

Common Haematology Reference Ranges

| <u>Test</u> | <u>Age</u> | <u>Reference Range</u> | <u>Units</u> |
|---|-----------------------|------------------------|-----------------------|
| Haemoglobin (Hgb) | Adult M | 13.0 -18.0 | g/dl |
| | Adult F | 11.5 -16.5 | |
| | newborn -1 month | 13.5 -18.5 | |
| | children 1 year | 10.0 -13.0 | |
| | children to 14 yrs | 11.0 -14.5 | |
| White blood cell count. (WBC). | adult | 4.0 -11.0 | x 10 ⁹ /l |
| | 1 year | 5.0 – 20.0 | |
| | children up to 7 yrs. | 5.0 -15.0 | |
| Platelet count (PLT). | | 150 - 450 | x 10 ⁹ /l |
| Red blood count (RBC) | Adults M | 4.0 - 6.5 | x 10 ¹² /l |
| | F | 3.5 - 5.8 | |
| | Infants | 3.9 - 5.9 | |
| | children (4 months) | 3.5 - 5.1 | |
| | children to 10 yrs | 3.5 - 5.5 | |
| Haematocrit (HCT) | Adults M | 0.40 – 0.54 | L/L |
| | F | 0.35 – 0.47 | |
| | infants 1 month | 0.44 – 0.64 | |
| | children 3 months | 0.32 – 0.45 | |
| | children -14 yrs | 0.37 – 0.45 | |
| Mean corpuscular volume (MCV) | | 76 -98 | fl |
| | infants (full term) | 106 (mean) | |
| Mean cell haemoglobin (MCH) | | 27.0 - 32.0 | pg |
| Mean cell haemoglobin concentration (MCHC) | | 31.0 - 36.0 | g/dl |
| Neutrophils | 16Y - Adult | 2.0 - 7.0 | x 10 ⁹ /l |
| | 12Y – 16Y | 1.8 - 8.0 | |
| | 6Y – 12Y | 1.5 - 8.0 | |
| | 2Y – 6Y | 1.5 - 8.5 | |
| | 0Y – 2Y | 1.0 – 8.5 | |
| Lymphocytes | 16Y - Adult | 1.0 - 3.0 | x 10 ⁹ /l |
| | 12Y – 16Y | 1.2 – 5.2 | |
| | 6Y – 12Y | 1.5 – 7.0 | |
| | 2Y – 6Y | 2.0 – 9.5 | |
| | 0Y – 2Y | 3.0 – 13.5 | |
| Monocytes | 16Y - Adult | 0.2 – 1.0 | x 10 ⁹ /l |
| | 6Y – 16Y | 0.1 – 0.8 | |
| | 0Y – 6Y | 0.3 - 1.5 | |
| Eosinophils | 16Y – Adult | 0.0 - 0.4 | x 10 ⁹ /l |
| | 6Y – 16Y | 0.1 - 0.8 | |
| | 2Y – 6Y | 0.3 - 0.8 | |
| | 0Y – 2Y | 0.1 - 0.3 | |
| Basophils | | 0.0 - 0.2 | x 10 ⁹ /l |

| | | | | |
|---|--|--------|-----------------------------------|----------------------|
| Reticulocytes | adult children to 12 months | | 0 – 100 0 – 300 | x 10 ⁹ /l |
| Erythrocyte sedimentation rate (ESR) Westergren 1 Hr. | Adults | | 0 - 10 | Mm/hr |
| RA Latex (Rheumatoid arthritis) | | | Negative | |
| RAPA (Rose Waaler) | | | Titre < 1/20 | |
| Paul Bunnell | | | Negative | |
| G6PD (screen) (assay) | | | Normal activity 7.92-16.28 | IU/gHb |
| Serum Vitamin B12 | | | 145 -900 | pg/ml. |
| Serum Folate | | | 4.0 -16.0 | ng/ml |
| Red cell Folate | | | 160 -800 | ng/ml |
| Serum Ferritin | | M F | 17.0 -350.0 14.0 -200.0 | ng/ml |
| Intrinsic Factor Antibody | | | <6 | u/ml |
| Hb Electrophoresis | | | | |
| Hb A2 | | | 2.1-3.4 | % |
| Hb F | | | 0.2 - 1.7 | % |
| Prothrombin Time | | | 9 -14 | secs. |
| APTT | Adult Neonate (<1month) | | 23 -34 30 – 50 | secs. “ |
| Thrombin Time | | | 11-16 | secs. |
| Bleeding time | | | 0-8 | mins |
| Plasma Fibrinogen | | | 2.2 – 5.0 | g/l |
| D-Dimer | Low/Intermediate clinical probability of VTE | | D-Dimer <450 ng/ml - VTE excluded | ng/ml |
| Protein C | Adult Neonate (<1month) | | > 75 >30 | % |
| Protein S Free | Adult Neonate (<1month) | M F | 72 - 123 58 - 113 >35 | % |
| Anti Thrombin III | Adult Neonate (<1month) | | > 80 >30 | % |
| Factor V Leiden PT 20210A gene screen | | | Absent Absent | |