sysmex XE/XT Instruments | 10 | 13.29 | 0.10 | 0.7 | 13.3 | 12.3 - 14.3 | 10 | 6.03 | 0.07 | 1.2 | 6.0 | 5.6 - 6.5 |
| All Sysmex XN/XS Instruments | 63 | 13.22 | 0.11 | 0.8 | 13.2 | 12.2 - 14.2 | 65 | 5.96 | 0.08 | 1.3 | 6.0 | 5.5 - 6.4 |
| Sysmex XN-1000 | 16 | 13.23 | 0.09 | 0.7 | 13.2 | 12.2 - 14.2 | 16 | 6.02 | 0.07 | 1.1 | 6.0 | 5.5 - 6.5 |
| Sysmex XS-1000i | 46 | 13.23 | 0.13 | 1.0 | 13.2 | 12.3 - 14.2 | 47 | 5.94 | 0.07 | 1.3 | 5.9 | 5.5 - 6.4 |

| <u>Instrument</u> | Specimen MX-5 | | | | | |
|------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 72 | 17.70 | 0.19 | 1.1 | 17.7 | 16.4 - 19.0 |
| All Sysmex XE/XT Instruments | 10 | 17.41 | 0.24 | 1.4 | 17.5 | 16.1 - 18.7 |
| All Sysmex XN/XS Instruments | 65 | 17.72 | 0.18 | 1.0 | 17.7 | 16.4 - 19.0 |
| Sysmex XN-1000 | 16 | 17.71 | 0.13 | 0.7 | 17.8 | 16.4 - 19.0 |
| Sysmex XS-1000i | 47 | 17.74 | 0.18 | 1.0 | 17.7 | 16.4 - 19.0 |

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

| <u>Instrument</u> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 73 | 53.24 | 0.95 | 1.8 | 53.3 | 50.0 - 56.5 | 73 | 18.53 | 0.44 | 2.4 | 18.6 | 17.4 - 19.7 |
| All Sysmex XE/XT Instruments | 10 | 53.24 | 0.65 | 1.2 | 53.5 | 50.0 - 56.5 | 10 | 19.13 | 0.26 | 1.4 | 19.1 | 17.9 - 20.3 |
| All Sysmex XN/XS Instruments | 65 | 53.24 | 0.99 | 1.9 | 53.3 | 50.0 - 56.5 | 65 | 18.46 | 0.40 | 2.1 | 18.5 | 17.3 - 19.6 |
| Sysmex XN-1000 | 16 | 52.63 | 0.64 | 1.2 | 52.9 | 49.4 - 55.8 | 16 | 17.98 | 0.29 | 1.6 | 18.1 | 16.8 - 19.1 |
| Sysmex XS-1000i | 47 | 53.49 | 0.99 | 1.8 | 53.6 | 50.2 - 56.8 | 46 | 18.67 | 0.21 | 1.1 | 18.7 | 17.5 - 19.8 |

| <u>Instrument</u> | Specimen MX-3 | | | | | | Specimen MX-4 | | | | | |
|------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 73 | 40.13 | 0.58 | 1.4 | 40.1 | 37.7 - 42.6 | 73 | 18.56 | 0.40 | 2.2 | 18.6 | 17.4 - 19.7 |
| All Sysmex XE/XT Instruments | 10 | 40.59 | 0.36 | 0.9 | 40.6 | 38.1 - 43.1 | 10 | 19.08 | 0.29 | 1.5 | 19.0 | 17.9 - 20.3 |
| All Sysmex XN/XS Instruments | 65 | 40.07 | 0.58 | 1.4 | 40.0 | 37.6 - 42.5 | 65 | 18.50 | 0.37 | 2.0 | 18.5 | 17.3 - 19.7 |
| Sysmex XN-1000 | 16 | 39.69 | 0.51 | 1.3 | 39.8 | 37.3 - 42.1 | 16 | 18.05 | 0.27 | 1.5 | 18.1 | 16.9 - 19.2 |
| Sysmex XS-1000i | 47 | 40.24 | 0.51 | 1.3 | 40.2 | 37.8 - 42.7 | 47 | 18.67 | 0.24 | 1.3 | 18.7 | 17.5 - 19.8 |

| <u>Instrument</u> | Specimen MX-5 | | | | | |
|------------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 73 | 53.29 | 0.89 | 1.7 | 53.4 | 50.0 - 56.5 |
| All Sysmex XE/XT Instruments | 10 | 53.13 | 0.75 | 1.4 | 53.5 | 49.9 - 56.4 |
| All Sysmex XN/XS Instruments | 65 | 53.31 | 0.91 | 1.7 | 53.3 | 50.1 - 56.6 |
| Sysmex XN-1000 | 16 | 52.77 | 0.77 | 1.5 | 52.8 | 49.6 - 56.0 |
| Sysmex XS-1000i | 47 | 53.54 | 0.85 | 1.6 | 53.7 | 50.3 - 56.8 |

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL-PLATELET COUNT (x 10⁹/L)

| <i>Instrument</i> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i>Labs</i> | <i>Mean</i> | <i>SD</i> | <i>CV</i> | <i>Median</i> | <i>Range</i> | <i>Labs</i> | <i>Mean</i> | <i>SD</i> | <i>CV</i> | <i>Median</i> | <i>Range</i> |
| All Method | 73 | 455.2 | 23.0 | 5.0 | 456 | 341 - 570 | 73 | 55.1 | 4.8 | 8.7 | 55 | 41 - 69 |
| All Sysmex XE/XT Instruments | 10 | 442.0 | 34.4 | 7.8 | 441 | 331 - 553 | 10 | 57.8 | 5.8 | 10.1 | 59 | 43 - 73 |
| All Sysmex XN/XS Instruments | 65 | 456.8 | 21.0 | 4.6 | 456 | 342 - 572 | 65 | 54.8 | 4.6 | 8.4 | 55 | 41 - 69 |
| Sysmex XN-1000 | 16 | 477.4 | 12.0 | 2.5 | 478 | 358 - 597 | 16 | 51.0 | 2.9 | 5.8 | 51 | 38 - 64 |
| Sysmex XS-1000i | 47 | 448.1 | 16.5 | 3.7 | 449 | 336 - 561 | 47 | 56.4 | 4.2 | 7.4 | 56 | 42 - 71 |
| | | | | | | | | | | | | |
| | Specimen MX-3 | | | | | | Specimen MX-4 | | | | | |
| All Method | 73 | 214.4 | 8.1 | 3.8 | 216 | 160 - 269 | 73 | 54.5 | 4.6 | 8.5 | 54 | 40 - 69 |
| All Sysmex XE/XT Instruments | 10 | 209.9 | 15.6 | 7.4 | 212 | 157 - 263 | 10 | 56.5 | 6.4 | 11.3 | 59 | 42 - 71 |
| All Sysmex XN/XS Instruments | 65 | 215.0 | 6.7 | 3.1 | 216 | 161 - 269 | 65 | 54.2 | 4.4 | 8.0 | 54 | 40 - 68 |
| Sysmex XN-1000 | 16 | 214.6 | 7.0 | 3.2 | 216 | 160 - 269 | 16 | 49.8 | 3.2 | 6.5 | 51 | 37 - 63 |
| Sysmex XS-1000i | 47 | 215.1 | 6.8 | 3.2 | 216 | 161 - 269 | 47 | 55.9 | 3.6 | 6.4 | 56 | 41 - 70 |
| | | | | | | | | | | | | |
| | Specimen MX-5 | | | | | | | | | | | |
| All Method | 73 | 452.7 | 21.4 | 4.7 | 452 | 339 - 566 | | | | | | |
| All Sysmex XE/XT Instruments | 10 | 435.8 | 27.7 | 6.4 | 436 | 326 - 545 | | | | | | |
| All Sysmex XN/XS Instruments | 65 | 454.8 | 19.8 | 4.4 | 454 | 341 - 569 | | | | | | |
| Sysmex XN-1000 | 16 | 473.3 | 13.2 | 2.8 | 475 | 354 - 592 | | | | | | |
| Sysmex XS-1000i | 47 | 447.4 | 16.7 | 3.7 | 447 | 335 - 560 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 70 | 59.46 | 4.81 | 8.1 | 57.9 | 45.0 - 73.9 | 65 | 60.24 | 2.56 | 4.3 | 59.6 | 52.5 - 68.0 |
| All Sysmex XE/XT Instruments | 10 | 58.34 | 1.45 | 2.5 | 58.7 | 53.9 - 62.7 | 10 | 63.99 | 1.31 | 2.1 | 63.9 | 60.0 - 68.0 |
| All Sysmex XN/XS Instruments | 62 | 59.60 | 5.07 | 8.5 | 57.7 | 44.3 - 74.9 | 58 | 59.96 | 2.89 | 4.8 | 59.4 | 51.2 - 68.7 |
| Sysmex XN-1000 | 16 | 60.18 | 4.36 | 7.2 | 58.2 | 47.1 - 73.3 | 16 | 66.74 | 7.66 | 11.5 | 61.5 | 43.7 - 89.8 |
| Sysmex XS-1000i | 44 | 59.16 | 5.08 | 8.6 | 57.4 | 43.9 - 74.5 | 44 | 58.98 | 1.00 | 1.7 | 58.9 | 55.9 - 62.0 |
| | | | | | | | | | | | | |
| | Specimen MX-3 | | | | | | Specimen MX-4 | | | | | |
| All Method | 66 | 46.06 | 3.55 | 7.7 | 46.4 | 35.3 - 56.8 | 67 | 60.48 | 3.38 | 5.6 | 59.8 | 50.3 - 70.7 |
| All Sysmex XE/XT Instruments | 10 | 52.69 | 1.83 | 3.5 | 53.7 | 47.2 - 58.2 | 10 | 64.43 | 1.00 | 1.5 | 64.3 | 61.4 - 67.5 |
| All Sysmex XN/XS Instruments | 58 | 45.15 | 2.64 | 5.9 | 46.1 | 37.2 - 53.1 | 60 | 60.21 | 3.81 | 6.3 | 59.4 | 48.7 - 71.7 |
| Sysmex XN-1000 | 13 | 48.22 | 4.91 | 10.2 | 46.5 | 33.4 - 63.0 | 16 | 66.98 | 7.66 | 11.4 | 61.7 | 43.9 - 90.0 |
| Sysmex XS-1000i | 46 | 44.85 | 2.85 | 6.4 | 45.8 | 36.2 - 53.4 | 46 | 58.95 | 1.32 | 2.2 | 58.8 | 54.9 - 63.0 |
| | | | | | | | | | | | | |
| | Specimen MX-5 | | | | | | | | | | | |
| All Method | 71 | 59.22 | 5.23 | 8.8 | 57.2 | 43.5 - 75.0 | | | | | | |
| All Sysmex XE/XT Instruments | 10 | 57.54 | 1.28 | 2.2 | 57.6 | 53.7 - 61.4 | | | | | | |
| All Sysmex XN/XS Instruments | 63 | 59.43 | 5.51 | 9.3 | 57.2 | 42.9 - 76.0 | | | | | | |
| Sysmex XN-1000 | 16 | 60.11 | 4.52 | 7.5 | 57.8 | 46.5 - 73.7 | | | | | | |
| Sysmex XS-1000i | 45 | 58.93 | 5.49 | 9.3 | 56.5 | 42.4 - 75.4 | | | | | | |

