Poster 2753

Contact: Bin Cai, MD, PhD

Email: bin.cai@shionogi.com

IDWeek 2023, Boston, MA, USA October 11–15, 2023

Real-World Use of Cefiderocol Treating Non-COVID Patients with Confirmed Gram-negative Infections in US Hospitals During January 2020 – June 2022



Bin Cai¹, Yun (Anna) Zhou², Christine Slover¹, Jennifer Copeland¹, Sean Nguyen¹
¹Shionogi Inc., Florham Park, NJ, USA; ²Genesis Research LLC, Hoboken, NJ, USA

OBJECTIVES

We aimed to describe cefiderocol usage in the treatment of patients with Gram-negative bacterial infections, without COVID-19, and for whom microbiology data were available from US hospitals between January 2020 and June 2022.

METHODS

Design: retrospective multicenter observational study.

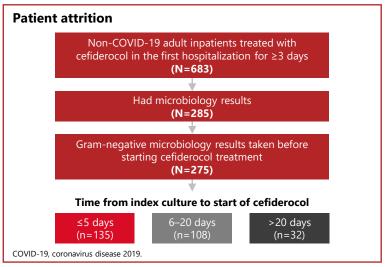
Data source: PINC AI database from January 2020 to June 2022.

Inclusion criteria: adult non-COVID hospitalized patients treated with cefiderocol consecutively for ≥3 days after laboratory confirmed Gramnegative bacterial infections.

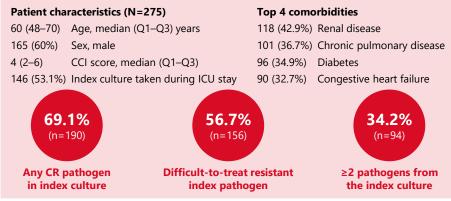
Endpoints: patient characteristics, microbiological profile, and overall, Day 14 and Day 28, in-hospital all-cause mortality (IHACM).

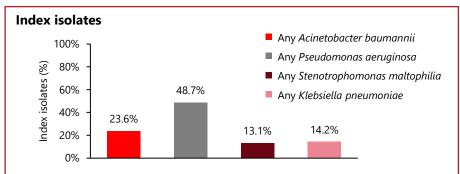
Index culture was defined as the first clinical culture with a Gram-negative pathogen during hospitalization. All pathogens identified from the index culture were index isolates.

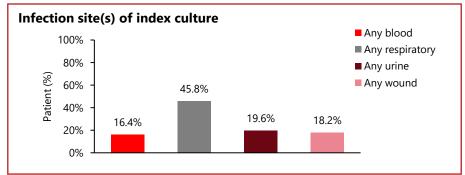
RESULTS



RESULTS







Treatment and hospitalization outcomes	Overall (N=275)
Days on cefiderocol, median (Q1–Q3)	9 (6–15)
Days from index culture to starting cefiderocol, median (Q1–Q3)	6 (3–11)
Cefiderocol used as monotherapy, n (%)	92 (33.5)
Received other Gram-negative antibiotics before cefiderocol, n (%)	253 (92.0)
In-hospital mortality	n/N, (% [95% CI])
All-cause mortality	45/275 (16.4% [12.0%–20.7%])
Initiating cefiderocol ≤5 days of index culture (n=135)	14/135 (10.4% [5.2%–15.5%])
6–20 days of index culture (n=108)	21/108 (19.4% [12%–26.9%])
>20 days of index culture (n=32)	10/32 (31.3% [8.2%–15.2%])
Death within 14 days from initiating cefiderocol	23/275 (8.4% [5.1%–11.6%])
Death within 28 days from initiating cefiderocol	35/275 (12.7% [8.8%–16.7%])
Death within 14 days from index culture	10/275 (3.6% [1.4%–5.9%])
Death within 28 days from index culture	26/275 (9.5% [6.0%–12.9%])

CONCLUSIONS

The study demonstrated that cefiderocol is effective in treating US patients with Gram-negative infections.

Patients receiving cefiderocol earlier had lower IHACM than those receiving cefiderocol later, but further investigations are needed to confirm this finding.