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| **Hematology – Complete Blood Count Hemogram** | | | | |
| White Blood Cell Count | K/mcL | Newborn-29Days | 9.0-32.0 | 9.0-32.0 |
| 1Month – 23Months | 5.0-13.0 | 5.0-13.0 |
| 2Years – 9Years | 4.0-12.0 | 4.0-12.0 |
| 10+ Years | 4.0-10.5 | 4.0-10.5 |
| Red Blood Cells | M/uL | Newborn – 29Days | 4.60-6.70 | 4.60-6.70 |
| 1Month – 23Months | 3.80-5.40 | 3.80-5.40 |
| 2Years – 9Years | 4.00-5.30 | 4.00-5.30 |
| 10Years – 17Years | 4.20-5.60 | 4.20-5.60 |
| 18+ Years | 4.70-6.00 | 4.20-5.40 |
| Hemoglobin | g/dL | Newborn – 29Days | 13.0-22.0 | 13.0-22.0 |
| 1Month – 23Months | 9.5-14.0 | 9.5-14.0 |
| 2Years – 9Years | 11.5-14.0 | 11.5-14.0 |
| 10Years – 17Years | 12.5-16.1 | 12.5-15.0 |
| 18+ Years | 13.5-18.0 | 12.5-16.0 |
| Hematocrit | % | Newborn – 29Days | 42.0-70.0 | 42.0-70.0 |
| 1Month – 23Months | 30.0-41.0 | 30.0-41.0 |
| 2Years – 9Years | 33.0-43.0 | 33.0-43.0 |
| 10Years – 17Years | 36.0-47.0 | 35.0-45.0 |
| 18+ Years | 42.0-52.0 | 37.0-47.0 |
| Mean Corpuscular Volume (MCV) | fL | Newborn – 29Days | 90.0-115.0 | 90.0-115.0 |
| 1Month – 23Months | 70.0-90.0 | 70.0-90.0 |
| 2Years – 9Years | 76.0-90.0 | 76.0-90.0 |
| 10Years – 17Years | 78.0-95.0 | 78.0-95.0 |
| 18+ Years | 78.0-100.0 | 78.0-100.0 |
| Mean Corpuscular Hemoglobin (MCH) | pg | Newborn – 29Days | 33.0-39.0 | 33.0-39.0 |
| 1Month – 23Months | 24.0-30.0 | 24.0-30.0 |
| 2Years – 9Years | 25.0-31.0 | 25.0-31.0 |
| 10Years – 17Years | 26.0-32.0 | 26.0-32.0 |
| 18+ Years | 27.0-31.0 | 27.0-31.0 |

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| **Test** | **Units** | **Human** | | |
| **Age** | **Male** | **Female** |
| Mean Corpuscular Hemoglobin Concentration (MCHC) | g/dL | ALL | 32.0-36.0 | 32.0-36.0 |
| Red Cell Distribution Width (RDW) | % | Newborn – 29Days | 13.0-18.0 | 13.0-18.0 |
| 1Month – 23Months | 11.5-16.0 | 11.5-16.0 |
| 2Years – 9Years | 11.5-15.0 | 11.5-15.0 |
| 10+ Years | 11.5-14.0 | 11.5-14.0 |
| Platelet | K/uL | ALL | 150-500 | 150-500 |
| Mean Platelet Volume (MPV) | fL | ALL | 6.0-9.5 | 6.0-9.5 |

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| **Test** | **Units** | **Human** | | |
| **Age** | **Male** | **Female** |
| **Hematology – Complete Blood Count Differential** | | | | |
| Neutrophils Absolute Count | K/uL | Newborn – 6Days | 2.7-9.0 | 3.4-11.3 |
| 7Days – 13Days | 1.8-7.1 | 2.2-7.2 |
| 14Days – 29Days | 3.2-11.4 | 1.7-7.6 |
| 1Month – 2Months | 1.6-8.7 | 1.6-10.7 |
| 3Months – 5Months | 1.7-6.0 | 1.5-5.8 |
| 6Months – 23Months | 1.2-5.7 | 2.2-8.4 |
| 2Years – 5Years | 2.4-9.0 | 1.4-5.2 |
| 6Years – 11Years | 2.0-7.1 | 2.2-5.7 |
| 12Years – 17Years | 2.3-7.8 | 2.0-7.2 |
| 18Years – 98Years | 2.8-11.1 | 2.3-6.7 |
| 99+ Years | 1.6-7.5 | 1.6-7.5 |
| Lymphocytes Absolute Count | K/uL | Newborn – 6Days | 0.9-5.5 | 1.2-5.1 |
| 7Days – 13Days | 1.1-7.8 | 1.3-5.4 |
| 14Days – 29Days | 1.3-7.5 | 0.8-8.5 |
