

HOSPITAL PHARMACISTS:
BE ANTIBIOTICS AWARE

Avoid Duplicative Anaerobic Coverage



SCENARIO

The pharmacy receives medication orders for piperacillin/tazobactam AND metronidazole for the same patient.

CDC's *Core Elements of Hospital Antibiotic Stewardship Programs* suggests that pharmacists review antibiotic therapy that is unnecessarily duplicative, including the use of agents with overlapping spectra. The combination of two agents with anaerobic activity is unnecessary in most cases.^{1,2} Exceptions may include *Clostridioides difficile* infection, necrotizing fasciitis, and certain biliary infections.³

Pharmacists can help avoid unnecessary duplicative anaerobic coverage by:



1. Alerting the provider that the antibiotics ordered have overlapping spectra of activity.



2. Discussing the clinical case with the provider and consider recommending discontinuation of metronidazole to avoid duplicative therapy, when appropriate.

You can apply this action plan to other combinations of agents that have duplicative anaerobic coverage (e.g., metronidazole and a carbapenem).

The scenarios and recommendations discussed are applicable to most immunocompetent adult patients. Prior to making interventions, always assess the individual patient and use your clinical judgment. Follow your institution's treatment guidelines when applicable.

References:

1. Implementation of Antibiotic Stewardship Core Elements at Small and Critical Access Hospitals. Centers for Disease Control and Prevention, www.cdc.gov/antibiotic-use/healthcare/implementation/core-elements-small-critical.html.
2. Core Elements of Hospital Antibiotic Stewardship Programs. Centers for Disease Control and Prevention, www.cdc.gov/antibiotic-use/healthcare/implementation/core-elements.html.
3. Huttner B, Jones M, Rubin MA, et al. Double trouble: how big a problem is redundant anaerobic antibiotic coverage in Veterans Affairs medical centers. *J Antimicrob Chemother.* 2012;67(6):1537-9.



www.cdc.gov/antibiotic-use