

Supplementary Materials

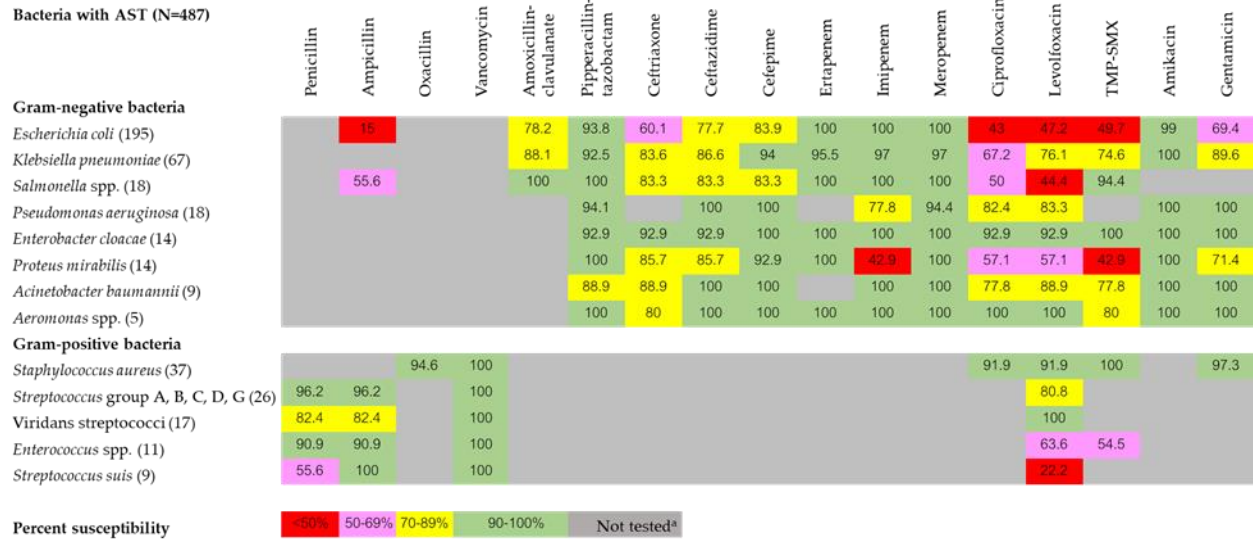


Figure S1. Antimicrobial susceptible percentage of clinical isolated bacteria with ≥ 5 first isolate counts. Abbreviations: AST, antimicrobial susceptibility testing; TMP-SMX, trimethoprim-sulfamethoxazole.

Table S1. Categories of appropriate and inappropriate antimicrobial use.

| Term | Definition |
|---|---|
| Optimally active coverage (appropriate) | Empirical active antimicrobial treatment based on local antimicrobial guidelines |
| Broad spectrum active coverage | Empirical active antimicrobial treatment has broader spectrum than in the local antimicrobial guidelines |
| Inactive spectrum coverage | Empirical inactive antimicrobial treatment according to susceptibility test report |
| Narrower/simpler antimicrobial is available | Available active narrower spectrum coverage or once daily dosing antimicrobials |
| Multiple antimicrobials change in 48h | >1 antimicrobial change in 48h, while awaiting for susceptibility test report |
| Unnecessary double coverage | Combination treatment to cover anaerobes or MRSA in skin and soft tissue infection and biliary tract infection |
| Shorter duration is possible | Antimicrobials can be stopped in 6-10 days in hemodynamically stable and afebrile patients ≥ 48 h |
| Oral step-down treatment is possible | Available active oral antimicrobials in patients with appropriate source control measures, and appropriate clinical response by day 5 of bacteremia |

Abbreviations: MRSA, methicillin-resistant *Staphylococcus aureus*.