

## **COMMOM BLOOD TESTS IN HEMATOLOGY LABORATORY**

Blood tests are used to detect abnormal levels of chemicals, enzymes, proteins, and organic waste products that are normally found in the blood. Physicians asked the patients to take certain blood tests to determine the stage of diseases and to follow up the post treatment care. Nowadays, there are various blood test available in the Hematology Laboratories.

Test	Used for
CBC	evaluate your overall health and detect a variety of diseases and conditions, such as
(complete blood count)	infections, anemia, and leukemia.
ESR	diagnose conditions associated with inflammation, such as: arthritis.
(erythrocyte sedimentation rate)	
Hb%	measures the amount of hemoglobin in your blood, whether higher or lower level than
(hemoglobin percentage)	normal %, indicates certain diseases.
PCV	diagnose polycythemia, dehydration, or anemia in certain patients.
(packed cell volume)	
Platelets Count	diagnose, or monitor conditions that affect the number of platelets, such as a <u>bleeding</u>
	<u>disorder</u> , a <u>bone marrow disease</u> .
Reticulocytes Count	detect hemolytic anemia by measuring how fast red blood cells called reticulocytes are
	made by the bone marrow and released into the blood.
вт, ст	detect coagulation disorder, epistaxis, platelet disorder.
(bleeding time, clotting time)	
ABO, Rh Blood Grouping	determine if a person is blood group A, B, AB, or O and if he or she is Rh-positive or Rh-negative.
G6PD	measures the levels of glucose-6-phosphate dehydrogenase (G6PD), an enzyme in your
	blood. An enzyme is a type of protein that's important for cell function.
Coomb's Test	detect antibodies that act against the surface of your red blood cells. The presence of these
	antibodies indicates a condition known as hemolytic anemia.



PNH Screening (paroxysmal nocturnal hemoglobinuria)	detect rare acquired life-threatening disease of the blood, which is characterized by destruction of red blood cells (hemolytic anemia), blood clots (thrombosis), and impaired bone marrow function.
Cold/ Warm Agglutination	detect autoimmune hemolytic anemia.
Heinz Body	detect hemolytic anemia associated with Heinz-body formation.
PT/INR (prothrombin time)	detect and diagnose a bleeding disorder or excessive clotting disorder.
APTT (activated partial thromboplastin clotting time)	detect and diagnose a bleeding disorder or excessive clotting disorder.
Fibrinogen	assess how well the protein called <u>fibrinogen</u> — also called coagulation factor I — performs in the blood and to measure its levels in your blood.
D-dimer	help rule out the presence of a serious blood clot.
Factor VIII (Antihaemophilia Factor A)	find out whether you have hemophilia A or another clotting disorder by measuring the activity of factor VIII, a blood-clotting protein.
Factor IX (Antihaemophilia Factor B)	find out which type of bleeding disorder you have.
Von Willebrand Factor	detect a common, inherited, genetically and clinically heterogeneous hemorrhagic lifelong bleeding disorder in which your blood doesn't clot properly.
Hb Electrophoresis	identify and measure the presence of abnormal proteins, which can cause certain anemia.

## References

- <a href="https://www.amdi.usm.my/allserviceshaematology/adl-list-of-test-and-sample-collection-haematology">https://www.amdi.usm.my/allserviceshaematology/adl-list-of-test-and-sample-collection-haematology</a>
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- University of Medical Technology, Yangon, Second Year, General Pathology Handbook