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

| <u>Instrument</u> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 72 | 19.12 | 2.77 | 14.5 | 18.9 | 10.8 - 27.5 | 73 | 14.87 | 2.66 | 17.9 | 15.6 | 6.8 - 22.9 |
| All Sysmex XE/XT Instruments | 10 | 26.13 | 1.62 | 6.2 | 26.0 | 21.2 - 31.0 | 10 | 18.96 | 1.73 | 9.1 | 19.1 | 13.7 - 24.2 |
| All Sysmex XN/XS Instruments | 65 | 18.42 | 1.81 | 9.8 | 18.7 | 12.9 - 23.9 | 65 | 14.36 | 2.30 | 16.0 | 15.3 | 7.4 - 21.3 |
| Sysmex XN-1000 | 16 | 18.71 | 2.27 | 12.1 | 19.8 | 11.8 - 25.6 | 16 | 14.44 | 2.57 | 17.8 | 15.8 | 6.7 - 22.2 |
| Sysmex XS-1000i | 45 | 18.04 | 1.29 | 7.1 | 18.3 | 14.1 - 21.9 | 47 | 14.33 | 2.27 | 15.9 | 15.3 | 7.5 - 21.2 |
| | | | | | | | | | | | | |
| | Specimen MX-3 | | | | | | Specimen MX-4 | | | | | |
| All Method | 73 | 30.43 | 5.73 | 18.8 | 31.4 | 13.2 - 47.7 | 72 | 14.80 | 2.51 | 17.0 | 15.4 | 7.2 - 22.4 |
| All Sysmex XE/XT Instruments | 10 | 30.74 | 2.48 | 8.1 | 30.5 | 23.2 - 38.2 | 10 | 19.05 | 1.51 | 7.9 | 19.4 | 14.5 - 23.6 |
| All Sysmex XN/XS Instruments | 65 | 30.40 | 6.02 | 19.8 | 31.5 | 12.3 - 48.5 | 64 | 14.27 | 2.07 | 14.5 | 15.3 | 8.0 - 20.5 |
| Sysmex XN-1000 | 16 | 28.48 | 5.16 | 18.1 | 31.5 | 12.9 - 44.0 | 15 | 14.42 | 2.29 | 15.9 | 15.4 | 7.5 - 21.3 |
| Sysmex XS-1000i | 47 | 31.20 | 6.20 | 19.9 | 31.8 | 12.5 - 49.8 | 47 | 14.23 | 2.05 | 14.4 | 15.2 | 8.0 - 20.4 |
| | | | | | | | | | | | | |
| | Specimen MX-5 | | | | | | | | | | | |
| All Method | 72 | 19.19 | 2.85 | 14.8 | 19.0 | 10.6 - 27.8 | | | | | | |
| All Sysmex XE/XT Instruments | 10 | 26.49 | 1.30 | 4.9 | 26.3 | 22.5 - 30.4 | | | | | | |
| All Sysmex XN/XS Instruments | 65 | 18.44 | 1.73 | 9.4 | 18.8 | 13.2 - 23.7 | | | | | | |
| Sysmex XN-1000 | 16 | 18.66 | 2.27 | 12.1 | 19.9 | 11.8 - 25.5 | | | | | | |
| Sysmex XS-1000i | 47 | 18.36 | 1.51 | 8.2 | 18.5 | 13.8 - 22.9 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 72 | 3.11 | 2.12 | 68.1 | 2.5 | 0.0 - 9.5 | 73 | 2.25 | 1.65 | 73.3 | 1.6 | 0.0 - 7.3 |
| All Sysmex XE/XT Instruments | 10 | 2.76 | 0.40 | 14.3 | 2.9 | 1.5 - 4.0 | 10 | 2.14 | 0.78 | 36.4 | 2.1 | 0.0 - 4.5 |
| All Sysmex XN/XS Instruments | 64 | 3.16 | 2.24 | 71.1 | 2.0 | 0.0 - 9.9 | 65 | 2.27 | 1.73 | 76.4 | 1.4 | 0.0 - 7.5 |
| Sysmex XN-1000 | 15 | 4.63 | 2.16 | 46.6 | 3.5 | 0.0 - 11.2 | 16 | 2.92 | 1.76 | 60.2 | 2.1 | 0.0 - 8.2 |
| Sysmex XS-1000i | 47 | 2.64 | 2.09 | 79.3 | 1.5 | 0.0 - 9.0 | 47 | 2.04 | 1.72 | 84.4 | 1.0 | 0.0 - 7.3 |
| | | | | | | | | | | | | |
| | Specimen MX-3 | | | | | | Specimen MX-4 | | | | | |
| All Method | 72 | 4.73 | 2.89 | 61.1 | 3.2 | 0.0 - 13.4 | 69 | 2.16 | 1.56 | 72.2 | 1.3 | 0.0 - 6.9 |
| All Sysmex XE/XT Instruments | 10 | 4.24 | 1.29 | 30.5 | 4.7 | 0.3 - 8.2 | 10 | 2.09 | 0.72 | 34.3 | 2.5 | 0.0 - 4.3 |
| All Sysmex XN/XS Instruments | 64 | 4.79 | 3.03 | 63.2 | 3.1 | 0.0 - 13.9 | 61 | 2.17 | 1.64 | 75.6 | 1.3 | 0.0 - 7.1 |
| Sysmex XN-1000 | 15 | 6.16 | 2.35 | 38.2 | 5.0 | 0.0 - 13.3 | 12 | 2.62 | 1.17 | 44.8 | 2.2 | 0.0 - 6.2 |
| Sysmex XS-1000i | 47 | 4.28 | 3.12 | 72.9 | 2.6 | 0.0 - 13.7 | 47 | 2.05 | 1.76 | 85.9 | 1.1 | 0.0 - 7.4 |
| | | | | | | | | | | | | |
| | Specimen MX-5 | | | | | | | | | | | |
| All Method | 68 | 2.98 | 1.80 | 60.4 | 2.4 | 0.0 - 8.4 | | | | | | |
| All Sysmex XE/XT Instruments | 10 | 2.90 | 0.47 | 16.3 | 3.0 | 1.4 - 4.4 | | | | | | |
| All Sysmex XN/XS Instruments | 60 | 2.99 | 1.91 | 63.9 | 1.9 | 0.0 - 8.8 | | | | | | |
| Sysmex XN-1000 | 12 | 3.86 | 1.42 | 36.8 | 3.5 | 0.0 - 8.2 | | | | | | |
| Sysmex XS-1000i | 46 | 2.68 | 1.94 | 72.3 | 1.6 | 0.0 - 8.6 | | | | | | |

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

| <i>Instrument</i> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i>Labs</i> | <i>Mean</i> | <i>SD</i> | <i>CV</i> | <i>Median</i> | <i>Range</i> | <i>Labs</i> | <i>Mean</i> | <i>SD</i> | <i>CV</i> | <i>Median</i> | <i>Range</i> |
| All Method | 64 | 13.25 | 1.81 | 13.7 | 13.9 | 7.8 - 18.7 | 64 | 16.91 | 3.47 | 20.5 | 15.6 | 6.5 - 27.4 |
| All Sysmex XE/XT Instruments | 10 | 12.78 | 0.79 | 6.2 | 12.6 | 10.4 - 15.2 | 10 | 14.91 | 0.46 | 3.1 | 14.9 | 13.5 - 16.3 |
| All Sysmex XN/XS Instruments | 56 | 13.32 | 1.91 | 14.3 | 14.1 | 7.5 - 19.1 | 56 | 17.19 | 3.62 | 21.0 | 15.7 | 6.3 - 28.1 |
| Sysmex XN-1000 | 12 | 13.38 | 1.74 | 13.0 | 13.9 | 8.1 - 18.6 | 10 | 16.13 | 0.22 | 1.4 | 16.2 | 15.4 - 16.8 |
| Sysmex XS-1000i | 43 | 13.28 | 1.99 | 15.0 | 14.0 | 7.3 - 19.3 | 45 | 17.45 | 4.00 | 22.9 | 15.4 | 5.4 - 29.5 |
| | | | | | | | | | | | | |
| | Specimen MX-3 | | | | | | Specimen MX-4 | | | | | |
| All Method | 66 | 13.32 | 3.52 | 26.4 | 12.1 | 2.7 - 23.9 | 65 | 17.10 | 3.72 | 21.7 | 15.6 | 5.9 - 28.3 |
| All Sysmex XE/XT Instruments | 10 | 12.34 | 0.71 | 5.7 | 12.4 | 10.2 - 14.5 | 10 | 14.44 | 0.53 | 3.7 | 14.4 | 12.8 - 16.1 |
| All Sysmex XN/XS Instruments | 58 | 13.46 | 3.73 | 27.7 | 12.1 | 2.2 - 24.7 | 57 | 17.47 | 3.82 | 21.9 | 15.7 | 6.0 - 29.0 |
| Sysmex XN-1000 | 10 | 12.02 | 0.51 | 4.2 | 12.0 | 10.4 - 13.6 | 10 | 16.11 | 0.38 | 2.4 | 16.3 | 14.9 - 17.3 |
| Sysmex XS-1000i | 46 | 14.01 | 3.81 | 27.2 | 12.2 | 2.5 - 25.5 | 46 | 17.80 | 4.19 | 23.5 | 15.7 | 5.2 - 30.4 |
| | | | | | | | | | | | | |
| | Specimen MX-5 | | | | | | | | | | | |
| All Method | 66 | 13.05 | 1.95 | 15.0 | 13.6 | 7.1 - 19.0 | | | | | | |
| All Sysmex XE/XT Instruments | 10 | 13.08 | 0.87 | 6.7 | 13.3 | 10.4 - 15.7 | | | | | | |
| All Sysmex XN/XS Instruments | 58 | 13.05 | 2.06 | 15.8 | 13.7 | 6.8 - 19.3 | | | | | | |
| Sysmex XN-1000 | 12 | 13.52 | 1.76 | 13.1 | 14.2 | 8.2 - 18.9 | | | | | | |
| Sysmex XS-1000i | 45 | 12.88 | 2.14 | 16.6 | 13.6 | 6.4 - 19.3 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Sysmex XE/XT Instruments | 10 | 80.85 | 2.65 | 3.3 | 80.4 | 72.9 - 88.8 | 10 | 84.28 | 0.68 | 0.8 | 84.3 | 82.2 - 86.4 |
| All Sysmex XN/XS Instruments | 65 | 5.49 | 3.93 | 71.5 | 7.8 | 0.0 - 17.3 | 65 | 5.72 | 4.12 | 72.0 | 7.8 | 0.0 - 18.1 |
| Sysmex XN-1000 | 16 | 3.08 | 2.32 | 75.3 | 4.7 | 0.0 - 10.1 | 16 | 3.03 | 2.23 | 73.5 | 4.6 | 0.0 - 9.8 |
| Sysmex XS-1000i | 47 | 6.44 | 4.01 | 62.2 | 8.2 | 0.0 - 18.5 | 47 | 6.77 | 4.20 | 62.1 | 8.6 | 0.0 - 19.4 |
| Specimen MX-3 | | | | | | | | | | | | |
| All Sysmex XE/XT Instruments | 10 | 69.73 | 1.64 | 2.4 | 69.8 | 64.7 - 74.7 | 10 | 84.05 | 0.78 | 0.9 | 84.3 | 81.7 - 86.4 |
| All Sysmex XN/XS Instruments | 65 | 4.85 | 3.14 | 64.7 | 6.4 | 0.0 - 14.3 | 64 | 5.87 | 4.14 | 70.4 | 8.0 | 0.0 - 18.3 |
| Sysmex XN-1000 | 16 | 3.23 | 2.10 | 65.2 | 4.7 | 0.0 - 9.6 | 16 | 3.09 | 2.36 | 76.3 | 4.7 | 0.0 - 10.2 |
| Sysmex XS-1000i | 47 | 5.49 | 3.24 | 59.0 | 7.0 | 0.0 - 15.3 | 46 | 6.99 | 4.17 | 59.7 | 8.8 | 0.0 - 19.5 |
| Specimen MX-5 | | | | | | | | | | | | |
| All Sysmex XE/XT Instruments | 10 | 81.08 | 2.95 | 3.6 | 80.6 | 72.2 - 90.0 | | | | | | |
| All Sysmex XN/XS Instruments | 64 | 5.83 | 4.13 | 70.9 | 8.2 | 0.0 - 18.3 | | | | | | |
| Sysmex XN-1000 | 16 | 3.05 | 2.28 | 74.8 | 4.7 | 0.0 - 9.9 | | | | | | |
| Sysmex XS-1000i | 46 | 6.94 | 4.18 | 60.2 | 8.6 | 0.0 - 19.5 | | | | | | |

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

| <u><i>Instrument</i></u> | Specimen MX-1 | | | | | | Specimen MX-2 | | | | | |
|------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> | <u><i>Labs</i></u> | <u><i>Mean</i></u> | <u><i>SD</i></u> | <u><i>CV</i></u> | <u><i>Median</i></u> | <u><i>Range</i></u> |
| All Method | 12 | 14.44 | 1.12 | 7.8 | 14.1 | 11.0 - 17.9 | 12 | 15.30 | 1.00 | 6.5 | 15.6 | 12.3 - 18.3 |
| All Sysmex XN/XS Instruments | 12 | 14.10 | 0.41 | 2.9 | 14.0 | 12.8 - 15.4 | 12 | 15.39 | 0.68 | 4.4 | 15.6 | 13.3 - 17.5 |
| Sysmex XN-1000 | 10 | 14.18 | 0.37 | 2.6 | 14.1 | 13.0 - 15.3 | 10 | 15.38 | 0.73 | 4.7 | 15.7 | 13.1 - 17.6 |
| Specimen MX-3 | | | | | | | | | | | | |
| All Sysmex XE/XT Instruments | 12 | 12.36 | 0.87 | 7.1 | 12.1 | 9.7 - 15.0 | 12 | 15.23 | 1.51 | 9.9 | 14.9 | 10.7 - 19.8 |
| All Sysmex XN/XS Instruments | 12 | 12.12 | 0.56 | 4.6 | 12.0 | 10.4 - 13.9 | 12 | 14.99 | 0.50 | 3.3 | 14.9 | 13.5 - 16.5 |
| Sysmex XN-1000 | 10 | 12.20 | 0.55 | 4.5 | 12.1 | 10.5 - 13.9 | 10 | 14.89 | 0.42 | 2.8 | 14.8 | 13.6 - 16.2 |
| Specimen MX-5 | | | | | | | | | | | | |
| All Sysmex XE/XT Instruments | 12 | 14.42 | 1.24 | 8.6 | 14.3 | 10.6 - 18.2 | | | | | | |
| All Sysmex XN/XS Instruments | 12 | 14.28 | 0.62 | 4.4 | 14.0 | 12.4 - 16.2 | | | | | | |
| Sysmex XN-1000 | 10 | 14.14 | 0.49 | 3.5 | 14.0 | 12.6 - 15.7 | | | | | | |

**2018 M1
BLOOD CELL IDENTIFICATION
Specimens BC-1 through BC-6**

CASE HISTORY:

A 48 year old male presented to a family medicine practice for a persistent sore throat causing difficulty breathing and swallowing. Other complaints included headaches, fatigue, and insomnia. The patient appeared sleepy, thin, and malnourished. He had a lesion at the corner of his mouth, and his temperature was slightly elevated. The patient has smoked ½ pack of cigarettes daily for over 20 years, and consumes 5 or more alcoholic drinks daily. A CBC was performed, and significant results appear below.

| Test | Results | Normal Range |
|------|---------------------------|---------------------------------|
| WBC | 4.5 x 10 ⁹ /L | 3.6 - 10.6 x 10 ⁹ /L |
| RBC | 2.5 x 10 ¹² /L | 4.2 - 6.0 x 10 ¹² /L |
| HGB | 10.0 g/dL | 13.5 - 18.0 g/dL |
| HCT | 31 % | 40 - 54 % |
| MCV | 124 fL | 78 - 94 fL |
| MCH | 40 pg | 26 - 34 pg |
| MCHC | 32 g/dL | 32-36 g/dL |
| RDW | 21 % | 11.5 - 14.5 % |
| PLT | 126 x 10 ⁹ /L | 150 - 450 x 10 ⁹ /L |

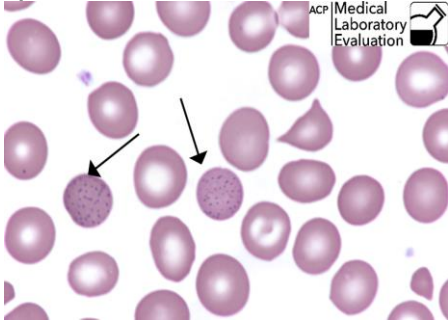
This patient was diagnosed with **megaloblastic anemia secondary to folate deficiency**. The hallmarks of megaloblastic anemia are oval macrocytes, hypersegmented neutrophils, and basophilic stippling. Folate (aka. folic acid) is a vitamin found in a variety of foods including leafy green vegetables, oranges, dried beans, liver, and beef. It is necessary for many biochemical processes, including DNA and red blood cell synthesis. Vitamin deficiencies can be caused by inadequate intake, impaired utilization, and/or increased demand.

Alcoholics often suffer from both primary and secondary malnutrition. Primary malnutrition is reduced intake of nutrients due to alcoholic beverages replacing nourishing meals. Secondary malnutrition occurs when nutrients are not properly absorbed or utilized. Folate is one of many nutrients that alcohol interferes with. In chronic alcoholism, high levels of ethanol cause malabsorption of folate and increased excretion of folate. Tobacco smoking also contributes to folate deficiency.

