

# **MEDICAL LABORATORY EVALUATION**

## **PARTICIPANT SUMMARY**

**2 • 0 • 1 • 4**

Hematology, Coagulation,  
Blood Bank, Urinalysis, PPM  
MLE-M2



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

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|                                                  |    |
|--------------------------------------------------|----|
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|--------------------------------------------------|----|

# EVALUATION CRITERIA

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

## Qualitative

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

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

## Quantitative

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

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

\*Whichever is greater

## HEMOCUE HEMATOLOGY–HEMOGLOBIN (g/dL)

| Specimen HQ-3     |             |             |           |           |               |              | Specimen HQ-4 |             |           |           |               |              |
|-------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| HemoCue           | 37          | 15.03       | 0.72      | 4.8       | 15.0          | 13.9 - 16.1  | 37            | 12.09       | 0.57      | 4.7       | 12.0          | 11.2 - 13.0  |

## HEMOCUE HEMATOLOGY–GLUCOSE (mg/dL)

| Specimen HQ-3         |             |             |           |           |               |              | Specimen HQ-4 |             |           |           |               |              |
|-----------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All HemoCue Methods   | 33          | 265.4       | 48.5      | 18.3      | 289           | 212 - 319    | 33            | 82.8        | 7.7       | 9.3       | 82            | 66 - 100     |
| HemoCue Glucose 201/+ | 32          | 265.4       | 49.2      | 18.6      | 291           | 212 - 319    | 32            | 83.0        | 7.5       | 9.1       | 82            | 66 - 100     |

## SEDIMENTATION RATE (MM/HR)

| Specimen ES-3                 |             |             |           |           |               |              | Specimen ES-4 |             |           |           |               |              |
|-------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>             | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                    | 193         | 45.2        | 12.3      | 27.3      | 42            | 8 - 83       | 191           | 7.0         | 2.2       | 31.6      | 7             | 0 - 14       |
| All HiChem Methods            | 10          | 69.6        | 8.4       | 12.1      | 69            | 44 - 95      | 10            | 6.9         | 3.0       | 42.9      | 7             | 0 - 16       |
| All Vital Diagnostics Methods | 22          | 56.5        | 7.2       | 12.7      | 56            | 34 - 79      | 22            | 6.8         | 1.1       | 15.4      | 7             | 3 - 10       |
| HiChem Mini-Ves               | 10          | 69.6        | 8.4       | 12.1      | 69            | 44 - 95      | 10            | 6.9         | 3.0       | 42.9      | 7             | 0 - 16       |
| Polymedco Sedimat             | 10          | 44.1        | 7.1       | 16.1      | 45            | 22 - 66      | 10            | 5.6         | 2.5       | 45.5      | 6             | 0 - 14       |
| Streck ESR-Auto Plus          | 13          | 64.5        | 5.7       | 8.8       | 64            | 47 - 82      | 12            | 9.8         | 0.6       | 5.9       | 10            | 8 - 12       |
| Vital Diagnostics Excyte M/10 | 19          | 56.5        | 6.3       | 11.2      | 55            | 37 - 76      | 19            | 6.9         | 1.1       | 16.0      | 7             | 3 - 11       |
| Westergren - diluted          | 110         | 39.7        | 7.1       | 17.9      | 39            | 18 - 62      | 111           | 6.8         | 2.3       | 34.0      | 7             | 0 - 14       |
| Westergren - undiluted        | 15          | 41.3        | 8.2       | 19.9      | 40            | 16 - 67      | 16            | 7.7         | 2.3       | 30.3      | 8             | 0 - 15       |

## SEDIMAT SEDIMENTATION RATE (MM/HR)

| Specimen MAT-3       |             |             |           |           |               |              | Specimen MAT-4 |             |           |           |               |              |
|----------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>    | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| Polymedco Sedimat 15 | 16          | 49.1        | 11.9      | 24.2      | 50            | 13 - 85      | 16             | 2.1         | 1.3       | 65.0      | 2             | 0 - 7        |

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

| Specimen CL-6                   |             |             |           |           |               |              | Specimen CL-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 31          | 21.50       | 0.55      | 2.5       | 21.5          | 18.2 - 24.8  | 31            | 3.24        | 0.22      | 6.7       | 3.2           | 2.7 - 3.8    |
| All Abbott Cell-Dyn Instruments | 30          | 21.45       | 0.50      | 2.3       | 21.5          | 18.2 - 24.7  | 30            | 3.24        | 0.22      | 6.8       | 3.2           | 2.7 - 3.8    |
| Abbott Cell-Dyn 3200            | 11          | 21.45       | 0.53      | 2.5       | 21.4          | 18.2 - 24.7  | 11            | 3.28        | 0.17      | 5.1       | 3.3           | 2.7 - 3.8    |
| Abbott Cell-Dyn Ruby            | 14          | 21.55       | 0.44      | 2.0       | 21.6          | 18.3 - 24.8  | 14            | 3.29        | 0.21      | 6.4       | 3.3           | 2.7 - 3.8    |
| Specimen CL-8                   |             |             |           |           |               |              | Specimen CL-9 |             |           |           |               |              |
| All Method                      | 31          | 7.77        | 0.24      | 3.1       | 7.8           | 6.6 - 9.0    | 31            | 3.21        | 0.12      | 3.7       | 3.2           | 2.7 - 3.7    |
| All Abbott Cell-Dyn Instruments | 30          | 7.77        | 0.25      | 3.2       | 7.8           | 6.6 - 9.0    | 30            | 3.21        | 0.12      | 3.8       | 3.2           | 2.7 - 3.7    |
| Abbott Cell-Dyn 3200            | 11          | 7.88        | 0.19      | 2.4       | 7.8           | 6.6 - 9.1    | 11            | 3.24        | 0.05      | 1.6       | 3.2           | 2.7 - 3.8    |
| Abbott Cell-Dyn Ruby            | 14          | 7.80        | 0.18      | 2.4       | 7.8           | 6.6 - 9.0    | 14            | 3.24        | 0.13      | 4.0       | 3.2           | 2.7 - 3.8    |
| Specimen CL-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 31          | 21.20       | 0.65      | 3.1       | 21.2          | 18.0 - 24.4  |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments | 30          | 21.16       | 0.63      | 3.0       | 21.2          | 17.9 - 24.4  |               |             |           |           |               |              |
| Abbott Cell-Dyn 3200            | 11          | 21.18       | 0.51      | 2.4       | 20.9          | 18.0 - 24.4  |               |             |           |           |               |              |
| Abbott Cell-Dyn Ruby            | 14          | 21.34       | 0.62      | 2.9       | 21.5          | 18.1 - 24.6  |               |             |           |           |               |              |

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

| Specimen CL-6                   |             |             |           |           |               |              | Specimen CL-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 31          | 5.287       | 0.086     | 1.6       | 5.27          | 4.96 - 5.61  | 31            | 2.237       | 0.041     | 1.8       | 2.24          | 2.10 - 2.38  |
| All Abbott Cell-Dyn Instruments | 30          | 5.291       | 0.084     | 1.6       | 5.27          | 4.97 - 5.61  | 30            | 2.238       | 0.041     | 1.8       | 2.24          | 2.10 - 2.38  |
| Abbott Cell-Dyn 3200            | 11          | 5.252       | 0.078     | 1.5       | 5.24          | 4.93 - 5.57  | 11            | 2.239       | 0.038     | 1.7       | 2.23          | 2.10 - 2.38  |
| Abbott Cell-Dyn Ruby            | 14          | 5.342       | 0.073     | 1.4       | 5.36          | 5.02 - 5.67  | 14            | 2.242       | 0.041     | 1.8       | 2.25          | 2.10 - 2.38  |
| Specimen CL-8                   |             |             |           |           |               |              | Specimen CL-9 |             |           |           |               |              |
| All Method                      | 31          | 4.587       | 0.077     | 1.7       | 4.59          | 4.31 - 4.87  | 31            | 2.240       | 0.042     | 1.9       | 2.23          | 2.10 - 2.38  |
| All Abbott Cell-Dyn Instruments | 30          | 4.591       | 0.074     | 1.6       | 4.60          | 4.31 - 4.87  | 30            | 2.243       | 0.040     | 1.8       | 2.24          | 2.10 - 2.38  |
| Abbott Cell-Dyn 3200            | 11          | 4.575       | 0.076     | 1.7       | 4.59          | 4.30 - 4.85  | 11            | 2.247       | 0.026     | 1.1       | 2.23          | 2.11 - 2.39  |
| Abbott Cell-Dyn Ruby            | 14          | 4.619       | 0.061     | 1.3       | 4.62          | 4.34 - 4.90  | 14            | 2.251       | 0.039     | 1.7       | 2.26          | 2.11 - 2.39  |
| Specimen CL-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 31          | 5.283       | 0.109     | 2.1       | 5.27          | 4.96 - 5.61  |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments | 30          | 5.288       | 0.108     | 2.0       | 5.28          | 4.97 - 5.61  |               |             |           |           |               |              |
| Abbott Cell-Dyn 3200            | 11          | 5.260       | 0.117     | 2.2       | 5.24          | 4.94 - 5.58  |               |             |           |           |               |              |
| Abbott Cell-Dyn Ruby            | 14          | 5.337       | 0.093     | 1.7       | 5.35          | 5.01 - 5.66  |               |             |           |           |               |              |

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

| Specimen CL-6                   |             |             |           |           |               |              | Specimen CL-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 31          | 16.95       | 0.37      | 2.2       | 16.9          | 15.7 - 18.2  | 30            | 5.59        | 0.14      | 2.5       | 5.6           | 5.1 - 6.0    |
| All Abbott Cell-Dyn Instruments | 30          | 16.97       | 0.37      | 2.2       | 17.0          | 15.7 - 18.2  | 29            | 5.59        | 0.14      | 2.5       | 5.6           | 5.2 - 6.0    |
| Abbott Cell-Dyn 3200            | 11          | 16.87       | 0.46      | 2.7       | 16.9          | 15.6 - 18.1  | 10            | 5.64        | 0.16      | 2.9       | 5.7           | 5.2 - 6.1    |
| Abbott Cell-Dyn Ruby            | 14          | 17.03       | 0.33      | 1.9       | 17.0          | 15.8 - 18.3  | 14            | 5.55        | 0.12      | 2.2       | 5.5           | 5.1 - 6.0    |
| Specimen CL-8                   |             |             |           |           |               |              | Specimen CL-9 |             |           |           |               |              |
| All Method                      | 31          | 13.31       | 0.25      | 1.9       | 13.3          | 12.3 - 14.3  | 31            | 5.56        | 0.16      | 3.0       | 5.5           | 5.1 - 6.0    |
| All Abbott Cell-Dyn Instruments | 30          | 13.31       | 0.25      | 1.9       | 13.4          | 12.3 - 14.3  | 30            | 5.56        | 0.17      | 3.0       | 5.6           | 5.1 - 6.0    |
| Abbott Cell-Dyn 3200            | 11          | 13.30       | 0.30      | 2.2       | 13.4          | 12.3 - 14.3  | 11            | 5.63        | 0.18      | 3.2       | 5.7           | 5.2 - 6.1    |
| Abbott Cell-Dyn Ruby            | 14          | 13.32       | 0.25      | 1.9       | 13.4          | 12.3 - 14.3  | 14            | 5.50        | 0.17      | 3.0       | 5.5           | 5.1 - 5.9    |
| Specimen CL-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 30          | 16.85       | 0.36      | 2.1       | 16.8          | 15.6 - 18.1  |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments | 29          | 16.87       | 0.36      | 2.1       | 16.8          | 15.6 - 18.1  |               |             |           |           |               |              |
| Abbott Cell-Dyn 3200            | 11          | 16.82       | 0.37      | 2.2       | 16.8          | 15.6 - 18.0  |               |             |           |           |               |              |
| Abbott Cell-Dyn Ruby            | 13          | 16.96       | 0.35      | 2.0       | 16.9          | 15.7 - 18.2  |               |             |           |           |               |              |

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

| Specimen CL-6                   |             |             |           |           |               |              | Specimen CL-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 31          | 45.39       | 3.10      | 6.8       | 44.5          | 42.6 - 48.2  | 31            | 15.78       | 0.98      | 6.2       | 15.4          | 14.8 - 16.8  |
| All Abbott Cell-Dyn Instruments | 25          | 43.96       | 0.91      | 2.1       | 44.1          | 41.3 - 46.7  | 25            | 15.35       | 0.41      | 2.7       | 15.3          | 14.4 - 16.3  |
| Abbott Cell-Dyn 3200            | 11          | 43.66       | 0.85      | 2.0       | 43.7          | 41.0 - 46.3  | 11            | 15.45       | 0.42      | 2.7       | 15.4          | 14.5 - 16.4  |
| Abbott Cell-Dyn Ruby            | 14          | 44.20       | 0.91      | 2.1       | 44.5          | 41.5 - 46.9  | 14            | 15.27       | 0.40      | 2.6       | 15.3          | 14.3 - 16.2  |
| Specimen CL-8                   |             |             |           |           |               |              | Specimen CL-9 |             |           |           |               |              |
| All Method                      | 31          | 37.71       | 2.28      | 6.0       | 37.1          | 35.4 - 40.0  | 31            | 15.78       | 0.86      | 5.5       | 15.5          | 14.8 - 16.8  |
| All Abbott Cell-Dyn Instruments | 25          | 36.70       | 0.91      | 2.5       | 36.5          | 34.4 - 39.0  | 25            | 15.40       | 0.29      | 1.9       | 15.4          | 14.4 - 16.4  |
| Abbott Cell-Dyn 3200            | 11          | 36.72       | 0.80      | 2.2       | 36.5          | 34.5 - 39.0  | 11            | 15.45       | 0.29      | 1.9       | 15.4          | 14.5 - 16.4  |
| Abbott Cell-Dyn Ruby            | 14          | 36.69       | 1.01      | 2.8       | 36.4          | 34.4 - 38.9  | 14            | 15.35       | 0.28      | 1.9       | 15.3          | 14.4 - 16.3  |
| Specimen CL-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 31          | 45.43       | 2.94      | 6.5       | 44.3          | 42.7 - 48.2  |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments | 25          | 44.11       | 1.06      | 2.4       | 43.8          | 41.4 - 46.8  |               |             |           |           |               |              |
| Abbott Cell-Dyn 3200            | 11          | 43.90       | 0.82      | 1.9       | 43.7          | 41.2 - 46.6  |               |             |           |           |               |              |
| Abbott Cell-Dyn Ruby            | 14          | 44.27       | 1.22      | 2.8       | 43.9          | 41.6 - 47.0  |               |             |           |           |               |              |

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

| Specimen CL-6                   |             |             |           |           |               |              | Specimen CL-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 31          | 506.8       | 31.5      | 6.2       | 506           | 380 - 634    | 31            | 80.6        | 6.9       | 8.6       | 81            | 60 - 101     |
| All Abbott Cell-Dyn Instruments | 30          | 509.8       | 27.2      | 5.3       | 507           | 382 - 638    | 30            | 80.5        | 7.0       | 8.7       | 80            | 60 - 101     |
| Abbott Cell-Dyn 3200            | 11          | 517.5       | 24.9      | 4.8       | 516           | 388 - 647    | 11            | 80.2        | 7.2       | 9.0       | 81            | 60 - 101     |
| Abbott Cell-Dyn Ruby            | 14          | 504.5       | 31.9      | 6.3       | 502           | 378 - 631    | 14            | 78.4        | 5.9       | 7.5       | 78            | 58 - 99      |
| Specimen CL-8                   |             |             |           |           |               |              | Specimen CL-9 |             |           |           |               |              |
| All Method                      | 31          | 264.9       | 18.7      | 7.0       | 262           | 198 - 332    | 31            | 80.1        | 7.2       | 9.0       | 79            | 60 - 101     |
| All Abbott Cell-Dyn Instruments | 30          | 266.0       | 17.8      | 6.7       | 262           | 199 - 333    | 30            | 79.9        | 7.3       | 9.1       | 79            | 59 - 100     |
| Abbott Cell-Dyn 3200            | 11          | 273.6       | 17.9      | 6.5       | 264           | 205 - 343    | 11            | 79.9        | 7.7       | 9.7       | 79            | 59 - 100     |
| Abbott Cell-Dyn Ruby            | 14          | 261.9       | 17.9      | 6.8       | 261           | 196 - 328    | 14            | 77.3        | 5.8       | 7.5       | 77            | 57 - 97      |
| Specimen CL-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 31          | 508.2       | 34.9      | 6.9       | 498           | 381 - 636    |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments | 30          | 511.3       | 30.8      | 6.0       | 500           | 383 - 640    |               |             |           |           |               |              |
| Abbott Cell-Dyn 3200            | 11          | 517.7       | 29.0      | 5.6       | 505           | 388 - 648    |               |             |           |           |               |              |
| Abbott Cell-Dyn Ruby            | 14          | 509.4       | 37.3      | 7.3       | 498           | 382 - 637    |               |             |           |           |               |              |

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

| Specimen CL-6                   |             |             |           |           |               |              | Specimen CL-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 31          | 75.59       | 0.80      | 1.1       | 75.6          | 73.1 - 78.1  | 31            | 50.61       | 1.48      | 2.9       | 50.4          | 46.1 - 55.1  |
| All Abbott Cell-Dyn Instruments | 30          | 75.55       | 0.78      | 1.0       | 75.5          | 73.2 - 78.0  | 30            | 50.61       | 1.50      | 3.0       | 50.3          | 46.0 - 55.2  |
| Abbott Cell-Dyn 3200            | 11          | 75.74       | 0.85      | 1.1       | 75.8          | 73.2 - 78.3  | 11            | 49.75       | 1.01      | 2.0       | 49.8          | 46.7 - 52.8  |
| Abbott Cell-Dyn Ruby            | 14          | 75.31       | 0.80      | 1.1       | 75.3          | 72.9 - 77.8  | 14            | 51.32       | 1.64      | 3.2       | 51.4          | 46.3 - 56.3  |
| Specimen CL-8                   |             |             |           |           |               |              | Specimen CL-9 |             |           |           |               |              |
| All Method                      | 31          | 64.03       | 0.90      | 1.4       | 64.1          | 61.3 - 66.8  | 31            | 49.91       | 1.26      | 2.5       | 49.6          | 46.1 - 53.7  |
| All Abbott Cell-Dyn Instruments | 30          | 63.96       | 0.83      | 1.3       | 64.1          | 61.4 - 66.5  | 30            | 49.82       | 1.18      | 2.4       | 49.6          | 46.2 - 53.4  |
| Abbott Cell-Dyn 3200            | 11          | 63.50       | 0.87      | 1.4       | 63.6          | 60.9 - 66.1  | 11            | 49.27       | 1.18      | 2.4       | 48.9          | 45.7 - 52.9  |
| Abbott Cell-Dyn Ruby            | 14          | 64.18       | 0.54      | 0.8       | 64.1          | 62.5 - 65.8  | 14            | 49.77       | 0.65      | 1.3       | 49.7          | 47.8 - 51.8  |
| Specimen CL-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 31          | 75.67       | 0.80      | 1.1       | 75.5          | 73.2 - 78.1  |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments | 30          | 75.64       | 0.80      | 1.1       | 75.5          | 73.2 - 78.1  |               |             |           |           |               |              |
| Abbott Cell-Dyn 3200            | 11          | 75.98       | 0.96      | 1.3       | 76.1          | 73.0 - 78.9  |               |             |           |           |               |              |
| Abbott Cell-Dyn Ruby            | 14          | 75.52       | 0.58      | 0.8       | 75.4          | 73.7 - 77.3  |               |             |           |           |               |              |

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

| Specimen CL-6                   |             |             |           |           |               |              | Specimen CL-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 31          | 16.36       | 0.87      | 5.3       | 16.5          | 13.7 - 19.0  | 31            | 39.25       | 2.35      | 6.0       | 39.9          | 32.2 - 46.4  |
| All Abbott Cell-Dyn Instruments | 30          | 16.39       | 0.87      | 5.3       | 16.5          | 13.7 - 19.0  | 30            | 39.31       | 2.37      | 6.0       | 40.0          | 32.2 - 46.5  |
| Abbott Cell-Dyn 3200            | 11          | 16.12       | 1.07      | 6.6       | 15.9          | 12.9 - 19.4  | 11            | 39.46       | 2.55      | 6.5       | 40.2          | 31.8 - 47.2  |
| Abbott Cell-Dyn Ruby            | 14          | 16.59       | 0.77      | 4.6       | 17.0          | 14.2 - 18.9  | 14            | 38.71       | 2.46      | 6.3       | 38.5          | 31.3 - 46.1  |
| Specimen CL-8                   |             |             |           |           |               |              | Specimen CL-9 |             |           |           |               |              |
| All Method                      | 31          | 26.34       | 1.04      | 3.9       | 26.5          | 23.2 - 29.5  | 31            | 39.74       | 2.16      | 5.4       | 40.4          | 33.2 - 46.3  |
| All Abbott Cell-Dyn Instruments | 30          | 26.40       | 1.00      | 3.8       | 26.6          | 23.4 - 29.4  | 30            | 39.87       | 2.07      | 5.2       | 40.5          | 33.6 - 46.1  |
| Abbott Cell-Dyn 3200            | 11          | 26.92       | 1.07      | 4.0       | 27.1          | 23.7 - 30.2  | 11            | 40.79       | 1.54      | 3.8       | 40.7          | 36.1 - 45.5  |
| Abbott Cell-Dyn Ruby            | 14          | 26.21       | 0.74      | 2.8       | 26.3          | 23.9 - 28.5  | 14            | 39.17       | 2.19      | 5.6       | 39.7          | 32.6 - 45.8  |
| Specimen CL-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 31          | 16.19       | 0.97      | 6.0       | 16.2          | 13.2 - 19.1  |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments | 30          | 16.22       | 0.97      | 6.0       | 16.2          | 13.3 - 19.2  |               |             |           |           |               |              |
| Abbott Cell-Dyn 3200            | 11          | 15.75       | 1.15      | 7.3       | 15.2          | 12.3 - 19.3  |               |             |           |           |               |              |
| Abbott Cell-Dyn Ruby            | 14          | 16.26       | 0.68      | 4.2       | 16.2          | 14.2 - 18.3  |               |             |           |           |               |              |

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

| Specimen CL-6                   |             |             |           |           |               |              | Specimen CL-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 31          | 3.38        | 0.37      | 11.0      | 3.4           | 2.2 - 4.5    | 31            | 6.77        | 1.40      | 20.7      | 6.7           | 2.5 - 11.0   |
| All Abbott Cell-Dyn Instruments | 30          | 3.38        | 0.38      | 11.2      | 3.4           | 2.2 - 4.6    | 30            | 6.74        | 1.42      | 21.0      | 6.7           | 2.4 - 11.0   |
| Abbott Cell-Dyn 3200            | 11          | 3.46        | 0.53      | 15.3      | 3.5           | 1.8 - 5.1    | 11            | 7.17        | 1.90      | 26.4      | 6.6           | 1.4 - 12.9   |
| Abbott Cell-Dyn Ruby            | 14          | 3.34        | 0.28      | 8.4       | 3.3           | 2.4 - 4.2    | 14            | 6.64        | 1.10      | 16.5      | 7.1           | 3.3 - 10.0   |
| Specimen CL-8                   |             |             |           |           |               |              | Specimen CL-9 |             |           |           |               |              |
| All Method                      | 30          | 4.36        | 0.43      | 9.9       | 4.3           | 3.0 - 5.7    | 31            | 6.75        | 1.40      | 20.8      | 6.6           | 2.5 - 11.0   |
| All Abbott Cell-Dyn Instruments | 29          | 4.35        | 0.43      | 10.0      | 4.3           | 3.0 - 5.7    | 30            | 6.72        | 1.42      | 21.1      | 6.6           | 2.4 - 11.0   |
| Abbott Cell-Dyn 3200            | 11          | 4.26        | 0.40      | 9.5       | 4.3           | 3.0 - 5.5    | 11            | 6.41        | 0.64      | 10.0      | 6.6           | 4.4 - 8.4    |
| Abbott Cell-Dyn Ruby            | 14          | 4.36        | 0.45      | 10.3      | 4.3           | 3.0 - 5.7    | 14            | 7.19        | 1.75      | 24.3      | 6.8           | 1.9 - 12.5   |
| Specimen CL-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 31          | 3.39        | 0.33      | 9.9       | 3.3           | 2.3 - 4.4    |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments | 30          | 3.38        | 0.34      | 10.0      | 3.3           | 2.3 - 4.5    |               |             |           |           |               |              |
| Abbott Cell-Dyn 3200            | 11          | 3.45        | 0.45      | 13.0      | 3.3           | 2.1 - 4.9    |               |             |           |           |               |              |
| Abbott Cell-Dyn Ruby            | 14          | 3.40        | 0.27      | 8.1       | 3.5           | 2.5 - 4.3    |               |             |           |           |               |              |

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

| Specimen CL-6                   |             |             |           |           |               |              | Specimen CL-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 31          | 4.11        | 0.27      | 6.5       | 4.1           | 3.3 - 5.0    | 31            | 2.68        | 0.30      | 11.2      | 2.6           | 1.7 - 3.6    |
| All Abbott Cell-Dyn Instruments | 30          | 4.13        | 0.25      | 6.2       | 4.1           | 3.3 - 4.9    | 30            | 2.68        | 0.31      | 11.4      | 2.6           | 1.7 - 3.6    |
| Abbott Cell-Dyn 3200            | 11          | 4.17        | 0.27      | 6.4       | 4.1           | 3.3 - 5.0    | 11            | 2.71        | 0.27      | 10.1      | 2.6           | 1.8 - 3.6    |
| Abbott Cell-Dyn Ruby            | 14          | 4.09        | 0.28      | 6.8       | 4.1           | 3.2 - 5.0    | 14            | 2.62        | 0.34      | 12.9      | 2.6           | 1.6 - 3.7    |
| Specimen CL-8                   |             |             |           |           |               |              | Specimen CL-9 |             |           |           |               |              |
| All Method                      | 31          | 4.89        | 0.35      | 7.1       | 4.9           | 3.8 - 6.0    | 31            | 2.74        | 0.30      | 10.9      | 2.7           | 1.8 - 3.7    |
| All Abbott Cell-Dyn Instruments | 30          | 4.92        | 0.31      | 6.3       | 4.9           | 3.9 - 5.9    | 30            | 2.75        | 0.30      | 10.8      | 2.7           | 1.8 - 3.7    |
| Abbott Cell-Dyn 3200            | 11          | 5.04        | 0.37      | 7.3       | 5.0           | 3.9 - 6.2    | 11            | 2.75        | 0.28      | 10.3      | 2.7           | 1.8 - 3.6    |
| Abbott Cell-Dyn Ruby            | 14          | 4.87        | 0.26      | 5.4       | 4.9           | 4.0 - 5.7    | 14            | 2.80        | 0.26      | 9.3       | 2.8           | 2.0 - 3.6    |
| Specimen CL-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 31          | 4.16        | 0.18      | 4.4       | 4.1           | 3.6 - 4.8    |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments | 30          | 4.16        | 0.18      | 4.4       | 4.1           | 3.6 - 4.8    |               |             |           |           |               |              |
| Abbott Cell-Dyn 3200            | 11          | 4.24        | 0.20      | 4.8       | 4.3           | 3.6 - 4.9    |               |             |           |           |               |              |
| Abbott Cell-Dyn Ruby            | 14          | 4.11        | 0.18      | 4.5       | 4.1           | 3.5 - 4.7    |               |             |           |           |               |              |

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

| Specimen CL-6                   |             |             |           |           |               |              | Specimen CL-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 30          | 0.48        | 0.13      | 27.0      | 0.5           | 0.0 - 0.9    | 31            | 0.58        | 0.42      | 73.4      | 0.4           | 0.0 - 1.9    |
| All Abbott Cell-Dyn Instruments | 29          | 0.47        | 0.13      | 26.5      | 0.5           | 0.0 - 0.9    | 30            | 0.56        | 0.41      | 74.5      | 0.4           | 0.0 - 1.9    |
| Abbott Cell-Dyn 3200            | 11          | 0.51        | 0.14      | 28.4      | 0.5           | 0.0 - 1.0    | 11            | 0.91        | 0.46      | 50.8      | 0.9           | 0.0 - 2.3    |
| Abbott Cell-Dyn Ruby            | 14          | 0.48        | 0.09      | 18.7      | 0.5           | 0.2 - 0.8    | 14            | 0.39        | 0.21      | 53.3      | 0.4           | 0.0 - 1.1    |
| Specimen CL-8                   |             |             |           |           |               |              | Specimen CL-9 |             |           |           |               |              |
| All Method                      | 29          | 0.26        | 0.12      | 46.4      | 0.2           | 0.0 - 0.7    | 31            | 0.80        | 0.45      | 56.0      | 0.8           | 0.0 - 2.2    |
| All Abbott Cell-Dyn Instruments | 29          | 0.26        | 0.12      | 46.4      | 0.2           | 0.0 - 0.7    | 30            | 0.77        | 0.43      | 55.6      | 0.8           | 0.0 - 2.1    |
| Abbott Cell-Dyn 3200            | 11          | 0.35        | 0.18      | 52.4      | 0.3           | 0.0 - 0.9    | 11            | 0.77        | 0.45      | 58.5      | 0.5           | 0.0 - 2.2    |
| Abbott Cell-Dyn Ruby            | 14          | 0.20        | 0.10      | 51.9      | 0.2           | 0.0 - 0.6    | 14            | 0.83        | 0.40      | 48.1      | 0.8           | 0.0 - 2.1    |
| Specimen CL-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 31          | 0.54        | 0.22      | 40.8      | 0.5           | 0.0 - 1.2    |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments | 30          | 0.54        | 0.22      | 41.4      | 0.5           | 0.0 - 1.3    |               |             |           |           |               |              |
| Abbott Cell-Dyn 3200            | 11          | 0.59        | 0.17      | 28.8      | 0.6           | 0.0 - 1.2    |               |             |           |           |               |              |
| Abbott Cell-Dyn Ruby            | 14          | 0.50        | 0.15      | 30.4      | 0.5           | 0.0 - 1.0    |               |             |           |           |               |              |

**SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)**

| Specimen SYX-6                    |             |             |           |           |               |              | Specimen SYX-7 |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 55          | 21.21       | 0.52      | 2.4       | 21.2          | 18.0 - 24.4  | 52             | 3.04        | 0.09      | 3.0       | 3.1           | 2.5 - 3.5    |
| All Sysmex Instruments            | 54          | 21.21       | 0.52      | 2.5       | 21.2          | 18.0 - 24.4  | 51             | 3.04        | 0.09      | 3.0       | 3.1           | 2.5 - 3.5    |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 21.13       | 0.50      | 2.4       | 21.1          | 17.9 - 24.3  | 27             | 3.01        | 0.09      | 3.0       | 3.0           | 2.5 - 3.5    |
| Sysmex pocH-100i                  | 18          | 21.21       | 0.43      | 2.0       | 21.3          | 18.0 - 24.4  | 16             | 3.06        | 0.09      | 2.9       | 3.1           | 2.5 - 3.6    |
| Specimen SYX-8                    |             |             |           |           |               |              | Specimen SYX-9 |             |           |           |               |              |
| All Method                        | 54          | 8.41        | 0.22      | 2.6       | 8.4           | 7.1 - 9.7    | 55             | 3.08        | 0.11      | 3.6       | 3.1           | 2.6 - 3.6    |
| All Sysmex Instruments            | 53          | 8.42        | 0.22      | 2.6       | 8.4           | 7.1 - 9.7    | 54             | 3.08        | 0.11      | 3.7       | 3.1           | 2.6 - 3.6    |
| Sysmex KX-21N & K - 800,1000,4500 | 27          | 8.35        | 0.16      | 1.9       | 8.3           | 7.0 - 9.7    | 28             | 3.04        | 0.10      | 3.1       | 3.0           | 2.5 - 3.5    |
| Sysmex pocH-100i                  | 18          | 8.44        | 0.24      | 2.8       | 8.5           | 7.1 - 9.8    | 18             | 3.12        | 0.12      | 3.9       | 3.1           | 2.6 - 3.6    |
| Specimen SYX-10                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                        | 55          | 21.23       | 0.54      | 2.5       | 21.2          | 18.0 - 24.5  |                |             |           |           |               |              |
| All Sysmex Instruments            | 54          | 21.22       | 0.54      | 2.6       | 21.2          | 18.0 - 24.5  |                |             |           |           |               |              |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 21.20       | 0.48      | 2.3       | 21.2          | 18.0 - 24.4  |                |             |           |           |               |              |
| Sysmex pocH-100i                  | 18          | 21.04       | 0.42      | 2.0       | 21.2          | 17.8 - 24.3  |                |             |           |           |               |              |

**SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–RED BLOOD CELL COUNT (x 10<sup>12</sup>/L)**

| Specimen SYX-6                    |             |             |           |           |               |              | Specimen SYX-7 |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 55          | 5.629       | 0.080     | 1.4       | 5.63          | 5.29 - 5.97  | 54             | 2.411       | 0.038     | 1.6       | 2.40          | 2.26 - 2.56  |
| All Sysmex Instruments            | 54          | 5.627       | 0.080     | 1.4       | 5.63          | 5.28 - 5.97  | 53             | 2.411       | 0.039     | 1.6       | 2.40          | 2.26 - 2.56  |
| Sysmex KX-21N & K - 800,1000,4500 | 27          | 5.602       | 0.043     | 0.8       | 5.60          | 5.26 - 5.94  | 28             | 2.404       | 0.025     | 1.0       | 2.40          | 2.25 - 2.55  |
| Sysmex pocH-100i                  | 18          | 5.664       | 0.107     | 1.9       | 5.68          | 5.32 - 6.01  | 17             | 2.431       | 0.053     | 2.2       | 2.44          | 2.28 - 2.58  |
| Specimen SYX-8                    |             |             |           |           |               |              | Specimen SYX-9 |             |           |           |               |              |
| All Method                        | 54          | 4.115       | 0.057     | 1.4       | 4.11          | 3.86 - 4.37  | 54             | 2.413       | 0.035     | 1.5       | 2.41          | 2.26 - 2.56  |
| All Sysmex Instruments            | 53          | 4.115       | 0.057     | 1.4       | 4.11          | 3.86 - 4.37  | 53             | 2.413       | 0.036     | 1.5       | 2.41          | 2.26 - 2.56  |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 4.098       | 0.040     | 1.0       | 4.11          | 3.85 - 4.35  | 28             | 2.407       | 0.031     | 1.3       | 2.40          | 2.26 - 2.56  |
| Sysmex pocH-100i                  | 18          | 4.138       | 0.098     | 2.4       | 4.16          | 3.89 - 4.39  | 17             | 2.435       | 0.038     | 1.6       | 2.44          | 2.28 - 2.59  |
| Specimen SYX-10                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                        | 54          | 5.620       | 0.074     | 1.3       | 5.62          | 5.28 - 5.96  |                |             |           |           |               |              |
| All Sysmex Instruments            | 53          | 5.621       | 0.073     | 1.3       | 5.62          | 5.28 - 5.96  |                |             |           |           |               |              |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 5.601       | 0.064     | 1.1       | 5.60          | 5.26 - 5.94  |                |             |           |           |               |              |
| Sysmex pocH-100i                  | 18          | 5.648       | 0.110     | 2.0       | 5.68          | 5.30 - 5.99  |                |             |           |           |               |              |

