

Beat the Bug: Enterococcus spp. Antibiotic Spectrum of Activity

Enterococcus spp. are gram-positive cocci that colonize the human gastrointestinal tract.¹ They can cause communityacquired and healthcare-associated infections ranging in severity from simple cystitis to life-threatening infective endocarditis. *Enterococcus faecalis* and *Enterococcus faecium* are the most commonly encountered species in clinical specimens. Treatment of Enterococcal infections may differ from typical empiric regimens. Read on for a summary of spectrum of activity for common Enterococci.¹⁻⁵

| | Antibiotic | Notes |
|------------------|--|---|
| Usually active | Penicillins (e.g. amoxicillin, piperacillin/tazobactam) | E. faecalis susceptible but E. faecium has high resistance rates |
| | Daptomycin | |
| | Fosfomycin | UTIs only |
| | Linezolid | |
| | Nitrofurantoin | Cystitis only |
| | Tigecycline | |
| | Vancomycin | E. faecalis susceptible but E. faecium has high resistance rates |
| Usually inactive | Carbapenems (e.g. meropenem) | Imipenem is most active. Other carbapenems should not be used empirically. |
| | Fluoroquinolones (e.g. levofloxacin) | UTI only |
| Do not use | | Exception: Gentamicin or ceftriaxone in combination with |
| | Aminogiycosides (e.g. gentamicin) | another active agent (e.g. ampicillin) is recommended for the treatment of Enterococcal endocarditis, but should not be used alone. |
| | Cephalosporins (e.g. cephalexin) | |
| | Clindamycin | |
| | Doxycycline | |
| | Macrolides (e.g. azithromycin) | |
| | Nafcillin, oxacillin | |
| | Trimethoprim-sulfamethoxazole | |

<u>Key Takeaway</u>: *Enterococcus* spp. may not be covered by certain antimicrobials (e.g. cephalosporins) used to treat other common infections. *E. faecium* tends to have higher resistance rates than *E. faecalis* among antimicrobials such as ampicillin and vancomycin.

References

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