Without enough folate, defective DNA synthesis causes a cell's nucleus and cytoplasm to grow and mature at different rates. This asynchrony leads to ineffective erythropoiesis, megaloblastic anemia, gastrointestinal tract abnormalities, oral lesions, and hyperpigmentation of the skin and mucus membranes. Typical laboratory findings in megaloblastic anemia include: pancytopenia, macrocytic/normochromic anemia with oval macrocytes, MCV >100 fL, neutropenia with hypersegmentation, anisocytosis, poikilocytosis, and increased serum bilirubin and lactate dehydrogenase.

BLOOD CELL IDENTIFICATION

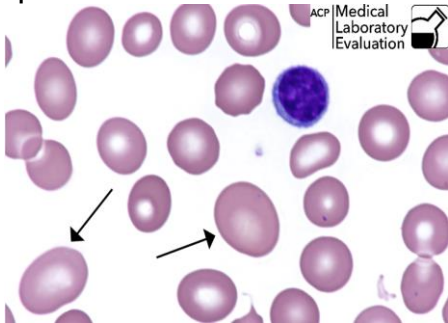
Specimen BC-1



| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|--------------------------------|-------------|----------------|--------------------|
| Basophilic stippling | 181 | 97.84% | Acceptable |
| Immature abnormal cell – refer | 3 | 1.62% | Acceptable |

The arrows in this photograph point to erythrocytes with **basophilic stippling**. These young red blood cells have recently expelled their nuclei but still contain some residual RNA. The RNA is aggregated into small granular clumps that stain dark blue-purple. The clumps of RNA are evenly distributed throughout the cell, and may appear fine (small) or coarse (large). Basophilic stippling is associated with defective heme synthesis, anemia, increased RBC production, thalassemia, and lead poisoning. Reticulocytes are similar, but are identified using a supravital stain such as New Methylene Blue. To view another photo of basophilic stippling, see 2014 M1 Specimen BC-1. To view a photo of reticulocytes, see 2015 M2 Specimen BC-12.

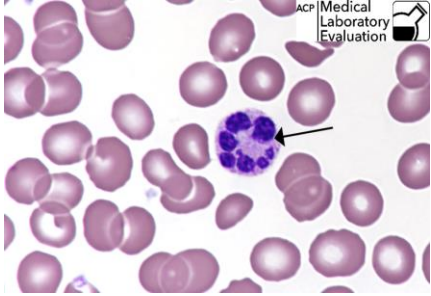
Specimen BC-2



| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Macrocyte | 171 | 92.43% | Acceptable |
| Ovalocyte | 8 | 4.32% | |

The arrows in this photograph point to **macrocytes**. The arrowed oval macrocytes are much larger than the nucleus of the mature, resting lymphocyte in the same field. “Ovalocyte (elliptocyte)” is not an acceptable response for this challenge. The clinically significant aspect of these cells is their abnormal size (macrocytosis.) These macrocytes are larger than normocytic ovalocytes, and rounder than ovalocytes/elliptocytes. There is also a slight difference in the morphology of oval macrocytes compared to ovalocytes/elliptocytes. The oval macrocytes pictured here are egg-like, while the ovalocyte tends to be more elongated or rod-like. Macrocytes occur in either oval or round form. Oval macrocytes (seen here) are associated with vitamin B12 and folate deficiencies, alcoholism, chronic infection, and toxicity. Round macrocytes are seen in a variety of chronic illnesses. In liver disease, round target-appearing macrocytes are a characteristic finding. To view another photo of oval macrocytes, see 2013 M2 Specimen BC-12. To view a photo of ovalocytes, see 2012 M3 Specimen BC-16.

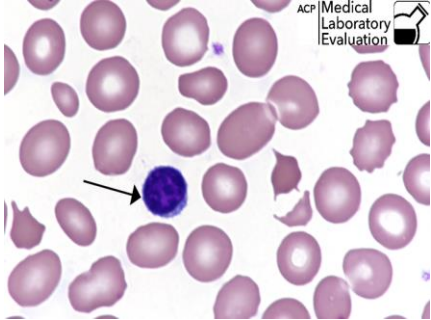
Specimen BC-3



| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|---------------------------|-------------|----------------|--------------------|
| Hypersegmented neutrophil | 182 | 98.38% | Acceptable |

The arrow in this photograph points to a **hypersegmented neutrophil**. The nuclei of normal neutrophils are divided into five or fewer distinct segments, or lobes, which are connected by a thin filament of chromatin. Hypersegmented neutrophils have six or more segments. The presence of hypersegmented neutrophils is one of the most sensitive and specific signs of megaloblastic anemia. They will often show up in the peripheral blood smear before macrocytosis becomes noticeable. To view another photo of a hypersegmented neutrophil, see 2013 M2 Specimen BC-11.

Specimen BC-4

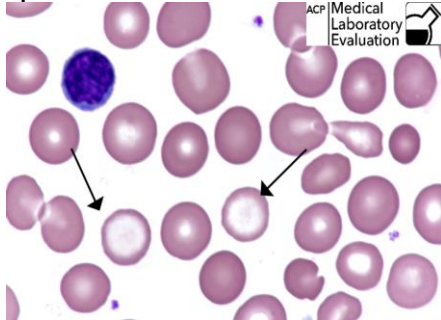


| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Lymphocyte | 185 | 100% | Acceptable |

The arrow in this photograph points to a **normal lymphocyte**. The nucleus is eccentric (off-center) and round to oval in shape. The nuclear chromatin is condensed, and there is only a scant, or small, amount of blue cytoplasm surrounding the nucleus. To view another photo of a mature, resting lymphocyte, see 2017 M2 Specimen BC-11.

BLOOD CELL IDENTIFICATION

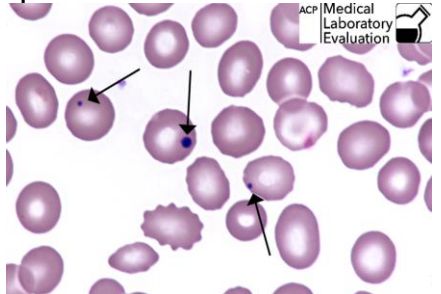
Specimen BC-5



The arrows in this photograph point to **hypochromic red cells**. Hypochromic cells have a larger area of central pallor than normal red blood cells. A red blood cell is considered hypochromic when the zone of central pallor covers more than one-third of the diameter of the cell. In normal RBCs, the zone of central pallor comprises only one-third or less of the total diameter/width of the cell. In normocytic cells, as pictured here, this pale appearance is due to a lower concentration of hemoglobin in the cell. Marked hypochromia is associated with a decreased MCHC value. To view another photo of hypochromic RBCs, see 2016 M1 Specimen BC-3.

| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Hypochromic red cell | 181 | 97.34% | Acceptable |

Specimen BC-6



The arrows in this ungraded educational challenge point to **Howell-Jolly bodies**. Howell-Jolly bodies are small, round, dense, blue erythrocyte inclusion bodies frequently located at the perimeter of the cell. They are remnants of nuclear chromatin that are ordinarily removed by the spleen. Howell-Jolly bodies are common in hemolytic and megaloblastic anemias, and in patients who have had splenectomies or have hyposplenias (splenic dysfunction or atrophy.) Heinz bodies resemble Howell-Jolly bodies but are not visible in Wright's stained preparations. To view another photo of Howell-Jolly bodies, see 2015 M3 Specimen BC-18.

| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|------------------------------|-------------|----------------|------------------------------------|
| Howell-Jolly body | 139 | 75.54% | Not graded – Educational Challenge |
| Immature/abnormal cell-refer | 41 | 22.28% | |
| Heinz body | 3 | 1.69% | |
| Döhle body | 1 | 0.54% | |

References:

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

Schrier, S. L. "Hemoglobinopathies and Hemolytic Anemias." *ACP Medicine*. Ed. D. C. Dale. New York: WebMD, Inc., 2004. 1096-1099.

Aslinia, F., Mazza, J.J., Yale, S.H. "Megaloblastic Anemia and Other Causes of Macrocytosis." *Clinical Medicine & Research*. September 1, 2006 vol. 4 no. 3 236-241.

Available at: <http://www.clinmedres.org/content/4/3/236.full>

BLOOD BANK

ABO GROUP

| <u>Specimen</u> | <u>Results</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|----------------|-------------|----------------|--------------------|
| BB-1 | Group AB | 7 | 100% | Acceptable |
| BB-2 | Group B | 7 | 100% | Acceptable |
| BB-3 | Group A | 7 | 100% | Acceptable |
| BB-4 | Group A | 7 | 100% | Acceptable |
| BB-5 | Group O | 7 | 100% | Acceptable |

RH FACTOR (D TYPE)

| <u>Specimen</u> | <u>Results</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|----------------|-------------|----------------|--------------------|
| BB-1 | Rh Negative | 18 | 100% | Acceptable |
| BB-2 | Rh Positive | 18 | 100% | Acceptable |
| BB-3 | Rh Negative | 18 | 100% | Acceptable |
| BB-4 | Rh Positive | 18 | 100% | Acceptable |
| BB-5 | Rh Positive | 18 | 100% | Acceptable |

UNEXPECTED ANTIBODY DETECTION

| <u>Specimen</u> | <u>Results</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|---------------------------------|-------------|----------------|--------------------|
| AB-1 | Unexpected antibody detected | 7 | 100% | Acceptable |
| AB-2 | No unexpected antibody detected | 7 | 100% | Acceptable |
| AB-3 | No unexpected antibody detected | 7 | 100% | Acceptable |
| AB-4 | No unexpected antibody detected | 7 | 100% | Acceptable |
| AB-5 | Unexpected antibody detected | 7 | 100% | Acceptable |

BLOOD BANK

ANTIBODY IDENTIFICATION

| <u>Specimen</u> | <u>Results</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|----------------------|-------------|----------------|--------------------|
| AB-1 | Anti-E | 1 | 100% | Acceptable |
| AB-2 | No antibody detected | 1 | 100% | Acceptable |
| AB-3 | No antibody detected | 1 | 100% | Acceptable |
| AB-4 | No antibody detected | 1 | 100% | Acceptable |
| AB-5 | Anti-S | 1 | 100% | Acceptable |

COMPATIBILITY TESTING

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

ACTIVATED PARTIAL THROMBOPLASTIN (seconds)

| <u>Reagent/Instrument</u> | <u>Specimen CG-1</u> | | | | | | <u>Specimen CG-2</u> | | | | | |
|---------------------------|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 19 | 40.9 | 3.6 | 8.7 | 40 | 34 - 48 | 19 | 36.1 | 2.9 | 8.0 | 35 | 30 - 42 |
| Dade Actin FSL | | | | | | | | | | | | |
| Sysmex CA-500/600 series | 9 | 38.7 | 1.5 | 3.9 | 39 | 32 - 45 | 9 | 34.1 | 1.1 | 3.1 | 34 | 28 - 40 |
| Hemoliance SynthASil | | | | | | | | | | | | |
| IL ACL, all models | 5 | 44.0 | 1.4 | 3.2 | 44 | 37 - 51 | 5 | 40.0 | 0.1 | 0.0 | 40 | 34 - 46 |
| IL TEST APTT-SP | | | | | | | | | | | | |
| IL ACL, all models | 5 | 45.5 | 3.5 | 7.8 | 46 | 38 - 53 | 5 | 39.5 | 0.7 | 1.8 | 40 | 33 - 46 |
| | | | | | | | | | | | | |
| | <u>Specimen CG-3</u> | | | | | | <u>Specimen CG-4</u> | | | | | |
| All Method | 19 | 26.9 | 2.8 | 10.6 | 26 | 22 - 31 | 19 | 27.9 | 6.5 | 23.5 | 25 | 23 - 33 |
| Dade Actin FSL | | | | | | | | | | | | |
| Sysmex CA-500/600 series | 9 | 25.0 | 0.9 | 3.5 | 25 | 21 - 29 | 9 | 24.0 | 0.7 | 2.9 | 24 | 20 - 28 |
| Hemoliance SynthASil | | | | | | | | | | | | |
| IL ACL, all models | 5 | 30.5 | 0.7 | 2.3 | 31 | 25 - 36 | 5 | 42.0 | 1.4 | 3.4 | 42 | 35 - 49 |
| IL TEST APTT-SP | | | | | | | | | | | | |
| IL ACL, all models | 5 | 30.5 | 2.1 | 7.0 | 31 | 25 - 36 | 5 | 29.5 | 0.7 | 2.4 | 30 | 25 - 34 |
| | | | | | | | | | | | | |
| | <u>Specimen CG-5</u> | | | | | | | | | | | |
| All Method | 13 | 68.0 | 8.4 | 12.4 | 69 | 57 - 79 | | | | | | |
| Dade Actin FSL | | | | | | | | | | | | |
| Sysmex CA-500/600 series | 9 | 66.1 | 8.4 | 12.6 | 68 | 56 - 77 | | | | | | |
| Hemoliance SynthASil | | | | | | | | | | | | |
| IL ACL, all models | 1 | - | - | - | 66 | 57 - 79 | | | | | | |
| IL TEST APTT-SP | | | | | | | | | | | | |
| IL ACL, all models | 1 | - | - | - | 76 | 57 - 79 | | | | | | |

Fibrinogen (mg/dL)

One participant reported Fibrinogen. The vendor assay values on a Sysmex CA-540 for specimens CG-1 through CG-5 are: 236 mg/dL, 234 mg/dL, 248 mg/dL, 361 mg/dL, and 86 mg/dL, respectively.