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

| Specimen SYX-6                    |             |             |           |           |               |              | Specimen SYX-7 |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 55          | 18.16       | 0.28      | 1.5       | 18.1          | 16.8 - 19.5  | 53             | 6.18        | 0.13      | 2.1       | 6.2           | 5.7 - 6.7    |
| All Sysmex Instruments            | 54          | 18.16       | 0.28      | 1.5       | 18.2          | 16.8 - 19.5  | 52             | 6.18        | 0.13      | 2.1       | 6.2           | 5.7 - 6.7    |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 18.16       | 0.22      | 1.2       | 18.2          | 16.8 - 19.5  | 28             | 6.23        | 0.12      | 2.0       | 6.2           | 5.7 - 6.7    |
| Sysmex pocH-100i                  | 18          | 18.18       | 0.37      | 2.0       | 18.1          | 16.9 - 19.5  | 16             | 6.15        | 0.10      | 1.7       | 6.2           | 5.7 - 6.6    |
| Specimen SYX-8                    |             |             |           |           |               |              | Specimen SYX-9 |             |           |           |               |              |
| All Method                        | 55          | 12.02       | 0.20      | 1.6       | 12.0          | 11.1 - 12.9  | 55             | 6.19        | 0.12      | 2.0       | 6.2           | 5.7 - 6.7    |
| All Sysmex Instruments            | 53          | 12.02       | 0.17      | 1.4       | 12.0          | 11.1 - 12.9  | 54             | 6.19        | 0.12      | 2.0       | 6.2           | 5.7 - 6.7    |
| Sysmex KX-21N & K - 800,1000,4500 | 27          | 12.06       | 0.12      | 1.0       | 12.1          | 11.2 - 12.9  | 28             | 6.23        | 0.10      | 1.6       | 6.2           | 5.7 - 6.7    |
| Sysmex pocH-100i                  | 18          | 11.96       | 0.21      | 1.8       | 12.0          | 11.1 - 12.8  | 18             | 6.17        | 0.13      | 2.1       | 6.2           | 5.7 - 6.7    |
| Specimen SYX-10                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                        | 54          | 18.12       | 0.24      | 1.3       | 18.1          | 16.8 - 19.4  |                |             |           |           |               |              |
| All Sysmex Instruments            | 53          | 18.12       | 0.24      | 1.4       | 18.1          | 16.8 - 19.4  |                |             |           |           |               |              |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 18.20       | 0.20      | 1.1       | 18.2          | 16.9 - 19.5  |                |             |           |           |               |              |
| Sysmex pocH-100i                  | 18          | 17.98       | 0.34      | 1.9       | 18.0          | 16.7 - 19.3  |                |             |           |           |               |              |

**SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–HEMATOCRIT (percent)**

| Specimen SYX-6                    |             |             |           |           |               |              | Specimen SYX-7 |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 55          | 47.97       | 1.62      | 3.4       | 47.5          | 45.0 - 50.9  | 54             | 16.83       | 0.65      | 3.9       | 16.7          | 15.8 - 17.9  |
| All Sysmex Instruments            | 54          | 47.90       | 1.54      | 3.2       | 47.5          | 45.0 - 50.8  | 53             | 16.80       | 0.63      | 3.7       | 16.6          | 15.7 - 17.9  |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 47.17       | 0.70      | 1.5       | 47.2          | 44.3 - 50.1  | 28             | 16.50       | 0.29      | 1.8       | 16.5          | 15.5 - 17.5  |
| Sysmex pocH-100i                  | 18          | 49.46       | 1.61      | 3.3       | 49.7          | 46.4 - 52.5  | 17             | 17.51       | 0.56      | 3.2       | 17.6          | 16.4 - 18.6  |
| Specimen SYX-8                    |             |             |           |           |               |              | Specimen SYX-9 |             |           |           |               |              |
| All Method                        | 55          | 32.18       | 1.14      | 3.5       | 31.8          | 30.2 - 34.2  | 55             | 16.81       | 0.66      | 3.9       | 16.6          | 15.8 - 17.9  |
| All Sysmex Instruments            | 54          | 32.14       | 1.11      | 3.4       | 31.8          | 30.2 - 34.1  | 54             | 16.79       | 0.64      | 3.8       | 16.6          | 15.7 - 17.8  |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 31.61       | 0.44      | 1.4       | 31.7          | 29.7 - 33.6  | 28             | 16.48       | 0.29      | 1.7       | 16.5          | 15.4 - 17.5  |
| Sysmex pocH-100i                  | 18          | 33.29       | 1.18      | 3.5       | 33.5          | 31.2 - 35.3  | 18             | 17.46       | 0.61      | 3.5       | 17.5          | 16.4 - 18.6  |
| Specimen SYX-10                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                        | 54          | 47.81       | 1.49      | 3.1       | 47.5          | 44.9 - 50.7  |                |             |           |           |               |              |
| All Sysmex Instruments            | 53          | 47.76       | 1.45      | 3.0       | 47.4          | 44.8 - 50.7  |                |             |           |           |               |              |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 47.11       | 0.73      | 1.5       | 47.3          | 44.2 - 50.0  |                |             |           |           |               |              |
| Sysmex pocH-100i                  | 18          | 49.16       | 1.52      | 3.1       | 49.6          | 46.2 - 52.2  |                |             |           |           |               |              |

## SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–PLATELET COUNT (x10<sup>9</sup>/L)

| Specimen SYX-6                    |             |             |           |           |               |              | Specimen SYX-7 |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 55          | 390.9       | 22.1      | 5.6       | 395           | 293 - 489    | 54             | 57.0        | 3.7       | 6.5       | 57            | 42 - 72      |
| All Sysmex Instruments            | 54          | 391.5       | 21.8      | 5.6       | 396           | 293 - 490    | 53             | 56.9        | 3.7       | 6.4       | 57            | 42 - 72      |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 400.3       | 12.3      | 3.1       | 397           | 300 - 501    | 28             | 57.3        | 2.8       | 5.0       | 58            | 42 - 72      |
| Sysmex pocH-100i                  | 18          | 370.6       | 16.3      | 4.4       | 373           | 277 - 464    | 17             | 55.7        | 3.9       | 7.0       | 56            | 41 - 70      |
| Specimen SYX-8                    |             |             |           |           |               |              | Specimen SYX-9 |             |           |           |               |              |
| All Method                        | 54          | 195.5       | 8.7       | 4.5       | 195           | 146 - 245    | 54             | 56.3        | 4.2       | 7.4       | 56            | 42 - 71      |
| All Sysmex Instruments            | 53          | 195.8       | 8.4       | 4.3       | 195           | 146 - 245    | 53             | 56.2        | 4.1       | 7.4       | 56            | 42 - 71      |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 197.6       | 7.2       | 3.6       | 197           | 148 - 248    | 28             | 55.9        | 4.1       | 7.4       | 56            | 41 - 70      |
| Sysmex pocH-100i                  | 18          | 188.9       | 10.0      | 5.3       | 190           | 141 - 237    | 17             | 55.4        | 3.5       | 6.4       | 56            | 41 - 70      |
| Specimen SYX-10                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                        | 54          | 391.0       | 18.6      | 4.8       | 395           | 293 - 489    |                |             |           |           |               |              |
| All Sysmex Instruments            | 53          | 391.6       | 18.3      | 4.7       | 395           | 293 - 490    |                |             |           |           |               |              |
| Sysmex KX-21N & K - 800,1000,4500 | 28          | 399.0       | 10.6      | 2.7       | 401           | 299 - 499    |                |             |           |           |               |              |
| Sysmex pocH-100i                  | 18          | 372.9       | 21.9      | 5.9       | 374           | 279 - 467    |                |             |           |           |               |              |

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

| Specimen SYX-6                    |             |             |           |           |               |              | Specimen SYX-7 |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 52          | 62.93       | 0.77      | 1.2       | 63.1          | 60.6 - 65.3  | 50             | 10.94       | 0.95      | 8.7       | 10.9          | 8.0 - 13.8   |
| All Sysmex Instruments            | 51          | 62.93       | 0.78      | 1.2       | 63.0          | 60.5 - 65.3  | 49             | 10.98       | 0.91      | 8.3       | 10.9          | 8.2 - 13.8   |
| Sysmex KX-21N & K - 800,1000,4500 | 26          | 62.71       | 0.74      | 1.2       | 62.8          | 60.4 - 65.0  | 26             | 11.27       | 0.82      | 7.3       | 11.3          | 8.8 - 13.8   |
| Sysmex pocH-100i                  | 17          | 63.45       | 0.58      | 0.9       | 63.2          | 61.7 - 65.2  | 16             | 10.13       | 1.02      | 10.1      | 10.3          | 7.0 - 13.2   |
| Specimen SYX-8                    |             |             |           |           |               |              | Specimen SYX-9 |             |           |           |               |              |
| All Method                        | 52          | 29.50       | 0.90      | 3.0       | 29.6          | 26.8 - 32.2  | 51             | 10.65       | 1.15      | 10.8      | 10.6          | 7.2 - 14.1   |
| All Sysmex Instruments            | 51          | 29.53       | 0.88      | 3.0       | 29.6          | 26.8 - 32.2  | 50             | 10.67       | 1.15      | 10.8      | 10.6          | 7.2 - 14.2   |
| Sysmex KX-21N & K - 800,1000,4500 | 26          | 29.56       | 0.88      | 3.0       | 29.5          | 26.9 - 32.2  | 26             | 11.32       | 1.05      | 9.3       | 11.4          | 8.1 - 14.5   |
| Sysmex pocH-100i                  | 17          | 29.41       | 0.88      | 3.0       | 29.6          | 26.7 - 32.1  | 16             | 9.72        | 0.69      | 7.1       | 9.6           | 7.6 - 11.8   |
| Specimen SYX-10                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                        | 52          | 62.89       | 0.83      | 1.3       | 63.0          | 60.4 - 65.4  |                |             |           |           |               |              |
| All Sysmex Instruments            | 51          | 62.87       | 0.81      | 1.3       | 63.0          | 60.4 - 65.4  |                |             |           |           |               |              |
| Sysmex KX-21N & K - 800,1000,4500 | 26          | 62.60       | 0.82      | 1.3       | 62.5          | 60.1 - 65.1  |                |             |           |           |               |              |
| Sysmex pocH-100i                  | 17          | 63.37       | 0.52      | 0.8       | 63.3          | 61.8 - 65.0  |                |             |           |           |               |              |

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

| Specimen SYX-6                    |             |             |           |           |               |              | Specimen SYX-7 |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 51          | 12.01       | 0.96      | 8.0       | 12.1          | 9.1 - 14.9   | 49             | 18.30       | 1.53      | 8.4       | 18.2          | 13.7 - 22.9  |
| All Sysmex Instruments            | 50          | 12.02       | 0.96      | 8.0       | 12.1          | 9.1 - 15.0   | 48             | 18.33       | 1.54      | 8.4       | 18.3          | 13.7 - 23.0  |
| Sysmex KX-21N & K - 800,1000,4500 | 26          | 12.56       | 0.69      | 5.5       | 12.5          | 10.4 - 14.7  | 26             | 18.95       | 1.37      | 7.2       | 18.9          | 14.8 - 23.1  |
| Sysmex pocH-100i                  | 17          | 11.04       | 0.58      | 5.2       | 11.2          | 9.2 - 12.8   | 16             | 16.85       | 1.49      | 8.9       | 17.0          | 12.3 - 21.4  |
| Specimen SYX-8                    |             |             |           |           |               |              | Specimen SYX-9 |             |           |           |               |              |
| All Method                        | 51          | 18.14       | 1.20      | 6.6       | 18.1          | 14.5 - 21.8  | 51             | 18.19       | 1.47      | 8.1       | 18.3          | 13.7 - 22.6  |
| All Sysmex Instruments            | 50          | 18.12       | 1.21      | 6.7       | 18.1          | 14.5 - 21.8  | 50             | 18.25       | 1.43      | 7.9       | 18.3          | 13.9 - 22.6  |
| Sysmex KX-21N & K - 800,1000,4500 | 26          | 18.79       | 0.98      | 5.2       | 18.9          | 15.8 - 21.8  | 26             | 19.04       | 1.01      | 5.3       | 18.9          | 15.9 - 22.1  |
| Sysmex pocH-100i                  | 17          | 17.17       | 0.91      | 5.3       | 17.4          | 14.4 - 19.9  | 17             | 16.88       | 1.02      | 6.0       | 16.8          | 13.8 - 20.0  |
| Specimen SYX-10                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                        | 51          | 12.01       | 0.78      | 6.5       | 12.1          | 9.6 - 14.4   |                |             |           |           |               |              |
| All Sysmex Instruments            | 50          | 12.03       | 0.77      | 6.4       | 12.1          | 9.7 - 14.4   |                |             |           |           |               |              |
| Sysmex KX-21N & K - 800,1000,4500 | 26          | 12.42       | 0.51      | 4.1       | 12.4          | 10.8 - 14.0  |                |             |           |           |               |              |
| Sysmex pocH-100i                  | 17          | 11.28       | 0.52      | 4.6       | 11.3          | 9.7 - 12.9   |                |             |           |           |               |              |

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

| Specimen SYX-6                    |             |             |           |           |               |              | Specimen SYX-7 |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 51          | 25.04       | 0.80      | 3.2       | 25.2          | 22.6 - 27.5  | 50             | 70.79       | 2.16      | 3.1       | 70.7          | 64.2 - 77.3  |
| All Sysmex Instruments            | 50          | 25.03       | 0.81      | 3.2       | 25.2          | 22.6 - 27.5  | 49             | 70.72       | 2.13      | 3.0       | 70.7          | 64.3 - 77.2  |
| Sysmex KX-21N & K - 800,1000,4500 | 26          | 24.72       | 0.70      | 2.8       | 24.8          | 22.6 - 26.9  | 26             | 69.79       | 1.46      | 2.1       | 69.8          | 65.4 - 74.2  |
| Sysmex pocH-100i                  | 17          | 25.52       | 0.61      | 2.4       | 25.6          | 23.6 - 27.4  | 16             | 72.53       | 2.19      | 3.0       | 72.9          | 65.9 - 79.1  |
| Specimen SYX-8                    |             |             |           |           |               |              | Specimen SYX-9 |             |           |           |               |              |
| All Method                        | 51          | 52.37       | 1.28      | 2.4       | 52.2          | 48.5 - 56.2  | 51             | 71.09       | 2.15      | 3.0       | 70.9          | 64.6 - 77.6  |
| All Sysmex Instruments            | 50          | 52.35       | 1.28      | 2.5       | 52.2          | 48.4 - 56.3  | 50             | 71.01       | 2.11      | 3.0       | 70.9          | 64.6 - 77.4  |
| Sysmex KX-21N & K - 800,1000,4500 | 26          | 51.67       | 0.82      | 1.6       | 51.7          | 49.2 - 54.2  | 26             | 69.67       | 1.42      | 2.0       | 69.5          | 65.4 - 74.0  |
| Sysmex pocH-100i                  | 17          | 53.42       | 1.12      | 2.1       | 53.1          | 50.0 - 56.8  | 17             | 73.11       | 1.49      | 2.0       | 73.2          | 68.6 - 77.6  |
| Specimen SYX-10                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                        | 51          | 25.10       | 0.67      | 2.7       | 25.1          | 23.0 - 27.2  |                |             |           |           |               |              |
| All Sysmex Instruments            | 50          | 25.10       | 0.67      | 2.7       | 25.1          | 23.0 - 27.2  |                |             |           |           |               |              |
| Sysmex KX-21N & K - 800,1000,4500 | 26          | 24.97       | 0.70      | 2.8       | 25.0          | 22.8 - 27.1  |                |             |           |           |               |              |
| Sysmex pocH-100i                  | 17          | 25.37       | 0.52      | 2.1       | 25.3          | 23.7 - 27.0  |                |             |           |           |               |              |

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)**

| <u><b>Instrument</b></u>              | <b>Specimen HD-6</b> |                    |                  |                  |                      |                     | <b>Specimen HD-7</b> |                    |                  |                  |                      |                     |
|---------------------------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
|                                       | <u><b>Labs</b></u>   | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>   | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                            | 747                  | 21.53              | 1.08             | 5.0              | 21.6                 | 18.2 - 24.8         | 745                  | 2.01               | 0.16             | 8.0              | 2.0                  | 1.7 - 2.4           |
| All Abbott Cell-Dyn Instruments       | 261                  | 20.81              | 0.98             | 4.7              | 20.8                 | 17.6 - 24.0         | 259                  | 1.98               | 0.12             | 6.2              | 2.0                  | 1.6 - 2.3           |
| All ABX Instruments                   | 130                  | 20.85              | 0.51             | 2.5              | 20.9                 | 17.7 - 24.0         | 131                  | 1.88               | 0.07             | 3.5              | 1.9                  | 1.6 - 2.2           |
| All COULTER Instruments               | 247                  | 22.38              | 0.66             | 2.9              | 22.4                 | 19.0 - 25.8         | 245                  | 2.16               | 0.12             | 5.4              | 2.2                  | 1.8 - 2.5           |
| All Danam/Drew Scientific Instruments | 11                   | 20.40              | 0.71             | 3.5              | 20.4                 | 17.3 - 23.5         | 11                   | 2.00               | 0.10             | 5.0              | 2.0                  | 1.7 - 2.3           |
| Abbott Cell-Dyn 1700                  | 23                   | 20.86              | 1.14             | 5.5              | 20.7                 | 17.7 - 24.0         | 23                   | 2.01               | 0.15             | 7.5              | 2.0                  | 1.7 - 2.4           |
| Abbott Cell-Dyn 1800                  | 122                  | 21.41              | 0.71             | 3.3              | 21.4                 | 18.1 - 24.7         | 123                  | 1.95               | 0.10             | 5.3              | 2.0                  | 1.6 - 2.3           |
| Abbott Cell-Dyn Emerald               | 111                  | 20.12              | 0.67             | 3.3              | 20.1                 | 17.1 - 23.2         | 110                  | 2.00               | 0.12             | 6.0              | 2.0                  | 1.7 - 2.4           |
| ABX Diagnostics Micros/45/60          | 130                  | 20.85              | 0.51             | 2.5              | 20.9                 | 17.7 - 24.0         | 131                  | 1.88               | 0.07             | 3.5              | 1.9                  | 1.6 - 2.2           |
| Boule Medonic CA 620                  | 11                   | 22.44              | 0.38             | 1.7              | 22.5                 | 19.0 - 25.9         | 11                   | 2.02               | 0.10             | 4.9              | 2.0                  | 1.7 - 2.4           |
| Boule Medonic M series                | 83                   | 22.28              | 0.53             | 2.4              | 22.3                 | 18.9 - 25.7         | 83                   | 1.84               | 0.09             | 4.7              | 1.8                  | 1.5 - 2.2           |
| COULTER AcT diff/diff 2               | 235                  | 22.37              | 0.65             | 2.9              | 22.4                 | 19.0 - 25.8         | 233                  | 2.17               | 0.12             | 5.4              | 2.2                  | 1.8 - 2.5           |
| Drew Scientific D3                    | 11                   | 20.40              | 0.71             | 3.5              | 20.4                 | 17.3 - 23.5         | 11                   | 2.00               | 0.10             | 5.0              | 2.0                  | 1.7 - 2.3           |
|                                       | <b>Specimen HD-8</b> |                    |                  |                  |                      |                     | <b>Specimen HD-9</b> |                    |                  |                  |                      |                     |
|                                       | <u><b>Labs</b></u>   | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>   | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                            | 748                  | 7.99               | 0.37             | 4.6              | 8.0                  | 6.7 - 9.2           | 747                  | 1.98               | 0.14             | 7.3              | 2.0                  | 1.6 - 2.3           |
| All Abbott Cell-Dyn Instruments       | 260                  | 7.79               | 0.31             | 3.9              | 7.8                  | 6.6 - 9.0           | 258                  | 1.95               | 0.12             | 6.2              | 1.9                  | 1.6 - 2.3           |
| All ABX Instruments                   | 130                  | 7.68               | 0.19             | 2.5              | 7.7                  | 6.5 - 8.9           | 130                  | 1.87               | 0.07             | 3.7              | 1.9                  | 1.5 - 2.2           |
| All COULTER Instruments               | 250                  | 8.32               | 0.24             | 2.9              | 8.3                  | 7.0 - 9.6           | 248                  | 2.10               | 0.10             | 4.9              | 2.1                  | 1.7 - 2.5           |
| All Danam/Drew Scientific Instruments | 11                   | 7.79               | 0.26             | 3.3              | 7.8                  | 6.6 - 9.0           | 11                   | 1.92               | 0.06             | 3.1              | 1.9                  | 1.6 - 2.3           |
| Abbott Cell-Dyn 1700                  | 23                   | 7.85               | 0.46             | 5.9              | 7.8                  | 6.6 - 9.1           | 23                   | 1.97               | 0.12             | 6.2              | 2.0                  | 1.6 - 2.3           |
| Abbott Cell-Dyn 1800                  | 123                  | 7.83               | 0.29             | 3.7              | 7.8                  | 6.6 - 9.1           | 121                  | 1.92               | 0.10             | 5.0              | 1.9                  | 1.6 - 2.3           |
| Abbott Cell-Dyn Emerald               | 111                  | 7.73               | 0.27             | 3.5              | 7.7                  | 6.5 - 8.9           | 112                  | 1.98               | 0.13             | 6.6              | 2.0                  | 1.6 - 2.3           |
| ABX Diagnostics Micros/45/60          | 130                  | 7.68               | 0.19             | 2.5              | 7.7                  | 6.5 - 8.9           | 130                  | 1.87               | 0.07             | 3.7              | 1.9                  | 1.5 - 2.2           |
| Boule Medonic CA 620                  | 11                   | 8.39               | 0.23             | 2.7              | 8.5                  | 7.1 - 9.7           | 11                   | 1.94               | 0.07             | 3.5              | 1.9                  | 1.6 - 2.3           |
| Boule Medonic M series                | 82                   | 8.02               | 0.22             | 2.7              | 8.0                  | 6.8 - 9.3           | 83                   | 1.85               | 0.10             | 5.6              | 1.8                  | 1.5 - 2.2           |
| COULTER AcT diff/diff 2               | 238                  | 8.32               | 0.24             | 2.9              | 8.3                  | 7.0 - 9.6           | 236                  | 2.11               | 0.10             | 4.9              | 2.1                  | 1.7 - 2.5           |
| Drew Scientific D3                    | 11                   | 7.79               | 0.26             | 3.3              | 7.8                  | 6.6 - 9.0           | 11                   | 1.92               | 0.06             | 3.1              | 1.9                  | 1.6 - 2.3           |

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L) cont'd**

| Specimen HD-10                        |             |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 747         | 21.50       | 1.16      | 5.4       | 21.7          | 18.2 - 24.8  |
| All Abbott Cell-Dyn Instruments       | 261         | 20.70       | 1.03      | 5.0       | 20.7          | 17.5 - 23.9  |
| All ABX Instruments                   | 128         | 20.77       | 0.48      | 2.3       | 20.8          | 17.6 - 23.9  |
| All COULTER Instruments               | 244         | 22.47       | 0.57      | 2.5       | 22.4          | 19.0 - 25.9  |
| All Danam/Drew Scientific Instruments | 11          | 20.22       | 0.58      | 2.9       | 20.2          | 17.1 - 23.3  |
| Abbott Cell-Dyn 1700                  | 23          | 20.70       | 1.43      | 6.9       | 21.0          | 17.5 - 23.8  |
| Abbott Cell-Dyn 1800                  | 123         | 21.35       | 0.76      | 3.6       | 21.4          | 18.1 - 24.6  |
| Abbott Cell-Dyn Emerald               | 111         | 20.05       | 0.73      | 3.6       | 20.0          | 17.0 - 23.1  |
| ABX Diagnostics Micros/45/60          | 128         | 20.77       | 0.48      | 2.3       | 20.8          | 17.6 - 23.9  |
| Boule Medonic CA 620                  | 11          | 22.35       | 0.53      | 2.4       | 22.3          | 19.0 - 25.8  |
| Boule Medonic M series                | 83          | 22.34       | 0.53      | 2.4       | 22.3          | 18.9 - 25.7  |
| COULTER AcT diff/diff 2               | 232         | 22.47       | 0.57      | 2.5       | 22.5          | 19.0 - 25.9  |
| Drew Scientific D3                    | 11          | 20.22       | 0.58      | 2.9       | 20.2          | 17.1 - 23.3  |

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10<sup>12</sup>/L)**

| Specimen HD-6                         |             |             |           |           |               |              | Specimen HD-7 |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 746         | 5.497       | 0.175     | 3.2       | 5.52          | 5.16 - 5.83  | 742           | 2.330       | 0.080     | 3.5       | 2.32          | 2.19 - 2.47  |
| All Abbott Cell-Dyn Instruments       | 263         | 5.398       | 0.198     | 3.7       | 5.43          | 5.07 - 5.73  | 262           | 2.352       | 0.110     | 4.7       | 2.36          | 2.21 - 2.50  |
| All ABX Instruments                   | 128         | 5.556       | 0.110     | 2.0       | 5.56          | 5.22 - 5.89  | 130           | 2.295       | 0.047     | 2.1       | 2.30          | 2.15 - 2.44  |
| All COULTER Instruments               | 247         | 5.533       | 0.152     | 2.7       | 5.54          | 5.20 - 5.87  | 245           | 2.343       | 0.063     | 2.7       | 2.34          | 2.20 - 2.49  |
| All Danam/Drew Scientific Instruments | 11          | 5.455       | 0.117     | 2.1       | 5.46          | 5.12 - 5.79  | 11            | 2.336       | 0.059     | 2.5       | 2.32          | 2.19 - 2.48  |
| Abbott Cell-Dyn 1700                  | 23          | 5.550       | 0.138     | 2.5       | 5.53          | 5.21 - 5.89  | 21            | 2.392       | 0.044     | 1.8       | 2.39          | 2.24 - 2.54  |
| Abbott Cell-Dyn 1800                  | 122         | 5.485       | 0.125     | 2.3       | 5.48          | 5.15 - 5.82  | 123           | 2.430       | 0.076     | 3.1       | 2.43          | 2.28 - 2.58  |
| Abbott Cell-Dyn Emerald               | 113         | 5.267       | 0.190     | 3.6       | 5.23          | 4.95 - 5.59  | 112           | 2.256       | 0.062     | 2.8       | 2.25          | 2.12 - 2.40  |
| ABX Diagnostics Micros/45/60          | 128         | 5.556       | 0.110     | 2.0       | 5.56          | 5.22 - 5.89  | 130           | 2.295       | 0.047     | 2.1       | 2.30          | 2.15 - 2.44  |
| Boule Medonic CA 620                  | 11          | 5.540       | 0.050     | 0.9       | 5.55          | 5.20 - 5.88  | 11            | 2.306       | 0.037     | 1.6       | 2.30          | 2.16 - 2.45  |
| Boule Medonic M series                | 84          | 5.616       | 0.096     | 1.7       | 5.63          | 5.27 - 5.96  | 84            | 2.294       | 0.040     | 1.7       | 2.29          | 2.15 - 2.44  |
| COULTER AcT diff/diff 2               | 236         | 5.531       | 0.151     | 2.7       | 5.54          | 5.19 - 5.87  | 234           | 2.344       | 0.062     | 2.7       | 2.35          | 2.20 - 2.49  |
| Drew Scientific D3                    | 11          | 5.455       | 0.117     | 2.1       | 5.46          | 5.12 - 5.79  | 11            | 2.336       | 0.059     | 2.5       | 2.32          | 2.19 - 2.48  |

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10<sup>12</sup>/L) cont'd**

| Specimen HD-8                         |             |             |           |           |               |              | Specimen HD-9 |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 744         | 4.493       | 0.128     | 2.9       | 4.51          | 4.22 - 4.77  | 746           | 2.325       | 0.081     | 3.5       | 2.32          | 2.18 - 2.47  |
| All Abbott Cell-Dyn Instruments       | 261         | 4.434       | 0.150     | 3.4       | 4.45          | 4.16 - 4.70  | 263           | 2.345       | 0.113     | 4.8       | 2.36          | 2.20 - 2.49  |
| All ABX Instruments                   | 129         | 4.515       | 0.085     | 1.9       | 4.51          | 4.24 - 4.79  | 130           | 2.293       | 0.046     | 2.0       | 2.30          | 2.15 - 2.44  |
| All COULTER Instruments               | 246         | 4.530       | 0.119     | 2.6       | 4.54          | 4.25 - 4.81  | 249           | 2.339       | 0.061     | 2.6       | 2.34          | 2.19 - 2.48  |
| All Danam/Drew Scientific Instruments | 11          | 4.476       | 0.100     | 2.2       | 4.45          | 4.20 - 4.75  | 11            | 2.358       | 0.131     | 5.5       | 2.31          | 2.21 - 2.50  |
| Abbott Cell-Dyn 1700                  | 22          | 4.504       | 0.130     | 2.9       | 4.52          | 4.23 - 4.78  | 23            | 2.357       | 0.066     | 2.8       | 2.37          | 2.21 - 2.50  |
| Abbott Cell-Dyn 1800                  | 123         | 4.522       | 0.109     | 2.4       | 4.52          | 4.25 - 4.80  | 120           | 2.434       | 0.070     | 2.9       | 2.44          | 2.28 - 2.59  |
| Abbott Cell-Dyn Emerald               | 113         | 4.320       | 0.113     | 2.6       | 4.32          | 4.06 - 4.58  | 112           | 2.251       | 0.067     | 3.0       | 2.25          | 2.11 - 2.39  |
| ABX Diagnostics Micros/45/60          | 129         | 4.515       | 0.085     | 1.9       | 4.51          | 4.24 - 4.79  | 130           | 2.293       | 0.046     | 2.0       | 2.30          | 2.15 - 2.44  |
| Boule Medonic CA 620                  | 11          | 4.550       | 0.044     | 1.0       | 4.55          | 4.27 - 4.83  | 11            | 2.293       | 0.027     | 1.2       | 2.29          | 2.15 - 2.44  |
| Boule Medonic M series                | 84          | 4.534       | 0.077     | 1.7       | 4.54          | 4.26 - 4.81  | 83            | 2.295       | 0.042     | 1.8       | 2.30          | 2.15 - 2.44  |
| COULTER AcT diff/diff 2               | 235         | 4.529       | 0.118     | 2.6       | 4.54          | 4.25 - 4.81  | 238           | 2.340       | 0.060     | 2.6       | 2.34          | 2.19 - 2.49  |
| Drew Scientific D3                    | 11          | 4.476       | 0.100     | 2.2       | 4.45          | 4.20 - 4.75  | 11            | 2.358       | 0.131     | 5.5       | 2.31          | 2.21 - 2.50  |

| Specimen HD-10                        |     |       |       |     |      |             |
|---------------------------------------|-----|-------|-------|-----|------|-------------|
| All Method                            | 743 | 5.487 | 0.168 | 3.1 | 5.50 | 5.15 - 5.82 |
| All Abbott Cell-Dyn Instruments       | 261 | 5.374 | 0.170 | 3.2 | 5.38 | 5.05 - 5.70 |
| All ABX Instruments                   | 129 | 5.549 | 0.118 | 2.1 | 5.55 | 5.21 - 5.89 |
| All COULTER Instruments               | 245 | 5.527 | 0.142 | 2.6 | 5.54 | 5.19 - 5.86 |
| All Danam/Drew Scientific Instruments | 11  | 5.443 | 0.111 | 2.0 | 5.42 | 5.11 - 5.77 |
| Abbott Cell-Dyn 1700                  | 22  | 5.496 | 0.093 | 1.7 | 5.51 | 5.16 - 5.83 |
| Abbott Cell-Dyn 1800                  | 122 | 5.451 | 0.149 | 2.7 | 5.45 | 5.12 - 5.78 |
| Abbott Cell-Dyn Emerald               | 113 | 5.265 | 0.133 | 2.5 | 5.27 | 4.94 - 5.59 |
| ABX Diagnostics Micros/45/60          | 129 | 5.549 | 0.118 | 2.1 | 5.55 | 5.21 - 5.89 |
| Boule Medonic CA 620                  | 11  | 5.499 | 0.076 | 1.4 | 5.47 | 5.16 - 5.83 |
| Boule Medonic M series                | 82  | 5.621 | 0.085 | 1.5 | 5.63 | 5.28 - 5.96 |
| COULTER AcT diff/diff 2               | 234 | 5.527 | 0.141 | 2.5 | 5.54 | 5.19 - 5.86 |
| Drew Scientific D3                    | 11  | 5.443 | 0.111 | 2.0 | 5.42 | 5.11 - 5.77 |

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

| <u>Instrument</u>                     | Specimen HD-6 |             |           |           |               |              | Specimen HD-7 |             |           |           |               |              |
|---------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                       | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 749           | 17.92       | 0.41      | 2.3       | 17.9          | 16.6 - 19.2  | 749           | 5.96        | 0.16      | 2.7       | 6.0           | 5.5 - 6.4    |
| All Abbott Cell-Dyn Instruments       | 261           | 18.16       | 0.36      | 2.0       | 18.2          | 16.8 - 19.5  | 263           | 6.04        | 0.17      | 2.8       | 6.0           | 5.6 - 6.5    |
| All ABX Instruments                   | 129           | 17.76       | 0.30      | 1.7       | 17.8          | 16.5 - 19.1  | 131           | 5.92        | 0.13      | 2.1       | 5.9           | 5.5 - 6.4    |
| All COULTER Instruments               | 246           | 17.71       | 0.35      | 2.0       | 17.7          | 16.4 - 19.0  | 244           | 5.87        | 0.14      | 2.4       | 5.9           | 5.4 - 6.3    |
| All Danam/Drew Scientific Instruments | 11            | 17.81       | 0.40      | 2.3       | 17.7          | 16.5 - 19.1  | 11            | 6.00        | 0.15      | 2.6       | 6.0           | 5.5 - 6.5    |
| Abbott Cell-Dyn 1700                  | 22            | 18.03       | 0.36      | 2.0       | 18.0          | 16.7 - 19.3  | 23            | 6.23        | 0.14      | 2.3       | 6.2           | 5.7 - 6.7    |
| Abbott Cell-Dyn 1800                  | 124           | 18.16       | 0.36      | 2.0       | 18.2          | 16.8 - 19.5  | 122           | 6.08        | 0.15      | 2.5       | 6.1           | 5.6 - 6.6    |
| Abbott Cell-Dyn Emerald               | 112           | 18.18       | 0.34      | 1.9       | 18.1          | 16.9 - 19.5  | 113           | 5.96        | 0.13      | 2.2       | 6.0           | 5.5 - 6.4    |
| ABX Diagnostics Micros/45/60          | 129           | 17.76       | 0.30      | 1.7       | 17.8          | 16.5 - 19.1  | 131           | 5.92        | 0.13      | 2.1       | 5.9           | 5.5 - 6.4    |
| Boule Medonic CA 620                  | 11            | 17.55       | 0.31      | 1.8       | 17.5          | 16.3 - 18.8  | 11            | 5.94        | 0.14      | 2.4       | 6.0           | 5.5 - 6.4    |
| Boule Medonic M series                | 82            | 18.12       | 0.28      | 1.6       | 18.1          | 16.8 - 19.4  | 84            | 6.02        | 0.12      | 1.9       | 6.0           | 5.5 - 6.5    |
| COULTER AcT diff/diff 2               | 235           | 17.70       | 0.34      | 1.9       | 17.7          | 16.4 - 19.0  | 232           | 5.87        | 0.14      | 2.3       | 5.9           | 5.4 - 6.3    |
| Drew Scientific D3                    | 11            | 17.81       | 0.40      | 2.3       | 17.7          | 16.5 - 19.1  | 11            | 6.00        | 0.15      | 2.6       | 6.0           | 5.5 - 6.5    |

| <u>Instrument</u>                     | Specimen HD-8 |             |           |           |               |              | Specimen HD-9 |             |           |           |               |              |
|---------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                       | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 750           | 13.42       | 0.29      | 2.2       | 13.4          | 12.4 - 14.4  | 748           | 5.96        | 0.16      | 2.7       | 6.0           | 5.5 - 6.4    |
| All Abbott Cell-Dyn Instruments       | 258           | 13.59       | 0.25      | 1.8       | 13.6          | 12.6 - 14.6  | 260           | 6.05        | 0.17      | 2.8       | 6.0           | 5.6 - 6.5    |
| All ABX Instruments                   | 130           | 13.38       | 0.22      | 1.6       | 13.4          | 12.4 - 14.4  | 131           | 5.93        | 0.12      | 1.9       | 6.0           | 5.5 - 6.4    |
| All COULTER Instruments               | 245           | 13.26       | 0.27      | 2.1       | 13.3          | 12.3 - 14.2  | 246           | 5.87        | 0.14      | 2.4       | 5.9           | 5.4 - 6.3    |
| All Danam/Drew Scientific Instruments | 11            | 13.37       | 0.26      | 2.0       | 13.4          | 12.4 - 14.4  | 11            | 5.95        | 0.14      | 2.4       | 5.9           | 5.5 - 6.4    |
| Abbott Cell-Dyn 1700                  | 22            | 13.55       | 0.34      | 2.5       | 13.7          | 12.6 - 14.6  | 23            | 6.16        | 0.18      | 2.9       | 6.2           | 5.7 - 6.6    |
| Abbott Cell-Dyn 1800                  | 122           | 13.61       | 0.24      | 1.8       | 13.6          | 12.6 - 14.6  | 122           | 6.11        | 0.15      | 2.4       | 6.1           | 5.6 - 6.6    |
| Abbott Cell-Dyn Emerald               | 111           | 13.56       | 0.23      | 1.7       | 13.6          | 12.6 - 14.6  | 109           | 5.96        | 0.12      | 2.0       | 6.0           | 5.5 - 6.4    |
| ABX Diagnostics Micros/45/60          | 130           | 13.38       | 0.22      | 1.6       | 13.4          | 12.4 - 14.4  | 131           | 5.93        | 0.12      | 1.9       | 6.0           | 5.5 - 6.4    |
| Boule Medonic CA 620                  | 11            | 13.28       | 0.15      | 1.1       | 13.3          | 12.3 - 14.3  | 11            | 5.88        | 0.13      | 2.3       | 5.9           | 5.4 - 6.3    |
| Boule Medonic M series                | 83            | 13.48       | 0.23      | 1.7       | 13.5          | 12.5 - 14.5  | 82            | 6.01        | 0.12      | 2.0       | 6.0           | 5.5 - 6.5    |
| COULTER AcT diff/diff 2               | 234           | 13.25       | 0.27      | 2.0       | 13.3          | 12.3 - 14.2  | 235           | 5.87        | 0.14      | 2.4       | 5.9           | 5.4 - 6.3    |
| Drew Scientific D3                    | 11            | 13.37       | 0.26      | 2.0       | 13.4          | 12.4 - 14.4  | 11            | 5.95        | 0.14      | 2.4       | 5.9           | 5.5 - 6.4    |