| 1Month – 2Months | 0.8-8.3 | 0.9-8.0 |
| 3Months – 5Months | 1.7-8.4 | 1.2-8.0 |
| 6Months – 23Months | 1.3-8.8 | 2.1-7.4 |
| 2Years – 5Years | 1.1-6.5 | 1.6-7.5 |
| 6Years – 11Years | 0.5-4.4 | 1.2-5.0 |
| 12Years – 17Years | 0.8-3.0 | 0.9-3.4 |
| 18Years – 98Years | 0.4-2.5 | 0.8-3.2 |
| 99+ Years | 0.8-4.5 | 0.8-4.5 |
| Monocytes Absolute Count | K/uL | Newborn – 6Days | 0.2-1.8 | 0.2-2.2 |
| 7Days – 13Days | 0.2-2.2 | 0.2-2.2 |
| 14Days – 29Days | 0.3-3.0 | 0.1-2.9 |
| 1Month – 2Months | 0.2-3.5 | 0.2-5.0 |
| 3Months – 5Months | 0.3-2.7 | 0.2-2.1 |
| 6Months – 23Months | 0.5-1.9 | 0.6-1.9 |
| 2Years – 5Years | 0.4-2.0 | 0.3-1.5 |
| 6Years – 11Years | 0.3-1.2 | 0.5-1.1 |
| 12Years – 17Years | 0.3-0.9 | 0.4-0.9 |
| 18Years – 98Years | 0.4-1.3 | 0.4-0.9 |
| 99+ Years | 0.1-1.2 | 0.1-1.2 |
| Eosinophils Absolute Count | K/uL | Newborn – 6Days | 0.0-0.3 | 0.0-0.2 |
| 7Days – 13Days | 0.0-0.8 | 0.0-0.5 |
| 14Days – 29Days | 0.0-0.6 | 0.0-0.6 |
| 1Month – 2Months | 0.0-0.9 | 0.0-0.5 |
| 3Months – 5Months | 0.0-0.5 | 0.0-0.2 |
| 6Months – 5Years | 0.0-0.4 | 0.0-0.1 |
| 6Years – 98Years | 0.0-0.3 | 0.0-0.2 |
| 99+ Years | 0.0-0.6 | 0.0-0.6 |

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| **Test** | **Units** | **Human** | | |
| **Age** | **Male** | **Female** |
| Basophils Absolute Count | K/uL | Newborn – 13Days | 0.0-0.3 | 0.0-0.3 |
| 14Days – 2Months | 0.0-0.4 | 0.0-0.4 |
| 3Months – 5Years | 0.0-0.3 | 0.0-0.3 |
| 6Years – 11Years | 0.0-0.3 | 0.0-0.2 |
| 12Years – 17Years | 0.0-0.2 | 0.0-0.2 |
| 18Years – 98Years | 0.0-0.3 | 0.0-0.2 |
| 99+ Years | 0.0-0.2 | 0.0-0.2 |
| Neutrophils Percentage | % | Newborn – 6Days | 32.2-69.8 | 33.9-69.6 |
| 7Days – 13Days | 25.6-67.8 | 21.6-59.0 |
| 14Days – 29Days | 29.0-65.9 | 15.8-61.1 |
| 1Month – 2Months | 18.7-58.8 | 17.3-61.0 |
| 3Months – 5Months | 17.1-51.0 | 16.0-58.9 |
| 6Months – 2Years | 11.9-53.4 | 21.8-61.2 |
| 3Years – 5Years | 24.6-70.9 | 20.7-61.8 |
| 6Years – 11Years | 34.3-78.6 | 32.3-69.7 |
| 12Years -17Years | 40.3-72.9 | 39.5-76.9 |
| 18Years – 98Years | 48.5-85.1 | 41.9-77.8 |
| 99+ Years | 41.0-75.0 | 41.0-75.0 |
| Bands Percentage | % | Newborn – 6Days | 0.0-10.0 | 0.0-10.0 |
| 7Days – 98Years | 0.0-5.0 | 0.0-5.0 |
| 99+ Years | 0.0-4.0 | 0.0-4.0 |
| Lymphocytes Percentage | % | Newborn – 6Days | 13.0-43.6 | 13.4-40.7 |
| 7Days – 13Days | 18.8-51.4 | 18.4-52.9 |
| 14Days – 29Days | 13.0-43.6 | 19.0-54.7 |
| 1Month – 2Months | 10.4-51.9 | 17.0-58.7 |
| 3Months – 5Months | 22.7-53.9 | 21.3-63.6 |
| 6Months – 2Years | 19.9-53.8 | 25.7-52.9 |
| 3Years – 5Years | 18.6-58.1 | 16.4-56.3 |
| 6Years – 11Years | 11.0-50.1 | 14.3-50.6 |
| 12Years -17Years | 14.1-43.1 | 13.1-45.2 |
| 18Years – 98Years | 6.5-32.9 | 12.9-40.6 |
| 99+ Years | 9.0-45.0 | 9.0-45.0 |
| Monocytes Percentage | % | Newborn – 6Days | 0.8-11.9 | 1.4-16.3 |
| 7Days – 13Days | 1.7-18.7 | 1.3-18.7 |
| 14Days – 29Days | 1.9-20.8 | 2.3-22.2 |
| 1Month – 2Months | 1.0-20.9 | 2.7-22.9 |
