

Purpose

This table provides Hematology and Coagulation reference ranges.

CBC/Differential/Reticulocyte Reference Ranges

Parameters	Units	0 days	1 day	7 days	8 days	14 days	1 month	2 months	3 months	6 months
WBC	X10 ⁹ /L	9.0 – 30.0	9.4 – 34.0	5.0 – 21.0	5.0 – 21.0	5.0 – 20.0	5.0 – 19.5	5.0 – 19.5	5.0 – 17.5	5.3 – 16.0
RBC	X10 ¹² /L	3.9 – 5.5	4.0 – 6.6	3.9 – 6.3	3.9 – 6.3	3.6 – 6.2	3.0 – 5.4	2.7 – 4.9	3.1 – 4.5	3.7 – 5.3
HGB	g/L	135 – 195	145 – 225	135 – 215	135 – 215	125 – 205	100 – 180	90 – 140	95 – 135	103 – 135
Hematocrit	L/L	0.42 – 0.60	0.45 – 0.67	0.42 – 0.66	0.42 – 0.66	0.39 – 0.63	0.31 – 0.55	0.28 – 0.42	0.29 – 0.41	0.31 – 0.39
MCV	fL	98.0 – 118.0	95.0 – 121.0	88.0 – 126.0	88.0 – 126.0	86.0 – 124.0	85.0 – 123.0	77.0 – 115.0	74.0 – 108.0	70.0 – 86.0
MCH	pg	31.0 – 37.0	31.0 – 37.0	28.0 – 40.0	28.0 – 40.0	28.0 – 40.0	28.0 – 40.0	26.0 – 34.0	25.0 – 35.0	24.0 – 31.0
MCHC	g/L	280 – 380	280 – 380	280 – 380	280 – 380	290 – 370	290 – 370	290 – 370	290 – 365	300 – 365
RDW	%									11.7 – 15.7
Platelet	X10 ⁹ /L	150 – 450	170 – 500	170 – 500	170 – 500	170 – 500	170 – 500	210 – 650	210 – 650	200 – 550
Neutrophils	X10 ⁹ /L	6.0 – 27.0	5.0 – 21.0	1.5 – 10.0	1.5 – 10.0	1.0 – 9.5	1.0 – 9.0	1.0 – 9.0	1.0 – 9.0	1.0 – 8.5
Lymphocytes	X10 ⁹ /L	2.0 – 11.0	2.0 – 11.5	2.0 – 17.0	2.0 – 17.0	2.0 – 17.0	2.5 – 16.5	2.5 – 16.5	2.5 – 16.5	4.0 – 13.5
Monocytes	X10 ⁹ /L	0.5 – 1.8	0.5 – 1.8	0.5 – 1.8	0.5 – 1.8	0.5 – 1.8	0.5 – 1.8	0.5 – 1.8	0.5 – 1.8	0.0 – 0.9
Eosinophils	X10 ⁹ /L	0.2 – 0.6	0.2 – 0.6	0.2 – 0.6	0.2 – 0.8	0.2 – 0.8	0.2 – 0.8	0.2 – 0.8	0.2 – 0.8	0.0 – 0.5
Basophils	X10 ⁹ /L	0.0 – 0.6	0.0 – 0.6	0.0 – 0.6	0.0 – 0.2	0.0 – 0.2	0.0 – 0.2	0.0 – 0.2	0.0 – 0.2	0.0 – 0.2
Immature Granulocytes	X10 ⁹ /L	0.0 – 0.1	0.0 – 0.1	0.0 – 0.1	0.0 – 0.1	0.0 – 0.1	0.0 – 0.1	0.0 – 0.1	0.0 – 0.1	0.0 – 0.1
Reticulocyte, Auto	X10 ⁹ /L	50 – 150	50 – 150	50 – 150	50 – 150	50 – 150	50 – 150	50 – 150	50 – 150	20 – 80
Reticulocyte, Manual	X10 ⁹ /L	100 – 300	100 – 300	100 – 300	100 – 300	100 – 300	100 – 300	100 – 300	100 – 300	40 – 120