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

| Specimen HD-10                        |             |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 749         | 17.97       | 0.40      | 2.3       | 18.0          | 16.7 - 19.3  |
| All Abbott Cell-Dyn Instruments       | 261         | 18.22       | 0.35      | 1.9       | 18.2          | 16.9 - 19.5  |
| All ABX Instruments                   | 129         | 17.77       | 0.31      | 1.8       | 17.8          | 16.5 - 19.1  |
| All COULTER Instruments               | 247         | 17.79       | 0.34      | 1.9       | 17.8          | 16.5 - 19.1  |
| All Danam/Drew Scientific Instruments | 11          | 17.70       | 0.31      | 1.8       | 17.6          | 16.4 - 19.0  |
| Abbott Cell-Dyn 1700                  | 22          | 18.09       | 0.30      | 1.6       | 18.1          | 16.8 - 19.4  |
| Abbott Cell-Dyn 1800                  | 123         | 18.24       | 0.36      | 2.0       | 18.2          | 16.9 - 19.6  |
| Abbott Cell-Dyn Emerald               | 112         | 18.23       | 0.34      | 1.9       | 18.2          | 16.9 - 19.6  |
| ABX Diagnostics Micros/45/60          | 129         | 17.77       | 0.31      | 1.8       | 17.8          | 16.5 - 19.1  |
| Boule Medonic CA 620                  | 11          | 17.48       | 0.30      | 1.7       | 17.5          | 16.2 - 18.8  |
| Boule Medonic M series                | 83          | 18.17       | 0.30      | 1.6       | 18.2          | 16.9 - 19.5  |
| COULTER AcT diff/diff 2               | 235         | 17.79       | 0.33      | 1.8       | 17.8          | 16.5 - 19.1  |
| Drew Scientific D3                    | 11          | 17.70       | 0.31      | 1.8       | 17.6          | 16.4 - 19.0  |

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

| Specimen HD-6                         |             |             |           |           |               |              | Specimen HD-7 |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 748         | 50.63       | 1.88      | 3.7       | 50.5          | 47.5 - 53.7  | 751           | 16.95       | 1.03      | 6.1       | 17.1          | 15.9 - 18.0  |
| All Abbott Cell-Dyn Instruments       | 262         | 51.95       | 1.70      | 3.3       | 51.9          | 48.8 - 55.1  | 260           | 17.84       | 0.61      | 3.4       | 17.8          | 16.7 - 19.0  |
| All ABX Instruments                   | 129         | 49.27       | 1.13      | 2.3       | 49.3          | 46.3 - 52.3  | 131           | 15.83       | 0.36      | 2.3       | 15.9          | 14.8 - 16.8  |
| All COULTER Instruments               | 246         | 50.39       | 1.47      | 2.9       | 50.4          | 47.3 - 53.5  | 245           | 17.13       | 0.47      | 2.7       | 17.2          | 16.0 - 18.2  |
| All Danam/Drew Scientific Instruments | 11          | 51.39       | 0.98      | 1.9       | 51.8          | 48.3 - 54.5  | 11            | 17.70       | 0.35      | 2.0       | 17.6          | 16.6 - 18.8  |
| Abbott Cell-Dyn 1700                  | 22          | 50.68       | 1.35      | 2.7       | 50.5          | 47.6 - 53.8  | 21            | 17.37       | 0.48      | 2.8       | 17.3          | 16.3 - 18.5  |
| Abbott Cell-Dyn 1800                  | 123         | 52.48       | 1.45      | 2.8       | 52.4          | 49.3 - 55.7  | 124           | 18.06       | 0.64      | 3.6       | 18.1          | 16.9 - 19.2  |
| Abbott Cell-Dyn Emerald               | 113         | 51.65       | 1.83      | 3.5       | 51.4          | 48.5 - 54.8  | 111           | 17.69       | 0.48      | 2.7       | 17.7          | 16.6 - 18.8  |
| ABX Diagnostics Micros/45/60          | 129         | 49.27       | 1.13      | 2.3       | 49.3          | 46.3 - 52.3  | 131           | 15.83       | 0.36      | 2.3       | 15.9          | 14.8 - 16.8  |
| Boule Medonic CA 620                  | 11          | 47.13       | 0.85      | 1.8       | 47.5          | 44.2 - 50.0  | 11            | 15.30       | 0.36      | 2.3       | 15.4          | 14.3 - 16.3  |
| Boule Medonic M series                | 84          | 49.61       | 1.38      | 2.8       | 49.7          | 46.6 - 52.6  | 85            | 15.58       | 0.42      | 2.7       | 15.6          | 14.6 - 16.6  |
| COULTER AcT diff/diff 2               | 235         | 50.34       | 1.43      | 2.8       | 50.3          | 47.3 - 53.4  | 234           | 17.12       | 0.46      | 2.7       | 17.2          | 16.0 - 18.2  |
| Drew Scientific D3                    | 11          | 51.39       | 0.98      | 1.9       | 51.8          | 48.3 - 54.5  | 11            | 17.70       | 0.35      | 2.0       | 17.6          | 16.6 - 18.8  |

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

| Specimen HD-8                         |             |             |           |           |               |              | Specimen HD-9 |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 750         | 37.90       | 1.57      | 4.2       | 37.9          | 35.6 - 40.2  | 749           | 16.89       | 1.01      | 6.0       | 17.0          | 15.8 - 18.0  |
| All Abbott Cell-Dyn Instruments       | 259         | 39.18       | 1.11      | 2.8       | 39.3          | 36.8 - 41.6  | 262           | 17.76       | 0.69      | 3.9       | 17.8          | 16.6 - 18.9  |
| All ABX Instruments                   | 128         | 36.58       | 0.77      | 2.1       | 36.6          | 34.3 - 38.8  | 131           | 15.79       | 0.38      | 2.4       | 15.8          | 14.8 - 16.8  |
| All COULTER Instruments               | 248         | 38.05       | 1.04      | 2.7       | 38.1          | 35.7 - 40.4  | 248           | 17.05       | 0.45      | 2.6       | 17.0          | 16.0 - 18.1  |
| All Danam/Drew Scientific Instruments | 11          | 38.79       | 0.75      | 1.9       | 39.1          | 36.4 - 41.2  | 11            | 17.90       | 1.05      | 5.9       | 17.7          | 16.8 - 19.0  |
| Abbott Cell-Dyn 1700                  | 21          | 38.01       | 1.24      | 3.3       | 38.3          | 35.7 - 40.3  | 22            | 16.99       | 0.58      | 3.4       | 17.1          | 15.9 - 18.1  |
| Abbott Cell-Dyn 1800                  | 123         | 39.58       | 1.06      | 2.7       | 39.6          | 37.2 - 42.0  | 121           | 18.04       | 0.61      | 3.4       | 18.1          | 16.9 - 19.2  |
| Abbott Cell-Dyn Emerald               | 112         | 38.94       | 1.00      | 2.6       | 38.9          | 36.6 - 41.3  | 112           | 17.64       | 0.57      | 3.2       | 17.6          | 16.5 - 18.7  |
| ABX Diagnostics Micros/45/60          | 128         | 36.58       | 0.77      | 2.1       | 36.6          | 34.3 - 38.8  | 131           | 15.79       | 0.38      | 2.4       | 15.8          | 14.8 - 16.8  |
| Boule Medonic CA 620                  | 11          | 35.15       | 0.70      | 2.0       | 35.3          | 33.0 - 37.3  | 11            | 15.23       | 0.34      | 2.2       | 15.3          | 14.3 - 16.2  |
| Boule Medonic M series                | 84          | 35.98       | 0.81      | 2.2       | 36.0          | 33.8 - 38.2  | 83            | 15.54       | 0.41      | 2.7       | 15.5          | 14.6 - 16.5  |
| COULTER AcT diff/diff 2               | 237         | 38.02       | 1.03      | 2.7       | 38.1          | 35.7 - 40.3  | 237           | 17.05       | 0.45      | 2.6       | 17.0          | 16.0 - 18.1  |
| Drew Scientific D3                    | 11          | 38.79       | 0.75      | 1.9       | 39.1          | 36.4 - 41.2  | 11            | 17.90       | 1.05      | 5.9       | 17.7          | 16.8 - 19.0  |
| Specimen HD-10                        |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                            | 745         | 50.46       | 1.74      | 3.5       | 50.4          | 47.4 - 53.5  |               |             |           |           |               |              |
| All Abbott Cell-Dyn Instruments       | 261         | 51.69       | 1.51      | 2.9       | 51.7          | 48.5 - 54.8  |               |             |           |           |               |              |
| All ABX Instruments                   | 129         | 49.16       | 1.15      | 2.3       | 49.2          | 46.2 - 52.2  |               |             |           |           |               |              |
| All COULTER Instruments               | 245         | 50.34       | 1.33      | 2.6       | 50.3          | 47.3 - 53.4  |               |             |           |           |               |              |
| All Danam/Drew Scientific Instruments | 11          | 51.10       | 0.85      | 1.7       | 50.8          | 48.0 - 54.2  |               |             |           |           |               |              |
| Abbott Cell-Dyn 1700                  | 21          | 50.38       | 0.95      | 1.9       | 50.3          | 47.3 - 53.5  |               |             |           |           |               |              |
| Abbott Cell-Dyn 1800                  | 122         | 52.03       | 1.57      | 3.0       | 52.0          | 48.9 - 55.2  |               |             |           |           |               |              |
| Abbott Cell-Dyn Emerald               | 113         | 51.57       | 1.37      | 2.6       | 51.7          | 48.4 - 54.7  |               |             |           |           |               |              |
| ABX Diagnostics Micros/45/60          | 129         | 49.16       | 1.15      | 2.3       | 49.2          | 46.2 - 52.2  |               |             |           |           |               |              |
| Boule Medonic CA 620                  | 11          | 46.51       | 0.99      | 2.1       | 46.6          | 43.7 - 49.3  |               |             |           |           |               |              |
| Boule Medonic M series                | 82          | 49.63       | 1.22      | 2.5       | 49.8          | 46.6 - 52.7  |               |             |           |           |               |              |
| COULTER AcT diff/diff 2               | 233         | 50.28       | 1.28      | 2.5       | 50.3          | 47.2 - 53.4  |               |             |           |           |               |              |
| Drew Scientific D3                    | 11          | 51.10       | 0.85      | 1.7       | 50.8          | 48.0 - 54.2  |               |             |           |           |               |              |

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL-PLATELET COUNT (x 10<sup>9</sup>/L)**

| Specimen HD-6                         |             |             |           |           |               |              | Specimen HD-7 |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 743         | 515.4       | 33.5      | 6.5       | 514           | 386 - 645    | 739           | 71.9        | 9.1       | 12.6      | 70            | 53 - 90      |
| All Abbott Cell-Dyn Instruments       | 263         | 539.2       | 38.9      | 7.2       | 542           | 404 - 675    | 256           | 75.2        | 11.0      | 14.6      | 73            | 56 - 94      |
| All ABX Instruments                   | 130         | 511.9       | 19.2      | 3.8       | 515           | 383 - 640    | 131           | 78.6        | 6.5       | 8.3       | 78            | 58 - 99      |
| All COULTER Instruments               | 247         | 509.5       | 23.9      | 4.7       | 510           | 382 - 637    | 243           | 67.4        | 4.9       | 7.3       | 67            | 50 - 85      |
| All Danam/Drew Scientific Instruments | 11          | 512.0       | 20.3      | 4.0       | 509           | 384 - 640    | 11            | 79.0        | 9.7       | 12.3      | 77            | 59 - 99      |
| Abbott Cell-Dyn 1700                  | 23          | 537.9       | 47.0      | 8.7       | 539           | 403 - 673    | 23            | 66.9        | 7.6       | 11.4      | 68            | 50 - 84      |
| Abbott Cell-Dyn 1800                  | 122         | 559.0       | 28.9      | 5.2       | 561           | 419 - 699    | 122           | 71.1        | 5.1       | 7.1       | 72            | 53 - 89      |
| Abbott Cell-Dyn Emerald               | 113         | 515.7       | 32.0      | 6.2       | 513           | 386 - 645    | 112           | 83.6        | 15.3      | 18.2      | 83            | 62 - 105     |
| ABX Diagnostics Micros/45/60          | 130         | 511.9       | 19.2      | 3.8       | 515           | 383 - 640    | 131           | 78.6        | 6.5       | 8.3       | 78            | 58 - 99      |
| Boule Medonic CA 620                  | 11          | 488.0       | 21.1      | 4.3       | 487           | 366 - 610    | 11            | 67.4        | 6.0       | 8.8       | 66            | 50 - 85      |
| Boule Medonic M series                | 84          | 478.3       | 20.5      | 4.3       | 478           | 358 - 598    | 85            | 64.9        | 5.0       | 7.7       | 64            | 48 - 82      |
| COULTER AcT diff/diff 2               | 236         | 509.3       | 23.4      | 4.6       | 510           | 381 - 637    | 232           | 67.6        | 5.0       | 7.3       | 67            | 50 - 85      |
| Drew Scientific D3                    | 11          | 512.0       | 20.3      | 4.0       | 509           | 384 - 640    | 11            | 79.0        | 9.7       | 12.3      | 77            | 59 - 99      |

| Specimen HD-8                         |     |       |      |     |     |           | Specimen HD-9 |      |      |      |    |          |
|---------------------------------------|-----|-------|------|-----|-----|-----------|---------------|------|------|------|----|----------|
| All Method                            | 745 | 264.9 | 18.6 | 7.0 | 266 | 198 - 332 | 737           | 70.5 | 8.3  | 11.8 | 69 | 52 - 89  |
| All Abbott Cell-Dyn Instruments       | 260 | 274.4 | 15.6 | 5.7 | 275 | 205 - 343 | 254           | 73.2 | 8.9  | 12.2 | 72 | 54 - 92  |
| All ABX Instruments                   | 129 | 273.5 | 12.2 | 4.5 | 273 | 205 - 342 | 128           | 77.5 | 6.3  | 8.2  | 77 | 58 - 97  |
| All COULTER Instruments               | 246 | 260.6 | 13.5 | 5.2 | 260 | 195 - 326 | 249           | 66.6 | 5.4  | 8.0  | 66 | 49 - 84  |
| All Danam/Drew Scientific Instruments | 11  | 270.5 | 12.0 | 4.4 | 271 | 202 - 339 | 11            | 74.1 | 9.8  | 13.2 | 73 | 55 - 93  |
| Abbott Cell-Dyn 1700                  | 23  | 256.4 | 23.5 | 9.2 | 255 | 192 - 321 | 23            | 66.3 | 6.7  | 10.1 | 66 | 49 - 83  |
| Abbott Cell-Dyn 1800                  | 124 | 274.6 | 14.6 | 5.3 | 275 | 205 - 344 | 124           | 70.4 | 5.6  | 7.9  | 70 | 52 - 89  |
| Abbott Cell-Dyn Emerald               | 112 | 276.2 | 14.9 | 5.4 | 276 | 207 - 346 | 113           | 80.8 | 13.4 | 16.6 | 77 | 60 - 101 |
| ABX Diagnostics Micros/45/60          | 129 | 273.5 | 12.2 | 4.5 | 273 | 205 - 342 | 128           | 77.5 | 6.3  | 8.2  | 77 | 58 - 97  |
| Boule Medonic CA 620                  | 11  | 246.3 | 11.9 | 4.8 | 248 | 184 - 308 | 11            | 67.4 | 4.5  | 6.7  | 68 | 50 - 85  |
| Boule Medonic M series                | 83  | 237.4 | 12.0 | 5.0 | 235 | 178 - 297 | 83            | 63.3 | 5.1  | 8.1  | 63 | 47 - 80  |
| COULTER AcT diff/diff 2               | 235 | 260.9 | 13.2 | 5.1 | 260 | 195 - 327 | 237           | 66.8 | 5.3  | 7.9  | 66 | 50 - 84  |
| Drew Scientific D3                    | 11  | 270.5 | 12.0 | 4.4 | 271 | 202 - 339 | 11            | 74.1 | 9.8  | 13.2 | 73 | 55 - 93  |

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–PLATELET COUNT (x 10<sup>9</sup>/L) cont'd**

| Specimen HD-10                        |             |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 748         | 514.5       | 33.6      | 6.5       | 512           | 385 - 644    |
| All Abbott Cell-Dyn Instruments       | 262         | 537.7       | 36.5      | 6.8       | 540           | 403 - 673    |
| All ABX Instruments                   | 129         | 512.4       | 18.1      | 3.5       | 512           | 384 - 641    |
| All COULTER Instruments               | 248         | 508.4       | 22.9      | 4.5       | 510           | 381 - 636    |
| All Danam/Drew Scientific Instruments | 11          | 507.7       | 22.5      | 4.4       | 507           | 380 - 635    |
| Abbott Cell-Dyn 1700                  | 23          | 531.0       | 39.4      | 7.4       | 525           | 398 - 664    |
| Abbott Cell-Dyn 1800                  | 123         | 556.8       | 29.9      | 5.4       | 555           | 417 - 697    |
| Abbott Cell-Dyn Emerald               | 113         | 517.1       | 30.6      | 5.9       | 515           | 387 - 647    |
| ABX Diagnostics Micros/45/60          | 129         | 512.4       | 18.1      | 3.5       | 512           | 384 - 641    |
| Boule Medonic CA 620                  | 11          | 478.9       | 21.9      | 4.6       | 481           | 359 - 599    |
| Boule Medonic M series                | 84          | 476.2       | 21.0      | 4.4       | 475           | 357 - 596    |
| COULTER AcT diff/diff 2               | 236         | 508.6       | 22.1      | 4.3       | 510           | 381 - 636    |
| Drew Scientific D3                    | 11          | 507.7       | 22.5      | 4.4       | 507           | 380 - 635    |

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

| Specimen HD-6                         |             |             |           |           |               |              | Specimen HD-7 |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 713         | 13.69       | 2.02      | 14.7      | 14.1          | 7.6 - 19.8   | 710           | 52.32       | 7.11      | 13.6      | 53.6          | 30.9 - 73.7  |
| All Abbott Cell-Dyn Instruments       | 240         | 12.42       | 1.44      | 11.6      | 12.2          | 8.1 - 16.8   | 247           | 48.56       | 4.11      | 8.5       | 48.9          | 36.2 - 60.9  |
| All ABX Instruments                   | 125         | 11.43       | 0.86      | 7.5       | 11.3          | 8.8 - 14.1   | 126           | 43.05       | 3.82      | 8.9       | 43.4          | 31.6 - 54.5  |
| All COULTER Instruments               | 226         | 15.53       | 0.46      | 3.0       | 15.5          | 14.1 - 17.0  | 226           | 59.09       | 1.81      | 3.1       | 59.2          | 53.6 - 64.6  |
| All Danam/Drew Scientific Instruments | 11          | 13.89       | 0.96      | 6.9       | 13.5          | 10.9 - 16.8  | 11            | 54.65       | 1.61      | 3.0       | 54.7          | 49.8 - 59.5  |
| Abbott Cell-Dyn 1700                  | 21          | 12.61       | 0.64      | 5.1       | 12.5          | 10.6 - 14.6  | 21            | 49.75       | 2.24      | 4.5       | 50.1          | 43.0 - 56.5  |
| Abbott Cell-Dyn 1800                  | 112         | 11.08       | 0.42      | 3.8       | 11.0          | 9.8 - 12.4   | 113           | 44.93       | 2.15      | 4.8       | 44.9          | 38.4 - 51.4  |
| Abbott Cell-Dyn Emerald               | 103         | 13.89       | 0.89      | 6.4       | 13.8          | 11.2 - 16.6  | 107           | 51.92       | 2.35      | 4.5       | 51.7          | 44.8 - 59.0  |
| ABX Diagnostics Micros/45/60          | 125         | 11.43       | 0.86      | 7.5       | 11.3          | 8.8 - 14.1   | 126           | 43.05       | 3.82      | 8.9       | 43.4          | 31.6 - 54.5  |
| Boule Medonic CA 620                  | 11          | 15.92       | 0.87      | 5.4       | 16.2          | 13.3 - 18.6  | 11            | 60.47       | 1.48      | 2.4       | 60.9          | 56.0 - 64.9  |
| Boule Medonic M series                | 83          | 15.18       | 0.49      | 3.2       | 15.2          | 13.7 - 16.7  | 82            | 58.20       | 1.96      | 3.4       | 58.1          | 52.3 - 64.1  |
| COULTER AcT diff/diff 2               | 223         | 15.52       | 0.46      | 3.0       | 15.5          | 14.1 - 17.0  | 222           | 59.09       | 1.75      | 3.0       | 59.2          | 53.8 - 64.4  |
| Drew Scientific D3                    | 11          | 13.89       | 0.96      | 6.9       | 13.5          | 10.9 - 16.8  | 11            | 54.65       | 1.61      | 3.0       | 54.7          | 49.8 - 59.5  |

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

| Specimen HD-8                         |             |             |           |           |               |              | Specimen HD-9 |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 712         | 28.06       | 3.91      | 14.0      | 28.7          | 16.3 - 39.9  | 709           | 52.79       | 7.16      | 13.6      | 53.9          | 31.2 - 74.3  |
| All Abbott Cell-Dyn Instruments       | 246         | 25.95       | 2.38      | 9.2       | 26.0          | 18.7 - 33.1  | 245           | 49.07       | 3.81      | 7.8       | 49.1          | 37.6 - 60.6  |
| All ABX Instruments                   | 126         | 23.00       | 1.82      | 7.9       | 22.9          | 17.5 - 28.5  | 126           | 43.01       | 3.93      | 9.1       | 42.7          | 31.2 - 54.9  |
| All COULTER Instruments               | 227         | 32.07       | 0.84      | 2.6       | 32.1          | 29.5 - 34.6  | 229           | 59.49       | 1.65      | 2.8       | 59.6          | 54.5 - 64.5  |
| All Danam/Drew Scientific Instruments | 11          | 28.93       | 1.05      | 3.6       | 28.6          | 25.7 - 32.1  | 11            | 55.73       | 1.76      | 3.2       | 55.8          | 50.4 - 61.0  |
| Abbott Cell-Dyn 1700                  | 21          | 27.15       | 1.61      | 5.9       | 27.2          | 22.3 - 32.0  | 21            | 50.87       | 1.91      | 3.8       | 51.5          | 45.1 - 56.6  |
| Abbott Cell-Dyn 1800                  | 114         | 23.74       | 0.92      | 3.9       | 23.7          | 20.9 - 26.6  | 114           | 45.79       | 2.02      | 4.4       | 45.7          | 39.7 - 51.9  |
| Abbott Cell-Dyn Emerald               | 106         | 27.97       | 1.27      | 4.5       | 28.0          | 24.1 - 31.8  | 105           | 52.09       | 2.34      | 4.5       | 52.0          | 45.0 - 59.2  |
| ABX Diagnostics Micros/45/60          | 126         | 23.00       | 1.82      | 7.9       | 22.9          | 17.5 - 28.5  | 126           | 43.01       | 3.93      | 9.1       | 42.7          | 31.2 - 54.9  |
| Boule Medonic CA 620                  | 11          | 32.55       | 0.83      | 2.5       | 32.8          | 30.0 - 35.1  | 11            | 61.43       | 2.04      | 3.3       | 62.0          | 55.2 - 67.6  |
| Boule Medonic M series                | 81          | 30.31       | 1.10      | 3.6       | 30.2          | 27.0 - 33.7  | 80            | 58.85       | 2.12      | 3.6       | 58.9          | 52.4 - 65.3  |
| COULTER AcT diff/diff 2               | 224         | 32.05       | 0.83      | 2.6       | 32.1          | 29.5 - 34.6  | 225           | 59.50       | 1.62      | 2.7       | 59.6          | 54.6 - 64.4  |
| Drew Scientific D3                    | 11          | 28.93       | 1.05      | 3.6       | 28.6          | 25.7 - 32.1  | 11            | 55.73       | 1.76      | 3.2       | 55.8          | 50.4 - 61.0  |

| Specimen HD-10                        |     |       |      |      |      |             |
|---------------------------------------|-----|-------|------|------|------|-------------|
| All Method                            | 710 | 13.65 | 2.01 | 14.7 | 14.1 | 7.6 - 19.7  |
| All Abbott Cell-Dyn Instruments       | 240 | 12.44 | 1.36 | 10.9 | 12.4 | 8.3 - 16.6  |
| All ABX Instruments                   | 126 | 11.35 | 0.88 | 7.7  | 11.3 | 8.7 - 14.0  |
| All COULTER Instruments               | 226 | 15.53 | 0.46 | 2.9  | 15.5 | 14.1 - 16.9 |
| All Danam/Drew Scientific Instruments | 11  | 13.70 | 0.77 | 5.6  | 13.3 | 11.3 - 16.1 |
| Abbott Cell-Dyn 1700                  | 20  | 12.88 | 0.62 | 4.8  | 12.9 | 11.0 - 14.8 |
| Abbott Cell-Dyn 1800                  | 114 | 11.19 | 0.45 | 4.0  | 11.2 | 9.8 - 12.6  |
| Abbott Cell-Dyn Emerald               | 101 | 13.70 | 0.70 | 5.1  | 13.7 | 11.5 - 15.9 |
| ABX Diagnostics Micros/45/60          | 126 | 11.35 | 0.88 | 7.7  | 11.3 | 8.7 - 14.0  |
| Boule Medonic CA 620                  | 11  | 16.35 | 0.51 | 3.1  | 16.1 | 14.8 - 17.9 |
| Boule Medonic M series                | 81  | 15.13 | 0.55 | 3.6  | 15.1 | 13.4 - 16.8 |
| COULTER AcT diff/diff 2               | 223 | 15.53 | 0.45 | 2.9  | 15.5 | 14.1 - 16.9 |
| Drew Scientific D3                    | 11  | 13.70 | 0.77 | 5.6  | 13.3 | 11.3 - 16.1 |

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

| Specimen HD-6                         |             |             |           |           |               |              | Specimen HD-7 |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 702         | 4.27        | 1.32      | 31.0      | 4.1           | 0.3 - 8.3    | 701           | 11.95       | 5.25      | 44.0      | 10.6          | 0.0 - 27.8   |
| All Abbott Cell-Dyn Instruments       | 244         | 4.74        | 1.92      | 40.4      | 5.3           | 0.0 - 10.5   | 243           | 14.38       | 3.46      | 24.1      | 14.1          | 3.9 - 24.8   |
| All ABX Instruments                   | 121         | 4.15        | 0.41      | 9.8       | 4.2           | 2.9 - 5.4    | 121           | 19.14       | 2.71      | 14.1      | 19.5          | 11.0 - 27.3  |
| All COULTER Instruments               | 227         | 3.78        | 0.54      | 14.3      | 3.8           | 2.1 - 5.5    | 227           | 6.82        | 1.26      | 18.4      | 6.8           | 3.0 - 10.6   |
| All Danam/Drew Scientific Instruments | 11          | 2.61        | 0.16      | 6.3       | 2.6           | 2.1 - 3.2    | 11            | 9.10        | 0.77      | 8.5       | 9.2           | 6.7 - 11.5   |
| Abbott Cell-Dyn 1700                  | 20          | 5.26        | 0.25      | 4.8       | 5.3           | 4.4 - 6.1    | 21            | 13.69       | 0.95      | 7.0       | 13.8          | 10.8 - 16.6  |
| Abbott Cell-Dyn 1800                  | 112         | 6.63        | 0.37      | 5.6       | 6.6           | 5.5 - 7.8    | 112           | 17.72       | 1.47      | 8.3       | 17.8          | 13.3 - 22.2  |
| Abbott Cell-Dyn Emerald               | 106         | 2.72        | 0.30      | 11.1      | 2.7           | 1.8 - 3.7    | 107           | 11.13       | 1.38      | 12.3      | 11.0          | 7.0 - 15.3   |
| ABX Diagnostics Micros/45/60          | 121         | 4.15        | 0.41      | 9.8       | 4.2           | 2.9 - 5.4    | 121           | 19.14       | 2.71      | 14.1      | 19.5          | 11.0 - 27.3  |
| Boule Medonic CA 620                  | 11          | 5.57        | 1.16      | 20.9      | 5.6           | 2.0 - 9.1    | 11            | 9.18        | 1.04      | 11.3      | 9.0           | 6.0 - 12.4   |
| Boule Medonic M series                | 83          | 4.56        | 0.65      | 14.3      | 4.5           | 2.6 - 6.6    | 82            | 9.85        | 1.93      | 19.6      | 9.9           | 4.0 - 15.7   |
| COULTER AcT diff/diff 2               | 224         | 3.78        | 0.54      | 14.3      | 3.8           | 2.1 - 5.4    | 224           | 6.83        | 1.26      | 18.4      | 6.8           | 3.0 - 10.7   |
| Drew Scientific D3                    | 11          | 2.61        | 0.16      | 6.3       | 2.6           | 2.1 - 3.2    | 11            | 9.10        | 0.77      | 8.5       | 9.2           | 6.7 - 11.5   |

| Specimen HD-8                         |     |       |      |      |      |            | Specimen HD-9 |       |      |      |      |             |
|---------------------------------------|-----|-------|------|------|------|------------|---------------|-------|------|------|------|-------------|
| All Method                            | 701 | 7.76  | 2.41 | 31.0 | 7.0  | 0.5 - 15.0 | 702           | 11.78 | 5.38 | 45.6 | 10.5 | 0.0 - 28.0  |
| All Abbott Cell-Dyn Instruments       | 242 | 8.73  | 2.70 | 30.9 | 9.2  | 0.6 - 16.9 | 243           | 14.31 | 3.42 | 23.9 | 13.8 | 4.0 - 24.6  |
| All ABX Instruments                   | 121 | 9.34  | 1.09 | 11.7 | 9.4  | 6.0 - 12.7 | 121           | 19.26 | 2.72 | 14.1 | 19.5 | 11.1 - 27.5 |
| All COULTER Instruments               | 227 | 5.56  | 0.58 | 10.5 | 5.6  | 3.8 - 7.4  | 228           | 6.58  | 1.19 | 18.0 | 6.5  | 3.0 - 10.2  |
| All Danam/Drew Scientific Instruments | 11  | 5.43  | 0.35 | 6.5  | 5.3  | 4.3 - 6.5  | 11            | 9.55  | 0.64 | 6.7  | 9.5  | 7.6 - 11.5  |
| Abbott Cell-Dyn 1700                  | 21  | 9.10  | 0.61 | 6.7  | 9.1  | 7.2 - 11.0 | 21            | 13.26 | 1.03 | 7.7  | 13.5 | 10.1 - 16.4 |
| Abbott Cell-Dyn 1800                  | 111 | 11.38 | 0.58 | 5.1  | 11.4 | 9.6 - 13.2 | 111           | 17.69 | 1.29 | 7.3  | 17.7 | 13.8 - 21.6 |
| Abbott Cell-Dyn Emerald               | 106 | 5.93  | 0.72 | 12.2 | 5.9  | 3.7 - 8.2  | 107           | 11.12 | 1.39 | 12.5 | 10.9 | 6.9 - 15.3  |
| ABX Diagnostics Micros/45/60          | 121 | 9.34  | 1.09 | 11.7 | 9.4  | 6.0 - 12.7 | 121           | 19.26 | 2.72 | 14.1 | 19.5 | 11.1 - 27.5 |
| Boule Medonic CA 620                  | 11  | 9.75  | 0.89 | 9.1  | 9.6  | 7.0 - 12.5 | 11            | 9.74  | 2.48 | 25.4 | 10.3 | 2.3 - 17.2  |
| Boule Medonic M series                | 83  | 8.75  | 1.09 | 12.5 | 8.7  | 5.4 - 12.1 | 82            | 8.95  | 2.17 | 24.3 | 9.2  | 2.4 - 15.5  |
| COULTER AcT diff/diff 2               | 224 | 5.57  | 0.58 | 10.4 | 5.6  | 3.8 - 7.4  | 225           | 6.59  | 1.19 | 18.1 | 6.6  | 3.0 - 10.2  |
| Drew Scientific D3                    | 11  | 5.43  | 0.35 | 6.5  | 5.3  | 4.3 - 6.5  | 11            | 9.55  | 0.64 | 6.7  | 9.5  | 7.6 - 11.5  |

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

| Specimen HD-10                        |             |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 701         | 4.31        | 1.32      | 30.6      | 4.1           | 0.3 - 8.3    |
| All Abbott Cell-Dyn Instruments       | 243         | 4.73        | 1.91      | 40.4      | 5.2           | 0.0 - 10.5   |
| All ABX Instruments                   | 121         | 4.18        | 0.39      | 9.3       | 4.2           | 3.0 - 5.4    |
| All COULTER Instruments               | 223         | 3.82        | 0.44      | 11.5      | 3.8           | 2.5 - 5.2    |
| All Danam/Drew Scientific Instruments | 11          | 2.69        | 0.14      | 5.1       | 2.6           | 2.2 - 3.2    |
| Abbott Cell-Dyn 1700                  | 20          | 5.17        | 0.23      | 4.4       | 5.2           | 4.4 - 5.9    |
| Abbott Cell-Dyn 1800                  | 111         | 6.59        | 0.38      | 5.7       | 6.5           | 5.4 - 7.8    |
| Abbott Cell-Dyn Emerald               | 105         | 2.71        | 0.31      | 11.3      | 2.7           | 1.7 - 3.7    |
| ABX Diagnostics Micros/45/60          | 121         | 4.18        | 0.39      | 9.3       | 4.2           | 3.0 - 5.4    |
| Boule Medonic CA 620                  | 11          | 6.18        | 1.16      | 18.8      | 6.1           | 2.6 - 9.7    |
| Boule Medonic M series                | 82          | 4.65        | 0.76      | 16.3      | 4.7           | 2.3 - 7.0    |
| COULTER AcT diff/diff 2               | 220         | 3.83        | 0.44      | 11.4      | 3.8           | 2.5 - 5.2    |
| Drew Scientific D3                    | 11          | 2.69        | 0.14      | 5.1       | 2.6           | 2.2 - 3.2    |

