INDICATIONS FOR BLOOD CULTURES (BCx) IN ADULT NON-NEUTROPENIC PATIENTS

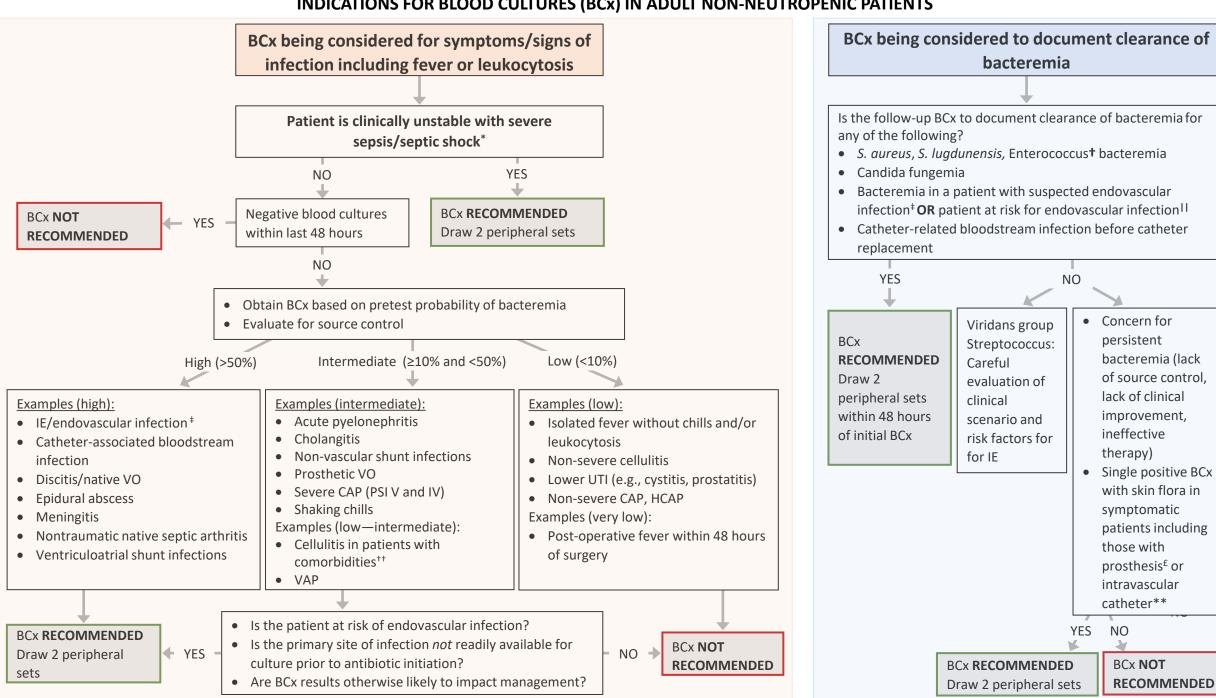


Figure Footnote

Algorithm of indications for bacterial blood cultures for non-neutropenic patients. The algorithm is not a substitute for clinical judgment. Peripheral BCx are preferred over central lines blood cultures due to lower false positive results.

Always draw 2 peripheral sets (i.e., 4 bottles with 8-10cc/bottle).

- * Blood culture (BCx) required by US Centers for Medicare and Medicaid Services severe sepsis criteria of the Severe Sepsis and Septic Shock Early Management Bundle.
- † There is debate over whether a single set of BCx for Enterococcus in patients without valvular heart disease and no urinary retention/obstruction that would predispose patients to bacteremia warrant repeat BCx, but ultimately it is recommended
- ‡ Endovascular infection: Septic thrombophlebitis, infected endovascular thrombi, implantable cardioverter defibrillator (ICD)/pacemaker lead infections, intravascular catheter infections, and vascular graft infections.
- | Patients at risk of endovascular infection: ICD/pacemaker, vascular graft, prosthetic valves and prosthetic material used for cardiac valve repair, history of infective endocarditis, valvulopathy in heart transplant recipient, unrepaired congenital heart disease with residual shunt or valvular regurgitation, or within the first 6 months post-repair.
- £ Prosthesis: Orthopedic or intravascular prosthesis.
- ** Routine additional follow-up BCx for a single BCx with skin flora (eg, coagulase-negative staphylococci) in an immunocompetent patient are not necessary unless bacteremia is suspected or a prosthesis is present.
- †† Cellulitis in patients with comorbidities: Immunocompromised hosts or those at risk of poor outcomes from sequelae from missed *Staphylococcus aureus* bacteremia.

Abbreviations: BCx, blood culture; CAP, community-acquired pneumonia; HCAP, healthcare-associated pneumonia; PSI, Pneumonia Severity Index; *S. aureus, Staphylococcus aureus*; *S. lugdunensis*, *Staphylococcus lugdunensis*; UTI, urinary tract infection; VAP, ventilator-associated pneumonia; VO, vertebral osteomyelitis.

The recommendations in this guide are meant to serve as treatment guidelines for use at Michigan Medicine facilities. If you are an individual experiencing a medical emergency, call 911 immediately. These guidelines

should not replace a provider's professional medical advice based on clinical judgment, or be used in lieu of an Infectious Diseases consultation when necessary. As a result of ongoing research, practice guidelines may from time to time change. The authors of these guidelines have made all attempts to ensure the accuracy based on current information, however, due to ongoing research, users of these guidelines are strongly encouraged to confirm the information contained within them through an independent source.

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