

Blood Culture

Synonyms

BC

Clinical Indication

Suspected septicaemia, endocarditis, septic shock, meningitis, pneumonia.
Refer to Sepsis guidelines

Part of Profile / See Also

Routine Culture for Aerobic and Anaerobic bacteria

Fungi or Mycobacteria/ AFB Culture by specific request

Refer to PF-PTD-215

Request Form

Order comms request i.e., ICE or Medway

OR clearly handwritten Microbiology form where order comms not available

Availability / Frequency of Analysis

On request.

Routine and Fungal Blood cultures MUST be delivered to the lab as soon as possible, preferably within 1 hour. These will be loaded onto the analyser on receipt in the lab at the hospital.

Cultures bottles for Mycobacteria will be transported to the Hub Laboratory for analysis.

Turnaround Time

A Negative interim report will be issued at 48 hours for adults and 36 hours for paediatrics.

A Negative final report will be issued at 5 days for routine cultures. Samples from certain wards (Colne, Chelmer, Roding), or where SBE, endocarditis, Brucella, heart and prosthetic valve involvement, heart murmur or fungal infection is indicated, a final report will be issued at 14 days. Cultures for Mycobacteria will take up to 42 days.

A Positive report will be issued when a culture becomes positive on the analyser. Initially the report will indicate that a positive has been detected. This may be issued at any time throughout day or night.

A further report will then be issued - [up to 5 days post flagging](#).

Patient Preparation

Aseptic technique MUST be used when collecting blood cultures. Clean patient's skin with appropriate wipes as provided in blood culture collection kit. Do not re-palpate skin once cleaned.

Where possible, blood cultures must be collected prior to commencement of antibiotic therapy. **However, commencing antibiotics in a septic patient should not be delayed.**

Sample Requirements

[Once received the bottles must be loaded onto the FX as soon as possible and within 4 hours of collection from the patient.](#)

[AVOID incubating or refrigerating inoculated blood cultures prior to loading to the FX. Pre-incubation may mean that organisms present have gone through the growth phase and be in the stationary or decline phase; bottles containing such organisms will not register positive.](#)

Specimen Type Whole blood

Volume Sample Volumes are indicated on each bottle.

ADULT ROUTINE: A routine blood culture set consists of two bottles: Aerobic – blue top / grey cap and Anaerobic - purple top / mauve cap
 For optimum recovery of organisms, inoculate each bottle with 8-10 ml of blood.

PAEDIATRIC ROUTINE: A single bottle - silver top/ pink cap.
 For optimum recovery of organisms, inoculate with 1 – 3 ml of blood

MYCOBACTERIA / AFB: A single bottle – Red top / white cap.
 For optimum recovery of Mycobacteria, inoculate with 3 - 5ml of blood

FUNGAL CULTURE / MYCOLOGY: A single bottle – Grey top / green cap
 Accepted specimen volume range is 3ml to 10mL.

Container CE marked BD BACTEC style blood culture bottles



Fungal / Mycology bottles (grey top / green cap) and AFB/Mycobacteria bottles (red top/white cap) are available by special request from Pathology First reception.

Reference Range & Units

Interferences

Bottles must not be over or under filled as this may yield sub optimal results.

Interpretation & Clinical

Consultant Microbiologist may provide clinical interpretation if required.

Decision Value

(if applicable)

References

Test code

BCA (Blood Culture Adult), BCP (Paediatric), MYBC (Fungal),
 TBBC (TB/Mycobacteria)

Lab Handling

Blood culture bottles should be loaded onto the FX analyser on receipt.