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

| Specimen HD-6                         |             |             |           |           |               |              | Specimen HD-7 |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 699         | 82.01       | 1.76      | 2.1       | 81.9          | 76.7 - 87.3  | 696           | 35.54       | 2.82      | 7.9       | 35.7          | 27.0 - 44.1  |
| All Abbott Cell-Dyn Instruments       | 241         | 82.74       | 0.96      | 1.2       | 82.7          | 79.8 - 85.7  | 242           | 37.14       | 1.91      | 5.2       | 37.2          | 31.4 - 42.9  |
| All ABX Instruments                   | 121         | 84.42       | 0.63      | 0.7       | 84.5          | 82.5 - 86.4  | 122           | 37.84       | 1.84      | 4.9       | 38.0          | 32.3 - 43.4  |
| All COULTER Instruments               | 226         | 80.69       | 0.70      | 0.9       | 80.7          | 78.5 - 82.9  | 225           | 34.08       | 1.65      | 4.8       | 33.9          | 29.1 - 39.1  |
| All Danam/Drew Scientific Instruments | 11          | 83.48       | 1.08      | 1.3       | 83.9          | 80.2 - 86.8  | 11            | 36.27       | 1.46      | 4.0       | 36.5          | 31.8 - 40.7  |
| Abbott Cell-Dyn 1700                  | 20          | 82.05       | 0.91      | 1.1       | 82.1          | 79.3 - 84.8  | 20            | 36.51       | 2.21      | 6.0       | 36.1          | 29.8 - 43.2  |
| Abbott Cell-Dyn 1800                  | 114         | 82.27       | 0.54      | 0.7       | 82.3          | 80.6 - 83.9  | 114           | 37.33       | 1.95      | 5.2       | 37.4          | 31.4 - 43.2  |
| Abbott Cell-Dyn Emerald               | 104         | 83.37       | 0.94      | 1.1       | 83.6          | 80.5 - 86.2  | 105           | 36.98       | 1.73      | 4.7       | 37.1          | 31.7 - 42.2  |
| ABX Diagnostics Micros/45/60          | 121         | 84.42       | 0.63      | 0.7       | 84.5          | 82.5 - 86.4  | 122           | 37.84       | 1.84      | 4.9       | 38.0          | 32.3 - 43.4  |
| Boule Medonic CA 620                  | 11          | 78.51       | 1.89      | 2.4       | 78.3          | 72.8 - 84.2  | 11            | 30.35       | 2.26      | 7.4       | 29.8          | 23.5 - 37.2  |
| Boule Medonic M series                | 80          | 80.28       | 0.86      | 1.1       | 80.3          | 77.7 - 82.9  | 80            | 31.79       | 2.06      | 6.5       | 32.0          | 25.6 - 38.0  |
| COULTER AcT diff/diff 2               | 223         | 80.70       | 0.71      | 0.9       | 80.7          | 78.5 - 82.9  | 222           | 34.09       | 1.65      | 4.8       | 33.9          | 29.1 - 39.1  |
| Drew Scientific D3                    | 11          | 83.48       | 1.08      | 1.3       | 83.9          | 80.2 - 86.8  | 11            | 36.27       | 1.46      | 4.0       | 36.5          | 31.8 - 40.7  |

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

| Specimen HD-8                         |             |             |           |           |               |              | Specimen HD-9 |             |           |           |               |              |
|---------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 703         | 64.15       | 2.64      | 4.1       | 64.0          | 56.2 - 72.1  | 700           | 35.32       | 2.75      | 7.8       | 35.5          | 27.0 - 43.6  |
| All Abbott Cell-Dyn Instruments       | 242         | 65.38       | 1.25      | 1.9       | 65.4          | 61.6 - 69.2  | 242           | 36.63       | 1.78      | 4.9       | 36.9          | 31.2 - 42.0  |
| All ABX Instruments                   | 123         | 67.66       | 1.11      | 1.6       | 67.7          | 64.3 - 71.1  | 124           | 37.84       | 1.87      | 4.9       | 38.0          | 32.2 - 43.5  |
| All COULTER Instruments               | 226         | 62.36       | 0.92      | 1.5       | 62.3          | 59.6 - 65.2  | 230           | 33.91       | 1.61      | 4.7       | 33.8          | 29.0 - 38.8  |
| All Danam/Drew Scientific Instruments | 11          | 65.67       | 1.18      | 1.8       | 65.7          | 62.1 - 69.3  | 11            | 34.75       | 1.62      | 4.7       | 34.8          | 29.8 - 39.7  |
| Abbott Cell-Dyn 1700                  | 19          | 63.94       | 1.25      | 2.0       | 64.0          | 60.1 - 67.7  | 20            | 35.82       | 1.52      | 4.2       | 35.9          | 31.2 - 40.4  |
| Abbott Cell-Dyn 1800                  | 114         | 64.87       | 0.88      | 1.4       | 64.9          | 62.2 - 67.6  | 114           | 36.55       | 1.86      | 5.1       | 36.6          | 30.9 - 42.2  |
| Abbott Cell-Dyn Emerald               | 104         | 66.22       | 0.95      | 1.4       | 66.4          | 63.3 - 69.1  | 106           | 36.87       | 1.72      | 4.7       | 37.1          | 31.7 - 42.1  |
| ABX Diagnostics Micros/45/60          | 123         | 67.66       | 1.11      | 1.6       | 67.7          | 64.3 - 71.1  | 124           | 37.84       | 1.87      | 4.9       | 38.0          | 32.2 - 43.5  |
| Boule Medonic CA 620                  | 11          | 57.70       | 1.14      | 2.0       | 58.1          | 54.2 - 61.2  | 11            | 28.84       | 1.60      | 5.5       | 28.5          | 24.0 - 33.7  |
| Boule Medonic M series                | 80          | 60.99       | 1.50      | 2.5       | 61.1          | 56.4 - 65.5  | 80            | 32.22       | 2.79      | 8.7       | 32.2          | 23.8 - 40.6  |
| COULTER AcT diff/diff 2               | 223         | 62.37       | 0.92      | 1.5       | 62.3          | 59.5 - 65.2  | 227           | 33.92       | 1.61      | 4.8       | 33.8          | 29.0 - 38.8  |
| Drew Scientific D3                    | 11          | 65.67       | 1.18      | 1.8       | 65.7          | 62.1 - 69.3  | 11            | 34.75       | 1.62      | 4.7       | 34.8          | 29.8 - 39.7  |

| Specimen HD-10                        |     |       |      |     |      |             |
|---------------------------------------|-----|-------|------|-----|------|-------------|
| All Method                            | 698 | 82.02 | 1.81 | 2.2 | 81.8 | 76.5 - 87.5 |
| All Abbott Cell-Dyn Instruments       | 241 | 82.77 | 1.00 | 1.2 | 82.7 | 79.7 - 85.8 |
| All ABX Instruments                   | 124 | 84.46 | 0.70 | 0.8 | 84.5 | 82.3 - 86.6 |
| All COULTER Instruments               | 226 | 80.68 | 0.65 | 0.8 | 80.6 | 78.7 - 82.7 |
| All Danam/Drew Scientific Instruments | 11  | 83.60 | 0.84 | 1.0 | 84.0 | 81.0 - 86.2 |
| Abbott Cell-Dyn 1700                  | 19  | 81.96 | 0.71 | 0.9 | 82.0 | 79.8 - 84.2 |
| Abbott Cell-Dyn 1800                  | 114 | 82.22 | 0.55 | 0.7 | 82.3 | 80.5 - 83.9 |
| Abbott Cell-Dyn Emerald               | 105 | 83.49 | 0.94 | 1.1 | 83.7 | 80.6 - 86.4 |
| ABX Diagnostics Micros/45/60          | 124 | 84.46 | 0.70 | 0.8 | 84.5 | 82.3 - 86.6 |
| Boule Medonic CA 620                  | 11  | 77.47 | 1.10 | 1.4 | 77.2 | 74.1 - 80.8 |
| Boule Medonic M series                | 79  | 80.26 | 0.94 | 1.2 | 80.2 | 77.4 - 83.1 |
| COULTER AcT diff/diff 2               | 223 | 80.68 | 0.64 | 0.8 | 80.6 | 78.7 - 82.7 |
| Drew Scientific D3                    | 11  | 83.60 | 0.84 | 1.0 | 84.0 | 81.0 - 86.2 |

## HEMATOLOGY W/ 5-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)

| Specimen DIF-6          |             |             |           |           |               |              | Specimen DIF-7 |             |           |           |               |              |
|-------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17          | 22.65       | 0.76      | 3.4       | 22.4          | 19.2 - 26.1  | 17             | 4.32        | 0.12      | 2.9       | 4.3           | 3.6 - 5.0    |
| All COULTER Instruments | 17          | 22.65       | 0.76      | 3.4       | 22.4          | 19.2 - 26.1  | 17             | 4.32        | 0.12      | 2.9       | 4.3           | 3.6 - 5.0    |
| Specimen DIF-8          |             |             |           |           |               |              | Specimen DIF-9 |             |           |           |               |              |
| All Method              | 17          | 9.82        | 0.29      | 3.0       | 9.9           | 8.3 - 11.3   | 17             | 4.23        | 0.13      | 3.1       | 4.2           | 3.5 - 4.9    |
| All COULTER Instruments | 17          | 9.82        | 0.29      | 3.0       | 9.9           | 8.3 - 11.3   | 17             | 4.23        | 0.13      | 3.1       | 4.2           | 3.5 - 4.9    |
| Specimen DIF-10         |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method              | 16          | 22.44       | 0.54      | 2.4       | 22.5          | 19.0 - 25.9  |                |             |           |           |               |              |
| All COULTER Instruments | 16          | 22.44       | 0.54      | 2.4       | 22.5          | 19.0 - 25.9  |                |             |           |           |               |              |

## HEMATOLOGY W/ 5-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10<sup>12</sup>/L)

| Specimen DIF-6          |             |             |           |           |               |              | Specimen DIF-7 |             |           |           |               |              |
|-------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17          | 5.441       | 0.124     | 2.3       | 5.45          | 5.11 - 5.77  | 17             | 2.637       | 0.040     | 1.5       | 2.63          | 2.47 - 2.80  |
| All COULTER Instruments | 17          | 5.441       | 0.124     | 2.3       | 5.45          | 5.11 - 5.77  | 17             | 2.637       | 0.040     | 1.5       | 2.63          | 2.47 - 2.80  |
| Specimen DIF-8          |             |             |           |           |               |              | Specimen DIF-9 |             |           |           |               |              |
| All Method              | 17          | 4.176       | 0.060     | 1.4       | 4.18          | 3.92 - 4.43  | 17             | 2.629       | 0.050     | 1.9       | 2.62          | 2.47 - 2.79  |
| All COULTER Instruments | 17          | 4.176       | 0.060     | 1.4       | 4.18          | 3.92 - 4.43  | 17             | 2.629       | 0.050     | 1.9       | 2.62          | 2.47 - 2.79  |
| Specimen DIF-10         |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method              | 17          | 5.415       | 0.125     | 2.3       | 5.40          | 5.09 - 5.75  |                |             |           |           |               |              |
| All COULTER Instruments | 17          | 5.415       | 0.125     | 2.3       | 5.40          | 5.09 - 5.75  |                |             |           |           |               |              |

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

| Specimen DIF-6          |             |             |           |           |               |              | Specimen DIF-7 |             |           |           |               |              |
|-------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17          | 16.89       | 0.34      | 2.0       | 16.9          | 15.7 - 18.1  | 16             | 6.83        | 0.07      | 1.0       | 6.8           | 6.3 - 7.4    |
| All COULTER Instruments | 17          | 16.89       | 0.34      | 2.0       | 16.9          | 15.7 - 18.1  | 16             | 6.83        | 0.07      | 1.0       | 6.8           | 6.3 - 7.4    |
| Specimen DIF-8          |             |             |           |           |               |              | Specimen DIF-9 |             |           |           |               |              |
| All Method              | 17          | 12.25       | 0.24      | 2.0       | 12.2          | 11.3 - 13.2  | 17             | 6.82        | 0.13      | 2.0       | 6.8           | 6.3 - 7.4    |
| All COULTER Instruments | 17          | 12.25       | 0.24      | 2.0       | 12.2          | 11.3 - 13.2  | 17             | 6.82        | 0.13      | 2.0       | 6.8           | 6.3 - 7.4    |
| Specimen DIF-10         |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method              | 17          | 16.89       | 0.34      | 2.0       | 16.9          | 15.7 - 18.1  |                |             |           |           |               |              |
| All COULTER Instruments | 17          | 16.89       | 0.34      | 2.0       | 16.9          | 15.7 - 18.1  |                |             |           |           |               |              |

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

| Specimen DIF-6          |             |             |           |           |               |              | Specimen DIF-7 |             |           |           |               |              |
|-------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17          | 53.35       | 1.14      | 2.1       | 53.3          | 50.1 - 56.6  | 17             | 21.01       | 0.35      | 1.6       | 20.9          | 19.7 - 22.3  |
| All COULTER Instruments | 17          | 53.35       | 1.14      | 2.1       | 53.3          | 50.1 - 56.6  | 17             | 21.01       | 0.35      | 1.6       | 20.9          | 19.7 - 22.3  |
| Specimen DIF-8          |             |             |           |           |               |              | Specimen DIF-9 |             |           |           |               |              |
| All Method              | 17          | 37.92       | 0.60      | 1.6       | 38.0          | 35.6 - 40.2  | 17             | 20.96       | 0.43      | 2.1       | 21.0          | 19.7 - 22.3  |
| All COULTER Instruments | 17          | 37.92       | 0.60      | 1.6       | 38.0          | 35.6 - 40.2  | 17             | 20.96       | 0.43      | 2.1       | 21.0          | 19.7 - 22.3  |
| Specimen DIF-10         |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method              | 17          | 53.08       | 1.18      | 2.2       | 53.1          | 49.8 - 56.3  |                |             |           |           |               |              |
| All COULTER Instruments | 17          | 53.08       | 1.18      | 2.2       | 53.1          | 49.8 - 56.3  |                |             |           |           |               |              |

## HEMATOLOGY W/ 5-PART DIFFERENTIAL–PLATELET COUNT (x 10<sup>9</sup>/L)

| Specimen DIF-6          |             |             |           |           |               |              | Specimen DIF-7 |             |           |           |               |              |
|-------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17          | 480.9       | 32.2      | 6.7       | 473           | 360 - 602    | 17             | 80.5        | 5.5       | 6.9       | 79            | 60 - 101     |
| All COULTER Instruments | 17          | 480.9       | 32.2      | 6.7       | 473           | 360 - 602    | 17             | 80.5        | 5.5       | 6.9       | 79            | 60 - 101     |
| Specimen DIF-8          |             |             |           |           |               |              | Specimen DIF-9 |             |           |           |               |              |
| All Method              | 17          | 246.8       | 8.6       | 3.5       | 247           | 185 - 309    | 17             | 78.2        | 5.3       | 6.8       | 78            | 58 - 98      |
| All COULTER Instruments | 17          | 246.8       | 8.6       | 3.5       | 247           | 185 - 309    | 17             | 78.2        | 5.3       | 6.8       | 78            | 58 - 98      |
| Specimen DIF-10         |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method              | 17          | 469.9       | 29.3      | 6.2       | 463           | 352 - 588    |                |             |           |           |               |              |
| All COULTER Instruments | 17          | 469.9       | 29.3      | 6.2       | 463           | 352 - 588    |                |             |           |           |               |              |

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

| Specimen DIF-6          |             |             |           |           |               |              | Specimen DIF-7 |             |           |           |               |              |
|-------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17          | 63.68       | 2.73      | 4.3       | 63.5          | 55.4 - 71.9  | 16             | 44.56       | 0.75      | 1.7       | 44.6          | 42.3 - 46.9  |
| All COULTER Instruments | 17          | 63.68       | 2.73      | 4.3       | 63.5          | 55.4 - 71.9  | 16             | 44.56       | 0.75      | 1.7       | 44.6          | 42.3 - 46.9  |
| Specimen DIF-8          |             |             |           |           |               |              | Specimen DIF-9 |             |           |           |               |              |
| All Method              | 17          | 55.09       | 2.36      | 4.3       | 54.6          | 48.0 - 62.2  | 16             | 44.31       | 0.79      | 1.8       | 44.4          | 41.9 - 46.7  |
| All COULTER Instruments | 17          | 55.09       | 2.36      | 4.3       | 54.6          | 48.0 - 62.2  | 16             | 44.31       | 0.79      | 1.8       | 44.4          | 41.9 - 46.7  |
| Specimen DIF-10         |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method              | 17          | 63.79       | 2.72      | 4.3       | 63.0          | 55.6 - 72.0  |                |             |           |           |               |              |
| All COULTER Instruments | 17          | 63.79       | 2.72      | 4.3       | 63.0          | 55.6 - 72.0  |                |             |           |           |               |              |

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

| Specimen DIF-6          |             |             |           |           |               |              | Specimen DIF-7 |             |           |           |               |              |
|-------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17          | 25.95       | 1.63      | 6.3       | 26.0          | 21.0 - 30.9  | 16             | 46.50       | 1.46      | 3.1       | 46.6          | 42.1 - 50.9  |
| All COULTER Instruments | 17          | 25.95       | 1.63      | 6.3       | 26.0          | 21.0 - 30.9  | 16             | 46.50       | 1.46      | 3.1       | 46.6          | 42.1 - 50.9  |
| Specimen DIF-8          |             |             |           |           |               |              | Specimen DIF-9 |             |           |           |               |              |
| All Method              | 15          | 34.72       | 0.57      | 1.6       | 34.8          | 33.0 - 36.5  | 17             | 46.44       | 2.27      | 4.9       | 47.0          | 39.6 - 53.3  |
| All COULTER Instruments | 15          | 34.72       | 0.57      | 1.6       | 34.8          | 33.0 - 36.5  | 17             | 46.44       | 2.27      | 4.9       | 47.0          | 39.6 - 53.3  |
| Specimen DIF-10         |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method              | 17          | 25.99       | 1.87      | 7.2       | 26.7          | 20.3 - 31.6  |                |             |           |           |               |              |
| All COULTER Instruments | 17          | 25.99       | 1.87      | 7.2       | 26.7          | 20.3 - 31.6  |                |             |           |           |               |              |

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

| Specimen DIF-6          |             |             |           |           |               |              | Specimen DIF-7 |             |           |           |               |              |
|-------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17          | 4.31        | 1.56      | 36.1      | 4.5           | 0.0 - 9.0    | 17             | 0.54        | 0.38      | 70.5      | 0.4           | 0.0 - 1.7    |
| All COULTER Instruments | 17          | 4.31        | 1.56      | 36.1      | 4.5           | 0.0 - 9.0    | 17             | 0.54        | 0.38      | 70.5      | 0.4           | 0.0 - 1.7    |
| Specimen DIF-8          |             |             |           |           |               |              | Specimen DIF-9 |             |           |           |               |              |
| All Method              | 17          | 3.54        | 0.87      | 24.7      | 3.5           | 0.9 - 6.2    | 17             | 0.50        | 0.30      | 60.0      | 0.4           | 0.0 - 1.4    |
| All COULTER Instruments | 17          | 3.54        | 0.87      | 24.7      | 3.5           | 0.9 - 6.2    | 17             | 0.50        | 0.30      | 60.0      | 0.4           | 0.0 - 1.4    |
| Specimen DIF-10         |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method              | 17          | 3.81        | 1.39      | 36.6      | 3.9           | 0.0 - 8.0    |                |             |           |           |               |              |
| All COULTER Instruments | 17          | 3.81        | 1.39      | 36.6      | 3.9           | 0.0 - 8.0    |                |             |           |           |               |              |

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

| <u>Instrument</u>       | Specimen DIF-6  |             |           |           |               |              | Specimen DIF-7 |             |           |           |               |              |
|-------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                         | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17              | 5.48        | 1.10      | 20.0      | 4.9           | 2.1 - 8.8    | 17             | 8.01        | 0.61      | 7.6       | 7.9           | 6.1 - 9.9    |
| All COULTER Instruments | 17              | 5.48        | 1.10      | 20.0      | 4.9           | 2.1 - 8.8    | 17             | 8.01        | 0.61      | 7.6       | 7.9           | 6.1 - 9.9    |
|                         | Specimen DIF-8  |             |           |           |               |              | Specimen DIF-9 |             |           |           |               |              |
|                         | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17              | 7.04        | 0.73      | 10.4      | 7.1           | 4.8 - 9.3    | 17             | 7.82        | 0.55      | 7.1       | 7.9           | 6.1 - 9.5    |
| All COULTER Instruments | 17              | 7.04        | 0.73      | 10.4      | 7.1           | 4.8 - 9.3    | 17             | 7.82        | 0.55      | 7.1       | 7.9           | 6.1 - 9.5    |
|                         | Specimen DIF-10 |             |           |           |               |              |                |             |           |           |               |              |
|                         | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |                |             |           |           |               |              |
| All Method              | 17              | 5.65        | 1.02      | 18.1      | 6.2           | 2.5 - 8.8    |                |             |           |           |               |              |
| All COULTER Instruments | 17              | 5.65        | 1.02      | 18.1      | 6.2           | 2.5 - 8.8    |                |             |           |           |               |              |

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

| <u>Instrument</u>       | Specimen DIF-6  |             |           |           |               |              | Specimen DIF-7 |             |           |           |               |              |
|-------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                         | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17              | 0.60        | 0.67      | 111.0     | 0.4           | 0.0 - 2.6    | 15             | 0.15        | 0.13      | 84.9      | 0.1           | 0.0 - 0.6    |
| All COULTER Instruments | 17              | 0.60        | 0.67      | 111.0     | 0.4           | 0.0 - 2.6    | 15             | 0.15        | 0.13      | 84.9      | 0.1           | 0.0 - 0.6    |
|                         | Specimen DIF-8  |             |           |           |               |              | Specimen DIF-9 |             |           |           |               |              |
|                         | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method              | 17              | 0.35        | 0.26      | 75.0      | 0.2           | 0.0 - 1.2    | 15             | 0.13        | 0.12      | 88.1      | 0.1           | 0.0 - 0.5    |
| All COULTER Instruments | 17              | 0.35        | 0.26      | 75.0      | 0.2           | 0.0 - 1.2    | 15             | 0.13        | 0.12      | 88.1      | 0.1           | 0.0 - 0.5    |
|                         | Specimen DIF-10 |             |           |           |               |              |                |             |           |           |               |              |
|                         | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |                |             |           |           |               |              |
| All Method              | 17              | 0.79        | 1.00      | 126.4     | 0.3           | 0.0 - 3.9    |                |             |           |           |               |              |
| All COULTER Instruments | 17              | 0.79        | 1.00      | 126.4     | 0.3           | 0.0 - 3.9    |                |             |           |           |               |              |

**QBC HEMATOLOGY–HEMATOCRIT (percent)**

| <u><b>Instrument</b></u> | <u><b>Labs</b></u> | <u><b>Mean</b></u> | <b>Specimen QBC-6</b>  |                  |                      |                     | <u><b>Labs</b></u> | <u><b>Mean</b></u> | <b>Specimen QBC-7</b> |                  |                      |                     |
|--------------------------|--------------------|--------------------|------------------------|------------------|----------------------|---------------------|--------------------|--------------------|-----------------------|------------------|----------------------|---------------------|
|                          |                    |                    | <u><b>SD</b></u>       | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                    |                    | <u><b>SD</b></u>      | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method               | 7                  | 28.34              | 0.72                   | 2.5              | 28.6                 | 26.6 - 30.1         | 7                  | 22.47              | 0.95                  | 4.2              | 22.4                 | 21.1 - 23.9         |
|                          |                    |                    | <b>Specimen QBC-8</b>  |                  |                      |                     |                    |                    | <b>Specimen QBC-9</b> |                  |                      |                     |
|                          |                    |                    | <u><b>SD</b></u>       | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                    |                    | <u><b>SD</b></u>      | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method               | 7                  | 35.94              | 0.39                   | 1.1              | 36.0                 | 33.7 - 38.1         | 7                  | 28.69              | 0.56                  | 2.0              | 28.7                 | 26.9 - 30.5         |
|                          |                    |                    | <b>Specimen QBC-10</b> |                  |                      |                     |                    |                    |                       |                  |                      |                     |
|                          |                    |                    | <u><b>SD</b></u>       | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                    |                    |                       |                  |                      |                     |
| All Method               | 7                  | 22.31              | 0.36                   | 1.6              | 22.2                 | 20.9 - 23.7         |                    |                    |                       |                  |                      |                     |

**QBC HEMATOLOGY–HEMOGLOBIN (g/dL)**

| <u><b>Instrument</b></u> | <u><b>Labs</b></u> | <u><b>Mean</b></u> | <b>Specimen QBC-6</b>  |                  |                      |                     | <u><b>Labs</b></u> | <u><b>Mean</b></u> | <b>Specimen QBC-7</b> |                  |                      |                     |
|--------------------------|--------------------|--------------------|------------------------|------------------|----------------------|---------------------|--------------------|--------------------|-----------------------|------------------|----------------------|---------------------|
|                          |                    |                    | <u><b>SD</b></u>       | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                    |                    | <u><b>SD</b></u>      | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method               | 7                  | 9.56               | 0.36                   | 3.8              | 9.5                  | 8.8 - 10.3          | 7                  | 7.60               | 0.37                  | 4.9              | 7.4                  | 7.0 - 8.2           |
|                          |                    |                    | <b>Specimen QBC-8</b>  |                  |                      |                     |                    |                    | <b>Specimen QBC-9</b> |                  |                      |                     |
|                          |                    |                    | <u><b>SD</b></u>       | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                    |                    | <u><b>SD</b></u>      | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method               | 7                  | 12.23              | 0.11                   | 0.9              | 12.2                 | 11.3 - 13.1         | 7                  | 9.63               | 0.26                  | 2.7              | 9.6                  | 8.9 - 10.4          |
|                          |                    |                    | <b>Specimen QBC-10</b> |                  |                      |                     |                    |                    |                       |                  |                      |                     |
|                          |                    |                    | <u><b>SD</b></u>       | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                    |                    |                       |                  |                      |                     |
| All Method               | 7                  | 7.56               | 0.31                   | 4.1              | 7.4                  | 7.0 - 8.1           |                    |                    |                       |                  |                      |                     |

QBC HEMATOLOGY–WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)

| Specimen QBC-6    |             |             |           |           |               |              | Specimen QBC-7 |             |           |           |               |              |
|-------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method        | 6           | 11.37       | 1.22      | 10.7      | 11.6          | 9.6 - 13.1   | 7              | 7.46        | 0.53      | 7.0       | 7.5           | 6.3 - 8.6    |
| Specimen QBC-8    |             |             |           |           |               |              | Specimen QBC-9 |             |           |           |               |              |
| All Method        | 5           | 26.38       | 3.18      | 12.1      | 27.6          | 22.4 - 30.4  | 6              | 11.43       | 1.33      | 11.6      | 11.5          | 9.7 - 13.2   |
| Specimen QBC-10   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method        | 7           | 7.51        | 0.71      | 9.5       | 7.3           | 6.3 - 8.7    |                |             |           |           |               |              |

QBC HEMATOLOGY–PLATELET COUNT (x 10<sup>9</sup>/L)

| Specimen QBC-6    |             |             |           |           |               |              | Specimen QBC-7 |             |           |           |               |              |
|-------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method        | 7           | 438.0       | 74.6      | 17.0      | 450           | 328 - 548    | 7              | 667.3       | 51.8      | 7.8       | 687           | 500 - 835    |
| Specimen QBC-8    |             |             |           |           |               |              | Specimen QBC-9 |             |           |           |               |              |
| All Method        | 6           | 233.0       | 31.5      | 13.5      | 220           | 174 - 292    | 6              | 470.2       | 51.3      | 10.9      | 446           | 352 - 588    |
| Specimen QBC-10   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method        | 7           | 675.7       | 56.4      | 8.3       | 668           | 506 - 845    |                |             |           |           |               |              |

# **QBC HEMATOLOGY–GRANULOCYTES (x 10<sup>9</sup>/L)**

| <u><b>Instrument</b></u> | <u><b>Labs</b></u> | <u><b>Mean</b></u> | <b>Specimen QBC-6</b>  |                  |                      |                     | <u><b>Labs</b></u> | <u><b>Mean</b></u> | <b>Specimen QBC-7</b> |                  |                      |                     |
|--------------------------|--------------------|--------------------|------------------------|------------------|----------------------|---------------------|--------------------|--------------------|-----------------------|------------------|----------------------|---------------------|
|                          |                    |                    | <u><b>SD</b></u>       | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                    |                    | <u><b>SD</b></u>      | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method               | 7                  | 7.51               | 1.68                   | 22.4             | 7.3                  | 2.4 - 12.6          | 7                  | 5.10               | 0.41                  | 8.0              | 5.1                  | 3.8 - 6.4           |
|                          |                    |                    | <b>Specimen QBC-8</b>  |                  |                      |                     |                    |                    | <b>Specimen QBC-9</b> |                  |                      |                     |
|                          |                    |                    |                        |                  |                      |                     |                    |                    |                       |                  |                      |                     |
| All Method               | 7                  | 11.97              | 3.58                   | 29.9             | 12.5                 | 1.2 - 22.8          | 7                  | 7.71               | 1.70                  | 22.0             | 7.3                  | 2.6 - 12.9          |
|                          |                    |                    | <b>Specimen QBC-10</b> |                  |                      |                     |                    |                    |                       |                  |                      |                     |
|                          |                    |                    |                        |                  |                      |                     |                    |                    |                       |                  |                      |                     |
| All Method               | 7                  | 5.06               | 0.59                   | 11.7             | 5.0                  | 3.2 - 6.9           |                    |                    |                       |                  |                      |                     |

# **QBC HEMATOLOGY–LYMPHS/MONO (x 10<sup>9</sup>/L)**

| <u><b>Instrument</b></u> | <u><b>Labs</b></u> | <u><b>Mean</b></u> | <b>Specimen QBC-6</b>  |                  |                      |                     | <u><b>Labs</b></u> | <u><b>Mean</b></u> | <b>Specimen QBC-7</b> |                  |                      |                     |
|--------------------------|--------------------|--------------------|------------------------|------------------|----------------------|---------------------|--------------------|--------------------|-----------------------|------------------|----------------------|---------------------|
|                          |                    |                    | <u><b>SD</b></u>       | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                    |                    | <u><b>SD</b></u>      | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method               | 7                  | 3.44               | 0.91                   | 26.3             | 3.7                  | 0.7 - 6.2           | 7                  | 2.37               | 0.74                  | 31.2             | 2.5                  | 0.1 - 4.6           |
|                          |                    |                    | <b>Specimen QBC-8</b>  |                  |                      |                     |                    |                    | <b>Specimen QBC-9</b> |                  |                      |                     |
|                          |                    |                    |                        |                  |                      |                     |                    |                    |                       |                  |                      |                     |
| All Method               | 7                  | 13.84              | 4.35                   | 31.4             | 12.0                 | 0.7 - 26.9          | 7                  | 3.34               | 0.68                  | 20.2             | 3.8                  | 1.3 - 5.4           |
|                          |                    |                    | <b>Specimen QBC-10</b> |                  |                      |                     |                    |                    |                       |                  |                      |                     |
|                          |                    |                    |                        |                  |                      |                     |                    |                    |                       |                  |                      |                     |
| All Method               | 7                  | 2.46               | 0.84                   | 34.2             | 2.8                  | 0.0 - 5.0           |                    |                    |                       |                  |                      |                     |

## RETICULOCYTE COUNT (percent)

| Specimen RT-3                  |             |             |           |           |               |              | Specimen RT-4 |             |           |           |               |              |
|--------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>              | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                     | 32          | 3.55        | 0.74      | 21.0      | 3.6           | 1.3 - 5.8    | 32            | 1.11        | 0.34      | 31.0      | 1.0           | 0.0 - 2.2    |
| All Automated Methods          | 18          | 3.62        | 0.29      | 8.1       | 3.7           | 2.7 - 4.5    | 18            | 0.96        | 0.15      | 15.6      | 0.9           | 0.5 - 1.5    |
| All Manual Methods             | 13          | 3.99        | 1.18      | 29.6      | 3.5           | 0.4 - 7.6    | 14            | 1.39        | 0.62      | 44.8      | 1.3           | 0.0 - 3.3    |
| Manual-New Methylen Blue Stain | 10          | 7.22        | 9.45      | 130.9     | 4.1           | 0.0 - 35.6   | 10            | 1.53        | 0.67      | 43.8      | 1.3           | 0.0 - 3.6    |

## HEMATOLOGY W/ 5-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)

| Specimen BCX-6                                    |             |             |           |           |               |              | Specimen BCX-7 |             |           |           |               |              |
|---------------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                        | 74          | 9.18        | 0.22      | 2.4       | 9.2           | 7.8 - 10.6   | 74             | 25.04       | 0.69      | 2.7       | 25.1          | 21.2 - 28.8  |
| All ABX Instruments                               | 33          | 9.14        | 0.22      | 2.4       | 9.1           | 7.7 - 10.6   | 33             | 24.92       | 0.72      | 2.9       | 25.0          | 21.1 - 28.7  |
| All COULTER Instruments                           | 41          | 9.20        | 0.22      | 2.4       | 9.2           | 7.8 - 10.6   | 41             | 25.14       | 0.65      | 2.6       | 25.1          | 21.3 - 29.0  |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19          | 9.13        | 0.16      | 1.8       | 9.2           | 7.7 - 10.6   | 19             | 24.98       | 0.62      | 2.5       | 25.2          | 21.2 - 28.8  |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 9.16        | 0.29      | 3.2       | 9.1           | 7.7 - 10.6   | 14             | 24.82       | 0.86      | 3.5       | 24.6          | 21.0 - 28.6  |
| COULTER AcT 5diff (version 2.01)                  | 39          | 9.21        | 0.22      | 2.4       | 9.2           | 7.8 - 10.6   | 39             | 25.17       | 0.64      | 2.5       | 25.2          | 21.3 - 29.0  |

| Specimen BCX-8                                    |             |             |           |           |               |              | Specimen BCX-9 |             |           |           |               |              |
|---------------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                        | 74          | 16.64       | 0.38      | 2.3       | 16.6          | 14.1 - 19.2  | 74             | 2.59        | 0.08      | 3.1       | 2.6           | 2.2 - 3.0    |
| All ABX Instruments                               | 33          | 16.56       | 0.38      | 2.3       | 16.6          | 14.0 - 19.1  | 33             | 2.57        | 0.08      | 3.3       | 2.6           | 2.1 - 3.0    |
| All COULTER Instruments                           | 41          | 16.69       | 0.37      | 2.2       | 16.7          | 14.1 - 19.2  | 41             | 2.60        | 0.07      | 2.8       | 2.6           | 2.2 - 3.0    |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19          | 16.59       | 0.30      | 1.8       | 16.6          | 14.1 - 19.1  | 19             | 2.56        | 0.07      | 2.7       | 2.6           | 2.1 - 3.0    |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 16.52       | 0.48      | 2.9       | 16.4          | 14.0 - 19.0  | 14             | 2.59        | 0.10      | 4.0       | 2.6           | 2.1 - 3.0    |
| COULTER AcT 5diff (version 2.01)                  | 39          | 16.72       | 0.35      | 2.1       | 16.7          | 14.2 - 19.3  | 39             | 2.60        | 0.07      | 2.9       | 2.6           | 2.2 - 3.0    |

| Specimen BCX-10                                   |             |             |           |           |               |              |
|---------------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                        | 72          | 6.88        | 0.20      | 2.9       | 6.9           | 5.8 - 8.0    |
| All ABX Instruments                               | 33          | 6.87        | 0.24      | 3.5       | 6.8           | 5.8 - 8.0    |
| All COULTER Instruments                           | 39          | 6.88        | 0.17      | 2.4       | 6.9           | 5.8 - 8.0    |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19          | 6.90        | 0.23      | 3.3       | 6.9           | 5.8 - 8.0    |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 6.83        | 0.25      | 3.7       | 6.8           | 5.8 - 7.9    |
| COULTER AcT 5diff (version 2.01)                  | 37          | 6.89        | 0.17      | 2.4       | 6.9           | 5.8 - 8.0    |