RH FACTOR (Slide Method)

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

COAGUCHEK XS PLUS PROTHROMBIN TIME (seconds)

| <i><u>Instrument</u></i> | Specimen XS-1 | | | | | | Specimen XS-2 | | | | | |
|---|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
| | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> | <i><u>Labs</u></i> | <i><u>Mean</u></i> | <i><u>SD</u></i> | <i><u>CV</u></i> | <i><u>Median</u></i> | <i><u>Range</u></i> |
| All Method | 23 | 32.27 | 1.76 | 5.5 | 32.6 | 27.4 - 37.2 | 23 | 14.29 | 0.42 | 3.0 | 14.2 | 12.1 - 16.5 |
| All Roche CoaguChek XS Plus Instruments | 23 | 32.27 | 1.76 | 5.5 | 32.6 | 27.4 - 37.2 | 23 | 14.26 | 0.40 | 2.8 | 14.2 | 12.1 - 16.4 |
| Roche CoaguChek XS Plus - Waived | 13 | 32.22 | 2.09 | 6.5 | 32.9 | 27.3 - 37.1 | 13 | 14.33 | 0.47 | 3.3 | 14.3 | 12.1 - 16.5 |
| Roche CoaguChek XS Plus | 10 | 32.34 | 1.28 | 3.9 | 32.4 | 27.4 - 37.2 | 10 | 14.16 | 0.27 | 1.9 | 14.2 | 12.0 - 16.3 |
| | Specimen XS-3 | | | | | | Specimen XS-4 | | | | | |
| All Method | 23 | 26.32 | 1.07 | 4.1 | 26.2 | 22.3 - 30.3 | 23 | 14.17 | 0.48 | 3.4 | 14.1 | 12.0 - 16.3 |
| All Roche CoaguChek XS Plus Instruments | 23 | 26.32 | 1.07 | 4.1 | 26.2 | 22.3 - 30.3 | 23 | 14.17 | 0.48 | 3.4 | 14.1 | 12.0 - 16.3 |
| Roche CoaguChek XS Plus - Waived | 13 | 26.46 | 1.38 | 5.2 | 26.3 | 22.4 - 30.5 | 13 | 14.26 | 0.70 | 4.9 | 14.0 | 12.1 - 16.4 |
| Roche CoaguChek XS Plus | 10 | 26.18 | 0.79 | 3.0 | 26.1 | 22.2 - 30.2 | 10 | 14.08 | 0.08 | 0.6 | 14.1 | 11.9 - 16.2 |
| | Specimen XS-5 | | | | | | | | | | | |
| All Method | 23 | 25.94 | 1.28 | 4.9 | 26.1 | 22.0 - 29.9 | | | | | | |
| All Roche CoaguChek XS Plus Instruments | 23 | 25.94 | 1.28 | 4.9 | 26.1 | 22.0 - 29.9 | | | | | | |
| Roche CoaguChek XS Plus - Waived | 13 | 26.00 | 1.85 | 7.1 | 26.3 | 22.1 - 29.9 | | | | | | |
| Roche CoaguChek XS Plus | 10 | 25.88 | 0.50 | 1.9 | 25.9 | 21.9 - 29.8 | | | | | | |

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

| <u>Instrument</u> | Specimen XS-1 | | | | | | Specimen XS-2 | | | | | |
|---|----------------------|-------------|-----------|-----------|---------------|--------------|----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 37 | 2.67 | 0.14 | 5.1 | 2.7 | 2.1 - 3.3 | 37 | 1.19 | 0.05 | 4.1 | 1.2 | 0.9 - 1.5 |
| All Roche CoaguChek XS Plus Instruments | 35 | 2.67 | 0.14 | 5.1 | 2.7 | 2.1 - 3.3 | 35 | 1.19 | 0.05 | 4.0 | 1.2 | 0.9 - 1.5 |
| Roche CoaguChek XS Plus - Waived | 26 | 2.67 | 0.14 | 5.4 | 2.7 | 2.1 - 3.3 | 26 | 1.20 | 0.05 | 4.4 | 1.2 | 0.9 - 1.5 |
| Roche CoaguChek XS Plus | 10 | 2.69 | 0.12 | 4.3 | 2.7 | 2.1 - 3.3 | 10 | 1.19 | 0.03 | 2.8 | 1.2 | 0.9 - 1.5 |
| | Specimen XS-3 | | | | | | Specimen XS-4 | | | | | |
| All Method | 23 | 2.20 | 0.09 | 3.9 | 2.2 | 1.7 - 2.7 | 23 | 1.21 | 0.05 | 4.3 | 1.2 | 0.9 - 1.5 |
| All Roche CoaguChek XS Plus Instruments | 23 | 2.20 | 0.09 | 3.9 | 2.2 | 1.7 - 2.7 | 23 | 1.21 | 0.05 | 4.3 | 1.2 | 0.9 - 1.5 |
| Roche CoaguChek XS Plus - Waived | 13 | 2.20 | 0.10 | 4.5 | 2.2 | 1.7 - 2.7 | 13 | 1.21 | 0.07 | 5.7 | 1.2 | 0.9 - 1.5 |
| Roche CoaguChek XS Plus | 10 | 2.20 | 0.07 | 3.2 | 2.2 | 1.7 - 2.7 | 10 | 1.20 | 0.01 | 0.0 | 1.2 | 0.9 - 1.5 |
| | Specimen XS-5 | | | | | | | | | | | |
| All Method | 23 | 2.17 | 0.12 | 5.3 | 2.2 | 1.7 - 2.7 | | | | | | |
| All Roche CoaguChek XS Plus Instruments | 23 | 2.17 | 0.12 | 5.3 | 2.2 | 1.7 - 2.7 | | | | | | |
| Roche CoaguChek XS Plus - Waived | 13 | 2.17 | 0.15 | 6.9 | 2.2 | 1.7 - 2.7 | | | | | | |
| Roche CoaguChek XS Plus | 10 | 2.16 | 0.05 | 2.5 | 2.2 | 1.7 - 2.6 | | | | | | |

COAGUCHECK XS - INTERNATIONAL NORMALIZED RATIO (INR)

| <u>Instrument</u> | Specimen INX-1 | | | | | | Specimen INX-2 | | | | | |
|--------------------|-----------------------|-------------|-----------|-----------|---------------|--------------|-----------------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| Roche CoaguChek XS | 121 | 2.16 | 0.10 | 4.5 | 2.2 | 1.7 - 2.6 | 121 | 1.18 | 0.05 | 4.3 | 1.2 | 0.9 - 1.5 |

i-Stat PROTHROMBIN TIME (seconds)

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-1</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-2</u> | | | |
|-------------------------|-------------|-------------|-----------------------|-----------|---------------|-------------|--------------|-------------|-------------|-----------------------|---------------|--------------|--|
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>SD</u> | | | | <u>CV</u> | <u>Median</u> | <u>Range</u> | |
| i-Stat Prothrombin Time | 10 | 13.84 | 0.75 | 5.4 | 13.9 | 11.7 - 16.0 | 10 | 14.20 | 0.66 | 4.7 | 14.0 | 12.0 - 16.4 | |
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-3</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-4</u> | | | |
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>SD</u> | | | | <u>CV</u> | <u>Median</u> | <u>Range</u> | |
| i-Stat Prothrombin Time | 10 | 27.10 | 1.09 | 4.0 | 27.3 | 23.0 - 31.2 | 10 | 14.22 | 0.58 | 4.1 | 14.0 | 12.0 - 16.4 | |
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-5</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-6</u> | | | |
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>SD</u> | | | | <u>CV</u> | <u>Median</u> | <u>Range</u> | |
| i-Stat Prothrombin Time | 10 | 26.26 | 0.68 | 2.6 | 26.2 | 22.3 - 30.2 | | | | | | | |

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

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-1</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-2</u> | | | |
|-------------------------|-------------|-------------|-----------------------|-----------|---------------|-----------|--------------|-------------|-------------|-----------------------|---------------|--------------|--|
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>SD</u> | | | | <u>CV</u> | <u>Median</u> | <u>Range</u> | |
| i-Stat Prothrombin Time | 10 | 1.18 | 0.08 | 7.1 | 1.2 | 0.9 - 1.5 | 10 | 1.20 | 0.07 | 5.9 | 1.2 | 0.9 - 1.5 | |
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-3</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-4</u> | | | |
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>SD</u> | | | | <u>CV</u> | <u>Median</u> | <u>Range</u> | |
| i-Stat Prothrombin Time | 10 | 2.36 | 0.11 | 4.8 | 2.4 | 1.8 - 2.9 | 10 | 1.20 | 0.07 | 5.9 | 1.2 | 0.9 - 1.5 | |
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-5</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen PTI-6</u> | | | |
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>SD</u> | | | | <u>CV</u> | <u>Median</u> | <u>Range</u> | |
| i-Stat Prothrombin Time | 10 | 2.26 | 0.05 | 2.4 | 2.3 | 1.8 - 2.8 | | | | | | | |

FLUID CELL COUNT – WHITE BLOOD CELL COUNT (µL)

| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen BF-1</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen BF-2</u> | | | |
|-------------------|-------------|-------------|----------------------|-----------|---------------|-----------|--------------|-------------|-------------|----------------------|---------------|--------------|--|
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>SD</u> | | | | <u>CV</u> | <u>Median</u> | <u>Range</u> | |
| All Method | 5 | 184.0 | 72.1 | 39.2 | 184 | 39 - 329 | 5 | 4.5 | 3.5 | 78.6 | 5 | 0 - 12 | |

FLUID CELL COUNT – RED BLOOD CELL COUNT (µL)

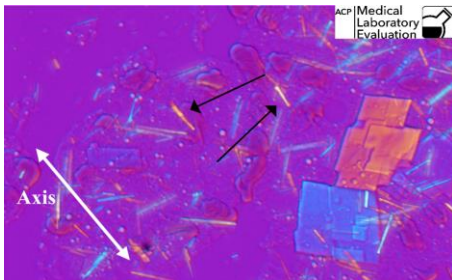
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen BF-1</u> | | | | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>Specimen BF-2</u> | | | |
|-------------------|-------------|-------------|----------------------|-----------|---------------|------------|--------------|-------------|-------------|----------------------|---------------|--------------|--|
| | | | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>SD</u> | | | | <u>CV</u> | <u>Median</u> | <u>Range</u> | |
| All Method | 5 | 1057.5 | 60.1 | 5.7 | 1058 | 937 - 1178 | 5 | 2.5 | 3.5 | 141.4 | 3 | 0 - 10 | |

**2018 M1
FLUID CRYSTAL IDENTIFICATION
Specimens FC-1 and FC-2**

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

Microscopic examination of synovial fluid for crystals is an important diagnostic test in the evaluation of arthritis. Some crystals can be identified by their shape or morphology alone. Others have similar shapes and need specialized techniques for identification. Using compensated polarized light helps us to identify crystals based on the optical differences described above. The compensator separates the microscope's light rays into slow-moving and fast-moving vibrations or waves. The compensator is marked with an arrow indicating the direction of the slow vibration. The "axis" in the photos below indicates the direction of the slow wave. Color produced by a crystal aligned with the slow-vibration ray of light can be used to identify the crystal. This difference in color is due to the molecular structure inside the crystal, which either allows the light to pass through unchanged, or impedes the light.

Specimen FC-1

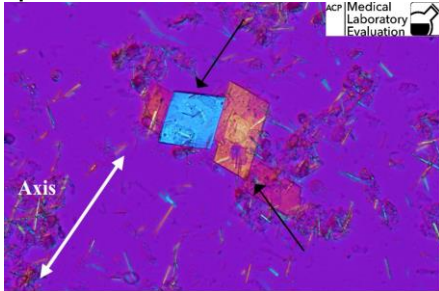


| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|---------------------------------|-------------|----------------|--------------------|
| MSU (Monosodium Urate) crystals | 4 | 80% | Acceptable |
| CPPD crystals | 1 | 20% | |

The arrows in this photograph point to **monosodium urate (MSU) crystals**. MSU crystals are usually thin and needle-like with pointed ends. They can be either intracellular or extracellular. MSU crystals are associated with gout, which is a common crystal-induced inflammatory arthritis. The crystals form in joints and tissues when the uric acid level is elevated. They cause inflammation and soft tissue damage, resulting in painful swelling, usually in one joint. The base of the big toe is often affected. Gout is caused by either decreased excretion of uric acid into the urine, or increased production of uric acid. There are many factors that contribute to gout, including alcohol use, purine-rich diets, obesity and the metabolic syndrome, and dehydration or use of diuretic agents. Since there are other needle-shaped crystals, examination with a red plate compensator can help with identification. MSU crystals are **negatively birefringent**, meaning the crystals that are lying parallel to (aligned with) the compensator filter axis are yellow, and the crystals lying perpendicular to the filter axis are blue.

**2018 M1
FLUID CRYSTAL IDENTIFICATION**

Specimen FC-2



| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Cholesterol crystals | 4 | 80% | Acceptable |
| No crystals observed | 1 | 20% | |

The arrows in this photograph point to **cholesterol crystals**. They are large, flat rhomboid plates with notched corners and a tendency to adhere to one another. This characteristic morphology makes them easy to identify in a regular wet mount without using specialized filters. Cholesterol crystals are associated with chronic inflammatory disorders such as osteoarthritis, infections such as Lyme disease, and autoimmune diseases such as rheumatoid arthritis and systemic lupus erythematosus.

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MICROALBUMIN, DIPSTICK

Specimen UM-1

Participant Results

| <u>Method</u> | <u>Labs</u> | <u>Negative</u> | <u>10 mg/L</u> | <u>20 mg/L</u> | <u>30 mg/L</u> | <u>50 mg/L</u> | <u>80 mg/L</u> | <u>100 mg/L</u> | <u>150 mg/L</u> | <u>+ (4 - 8 mg/dL)</u> | <u>++ (>8 mg/dL)</u> |
|-------------------------------|-------------|-----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|------------------------|-------------------------|
| ALL METHODS | 36 | - | - | - | - | - | 24 | 1 | 11 | - | - |
| Roche Micral - 1 minute | 1 | - | - | - | - | - | - | 1 | - | - | - |
| Siemens Clinitek Microalbumin | 33 | - | - | - | - | - | 23 | - | 10 | - | - |
| Siemens DCA 2000(+) | 1 | - | - | - | - | - | - | - | 1 | - | - |

CREATININE, DIPSTICK

Specimen UM-1

Participant Results

| <u>Method</u> | <u>Labs</u> | <u>Negative</u> | <u>10 mg/dL</u> | <u>30 mg/dL</u> | <u>50 mg/dL</u> | <u>100 mg/dL</u> | <u>200 mg/dL</u> | <u>300 mg/dL</u> |
|-------------------------------|-------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|
| ALL METHODS | 38 | - | - | - | 8 | 16 | 12 | 2 |
| Siemens Clinitek Microalbumin | 33 | - | - | - | 8 | 13 | 10 | 2 |
| Siemens DCA 2000(+) | 1 | - | - | - | - | - | 1 | - |
| Siemens Multistix Pro | 2 | - | - | - | - | 2 | - | - |

Graded by 91% referee consensus.

