

HEMATOLOGY: 1- BLOOD PICTURE OR COMPLETE BLOOD COUNT

By

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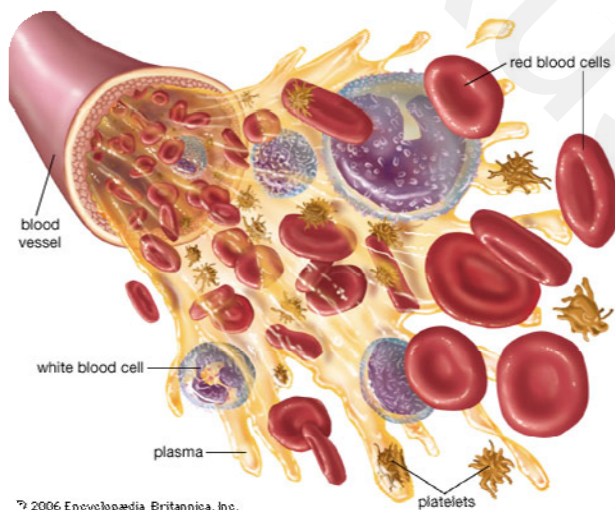
Hematology may be defined as the scientific study of the structure and function of the blood in health and disease. Hematology therefore is a laboratory science in which we quantitatively and qualitatively observe the different components of blood in order to diagnose a great variety of diseases.

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Blood Picture Complete Blood Count (CBC) Hemogram

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BLOOD COMPONENTS



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Complete Blood Count:			
	Patient Value	Normal Range 2 years – 6 years	
WBC	8.4 x 10 ⁹ /L	(5.0 – 17.0)	
RBC	2.77 x 10 ¹² /L	(3.90 – 5.30)	
Hgb	7.5 g/dl	(11.5 – 13.5)	
Hct	21.8 %	(34.0 – 40.0)	
MCV	78.6 fl	(75.0 – 87.0)	
MCH	26.9 pg	(25.0 – 31.0)	
MCHC	34.2 gm/dl	(31.0 – 36.0)	
RDW	17.3 %	(11.5 – 15.0)	
PLT	192 x 10 ⁹ /L	(150 – 450)	
Differential:			
	Absolute	Normal Range Number	2 years – 6 years
Neutrophils	43 %	(3.61)	(1.50 – 8.50)
Bands	6 %	(0.50)	(0.00 – 1.00)
Lymphocytes	41 %	(3.44)	(3.00 – 9.50)
Monocytes	4 %	(0.34)	(0.00 – 0.80)
Eosinophils	3 %	(0.25)	(0.02 – 0.65)

**Evaluation of the red blood cells (RBCs)
Erythrocytes picture**

Mean corpuscular values

Erythrocytes morphology

Packed cell volume



RBCs count

Hemoglobin concentration

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Evaluation of the White blood cells (WBCs) WBCs picture



Monocyte



Lymphocyte



Neutrophil



Eosinophil



Basophil

Total WBCs count

Differential leucocytes count

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Evaluation of Platelets (RBCs) Platelets picture



Platelets (Thrombocytes) count

Mean platelet volume (MPV)

Plateletcrit (PCT)

Platelet distribution width (PDW)

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Blood Picture
Complete blood count (CBC)

RBCs count (/mm³ or T/l)

Hemoglobin concentration (g/l)

Packed cell volume (%)

Erythrocytes morphology

Determination of Mean corpuscular values (MCV, MCH, MCHC)

Total WBCs count (/mm³ or G/l)

Differential leucocytes count

Platelets (Thrombocytes) count (/mm³)

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