


 Accredited to
 ISO 15189:2012

Full Blood Count

Synonyms

FBC, CBC.

Clinical Indication

Integral part of most diagnostic investigations.

Samples should not be taken whilst patient is on a drip or receiving a blood transfusion.

Part of Profile / See Also

Hb, RBC & Parameters, WBC, WBC differential. May include blood film if indicated or specifically requested.

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of Analysis

On request. If urgent request form should be marked accordingly.

Turnaround Time

IF urgent: 1 hour from time sample received in the laboratory

Patient Preparation

None required

Sample Requirements

Specimen Type

Whole Blood

Volume

3 or 4 mL

Container



Purple top (EDTA) tube



Paediatric Lavender top or red top (EDTA) tube

Sample must reach the laboratory within 12 hours of collection.

Reference Range & Units

Adult Reference Ranges	Male	Female	Units
Haemoglobin	130-180	115-165	g/L
White Cell Count	4-11	4-11	10 ⁹ /L
Platelet Count	150-400	150-400	10 ⁹ /L
Haematocrit	0.40-0.52	0.37-0.47	L/L
Red Blood Count	4.5-6.5	3.8-5.8	10 ¹² /L
Red Cell Distribution Width	11.0-14.8	11.0-14.8	%
Mean Cell Volume	80-100	80-100	fl
Mean Cell Haemoglobin	27-32	27-32	g/L
Neutrophil Count	1.7-7.5	1.7-7.5	10 ⁹ /L
Lymphocyte Count	1.0-4.5	1.0-4.5	10 ⁹ /L
Monocyte Count	0.2-0.8	0.2-0.8	10 ⁹ /L
Eosinophil Count	0.0-0.4	0.0-0.4	10 ⁹ /L
Basophil Count	0.0-0.1	0.0-0.1	10 ⁹ /L

Reference ranges for FBC parameters obtained from Phase II of the Pathology Harmony Project. *Lymphocyte range locally derived.

For paediatric ranges please contact laboratory or see laboratory report.

Interferences

Delay in sample reaching laboratory (>12 hours). Underfilled, clotted or haemolysed samples. Samples should not be taken whilst patient is on a drip or receiving a blood transfusion.

Interpretation & Clinical

Decision Value (if applicable)

The full blood count (FBC) is one of the most commonly requested tests and provides important information about the type and numbers of cells in the blood: red blood cells, white blood cells and platelets. Abnormalities in any of these types of cells can indicate the presence of important medical disorders including anaemia, infection and clotting disorders. A blood film can be used to supplement the FBC results and aid clinical interpretation.

References

DXH 800 analyser IFU

Test code

FBC

Lab Handling

No special requirements