MICROALBUMIN, QUANTITATIVE

Specimen UM-1

| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method | 68 | 135.63 | 10.11 | 7.5 | 134.1 | 94.9 - 176.4 |
| Beckman AU | 16 | 133.98 | 4.22 | 3.2 | 133.5 | 93.7 - 174.2 |
| Siemens DCA Vantage | 10 | 132.81 | 4.83 | 3.6 | 131.6 | 92.9 - 172.7 |
| Siemens Dimension | 19 | 131.61 | 11.26 | 8.6 | 129.9 | 92.1 - 171.1 |

CREATININE, URINE (mg/dL)

Specimen UM-1

| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method | 64 | 71.19 | 4.45 | 6.2 | 71.6 | 59.0 - 83.3 |
| Beckman AU | 15 | 72.27 | 1.99 | 2.7 | 73.0 | 59.9 - 84.6 |
| Siemens DCA Vantage | 10 | 75.69 | 2.24 | 3.0 | 76.4 | 62.8 - 88.6 |
| Siemens Dimension | 16 | 66.70 | 3.92 | 5.9 | 67.5 | 55.3 - 78.1 |

WAIVED HEMATOLOGY–HEMOGLOBIN (g/dL)

| <u>Instrument</u> | Specimen HD-1 | | | | | | Specimen HD-2 | | | | | |
|------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 103 | 17.52 | 0.84 | 4.8 | 17.6 | 15.8 - 19.3 | 110 | 6.18 | 0.23 | 3.7 | 6.2 | 5.7 - 6.7 |
| All Stanbio Methods | 36 | 17.88 | 0.80 | 4.5 | 18.0 | 16.2 - 19.5 | 38 | 6.27 | 0.18 | 2.9 | 6.3 | 5.8 - 6.8 |
| Alere (Stanbio) HemoPoint H2 | 36 | 17.74 | 1.08 | 6.1 | 18.0 | 15.5 - 20.0 | 37 | 6.27 | 0.18 | 2.9 | 6.3 | 5.8 - 6.8 |
| HemoCue | 63 | 17.42 | 0.64 | 3.7 | 17.4 | 16.1 - 18.7 | 68 | 6.14 | 0.15 | 2.4 | 6.1 | 5.7 - 6.6 |

WAIVED HEMATOLOGY–HEMATOCRIT (percent)

| <u>Instrument</u> | Specimen HD-1 | | | | | | Specimen HD-2 | | | | | |
|-------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method | 12 | 45.02 | 13.51 | 30.0 | 49.0 | 17.9 - 72.1 | 10 | 15.05 | 4.47 | 29.7 | 16.8 | 6.1 - 24.0 |

KOH SKIN PREPARATION

| <u>Specimen</u> | <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|--|-------------------------------|-------------|----------------|--------------------|
| K-1 | Yeast/fungal elements absent | 117 | 91.45% | Acceptable |
| | Yeast/fungal elements present | 11 | 8.59% | |
| Organism present in specimen K-1: <i>Enterococcus faecalis</i> . | | | | |
| K-2 | Yeast/fungal elements present | 121 | 93.08% | Acceptable |
| | Yeast/fungal elements absent | 9 | 6.92% | |
| Organism present in specimen K-2: <i>Trichophyton rubrum</i> . | | | | |

URINALYSIS DIPSTICK–SPECIFIC GRAVITY

Specimen UA-1

| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|--|-------------|-------------|-----------|-----------|---------------|---------------|
| All Method | 750 | 1.0196 | 0.0042 | 0.4 | 1.020 | 1.009 - 1.030 |
| All Iris Diagnostics Methods | 10 | 1.0258 | 0.0009 | 0.1 | 1.026 | 1.015 - 1.036 |
| All Refractive Index Methods | 17 | 1.0272 | 0.0019 | 0.2 | 1.027 | 1.017 - 1.038 |
| All Roche Methods | 34 | 1.0154 | 0.0019 | 0.2 | 1.015 | 1.005 - 1.026 |
| All Siemens Methods | 430 | 1.0186 | 0.0026 | 0.3 | 1.020 | 1.008 - 1.029 |
| Diagnostic Test Group Clarity Urocheck 120 | 10 | 1.0290 | 0.0021 | 0.2 | 1.030 | 1.019 - 1.039 |
| Henry Schein Uriscpec / Uriscpec Plus | 18 | 1.0181 | 0.0035 | 0.3 | 1.018 | 1.008 - 1.029 |
| McKesson 120 Urine Analyzer | 18 | 1.0278 | 0.0026 | 0.3 | 1.030 | 1.017 - 1.038 |
| Roche Chemstrips | 25 | 1.0160 | 0.0025 | 0.2 | 1.015 | 1.006 - 1.026 |
| Roche Urisys | 27 | 1.0156 | 0.0021 | 0.2 | 1.015 | 1.005 - 1.026 |
| Siemens Clinitek 50 | 16 | 1.0184 | 0.0039 | 0.4 | 1.020 | 1.008 - 1.029 |
| Siemens Clinitek Advantus | 14 | 1.0200 | 0.0001 | 0.0 | 1.020 | 1.010 - 1.030 |
| Siemens Clinitek Status / Status+ | 384 | 1.0185 | 0.0026 | 0.3 | 1.020 | 1.008 - 1.029 |
| Siemens Reagent Strips | 130 | 1.0201 | 0.0039 | 0.4 | 1.020 | 1.010 - 1.031 |

URINALYSIS DIPSTICK-pH

Specimen UA-1

Participant Results

| <u>Method</u> | <u>Labs</u> | <u>≤3.5</u> | <u>4.0</u> | <u>4.5</u> | <u>5.0</u> | <u>5.5</u> | <u>6.0</u> | <u>6.5</u> | <u>7.0</u> | <u>7.5</u> | <u>8.0</u> | <u>8.5</u> | <u>≥9.0</u> |
|--|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| ALL METHODS | 764 | - | - | 1 | 438 | 221 | 101 | 3 | - | - | - | - | - |
| Beckman AU | 1 | - | - | - | 1 | - | - | - | - | - | - | - | - |
| BTNX Rapid Response Test Strips | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - |
| BTNX Rapid Response U120/U500 | 1 | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Consult Diagnostics Reagent Strips | 5 | - | - | - | 4 | - | 1 | - | - | - | - | - | - |
| Consult Diagnostics Urine Analyzer | 6 | - | - | - | 1 | 4 | 1 | - | - | - | - | - | - |
| CTMI CT-120 Urine Analyzer | 7 | - | - | - | - | 3 | 4 | - | - | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck | 3 | - | - | - | 2 | - | 1 | - | - | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck 120 | 10 | - | - | - | - | 3 | 7 | - | - | - | - | - | - |
| Germaine Laboratories AimStrip | 2 | - | - | - | 1 | 1 | - | - | - | - | - | - | - |
| Germaine Labs AimStrip Urine Analyzer | 2 | - | - | - | - | 1 | 1 | - | - | - | - | - | - |
| Henry Schein One Step Plus | 2 | - | - | - | 2 | - | - | - | - | - | - | - | - |
| Henry Schein Urispec / Urispec Plus | 19 | - | - | - | 18 | - | 1 | - | - | - | - | - | - |
| Iris Diagnostics iChem Velocity Strips | 1 | - | - | - | 1 | - | - | - | - | - | - | - | - |
| Iris Ichem VELOCITY Urine Chemistry System | 9 | - | - | - | 9 | - | - | - | - | - | - | - | - |
| McKesson 10SG Reagent Strips | 6 | - | - | - | 6 | - | - | - | - | - | - | - | - |
| McKesson 120 Urine Analyzer | 19 | - | - | - | 1 | 6 | 12 | - | - | - | - | - | - |
| Medline 120 Urine Analyzer | 4 | - | - | - | - | 1 | 3 | - | - | - | - | - | - |
| Medline Urinalysis Reagent Strips | 3 | - | - | - | 2 | 1 | - | - | - | - | - | - | - |
| Moore Medical Urine Reagent Strips | 2 | - | - | - | 2 | - | - | - | - | - | - | - | - |
| NDC Pro Advantage | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - |
| pH Paper | 1 | - | - | - | 1 | - | - | - | - | - | - | - | - |
| Roche Chemstrip 101 | 3 | - | - | - | 3 | - | - | - | - | - | - | - | - |
| Roche Chemstrips | 30 | - | - | - | 29 | - | 1 | - | - | - | - | - | - |
| Roche cobas u 411 | 1 | - | - | - | 1 | - | - | - | - | - | - | - | - |
| Roche Criterion Analyzer | 3 | - | - | - | 3 | - | - | - | - | - | - | - | - |
| Roche Urisys | 27 | - | - | - | 26 | - | - | 1 | - | - | - | - | - |
| Siemens Clinitek 10 / 100 | 6 | - | - | - | 4 | 1 | 1 | - | - | - | - | - | - |
| Siemens Clinitek 2000 | 1 | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Siemens Clinitek 50 | 17 | - | - | - | 15 | 2 | - | - | - | - | - | - | - |
| Siemens Clinitek 500 | 6 | - | - | - | - | 6 | - | - | - | - | - | - | - |
| Siemens Clinitek Advantus | 15 | - | - | - | 1 | 11 | 3 | - | - | - | - | - | - |
| Siemens Clinitek Atlas | 2 | - | - | - | - | 1 | 1 | - | - | - | - | - | - |
| Siemens Clinitek Status / Status+ | 393 | - | - | - | 220 | 171 | 2 | - | - | - | - | - | - |
| Siemens Hemacombistix | 1 | - | - | - | 1 | - | - | - | - | - | - | - | - |
| Siemens Multistix Pro | 4 | - | - | - | 2 | 1 | 1 | - | - | - | - | - | - |
| Siemens Reagent Strips | 131 | - | - | - | 68 | 5 | 57 | 1 | - | - | - | - | - |
| UriScan Reagent Strips | 4 | - | - | - | 3 | - | 1 | - | - | - | - | - | - |

URINALYSIS DIPSTICK–PROTEIN QUALITATIVE

Specimen UA-1

| <u>Method</u> | <i>Participant Results</i> | | | | | | | | | | | | |
|---|----------------------------|-----------------|--------------|-------------|-------------|-------------|-------------|--------------------------------|--------------------------------|---------------------------|----------------------------------|-----------------------------------|---|
| | <u>Labs</u> | <u>Negative</u> | <u>Trace</u> | <u>(1+)</u> | <u>(2+)</u> | <u>(3+)</u> | <u>(4+)</u> | <u>10 - 20</u> <u>mg/dL</u> | <u>30 - 70</u> <u>mg/dL</u> | <u>75</u> <u>mg/dL</u> | <u>100 - 200</u> <u>mg/dL</u> | <u>≥300 - 600</u> <u>mg/dL</u> | <u>>600 or ≥1000</u> <u>mg/dL</u> |
| ALL METHODS | 792 | 773 | 14 | 1 | 1 | - | - | 3 | - | - | - | - | - |
| BTNX Rapid Response Test Strips | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| BTNX Rapid Response U120/U500 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| Consult Diagnostics Reagent Strips | 5 | 4 | 1 | - | - | - | - | - | - | - | - | - | - |
| Consult Diagnostics Urine Analyzer | 6 | 6 | - | - | - | - | - | - | - | - | - | - | - |
| CTMI CT-120 Urine Analyzer | 7 | 7 | - | - | - | - | - | - | - | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck 120 | 10 | 10 | - | - | - | - | - | - | - | - | - | - | - |
| Germaine Laboratories AimStrip | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - |
| Germaine Labs AimStrip Urine Analyzer | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - |
| Henry Schein One Step Plus | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - |
| Henry Schein Urispec / Urispec Plus | 19 | 19 | - | - | - | - | - | - | - | - | - | - | - |
| Iris Diagnostics iChem Velocity Strips | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| Iris Ichem VELOCITY Urine Chemistry System | 9 | 9 | - | - | - | - | - | - | - | - | - | - | - |
| McKesson 10SG Reagent Strips | 6 | 3 | 2 | - | - | - | - | 1 | - | - | - | - | - |
| McKesson 120 Urine Analyzer | 19 | 19 | - | - | - | - | - | - | - | - | - | - | - |
| Medline 120 Urine Analyzer | 4 | 4 | - | - | - | - | - | - | - | - | - | - | - |
| Medline Urinalysis Reagent Strips | 3 | 2 | 1 | - | - | - | - | - | - | - | - | - | - |
| Moore Medical Urine Reagent Strips | 2 | 1 | 1 | - | - | - | - | - | - | - | - | - | - |
| NDC Pro Advantage | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - |

URINALYSIS DIPSTICK-PROTEIN QUALITATIVE (cont'd)

Specimen UA-1

| <u>Method</u> | <u>Participant Results</u> | | | | | | | | | | | | |
|-----------------------------------|----------------------------|-----------------|--------------|-------------|-------------|-------------|-------------|--------------------------------|--------------------------------|---------------------------|----------------------------------|-----------------------------------|---|
| | <u>Labs</u> | <u>Negative</u> | <u>Trace</u> | <u>(1+)</u> | <u>(2+)</u> | <u>(3+)</u> | <u>(4+)</u> | <u>10 - 20</u> <u>mg/dL</u> | <u>30 - 70</u> <u>mg/dL</u> | <u>75</u> <u>mg/dL</u> | <u>100 - 200</u> <u>mg/dL</u> | <u>≥300 - 600</u> <u>mg/dL</u> | <u>>600 or ≥1000</u> <u>mg/dL</u> |
| Roche Chemstrip 101 | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - |
| Roche Chemstrips | 45 | 43 | 1 | - | 1 | - | - | - | - | - | - | - | - |
| Roche cobas u 411 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| Roche Criterion Analyzer | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - |
| Roche Urisys | 27 | 25 | 2 | - | - | - | - | - | - | - | - | - | - |
| Siemens Albustix | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 10 / 100 | 6 | 6 | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 2000 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 50 | 17 | 17 | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 500 | 6 | 6 | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek Advantus | 15 | 15 | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek Atlas | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek Status / Status+ | 394 | 394 | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Hemacombistix | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Multistix Pro | 4 | 4 | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Reagent Strips | 133 | 127 | 5 | 1 | - | - | - | - | - | - | - | - | - |
| Siemens Uristix | 13 | 13 | - | - | - | - | - | - | - | - | - | - | - |
| UriScan Reagent Strips | 4 | 3 | 1 | - | - | - | - | - | - | - | - | - | - |

