

Overcoming Cefiderocol AST Challenges in MDR-GN Infections: A Stepwise Approach

Infographic 1 of 2 in the 'Accelerating time to effective therapy' series

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In the UK, Fetcroja® (Cefiderocol) is indicated for the treatment of infections due to aerobic Gram-negative organisms in adults with limited treatment options. Consideration should be given to official guidance on the appropriate use of antibacterial agents. The label may differ in other countries; please check local prescribing information. Please access the full Fetcroja® Summary of Product Characteristics [here](#). Adverse Events Reporting information can be found at the bottom of this infographic.

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Inappropriate and delayed appropriate antibiotic therapy has a major impact on survival.^{1,2}

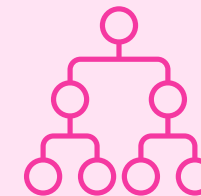
Antimicrobial susceptibility results obtained as early as possible may reduce time to effective therapy.³⁻⁶

To reduce delays, susceptibility to cefiderocol should be determined alongside that of other therapies for CR pathogens wherever possible.^{1,7}

Overcoming the challenges of cefiderocol AST is crucial for its clinical application and patient safety.⁷



A new comprehensive review and expert opinion paper offers a standardised, reproducible way forward.⁷

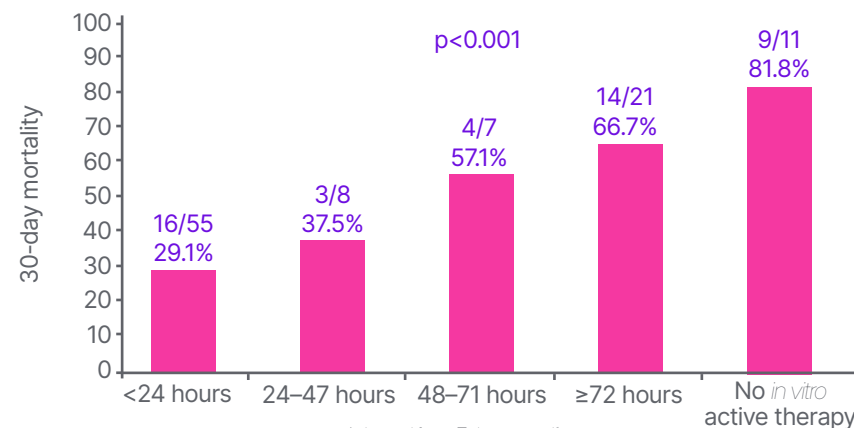


Stefani et al. designed two practical decision trees, based on:⁷

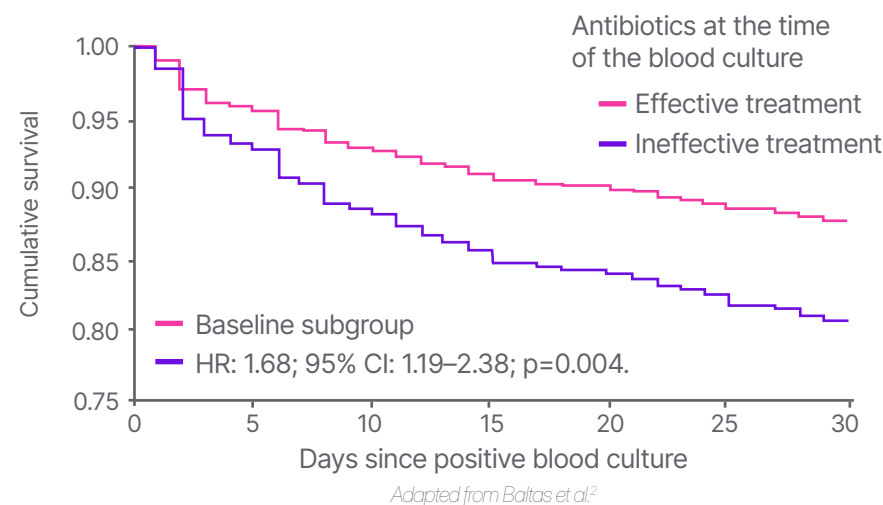
- Thirteen published papers on AST methods.
- The expert opinion of six microbiology experts.