# HEMATOLOGY W/ 5-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10<sup>12</sup>/L)

| <u>Instrument</u>                                 | Specimen BCX-6  |             |           |           |               |              | Specimen BCX-7 |             |           |           |               |              |
|---------------------------------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                                                   | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                        | 72              | 5.514       | 0.095     | 1.7       | 5.51          | 5.18 - 5.85  | 73             | 4.634       | 0.081     | 1.7       | 4.63          | 4.35 - 4.92  |
| All ABX Instruments                               | 33              | 5.509       | 0.125     | 2.3       | 5.50          | 5.17 - 5.84  | 33             | 4.617       | 0.085     | 1.8       | 4.62          | 4.33 - 4.90  |
| All COULTER Instruments                           | 39              | 5.502       | 0.073     | 1.3       | 5.51          | 5.17 - 5.84  | 40             | 4.647       | 0.076     | 1.6       | 4.65          | 4.36 - 4.93  |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19              | 5.481       | 0.073     | 1.3       | 5.46          | 5.15 - 5.81  | 19             | 4.596       | 0.067     | 1.5       | 4.59          | 4.32 - 4.88  |
| ABX Diagnostics Pentra 80 / XL 80                 | 14              | 5.547       | 0.168     | 3.0       | 5.61          | 5.21 - 5.88  | 14             | 4.645       | 0.100     | 2.2       | 4.65          | 4.36 - 4.93  |
| COULTER AcT 5diff (version 2.01)                  | 37              | 5.503       | 0.074     | 1.4       | 5.51          | 5.17 - 5.84  | 38             | 4.650       | 0.077     | 1.7       | 4.65          | 4.37 - 4.93  |
| <u>Instrument</u>                                 | Specimen BCX-8  |             |           |           |               |              | Specimen BCX-9 |             |           |           |               |              |
|                                                   | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                        | 73              | 5.293       | 0.088     | 1.7       | 5.28          | 4.97 - 5.62  | 74             | 2.313       | 0.050     | 2.2       | 2.32          | 2.17 - 2.46  |
| All ABX Instruments                               | 33              | 5.288       | 0.086     | 1.6       | 5.28          | 4.97 - 5.61  | 33             | 2.289       | 0.043     | 1.9       | 2.31          | 2.15 - 2.43  |
| All COULTER Instruments                           | 40              | 5.297       | 0.090     | 1.7       | 5.29          | 4.97 - 5.62  | 41             | 2.333       | 0.047     | 2.0       | 2.34          | 2.19 - 2.48  |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19              | 5.257       | 0.059     | 1.1       | 5.26          | 4.94 - 5.58  | 19             | 2.306       | 0.032     | 1.4       | 2.31          | 2.16 - 2.45  |
| ABX Diagnostics Pentra 80 / XL 80                 | 14              | 5.331       | 0.099     | 1.9       | 5.38          | 5.01 - 5.66  | 14             | 2.266       | 0.046     | 2.0       | 2.27          | 2.13 - 2.41  |
| COULTER AcT 5diff (version 2.01)                  | 38              | 5.301       | 0.091     | 1.7       | 5.29          | 4.98 - 5.62  | 38             | 2.341       | 0.037     | 1.6       | 2.34          | 2.20 - 2.49  |
| <u>Instrument</u>                                 | Specimen BCX-10 |             |           |           |               |              |                |             |           |           |               |              |
|                                                   | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |                |             |           |           |               |              |
| All Method                                        | 73              | 5.976       | 0.093     | 1.6       | 5.97          | 5.61 - 6.34  |                |             |           |           |               |              |
| All ABX Instruments                               | 33              | 5.982       | 0.099     | 1.7       | 5.97          | 5.62 - 6.35  |                |             |           |           |               |              |
| All COULTER Instruments                           | 39              | 5.964       | 0.079     | 1.3       | 5.97          | 5.60 - 6.33  |                |             |           |           |               |              |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19              | 5.941       | 0.058     | 1.0       | 5.93          | 5.58 - 6.30  |                |             |           |           |               |              |
| ABX Diagnostics Pentra 80 / XL 80                 | 14              | 6.037       | 0.117     | 1.9       | 6.08          | 5.67 - 6.40  |                |             |           |           |               |              |
| COULTER AcT 5diff (version 2.01)                  | 39              | 5.979       | 0.102     | 1.7       | 5.99          | 5.62 - 6.34  |                |             |           |           |               |              |

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

| <u><b>Instrument</b></u>                          | <b>Specimen BCX-6</b>  |                    |                  |                  |                      |                     | <b>Specimen BCX-7</b> |                    |                  |                  |                      |                     |
|---------------------------------------------------|------------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                                        | 74                     | 16.01              | 0.21             | 1.3              | 16.0                 | 14.8 - 17.2         | 74                    | 13.47              | 0.20             | 1.5              | 13.5                 | 12.5 - 14.5         |
| All ABX Instruments                               | 33                     | 16.02              | 0.23             | 1.4              | 16.0                 | 14.8 - 17.2         | 33                    | 13.44              | 0.21             | 1.5              | 13.4                 | 12.4 - 14.4         |
| All COULTER Instruments                           | 41                     | 16.01              | 0.19             | 1.2              | 16.1                 | 14.8 - 17.2         | 41                    | 13.49              | 0.19             | 1.4              | 13.5                 | 12.5 - 14.5         |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 16.02              | 0.19             | 1.2              | 16.0                 | 14.8 - 17.2         | 19                    | 13.42              | 0.13             | 0.9              | 13.4                 | 12.4 - 14.4         |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 16.02              | 0.29             | 1.8              | 16.0                 | 14.8 - 17.2         | 14                    | 13.47              | 0.29             | 2.1              | 13.5                 | 12.5 - 14.5         |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 16.02              | 0.19             | 1.2              | 16.1                 | 14.8 - 17.2         | 39                    | 13.50              | 0.19             | 1.4              | 13.5                 | 12.5 - 14.5         |
|                                                   | <b>Specimen BCX-8</b>  |                    |                  |                  |                      |                     | <b>Specimen BCX-9</b> |                    |                  |                  |                      |                     |
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                                        | 74                     | 15.89              | 0.21             | 1.3              | 15.9                 | 14.7 - 17.1         | 74                    | 6.38               | 0.14             | 2.1              | 6.4                  | 5.9 - 6.9           |
| All ABX Instruments                               | 33                     | 15.91              | 0.20             | 1.3              | 15.9                 | 14.7 - 17.1         | 33                    | 6.28               | 0.11             | 1.7              | 6.3                  | 5.8 - 6.8           |
| All COULTER Instruments                           | 41                     | 15.88              | 0.23             | 1.4              | 15.9                 | 14.7 - 17.0         | 40                    | 6.48               | 0.08             | 1.2              | 6.5                  | 6.0 - 7.0           |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 15.91              | 0.15             | 1.0              | 15.9                 | 14.7 - 17.1         | 19                    | 6.29               | 0.07             | 1.2              | 6.3                  | 5.8 - 6.8           |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 15.91              | 0.25             | 1.6              | 15.9                 | 14.8 - 17.1         | 14                    | 6.26               | 0.14             | 2.2              | 6.3                  | 5.8 - 6.7           |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 15.88              | 0.23             | 1.4              | 15.9                 | 14.7 - 17.0         | 38                    | 6.48               | 0.07             | 1.1              | 6.5                  | 6.0 - 7.0           |
|                                                   | <b>Specimen BCX-10</b> |                    |                  |                  |                      |                     |                       |                    |                  |                  |                      |                     |
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                       |                    |                  |                  |                      |                     |
| All Method                                        | 74                     | 19.32              | 0.29             | 1.5              | 19.3                 | 17.9 - 20.7         |                       |                    |                  |                  |                      |                     |
| All ABX Instruments                               | 33                     | 19.46              | 0.26             | 1.4              | 19.4                 | 18.0 - 20.9         |                       |                    |                  |                  |                      |                     |
| All COULTER Instruments                           | 40                     | 19.18              | 0.22             | 1.2              | 19.2                 | 17.8 - 20.6         |                       |                    |                  |                  |                      |                     |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 19.44              | 0.21             | 1.1              | 19.4                 | 18.0 - 20.8         |                       |                    |                  |                  |                      |                     |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 19.49              | 0.33             | 1.7              | 19.6                 | 18.1 - 20.9         |                       |                    |                  |                  |                      |                     |
| COULTER AcT 5diff (version 2.01)                  | 38                     | 19.19              | 0.22             | 1.2              | 19.2                 | 17.8 - 20.6         |                       |                    |                  |                  |                      |                     |

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

| <u><b>Instrument</b></u>                          | <b>Specimen BCX-6</b>  |                    |                  |                  |                      |                     | <b>Specimen BCX-7</b> |                    |                  |                  |                      |                     |
|---------------------------------------------------|------------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                                        | 74                     | 46.07              | 1.00             | 2.2              | 46.1                 | 43.3 - 48.9         | 74                    | 38.65              | 0.78             | 2.0              | 38.6                 | 36.3 - 41.0         |
| All ABX Instruments                               | 33                     | 46.25              | 0.91             | 2.0              | 46.2                 | 43.4 - 49.1         | 33                    | 38.72              | 0.72             | 1.9              | 38.6                 | 36.3 - 41.1         |
| All COULTER Instruments                           | 41                     | 45.93              | 1.06             | 2.3              | 45.9                 | 43.1 - 48.7         | 41                    | 38.60              | 0.83             | 2.2              | 38.5                 | 36.2 - 41.0         |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 46.13              | 0.77             | 1.7              | 46.1                 | 43.3 - 48.9         | 19                    | 38.50              | 0.60             | 1.6              | 38.6                 | 36.1 - 40.9         |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 46.41              | 1.08             | 2.3              | 46.7                 | 43.6 - 49.2         | 14                    | 39.01              | 0.78             | 2.0              | 39.1                 | 36.6 - 41.4         |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 46.01              | 1.03             | 2.2              | 45.9                 | 43.2 - 48.8         | 39                    | 38.65              | 0.83             | 2.1              | 38.5                 | 36.3 - 41.0         |
|                                                   | <b>Specimen BCX-8</b>  |                    |                  |                  |                      |                     | <b>Specimen BCX-9</b> |                    |                  |                  |                      |                     |
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                                        | 74                     | 45.34              | 0.95             | 2.1              | 45.3                 | 42.6 - 48.1         | 74                    | 18.52              | 0.39             | 2.1              | 18.5                 | 17.4 - 19.7         |
| All ABX Instruments                               | 33                     | 45.47              | 0.78             | 1.7              | 45.5                 | 42.7 - 48.2         | 33                    | 18.58              | 0.36             | 2.0              | 18.6                 | 17.4 - 19.7         |
| All COULTER Instruments                           | 41                     | 45.24              | 1.07             | 2.4              | 45.2                 | 42.5 - 48.0         | 41                    | 18.48              | 0.42             | 2.2              | 18.5                 | 17.3 - 19.6         |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 45.34              | 0.72             | 1.6              | 45.3                 | 42.6 - 48.1         | 19                    | 18.44              | 0.30             | 1.6              | 18.4                 | 17.3 - 19.6         |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 45.65              | 0.84             | 1.8              | 45.6                 | 42.9 - 48.4         | 14                    | 18.76              | 0.37             | 1.9              | 18.8                 | 17.6 - 19.9         |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 45.32              | 1.03             | 2.3              | 45.2                 | 42.6 - 48.1         | 39                    | 18.50              | 0.42             | 2.3              | 18.5                 | 17.3 - 19.7         |
|                                                   | <b>Specimen BCX-10</b> |                    |                  |                  |                      |                     |                       |                    |                  |                  |                      |                     |
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                       |                    |                  |                  |                      |                     |
| All Method                                        | 74                     | 53.96              | 0.99             | 1.8              | 53.8                 | 50.7 - 57.2         |                       |                    |                  |                  |                      |                     |
| All ABX Instruments                               | 33                     | 53.95              | 0.81             | 1.5              | 53.9                 | 50.7 - 57.2         |                       |                    |                  |                  |                      |                     |
| All COULTER Instruments                           | 41                     | 53.96              | 1.12             | 2.1              | 53.6                 | 50.7 - 57.2         |                       |                    |                  |                  |                      |                     |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 53.96              | 0.75             | 1.4              | 53.8                 | 50.7 - 57.3         |                       |                    |                  |                  |                      |                     |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 53.94              | 0.91             | 1.7              | 54.1                 | 50.7 - 57.2         |                       |                    |                  |                  |                      |                     |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 54.04              | 1.09             | 2.0              | 53.8                 | 50.7 - 57.3         |                       |                    |                  |                  |                      |                     |

# HEMATOLOGY W/ 5-PART DIFFERENTIAL-PLATELET COUNT (x 10<sup>9</sup>/L)

| Specimen BCX-6                                    |             |             |           |           |               |              | Specimen BCX-7 |             |           |           |               |              |
|---------------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                        | 73          | 248.3       | 10.2      | 4.1       | 247           | 186 - 311    | 74             | 476.6       | 16.2      | 3.4       | 476           | 357 - 596    |
| All ABX Instruments                               | 33          | 248.1       | 8.8       | 3.6       | 248           | 186 - 311    | 33             | 476.2       | 14.1      | 3.0       | 475           | 357 - 596    |
| All COULTER Instruments                           | 40          | 248.5       | 11.3      | 4.6       | 247           | 186 - 311    | 41             | 476.9       | 17.9      | 3.7       | 476           | 357 - 597    |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19          | 246.1       | 6.1       | 2.5       | 246           | 184 - 308    | 19             | 475.1       | 11.9      | 2.5       | 474           | 356 - 594    |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 250.8       | 11.2      | 4.5       | 253           | 188 - 314    | 14             | 477.8       | 16.9      | 3.5       | 481           | 358 - 598    |
| COULTER AcT 5diff (version 2.01)                  | 39          | 249.1       | 13.0      | 5.2       | 247           | 186 - 312    | 39             | 476.5       | 18.2      | 3.8       | 474           | 357 - 596    |
| Specimen BCX-8                                    |             |             |           |           |               |              | Specimen BCX-9 |             |           |           |               |              |
| All Method                                        | 74          | 298.1       | 9.8       | 3.3       | 297           | 223 - 373    | 73             | 77.3        | 5.0       | 6.5       | 77            | 57 - 97      |
| All ABX Instruments                               | 33          | 299.4       | 8.9       | 3.0       | 298           | 224 - 375    | 33             | 75.9        | 4.6       | 6.1       | 75            | 56 - 95      |
| All COULTER Instruments                           | 41          | 297.0       | 10.5      | 3.5       | 297           | 222 - 372    | 40             | 78.5        | 5.1       | 6.5       | 79            | 58 - 99      |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19          | 299.5       | 7.3       | 2.4       | 298           | 224 - 375    | 19             | 77.4        | 5.1       | 6.6       | 77            | 58 - 97      |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 299.2       | 11.1      | 3.7       | 300           | 224 - 375    | 14             | 74.0        | 3.0       | 4.1       | 75            | 55 - 93      |
| COULTER AcT 5diff (version 2.01)                  | 39          | 297.2       | 10.7      | 3.6       | 297           | 222 - 372    | 38             | 78.9        | 4.9       | 6.2       | 80            | 59 - 99      |
| Specimen BCX-10                                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                                        | 74          | 290.1       | 10.7      | 3.7       | 291           | 217 - 363    |                |             |           |           |               |              |
| All ABX Instruments                               | 33          | 293.0       | 9.5       | 3.2       | 292           | 219 - 367    |                |             |           |           |               |              |
| All COULTER Instruments                           | 41          | 287.8       | 11.1      | 3.9       | 290           | 215 - 360    |                |             |           |           |               |              |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19          | 293.6       | 8.3       | 2.8       | 295           | 220 - 367    |                |             |           |           |               |              |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 292.1       | 11.2      | 3.8       | 292           | 219 - 366    |                |             |           |           |               |              |
| COULTER AcT 5diff (version 2.01)                  | 39          | 287.7       | 11.4      | 4.0       | 289           | 215 - 360    |                |             |           |           |               |              |

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

| <u><b>Instrument</b></u>                          | <b>Specimen BCX-6</b>  |                    |                  |                  |                      |                     | <b>Specimen BCX-7</b> |                    |                  |                  |                      |                     |
|---------------------------------------------------|------------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                                        | 74                     | 65.53              | 5.25             | 8.0              | 65.1                 | 49.7 - 81.3         | 74                    | 46.74              | 3.11             | 6.7              | 46.9                 | 37.4 - 56.1         |
| All ABX Instruments                               | 33                     | 68.47              | 5.11             | 7.5              | 69.0                 | 53.1 - 83.8         | 33                    | 48.31              | 3.06             | 6.3              | 48.5                 | 39.1 - 57.5         |
| All COULTER Instruments                           | 41                     | 63.17              | 4.08             | 6.5              | 63.9                 | 50.9 - 75.4         | 41                    | 45.48              | 2.56             | 5.6              | 46.0                 | 37.7 - 53.2         |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 70.32              | 5.00             | 7.1              | 71.7                 | 55.3 - 85.4         | 19                    | 49.45              | 2.87             | 5.8              | 49.9                 | 40.8 - 58.1         |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 65.96              | 4.22             | 6.4              | 66.8                 | 53.3 - 78.7         | 14                    | 46.76              | 2.67             | 5.7              | 47.3                 | 38.7 - 54.8         |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 63.37              | 3.88             | 6.1              | 63.9                 | 51.7 - 75.1         | 39                    | 45.57              | 2.34             | 5.1              | 46.0                 | 38.5 - 52.6         |
|                                                   | <b>Specimen BCX-8</b>  |                    |                  |                  |                      |                     | <b>Specimen BCX-9</b> |                    |                  |                  |                      |                     |
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                                        | 74                     | 49.91              | 3.66             | 7.3              | 49.7                 | 38.9 - 60.9         | 74                    | 53.66              | 4.12             | 7.7              | 52.8                 | 41.3 - 66.1         |
| All ABX Instruments                               | 33                     | 50.99              | 3.73             | 7.3              | 50.5                 | 39.7 - 62.2         | 33                    | 56.95              | 3.35             | 5.9              | 57.9                 | 46.9 - 67.1         |
| All COULTER Instruments                           | 41                     | 49.04              | 3.39             | 6.9              | 49.3                 | 38.8 - 59.3         | 41                    | 51.00              | 2.41             | 4.7              | 50.9                 | 43.7 - 58.3         |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 52.81              | 3.42             | 6.5              | 53.5                 | 42.5 - 63.1         | 19                    | 57.90              | 3.05             | 5.3              | 59.2                 | 48.7 - 67.1         |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 48.51              | 2.58             | 5.3              | 49.0                 | 40.7 - 56.3         | 14                    | 55.67              | 3.42             | 6.1              | 56.5                 | 45.4 - 66.0         |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 49.19              | 3.33             | 6.8              | 49.3                 | 39.1 - 59.2         | 39                    | 50.99              | 2.21             | 4.3              | 50.9                 | 44.3 - 57.7         |
|                                                   | <b>Specimen BCX-10</b> |                    |                  |                  |                      |                     |                       |                    |                  |                  |                      |                     |
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                       |                    |                  |                  |                      |                     |
| All Method                                        | 74                     | 50.25              | 5.15             | 10.2             | 50.1                 | 34.8 - 65.7         |                       |                    |                  |                  |                      |                     |
| All ABX Instruments                               | 33                     | 50.60              | 5.40             | 10.7             | 50.2                 | 34.3 - 66.9         |                       |                    |                  |                  |                      |                     |
| All COULTER Instruments                           | 41                     | 49.98              | 4.98             | 10.0             | 50.0                 | 35.0 - 65.0         |                       |                    |                  |                  |                      |                     |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 53.59              | 3.89             | 7.3              | 54.5                 | 41.9 - 65.3         |                       |                    |                  |                  |                      |                     |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 46.54              | 4.48             | 9.6              | 47.3                 | 33.1 - 60.0         |                       |                    |                  |                  |                      |                     |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 50.14              | 4.91             | 9.8              | 50.0                 | 35.4 - 64.9         |                       |                    |                  |                  |                      |                     |

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

| <u><b>Instrument</b></u>                          | <b>Specimen BCX-6</b>  |                    |                  |                  |                      |                     | <b>Specimen BCX-7</b> |                    |                  |                  |                      |                     |
|---------------------------------------------------|------------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                                        | 74                     | 21.34              | 4.39             | 20.6             | 20.7                 | 8.1 - 34.6          | 74                    | 42.46              | 3.85             | 9.1              | 41.8                 | 30.8 - 54.1         |
| All ABX Instruments                               | 33                     | 23.06              | 4.50             | 19.5             | 22.5                 | 9.5 - 36.6          | 33                    | 45.45              | 3.35             | 7.4              | 44.8                 | 35.4 - 55.5         |
| All COULTER Instruments                           | 40                     | 19.65              | 3.30             | 16.8             | 19.2                 | 9.7 - 29.6          | 40                    | 39.86              | 1.82             | 4.6              | 40.1                 | 34.4 - 45.4         |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 20.92              | 3.87             | 18.5             | 20.6                 | 9.3 - 32.6          | 19                    | 43.72              | 2.77             | 6.3              | 43.3                 | 35.4 - 52.1         |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 25.96              | 3.66             | 14.1             | 26.6                 | 14.9 - 37.0         | 14                    | 47.80              | 2.58             | 5.4              | 47.4                 | 40.0 - 55.6         |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 19.59              | 3.32             | 16.9             | 19.2                 | 9.6 - 29.6          | 39                    | 39.91              | 1.81             | 4.5              | 40.1                 | 34.4 - 45.4         |
|                                                   | <b>Specimen BCX-8</b>  |                    |                  |                  |                      |                     | <b>Specimen BCX-9</b> |                    |                  |                  |                      |                     |
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                                        | 74                     | 39.14              | 4.09             | 10.4             | 38.4                 | 26.8 - 51.5         | 74                    | 28.72              | 3.93             | 13.7             | 28.4                 | 16.9 - 40.6         |
| All ABX Instruments                               | 33                     | 41.63              | 3.98             | 9.6              | 41.7                 | 29.6 - 53.6         | 33                    | 31.22              | 4.02             | 12.9             | 31.2                 | 19.1 - 43.3         |
| All COULTER Instruments                           | 41                     | 37.15              | 2.93             | 7.9              | 37.0                 | 28.3 - 46.0         | 41                    | 26.70              | 2.43             | 9.1              | 27.0                 | 19.4 - 34.1         |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 39.22              | 2.96             | 7.6              | 38.8                 | 30.3 - 48.2         | 19                    | 29.50              | 3.86             | 13.1             | 29.1                 | 17.9 - 41.1         |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 44.89              | 2.64             | 5.9              | 44.7                 | 36.9 - 52.9         | 14                    | 33.56              | 2.98             | 8.9              | 33.0                 | 24.6 - 42.6         |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 36.89              | 2.65             | 7.2              | 36.6                 | 28.9 - 44.9         | 38                    | 26.84              | 1.96             | 7.3              | 27.2                 | 20.9 - 32.8         |
|                                                   | <b>Specimen BCX-10</b> |                    |                  |                  |                      |                     |                       |                    |                  |                  |                      |                     |
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                       |                    |                  |                  |                      |                     |
| All Method                                        | 74                     | 39.90              | 5.86             | 14.7             | 39.1                 | 22.3 - 57.5         |                       |                    |                  |                  |                      |                     |
| All ABX Instruments                               | 33                     | 42.35              | 6.33             | 14.9             | 43.2                 | 23.3 - 61.4         |                       |                    |                  |                  |                      |                     |
| All COULTER Instruments                           | 41                     | 37.92              | 4.65             | 12.3             | 37.9                 | 23.9 - 51.9         |                       |                    |                  |                  |                      |                     |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19                     | 38.93              | 4.97             | 12.8             | 38.5                 | 24.0 - 53.9         |                       |                    |                  |                  |                      |                     |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 46.99              | 4.93             | 10.5             | 46.3                 | 32.2 - 61.8         |                       |                    |                  |                  |                      |                     |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 37.71              | 4.48             | 11.9             | 37.9                 | 24.2 - 51.2         |                       |                    |                  |                  |                      |                     |

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

| Specimen BCX-6                                    |             |             |           |           |               |              | Specimen BCX-7 |             |           |           |               |              |
|---------------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                        | 68          | 1.47        | 0.87      | 59.2      | 1.3           | 0.0 - 4.1    | 71             | 1.37        | 0.74      | 53.5      | 1.3           | 0.0 - 3.6    |
| All ABX Instruments                               | 33          | 1.93        | 1.45      | 74.8      | 1.5           | 0.0 - 6.3    | 33             | 1.40        | 0.79      | 56.6      | 1.3           | 0.0 - 3.8    |
| All COULTER Instruments                           | 38          | 1.39        | 0.86      | 61.7      | 1.3           | 0.0 - 4.0    | 38             | 1.35        | 0.69      | 51.2      | 1.3           | 0.0 - 3.5    |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 18          | 1.38        | 0.85      | 61.6      | 1.2           | 0.0 - 4.0    | 19             | 1.43        | 0.98      | 68.6      | 1.0           | 0.0 - 4.4    |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 2.38        | 1.57      | 66.1      | 2.0           | 0.0 - 7.1    | 14             | 1.36        | 0.46      | 34.0      | 1.3           | 0.0 - 2.8    |
| COULTER AcT 5diff (version 2.01)                  | 36          | 1.44        | 0.86      | 59.6      | 1.3           | 0.0 - 4.1    | 36             | 1.40        | 0.67      | 48.2      | 1.3           | 0.0 - 3.5    |
| Specimen BCX-8                                    |             |             |           |           |               |              | Specimen BCX-9 |             |           |           |               |              |
| All Method                                        | 70          | 1.21        | 0.71      | 58.2      | 1.0           | 0.0 - 3.4    | 74             | 0.31        | 0.32      | 103.1     | 0.2           | 0.0 - 1.3    |
| All ABX Instruments                               | 32          | 1.18        | 0.73      | 61.9      | 1.0           | 0.0 - 3.4    | 33             | 0.32        | 0.27      | 85.9      | 0.2           | 0.0 - 1.2    |
| All COULTER Instruments                           | 38          | 1.24        | 0.69      | 55.9      | 1.1           | 0.0 - 3.4    | 41             | 0.31        | 0.36      | 117.0     | 0.2           | 0.0 - 1.4    |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 18          | 1.13        | 0.79      | 69.9      | 1.0           | 0.0 - 3.6    | 19             | 0.28        | 0.20      | 70.6      | 0.2           | 0.0 - 0.9    |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 1.24        | 0.67      | 53.8      | 1.1           | 0.0 - 3.3    | 14             | 0.36        | 0.35      | 96.7      | 0.3           | 0.0 - 1.5    |
| COULTER AcT 5diff (version 2.01)                  | 36          | 1.28        | 0.70      | 54.6      | 1.1           | 0.0 - 3.4    | 39             | 0.27        | 0.32      | 119.9     | 0.2           | 0.0 - 1.3    |
| Specimen BCX-10                                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                                        | 69          | 1.13        | 0.81      | 71.7      | 0.9           | 0.0 - 3.6    |                |             |           |           |               |              |
| All ABX Instruments                               | 30          | 0.93        | 0.58      | 63.1      | 0.9           | 0.0 - 2.7    |                |             |           |           |               |              |
| All COULTER Instruments                           | 41          | 1.49        | 1.24      | 83.1      | 1.2           | 0.0 - 5.2    |                |             |           |           |               |              |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 17          | 0.88        | 0.59      | 67.1      | 0.9           | 0.0 - 2.7    |                |             |           |           |               |              |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 1.15        | 0.82      | 71.6      | 0.9           | 0.0 - 3.7    |                |             |           |           |               |              |
| COULTER AcT 5diff (version 2.01)                  | 39          | 1.50        | 1.23      | 82.3      | 1.2           | 0.0 - 5.3    |                |             |           |           |               |              |

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

| Specimen BCX-6                                    |             |             |           |           |               |              | Specimen BCX-7 |             |           |           |               |              |
|---------------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                        | 73          | 5.21        | 0.88      | 16.9      | 5.3           | 2.5 - 7.9    | 74             | 3.87        | 0.46      | 11.8      | 3.9           | 2.4 - 5.3    |
| All ABX Instruments                               | 33          | 5.44        | 0.91      | 16.8      | 5.4           | 2.6 - 8.2    | 33             | 3.88        | 0.44      | 11.4      | 3.9           | 2.5 - 5.3    |
| All COULTER Instruments                           | 40          | 5.02        | 0.81      | 16.2      | 5.1           | 2.5 - 7.5    | 41             | 3.86        | 0.47      | 12.3      | 3.9           | 2.4 - 5.3    |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19          | 5.62        | 0.91      | 16.1      | 5.4           | 2.8 - 8.4    | 19             | 4.05        | 0.42      | 10.4      | 4.1           | 2.7 - 5.4    |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 5.19        | 0.89      | 17.2      | 5.2           | 2.5 - 7.9    | 14             | 3.65        | 0.37      | 10.1      | 3.6           | 2.5 - 4.8    |
| COULTER AcT 5diff (version 2.01)                  | 38          | 5.09        | 0.77      | 15.2      | 5.2           | 2.7 - 7.5    | 39             | 3.85        | 0.49      | 12.6      | 3.8           | 2.3 - 5.4    |
| Specimen BCX-8                                    |             |             |           |           |               |              | Specimen BCX-9 |             |           |           |               |              |
| All Method                                        | 74          | 5.34        | 0.66      | 12.3      | 5.3           | 3.3 - 7.4    | 73             | 8.88        | 1.62      | 18.3      | 9.0           | 4.0 - 13.8   |
| All ABX Instruments                               | 33          | 5.34        | 0.62      | 11.5      | 5.1           | 3.4 - 7.2    | 32             | 9.49        | 1.64      | 17.3      | 9.9           | 4.5 - 14.5   |
| All COULTER Instruments                           | 41          | 5.34        | 0.69      | 13.0      | 5.3           | 3.2 - 7.5    | 41             | 8.41        | 1.46      | 17.4      | 8.2           | 4.0 - 12.8   |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19          | 5.59        | 0.61      | 11.0      | 5.7           | 3.7 - 7.5    | 19             | 10.28       | 1.79      | 17.4      | 9.9           | 4.9 - 15.7   |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 5.01        | 0.45      | 9.1       | 5.0           | 3.6 - 6.4    | 14             | 8.85        | 1.86      | 21.0      | 9.2           | 3.2 - 14.5   |
| COULTER AcT 5diff (version 2.01)                  | 39          | 5.38        | 0.68      | 12.6      | 5.3           | 3.3 - 7.5    | 39             | 8.45        | 1.47      | 17.4      | 8.2           | 4.0 - 12.9   |
| Specimen BCX-10                                   |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method                                        | 72          | 5.10        | 0.94      | 18.4      | 5.0           | 2.2 - 8.0    |                |             |           |           |               |              |
| All ABX Instruments                               | 33          | 5.23        | 1.23      | 23.6      | 5.0           | 1.5 - 9.0    |                |             |           |           |               |              |
| All COULTER Instruments                           | 41          | 5.15        | 0.92      | 17.8      | 5.1           | 2.4 - 8.0    |                |             |           |           |               |              |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 19          | 5.38        | 1.46      | 27.2      | 5.0           | 0.9 - 9.8    |                |             |           |           |               |              |
| ABX Diagnostics Pentra 80 / XL 80                 | 14          | 5.04        | 0.85      | 16.8      | 5.0           | 2.4 - 7.6    |                |             |           |           |               |              |
| COULTER AcT 5diff (version 2.01)                  | 39          | 5.17        | 0.93      | 17.9      | 5.1           | 2.3 - 8.0    |                |             |           |           |               |              |

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

| <u><b>Instrument</b></u>                          | <b>Specimen BCX-6</b>  |                    |                  |                  |                      |                     | <b>Specimen BCX-7</b> |                    |                  |                  |                      |                     |
|---------------------------------------------------|------------------------|--------------------|------------------|------------------|----------------------|---------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                                        | 71                     | 6.00               | 4.76             | 79.4             | 9.6                  | 0.0 - 20.3          | 72                    | 5.33               | 4.28             | 80.3             | 8.7                  | 0.0 - 18.2          |
| All ABX Instruments                               | 30                     | 0.50               | 0.04             | 7.4              | 0.5                  | 0.3 - 0.7           | 31                    | 0.45               | 0.05             | 11.3             | 0.4                  | 0.2 - 0.7           |
| All COULTER Instruments                           | 39                     | 10.01              | 0.47             | 4.7              | 10.0                 | 8.5 - 11.5          | 38                    | 8.94               | 0.21             | 2.4              | 9.0                  | 8.3 - 9.6           |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 16                     | 0.49               | 0.04             | 9.0              | 0.5                  | 0.3 - 0.7           | 17                    | 0.46               | 0.05             | 10.6             | 0.5                  | 0.3 - 0.7           |
| ABX Diagnostics Pentra 80 / XL 80                 | 13                     | 0.50               | 0.00             | 0.0              | 0.5                  | 0.5 - 0.5           | 14                    | 0.43               | 0.05             | 10.9             | 0.4                  | 0.2 - 0.6           |
| COULTER AcT 5diff (version 2.01)                  | 37                     | 10.04              | 0.46             | 4.5              | 10.0                 | 8.6 - 11.5          | 36                    | 8.94               | 0.20             | 2.2              | 9.0                  | 8.3 - 9.6           |
|                                                   | <b>Specimen BCX-8</b>  |                    |                  |                  |                      |                     | <b>Specimen BCX-9</b> |                    |                  |                  |                      |                     |
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                                        | 72                     | 4.13               | 3.32             | 80.4             | 6.7                  | 0.0 - 14.1          | 72                    | 8.19               | 6.47             | 79.0             | 12.5                 | 0.0 - 27.6          |
| All ABX Instruments                               | 31                     | 0.35               | 0.05             | 14.6             | 0.3                  | 0.1 - 0.6           | 30                    | 0.65               | 0.05             | 7.8              | 0.7                  | 0.5 - 0.9           |
| All COULTER Instruments                           | 40                     | 6.97               | 0.28             | 4.0              | 7.0                  | 6.1 - 7.9           | 41                    | 13.58              | 1.10             | 8.1              | 13.2                 | 10.2 - 16.9         |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 17                     | 0.35               | 0.05             | 14.6             | 0.4                  | 0.1 - 0.6           | 17                    | 0.66               | 0.05             | 7.7              | 0.7                  | 0.5 - 0.9           |
| ABX Diagnostics Pentra 80 / XL 80                 | 14                     | 0.34               | 0.05             | 15.0             | 0.3                  | 0.1 - 0.5           | 13                    | 0.65               | 0.05             | 8.0              | 0.6                  | 0.4 - 0.9           |
| COULTER AcT 5diff (version 2.01)                  | 38                     | 6.97               | 0.28             | 4.1              | 7.0                  | 6.1 - 7.9           | 39                    | 13.63              | 1.09             | 8.0              | 13.2                 | 10.3 - 16.9         |
|                                                   | <b>Specimen BCX-10</b> |                    |                  |                  |                      |                     |                       |                    |                  |                  |                      |                     |
|                                                   | <u><b>Labs</b></u>     | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                       |                    |                  |                  |                      |                     |
| All Method                                        | 72                     | 3.23               | 2.62             | 81.2             | 5.0                  | 0.0 - 11.1          |                       |                    |                  |                  |                      |                     |
| All ABX Instruments                               | 31                     | 0.28               | 0.04             | 15.3             | 0.3                  | 0.1 - 0.5           |                       |                    |                  |                  |                      |                     |
| All COULTER Instruments                           | 41                     | 5.46               | 0.58             | 10.6             | 5.5                  | 3.7 - 7.2           |                       |                    |                  |                  |                      |                     |
| ABX Diagnostics Pentra 60C+ (version 2.21 and up) | 17                     | 0.26               | 0.05             | 18.6             | 0.3                  | 0.1 - 0.5           |                       |                    |                  |                  |                      |                     |
| ABX Diagnostics Pentra 80 / XL 80                 | 13                     | 0.30               | 0.00             | 0.0              | 0.3                  | 0.3 - 0.3           |                       |                    |                  |                  |                      |                     |
| COULTER AcT 5diff (version 2.01)                  | 39                     | 5.48               | 0.59             | 10.7             | 5.5                  | 3.7 - 7.3           |                       |                    |                  |                  |                      |                     |

## HEMATOLOGY W/ 5-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)

| Specimen MX-6          |             |             |           |           |               |              | Specimen MX-7 |             |           |           |               |              |
|------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 46          | 20.37       | 1.03      | 5.0       | 20.7          | 17.3 - 23.5  | 44            | 4.10        | 0.16      | 3.9       | 4.1           | 3.4 - 4.8    |
| All Sysmex Instruments | 46          | 20.37       | 1.03      | 5.0       | 20.7          | 17.3 - 23.5  | 44            | 4.10        | 0.16      | 3.9       | 4.1           | 3.4 - 4.8    |
| Sysmex XS-1000i        | 29          | 20.97       | 0.45      | 2.2       | 21.1          | 17.8 - 24.2  | 28            | 4.15        | 0.09      | 2.1       | 4.2           | 3.5 - 4.8    |
| Specimen MX-8          |             |             |           |           |               |              | Specimen MX-9 |             |           |           |               |              |
| All Method             | 46          | 7.46        | 0.24      | 3.3       | 7.5           | 6.3 - 8.6    | 44            | 4.07        | 0.14      | 3.3       | 4.1           | 3.4 - 4.7    |
| All Sysmex Instruments | 46          | 7.46        | 0.24      | 3.3       | 7.5           | 6.3 - 8.6    | 44            | 4.07        | 0.14      | 3.3       | 4.1           | 3.4 - 4.7    |
| Sysmex XS-1000i        | 29          | 7.57        | 0.16      | 2.1       | 7.6           | 6.4 - 8.8    | 29            | 4.12        | 0.12      | 2.9       | 4.1           | 3.5 - 4.8    |
| Specimen MX-10         |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method             | 46          | 20.37       | 1.02      | 5.0       | 20.8          | 17.3 - 23.5  |               |             |           |           |               |              |
| All Sysmex Instruments | 46          | 20.37       | 1.02      | 5.0       | 20.8          | 17.3 - 23.5  |               |             |           |           |               |              |
| Sysmex XS-1000i        | 27          | 21.11       | 0.27      | 1.3       | 21.1          | 17.9 - 24.3  |               |             |           |           |               |              |