CBC/Differential/Reticulocyte Reference Ranges cont'd

Parameters	Units	1 year	2 years	5 years	6 years	9 years	10 years	12 years	16 years	18 years	19 years
WBC	X10 ⁹ /L	5.3 - 16.0	5.3 - 16.0	5.0 - 15.0	3.9 - 10.2	3.9 - 10.2	3.9 - 10.2	3.9 - 10.2	3.9 - 10.2	4.0 - 10.0	4.0 - 10.0
RBC	X10 ¹² /L	3.7 - 5.3	3.9 - 5.3	3.9 - 5.3	4.1 - 5.2	4.1 - 5.2	4.1 - 5.2	M: 4.4 - 5.5 F: 4.1 - 5.0	M: 4.4 - 5.7 F: 4.0 - 4.9	M: 4.0 - 5.5 F: 3.9 - 5.0	M: 4.0 - 5.5 F: 3.9 - 5.0
HGB	g/L	103 - 135	105 - 135	107 - 147	118 - 146	118 - 146	118 - 146	M: 125 - 165 F: 117 - 149	M: 131 - 169 F: 117 - 149	M: 130 - 170 F: 120 - 150	M: 130 - 170 F: 120 - 150
Hematocrit	L/L	0.31 - 0.39	0.33 - 0.39	0.34 - 0.40	0.35 - 0.43	0.35 - 0.43	0.35 - 0.43	M: 0.37 - 0.47 F: 0.35 - 0.44	M: 0.38 - 0.49 F: 0.35 - 0.44	M: 0.39 - 0.50 F: 0.37 - 0.45	M: 0.39 - 0.50 F: 0.37 - 0.45
MCV	fL	70.0 - 86.0	75.0 - 87.0	75.0 - 87.0	77.0 - 92.0	77.0 - 92.0	77.0 - 92.0	77.0 - 92.0	80.0 - 95.0	82.0 - 99.0	82.0 - 99.0
MCH	pg	24.0 - 31.0	24.0 - 30.0	24.0 - 30.0	25.8 - 31.7	25.8 - 31.7	25.8 - 31.7	25.8 - 31.7	25.0 - 33.8	27.8 - 33.0	27.8 - 33.0
MCHC	g/L	300 - 365	310 - 370	310 - 370	330 - 365	330 - 365	330 - 365	330 - 365	330 - 365	315 - 354	315 - 354
RDW	%	11.7 - 15.7	11.7 - 15.7	11.7 - 15.7	11.6 - 14.8	11.6 - 14.8	11.6 - 14.8	11.6 - 14.8	11.2 - 14.8	11.4 - 14.5	11.4 - 14.5
Platelet	X10 ⁹ /L	200 - 550	200 - 490	180 - 440	180 - 440	180 - 440	180 - 440	180 - 440	165 - 397	150 - 400	150 - 400
Neutrophils	X10 ⁹ /L	1.5 - 8.5	1.5 - 8.5	1.5 - 8.5	1.7 - 5.0	1.4 - 5.2	1.5 - 7.4	1.5 - 7.4	1.8 - 6.8	M: 2.0 - 7.0 F: 1.7 - 6.0	M: 2.0 - 7.0 F: 1.7 - 6.0
Lymphocytes	X10 ⁹ /L	4.0 - 10.5	2.0 - 8.0	2.0 - 8.0	1.9 - 4.3	1.5 - 4.2	1.5 - 4.2	1.0 - 3.6	1.0 - 3.6	M: 0.6 - 3.2 F: 0.6 - 3.0	M: 0.6 - 3.2 F: 0.6 - 3.0
Monocytes	X10 ⁹ /L	0.0 - 0.9	0.0 - 0.9	0.0 - 0.9	0.1 - 0.7	0.1 - 0.7	0.1 - 0.7	0.1 - 0.7	0.1 - 0.7	0.3 - 0.9	0.3 - 0.9
Eosinophils	X10 ⁹ /L	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5	0.0 - 0.7	0.0 - 0.7	0.0 - 0.7	0.0 - 0.7	0.0 - 0.7	0.0 - 0.5	0.0 - 0.5
Basophils	X10 ⁹ /L	0.0 - 0.2	0.0 - 0.2	0.0 - 0.2	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1	0.0 - 0.2	0.0 - 0.2
Immature Granulocytes	X10 ⁹ /L	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1	0.0 - 0.1
Reticulocyte, Auto	X10 ⁹ /L	20 - 80	20 - 80	20 - 80	20 - 80	20 - 80	20 - 80	20 - 80	20 - 80	20 - 80	20 - 120
Reticulocyte, Manual	X10 ⁹ /L	40 - 120	40 - 120	40 - 120	30 - 80	30 - 180	30 - 180	30 - 180	30 - 180	30 - 180	40 - 120

Coagulation Reference Ranges

Test	Units	Reference
INR		0.8 - 1.2
PTT	seconds	25 - 40
D-Dimer	ug/L FEU	< 500
Fibrinogen	g/L	1.70 - 4.50
Thrombin Time	seconds	< 20.0