

11.5 Handling and Storage of Samples for Testing

Sample type	Requirement	Transport and pre-processing storage
Peripheral blood	5mL EDTA minimum (10mL preferred), and fresh PB smear.	Ambient
CD34 assay (PBSCH or peripheral blood)	Prior consultation with lab required.	Transport at ambient temperature. Store PBSCH at 4°C (fridge) or PB at room temperature if sample not processed immediately.
Estimation of Fetomaternal Haemorrhage	5mL EDTA	Transport at ambient temperature. Store at 4°C prior to transport, or if >4hr delay prior to processing.
Bone marrow aspirate	Fresh sample in culture media, and fresh aspirate smear.	Ambient
Bone marrow trephine	Fresh sample in culture media, and either fresh aspirate smear or trephine roll.	Ambient
FNA	Fresh sample in culture media	Ambient
Pleural or pericardial effusion	Fresh sample	Ambient
CSF	Prior consultation with lab required. External clients: add equal volume of culture media and send fresh cytopsin slide if possible.	Transport at ambient temperature. Store at 4°C if sample not processed immediately.
Tissue biopsy (including core biopsies)	Fresh sample in culture media	Transport at ambient temperature. Store at 4°C if sample not processed immediately.
Spleen or liver tissue (including core biopsies)	Samples must be processed ASAP because of tissue enzymes. On-call staff must be contacted if spleen or liver tissue samples are received outside normal working hours.	

Surface marker analysis cannot be performed on samples stored in formalin. Bone marrow trephine or lymph node samples received in formalin are likely to be for histology – check with surface marker staff or requesting doctor if uncertain.

Culture media (BM transport media/RPMI) is prepared in the cytogenetics laboratory. The media is pink in colour and vials are in the surface markers fridge, or the fridge located in the haematology patient treatment room. If samples are received out of hours in saline, add culture media and store as indicated above.