## HEMATOLOGY W/ 5-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10<sup>12</sup>/L)

| Specimen MX-6          |             |             |           |           |               |              | Specimen MX-7 |             |           |           |               |              |
|------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 46          | 5.649       | 0.068     | 1.2       | 5.65          | 5.30 - 5.99  | 46            | 2.386       | 0.049     | 2.1       | 2.38          | 2.24 - 2.53  |
| All Sysmex Instruments | 46          | 5.649       | 0.068     | 1.2       | 5.65          | 5.30 - 5.99  | 46            | 2.386       | 0.049     | 2.1       | 2.38          | 2.24 - 2.53  |
| Sysmex XS-1000i        | 29          | 5.659       | 0.059     | 1.0       | 5.67          | 5.31 - 6.00  | 29            | 2.360       | 0.037     | 1.6       | 2.36          | 2.21 - 2.51  |
| Specimen MX-8          |             |             |           |           |               |              | Specimen MX-9 |             |           |           |               |              |
| All Method             | 46          | 4.815       | 0.062     | 1.3       | 4.81          | 4.52 - 5.11  | 46            | 2.381       | 0.049     | 2.1       | 2.38          | 2.23 - 2.53  |
| All Sysmex Instruments | 46          | 4.815       | 0.062     | 1.3       | 4.81          | 4.52 - 5.11  | 46            | 2.381       | 0.049     | 2.1       | 2.38          | 2.23 - 2.53  |
| Sysmex XS-1000i        | 29          | 4.798       | 0.053     | 1.1       | 4.79          | 4.51 - 5.09  | 29            | 2.354       | 0.034     | 1.4       | 2.35          | 2.21 - 2.50  |
| Specimen MX-10         |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method             | 46          | 5.657       | 0.078     | 1.4       | 5.67          | 5.31 - 6.00  |               |             |           |           |               |              |
| All Sysmex Instruments | 46          | 5.657       | 0.078     | 1.4       | 5.67          | 5.31 - 6.00  |               |             |           |           |               |              |
| Sysmex XS-1000i        | 29          | 5.673       | 0.060     | 1.1       | 5.68          | 5.33 - 6.02  |               |             |           |           |               |              |

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

| Specimen MX-6          |             |             |           |           |               |              | Specimen MX-7 |             |           |           |               |              |
|------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 46          | 17.67       | 0.23      | 1.3       | 17.7          | 16.4 - 19.0  | 45            | 5.82        | 0.08      | 1.3       | 5.8           | 5.4 - 6.3    |
| All Sysmex Instruments | 46          | 17.67       | 0.23      | 1.3       | 17.7          | 16.4 - 19.0  | 45            | 5.82        | 0.08      | 1.3       | 5.8           | 5.4 - 6.3    |
| Sysmex XS-1000i        | 29          | 17.79       | 0.17      | 1.0       | 17.8          | 16.5 - 19.1  | 29            | 5.81        | 0.08      | 1.4       | 5.8           | 5.4 - 6.3    |
| Specimen MX-8          |             |             |           |           |               |              | Specimen MX-9 |             |           |           |               |              |
| All Method             | 45          | 13.69       | 0.16      | 1.2       | 13.7          | 12.7 - 14.7  | 45            | 5.81        | 0.08      | 1.4       | 5.8           | 5.4 - 6.3    |
| All Sysmex Instruments | 45          | 13.69       | 0.16      | 1.2       | 13.7          | 12.7 - 14.7  | 45            | 5.81        | 0.08      | 1.4       | 5.8           | 5.4 - 6.3    |
| Sysmex XS-1000i        | 28          | 13.72       | 0.16      | 1.2       | 13.7          | 12.7 - 14.7  | 29            | 5.80        | 0.08      | 1.4       | 5.8           | 5.3 - 6.3    |
| Specimen MX-10         |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method             | 46          | 17.66       | 0.24      | 1.3       | 17.7          | 16.4 - 18.9  |               |             |           |           |               |              |
| All Sysmex Instruments | 46          | 17.66       | 0.24      | 1.3       | 17.7          | 16.4 - 18.9  |               |             |           |           |               |              |
| Sysmex XS-1000i        | 29          | 17.77       | 0.19      | 1.1       | 17.8          | 16.5 - 19.1  |               |             |           |           |               |              |

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

| Specimen MX-6          |             |             |           |           |               |              | Specimen MX-7 |             |           |           |               |              |
|------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 46          | 51.98       | 0.87      | 1.7       | 51.9          | 48.8 - 55.2  | 46            | 17.76       | 0.32      | 1.8       | 17.8          | 16.6 - 18.9  |
| All Sysmex Instruments | 46          | 51.98       | 0.87      | 1.7       | 51.9          | 48.8 - 55.2  | 46            | 17.76       | 0.32      | 1.8       | 17.8          | 16.6 - 18.9  |
| Sysmex XS-1000i        | 29          | 52.11       | 0.92      | 1.8       | 52.2          | 48.9 - 55.3  | 29            | 17.64       | 0.28      | 1.6       | 17.6          | 16.5 - 18.8  |
| Specimen MX-8          |             |             |           |           |               |              | Specimen MX-9 |             |           |           |               |              |
| All Method             | 46          | 40.33       | 0.52      | 1.3       | 40.5          | 37.9 - 42.8  | 46            | 17.70       | 0.34      | 1.9       | 17.8          | 16.6 - 18.8  |
| All Sysmex Instruments | 46          | 40.33       | 0.52      | 1.3       | 40.5          | 37.9 - 42.8  | 46            | 17.70       | 0.34      | 1.9       | 17.8          | 16.6 - 18.8  |
| Sysmex XS-1000i        | 29          | 40.31       | 0.52      | 1.3       | 40.5          | 37.8 - 42.8  | 29            | 17.59       | 0.28      | 1.6       | 17.6          | 16.5 - 18.7  |
| Specimen MX-10         |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method             | 46          | 52.02       | 0.87      | 1.7       | 52.1          | 48.9 - 55.2  |               |             |           |           |               |              |
| All Sysmex Instruments | 46          | 52.02       | 0.87      | 1.7       | 52.1          | 48.9 - 55.2  |               |             |           |           |               |              |
| Sysmex XS-1000i        | 29          | 52.19       | 0.84      | 1.6       | 52.4          | 49.0 - 55.4  |               |             |           |           |               |              |

## HEMATOLOGY W/ 5-PART DIFFERENTIAL–PLATELET COUNT (x 10<sup>9</sup>/L)

| Specimen MX-6          |             |             |           |           |               |              | Specimen MX-7 |             |           |           |               |              |
|------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 45          | 407.6       | 15.6      | 3.8       | 407           | 305 - 510    | 46            | 58.3        | 5.1       | 8.7       | 58            | 43 - 73      |
| All Sysmex Instruments | 45          | 407.6       | 15.6      | 3.8       | 407           | 305 - 510    | 46            | 58.3        | 5.1       | 8.7       | 58            | 43 - 73      |
| Sysmex XS-1000i        | 29          | 411.8       | 11.6      | 2.8       | 411           | 308 - 515    | 29            | 57.4        | 3.7       | 6.5       | 57            | 43 - 72      |
| Specimen MX-8          |             |             |           |           |               |              | Specimen MX-9 |             |           |           |               |              |
| All Method             | 46          | 217.9       | 8.5       | 3.9       | 219           | 163 - 273    | 46            | 58.6        | 5.2       | 9.0       | 59            | 43 - 74      |
| All Sysmex Instruments | 46          | 217.9       | 8.5       | 3.9       | 219           | 163 - 273    | 46            | 58.6        | 5.2       | 9.0       | 59            | 43 - 74      |
| Sysmex XS-1000i        | 29          | 218.1       | 7.7       | 3.5       | 219           | 163 - 273    | 29            | 57.6        | 4.6       | 7.9       | 57            | 43 - 73      |
| Specimen MX-10         |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method             | 46          | 407.3       | 17.1      | 4.2       | 407           | 305 - 510    |               |             |           |           |               |              |
| All Sysmex Instruments | 46          | 407.3       | 17.1      | 4.2       | 407           | 305 - 510    |               |             |           |           |               |              |
| Sysmex XS-1000i        | 29          | 413.0       | 10.7      | 2.6       | 413           | 309 - 517    |               |             |           |           |               |              |

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

| Specimen MX-6          |             |             |           |           |               |              | Specimen MX-7 |             |           |           |               |              |
|------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 42          | 59.37       | 5.25      | 8.8       | 61.7          | 43.6 - 75.2  | 45            | 62.29       | 7.28      | 11.7      | 58.8          | 40.4 - 84.2  |
| All Sysmex Instruments | 42          | 59.37       | 5.25      | 8.8       | 61.7          | 43.6 - 75.2  | 45            | 62.29       | 7.28      | 11.7      | 58.8          | 40.4 - 84.2  |
| Sysmex XS-1000i        | 26          | 57.56       | 5.80      | 10.1      | 54.2          | 40.1 - 75.0  | 29            | 60.60       | 8.58      | 14.2      | 57.3          | 34.8 - 86.4  |
| Specimen MX-8          |             |             |           |           |               |              | Specimen MX-9 |             |           |           |               |              |
| All Method             | 44          | 51.82       | 3.46      | 6.7       | 50.4          | 41.4 - 62.2  | 42            | 61.02       | 5.17      | 8.5       | 58.6          | 45.5 - 76.6  |
| All Sysmex Instruments | 44          | 51.82       | 3.46      | 6.7       | 50.4          | 41.4 - 62.2  | 42            | 61.02       | 5.17      | 8.5       | 58.6          | 45.5 - 76.6  |
| Sysmex XS-1000i        | 28          | 49.39       | 1.42      | 2.9       | 49.1          | 45.1 - 53.7  | 28            | 60.16       | 7.98      | 13.3      | 57.8          | 36.2 - 84.1  |
| Specimen MX-10         |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method             | 43          | 59.57       | 5.48      | 9.2       | 61.7          | 43.1 - 76.0  |               |             |           |           |               |              |
| All Sysmex Instruments | 43          | 59.57       | 5.48      | 9.2       | 61.7          | 43.1 - 76.0  |               |             |           |           |               |              |
| Sysmex XS-1000i        | 27          | 57.93       | 6.15      | 10.6      | 54.3          | 39.4 - 76.4  |               |             |           |           |               |              |

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

| Specimen MX-6          |             |             |           |           |               |              | Specimen MX-7 |             |           |           |               |              |
|------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 45          | 20.49       | 2.59      | 12.6      | 21.3          | 12.7 - 28.3  | 45            | 17.38       | 1.85      | 10.6      | 18.1          | 11.8 - 23.0  |
| All Sysmex Instruments | 45          | 20.49       | 2.59      | 12.6      | 21.3          | 12.7 - 28.3  | 45            | 17.38       | 1.85      | 10.6      | 18.1          | 11.8 - 23.0  |
| Sysmex XS-1000i        | 29          | 20.13       | 2.84      | 14.1      | 21.9          | 11.6 - 28.7  | 29            | 17.11       | 2.12      | 12.4      | 18.0          | 10.7 - 23.5  |
| Specimen MX-8          |             |             |           |           |               |              | Specimen MX-9 |             |           |           |               |              |
| All Method             | 46          | 26.74       | 2.99      | 11.2      | 27.3          | 17.7 - 35.8  | 46            | 17.34       | 1.88      | 10.8      | 17.9          | 11.7 - 23.0  |
| All Sysmex Instruments | 46          | 26.74       | 2.99      | 11.2      | 27.3          | 17.7 - 35.8  | 46            | 17.34       | 1.88      | 10.8      | 17.9          | 11.7 - 23.0  |
| Sysmex XS-1000i        | 29          | 26.81       | 3.57      | 13.3      | 28.9          | 16.0 - 37.6  | 29            | 17.18       | 2.24      | 13.0      | 18.2          | 10.4 - 23.9  |
| Specimen MX-10         |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method             | 45          | 20.45       | 2.55      | 12.5      | 21.3          | 12.8 - 28.1  |               |             |           |           |               |              |
| All Sysmex Instruments | 45          | 20.45       | 2.55      | 12.5      | 21.3          | 12.8 - 28.1  |               |             |           |           |               |              |
| Sysmex XS-1000i        | 29          | 20.19       | 2.77      | 13.7      | 22.0          | 11.8 - 28.5  |               |             |           |           |               |              |

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

| Specimen MX-6          |             |             |           |           |               |              | Specimen MX-7 |             |           |           |               |              |
|------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 45          | 2.66        | 1.91      | 71.9      | 2.6           | 0.0 - 8.4    | 45            | 2.19        | 1.22      | 56.0      | 1.8           | 0.0 - 5.9    |
| All Sysmex Instruments | 45          | 2.66        | 1.91      | 71.9      | 2.6           | 0.0 - 8.4    | 45            | 2.19        | 1.22      | 56.0      | 1.8           | 0.0 - 5.9    |
| Sysmex XS-1000i        | 29          | 2.62        | 2.27      | 86.5      | 1.1           | 0.0 - 9.5    | 29            | 2.28        | 1.45      | 63.6      | 1.2           | 0.0 - 6.7    |
| Specimen MX-8          |             |             |           |           |               |              | Specimen MX-9 |             |           |           |               |              |
| All Method             | 46          | 3.92        | 2.10      | 53.7      | 3.8           | 0.0 - 10.3   | 45            | 2.08        | 1.19      | 57.2      | 1.8           | 0.0 - 5.7    |
| All Sysmex Instruments | 46          | 3.92        | 2.10      | 53.7      | 3.8           | 0.0 - 10.3   | 45            | 2.08        | 1.19      | 57.2      | 1.8           | 0.0 - 5.7    |
| Sysmex XS-1000i        | 29          | 3.68        | 2.44      | 66.2      | 2.1           | 0.0 - 11.0   | 29            | 2.15        | 1.63      | 75.7      | 1.2           | 0.0 - 7.1    |
| Specimen MX-10         |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method             | 45          | 2.69        | 1.86      | 69.3      | 2.4           | 0.0 - 8.3    |               |             |           |           |               |              |
| All Sysmex Instruments | 45          | 2.69        | 1.86      | 69.3      | 2.4           | 0.0 - 8.3    |               |             |           |           |               |              |
| Sysmex XS-1000i        | 29          | 2.54        | 2.19      | 85.9      | 1.1           | 0.0 - 9.2    |               |             |           |           |               |              |

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

| <u><b>Instrument</b></u> | <b>Specimen MX-6</b>  |                    |                  |                  |                      |                     | <b>Specimen MX-7</b> |                    |                  |                  |                      |                     |
|--------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
|                          | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>   | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method               | 41                    | 13.73              | 1.21             | 8.8              | 14.1                 | 10.1 - 17.4         | 41                   | 16.35              | 3.43             | 21.0             | 14.9                 | 6.0 - 26.7          |
| All Sysmex Instruments   | 41                    | 13.73              | 1.21             | 8.8              | 14.1                 | 10.1 - 17.4         | 41                   | 16.35              | 3.43             | 21.0             | 14.9                 | 6.0 - 26.7          |
| Sysmex XS-1000i          | 26                    | 13.57              | 1.35             | 9.9              | 14.1                 | 9.5 - 17.7          | 25                   | 17.26              | 4.15             | 24.1             | 14.8                 | 4.7 - 29.8          |
|                          | <b>Specimen MX-8</b>  |                    |                  |                  |                      |                     | <b>Specimen MX-9</b> |                    |                  |                  |                      |                     |
|                          | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>   | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method               | 44                    | 14.37              | 3.05             | 21.2             | 12.9                 | 5.2 - 23.6          | 41                   | 16.13              | 3.17             | 19.6             | 14.8                 | 6.6 - 25.7          |
| All Sysmex Instruments   | 44                    | 14.37              | 3.05             | 21.2             | 12.9                 | 5.2 - 23.6          | 41                   | 16.13              | 3.17             | 19.6             | 14.8                 | 6.6 - 25.7          |
| Sysmex XS-1000i          | 28                    | 15.23              | 3.53             | 23.2             | 13.0                 | 4.6 - 25.9          | 25                   | 16.94              | 3.83             | 22.6             | 14.6                 | 5.4 - 28.5          |
|                          | <b>Specimen MX-10</b> |                    |                  |                  |                      |                     |                      |                    |                  |                  |                      |                     |
|                          | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                      |                    |                  |                  |                      |                     |
| All Method               | 42                    | 13.65              | 1.31             | 9.6              | 14.0                 | 9.7 - 17.6          |                      |                    |                  |                  |                      |                     |
| All Sysmex Instruments   | 42                    | 13.65              | 1.31             | 9.6              | 14.0                 | 9.7 - 17.6          |                      |                    |                  |                  |                      |                     |
| Sysmex XS-1000i          | 27                    | 13.34              | 1.52             | 11.4             | 14.0                 | 8.7 - 17.9          |                      |                    |                  |                  |                      |                     |

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

| <u><b>Instrument</b></u>     | <b>Specimen MX-6</b>  |                    |                  |                  |                      |                     | <b>Specimen MX-7</b> |                    |                  |                  |                      |                     |
|------------------------------|-----------------------|--------------------|------------------|------------------|----------------------|---------------------|----------------------|--------------------|------------------|------------------|----------------------|---------------------|
|                              | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>   | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                   | 15                    | 82.41              | 2.42             | 2.9              | 8.9                  | 75.1 - 89.7         | 16                   | 83.83              | 5.40             | 6.4              | 8.8                  | 67.6 - 100.1        |
| All Sysmex XS/XN Instruments | 30                    | 5.21               | 4.32             | 82.9             | 7.9                  | 0.0 - 18.2          | 29                   | 5.10               | 4.38             | 85.8             | 7.7                  | 0.0 - 18.3          |
| All Sysmex XT/XE Instruments | 15                    | 82.41              | 2.42             | 2.9              | 82.7                 | 75.1 - 89.7         | 16                   | 83.83              | 5.40             | 6.4              | 82.3                 | 67.6 - 100.1        |
| Sysmex XS-1000i              | 29                    | 5.38               | 4.28             | 79.5             | 7.9                  | 0.0 - 18.3          | 28                   | 5.29               | 4.35             | 82.2             | 7.8                  | 0.0 - 18.4          |
|                              | <b>Specimen MX-8</b>  |                    |                  |                  |                      |                     | <b>Specimen MX-9</b> |                    |                  |                  |                      |                     |
|                              | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> | <u><b>Labs</b></u>   | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
| All Method                   | 16                    | 71.03              | 1.64             | 2.3              | 7.7                  | 66.1 - 76.0         | 16                   | 83.53              | 4.99             | 6.0              | 9.1                  | 68.5 - 98.5         |
| All Sysmex XS/XN Instruments | 30                    | 4.52               | 3.67             | 81.3             | 6.8                  | 0.0 - 15.6          | 30                   | 4.99               | 4.41             | 88.2             | 7.5                  | 0.0 - 18.3          |
| All Sysmex XT/XE Instruments | 16                    | 71.03              | 1.64             | 2.3              | 70.6                 | 66.1 - 76.0         | 16                   | 83.53              | 4.99             | 6.0              | 82.0                 | 68.5 - 98.5         |
| Sysmex XS-1000i              | 29                    | 4.67               | 3.64             | 77.9             | 7.0                  | 0.0 - 15.6          | 29                   | 5.16               | 4.39             | 85.2             | 7.5                  | 0.0 - 18.4          |
|                              | <b>Specimen MX-10</b> |                    |                  |                  |                      |                     |                      |                    |                  |                  |                      |                     |
|                              | <u><b>Labs</b></u>    | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |                      |                    |                  |                  |                      |                     |
| All Method                   | 15                    | 82.47              | 2.51             | 3.0              | 9.1                  | 74.9 - 90.0         |                      |                    |                  |                  |                      |                     |
| All Sysmex XS/XN Instruments | 30                    | 5.30               | 4.36             | 82.3             | 7.9                  | 0.0 - 18.4          |                      |                    |                  |                  |                      |                     |
| All Sysmex XT/XE Instruments | 15                    | 82.47              | 2.51             | 3.0              | 82.8                 | 74.9 - 90.0         |                      |                    |                  |                  |                      |                     |
| Sysmex XS-1000i              | 29                    | 5.48               | 4.32             | 79.0             | 8.0                  | 0.0 - 18.5          |                      |                    |                  |                  |                      |                     |

Case History:

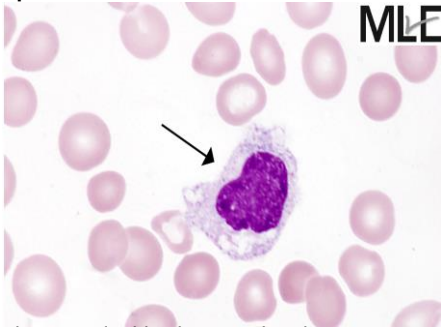
A 45-year-old white male presented to his internist's office with a cough and low-grade fever that had persisted for about a month. The examining physician noticed numerous small bruises on the patient's body. When asked about the bruises, the patient stated he did not know how he got them, and that he had not been very active since his illness began due to fatigue and aching joints. A CBC was performed, and the results appear below.

| Test | Results                 | Reference Range              |
|------|-------------------------|------------------------------|
| WBC  | $30.0 \times 10^9/L$    | $4.5 - 15.0 \times 10^9/L$   |
| RBC  | $3.10 \times 10^{12}/L$ | $4.6 - 6.0 \times 10^{12}/L$ |
| HGB  | 9.3 g/dL                | 14.0 - 18.0 g/dL             |
| HCT  | 27 %                    | 40 - 54 %                    |
| PLT  | $35 \times 10^9/L$      | $150 - 450 \times 10^9/L$    |
| MCV  | 88 fL                   | 80 - 94 fL                   |
| MCH  | 30 pg                   | 26 - 32 pg                   |
| MCHC | 34 g/dL                 | 32 - 36 g/dL                 |
| RDW  | 12 %                    | 11.5 - 14.5 %                |

This patient was diagnosed with **acute myelogenous leukemia (AML)**. Leukemia is a disease in which one type of white blood cell abnormally proliferates in the bone marrow. The cells produced are non-functional and live longer than normal cells. The abnormal cells fill up the bone marrow and inhibit the production of normal blood cells, resulting in anemia (due to decreased RBC production), bleeding and bruising (due to decreased platelet production), and infection (due to dysfunctional WBCs). The leukemic cells also accumulate in the blood stream, organs, and tissues, causing swelling of the spleen, liver, and lymph nodes. AML is the most common leukemia in adults. It is caused by the malignant transformation of a precursor or stem cell in the myeloid cell line that would normally have matured into granulocytes, erythrocytes, or megakaryocytes. However, leukemic cells remain immature and undifferentiated. There are a number of subtypes of AML, named for the affected stage or cell type. These include acute myeloblastic leukemia, acute promyelocytic leukemia, acute monocytic leukemia, acute myelomonocytic leukemia, erythroleukemia, and acute megakaryoblastic leukemia.

BLOOD CELL IDENTIFICATION

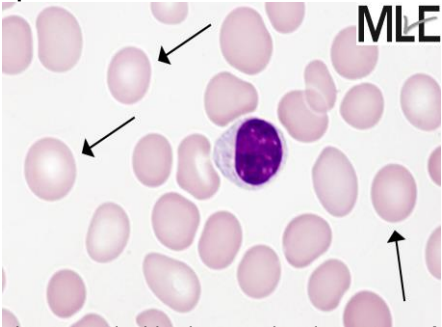
Specimen BC-7



| Identification                 | Labs | Percent | Performance |
|--------------------------------|------|---------|-------------|
| Monocyte                       | 228  | 89.41%  | Acceptable  |
| Immature/abnormal cell – refer | 7    | 2.75%   |             |
| Myelocyte cell                 | 7    | 2.75%   |             |
| Lymphocyte, reactive           | 7    | 2.75%   |             |

The arrow in this photograph points to a **monocyte**. The nucleus is indented and the nuclear chromatin is lacy with small clumps. The cytoplasm is abundant, pale gray-blue, and filled with swirls of minute granules that produce a cloudy or turbid appearance. The cytoplasmic membrane is irregular, with a pseudopod pushing away adjacent red blood cells, and numerous cytoplasmic vacuoles. To view another photo of a monocyte, see 2013 M1 Specimen BC-3.

Specimen BC-8

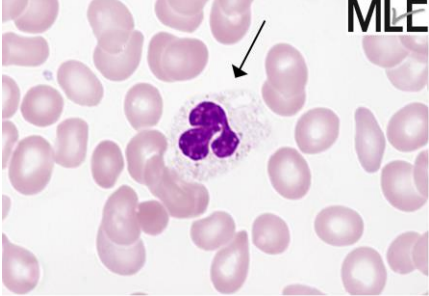


| Identification       | Labs | Percent | Performance |
|----------------------|------|---------|-------------|
| Erythrocyte, normal  | 220  | 86.27%  | Acceptable  |
| Hypochromic red cell | 19   | 7.45%   |             |
| Macrocyte            | 9    | 3.53%   |             |

The arrows in this photograph point to **normal erythrocytes** (red blood cells.) The arrowed cells are approximately the same size as the nucleus of the mature lymphocyte nearby. The area of central pallor takes up about one-third of the diameter of the cell. To view another photo of normal red cells, see 2013 M1 Specimen BC-2.

BLOOD CELL IDENTIFICATION

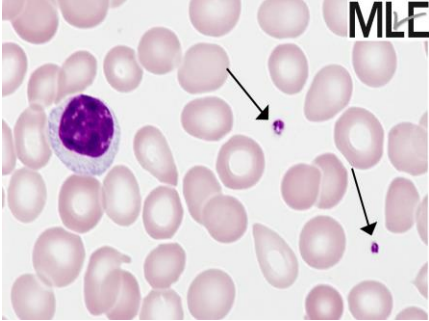
Specimen BC-9



The arrow in this photograph points to a **segmented neutrophil**. The nucleus is divided into lobes, or segments, which are connected by a thin filament of chromatin. The cytoplasm of this normal cell contains fine, violet-pink granules. In patients with AML the absolute neutrophil count is decreased, and the granulocytes can appear hypogranular or “partially degranulated.” Also, there may be neutrophils segmented into fewer lobes than normal, called “pseudo Pelger-Huët cells.” To view another segmented neutrophil, see 2012 M3 BC-15.

| <u>Identification</u>        | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|------------------------------|-------------|----------------|--------------------|
| Neutrophil-Segmented or band | 246         | 96.47%         | Acceptable         |

Specimen BC-10

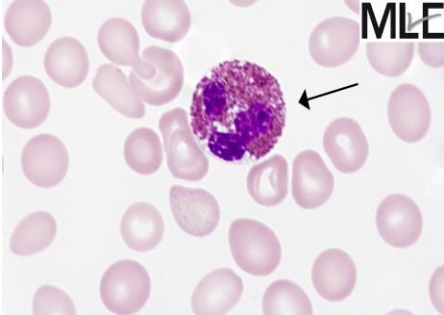


The arrows in this photograph point to **normal platelets**. Platelets are much smaller than red blood cells. They have a rounded shape with irregular edges. They contain fine, red-violet granules surrounded by bluish cytoplasm. To view another photo of normal platelets, see 2013 M3 Specimen BC-16.

| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Platelet, normal      | 247         | 96.48%         | Acceptable         |
| Platelet, abnormal    | 6           | 2.34%          |                    |

BLOOD CELL IDENTIFICATION

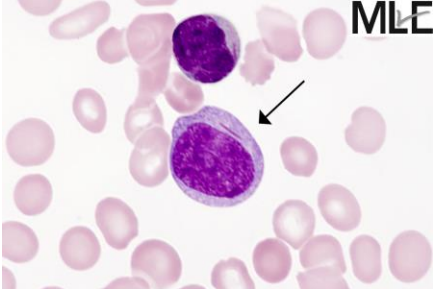
Specimen BC-11



| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Eosinophil, any stage | 247         | 96.86%         | Acceptable         |
| Basophil, any stage   | 5           | 1.96%          |                    |

The arrow in this photograph points to an **eosinophil**. “Eos” are easily identified by their characteristic red-orange color, imparted by the dye eosin. The cytoplasm of an eosinophil is filled with coarse, red-orange granules, which surround the nucleus but do not obscure it. In patients with AML, the eos and other granulocytes may be partially degranulated or hypogranular, but should still be fairly easy to identify. To view another photo of an eosinophil, see 2012 M2 Specimen BC-11.

Specimen BC-12



| <u>Identification</u>          | <u>Labs</u> | <u>Percent</u> | <u>Performance</u>                 |
|--------------------------------|-------------|----------------|------------------------------------|
| Auer rod                       | 185         | 74.30%         | Not graded – Educational Challenge |
| Immature/abnormal cell – refer | 39          | 15.66%         |                                    |
| Blast cell                     | 18          | 7.23%          |                                    |

The arrow in this educational challenge points to an **Auer rod** within a blast cell. AML blasts have abundant cytoplasm, often contain cytoplasmic granules, and in about 10% of patients with AML, contain Auer rods. Auer rods are pink-staining, rod-shaped inclusions. The presence of Auer rods is diagnostic for multiple presentations of AML. Auer rods are found in the cytoplasm of immature cells in myeloblastic, myelomonocytic, or monocytic leukemia, and sometimes in the plasma cells of multiple myeloma. The smaller cell in this photo is a type of myeloblast seen in AML called a microblast. Compare this cell with the lymphocytes in BC-8 and BC-10 above. It is important to be able to tell the difference between these because microblasts can be mistaken for small lymphocytes, leading to a missed diagnosis. To view another photo of a blast cell with Auer rod, see 2008 M1 Specimen BC-6.

References:

<http://www.labtestsonline.org/understanding/conditions/leukemia.html>

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## BLOOD BANK

### ABO GROUP

| <u>Specimen</u> | <u>Results</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|----------------|-------------|----------------|--------------------|
| BB-6            | Group O        | 8           | 100%           | Acceptable         |
| BB-7            | Group B        | 8           | 100%           | Acceptable         |
| BB-8            | Group A        | 8           | 100%           | Acceptable         |
| BB-9            | Group AB       | 8           | 100%           | Acceptable         |
| BB-10           | Group AB       | 8           | 100%           | Acceptable         |

### RH FACTOR (D TYPE)

| <u>Specimen</u> | <u>Results</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|----------------|-------------|----------------|--------------------|
| BB-6            | Rh Positive    | 11          | 91.67%         | Acceptable         |
|                 | Rh Negative    | 1           | 8.33%          |                    |
| BB-7            | Rh Positive    | 12          | 100%           | Acceptable         |
| BB-8            | Rh Negative    | 12          | 100%           | Acceptable         |
| BB-9            | Rh Positive    | 12          | 100%           | Acceptable         |
| BB-10           | Rh Negative    | 12          | 100%           | Acceptable         |

Specimen BB-6 is graded by 100% referee consensus.

