

ICU Antimicrobial Reference Tables

Downloadable reference - verify local susceptibility, formulation, dosing and current guideline context

These tables are educational starting frameworks. They do not replace the local ICU antibiogram, source control, microbiology/ID advice, organ-function dosing or patient-specific contraindications.

Drug-by-Pathogen Framework

Pathogen / phenotype	Preferred / active strategies	Ineffective / not recommended
ESBL Enterobacterales	Meropenem for severe infection / shock; Ertapenem for susceptible non-Pseudomonas infection when clinically stable; Cefepime-enmetazobactam (Exblifep): alternative in selected ESBL-E infections; U.S. label is cUTI	Ceftriaxone when ESBL resistant; Do not assume piperacillin-tazobactam is equivalent to a carbapenem for invasive ESBL infection
KPC-producing CRE	Meropenem-vaborbactam; Ceftazidime-avibactam (Avycaz); Imipenem-cilastatin-relebactam (Recarbrio)	Aztreonam alone; Polymyxins when an active safer novel beta-lactam is available; Routine aminoglycoside monotherapy for invasive disease
NDM / other MBL-producing Enterobacterales	Aztreonam-avibactam (Emblaveo) when available; Ceftazidime-avibactam + aztreonam when the fixed combination is unavailable; Cefiderocol when susceptible	Ceftazidime-avibactam alone; Meropenem-vaborbactam for NDM; Imipenem-relebactam for NDM
OXA-48-like CRE	Ceftazidime-avibactam (Avycaz); Other agents only when susceptibility/mechanism support them	Meropenem-vaborbactam as a mechanism-based default; Assuming all carbapenemases respond to the same inhibitor
DTR Pseudomonas aeruginosa	Ceftolozane-tazobactam; Ceftazidime-avibactam; Imipenem-cilastatin-relebactam; Cefiderocol when susceptibility/site support use	Ertapenem; Ceftriaxone; TMP-SMX; Vancomycin; Polymyxin as preferred therapy when an active safer beta-lactam exists
CRAB	Sulbactam-durlobactam (Xacduro) + imipenem-cilastatin or meropenem - IDSA 2026 preferred approach; If Xacduro is temporarily unavailable: high-dose ampicillin-sulbactam + another active agent; Alternative combination components when susceptible: high-dose minocycline, high-dose tigecycline, cefiderocol, polymyxin B	Routine carbapenem monotherapy; Colistin/polymyxin as preferred therapy when Xacduro is active/available; Treating colonization as invasive infection
Stenotrophomonas maltophilia	Cefiderocol monotherapy - IDSA 2026 preferred approach for invasive infection, with limited clinical-outcomes evidence; Aztreonam-avibactam + a second active agent - alternative; Levofloxacin, minocycline, or TMP-SMX as components of combination therapy - alternatives; Consider step-down to susceptible single-agent therapy only after clear, sustained clinical improvement	Meropenem; Imipenem; Routine treatment of respiratory colonization
MSSA	Cefazolin; Antistaphylococcal penicillin where appropriate	Vancomycin as preferred definitive therapy when a beta-lactam is tolerated and isolate is susceptible
MRSA	Vancomycin (AUC-guided for serious infection); Linezolid for MRSA pneumonia; Daptomycin for bacteremia/endovascular infection - NOT pneumonia	Daptomycin for primary alveolar pneumonia; Cefazolin as MRSA therapy
VRE / resistant Enterococcus	Linezolid; High-dose daptomycin in selected bacteremia/endovascular infection when susceptible and specialist-guided	Cephalosporins as Enterococcus therapy; Assuming all E. faecium remains daptomycin susceptible

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Invasive Candidemia	Echinocandin initial therapy for most critically ill adults; Fluconazole step-down when clinically stable and isolate is susceptible; Evaluate source control and catheter removal when the catheter is a likely source and removal is feasible	Treating respiratory Candida colonization; Automatic catheter removal regardless of source/feasibility
Invasive Aspergillosis	Voriconazole; Isavuconazole; Liposomal amphotericin B in selected situations	Fluconazole; Echinocandin monotherapy as routine first-line definitive therapy
Mucormycosis	Liposomal amphotericin B; Isavuconazole; Posaconazole as selected step-down/salvage therapy	Fluconazole; Echinocandin monotherapy
Severe Influenza	Oseltamivir enterally as standard first-line therapy when susceptible; Consider longer duration in prolonged severe disease/immunocompromise	Routine doubling to oseltamivir 150 mg twice daily; Delaying antiviral therapy while waiting for confirmatory testing in a compatible severe syndrome