BCx RECOMMENDED LINK TO PEDIATRIC SEPSIS PATHWAY

Link to PICU/PCICU Clinical Decision Support Tool

BCx being considered for symptoms/signs of infection including fever or leukocytosis

Patient is clinically unstable with severe sepsis/septic shock

NO

BCx RECOMMENDED

Link to Pediatric Sepsis Pathway

CONSIDER BCx

YES

BCx RECOMMENDED

Suspcion and anticipated IV antibiotic treatment for:
- Infective endocarditis or endovascular infection†
- Central line present
- Acute hematogenous osteomyelitis
- Acute bacterial arthritis
- Meningitis/intra-cranial infection

- Complicated intra-abdominal infections with concern for antibiotic-resistant organisms, immunocompromised patients, healthcare-associated infection
- Complicated pneumonia with parapneumonic effusion
- Unvaccinated or under vaccinated child (especially < 6 months of age)

BCx NOT RECOMMENDED

- Non-severe SSTI
- Non severe UTI (Upper or lower tract)
- Non-severe CAP
- Patients to be admitted with High-Risk BRUE without suspicion of SBI
- Post-operative fever within 48 hours of surgery
- Fever within the expected time course for identified viral infection
- Persistent fever in a patient with or without an identified bacterial non-bloodstream infection AND blood culture obtained within the last 48 hours which is negative to date
- Identified non-infectious source of fever (dysautonomia)
**BLOOD CULTURES (BCx) TO DOCUMENT CLEARANCE OF BACTEREMIA OR CANDIDEMIA**

**Is the BCx to document clearance for one of the below indications?**
- *Staphylococcus aureus, S. lugdunensis, or enterococcal bacteremia*
- *Candida fungemia*
- *Bacteremia or fungemia with a suspected endovascular infection* OR patient at risk for an endovascular infection OR patient at risk for an endovascular infection
- *CLABSI before catheter replacement*

**YES**
- **BCx RECOMMENDED**

**NO**
- **Does the patient have one of the following:**
  - Persistent bacteremia or fungemia in the setting of a lack of source control, lack of clinical improvement, or ineffective therapy
  - A single positive culture with skin flora (i.e., coagulase negative staphylococci) AND signs and symptoms of an infection including those with prostheses or central venous catheters

**YES**
- **BCx RECOMMENDED**

**NO**
- **BCx NOT RECOMMENDED**

**PATIENTS WITH NEUTROPENIC FEVER (ANC <500)**
Blood cultures are **not recommended** after 72 hours of persistent febrile neutropenia except in the setting of new hemodynamic instability, prior positive blood cultures, or as recommended by the infectious diseases consult service.
Footnotes:

Pediatric patients are \( \leq \) 18 years of age unless followed by a pediatric subspecialty service (Hematology/oncology, Complex Care)

The above algorithms are not a substitute for clinical judgment.

† Endovascular infection: Septic thrombophlebitis, infected endovascular thrombi, implantable cardioverter defibrillator (ICD)/pacemaker lead infections, intravascular catheter infections, VAD, and vascular graft infections.

‡ Patients at risk of endovascular infection: ICD/pacemaker, VAD, vascular graft, prosthetic valves and prosthetic material used for cardiac valve repair, history of infective endocarditis, valvulopathy in heart transplant recipient, un repaired congenital heart disease, repaired congenital heart disease with residual shunt or valvular regurgitation, or within the first 6 months post-repair.

**Abbreviations:** BCx, blood culture; CAP, community-acquired pneumonia; CLABSI – central line associated bloodstream infection; HAP, healthcare-associated pneumonia; UTI, urinary tract infection; VAD, ventricular assist device; VAP, ventilator-associated pneumonia; SBI - Serious Bacterial Infection; BRUE - Brief resolved unexplained event

References:


ciae351, [https://doi.org/10.1093/cid/ciae351](https://doi.org/10.1093/cid/ciae351)


[https://idmp.ucsf.edu/sites/g/files/tkssra4251/f/Blood%20Culture%20Guidelines%207.3.24.pdf](https://idmp.ucsf.edu/sites/g/files/tkssra4251/f/Blood%20Culture%20Guidelines%207.3.24.pdf) -accessed 7/9/24