### UNEXPECTED ANTIBODY DETECTION

| <u>Specimen</u> | <u>Results</u>                  | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|---------------------------------|-------------|----------------|--------------------|
| AB-6            | No unexpected antibody detected | 8           | 100%           | Acceptable         |
| AB-7            | Unexpected antibody detected    | 8           | 100%           | Acceptable         |
| AB-8            | Unexpected antibody detected    | 8           | 100%           | Acceptable         |
| AB-9            | Unexpected antibody detected    | 8           | 100%           | Acceptable         |
| AB-10           | No unexpected antibody detected | 8           | 100%           | Acceptable         |

## BLOOD BANK

### ANTIBODY IDENTIFICATION

| <u>Specimen</u> | <u>Results</u>       | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|----------------------|-------------|----------------|--------------------|
| AB-6            | No antibody detected | 1           | 100%           | Acceptable         |
| AB-7            | Anti-c               | 1           | 100%           | Acceptable         |
| AB-8            | Anti-E               | 1           | 100%           | Acceptable         |
| AB-9            | Anti-M               | 1           | 100%           | Acceptable         |
| AB-10           | No antibody detected | 1           | 100%           | Acceptable         |

### COMPATIBILITY TESTING

| <u>Specimen</u> | <u>Results</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|----------------|-------------|----------------|--------------------|
| AB-6            | Compatible     | 6           | 100%           | Acceptable         |
| AB-7            | Compatible     | 6           | 100%           | Acceptable         |
| AB-8            | Compatible     | 6           | 100%           | Acceptable         |
| AB-9            | Not Compatible | 6           | 100%           | Acceptable         |
| AB-10           | Compatible     | 6           | 100%           | Acceptable         |

**PROTHROMBIN TIME (seconds)**

| <u>Reagent/Instrument</u>   | Specimen CG-6  |             |           |           |               |              | Specimen CG-7 |             |           |           |               |              |
|-----------------------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                             | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                  | 65             | 24.85       | 3.57      | 14.4      | 25.3          | 21.1 - 28.6  | 65            | 40.93       | 8.42      | 20.6      | 42.5          | 34.7 - 47.1  |
| Dade Innovin                |                |             |           |           |               |              |               |             |           |           |               |              |
| Dade Behring BFT II         | 5              | 27.06       | 2.39      | 8.8       | 27.7          | 23.0 - 31.2  | 5             | 48.32       | 4.20      | 8.7       | 50.1          | 41.0 - 55.6  |
| Sysmex CA-500/600 series    | 30             | 25.76       | 0.93      | 3.6       | 25.8          | 21.8 - 29.7  | 29            | 43.23       | 2.15      | 5.0       | 43.4          | 36.7 - 49.8  |
| All Coagulation Instruments | 36             | 25.81       | 1.14      | 4.4       | 25.9          | 21.9 - 29.7  | 37            | 43.79       | 3.38      | 7.7       | 43.5          | 37.2 - 50.4  |
| HemosIL RecombiPlasTin 2G   |                |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 5              | 29.80       | 1.06      | 3.6       | 29.5          | 25.3 - 34.3  | 5             | 51.22       | 2.12      | 4.1       | 51.8          | 43.5 - 59.0  |
| IL TEST PT Fibrinogen       |                |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 13             | 20.50       | 0.65      | 3.2       | 20.2          | 17.4 - 23.6  | 13            | 29.90       | 1.44      | 4.8       | 29.4          | 25.4 - 34.4  |
| PH/CMS Thromboplastin-D     |                |             |           |           |               |              |               |             |           |           |               |              |
| All Coagulation Instruments | 5              | 19.36       | 1.28      | 6.6       | 19.6          | 16.4 - 22.3  | 5             | 28.90       | 2.17      | 7.5       | 29.0          | 24.5 - 33.3  |
| <u>Reagent/Instrument</u>   | Specimen CG-8  |             |           |           |               |              | Specimen CG-9 |             |           |           |               |              |
|                             | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                  | 64             | 10.96       | 0.68      | 6.2       | 11.0          | 9.3 - 12.7   | 65            | 10.86       | 0.81      | 7.4       | 10.8          | 9.2 - 12.5   |
| Dade Innovin                |                |             |           |           |               |              |               |             |           |           |               |              |
| Dade Behring BFT II         | 5              | 9.72        | 0.22      | 2.2       | 9.7           | 8.2 - 11.2   | 5             | 9.26        | 0.18      | 2.0       | 9.2           | 7.8 - 10.7   |
| Sysmex CA-500/600 series    | 30             | 10.77       | 0.32      | 3.0       | 10.8          | 9.1 - 12.4   | 30            | 10.61       | 0.30      | 2.8       | 10.7          | 9.0 - 12.3   |
| All Coagulation Instruments | 37             | 10.59       | 0.49      | 4.6       | 10.7          | 9.0 - 12.2   | 37            | 10.40       | 0.55      | 5.3       | 10.6          | 8.8 - 12.0   |
| HemosIL RecombiPlasTin 2G   |                |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 5              | 11.32       | 0.33      | 2.9       | 11.3          | 9.6 - 13.1   | 5             | 11.66       | 0.18      | 1.6       | 11.7          | 9.9 - 13.5   |
| IL TEST PT Fibrinogen       |                |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 13             | 11.55       | 0.33      | 2.9       | 11.8          | 9.8 - 13.3   | 13            | 11.30       | 0.29      | 2.6       | 11.3          | 9.6 - 13.0   |
| PH/CMS Thromboplastin-D     |                |             |           |           |               |              |               |             |           |           |               |              |
| All Coagulation Instruments | 5              | 10.88       | 0.95      | 8.7       | 10.4          | 9.2 - 12.6   | 5             | 10.86       | 0.92      | 8.5       | 10.8          | 9.2 - 12.5   |
| <u>Reagent/Instrument</u>   | Specimen CG-10 |             |           |           |               |              |               |             |           |           |               |              |
|                             | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method                  | 64             | 12.58       | 0.61      | 4.8       | 12.7          | 10.6 - 14.5  |               |             |           |           |               |              |
| Dade Innovin                |                |             |           |           |               |              |               |             |           |           |               |              |
| Dade Behring BFT II         | 5              | 12.20       | 1.02      | 8.4       | 11.8          | 10.3 - 14.1  |               |             |           |           |               |              |
| Sysmex CA-500/600 series    | 30             | 12.58       | 0.33      | 2.6       | 12.6          | 10.6 - 14.5  |               |             |           |           |               |              |
| All Coagulation Instruments | 36             | 12.45       | 0.43      | 3.4       | 12.6          | 10.5 - 14.4  |               |             |           |           |               |              |
| HemosIL RecombiPlasTin 2G   |                |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 5              | 11.88       | 0.19      | 1.6       | 11.9          | 10.0 - 13.7  |               |             |           |           |               |              |
| IL TEST PT Fibrinogen       |                |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 13             | 13.17       | 0.27      | 2.0       | 13.1          | 11.1 - 15.2  |               |             |           |           |               |              |
| PH/CMS Thromboplastin-D     |                |             |           |           |               |              |               |             |           |           |               |              |
| All Coagulation Instruments | 5              | 12.04       | 0.99      | 8.3       | 11.4          | 10.2 - 13.9  |               |             |           |           |               |              |

**PROTHROMBIN TIME–INTERNATIONAL NORMALIZED RATIO (INR)**

| Specimen CG-6               |             |             |           |           |               |              | Specimen CG-7 |             |           |           |               |              |
|-----------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u>   | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                  | 67          | 2.72        | 0.37      | 13.5      | 2.6           | 2.1 - 3.3    | 65            | 4.98        | 1.28      | 25.8      | 4.4           | 3.9 - 6.0    |
| Dade Innovin                |             |             |           |           |               |              |               |             |           |           |               |              |
| Dade Behring BFT II         | 5           | 2.50        | 0.24      | 9.8       | 2.5           | 2.0 - 3.0    | 5             | 4.06        | 0.43      | 10.7      | 4.0           | 3.2 - 4.9    |
| Sysmex CA-500/600 series    | 29          | 2.46        | 0.13      | 5.3       | 2.4           | 1.9 - 3.0    | 29            | 4.05        | 0.27      | 6.6       | 4.0           | 3.2 - 4.9    |
| All Coagulation Instruments | 37          | 2.46        | 0.15      | 5.9       | 2.5           | 1.9 - 3.0    | 37            | 4.06        | 0.29      | 7.0       | 4.0           | 3.2 - 4.9    |
| HemosIL RecombiPlasTin 2G   |             |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 5           | 2.78        | 0.04      | 1.6       | 2.8           | 2.2 - 3.4    | 5             | 4.82        | 0.13      | 2.7       | 4.8           | 3.8 - 5.8    |
| IL TEST PT Fibrinogen       |             |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 13          | 3.04        | 0.17      | 5.5       | 3.1           | 2.4 - 3.7    | 12            | 6.18        | 0.42      | 6.7       | 6.3           | 4.9 - 7.5    |
| PH/CMS Thromboplastin-D     |             |             |           |           |               |              |               |             |           |           |               |              |
| All Coagulation Instruments | 6           | 3.27        | 0.21      | 6.3       | 3.3           | 2.6 - 4.0    | 6             | 7.92        | 1.11      | 14.1      | 7.9           | 6.3 - 9.6    |
| Specimen CG-8               |             |             |           |           |               |              | Specimen CG-9 |             |           |           |               |              |
| All Method                  | 67          | 1.03        | 0.06      | 6.1       | 1.0           | 0.8 - 1.3    | 67            | 1.01        | 0.06      | 5.5       | 1.0           | 0.8 - 1.3    |
| Dade Innovin                |             |             |           |           |               |              |               |             |           |           |               |              |
| Dade Behring BFT II         | 5           | 1.08        | 0.04      | 4.1       | 1.1           | 0.8 - 1.3    | 5             | 1.00        | 0.07      | 7.1       | 1.0           | 0.8 - 1.2    |
| Sysmex CA-500/600 series    | 29          | 1.04        | 0.05      | 4.8       | 1.0           | 0.8 - 1.3    | 29            | 1.02        | 0.04      | 4.0       | 1.0           | 0.8 - 1.3    |
| All Coagulation Instruments | 37          | 1.05        | 0.05      | 4.8       | 1.0           | 0.8 - 1.3    | 37            | 1.02        | 0.05      | 4.7       | 1.0           | 0.8 - 1.3    |
| HemosIL RecombiPlasTin 2G   |             |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 5           | 1.06        | 0.05      | 5.2       | 1.1           | 0.8 - 1.3    | 5             | 1.08        | 0.04      | 4.1       | 1.1           | 0.8 - 1.3    |
| IL TEST PT Fibrinogen       |             |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 13          | 1.03        | 0.06      | 6.1       | 1.0           | 0.8 - 1.3    | 13            | 0.98        | 0.04      | 3.8       | 1.0           | 0.7 - 1.2    |
| PH/CMS Thromboplastin-D     |             |             |           |           |               |              |               |             |           |           |               |              |
| All Coagulation Instruments | 6           | 0.95        | 0.05      | 5.8       | 1.0           | 0.7 - 1.2    | 6             | 0.98        | 0.08      | 7.7       | 1.0           | 0.7 - 1.2    |
| Specimen CG-10              |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                  | 66          | 1.21        | 0.09      | 7.3       | 1.2           | 0.9 - 1.5    |               |             |           |           |               |              |
| Dade Innovin                |             |             |           |           |               |              |               |             |           |           |               |              |
| Dade Behring BFT II         | 5           | 1.28        | 0.15      | 11.6      | 1.3           | 1.0 - 1.6    |               |             |           |           |               |              |
| Sysmex CA-500/600 series    | 29          | 1.21        | 0.04      | 3.6       | 1.2           | 0.9 - 1.5    |               |             |           |           |               |              |
| All Coagulation Instruments | 36          | 1.22        | 0.05      | 4.2       | 1.2           | 0.9 - 1.5    |               |             |           |           |               |              |
| HemosIL RecombiPlasTin 2G   |             |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 5           | 1.10        | 0.00      | 0.0       | 1.1           | 0.8 - 1.4    |               |             |           |           |               |              |
| IL TEST PT Fibrinogen       |             |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models          | 13          | 1.31        | 0.05      | 3.8       | 1.3           | 1.0 - 1.6    |               |             |           |           |               |              |
| PH/CMS Thromboplastin-D     |             |             |           |           |               |              |               |             |           |           |               |              |
| All Coagulation Instruments | 6           | 1.18        | 0.08      | 6.4       | 1.2           | 0.9 - 1.5    |               |             |           |           |               |              |

## ACTIVATED PARTIAL THROMBOPLASTIN (seconds)

| Specimen CG-6             |             |             |           |           |               |              | Specimen CG-7 |             |           |           |               |              |
|---------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                | 28          | 49.2        | 6.1       | 12.3      | 47            | 41 - 57      | 28            | 74.0        | 8.7       | 11.8      | 71            | 62 - 86      |
| Dade Actin FSL            |             |             |           |           |               |              |               |             |           |           |               |              |
| Sysmex CA-500/600 series  | 16          | 46.3        | 2.2       | 4.7       | 46            | 39 - 54      | 16            | 69.9        | 3.2       | 4.6       | 70            | 59 - 81      |
| IL TEST APTT-SP           |             |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models        | 6           | 47.3        | 2.4       | 5.1       | 48            | 40 - 55      | 6             | 71.0        | 2.6       | 3.7       | 71            | 60 - 82      |
| Specimen CG-8             |             |             |           |           |               |              | Specimen CG-9 |             |           |           |               |              |
| All Method                | 28          | 26.3        | 1.3       | 5.0       | 26            | 22 - 31      | 28            | 27.8        | 1.5       | 5.5       | 28            | 23 - 32      |
| Dade Actin FSL            |             |             |           |           |               |              |               |             |           |           |               |              |
| Sysmex CA-500/600 series  | 16          | 25.8        | 1.0       | 3.9       | 26            | 21 - 30      | 16            | 27.0        | 0.9       | 3.3       | 27            | 22 - 32      |
| IL TEST APTT-SP           |             |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models        | 6           | 26.0        | 1.4       | 5.4       | 26            | 22 - 30      | 6             | 27.7        | 1.0       | 3.7       | 28            | 23 - 32      |
| Specimen CG-10            |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                | 28          | 33.3        | 7.0       | 21.1      | 30            | 28 - 39      |               |             |           |           |               |              |
| Dade Actin FSL            |             |             |           |           |               |              |               |             |           |           |               |              |
| Sysmex CA-500/600 series  | 16          | 28.2        | 1.2       | 4.1       | 28            | 23 - 33      |               |             |           |           |               |              |
| IL TEST APTT-SP           |             |             |           |           |               |              |               |             |           |           |               |              |
| IL ACL, all models        | 6           | 35.5        | 1.0       | 3.0       | 36            | 30 - 41      |               |             |           |           |               |              |

## Fibrinogen (mg/dL)

One participant reported Fibrinogen. The vendor assay values for specimens CG-6 through CG-10 are: 293 mg/dL, 262 mg/dL, 320 mg/dL, 592 mg/dL and 105 mg/dL respectively.

## RH FACTOR (Slide Method)

| <u>Specimen</u> | <u>Results</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|----------------|-------------|----------------|--------------------|
| RH-6            | Rh Negative    | 2           | 100%           | Acceptable         |
| RH-7            | Rh Positive    | 2           | 100%           | Acceptable         |
| RH-8            | Rh Positive    | 2           | 100%           | Acceptable         |
| RH-9            | Rh Positive    | 2           | 100%           | Acceptable         |
| RH-10           | Rh Negative    | 2           | 100%           | Acceptable         |

## COAGUCHEK XS PLUS PROTHROMBIN TIME (seconds)

| Specimen XS-6                           |             |             |           |           |               |              | Specimen XS-7 |             |           |           |               |              |
|-----------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Roche CoaguChek XS Plus Instruments | 23          | 23.19       | 2.15      | 9.3       | 22.5          | 19.7 - 26.7  | 23            | 33.88       | 3.00      | 8.9       | 33.3          | 28.7 - 39.0  |
| Specimen XS-8                           |             |             |           |           |               |              | Specimen XS-9 |             |           |           |               |              |
| All Roche CoaguChek XS Plus Instruments | 21          | 22.69       | 1.81      | 8.0       | 22.1          | 19.2 - 26.1  | 21            | 14.23       | 0.61      | 4.3       | 14.0          | 12.0 - 16.4  |
| Specimen XS-10                          |             |             |           |           |               |              |               |             |           |           |               |              |
| All Roche CoaguChek XS Plus Instruments | 21          | 22.73       | 1.91      | 8.4       | 21.9          | 19.3 - 26.2  |               |             |           |           |               |              |

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

| Specimen XS-6                           |             |             |           |           |               |              | Specimen XS-7 |             |           |           |               |              |
|-----------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>                       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Roche CoaguChek XS Plus Instruments | 23          | 1.99        | 0.19      | 9.6       | 1.9           | 1.5 - 2.4    | 23            | 2.92        | 0.35      | 11.9      | 2.8           | 2.3 - 3.6    |
| Specimen XS-8                           |             |             |           |           |               |              | Specimen XS-9 |             |           |           |               |              |
| All Roche CoaguChek XS Plus Instruments | 21          | 1.92        | 0.16      | 8.3       | 1.8           | 1.5 - 2.4    | 21            | 1.18        | 0.07      | 6.1       | 1.2           | 0.9 - 1.5    |
| Specimen XS-10                          |             |             |           |           |               |              |               |             |           |           |               |              |
| All Roche CoaguChek XS Plus Instruments | 21          | 1.93        | 0.15      | 8.0       | 1.9           | 1.5 - 2.4    |               |             |           |           |               |              |

## ITC PROTIME MICROCOAGULATION SYSTEM PROTHROMBIN TIME (seconds)

| Specimen IT-3     |             |             |           |           |               |              | Specimen IT-4 |             |           |           |               |              |
|-------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method        | 3           | -           | -         | -         | 43.1          | Not graded   | 3             | -           | -         | -         | 22.2          | Not graded   |

## ITC PROTIME MICROCOAGULATION SYSTEM –INTERNATIONAL NORMALIZED RATIO (INR)

| Specimen IT-3     |             |             |           |           |               |              | Specimen IT-4 |             |           |           |               |              |
|-------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method        | 3           | -           | -         | -         | 2.9           | Not graded   | 3             | -           | -         | -         | 1.7           | Not graded   |

### i-Stat PROTHROMBIN TIME (seconds)

| Specimen PTI-6          |             |             |           |           |               |              | Specimen PTI-7 |             |           |           |               |              |
|-------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| i-Stat Prothrombin Time | 11          | 14.28       | 0.51      | 3.6       | 14.5          | 12.1 - 16.5  | 11             | 24.98       | 1.40      | 5.6       | 24.5          | 21.2 - 28.8  |
| Specimen PTI-8          |             |             |           |           |               |              | Specimen PTI-9 |             |           |           |               |              |
| i-Stat Prothrombin Time | 11          | 25.78       | 1.33      | 5.2       | 25.6          | 21.9 - 29.7  | 11             | 14.96       | 1.30      | 8.7       | 14.6          | 12.7 - 17.3  |
| Specimen PTI-10         |             |             |           |           |               |              |                |             |           |           |               |              |
| i-Stat Prothrombin Time | 11          | 23.56       | 3.21      | 13.6      | 24.6          | 20.0 - 27.1  |                |             |           |           |               |              |

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

| Specimen PTI-6          |             |             |           |           |               |              | Specimen PTI-7 |             |           |           |               |              |
|-------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| i-Stat Prothrombin Time | 11          | 1.18        | 0.04      | 3.8       | 1.2           | 0.9 - 1.5    | 11             | 2.16        | 0.13      | 6.2       | 2.1           | 1.7 - 2.6    |
| Specimen PTI-8          |             |             |           |           |               |              | Specimen PTI-9 |             |           |           |               |              |
| i-Stat Prothrombin Time | 11          | 2.24        | 0.11      | 5.1       | 2.2           | 1.7 - 2.7    | 11             | 1.26        | 0.13      | 10.6      | 1.2           | 1.0 - 1.6    |
| Specimen PTI-10         |             |             |           |           |               |              |                |             |           |           |               |              |
| i-Stat Prothrombin Time | 11          | 2.02        | 0.29      | 14.6      | 2.1           | 1.6 - 2.5    |                |             |           |           |               |              |

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

| Specimen BF-3     |             |             |           |           |               |              | Specimen BF-4 |             |           |           |               |              |
|-------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method        | 5           | 1581.0      | 167.2     | 10.6      | 1587          | 1246 - 1916  | 5             | 0.8         | 1.5       | 200.0     | 0             | 0 - 4        |

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

| Specimen BF-3     |             |             |           |           |               |              | Specimen BF-4 |             |           |           |               |              |
|-------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method        | 5           | 1194.0      | 273.7     | 22.9      | 1203          | 646 - 1742   | 5             | 0.0         | 0.0       | 0.0       | 0             | 0 - 0        |

FLUID CELL COUNT/CRYSTALS – CRYSTAL IDENTIFCATION

| <u>Specimen</u> | <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|-----------------------|-------------|----------------|--------------------|
| BF-3            | Cholesterol crystals  | 9           | 90%            | Acceptable         |
|                 | CPPD Crystals         | 1           | 10%            |                    |
| BF-4            | CPPD Crystals         | 6           | 60%            | Not Graded         |
|                 | Other, not listed     | 3           | 30%            |                    |
|                 | No crystals observed  | 1           | 10%            |                    |

BF-4 is an ungraded challenge due to no referee group found.

**MICROALBUMIN, DIPSTICK****Specimen UM-2*****Participant Results***

| <b><u>Method</u></b>        | <b><u>Labs</u></b> | <b><u>Negative</u></b> | <b><u>10 mg/L(Pos)</u></b> | <b><u>20/30 mg/L</u></b> | <b><u>50 mg/L (+)</u></b> | <b><u>80 mg/L</u></b> | <b><u>100 mg/L (++)</u></b> | <b><u>150 mg/L</u></b> |
|-----------------------------|--------------------|------------------------|----------------------------|--------------------------|---------------------------|-----------------------|-----------------------------|------------------------|
| ALL METHODS                 | 41                 | -                      | -                          | -                        | -                         | 4                     | 6                           | 31                     |
| Bayer Clinitek Microalbumin | 35                 | -                      | -                          | -                        | -                         | 4                     | -                           | 31                     |
| Roche Micral - 1 minute     | 6                  | -                      | -                          | -                        | -                         | -                     | 6                           | -                      |

**CREATININE, DIPSTICK****Specimen UM-2*****Participant Results***

| <b><u>Method</u></b>        | <b><u>Labs</u></b> | <b><u>Negative</u></b> | <b><u>10 mg/dL</u></b> | <b><u>30 mg/dL</u></b> | <b><u>50 mg/dL</u></b> | <b><u>100 mg/dL</u></b> | <b><u>200 mg/dL</u></b> | <b><u>300 mg/dL</u></b> |
|-----------------------------|--------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|
| ALL METHODS                 | 37                 | -                      | -                      | 1                      | -                      | -                       | 6                       | 30                      |
| Bayer Clinitek Microalbumin | 34                 | -                      | -                      | 1                      | -                      | -                       | 5                       | 28                      |
| Bayer Multistix Pro         | 3                  | -                      | -                      | -                      | -                      | -                       | 1                       | 2                       |

## MICROALBUMIN, QUANTITATIVE

| Specimen UM-2                     |             |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 85          | 157.0       | 11.4      | 7.3       | 155           | 122 - 192    |
| Axis-Shield Afinion AS100         | 11          | 161.3       | 11.6      | 7.2       | 163           | 126 - 197    |
| Beckman AU                        | 12          | 153.5       | 20.4      | 13.3      | 148           | 92 - 215     |
| Siemens DCA Vantage               | 15          | 155.8       | 6.5       | 4.2       | 155           | 136 - 176    |
| Siemens Dimension/AR/ES/RxL/Xpand | 28          | 158.9       | 17.0      | 10.7      | 161           | 107 - 210    |

## CREATININE, URINE (mg/dL)

| Specimen UM-2                     |             |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>                     | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 86          | 220.3       | 11.7      | 5.3       | 220           | 185 - 256    |
| Axis-Shield Afinion AS100         | 11          | 212.6       | 23.5      | 11.0      | 207           | 142 - 284    |
| Beckman AU                        | 12          | 226.8       | 7.4       | 3.3       | 229           | 204 - 249    |
| Siemens DCA Vantage               | 15          | 229.5       | 8.9       | 3.9       | 231           | 202 - 257    |
| Siemens Dimension/AR/ES/RxL/Xpand | 24          | 217.0       | 10.6      | 4.9       | 217           | 185 - 249    |

## WAIVED HEMATOLOGY–HEMOGLOBIN (g/dL)

| Specimen HD-6        |             |             |           |           |               |              | Specimen HD-7 |             |           |           |               |              |
|----------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>    | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method           | 93          | 17.33       | 0.77      | 4.5       | 17.4          | 16.1 - 18.6  | 90            | 6.07        | 0.19      | 3.1       | 6.1           | 5.6 - 6.5    |
| All Stanbio Methods  | 31          | 17.67       | 0.90      | 5.1       | 18.0          | 16.4 - 19.0  | 27            | 6.13        | 0.23      | 3.7       | 6.1           | 5.6 - 6.6    |
| HemoCue              | 59          | 17.25       | 0.54      | 3.1       | 17.2          | 16.0 - 18.5  | 63            | 6.04        | 0.17      | 2.8       | 6.0           | 5.6 - 6.5    |
| Stanbio HemoPoint H2 | 26          | 17.88       | 0.53      | 2.9       | 18.0          | 16.6 - 19.2  | 27            | 6.13        | 0.23      | 3.7       | 6.1           | 5.6 - 6.6    |

## WAIVED HEMATOLOGY–HEMATOCRIT (percent)

| Specimen HD-6               |             |             |           |           |               |              | Specimen HD-7 |             |           |           |               |              |
|-----------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>           | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                  | 22          | 48.49       | 3.08      | 6.4       | 48.8          | 42.3 - 54.7  | 18            | 16.03       | 1.98      | 12.4      | 16.0          | 12.0 - 20.0  |
| All Microhematocrit Methods | 13          | 46.97       | 2.64      | 5.6       | 47.0          | 41.6 - 52.3  | 13            | 15.15       | 1.57      | 10.4      | 16.0          | 12.0 - 18.3  |

## KOH SKIN PREPARATION

| <u>Specimen</u> | <u>Identification</u>         | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------|-------------------------------|-------------|----------------|--------------------|
| K-3             | Yeast/fungal elements absent  | 153         | 93.87%         | Acceptable         |
|                 | Yeast/fungal elements present | 10          | 6.13%          |                    |

Organism present in specimen K-3: *Staphylococcus aureus*.

|     |                               |     |        |            |
|-----|-------------------------------|-----|--------|------------|
| K-4 | Yeast/fungal elements present | 152 | 93.83% | Acceptable |
|     | Yeast/fungal elements absent  | 10  | 6.17%  |            |

Organism present in specimen K-4: *Aspergillus niger*.

## COAGUCHECK XS - INTERNATIONAL NORMALIZED RATIO (INR)

| <u>Instrument</u>  | Specimen INX-3 |             |           |           |               |              | Specimen INX-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         | 114            | 2.61        | 0.18      | 6.8       | 2.6           | 2.0 - 3.2    | 113            | 1.23        | 0.05      | 4.0       | 1.2           | 0.9 - 1.5    |
| Roche CoaguChek XS | 114            | 2.61        | 0.18      | 6.8       | 2.6           | 2.0 - 3.2    | 113            | 1.23        | 0.05      | 4.0       | 1.2           | 0.9 - 1.5    |

## URINALYSIS DIPSTICK–SPECIFIC GRAVITY

### Specimen UA-2

| <u>Method</u>                      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
|------------------------------------|-------------|-------------|-----------|-----------|---------------|---------------|
| All Method                         | 911         | 1.0166      | 0.0052    | 0.5       | 1.020         | 1.006 - 1.027 |
| All Bayer Instruments              | 459         | 1.0203      | 0.0026    | 0.3       | 1.020         | 1.010 - 1.031 |
| All Roche Instruments              | 60          | 1.0097      | 0.0026    | 0.3       | 1.010         | 0.999 - 1.020 |
| Bayer Clinitek 10 / 100            | 14          | 1.0189      | 0.0049    | 0.5       | 1.020         | 1.008 - 1.029 |
| Bayer Clinitek 50                  | 51          | 1.0157      | 0.0019    | 0.2       | 1.015         | 1.005 - 1.026 |
| Bayer Clinitek 500                 | 14          | 1.0200      | 0.0000    | 0.0       | 1.020         | 1.010 - 1.030 |
| Bayer Clinitek Advantus            | 20          | 1.0190      | 0.0021    | 0.2       | 1.020         | 1.009 - 1.029 |
| Bayer Clinitek Status / Status+    | 357         | 1.0210      | 0.0021    | 0.2       | 1.020         | 1.011 - 1.032 |
| Bayer Reagent Strips               | 217         | 1.0122      | 0.0035    | 0.3       | 1.010         | 1.002 - 1.023 |
| Consult Diagnostics Urine Analyzer | 15          | 1.0180      | 0.0032    | 0.3       | 1.020         | 1.008 - 1.028 |
| CTMI CT-120 Urine Analyzer         | 11          | 1.0150      | 0.0000    | 0.0       | 1.015         | 1.005 - 1.025 |
| Diagnostic Test Group Clarity      |             |             |           |           |               |               |
| Urocheck 120                       | 11          | 1.0150      | 0.0000    | 0.0       | 1.015         | 1.005 - 1.025 |
| Other Analyzer Method              | 10          | 1.0166      | 0.0043    | 0.4       | 1.018         | 1.006 - 1.027 |
| Other Dipstick Method              | 16          | 1.0184      | 0.0062    | 0.6       | 1.020         | 1.008 - 1.029 |
| Roche Chemstrips                   | 48          | 1.0109      | 0.0020    | 0.2       | 1.010         | 1.000 - 1.021 |
| Roche Criterion Analyzer           | 14          | 1.0093      | 0.0027    | 0.3       | 1.010         | 0.999 - 1.020 |
| Roche Urisys                       | 36          | 1.0094      | 0.0026    | 0.3       | 1.010         | 0.999 - 1.020 |

## URINALYSIS DIPSTICK–pH

### Specimen UA-2

### Participant Results

| <u>Method</u>                              | <u>Labs</u> | <u>3.5 or less</u> | <u>4.0</u> | <u>4.5</u> | <u>5.0</u> | <u>5.5</u> | <u>6.0</u> | <u>6.5</u> | <u>7.0</u> | <u>7.5</u> | <u>8.0</u> | <u>8.5</u> | <u>9.0</u> |
|--------------------------------------------|-------------|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| ALL METHODS                                | 939         | 1                  | -          | -          | 2          | -          | 4          | 25         | 709        | 193        | 5          | -          | -          |
| Arkray DiaScreen                           | 6           | -                  | -          | -          | -          | -          | -          | -          | 6          | -          | -          | -          | -          |
| Arkray DiaScreen 50                        | 2           | -                  | -          | -          | -          | -          | -          | -          | 2          | -          | -          | -          | -          |
| Bayer Clinitek 10 / 100                    | 13          | -                  | -          | -          | -          | -          | -          | -          | 5          | 8          | -          | -          | -          |
| Bayer Clinitek 200/200+                    | 2           | -                  | -          | -          | -          | -          | -          | -          | 1          | 1          | -          | -          | -          |
| Bayer Clinitek 50                          | 57          | -                  | -          | -          | -          | -          | -          | 2          | 54         | 1          | -          | -          | -          |
| Bayer Clinitek 500                         | 14          | -                  | -          | -          | -          | -          | -          | -          | 8          | 6          | -          | -          | -          |
| Bayer Clinitek Advantus                    | 22          | -                  | -          | -          | -          | -          | -          | -          | 17         | 5          | -          | -          | -          |
| Bayer Clinitek Atlas                       | 5           | -                  | -          | -          | -          | -          | -          | -          | 5          | -          | -          | -          | -          |
| Bayer Clinitek Status / Status+            | 359         | -                  | -          | -          | -          | -          | 1          | -          | 355        | 3          | -          | -          | -          |
| Bayer Hemacombistix                        | 1           | -                  | -          | -          | -          | -          | -          | -          | -          | 1          | -          | -          | -          |
| Bayer Multistix Pro                        | 1           | -                  | -          | -          | -          | -          | -          | -          | 1          | -          | -          | -          | -          |
| Bayer Reagent Strips                       | 230         | -                  | -          | -          | -          | -          | 2          | 13         | 51         | 161        | 3          | -          | -          |
| Behring Reagent Strips                     | 1           | -                  | -          | -          | -          | -          | -          | -          | -          | 1          | -          | -          | -          |
| Consult Diagnostics Urine Analyzer         | 15          | -                  | -          | -          | -          | -          | -          | 3          | 12         | -          | -          | -          | -          |
| CTMI CT-120 Urine Analyzer                 | 11          | -                  | -          | -          | -          | -          | -          | -          | 11         | -          | -          | -          | -          |
| Diagnostic Test Group Clarity Urocheck     | 8           | -                  | -          | -          | 2          | -          | -          | -          | 6          | -          | -          | -          | -          |
| Diagnostic Test Group Clarity Urocheck 120 | 11          | -                  | -          | -          | -          | -          | -          | 1          | 10         | -          | -          | -          | -          |
| Germaine Laboratories AimStrip             | 3           | -                  | -          | -          | -          | -          | -          | -          | 3          | -          | -          | -          | -          |
| McKesson 10SG Reagent Strips               | 9           | -                  | -          | -          | -          | -          | -          | 2          | 7          | -          | -          | -          | -          |
| NDC Pro Advantage                          | 1           | -                  | -          | -          | -          | -          | -          | -          | 1          | -          | -          | -          | -          |
| Other Analyzer Method                      | 10          | -                  | -          | -          | -          | -          | -          | 1          | 8          | 1          | -          | -          | -          |
| Other Dipstick Method                      | 16          | -                  | -          | -          | -          | -          | -          | 2          | 14         | -          | -          | -          | -          |
| pH Paper                                   | 1           | -                  | -          | -          | -          | -          | -          | -          | -          | 1          | -          | -          | -          |
| PSS Select Reagent Strips                  | 8           | -                  | -          | -          | -          | -          | -          | -          | 7          | 1          | -          | -          | -          |
| PSS Select Urine Analyzer                  | 1           | -                  | -          | -          | -          | -          | -          | -          | 1          | -          | -          | -          | -          |
| Roche Chemstrip 101                        | 7           | -                  | -          | -          | -          | -          | -          | -          | 7          | -          | -          | -          | -          |
| Roche Chemstrips                           | 55          | 1                  | -          | -          | -          | -          | -          | -          | 51         | 1          | 2          | -          | -          |
| Roche cobas u 411                          | 2           | -                  | -          | -          | -          | -          | -          | -          | 2          | -          | -          | -          | -          |
| Roche Criterion Analyzer                   | 14          | -                  | -          | -          | -          | -          | -          | -          | 14         | -          | -          | -          | -          |
| Roche SuperUA/ChemstripUA                  | 1           | -                  | -          | -          | -          | -          | -          | -          | 1          | -          | -          | -          | -          |
| Roche Urisys                               | 37          | -                  | -          | -          | -          | -          | 1          | 1          | 35         | -          | -          | -          | -          |
| Schein Urispec                             | 8           | -                  | -          | -          | -          | -          | -          | -          | 8          | -          | -          | -          | -          |
| UriScan Reagent Strips                     | 1           | -                  | -          | -          | -          | -          | -          | -          | 1          | -          | -          | -          | -          |

## URINALYSIS DIPSTICK–PROTEIN QUALITATIVE

### Specimen UA-2

| <u>Method</u>                              | <u>Labs</u> | <u>Negative</u> | <u>Trace</u> | <i>Participant Results</i>               |                                           |                                               |                             |                                             |
|--------------------------------------------|-------------|-----------------|--------------|------------------------------------------|-------------------------------------------|-----------------------------------------------|-----------------------------|---------------------------------------------|
|                                            |             |                 |              | <u>30</u><br><u>mg/dL</u><br><u>(1+)</u> | <u>100</u><br><u>mg/dL</u><br><u>(2+)</u> | <u>300-500</u><br><u>mg/dL</u><br><u>(3+)</u> | <u>≥300</u><br><u>mg/dL</u> | <u>≥1000</u><br><u>mg/dL</u><br><u>(4+)</u> |
| ALL METHODS                                | 980         | 7               | 1            | 54                                       | 556                                       | 189                                           | 167                         | 6                                           |
| Arkray DiaScreen                           | 12          | -               | -            | -                                        | 8                                         | 4                                             | -                           | -                                           |
| Arkray DiaScreen 50                        | 2           | -               | -            | -                                        | 2                                         | -                                             | -                           | -                                           |
| Bayer Albustix                             | 2           | -               | -            | -                                        | 2                                         | -                                             | -                           | -                                           |
| Bayer Clinitek 10 / 100                    | 14          | -               | -            | -                                        | 6                                         | 5                                             | 3                           | -                                           |
| Bayer Clinitek 200/200+                    | 2           | -               | -            | -                                        | 2                                         | -                                             | -                           | -                                           |
| Bayer Clinitek 50                          | 57          | -               | -            | -                                        | 18                                        | 12                                            | 27                          | -                                           |
| Bayer Clinitek 500                         | 14          | -               | -            | -                                        | 14                                        | -                                             | -                           | -                                           |
| Bayer Clinitek Advantus                    | 21          | -               | -            | -                                        | 21                                        | -                                             | -                           | -                                           |
| Bayer Clinitek Atlas                       | 5           | -               | -            | -                                        | 5                                         | -                                             | -                           | -                                           |
| Bayer Clinitek Status / Status+            | 360         | 3               | -            | -                                        | 163                                       | 67                                            | 127                         | -                                           |
| Bayer Hemacombistix                        | 1           | -               | -            | -                                        | -                                         | -                                             | 1                           | -                                           |
| Bayer Multistix Pro                        | 1           | -               | -            | -                                        | -                                         | -                                             | 1                           | -                                           |
| Bayer Reagent Strips                       | 233         | 1               | 1            | 1                                        | 142                                       | 79                                            | 6                           | 3                                           |
| Bayer Uristix                              | 17          | -               | -            | -                                        | 9                                         | 8                                             | -                           | -                                           |
| Consult Diagnostics Urine Analyzer         | 15          | -               | -            | 6                                        | 9                                         | -                                             | -                           | -                                           |
| CTMI CT-120 Urine Analyzer                 | 11          | -               | -            | -                                        | 11                                        | -                                             | -                           | -                                           |
| Diagnostic Test Group Clarity Urocheck     | 7           | -               | -            | -                                        | 7                                         | -                                             | -                           | -                                           |
| Diagnostic Test Group Clarity Urocheck 120 | 11          | -               | -            | 2                                        | 9                                         | -                                             | -                           | -                                           |
| Germaine Laboratories AimStrip             | 3           | -               | -            | -                                        | 3                                         | -                                             | -                           | -                                           |
| McKesson 10SG Reagent Strips               | 9           | -               | -            | 2                                        | 7                                         | -                                             | -                           | -                                           |
| NDC Pro Advantage                          | 1           | -               | -            | -                                        | 1                                         | -                                             | -                           | -                                           |
| Other Analyzer Method                      | 9           | -               | -            | 3                                        | 5                                         | -                                             | 1                           | -                                           |
| Other Dipstick Method                      | 16          | -               | -            | 2                                        | 11                                        | 2                                             | -                           | 1                                           |
| PSS Select Reagent Strips                  | 8           | -               | -            | 1                                        | 7                                         | -                                             | -                           | -                                           |
| PSS Select Urine Analyzer                  | 1           | -               | -            | 1                                        | -                                         | -                                             | -                           | -                                           |
| Roche Chemstrip 101                        | 7           | -               | -            | 3                                        | 4                                         | -                                             | -                           | -                                           |
| Roche Chemstrips                           | 68          | 2               | -            | 7                                        | 48                                        | 11                                            | -                           | -                                           |
| Roche cobas u 411                          | 2           | -               | -            | 1                                        | 1                                         | -                                             | -                           | -                                           |
| Roche Criterion Analyzer                   | 14          | -               | -            | 1                                        | 13                                        | -                                             | -                           | -                                           |
| Roche SuperUA/ChemstripUA                  | 1           | -               | -            | -                                        | 1                                         | -                                             | -                           | -                                           |
| Roche Urisys                               | 37          | 1               | -            | 21                                       | 15                                        | -                                             | -                           | -                                           |
| Schein Urispec                             | 8           | -               | -            | 3                                        | 5                                         | -                                             | -                           | -                                           |
| Sulfosalicylic Acid                        | 2           | -               | -            | -                                        | 2                                         | -                                             | -                           | -                                           |
| UriScan Reagent Strips                     | 1           | -               | -            | -                                        | 1                                         | -                                             | -                           | -                                           |

