
DIAGNOSTIC CRITERIA ^

- 2018 criteria for prosthetic joint infections as defined by Parvizi and associates
 - derived from 2011 MSIS; 98% sensitivity and 99.5% specificity for diagnosing PJI
 - **major criteria** (diagnosis can be made when 1 major criteria exist)
 - sinus tract communicating with prosthesis
 - pathogen isolated by culture from 2 separate tissue/fluid samples from the affected joint
 - **minor criteria** (preoperative diagnosis)
 - the scores below are added together to determine:
 - ≥ 6 = infected; 2-5 = inconclusive; 0-1 = not infected
 - serum labs
 - elevated CRP (>10 mg/L) or D-dimer (>860 ng/mL) - 2 points
 - elevated ESR (>30 mm/h) - 1 point
 - synovial fluid analysis
 - elevated synovial WBC ($>3,000$ cells/ μ l) or leukocyte esterase - 3 points
 - positive alpha-defensin - 3 points
 - most sensitive and specific marker for PJI
 - elevated synovial PMN ($>80\%$) - 2 points
 - elevated synovial CRP (>6.9 mg/L) - 1 point
 - **inconclusive** (inconclusive preoperative score (2-5) or dry aspiration)
 - positive histology (>5 PMN/hpf in 5 hpf at x400 magnification (intraoperative frozen section of periprosthetic tissue)) - 3 points
 - purulence in affected joint - 3 points
 - single positive culture - 2 points
 - **preoperative score + intraoperative score combined**
 - combined score ≥ 6 = infected; 4-5 = inconclusive; 0-3 = not infected