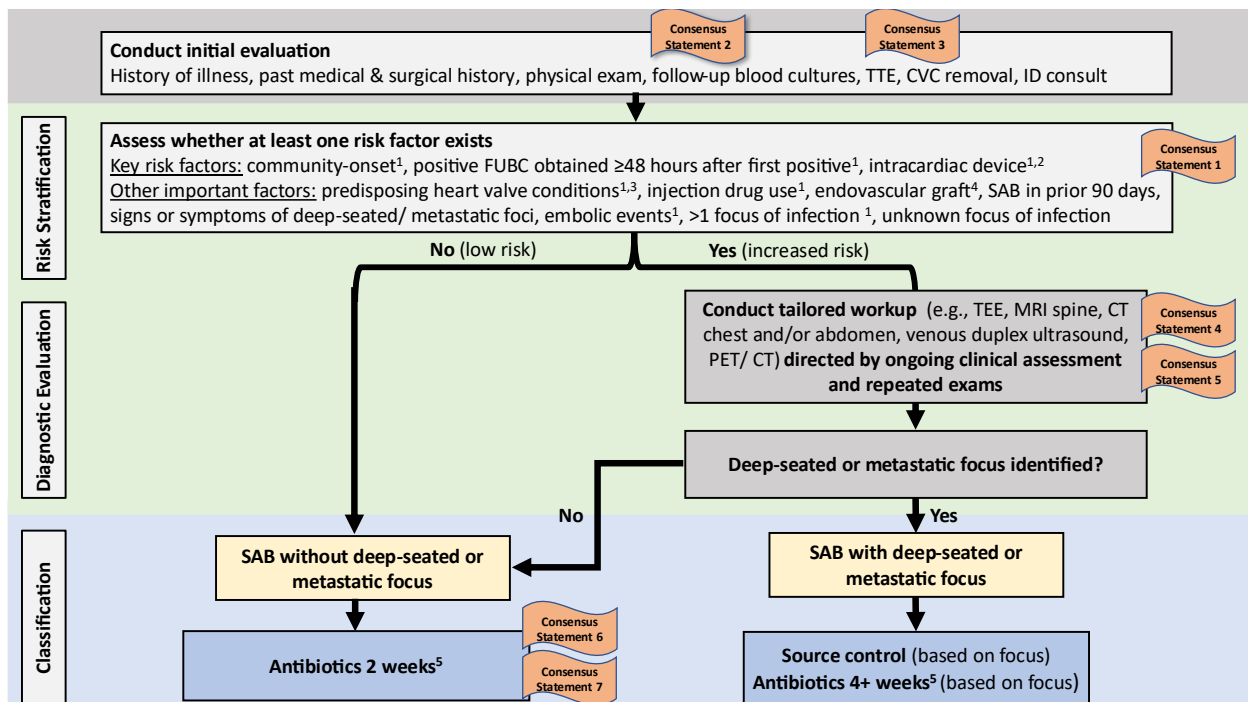


Figure 1: Framework for Risk Stratification and Diagnostic Evaluation of SAB in Adult Patients



Disclaimer: The listed risk factors are based on a review of the literature and expert opinion and do not represent an exhaustive or comprehensive list of all risk factors associated with increased risk SAB.

Figure 1. Framework for Risk Stratification and Diagnostic Evaluation of *Staphylococcus aureus* bacteremia (SAB) in Adult Patients.

This framework outlines the approach to risk stratification, diagnostic evaluation, and classification of adult patients into a final diagnosis of SAB with or without deep-seated or metastatic foci. It uses a stepwise approach to guide appropriate diagnostic evaluation, minimizing the risk of missed occult infectious foci while avoiding unnecessary prolonged antibiotic exposure in patients without confirmed deep-seated or metastatic foci of infection. An initial evaluation is performed in all patients with SAB that enables patients to be stratified into “low-risk” or “increased-risk” SAB. Patients stratified as “increased risk” will undergo tailored diagnostic evaluation based on clinical findings (e.g., symptom/exam-directed imaging) and individual patient characteristics. Due to the dynamic nature of SAB, ongoing clinical assessment is necessary to guide diagnostic evaluation. This approach ultimately supports appropriate classification of patients into a final diagnosis of SAB with or without a deep-seated or metastatic foci of infection enabling treatment decisions to be tailored accordingly. Please refer to Consensus Statements (indicated by flags) for additional detail.

Footnotes

Abbreviations: CT: Computed Tomography; CVC: central venous catheter; DVT: deep vein thrombosis; FUBC: follow-up blood cultures; ID: infectious diseases; MRI: magnetic resonance imaging; PET/CT: Positron Emission Tomography/Computed Tomography; SAB: *Staphylococcus aureus* bacteremia; TEE: transesophageal echocardiography; TTE: transthoracic echocardiography.

¹Endocarditis increased-risk features for endocarditis: presence of an intracardiac device², predisposing heart valve conditions,³ positive blood culture obtained ≥48 hours after the first positive blood culture, embolic events, more than one non-contiguous focus of infection, community-onset SAB, injection drug use.

²Intracardiac device: prosthetic heart valve, permanent pacemaker, automatic implantable cardioverter-defibrillator, left ventricular assist device.

³*Predisposing heart valve conditions as defined by 2023 Duke-ISCVID criteria [47].*

⁴*Endovascular graft: synthetic bypass graft in the vessel wall.*

⁵*Longer durations of therapy, guided by the likely focus, may be appropriate in select scenarios (e.g., retained intracardiac device, recently placed endovascular graft, DVT at central venous catheter site), particularly in the setting of prolonged bacteremia, or if diagnostic testing is incomplete or indeterminate. In these situations, reassessment of source control should also be considered.*