



Conjugated Bilirubin

Synonyms

Direct bilirubin

Clinical Indication

Bilirubin itself is not water soluble so before excretion, bilirubin is conjugated with glucuronic acid to render it soluble. Under normal circumstances very little conjugated bilirubin reaches the circulation, but in biliary obstruction conjugated bilirubin is found in serum (and urine). Measurement of conjugated bilirubin is useful in determining the underlying cause of a raised total bilirubin.

This test is only recommended to be performed if the total bilirubin is elevated (i.e. >20 umol/L)

Part of Profile / See Also

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of Analysis

On request. If a patient is found to have total bilirubin >50 umol/L, Albumin >35 g/L, ALP is <230 U/L and ALT is <40 U/L, the laboratory will automatically reflex a conjugated bilirubin.

Turnaround Time

Same day

Patient Preparation

None required

Sample Requirements

Specimen Type

Serum and plasma.

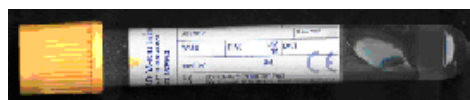
Volume

2 ml

Container



Green top (lithium-heparin) tube



Or Yellow top (SST) tube



Or paediatric orange top (lithium-heparin)



Or paediatric green top (lithium-heparin)

Plain serum samples may also be used.

Reference Range & Units

Conjugated Bilirubin: <3.4 umol/L
Reference: Beckman method insert

Interferences

Bilirubin is photosensitive, and specimens should be protected from light when highly accurate measurements are required. This is especially important with specimens collected from neonates. Samples are still analysed even if not protected from light

Interpretation & Clinical

Decision Value (if applicable)

The following automated comment appears if the conjugated bilirubin if >75%. In the absence of intravascular haemolysis or other liver pathology, an increased unconjugated bilirubin (i.e. > 75% of an elevated total) is consistent with GILBERTS SYNDROME.

If age is >3 months and bilirubin is ≥ 25 and < 100 and % unconjugated bilirubin is >75 then add comment 'In the absence of intravascular haemolysis or other liver pathology, an increased unconjugated bilirubin (i.e. >75% of an elevated total) is consistent with GILBERTS SYNDROME.

References

Beckman kit insert.

Test code

CBIL

Lab Handling

Analysed from primary tube and stored at 4°C

Serum and plasma stable at 4-8°C for 3 days (protected from light)