URINALYSIS DIPSTICK–GLUCOSE

Specimen UA-1

| <u>Method</u> | <u>Labs</u> | <u>Negative or Normal</u> | <u>Trace</u> | <u>(1+)</u> | <u>Participant Results</u> | | | | <u>30 - 100 mg/dL</u> | <u>150 - 300 mg/dL</u> | <u>500 mg/dL</u> | <u>>500 or ≥1000 or ≥2000 mg/dL</u> |
|--|-------------|-------------------------------|--------------|-------------|----------------------------|-------------|-------------|-----|---------------------------|--------------------------------|----------------------|--|
| | | | | | <u>(2+)</u> | <u>(3+)</u> | <u>(4+)</u> | | | | | |
| ALL METHODS | 783 | 31 | 72 | 149 | 6 | 23 | 4 | 121 | 296 | 6 | 75 | |
| BTNX Rapid Response Test Strips | 1 | 1 | - | - | - | - | - | - | - | - | - | |
| BTNX Rapid Response U120/U500 | 1 | - | - | 1 | - | - | - | - | - | - | - | |
| Consult Diagnostics Reagent Strips | 5 | 1 | 1 | 3 | - | - | - | - | - | - | - | |
| Consult Diagnostics Urine Analyzer | 6 | - | - | 4 | - | - | - | - | 2 | - | - | |
| CTMI CT-120 Urine Analyzer | 7 | - | 1 | 2 | - | - | - | 4 | - | - | - | |
| Diagnostic Test Group Clarity Urocheck | 3 | - | - | 2 | - | - | - | 1 | - | - | - | |
| Diagnostic Test Group Clarity Urocheck 120 | 10 | 4 | 3 | 3 | - | - | - | - | - | - | - | |
| Germaine Laboratories AimStrip | 2 | - | - | 2 | - | - | - | - | - | - | - | |
| Germaine Labs AimStrip Urine Analyzer | 2 | - | - | 2 | - | - | - | - | - | - | - | |
| Henry Schein One Step Plus | 2 | - | - | - | - | - | - | - | - | - | 2 | |
| Henry Schein Urispec / Urispec Plus | 19 | - | - | - | - | 1 | - | 1 | 5 | 2 | 10 | |
| Iris Diagnostics iChem Velocity Strips | 1 | - | - | - | - | - | - | - | - | - | 1 | |
| Iris Ichem VELOCITY Urine Chemistry System | 9 | - | - | - | - | 8 | - | - | - | - | 1 | |
| McKesson 10SG Reagent Strips | 6 | 1 | - | - | - | - | - | 1 | 3 | - | 1 | |
| McKesson 120 Urine Analyzer | 19 | 1 | 1 | 17 | - | - | - | - | - | - | - | |
| Medline 120 Urine Analyzer | 4 | - | - | 3 | 1 | - | - | - | - | - | - | |
| Medline Urinalysis Reagent Strips | 3 | - | - | 3 | - | - | - | - | - | - | - | |
| Moore Medical Urine Reagent Strips | 2 | - | - | 1 | 1 | - | - | - | - | - | - | |
| NDC Pro Advantage | 1 | - | - | 1 | - | - | - | - | - | - | - | |
| Roche Chemstrip 101 | 3 | - | - | - | - | - | - | - | - | 1 | 2 | |
| Roche Chemstrips | 45 | - | - | 1 | - | 1 | 4 | 1 | - | - | 38 | |
| Roche cobas u 411 | 1 | - | - | - | - | - | - | - | - | - | 1 | |
| Roche Criterion Analyzer | 3 | - | - | - | 1 | 1 | - | - | - | - | 1 | |
| Roche Urisys | 27 | - | - | - | - | 11 | - | - | 1 | - | 15 | |
| Siemens Clinitek 10 / 100 | 6 | - | 3 | - | - | - | - | - | 3 | - | - | |
| Siemens Clinitek 2000 | 1 | - | - | 1 | - | - | - | - | - | - | - | |
| Siemens Clinitek 50 | 17 | - | 2 | 6 | - | - | - | 4 | 5 | - | - | |
| Siemens Clinitek 500 | 6 | - | 1 | 2 | - | - | - | 2 | 1 | - | - | |
| Siemens Clinitek Advantus | 15 | - | 2 | 6 | - | - | - | 5 | 2 | - | - | |
| Siemens Clinitek Atlas | 2 | - | - | - | - | 1 | - | - | - | - | 1 | |
| Siemens Clinitek Status / Status+ | 394 | 4 | 34 | 79 | 1 | - | - | 64 | 212 | - | - | |
| Siemens Hemacombistix | 1 | - | - | - | - | - | - | 1 | - | - | - | |
| Siemens Multistix Pro | 4 | - | 1 | - | - | - | - | - | 3 | - | - | |
| Siemens Reagent Strips | 133 | 15 | 22 | 5 | 1 | - | - | 36 | 53 | 1 | - | |
| Siemens Uristix | 5 | 3 | - | 1 | - | - | - | - | 1 | - | - | |
| UriScan Reagent Strips | 4 | - | - | 2 | 1 | - | - | - | - | 1 | - | |

URINALYSIS DIPSTICK–KETONES

Specimen UA-1

| <u>Method</u> | <u>Labs</u> | Participant Results | | | | | | | | | | | | | |
|---|--------------------|----------------------------|---------------------|---------------------|------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------------|------------------------------|
| | | <u>Negative</u> | <u>Trace</u> | <u>Small</u> | <u>Moderate</u> | <u>Large</u> | <u>(1+)</u> | <u>(2+)</u> | <u>(3+)</u> | <u>(4+)</u> | <u>5 - 10 mg/dL</u> | <u>15 - 25 mg/dL</u> | <u>40 - 60 mg/dL</u> | <u>80 - 100 mg/dL</u> | <u>≥150 mg/dL</u> |
| ALL METHODS | 761 | 2 | - | 4 | 16 | 88 | 7 | 132 | 98 | 3 | 2 | 26 | 240 | 134 | 9 |
| BTNX Rapid Response Test Strips | 1 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| BTNX Rapid Response U120/U500 | 1 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Consult Diagnostics Reagent Strips | 5 | - | - | - | - | - | - | 2 | 3 | - | - | - | - | - | - |
| Consult Diagnostics Urine Analyzer | 6 | - | - | - | - | - | - | 1 | 3 | - | - | 2 | - | - | - |
| CTMI CT-120 Urine Analyzer | 7 | - | - | - | - | - | - | 2 | 2 | - | - | 1 | 1 | 1 | - |
| Diagnostic Test Group Clarity Urocheck | 3 | - | - | - | - | - | - | 2 | 1 | - | - | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck 120 | 10 | - | - | - | - | - | 1 | 3 | 3 | - | 1 | 1 | 1 | - | - |
| Germaine Laboratories AimStrip | 3 | - | - | - | 1 | - | - | 1 | - | - | 1 | - | - | - | - |
| Germaine Labs AimStrip Urine Analyzer | 2 | - | - | - | - | - | - | - | 2 | - | - | - | - | - | - |
| Henry Schein One Step Plus | 2 | - | - | - | - | - | - | - | - | - | - | 2 | - | - | - |
| Henry Schein Urispec / Urispec Plus | 19 | 1 | - | - | 1 | - | - | 1 | - | - | - | 16 | - | - | - |
| Iris Diagnostics iChem Velocity Strips | 1 | - | - | - | - | - | - | - | - | - | - | - | - | 1 | - |
| Iris Ichem VELOCITY Urine Chemistry System | 9 | - | - | - | - | - | 4 | 4 | - | - | - | 1 | - | - | - |
| McKesson 10SG Reagent Strips | 6 | - | - | - | - | 2 | - | - | 2 | - | - | - | - | 1 | 1 |
| McKesson 120 Urine Analyzer | 19 | - | - | - | - | - | - | 3 | 14 | - | - | - | - | 2 | - |
| Medline 120 Urine Analyzer | 4 | - | - | - | - | - | - | 1 | 3 | - | - | - | - | - | - |
| Medline Urinalysis Reagent Strips | 3 | - | - | - | - | - | - | - | 3 | - | - | - | - | - | - |
| Moore Medical Urine Reagent Strips | 2 | - | - | - | - | - | - | - | 2 | - | - | - | - | - | - |
| NDC Pro Advantage | 1 | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - |
| Roche Chemstrip 101 | 3 | - | - | - | - | 1 | - | - | 2 | - | - | - | - | - | - |
| Roche Chemstrips | 31 | - | - | 2 | 5 | 9 | - | 2 | 13 | - | - | - | - | - | - |
| Roche cobas u 411 | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Roche Criterion Analyzer | 3 | - | - | - | - | - | - | 1 | 1 | - | - | - | 1 | - | - |
| Roche Urisys | 27 | - | - | - | - | - | - | 11 | - | - | - | - | 14 | - | 2 |
| Siemens Clinitek 10 / 100 | 6 | - | - | - | - | - | - | 2 | - | - | - | - | 4 | - | - |
| Siemens Clinitek 2000 | 1 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Siemens Clinitek 50 | 17 | - | - | - | - | - | - | 6 | 2 | - | - | - | 7 | 2 | - |
| Siemens Clinitek 500 | 6 | - | - | - | - | - | - | 3 | - | - | - | 1 | 2 | - | - |
| Siemens Clinitek Advantus | 14 | - | - | - | - | - | 1 | 6 | 1 | - | - | - | 6 | - | - |
| Siemens Clinitek Atlas | 2 | - | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - |
| Siemens Clinitek Status / Status+ | 394 | - | - | 1 | 1 | 1 | 1 | 73 | 35 | 1 | - | 2 | 187 | 92 | - |
| Siemens Ketostix | 1 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - |
| Siemens Multistix Pro | 4 | - | - | - | - | - | - | 1 | - | - | - | - | 1 | 2 | - |
| Siemens Reagent Strips | 131 | 1 | - | 1 | 7 | 71 | - | 1 | 4 | 2 | - | - | 10 | 28 | 6 |
| UriScan Reagent Strips | 3 | - | - | - | - | - | - | 1 | 1 | - | - | - | 1 | - | - |

URINALYSIS DIPSTICK–BILIRUBIN

Specimen UA-1

| <u>Method</u> | <u>Labs</u> | <u>Negative</u> | <u>Trace</u> | <u>Small</u> | <u>Moderate</u> | <u>Participant Results</u> | | | | | <u>0.5 - 1.0</u> <u>mg/dL</u> | <u>2.0 - 4.0</u> <u>mg/dL</u> | <u>6.0 - 10.0</u> <u>mg/dL</u> | <u>>10.0</u> <u>mg/dL</u> |
|--|-------------|-----------------|--------------|--------------|-----------------|----------------------------|-------------|-------------|-------------|-------------|----------------------------------|----------------------------------|-----------------------------------|---------------------------------|
| | | | | | | <u>Large</u> | <u>(1+)</u> | <u>(2+)</u> | <u>(3+)</u> | <u>(4+)</u> | | | | |
| ALL METHODS | 741 | 740 | - | 1 | - | - | - | - | - | - | - | - | - | - |
| BTNX Rapid Response Test Strips | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| BTNX Rapid Response U120/U500 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Consult Diagnostics Reagent Strips | 5 | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| Consult Diagnostics Urine Analyzer | 6 | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| CTMI CT-120 Urine Analyzer | 7 | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck 120 | 10 | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| Germaine Laboratories AimStrip | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Germaine Labs AimStrip Urine Analyzer | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Henry Schein One Step Plus | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Henry Schein Urispec / Urispec Plus | 19 | 19 | - | - | - | - | - | - | - | - | - | - | - | - |
| Iris Diagnostics iChem Velocity Strips | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Iris Ichem VELOCITY Urine Chemistry System | 9 | 9 | - | - | - | - | - | - | - | - | - | - | - | - |
| McKesson 10SG Reagent Strips | 6 | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| McKesson 120 Urine Analyzer | 19 | 19 | - | - | - | - | - | - | - | - | - | - | - | - |
| Medline 120 Urine Analyzer | 4 | 4 | - | - | - | - | - | - | - | - | - | - | - | - |
| Medline Urinalysis Reagent Strips | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - | - |
| Moore Medical Urine Reagent Strips | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| NDC Pro Advantage | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Roche Chemstrip 101 | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - | - |
| Roche Chemstrips | 27 | 27 | - | - | - | - | - | - | - | - | - | - | - | - |
| Roche cobas u 411 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Roche Criterion Analyzer | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - | - |
| Roche Urisys | 27 | 27 | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 10 / 100 | 6 | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 2000 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 50 | 17 | 17 | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 500 | 6 | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek Advantus | 14 | 14 | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek Atlas | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek Status / Status+ | 389 | 389 | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Multistix Pro | 4 | 4 | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Reagent Strips | 126 | 125 | - | 1 | - | - | - | - | - | - | - | - | - | - |
| UriScan Reagent Strips | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - | - |

URINALYSIS DIPSTICK–UROBILINOGEN

Specimen UA-1

| <u>Method</u> | <u>Labs</u> | <i>Participant Results</i> | | | | |
|---|-------------|--|--|---|--|---|
| | | <u>Normal or 0.0 - 0.2 mg/dL or <3.2 µmol/L</u> | <u>1.0 or <2.0 mg/dL or 16 µmol/L</u> | <u>2.0/3.0 mg/dL or 34 or 35 µmol/L</u> | <u>4.0 or 4.0/6.0 mg/dL or 70 µmol/L</u> | <u>>=8.0 or 12.0 mg/dL or >=140 or 200 µmol/L</u> |
| ALL METHODS | 734 | 726 | 3 | 4 | - | 1 |
| BTNX Rapid Response Test Strips | 1 | 1 | - | - | - | - |
| BTNX Rapid Response U120/U500 | 1 | 1 | - | - | - | - |
| Consult Diagnostics Reagent Strips | 5 | 5 | - | - | - | - |
| Consult Diagnostics Urine Analyzer | 6 | 6 | - | - | - | - |
| CTMI CT-120 Urine Analyzer | 6 | 5 | - | 1 | - | - |
| Diagnostic Test Group Clarity Urocheck | 3 | 3 | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck 120 | 9 | 9 | - | - | - | - |
| Germaine Laboratories AimStrip | 2 | 2 | - | - | - | - |
| Germaine Labs AimStrip Urine Analyzer | 1 | 1 | - | - | - | - |
| Henry Schein One Step Plus | 2 | 2 | - | - | - | - |
| Henry Schein Urispec / Urispec Plus | 19 | 19 | - | - | - | - |
| Iris Diagnostics iChem Velocity Strips | 1 | 1 | - | - | - | - |
| Iris Ichem VELOCITY Urine Chemistry System | 8 | 8 | - | - | - | - |
| McKesson 10SG Reagent Strips | 6 | 6 | - | - | - | - |
| McKesson 120 Urine Analyzer | 19 | 19 | - | - | - | - |
| Medline 120 Urine Analyzer | 3 | 2 | - | - | - | 1 |
| Medline Urinalysis Reagent Strips | 3 | 3 | - | - | - | - |
| Moore Medical Urine Reagent Strips | 2 | 2 | - | - | - | - |
| NDC Pro Advantage | 1 | 1 | - | - | - | - |
| Roche Chemstrip 101 | 3 | 3 | - | - | - | - |
| Roche Chemstrips | 27 | 27 | - | - | - | - |
| Roche cobas u 411 | 1 | 1 | - | - | - | - |
| Roche Criterion Analyzer | 3 | 3 | - | - | - | - |
| Roche Urisys | 27 | 27 | - | - | - | - |
| Siemens Clinitek 10 / 100 | 6 | 6 | - | - | - | - |
| Siemens Clinitek 2000 | 1 | 1 | - | - | - | - |
| Siemens Clinitek 50 | 17 | 16 | - | 1 | - | - |
| Siemens Clinitek 500 | 6 | 6 | - | - | - | - |
| Siemens Clinitek Advantus | 13 | 13 | - | - | - | - |
| Siemens Clinitek Atlas | 1 | 1 | - | - | - | - |
| Siemens Clinitek Status / Status+ | 387 | 383 | 2 | 2 | - | - |
| Siemens Multistix Pro | 4 | 4 | - | - | - | - |
| Siemens Reagent Strips | 127 | 126 | 1 | - | - | - |
| UriScan Reagent Strips | 3 | 3 | - | - | - | - |

URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN

Specimen UA-1

Participant Results

| <u>Method</u> | <u>Labs</u> | <u>Negative</u> | <u>Trace</u> | <u>Small</u> | <u>Moderate</u> | <u>Large</u> | <u>(1+)</u> | <u>(2+)</u> | <u>(3+)</u> | <u>(4+)</u> | <u>(5+)</u> | <u>5 - 25</u> <u>Erv/µL</u> | <u>50 -</u> <u>100</u> <u>Erv/µL</u> | <u>250</u> <u>Erv/µL</u> | <u>±0.03</u> <u>mg/dL</u> | <u>0.06</u> <u>-</u> <u>0.10</u> <u>mg/</u> <u>dL</u> | <u>0.2 -</u> <u>0.5</u> <u>mg/</u> <u>dL</u> | <u>≥ 1.0</u> <u>mg/</u> <u>dL</u> |
|--|-------------|-----------------|--------------|--------------|-----------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------------------------|--|-----------------------------|------------------------------|---|---|---|
| ALL METHODS | 774 | 750 | 17 | - | 1 | - | 1 | 1 | - | - | - | 1 | 1 | - | - | - | 2 | - |
| BTNX Rapid Response Test Strips | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BTNX Rapid Response U120/U500 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Consult Diagnostics Reagent Strips | 5 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Consult Diagnostics Urine Analyzer | 6 | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CTMI CT-120 Urine Analyzer | 6 | 5 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck 120 | 10 | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Germaine Laboratories AimStrip | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Germaine Labs AimStrip Urine Analyzer | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Henry Schein One Step Plus | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Henry Schein Urispec / Urispec Plus | 19 | 18 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - |
| Iris Diagnostics iChem Velocity Strips | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Iris Ichem VELOCITY Urine Chemistry System | 9 | 9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| McKesson 10SG Reagent Strips | 5 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| McKesson 120 Urine Analyzer | 19 | 19 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Medline 120 Urine Analyzer | 4 | 4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Medline Urinalysis Reagent Strips | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Moore Medical Urine Reagent Strips | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| NDC Pro Advantage | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Roche Chemstrip 101 | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Roche Chemstrips | 41 | 40 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Roche cobas u 411 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Roche Criterion Analyzer | 3 | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Roche Urisys | 27 | 26 | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - |
| Siemens Clinitek 10 / 100 | 6 | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 2000 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 50 | 17 | 16 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek 500 | 6 | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek Advantus | 15 | 15 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek Atlas | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Clinitek Status / Status+ | 395 | 383 | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| Siemens Hemacombistix | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Multistix Pro | 4 | 4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Siemens Reagent Strips | 132 | 126 | 4 | - | 1 | - | - | 1 | - | - | - | - | - | - | - | - | - | - |
| UriScan Reagent Strips | 4 | 4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

URINALYSIS DIPSTICK–LEUKOCYTE ESTERASE

Specimen UA-1

| <u>Method</u> | <i>Participant Results</i> | | | | | | | | | | | | |
|--|----------------------------|-----------------|--------------|--------------|-----------------|--------------|-------------|-------------|-------------|-------------|------------------------|-------------------------|--------------------------|
| | <u>Labs</u> | <u>Negative</u> | <u>Trace</u> | <u>Small</u> | <u>Moderate</u> | <u>Large</u> | <u>(1+)</u> | <u>(2+)</u> | <u>(3+)</u> | <u>(4+)</u> | <u>15 or 25 µL</u> | <u>75 or 100 µL</u> | <u>250 or 500 µL</u> |
| ALL METHODS | 780 | 9 | 26 | 225 | 163 | 19 | 139 | 142 | 9 | 2 | 2 | 7 | 37 |
| BTNX Rapid Response Test Strips | 1 | - | 1 | - | - | - | - | - | - | - | - | - | - |
| BTNX Rapid Response U120/U500 | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - |
| Consult Diagnostics Reagent Strips | 5 | 1 | - | - | - | - | 3 | 1 | - | - | - | - | - |
| Consult Diagnostics Urine Analyzer | 6 | - | - | - | - | - | 1 | 4 | - | - | 1 | - | - |
| CTMI CT-120 Urine Analyzer | 7 | - | 1 | - | - | - | 3 | 2 | - | - | 1 | - | - |
| Diagnostic Test Group Clarity Urocheck | 3 | - | - | - | - | - | - | 3 | - | - | - | - | - |
| Diagnostic Test Group Clarity Urocheck 120 | 10 | 1 | - | - | - | - | 2 | 7 | - | - | - | - | - |
| Germaine Laboratories AimStrip | 2 | 1 | - | - | - | - | 1 | - | - | - | - | - | - |
| Germaine Labs AimStrip Urine Analyzer | 2 | - | - | - | - | - | 1 | 1 | - | - | - | - | - |
| Henry Schein One Step Plus | 2 | - | - | - | - | 1 | - | - | - | - | - | - | 1 |
| Henry Schein Urispec / Urispec Plus | 18 | - | - | 1 | - | - | - | - | 1 | - | - | 1 | 15 |
| Iris Diagnostics iChem Velocity Strips | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 |
| Iris iChem VELOCITY Urine Chemistry System | 9 | - | - | - | - | 8 | - | - | 1 | - | - | - | - |
| McKesson 10SG Reagent Strips | 5 | - | - | 1 | - | - | - | 2 | - | - | - | 1 | 1 |
| McKesson 120 Urine Analyzer | 19 | 2 | 1 | - | - | - | 8 | 7 | - | - | - | 1 | - |
| Medline 120 Urine Analyzer | 4 | - | - | - | - | - | 2 | 1 | 1 | - | - | - | - |
| Medline Urinalysis Reagent Strips | 3 | - | - | - | - | - | 2 | 1 | - | - | - | - | - |
| Moore Medical Urine Reagent Strips | 2 | - | - | - | - | - | 1 | 1 | - | - | - | - | - |
| NDC Pro Advantage | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - |
| Roche Chemstrip 101 | 3 | - | - | - | - | - | - | 3 | - | - | - | - | - |
| Roche Chemstrips | 41 | - | - | 1 | - | 1 | - | 39 | - | - | - | - | - |
| Roche cobas u 411 | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 |
| Roche Criterion Analyzer | 3 | - | - | - | - | - | - | 2 | - | - | - | - | 1 |
| Roche Urisys | 27 | - | - | - | - | - | 1 | 10 | - | 1 | - | - | 15 |
| Siemens Clinitek 10 / 100 | 6 | - | 1 | 3 | - | - | 2 | - | - | - | - | - | - |
| Siemens Clinitek 2000 | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - |
| Siemens Clinitek 50 | 17 | - | - | 8 | - | 1 | 8 | - | - | - | - | - | - |
| Siemens Clinitek 500 | 6 | - | - | 3 | - | - | 3 | - | - | - | - | - | - |
| Siemens Clinitek Advantus | 15 | - | - | 6 | - | - | 9 | - | - | - | - | - | - |
| Siemens Clinitek Atlas | 2 | - | - | - | 1 | - | - | - | 1 | - | - | - | - |
| Siemens Clinitek Status / Status+ | 395 | 2 | 11 | 167 | 100 | 5 | 72 | 35 | 3 | - | - | - | - |
| Siemens Multistix Pro | 4 | - | - | 2 | 1 | - | 1 | - | - | - | - | - | - |
| Siemens Reagent Strips | 130 | 1 | 9 | 25 | 58 | 2 | 14 | 20 | - | 1 | - | - | - |
| Siemens Uristix | 10 | - | - | 5 | 3 | - | - | 2 | - | - | - | - | - |
| UriScan Reagent Strips | 4 | 1 | - | - | - | - | - | - | 2 | - | - | 1 | - |

URINALYSIS DIPSTICK–NITRITE

Specimen UA-1

Participant Results

| <u>Method</u> | <u>Labs</u> | <u>Negative</u> | <u>Positive</u> |
|--|-------------|-----------------|-----------------|
| ALL METHODS | 782 | 56 | 726 |
| BTNX Rapid Response Test Strips | 1 | 1 | - |
| BTNX Rapid Response U120/U500 | 1 | - | 1 |
| Consult Diagnostics Reagent Strips | 5 | 1 | 4 |
| Consult Diagnostics Urine Analyzer | 6 | 2 | 4 |
| CTMI CT-120 Urine Analyzer | 6 | 6 | - |
| Diagnostic Test Group Clarity Urocheck | 3 | - | 3 |
| Diagnostic Test Group Clarity Urocheck 120 | 10 | 8 | 2 |
| Germaine Laboratories AimStrip | 2 | 1 | 1 |
| Germaine Labs AimStrip Urine Analyzer | 2 | 1 | 1 |
| Henry Schein One Step Plus | 3 | - | 3 |
| Henry Schein Urispec / Urispec Plus | 18 | 6 | 12 |
| Iris Diagnostics iChem Velocity Strips | 1 | - | 1 |
| Iris Ichem VELOCITY Urine Chemistry System | 9 | - | 9 |
| McKesson 10SG Reagent Strips | 6 | - | 6 |
| McKesson 120 Urine Analyzer | 19 | 11 | 8 |
| Medline 120 Urine Analyzer | 4 | 2 | 2 |
| Medline Urinalysis Reagent Strips | 3 | - | 3 |
| Moore Medical Urine Reagent Strips | 2 | - | 2 |
| NDC Pro Advantage | 1 | 1 | - |
| Roche Chemstrip 101 | 3 | - | 3 |
| Roche Chemstrips | 41 | - | 41 |
| Roche cobas u 411 | 1 | - | 1 |
| Roche Criterion Analyzer | 3 | - | 3 |
| Roche Urisys | 27 | 7 | 20 |
| Siemens Clinitek 10 / 100 | 6 | 1 | 5 |
| Siemens Clinitek 2000 | 1 | - | 1 |
| Siemens Clinitek 50 | 17 | - | 17 |
| Siemens Clinitek 500 | 6 | - | 6 |
| Siemens Clinitek Advantus | 15 | - | 15 |
| Siemens Clinitek Atlas | 2 | - | 2 |
| Siemens Clinitek Status / Status+ | 394 | 4 | 390 |
| Siemens Multistix Pro | 4 | - | 4 |
| Siemens Reagent Strips | 131 | 3 | 128 |
| Siemens Uristix | 10 | - | 10 |
| UriScan Reagent Strips | 4 | 1 | 3 |

URINALYSIS –MICROALBUMIN (dipstick only)

Specimen UA-1

| <u>Method</u> | <u>Labs</u> | <u>Negative</u> | <i>Participant Results</i> | | | | | | | | |
|-------------------------------|-------------|-----------------|----------------------------|----------------|----------------|----------------|----------------|-----------------|-----------------|------------------------|-------------------------|
| | | | <u>10 mg/L</u> | <u>20 mg/L</u> | <u>30 mg/L</u> | <u>50 mg/L</u> | <u>80 mg/L</u> | <u>100 mg/L</u> | <u>150 mg/L</u> | <u>+ (4 - 8 mg/dL)</u> | <u>++ (>8 mg/dL)</u> |
| ALL METHODS | 60 | 6 | 43 | 9 | - | - | 1 | 1 | - | - | - |
| BTNX Rapid Response | | | | | | | | | | | |
| Microalb/Crea | 1 | 1 | - | - | - | - | - | - | - | - | - |
| Roche Micral - 1 minute | 14 | 4 | 1 | 9 | - | - | - | - | - | - | - |
| Siemens Clinitek Microalbumin | 44 | - | 42 | - | - | - | 1 | 1 | - | - | - |