Time from blood culture to appropriate therapy in KPC *K. pneumoniae* infection¹



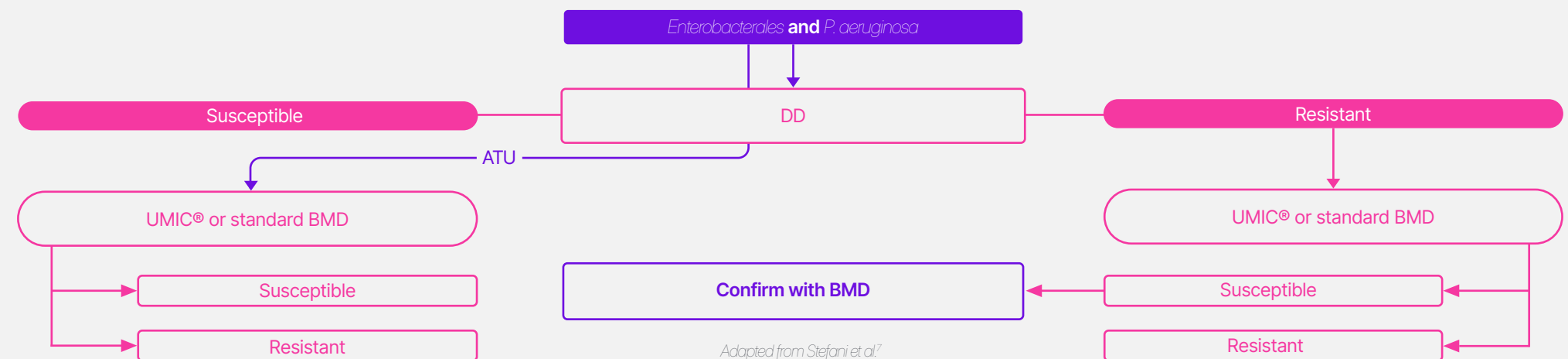
Time to appropriate antibiotic therapy is a predictor of outcome.¹



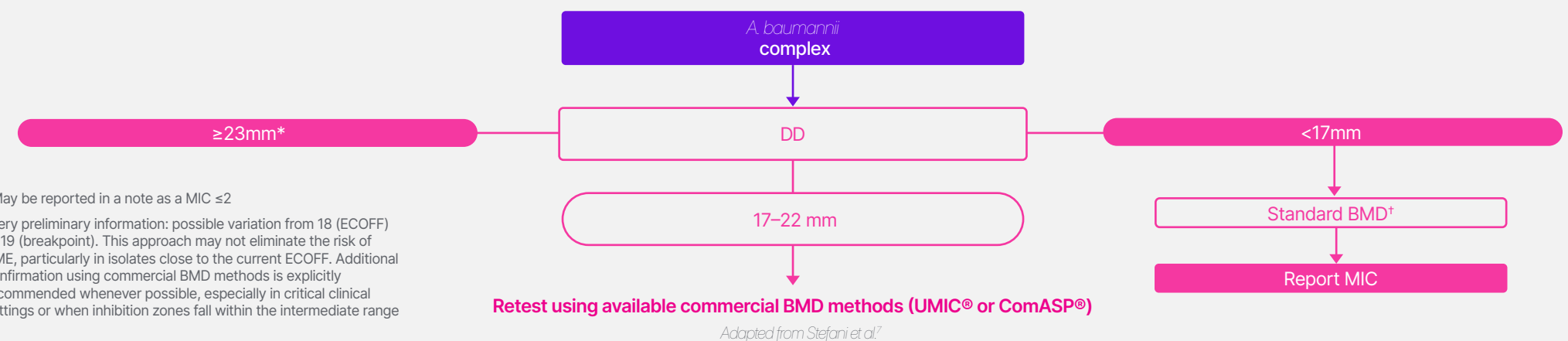
In patients with bacteremia due to *P. aeruginosa*, *Klebsiella* spp., and *E. coli* (n=789), ineffective empirical antibiotics at time of blood culture was associated with **increased risk of mortality within 30 days.**²

Stefani et al. outlines a stepwise approach to cefiderocol AST in which DD is used for initial screening.⁷

Cefiderocol susceptibility testing for *Enterobacterales* and *P. aeruginosa*⁷



Cefiderocol susceptibility testing for *A. baumannii*.⁷



Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme, website: <https://yellowcard.mhra.gov.uk/> or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to Shionogi on +44 (0) 203 053 4190 or email contact@shionogi.eu.

References

1. Falcone M et al. Crit Care. 2020;24:29.
2. Baltas I et al. J Antimicrob Chemother. 2021;76(3):813-19.
3. Van Heuverswyn et al. Clin Infect Dis. 2023;76:469-78.
4. Bonine NG et al. Am J Med Sci. 2019;357:103-10.
5. Bauer KA et al. Clin Infect Dis. 2014;59 Suppl3:S134-45.
6. Zak-Doron Y et al. Clin Infect Dis. 2018;67:1815-23.
7. Stefani S et al. Antibiotics. 2025;14(8):760.
8. Rawson TM et al. J Antimicrob Chemother. 2025;80(5):1462-4.

Abbreviations:

AST: antibiotic susceptibility testing; ATU: areas of technical uncertainty; BMD: broth microdilution; CLSI: Clinical and Laboratory Standards Institute; CR: Carbapenem-resistant; DD: disk diffusion; ECOFF: Epidemiological Cut-off Values; EUCAST: European Committee on Antimicrobial Susceptibility Testing; FDC: fixed-dose combination; HR: hazard ratio; ID-CAMHB: iron-depleted cation-adjusted Mueller-Hinton broth; KPC: klebsiella pneumoniae carbapenemase; MIC: minimum inhibitory concentration; VME: very major error.

Key Learnings

Reliance on DD results alone may overcall cefiderocol resistance when compared with BMD and may lead to patients receiving suboptimal treatment.⁸

Stefani et al. recommend a stepwise approach of screening with DD, and isolates in the ATU range or showing reduced susceptibility being confirmed using commercial BMD methods, preferably UMIC® or ComASP®.⁷