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Ac f Cef de c a d C a a A e a a US l a e f *Pseudomonas aeruginosa*, *Acinetobacter baumannii-calcoaceticus* ec e c e , a d *Stenotroph omonas maltoph ilia*, l c d Ca ba e e - Re a l a e f e SENTRY A c b a S e a ce P a (2020| 2022)

Dee S 1 d e, R d Me de , Ma a a Ca a e a
JMI Laboratories, North Liberty, Iowa, USA

Introduction

- Cefiderocol is a siderophore-conjugated cephalosporin with broad activity against Gram-negative bacteria, including multidrug-resistant organisms.
- Cefiderocol was approved by the EMA for the treatment of infections caused by Gram-negative bacteria in adult patients with limited treatment options and the US FDA for complicated urinary tract infection, hospital-acquired bacterial pneumonia, and ventilator-associated bacterial pneumonia.
- Non–glucose-fermenting species including *P* , *A* - complex, and are often extensively drug-resistant (XDR), presenting serious treatment challenges.
- The susceptibility of cefiderocol and comparator agents was investigated against non–glucose-fermenting US isolates collected in 2020–2022 as part of the SENTRY Antimicrobial Surveillance Program.

Materials and Methods

- A total of 2,982 *P.* , 799 *A.* - species complex, and 585 . were isolated from hospitalised patients in 63 US medical centres.

Results

- The most common infection type from which isolates were collected was pneumonia (=2,340), followed by skin and skin structure (=827), bloodstream infection (=543), urinary tract infection (=391), intra-abdominal infection (=142), and other sites (=123).

  P. susceptibilities to cefiderocol and BL/BLI combinations were >96.0%, except for meropenem-vaborbactam (90.8%; Table 1).
- Cefiderocol was the most active agent against XDR *P.* isolates (susceptibility 98.2/97.1/93.0% CLSI/EUCAST/FDA, respectively). The susceptibilities of the BL/BLI combinations against these XDR isolates ranged from 42.1% to 78.8%.
- Cefiderocol had higher susceptibilities than comparator agents against BL/BLI-resistant *P.* isolates (Table 1, Figure 1).

  A. - complex susceptibility to cefiderocol was 98.5/97.2/93.6% (CLSI/EUCAST/FDA; Table 2, Figure 1).
- Cefiderocol retained good activity against XDR, meropenem-resistant, or imipenem-relebactam–resistant *A.* - complex isolates, with ≥85.0% susceptibility.
- Cefiderocol was active against . (98.5/99.3% susceptible, CLSI/EUCAST; Table 2, Figure 1).

Conclusions

- Cefiderocol was the most active β-lactam with broad activity against contemporary US isolates of drug-resistant subsets of *P.* and *A.* - complex as well as . , where treatment options are limited.
- These data suggest that cefiderocol is an important treatment option for infections caused by non–glucose-fermenting pathogens, including meropenem-, BL/BLI-resistant, and XDR isolates.

References

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