URINALYSIS –URINE hCG**Specimen UA-1**

| <u>Method</u> | <i>Participant Results</i> | | |
|--|-----------------------------------|------------------------|------------------------|
| | <u>Labs</u> | <u>Positive</u> | <u>Negative</u> |
| ALL METHODS | 444 | - | 444 |
| Alere Aceava hCG-Urine | 2 | - | 2 |
| Alere Clearview 25 hCG Combo | 1 | - | 1 |
| Alere Clearview hCG Cassette | 5 | - | 5 |
| Alere Clearview hCG Combo II | 1 | - | 1 |
| Alfa Scientific Instant View | 4 | - | 4 |
| Beckman Coulter ICON 25 hCG | 21 | - | 21 |
| Beckman Coulter ICON II | 9 | - | 9 |
| BioSign hCG | 1 | - | 1 |
| BTNX Rapid Response hCG | 2 | - | 2 |
| Cardinal Health SP Brand combo | 26 | - | 26 |
| Cardinal Hlth SPBrand-cassette | 2 | - | 2 |
| Clarity Diagnostics hCG strip/cassette | 10 | - | 10 |
| CONSULT diagnostics hCG Cassette | 55 | - | 55 |
| CONSULT diagnostics hCG Combo | 12 | - | 12 |
| CONSULT diagnostics hCG Dipstick | 28 | - | 28 |
| Consult Diagnostics Reagent Strips | 2 | - | 2 |
| Germaine Laboratories AimStrip Pregnancy | 1 | - | 1 |
| Henry Schein One Step | 59 | - | 59 |
| Immunostics Cept-D | 2 | - | 2 |
| Immunostics hCG Detector-urine | 2 | - | 2 |
| McKesson hCG Combo Cassette | 4 | - | 4 |
| McKesson hCG Urine Cassette | 7 | - | 7 |
| MediChoice hCG Combi Cassette | 8 | - | 8 |
| MediChoice hCG Urine Cassette | 1 | - | 1 |
| Medline hCG Combo Test Cassette | 3 | - | 3 |
| Medline hCG Test Cassette | 5 | - | 5 |
| Medline hCG Test Strip | 1 | - | 1 |
| Moore Medical hCG Urine | 4 | - | 4 |
| NDC Pro Advantage | 2 | - | 2 |
| PEP (Lab Supply) HCG | 2 | - | 2 |
| Polymedco Poly stat hCG | 2 | - | 2 |
| Quidel QuickVue One-Step Combo | 22 | - | 22 |
| Quidel QuickVue One-Step Urine | 46 | - | 46 |
| Quidel QuickVue+ One-Step Combo | 23 | - | 23 |
| Quidel Sofia hCG | 2 | - | 2 |
| RefuAH hCG Dipstick | 7 | - | 7 |
| Sekisui OSOM - Urine Test | 1 | - | 1 |
| Sekisui OSOM Card Pregnancy | 9 | - | 9 |

URINALYSIS –URINE hCG (cont'd)

Specimen UA-1

| <u>Method</u> | <i>Participant Results</i> | | |
|-----------------------------------|----------------------------|-----------------|-----------------|
| | <u>Labs</u> | <u>Positive</u> | <u>Negative</u> |
| Sekisui OSOM hCG Combo Test | 2 | - | 2 |
| Siemens Clinitek Status / Status+ | 10 | - | 10 |
| Stanbio QuPID | 10 | - | 10 |
| Stanbio QuPID Plus | 2 | - | 2 |
| Stanbio TRUE hCG | 8 | - | 8 |
| Sure-Vue hCG - 25mIU | 1 | - | 1 |
| Sure-Vue hCG-STAT | 6 | - | 6 |

FECAL OCCULT BLOOD

| <u>Method</u> | Specimen OC-1 | | | Specimen OC-2 | | |
|------------------------------|----------------------|-----------------|-----------------|----------------------|-----------------|-----------------|
| | <u>Labs</u> | <u>Positive</u> | <u>Negative</u> | <u>Labs</u> | <u>Positive</u> | <u>Negative</u> |
| ALL METHODS | 306 | 300 | 6 | 304 | 6 | 298 |
| Beckman Coulter Hemocult ICT | 50 | 47 | 3 | 49 | 3 | 46 |
| Guaiac (slide) Test | 177 | 175 | 2 | 176 | 3 | 173 |
| Hemosure iFOB | 38 | 38 | - | 38 | - | 38 |
| Other Immunochemical FOB kit | 18 | 18 | - | 18 | - | 18 |
| Polymedco OC Auto Micro 80 | 4 | 4 | - | 4 | - | 4 |
| Polymedco OC-Light iFOB | 10 | 10 | - | 10 | - | 10 |
| Quidel QuickVue iFOB | 6 | 6 | - | 6 | - | 6 |

2018 M1
Urine Sediment Identification
SPECIMENS US-1 AND US-2

CASE HISTORY:

A 66 year old female with multiple sclerosis presented to her internist for a wellness checkup. The patient is non-ambulatory due to paralysis, and her adult grandson recently moved in to assist with activities of daily living. For convenience, they collected a urine specimen at home in the morning and brought it to the office visit in the afternoon. Routine urinalysis was performed, and results appear below.

Color = Yellow
Appearance = Hazy

Dipstick results:

Specific Gravity = 1.020
pH = 8.5
Protein = Trace
Glucose = Negative
Ketones = Negative
Bilirubin = Negative
Urobilinogen = 4.0 mg/dL
Blood = Trace
Leukocyte Esterase = Negative
Nitrite = Positive

This specimen has been contaminated with fecal matter and should be recollected.

Some patients have difficulty collecting a clean catch midstream urine specimen. Bacteria are introduced into the specimen from normal skin flora by improper collection, and from stool contamination. In this patient, a combination of both sources contributed to the contaminated sample. Fecal contamination can especially be a problem if the patient is a child, elderly, physically disabled, cognitively impaired, or incontinent. Sometimes caregivers will submit a contaminated urine specimen that has been collected from a bedpan. If a large amount of fecal contamination is present, the urine will often have a brownish yellow color and turbid appearance. Microscopically, there will be a variety of formed elements in bizarre shapes and sizes, including plant cells, fibers, yeast cells, and many bacteria. The contaminated specimen should be rejected and recollected. Rarely, feces in the urine may be due to a fistula, which is an abnormal connection between the colon and the urinary tract. A fistula is a serious pathologic condition that causes fecal matter to appear in the urine repeatedly and consistently.

Ideally, urine specimens should be delivered to the laboratory promptly and analyzed within 2 hours of collection. If the urinalysis cannot be performed while the specimen is fresh, the urine should be refrigerated as soon as possible after collection. Urinalysis can be performed on refrigerated urine up to 24 hours after collection, but the specimen should be allowed to come back to room temperature before testing for accurate chemical/dipstick reactions.

In this patient, the pH may be falsely increased due to improper storage of the specimen. Causes of pH greater than 8.0 include improper storage conditions, adulteration with an alkaline agent, or a highly alkaline medication excreted by the kidneys. The urobilinogen result is falsely elevated due to fecal contamination because urobilinogen is excreted in the stool. Blood results may be falsely positive due to substances in the stool that interfere with the reagent strip pad. Nitrite is often positive in urinary tract infections, however in this case, the negative leukocyte esterase and lack of white blood cells in the microscopic exam indicate this nitrite result is a false positive. It takes 4 hours for bacteria to reduce nitrate to nitrite, and this specimen sat for a long time between collection and analysis.

Urine Sediment Identification

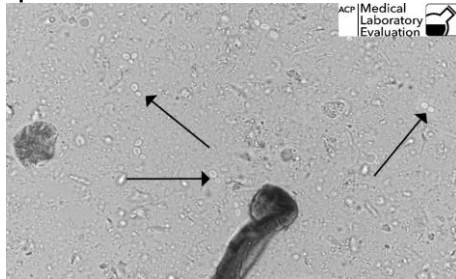
Specimen US-1



| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|------------------------------|-------------|----------------|--------------------|
| Fiber/fecal contamination | 339 | 70.92% | Acceptable |
| Identification Unknown refer | 113 | 23.64% | Acceptable |
| Bacteria | 18 | 3.77% | |

The arrows in this photograph point to **fibers from fecal contamination**. The pattern of striations and the dramatic helical structure seen in these fibers would never occur in a urinary cast. The presence of yeast and many bacteria of different types, as well as fibers and other debris, indicate the specimen is probably contaminated. To view another photo of a fiber, see 2009 M3 Specimen US-6.

Specimen US-2



| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Yeast/fungi | 444 | 92.69% | Acceptable |
| Red blood cell (RBC) | 13 | 2.71% | |
| Bacteria | 11 | 2.30% | |

The arrows in this photograph point to **yeast**. Yeast cells are small oval fungi that reproduce by budding and sometimes produce long branching forms called pseudohyphae. Yeast is a part of the normal intestinal flora, in small amounts. In this case, the negative leukocyte esterase test and absence of white blood cells indicate the patient does not have a urinary tract infection. To view another photo of yeast, see 2013 M2 Specimen US-4.

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

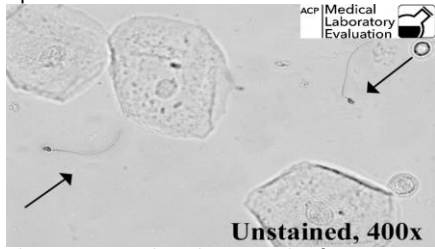
Mundt, L.A, Shanahan, K.: *Graff's Textbook of Routine Urinalysis and Body Fluids, 2nd ed.* Philadelphia: Lippincott Williams & Wilkins, 2011.

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PROVIDER-PERFORMED MICROSCOPY (PPM)

Wet Mount Preparation

Specimen PPM-1

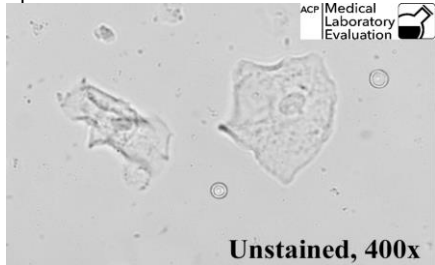


| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Spermatozoa | 488 | 97.60% | Acceptable |
| Trichomonas vaginalis | 4 | 0.80% | |

The arrows in this photograph of a wet mount preparation point to **spermatozoa**. Spermatozoa have small oval heads and long, thin, filamentous tails. Some labs consider sperm to be contaminants and choose not to report their presence at all. However, the laboratory may not have sufficient information about the patient to determine the clinical significance. All findings should be reported so the clinician can make informed decisions in caring for the patient. To view another photo of spermatozoa, see 2014 M3 Specimen PPM-13.

KOH Preparation

Specimen PPM-2



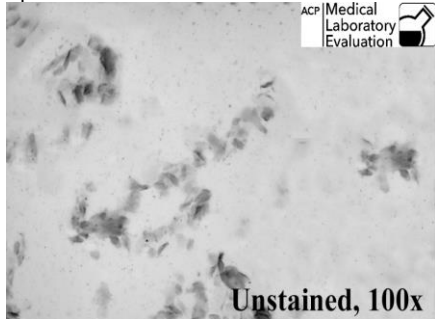
| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-------------------------------|-------------|----------------|--------------------|
| Yeast/fungal elements absent | 446 | 94.69% | Acceptable |
| Yeast/fungal elements present | 25 | 5.31% | |

Yeast and fungal elements are absent in this photograph of a KOH vaginal wet mount. The two circular objects in this photo are red blood cells. Red cells typically dissolve in KOH and may not often be seen in a KOH prep, but the microscopist should be able to distinguish yeast cells from red cells. Red blood cells are always single and frequently have a characteristic donut or inner tube appearance due to their biconcave disc shape, as seen here. Yeast cells are more oval in shape and often are seen in clusters and/or budding. To view a photo of yeast cells in a KOH prep, see 2015 M3 Specimen PPM-14. To view another photo of red blood cells, see 2016 M3 Specimen PPM-13.

PROVIDER-PERFORMED MICROSCOPY (PPM)

Scabies Detection

Specimen PPM-3

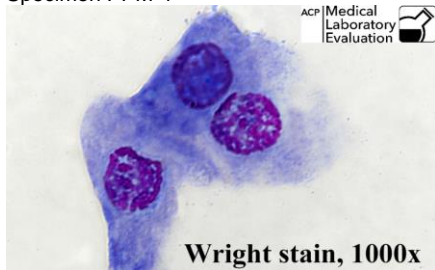


| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Scabies absent | 143 | 89.94% | Acceptable |
| Scabies present | 16 | 10.06% | |

Scabies are absent in this photograph of a skin scrapings preparation. The diagnosis of scabies is often made only by the patient history and examination of the skin. There may be only 10-15 mites on the entire body of an infested person who is otherwise healthy, so a negative test does not rule out the diagnosis of scabies. To view a photo of a scabies mite, see 2017 M1 Specimen PPM-3.

Nasal Smear

Specimen PPM-4



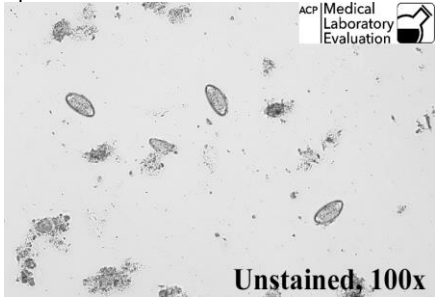
| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Eosinophils absent | 60 | 51.28% | Acceptable |
| Eosinophils present | 57 | 48.72% | |

Eosinophils are absent in this photograph of Wright-stained nasal mucus. Respiratory secretions are examined for leukocytes in order to differentiate allergic conditions from infections. Eosinophils are a specific type of leukocyte (white blood cell) associated with allergic conditions. The purple mononuclear cells shown in this photo are not eosinophils. An eosinophil has a segmented nucleus surrounded by large, round, orange-staining granules that fill the cytoplasm. This gives "eos" a unique bright red-orange color that makes them easy to spot and identify. To view a photo of eosinophils in a nasal smear, see 2017 M2 Specimen PPM-10. **Specimen PPM-4 was graded by 100% referee consensus.**

PROVIDER-PERFORMED MICROSCOPY (PPM)

Pinworm Preparation

Specimen PPM-5

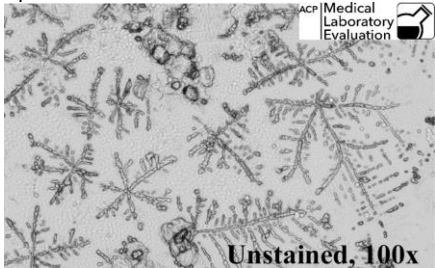


| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Pinworms/eggs present | 212 | 99.53% | Acceptable |
| Pinworms/eggs absent | 1 | 0.47% | |

Pinworm eggs are present in this photograph of a perianal pinworm preparation. To view another photo of pinworm eggs, see 2016 M1 Specimen PPM-5.

Vaginal Fluid Preparation

Specimen PPM-6



| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Ferning present | 183 | 98.92% | Acceptable |
| Ferning absent | 2 | 1.08% | |

Ferning is present in this photograph of air-dried vaginal secretions. The fern test is used to detect premature rupture of the membranes surrounding the fetus during pregnancy, which is a serious pathological condition. When amniotic fluid is dried on a microscope slide, the sodium chloride (salt) in crystallizes to form a plant-like pattern. Normal vaginal secretions and urine do not produce ferning. Cervical mucus, which is normally absent during pregnancy, can display fern-like crystallization, and may lead to a false positive interpretation. Careful examination of the slide, however, permits easy differentiation of these substances. Crystallization of amniotic liquid involves the entire smear, unlike the crystallization of cervical mucus which occurs in linear bands due to its string-like nature. To view another positive fern test, see 2015 M1 Specimen PPM-6.

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