



Hematology Age Related Reference Ranges and Critical Values

TEST	GENDER	AGE	REFERENCE RANGE	CRITICAL VALUE LOW	CRITICAL VALUE HIGH
WBC	M/F	0 - 2 months 2 months - 5 years 5 - 11 years >11 years	5.0-20.0 x 10 ³ /μL 4.5-17.0 x 10 ³ /μL 4.5-13.0 x 10 ³ /μL 4.0-10.0 x 10 ³ /μL	<1.0 x 10 ³ /μL (all ages)	>30.0 x 10 ³ /μL (all ages)
RBC	M/F Male Female	0 - 6 months 6 months - 11 years >11 years >11 years	3.90-5.90 x 10 ⁶ /μL 3.80-5.40 x 10 ⁶ /μL 4.31-6.40 x 10 ⁶ /μL 3.85-5.20 x 10 ⁶ /μL	None	
HEMOGLOBIN	M/F Male Female	0 - 2 months 2 months - 11 years >11 years >11 years	14.0-18.0 gm/dL 11.0-14.0 gm/dL 13.6-18.0 gm/dL 11.5-16.0 gm/dL	<10.0 gm/dL <6.0 gm/dL <6.0 gm/dL <6.0 gm/dL	None
HEMATOCRIT	M/F Male Female	0 - 2 weeks 2 weeks - 2 months 2 months - 1 year 1 - 5 years >5 years >5 years	42.0-68.0% 35.0-50.0% 30.0-40.0% 32.0-42.0% 39.8-52.0% 34.7-46.0%	<30.0% <18.0% <18.0% <18.0% <18.0% <18.0%	None
MCV	M/F	0 - 2 weeks 2 week - 6 months 6 months - 11 years >11 years	88.0-114.0 fl 85.0-97.0 fl 72.0-86.6 fl 80.0-97.0 fl	None	
MCH	M/F	0 - 2 weeks 2 weeks - 6 months 6 months - 5 years >5 years	34.0-37.0 pg 31.0-36.0 pg 25.0-31.0 pg 26.0-34.0 pg	None	
MCHC	M/F	0 - 2 weeks 2 weeks - 6 months >6 months	31.0-35.0 gm/dL 32.0-35.0 gm/dL 32.0-36.0 gm/dL	None	
RDW	M/F	0 - 2 days >2 days	14.9-18.7 % 11.5-15.0 %	None	
PLATELET	M/F	0 - 2 months >2 months	140-440 x 10 ³ /μL 140-440 x 10 ³ /μL	<100 x 10 ³ /μL <25 x 10 ³ /μL	>1,000 x 10 ³ /μL >1,000 x 10 ³ /μL
MPV	M/F	All Ages	6.5-12.4 fl	None	
NEUTROPHILS, ABSOLUTE	M/F	0 - 6 days 6 days - 2 months 2 months - 1 year 1 - 5 years 5 - 11 years >11 years	1.5-16.0 x 10 ³ /μL 0.8-9.0 x 10 ³ /μL 0.7-7.6 x 10 ³ /μL 1.5-11.0 x 10 ³ /μL 1.5-8.5 x 10 ³ /μL 1.5-8.0 x 10 ³ /μL	<0.50 x 10 ³ /μL (all ages)	None
LYMPHOCYTES, ABSOLUTE	M/F	0 - 6 days 6 days - 5 years 5 - 11 years >11 years	0.5-10.0 x 10 ³ /μL 2.0-14.0 x 10 ³ /μL 1.0-7.8 x 10 ³ /μL 0.8-4.0 x 10 ³ /μL	None	



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MONOCYTES, ABSOLUTE	M/F	0 - 2 months 2 months - 5 years 5 - 11 years > 11 years	0.0-2.4 x 10 ³ /μL 0.0-2.0 x 10 ³ /μL 0.0-1.6 x 10 ³ /μL 0.0-1.2 x 10 ³ /μL	None	
EOSINOPHILS, ABSOLUTE	M/F	0 - 2 months 2 months - 5 years 5 - 11 years >11 years	0.0-1.4 x 10 ³ /μL 0.0-1.2 x 10 ³ /μL 0.0-0.9 x 10 ³ /μL 0.0-0.3 x 10 ³ /μL	None	
BASOPHILS, ABSOLUTE	M/F	0 - 2 months 2 months - 5 years 5 - 11 years >11 years	0.0-0.6 x 10 ³ /μL 0.0-0.5 x 10 ³ /μL 0.0-0.4 x 10 ³ /μL 0.0-0.3 x 10 ³ /μL	None	
NEUTROPHILS PERCENT	M/F	0 - 6 days 6 days - 1 year 1 - 11 years >11 years	37.0-70.0 % 15.0-55.0 % 30.0-65.0 % 37.0-80.0 %	None	
LYMPHOCYTES PERCENT	M/F	0 - 6 days 6 days - 5 year 5 - 11 years >11 years	20.0-50.0 % 40.0-70.0 % 20.0-60.0 % 16.0-51.0 %	None	
MONOCYTES PERCENT	M/F	All Ages	0.0-12.0 %	None	
EOSINOPHILS PERCENT	M/F	All Ages	0.0-8.0 %	None	
BASOPHILS PERCENT	M/F	All Ages	0.0-3.0 %	None	
SED RATE	Male Female	All Ages	0-15 mm/hr 0-20 mm/hr	None	
RETICULOCYTE PERCENT	M/F	0 - 14 days >14 days	2.5-6.5% 0.5-2.0%	None	
RETICULOCYTE ABSOLUTE	M/F Male Female	0 - 14 days >14 days >14 days	95-383 x 10 ³ /μL 20-130 x 10 ³ /μL 20-100 x 10 ³ /μL	None	

The presence of **blasts** is a critical value on all new (unknown) patients. When a hematology specimen requires a smear review, the turn around time for the critical value is 30 minutes. The definition for turn around time for smear review begins when the review is reflexed and ends with the verification of the smear.

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