

Synovial fluid sample collection guide for the diagnosis of synovitis / septic arthritis

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To correctly diagnose the cause of synovitis/septic arthritis in a patient with a red, painful/swollen joint the correct samples and test requests are imperative.

Lancet Laboratories offers the following tests on synovial fluid:

TEST	TRANSPORT/TUBE	COMMENT
Joint fluid microscopy, cell count and crystals	EDTA (purple top)	EDTA assists to prevent clotting of fluid, thus an adequate cell count can be performed.
Joint fluid culture and sensitivity	Paediatric blood culture bottle OR sterile container	Paediatric bottle allows for low volumes of fluid to be sent. For bacterial and fungal growth, bottles are incubated for 14 days.
Synovial fluid CRP	SST (yellow top) tube OR sterile container	Forms part of the MSIS* scoring system for the diagnosis of a PJI
Synovial chromium/cobalt ions	Metal-free dark blue tube	Assists with the diagnosis of metallosis
TB Xpert® (PCR) and TB culture	Sterile container	
Panpathogen PCR (panbacterial & panfungal)	Sterile container	TAT: 48 – 72 hours after receipt in molecular laboratory
Cytology	Sterile container	

* MSIS: Musculoskeletal Infection Society

For the diagnosis of prosthetic joint infection (PJI), peri-prosthetic tissue samples/synovial biopsies for MC&S are also recommended.

If the prosthetic material is removed, Lancet Laboratories offers sonication- or vortex-assisted culture of the removed prosthetic material to aid in the diagnosis of orthopaedic implant-associated infections.

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