

How to Treat Infections Caused by CRE

Treatment Recommendations for CRE Infections Outside the Urinary Tract

Carbapenem-resistant Enterobacterales (CRE) definition: Enterobacterales isolate displaying resistance to either meropenem or imipenem/cilastatin or producing a carbapenemase

Ambler Class	Resistance Gene Detected	Preferred Regimen(s)	Alternative Regimen(s)	Comments
A	KPC	- Meropenem/vaborbactam - Ceftazidime/avibactam - Imipenem/cilastatin/relebactam	- Cefiderocol - Tigecycline* or eravacycline*	
B	IMP, NDM, VIM	- Ceftazidime/avibactam + aztreonam - Cefiderocol	Tigecycline* or eravacycline*	Administer ceftazidime/avibactam and aztreonam simultaneously
D	OXA-48	Ceftazidime/avibactam	- Cefiderocol - Tigecycline* or eravacycline*	
–	CRE confirmed (resistant to meropenem and/or imipenem/cilastatin) PLUS Carbapenemase testing results unavailable or negative	- Ceftazidime/avibactam - Meropenem/vaborbactam - Imipenem/cilastatin/relebactam If high local prevalence or patient history of metallo-β-lactamase (eg, NDM): - Ceftazidime/avibactam + aztreonam - Cefiderocol	Tigecycline* or eravacycline*	

*Not recommended for treatment of urinary tract infections or bloodstream infections.

For Enterobacterales isolates that are not susceptible to ertapenem (minimum inhibitory concentration [MIC] ≥ 1 μ g/mL) but susceptible to meropenem and imipenem (MIC ≤ 1 μ g/mL) AND a carbapenemase is not identified, use of extended infusion meropenem or imipenem suggested



Not recommended for CRE infections:

- Omadacycline
- Polymyxins (eg, polymyxin B and colistin)
- Combination therapy (eg, β -lactam with an aminoglycoside, fluoroquinolone, tetracycline, or polymyxin)



References

cdc.gov/hai/pdfs/cre/cre-guidance-508.pdf
Tamma. Clin Infect Dis. 2023;ciad428.

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