| 3Months – 5Months | 4.9-19.6 | 2.4-19.1 |
| 6Months – 2Years | 2.3-17.3 | 4.6-18.1 |
| 3Years – 5Years | 4.6-15.4 | 3.3-15.5 |
| 6Years – 11Years | 3.5-13.9 | 5.7-13.2 |
| 12Years -17Years | 3.3-13.4 | 4.2-12.3 |
| 18Years – 98Years | 3.1-12.5 | 3.8-11.2 |
| 99+ Years | 1.0-12.0 | 1.0-12.0 |

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| **Test** | **Units** | **Human** | | |
| **Age** | **Male** | **Female** |
| Eosinophils Percentage | % | Newborn – 6Days | 0.0-2.9 | 0.0-2.9 |
| 7Days – 13Days | 0.0-5.4 | 0.0-7.5 |
| 14Days – 29Days | 0.0-5.0 | 0.0-4.1 |
| 1Month – 2Months | 0.0-7.0 | 0.0-5.4 |
| 3Months – 5Months | 0.0-5.4 | 0.0-3.1 |
| 6Months – 2Years | 0.0-3.5 | 0.0-2.8 |
| 3Years – 5Years | 0.0-2.0 | 0.0-3.1 |
| 6Years – 11Years | 0.0-2.4 | 0.0-3.3 |
| 12Years – 17Years | 0.0-4.8 | 0.0-4.0 |
| 18Years – 98Years | 0.0-2.8 | 0.0-4.1 |
| 99+ Years | 0.0-6.0 | 0.0-6.0 |
| Basophils Percentage | % | ALL | 0.0-2.0 | 0.0-2.0 |
| **Hematology – Complete Blood Count Other** |
| Circulating Eosinophils (Random, Baseline, 6-Hour) | /cu mm | Newborn – 1Year | 0-2000 | 0-2000 |
| 2Years – 17Years | 0-700 | 0-700 |
| 18+ Years | 0-400 | 0-400 |
| **Hematology – Bronchioalveolar Lavage (BAL)** |
| White Blood Cell Count, BAL | Million Cells | ALL | 29.4-35.2 | 29.4-35.2 |
| Red Blood Cell Count, BAL | Million Cells | ALL | Not established | Not established |
| Macrophages Percentage, BAL | % | ALL | 87-89 | 87-89 |
| Lymphocytes Percentage, BAL | % | ALL | 9-10 | 9-10 |
| Neutrophils Percentage, BAL | % | ALL | 1-2 | 1-2 |
| Eosinophils Percentage, BAL | % | ALL | 0-1 | 0-1 |
| **Hematology – Body Fluid Other** |
| White Blood Cell Count, Fluid Other | /cu mm | ALL | 0-200 | 0-200 |
| Red Blood Cell Count, Fluid Other | /cu mm | ALL | 0-5 | 0-5 |
| Macrophages Percentage, Fluid Other | % | ALL | 0-64 | 0-64 |
| Lymphocytes Percentage, Fluid Other | % | ALL | Not established | Not Established |
| Polymorphonuclear Percentage,  Fluid Other | % | ALL | 0-24 | 0-24 |
| Eosinophils Percentage, Fluid Other | % | ALL | 0-2 | 0-2 |
| **Test** | **Units** | **Human** | | |
| **Age** | **Male** | **Female** |
| **Urinalysis – Dipstick** | | | | |
| pH |  | ALL | 5.0-8.0 | 5.0-8.0 |
| Protein |  | ALL | Negative | Negative |
| Glucose |  | ALL | Negative | Negative |
| Ketones |  | ALL | Negative | Negative |
| Bilirubin |  | ALL | Negative | Negative |
| Ictotest |  | ALL | Negative | Negative |
| Blood |  | ALL | Negative | Negative |
| Urobilinogen | E.U./dL | ALL | <1.0 | <1.0 |
| Nitrite |  | ALL | Negative | Negative |
| Leukocyte Esterase |  | ALL | Negative | Negative |
| Specific Gravity |  | ALL | 1.010-1.025 | 1.010-1.025 |
| **Urinalysis – Microscopic** | | | | |
| White Blood Cell | /HPF | ALL | 0-5 | 0-5 |
| Red Blood Cell | /HPF | ALL | 0-5 | 0-5 |
| Bacteria | /HPF | ALL | None Seen | None Seen |
| Squamous Epithelial Cells | /HPF | ALL | None Seen – Few | None Seen – Few |