

Treatment of proven or suspected infections due to multi-drug resistant aerobic, carbapenem-resistant gram-negative pathogens that have demonstrated susceptibility

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Document control

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Colour coding reflects probability of sensitivity¹ and not the formulary preference:

- **Green:** more than 80% susceptible
- **Yellow:** 30-80% susceptible
- **Red:** intrinsically resistant or <30% susceptible

Formulary preference is provided in text within each colour coded box. If an organism is susceptible to an **Amber** antibiotic, it should be considered alongside **Green** antibiotics with treatment choice dependent on patient factors and cost. Please note chloramphenicol and co-trimoxazole may have activity for some carbapenem-resistant gram-negative pathogens.

Antibiotic	Cost	KPC (class A)	MBL (class B)	OXA-48 (class D)	MDR Pseudomonas
Colistin (not monotherapy*)	£				
Tigecycline (not monotherapy*)	£	Not preferred due FDA alert (increased risk of mortality) and caution in children <8 years ^{2,3}	Not preferred due FDA alert (increased risk of mortality) and caution in children <8 years ^{2,3}	Not preferred due FDA alert (increased risk of mortality) and caution in children <8 years ^{2,3}	
Meropenem/vaborbactam	££	Preferred where other agents are not suitable			
Fosfomycin IV (not monotherapy*)	££				
Ceftazidime/avibactam	£££	Not preferred due to high cost		Preferred where other agents are not suitable	
Aztreonam + Ceftazidime/avibactam	£££	Non-formulary	Preferred where other agents are not suitable	Non-formulary	
Ceftolozane/tazobactam	££££				Preferred where other agents are not suitable
Cefiderocol	££££££	Non-formulary	Preferred where all other agents are not suitable	Non-formulary	Non-formulary

* Combination with meropenem is appropriate provided MIC for meropenem is ≤8.

References:

1. TammaPD, Hsu AJ. Journal of the Pediatric Infectious Diseases Society 2019;8(3):251–60

2. Food and Drug Administration. FDA Drug Safety Communication: FDA warns of increased risk of death with IV antibacterial Tygacil (tigecycline) and approves new Boxed Warning. September 2013 ([link](#))
3. eMC: Tigecycline 50 mg powder for solution for infusion ([link](#))