## URINALYSIS DIPSTICK–GLUCOSE

### Specimen UA-2

| <u>Method</u>                              | <u>Labs</u> | <u>Negative</u> | <i>Participant Results</i>          |                      |                      |                      |                       |                           |                        |
|--------------------------------------------|-------------|-----------------|-------------------------------------|----------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|
|                                            |             |                 | <u>50-100<br/>mg/dL<br/>(Trace)</u> | <u>150<br/>mg/dL</u> | <u>250<br/>mg/dL</u> | <u>500<br/>mg/dL</u> | <u>1000<br/>mg/dL</u> | <u>&gt;1000<br/>mg/dL</u> | <u>≥2000<br/>mg/dL</u> |
| ALL METHODS                                | 961         | 956             | 2                                   | -                    | 3                    | -                    | -                     | -                         | -                      |
| Arkray DiaScreen                           | 7           | 7               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Arkray DiaScreen 50                        | 2           | 2               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Bayer Clinitek 10 / 100                    | 14          | 14              | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Bayer Clinitek 200/200+                    | 2           | 2               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Bayer Clinitek 50                          | 56          | 56              | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Bayer Clinitek 500                         | 14          | 14              | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Bayer Clinitek Advantus                    | 22          | 22              | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Bayer Clinitek Atlas                       | 5           | 5               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Bayer Clinitek Status / Status+            | 358         | 357             | -                                   | -                    | 1                    | -                    | -                     | -                         | -                      |
| Bayer Hemacombistix                        | 1           | 1               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Bayer Multistix Pro                        | 1           | 1               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Bayer Reagent Strips                       | 233         | 233             | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Bayer Uristix                              | 5           | 5               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Consult Diagnostics Urine Analyzer         | 15          | 15              | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| CTMI CT-120 Urine Analyzer                 | 11          | 11              | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Diagnostic Test Group Clarity Urocheck     | 8           | 8               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Diagnostic Test Group Clarity Urocheck 120 | 11          | 11              | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Germaine Laboratories AimStrip             | 3           | 3               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| McKesson 10SG Reagent Strips               | 9           | 9               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| NDC Pro Advantage                          | 1           | 1               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Other Analyzer Method                      | 9           | 9               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Other Dipstick Method                      | 16          | 16              | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| PSS Select Reagent Strips                  | 8           | 8               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| PSS Select Urine Analyzer                  | 1           | 1               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Roche Chemstrip 101                        | 7           | 7               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Roche Chemstrips                           | 70          | 66              | 2                                   | -                    | 2                    | -                    | -                     | -                         | -                      |
| Roche cobas u 411                          | 2           | 2               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Roche Criterion Analyzer                   | 14          | 14              | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Roche SuperUA/ChemstripUA                  | 1           | 1               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Roche Urisys                               | 37          | 37              | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| Schein Urispec                             | 8           | 8               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |
| UriScan Reagent Strips                     | 1           | 1               | -                                   | -                    | -                    | -                    | -                     | -                         | -                      |

## URINALYSIS DIPSTICK–KETONES

### Specimen UA-2

| <u>Method</u>                              | <u>Labs</u> | <u>Negative</u> | <u>Trace<br/>(5 mg/dL)</u> | <i>Participant Results</i>          |                                        |                                     |                      |                    |
|--------------------------------------------|-------------|-----------------|----------------------------|-------------------------------------|----------------------------------------|-------------------------------------|----------------------|--------------------|
|                                            |             |                 |                            | <u>Small<br/>(1+, 15<br/>mg/dL)</u> | <u>Moderate<br/>(2+, 40<br/>mg/dL)</u> | <u>Large<br/>(3+, 80<br/>mg/dL)</u> | <u>150<br/>mg/dL</u> | <u>≥ 160 mg/dL</u> |
| ALL METHODS                                | 938         | 926             | 11                         | -                                   | -                                      | -                                   | -                    | 1                  |
| Arkray DiaScreen                           | 6           | 3               | 3                          | -                                   | -                                      | -                                   | -                    | -                  |
| Arkray DiaScreen 50                        | 2           | 2               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Bayer Clinitek 10 / 100                    | 14          | 12              | 2                          | -                                   | -                                      | -                                   | -                    | -                  |
| Bayer Clinitek 200/200+                    | 2           | 2               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Bayer Clinitek 50                          | 57          | 57              | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Bayer Clinitek 500                         | 14          | 14              | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Bayer Clinitek Advantus                    | 22          | 22              | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Bayer Clinitek Atlas                       | 5           | 5               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Bayer Clinitek Status / Status+            | 359         | 358             | -                          | -                                   | -                                      | -                                   | -                    | 1                  |
| Bayer Ketostix                             | 1           | 1               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Bayer Multistix Pro                        | 1           | 1               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Bayer Reagent Strips                       | 232         | 229             | 3                          | -                                   | -                                      | -                                   | -                    | -                  |
| Consult Diagnostics Urine Analyzer         | 15          | 14              | 1                          | -                                   | -                                      | -                                   | -                    | -                  |
| CTMI CT-120 Urine Analyzer                 | 11          | 11              | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Diagnostic Test Group Clarity Urocheck     | 8           | 8               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Diagnostic Test Group Clarity Urocheck 120 | 11          | 11              | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Germaine Laboratories AimStrip             | 3           | 3               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| McKesson 10SG Reagent Strips               | 9           | 8               | 1                          | -                                   | -                                      | -                                   | -                    | -                  |
| NDC Pro Advantage                          | 1           | 1               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Other Analyzer Method                      | 9           | 9               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Other Dipstick Method                      | 16          | 15              | 1                          | -                                   | -                                      | -                                   | -                    | -                  |
| PSS Select Reagent Strips                  | 7           | 7               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| PSS Select Urine Analyzer                  | 1           | 1               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Roche Chemstrip 101                        | 7           | 7               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Roche Chemstrips                           | 55          | 55              | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Roche cobas u 411                          | 2           | 2               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Roche Criterion Analyzer                   | 14          | 14              | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Roche SuperUA/ChemstripUA                  | 1           | 1               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Roche Urisys                               | 37          | 37              | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| Schein Urispec                             | 8           | 8               | -                          | -                                   | -                                      | -                                   | -                    | -                  |
| UriScan Reagent Strips                     | 1           | 1               | -                          | -                                   | -                                      | -                                   | -                    | -                  |

## URINALYSIS DIPSTICK–BILIRUBIN

### Specimen UA-2

| <u>Method</u>                              | <u>Labs</u> | <u>Negative</u> | <i>Participant Results</i> |                          |                       |
|--------------------------------------------|-------------|-----------------|----------------------------|--------------------------|-----------------------|
|                                            |             |                 | <i>Small<br/>(1+)</i>      | <i>Moderate<br/>(2+)</i> | <i>Large<br/>(3+)</i> |
| ALL METHODS                                | 912         | 910             | 1                          | -                        | 1                     |
| Arkray DiaScreen                           | 6           | 6               | -                          | -                        | -                     |
| Arkray DiaScreen 50                        | 2           | 2               | -                          | -                        | -                     |
| Bayer Clinitek 10 / 100                    | 14          | 14              | -                          | -                        | -                     |
| Bayer Clinitek 200/200+                    | 2           | 2               | -                          | -                        | -                     |
| Bayer Clinitek 50                          | 55          | 55              | -                          | -                        | -                     |
| Bayer Clinitek 500                         | 14          | 14              | -                          | -                        | -                     |
| Bayer Clinitek Advantus                    | 21          | 21              | -                          | -                        | -                     |
| Bayer Clinitek Atlas                       | 5           | 5               | -                          | -                        | -                     |
| Bayer Clinitek Status / Status+            | 347         | 347             | -                          | -                        | -                     |
| Bayer Multistix Pro                        | 1           | 1               | -                          | -                        | -                     |
| Bayer Reagent Strips                       | 225         | 225             | -                          | -                        | -                     |
| Consult Diagnostics Urine Analyzer         | 15          | 15              | -                          | -                        | -                     |
| CTMI CT-120 Urine Analyzer                 | 11          | 11              | -                          | -                        | -                     |
| Diagnostic Test Group Clarity Urocheck     | 8           | 8               | -                          | -                        | -                     |
| Diagnostic Test Group Clarity Urocheck 120 | 11          | 11              | -                          | -                        | -                     |
| Germaine Laboratories AimStrip             | 3           | 3               | -                          | -                        | -                     |
| McKesson 10SG Reagent Strips               | 9           | 9               | -                          | -                        | -                     |
| NDC Pro Advantage                          | 1           | 1               | -                          | -                        | -                     |
| Other Analyzer Method                      | 9           | 9               | -                          | -                        | -                     |
| Other Dipstick Method                      | 16          | 16              | -                          | -                        | -                     |
| PSS Select Reagent Strips                  | 7           | 7               | -                          | -                        | -                     |
| PSS Select Urine Analyzer                  | 1           | 1               | -                          | -                        | -                     |
| Roche Chemstrip 101                        | 7           | 7               | -                          | -                        | -                     |
| Roche Chemstrips                           | 52          | 51              | -                          | -                        | 1                     |
| Roche cobas u 411                          | 2           | 2               | -                          | -                        | -                     |
| Roche Criterion Analyzer                   | 14          | 14              | -                          | -                        | -                     |
| Roche SuperUA/ChemstripUA                  | 1           | -               | 1                          | -                        | -                     |
| Roche Urisys                               | 37          | 37              | -                          | -                        | -                     |
| Schein Urispec                             | 8           | 8               | -                          | -                        | -                     |
| UriScan Reagent Strips                     | 1           | 1               | -                          | -                        | -                     |

## URINALYSIS DIPSTICK–UROBILINOGEN

### Specimen UA-2

#### Participant Results

| <u>Method</u>                              | <u>Labs</u> | <u>0.2/Normal mg/dL</u> | <u>1.0 mg/dL</u> | <u>2.0 mg/dL</u> | <u>4.0 mg/dL</u> | <u>&gt;8.0 mg/dL</u> |
|--------------------------------------------|-------------|-------------------------|------------------|------------------|------------------|----------------------|
| ALL METHODS                                | 895         | 892                     | 1                | 2                | -                | -                    |
| Arkray DiaScreen                           | 6           | 6                       | -                | -                | -                | -                    |
| Arkray DiaScreen 50                        | 2           | 2                       | -                | -                | -                | -                    |
| Bayer Clinitek 10 / 100                    | 14          | 14                      | -                | -                | -                | -                    |
| Bayer Clinitek 200/200+                    | 2           | 2                       | -                | -                | -                | -                    |
| Bayer Clinitek 50                          | 55          | 55                      | -                | -                | -                | -                    |
| Bayer Clinitek 500                         | 9           | 9                       | -                | -                | -                | -                    |
| Bayer Clinitek Advantus                    | 20          | 19                      | 1                | -                | -                | -                    |
| Bayer Clinitek Atlas                       | 3           | 3                       | -                | -                | -                | -                    |
| Bayer Clinitek Status / Status+            | 346         | 346                     | -                | -                | -                | -                    |
| Bayer Multistix Pro                        | 1           | 1                       | -                | -                | -                | -                    |
| Bayer Reagent Strips                       | 221         | 220                     | -                | 1                | -                | -                    |
| Consult Diagnostics Urine Analyzer         | 14          | 14                      | -                | -                | -                | -                    |
| CTMI CT-120 Urine Analyzer                 | 11          | 11                      | -                | -                | -                | -                    |
| Diagnostic Test Group Clarity Urocheck     | 8           | 8                       | -                | -                | -                | -                    |
| Diagnostic Test Group Clarity Urocheck 120 | 11          | 11                      | -                | -                | -                | -                    |
| Germaine Laboratories AimStrip             | 2           | 2                       | -                | -                | -                | -                    |
| McKesson 10SG Reagent Strips               | 9           | 8                       | -                | 1                | -                | -                    |
| NDC Pro Advantage                          | 1           | 1                       | -                | -                | -                | -                    |
| Other Analyzer Method                      | 8           | 8                       | -                | -                | -                | -                    |
| Other Dipstick Method                      | 16          | 16                      | -                | -                | -                | -                    |
| PSS Select Reagent Strips                  | 7           | 7                       | -                | -                | -                | -                    |
| PSS Select Urine Analyzer                  | 1           | 1                       | -                | -                | -                | -                    |
| Roche Chemstrip 101                        | 7           | 7                       | -                | -                | -                | -                    |
| Roche Chemstrips                           | 51          | 51                      | -                | -                | -                | -                    |
| Roche cobas u 411                          | 2           | 2                       | -                | -                | -                | -                    |
| Roche Criterion Analyzer                   | 14          | 14                      | -                | -                | -                | -                    |
| Roche SuperUA/ChemstripUA                  | 1           | 1                       | -                | -                | -                | -                    |
| Roche Urisys                               | 37          | 37                      | -                | -                | -                | -                    |
| Schein Urispec                             | 8           | 8                       | -                | -                | -                | -                    |
| UriScan Reagent Strips                     | 1           | 1                       | -                | -                | -                | -                    |

## URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN

### Specimen UA-2

| <u>Method</u>                              | <i>Participant Results</i> |                 |              |                                    |                                     |                                   |
|--------------------------------------------|----------------------------|-----------------|--------------|------------------------------------|-------------------------------------|-----------------------------------|
|                                            | <u>Labs</u>                | <u>Negative</u> | <u>Trace</u> | <i>Small (5-10<br/>RBC/μL, 1+)</i> | <i>Moderate (50<br/>RBC/μL, 2+)</i> | <i>Large (250<br/>RBC/μL, 3+)</i> |
| ALL METHODS                                | 951                        | 1               | 2            | 3                                  | 46                                  | 899                               |
| Arkray DiaScreen                           | 6                          | -               | -            | -                                  | -                                   | 6                                 |
| Arkray DiaScreen 50                        | 2                          | -               | -            | -                                  | -                                   | 2                                 |
| Bayer Clinitek 10 / 100                    | 14                         | -               | -            | -                                  | 2                                   | 12                                |
| Bayer Clinitek 200/200+                    | 2                          | -               | -            | -                                  | -                                   | 2                                 |
| Bayer Clinitek 50                          | 57                         | -               | 1            | -                                  | 1                                   | 55                                |
| Bayer Clinitek 500                         | 14                         | -               | -            | -                                  | 1                                   | 13                                |
| Bayer Clinitek Advantus                    | 22                         | -               | -            | -                                  | 1                                   | 21                                |
| Bayer Clinitek Atlas                       | 5                          | -               | -            | -                                  | 1                                   | 4                                 |
| Bayer Clinitek Status / Status+            | 360                        | -               | 1            | -                                  | 17                                  | 342                               |
| Bayer Hemacombistix                        | 1                          | -               | -            | -                                  | -                                   | 1                                 |
| Bayer Multistix Pro                        | 1                          | -               | -            | -                                  | -                                   | 1                                 |
| Bayer Reagent Strips                       | 231                        | -               | -            | 1                                  | 1                                   | 229                               |
| Consult Diagnostics Urine Analyzer         | 15                         | -               | -            | -                                  | -                                   | 15                                |
| CTMI CT-120 Urine Analyzer                 | 11                         | -               | -            | -                                  | -                                   | 11                                |
| Diagnostic Test Group Clarity Urocheck     | 8                          | -               | -            | -                                  | -                                   | 8                                 |
| Diagnostic Test Group Clarity Urocheck 120 | 11                         | -               | -            | -                                  | -                                   | 11                                |
| Germaine Laboratories AimStrip             | 3                          | -               | -            | -                                  | -                                   | 3                                 |
| McKesson 10SG Reagent Strips               | 9                          | -               | -            | 1                                  | 1                                   | 7                                 |
| NDC Pro Advantage                          | 1                          | -               | -            | -                                  | -                                   | 1                                 |
| Other Analyzer Method                      | 9                          | -               | -            | 1                                  | -                                   | 8                                 |
| Other Dipstick Method                      | 16                         | -               | -            | -                                  | 3                                   | 13                                |
| PSS Select Reagent Strips                  | 8                          | -               | -            | -                                  | 2                                   | 6                                 |
| PSS Select Urine Analyzer                  | 1                          | -               | -            | -                                  | -                                   | 1                                 |
| Roche Chemstrip 101                        | 7                          | -               | -            | -                                  | -                                   | 7                                 |
| Roche Chemstrips                           | 66                         | 1               | -            | -                                  | 1                                   | 64                                |
| Roche cobas u 411                          | 2                          | -               | -            | -                                  | -                                   | 2                                 |
| Roche Criterion Analyzer                   | 14                         | -               | -            | -                                  | -                                   | 14                                |
| Roche SuperUA/ChemstripUA                  | 1                          | -               | -            | -                                  | -                                   | 1                                 |
| Roche Urisys                               | 37                         | -               | -            | -                                  | 14                                  | 23                                |
| Schein Urispec                             | 8                          | -               | -            | -                                  | 1                                   | 7                                 |
| UriScan Reagent Strips                     | 1                          | -               | -            | -                                  | -                                   | 1                                 |

## URINALYSIS DIPSTICK--LEUKOCYTE ESTERASE

Specimen UA-2

### Participant Results

| <u>Method</u>                              | <u>Labs</u> | <u>Negative</u> | <u>Trace</u> | <u>Small<br/>(1+)</u> | <u>Moderate<br/>(2+)</u> | <u>Large<br/>(3+)</u> |
|--------------------------------------------|-------------|-----------------|--------------|-----------------------|--------------------------|-----------------------|
| ALL METHODS                                | 962         | 951             | 9            | -                     | 1                        | 1                     |
| Arkray DiaScreen                           | 12          | 10              | 2            | -                     | -                        | -                     |
| Arkray DiaScreen 50                        | 2           | 2               | -            | -                     | -                        | -                     |
| Bayer Clinitek 10 / 100                    | 14          | 13              | -            | -                     | 1                        | -                     |
| Bayer Clinitek 200/200+                    | 2           | 2               | -            | -                     | -                        | -                     |
| Bayer Clinitek 50                          | 57          | 57              | -            | -                     | -                        | -                     |
| Bayer Clinitek 500                         | 14          | 14              | -            | -                     | -                        | -                     |
| Bayer Clinitek Advantus                    | 22          | 22              | -            | -                     | -                        | -                     |
| Bayer Clinitek Atlas                       | 5           | 5               | -            | -                     | -                        | -                     |
| Bayer Clinitek Status / Status+            | 359         | 358             | -            | -                     | -                        | 1                     |
| Bayer Multistix Pro                        | 1           | 1               | -            | -                     | -                        | -                     |
| Bayer Reagent Strips                       | 226         | 223             | 3            | -                     | -                        | -                     |
| Bayer Uristix                              | 14          | 14              | -            | -                     | -                        | -                     |
| Consult Diagnostics Urine Analyzer         | 14          | 13              | 1            | -                     | -                        | -                     |
| CTMI CT-120 Urine Analyzer                 | 11          | 11              | -            | -                     | -                        | -                     |
| Diagnostic Test Group Clarity Urocheck     | 8           | 8               | -            | -                     | -                        | -                     |
| Diagnostic Test Group Clarity Urocheck 120 | 11          | 11              | -            | -                     | -                        | -                     |
| Germaine Laboratories AimStrip             | 3           | 3               | -            | -                     | -                        | -                     |
| McKesson 10SG Reagent Strips               | 9           | 9               | -            | -                     | -                        | -                     |
| NDC Pro Advantage                          | 1           | 1               | -            | -                     | -                        | -                     |
| Other Analyzer Method                      | 9           | 9               | -            | -                     | -                        | -                     |
| Other Dipstick Method                      | 16          | 15              | 1            | -                     | -                        | -                     |
| PSS Select Reagent Strips                  | 8           | 8               | -            | -                     | -                        | -                     |
| PSS Select Urine Analyzer                  | 1           | 1               | -            | -                     | -                        | -                     |
| Roche Chemstrip 101                        | 7           | 7               | -            | -                     | -                        | -                     |
| Roche Chemstrips                           | 66          | 64              | 2            | -                     | -                        | -                     |
| Roche cobas u 411                          | 2           | 2               | -            | -                     | -                        | -                     |
| Roche Criterion Analyzer                   | 14          | 14              | -            | -                     | -                        | -                     |
| Roche SuperUA/ChemstripUA                  | 1           | 1               | -            | -                     | -                        | -                     |
| Roche Urisys                               | 37          | 37              | -            | -                     | -                        | -                     |
| Schein Urispec                             | 8           | 8               | -            | -                     | -                        | -                     |
| UriScan Reagent Strips                     | 1           | 1               | -            | -                     | -                        | -                     |

## URINALYSIS DIPSTICK–NITRITE

### Specimen UA-2

#### *Participant Results*

| <u>Method</u>                              | <u>Labs</u> | <u>Positive</u> | <u>Negative</u> |
|--------------------------------------------|-------------|-----------------|-----------------|
| ALL METHODS                                | 960         | 8               | 952             |
| Arkray DiaScreen                           | 12          | 1               | 11              |
| Arkray DiaScreen 50                        | 1           | -               | 1               |
| Bayer Clinitek 10 / 100                    | 14          | -               | 14              |
| Bayer Clinitek 200/200+                    | 2           | -               | 2               |
| Bayer Clinitek 50                          | 57          | -               | 57              |
| Bayer Clinitek 500                         | 14          | -               | 14              |
| Bayer Clinitek Advantus                    | 22          | -               | 22              |
| Bayer Clinitek Atlas                       | 5           | -               | 5               |
| Bayer Clinitek Status / Status+            | 357         | 3               | 354             |
| Bayer Multistix Pro                        | 1           | -               | 1               |
| Bayer Reagent Strips                       | 226         | 1               | 225             |
| Bayer Uristix                              | 14          | -               | 14              |
| Consult Diagnostics Urine Analyzer         | 13          | -               | 13              |
| CTMI CT-120 Urine Analyzer                 | 11          | -               | 11              |
| Diagnostic Test Group Clarity Urocheck     | 8           | 1               | 7               |
| Diagnostic Test Group Clarity Urocheck 120 | 11          | -               | 11              |
| Germaine Laboratories AimStrip             | 3           | -               | 3               |
| McKesson 10SG Reagent Strips               | 6           | -               | 6               |
| NDC Pro Advantage                          | 1           | -               | 1               |
| Other Analyzer Method                      | 10          | -               | 10              |
| Other Dipstick Method                      | 15          | -               | 15              |
| PSS Select Reagent Strips                  | 8           | -               | 8               |
| PSS Select Urine Analyzer                  | 1           | -               | 1               |
| Roche Chemstrip 101                        | 7           | -               | 7               |
| Roche Chemstrips                           | 65          | 1               | 64              |
| Roche cobas u 411                          | 2           | -               | 2               |
| Roche Criterion Analyzer                   | 14          | -               | 14              |
| Roche SuperUA/ChemstripUA                  | 1           | -               | 1               |
| Roche Urisys                               | 35          | 1               | 34              |
| Schein Urispec                             | 8           | -               | 8               |
| UriScan Reagent Strips                     | 1           | -               | 1               |

## URINALYSIS –MICROALBUMIN (dipstick only)

### Specimen UA-2

| <i>Participant Results</i>  |             |                 |                     |                   |                    |                |                      |                 |
|-----------------------------|-------------|-----------------|---------------------|-------------------|--------------------|----------------|----------------------|-----------------|
| <u>Method</u>               | <u>Labs</u> | <u>Negative</u> | <u>10 mg/L(Pos)</u> | <u>20/30 mg/L</u> | <u>50 mg/L (+)</u> | <u>80 mg/L</u> | <u>100 mg/L (++)</u> | <u>150 mg/L</u> |
| ALL METHODS                 | 71          | 2               | 1                   | -                 | 3                  | -              | 24                   | 41              |
| Bayer Clinitek Microalbumin | 41          | -               | -                   | -                 | -                  | -              | -                    | 41              |
| DCL ImmunoDip               | 1           | -               | 1                   | -                 | -                  | -              | -                    | -               |
| Micro-Bumintest             | 2           | -               | -                   | -                 | -                  | -              | 2                    | -               |
| Roche Micral - 1 minute     | 27          | 2               | -                   | -                 | 3                  | -              | 22                   | -               |

## URINALYSIS –URINE hCG

### Specimen UA-2

#### Participant Results

| <u>Method</u>                                    | <u>Labs</u> | <u>Positive</u> | <u>Negative</u> |
|--------------------------------------------------|-------------|-----------------|-----------------|
| ALL METHODS                                      | 541         | 538             | 3               |
| AimStep Combo Pregnancy                          | 2           | 2               | -               |
| Alfa Scientific Instant View                     | 5           | 5               | -               |
| Bayer Clinitek Status / Status+                  | 1           | 1               | -               |
| Beckman Coulter ICON 25 hCG                      | 33          | 33              | -               |
| Beckman Coulter ICON II/20 HCG                   | 3           | 3               | -               |
| Cardinal Health SP Brand combo                   | 25          | 25              | -               |
| Cardinal Hlth SPBrand-cassette                   | 7           | 7               | -               |
| CONSULT diagnostics hCG Cassette                 | 47          | 47              | -               |
| CONSULT diagnostics hCG Combo                    | 22          | 22              | -               |
| CONSULT diagnostics hCG Dipstick                 | 19          | 19              | -               |
| Diagnostic Test Group Clarity hCG strip/cassette | 9           | 9               | -               |
| Germaine Laboratories AimStrip                   | 4           | 4               | -               |
| Henry Schein One Step                            | 58          | 58              | -               |
| Immunostics Cept-D                               | 1           | -               | 1               |
| Immunostics Detector Combi                       | 2           | 2               | -               |
| Immunostics hCG Detector-urine                   | 9           | 9               | -               |
| Inverness Acceva hCG-Urine                       | 4           | 4               | -               |
| Inverness Clearview 25 hCG Combo                 | 1           | 1               | -               |
| Inverness Clearview hCG Combo II                 | 2           | 2               | -               |
| McKesson hCG Combo Cassette                      | 14          | 14              | -               |
| McKesson hCG Urine Cassette                      | 26          | 26              | -               |
| McKesson urine hCG-all 20 mIU kits               | 4           | 4               | -               |
| MediChoice hCG Combi Cassette                    | 6           | 6               | -               |
| MediChoice hCG Urine Cassette                    | 1           | 1               | -               |
| NDC Pro Advantage                                | 2           | 2               | -               |
| PEP (Lab Supply) HCG                             | 2           | 2               | -               |
| Polymedco Poly stat hCG                          | 9           | 9               | -               |
| PSS Select hCG Cassette                          | 1           | 1               | -               |
| Quidel QuickVue One-Step Combo                   | 25          | 25              | -               |
| Quidel QuickVue One-Step Urine                   | 71          | 69              | 2               |
| Quidel QuickVue+ One-Step Combo                  | 17          | 17              | -               |
| Refuah hCG Dipstick                              | 1           | 1               | -               |
| Roche Urisys                                     | 1           | 1               | -               |
| Sekisui OSOM - Urine Test                        | 3           | 3               | -               |
| Sekisui OSOM Card Pregnancy                      | 8           | 8               | -               |
| Sekisui OSOM hCG Combo Test                      | 17          | 17              | -               |
| Stanbio QuPID                                    | 7           | 7               | -               |
| Stanbio QuPID Plus                               | 1           | 1               | -               |
| Stanbio TRUE hCG                                 | 7           | 7               | -               |
| Sure-Vue hCG - 25mIU                             | 3           | 3               | -               |

## FECAL OCCULT BLOOD

| <u>Method</u>                      | Specimen OC-3 |                 |                 | Specimen OC-4 |                 |                 |
|------------------------------------|---------------|-----------------|-----------------|---------------|-----------------|-----------------|
|                                    | <u>Labs</u>   | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>   | <u>Positive</u> | <u>Negative</u> |
| ALL METHODS                        | 451           | 7               | 444             | 449           | 446             | 3               |
| Alfa Scientific Instant View       | 1             | -               | 1               | 1             | 1               | -               |
| Beckman Coulter Hemoccult ICT      | 52            | 5               | 47              | 50            | 50              | -               |
| Guaiac (slide) Test                | 277           | 1               | 276             | 277           | 275             | 2               |
| Hemosure iFOB                      | 48            | -               | 48              | 48            | 48              | -               |
| Inverness Clearview iFOBT Complete | 2             | -               | 2               | 2             | 2               | -               |
| Other Immunochemical FOB kit       | 24            | -               | 24              | 24            | 24              | -               |
| Polymedco OC Auto Micro 80         | 6             | -               | 6               | 6             | 6               | -               |
| Polymedco OC-Light iFOB            | 15            | 1               | 14              | 15            | 14              | 1               |
| Quidel QuickVue iFOB               | 10            | -               | 10              | 10            | 10              | -               |

2014 M2

Urine Sediment Identification

SPECIMENS US-3 AND US-4

### CASE HISTORY:

A 33-year-old female presented to her OB/GYN during her third pregnancy with new symptoms of fever, chills, and nausea. She also reported having back pain in her lower ribcage (flank) area. A urinalysis was performed, and the results appear below.

Color = Yellow

Appearance = Hazy

### Dipstick results:

Specific gravity = 1.010

pH = 6.5

Protein = 100 mg/dL (2+)

Glucose = Negative

Ketones = Negative

Bilirubin = Negative

Urobilinogen = Normal/0.2 mg/dL

Blood = Negative

Leukocyte Esterase = Moderate (2+)

Nitrite = Positive

This patient was diagnosed with **acute pyelonephritis**. Pyelonephritis is a bacterial infection of the upper urinary tract- the kidney and the ureters (the ducts that carry urine away from the kidney.) Pyelonephritis usually occurs as a result of a bacterial infection that has ascended from the lower urinary tract. In this case, the positive dipstick results for protein, leukocytes, and nitrite indicate bacterial infection.

### Specimen US-3



| <u>Identification</u>           | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|---------------------------------|-------------|----------------|--------------------|
| Renal tubular epithelial (RTE)  | 438         | 68.01%         | Acceptable         |
| Indentification Unknown – Refer | 4           | 0.62%          | Acceptable         |
| Transitional epithelial cell    | 125         | 19.41%         |                    |
| White blood cell (WBC)          | 34          | 5.28%          |                    |
| Cellular (WBC) cast             | 15          | 2.33%          |                    |
| RTE with fat globules           | 12          | 1.86%          |                    |

The arrows in this photograph point to **renal tubular epithelial cells**. Epithelial cells line the entire urinary tract. There are three types of epithelial cells that may be seen in the urine sediment. Renal tubular epithelial cells (RTEs) are the most clinically significant because they originate in the tubules inside the kidney. Transitional epithelial cells (TEs) line the urinary tract from the kidney to the upper urethra, and squamous epithelial cells (SECs) line the lower urethra. Cell morphology varies depending on the cell's site of origin along the urinary tract.

Many participants mistakenly identified these as transitional epithelial cells. The main differences between RTEs and TEs are cell size and N:C ratio (amount of nucleus vs. amount of cytoplasm). RTEs are smaller than TEs. RTEs are slightly larger than white blood cells (WBCs), while TEs are 2-4 times as large as WBCs. The N:C ratio is higher in RTEs than in TEs. The RTE nucleus takes up more space than the cytoplasm does. The TE nucleus appears much smaller relative to the rest of the cell due to the TE's tendency to absorb water and swell. Another identifying feature of some RTEs is their cuboidal or columnar form, which means they have at least one flat side, like the arrowed cell on the left. TEs do not have flat sides like RTEs. To view another photo of renal tubular epithelial cells, see 2011 M2 Specimen US-3. To view a photo of transitional epithelial cells, see 2012 M2 Specimen US-3. This challenge is graded by 91% referee consensus.

### Specimen US-4



| <u>Identification</u>  | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|------------------------|-------------|----------------|--------------------|
| White blood cell (WBC) | 607         | 93.96%         | Acceptable         |
| Red blood cell (RBC)   | 20          | 3.10%          |                    |
| Cellular (WBC) cast    | 11          | 1.70%          |                    |

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

### References:

- 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*, 2<sup>nd</sup> ed. Philadelphia: Lippincott Williams & Wilkins, 2011.
- Ringsrud, K. M., Linné, J. J.: *Urinalysis and Body Fluids/ A ColorText and Atlas*. St. Louis: Mosby, 1995.
- Shankland, S. J. "Glomerular Diseases." *ACP Medicine*. Ed. D. C. Dale. New York: WebMD, Inc., 2004. 2004.

PROVIDER-PERFORMED MICROSCOPY (PPM)

Wet Mount Preparation

Specimen PPM-7

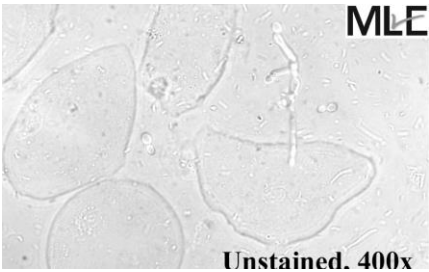


| <u>Identification</u>    | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|--------------------------|-------------|----------------|--------------------|
| Squamous epithelial cell | 554         | 93.11%         | Acceptable         |
| Clue cell                | 29          | 4.87%          |                    |

The arrow in this photograph of a vaginal wet mount prep points to a **squamous epithelial cell**. Squamous cells are large, flat, and irregularly shaped, with a single small nucleus and plentiful cytoplasm. They often appear folded or rolled. Although there are a few bacteria present here, these epithelial cells should not be mistaken for clue cells. Clue cells are so completely covered with bacteria that the cell appears speckled or glittery, and the edges of the cell are obscured by the bacteria. It is important to learn the difference between these two cell types because squamous epithelial cells are a normal finding, while clue cells are indicative of bacterial vaginosis. To view a clue cell, see 2013 M1 Specimen PPM-1.

KOH Preparation

Specimen PPM-8



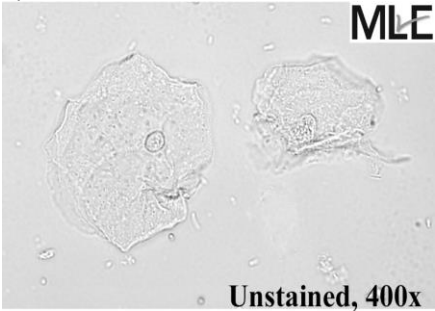
| <u>Identification</u>         | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-------------------------------|-------------|----------------|--------------------|
| Yeast/fungal elements present | 557         | 97.55%         | Acceptable         |
| Yeast/fungal elements absent  | 14          | 2.45%          |                    |

**Yeast and fungal elements are present** in this photograph of a potassium hydroxide vaginal wet mount preparation. There are two pairs of budding yeast and some pseudohyphae between them.

PROVIDER-PERFORMED MICROSCOPY (PPM)

Sperm Identification

Specimen PPM-9

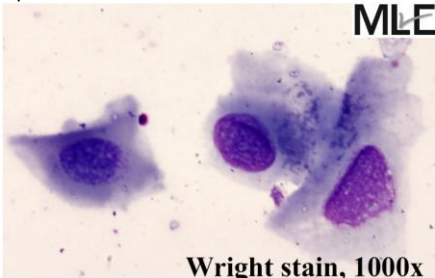


Spermatozoa are absent in this photograph of a vaginal wet mount preparation.

| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Sperm absent          | 565         | 99.65%         | Acceptable         |
| Sperm present         | 2           | 0.35%          |                    |

Nasal Smear

Specimen PPM-10

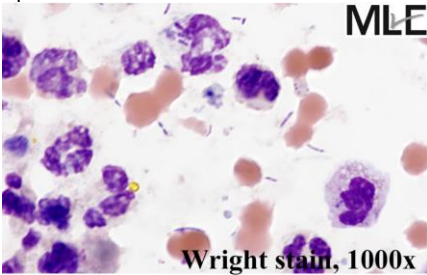


Eosinophils are absent in this photograph of stained nasal mucus.

| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Eosinophils absent    | 154         | 84.62%         | Acceptable         |
| Eosinophils present   | 28          | 15.38%         |                    |

PROVIDER-PERFORMED MICROSCOPY (PPM)

Stool Preparation  
Specimen PPM-11



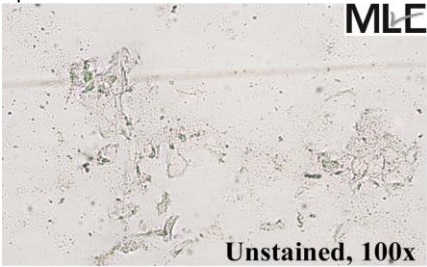
Leukocytes are present in this photograph of a stained fecal preparation.

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| <u>Identification</u>  | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|------------------------|-------------|----------------|--------------------|
| Leukocytes are present | 220         | 100%           | Acceptable         |

Pinworm Preparation  
Specimen PPM-12



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

| <u>Identification</u> | <u>Labs</u> | <u>Percent</u> | <u>Performance</u> |
|-----------------------|-------------|----------------|--------------------|
| Pinworms/eggs absent  | 234         | 96.69%         | Acceptable         |
| Pinworms/eggs present | 8           | 3.31%          |                    |

Reference:

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

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