

ABSTRACT E POSTER HIGHLIGHTS**F  CUS SU:**

Cefiderocol nella gestione delle infezioni da bacilli Gram-negativi multiresistenti

Evidenze e prospettive dal 36esimo ESCMID Global 2026

a cura della Dr.ssa



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INTRODUZIONE E COMMENTO GENERALE

L'evoluzione epidemiologica della resistenza antimicrobica conferma la rilevanza critica dei bacilli Gram-negativi (GNB), in particolare dei GNB non fermentanti e degli *Enterobacterales* resistenti ai carbapenemi, la cui capacità di sviluppare profili multi-resistenti e di difficile trattamento continua a condizionare in modo significativo le scelte terapeutiche in ambito ospedaliero.

Cefiderocol, cefalosporina siderofora che sfrutta i sistemi di trasporto del ferro per attraversare la membrana esterna batterica e raggiungere lo spazio periplasmatico, **si distingue per la sua attività nei confronti di numerosi patogeni GNB, inclusi ceppi resistenti ai carbapenemi.** I dati presentati a ESCMID 2026 documentano il **profilo clinico e microbiologico della molecola in diversi contesti d'impiego**, fornendo evidenze sia da coorti real-world sia da programmi di sorveglianza internazionale.

Le **Real-World Evidence** presentate al congresso comprendono analisi derivate dagli studi **PROVE, CIRCE e CONVINCe**.

PROVE è uno studio real-world retrospettivo multicentrico, tuttora in corso, che valuta gli outcomes di pazienti con infezioni da GNB trattati con cefiderocol. Nel sottogruppo dello studio dedicato alle **infezioni polimicrobiche** costituito da 306 pazienti con infezioni polimicrobiche da *Enterobacterales*, *Pseudomonas aeruginosa*, *Acinetobacter baumannii*, *Stenotrophomonas maltophilia* ed altri GNB, cefiderocol ha mostrato una **clinical cure del 65%, una clinical response alla fine del trattamento del 72,9%** e una mortalità a 30 giorni per tutte le cause del 22,5%. In tale sottoanalisi, come atteso, la maggior parte dei pazienti era ospedalizzata in unità di terapia intensiva ed era affetta da infezioni del tratto respiratorio. **Questi dati supportano l'impiego della molecola in infezioni polimicrobiche, che spesso configurano quadri microbiologici complessi**, si verificano in pazienti critici e sono tradizionalmente associati a prognosi peggiori e a minori opzioni terapeutiche.

L'efficacia clinica di cefiderocol emerge anche

in specifici tipi di infezioni. Nell'analisi **PROVE** dedicata alle **infezioni osteoarticolari**, condotta su 54 pazienti, la **clinical cure complessiva è risultata pari all'83,3%**, con una **clinical response a fine trattamento dell'88,9%**, una mortalità a 14 giorni del 3,7% e a 30 giorni dell'11,1%. Questi risultati indicano **un'attività favorevole anche in un setting clinico complesso**, caratterizzato dalla necessità di trattamenti prolungati e da possibili criticità di penetrazione tissutale.

Lo studio **CIRCE**, condotto in Spagna ha incluso pazienti con **infezioni confermate da Enterobacterales produttori di metallo-beta-lattamasi (MBL) trattati con cefiderocol per almeno 72 ore**. Erano escluse le infezioni da MBL con MIC a cefiderocol > 8 mcg/mL. In totale, 120 pazienti erano affetti da infezione da New Delhi metallo-beta-lattamasi (NDM), 106 da Verona integron encoded metallo beta lactamases (VIM) e 6 avevano infezione da più di una MBL. La **risposta clinica a 14 giorni** (definita come risoluzione di segni e sintomi di infezione oppure miglioramento clinico senza risoluzione completa) **è stata dell'82,3%**, mentre la clinical cure a 14 giorni (definita come risoluzione di segni e sintomi di infezione) è risultata del 67,7%. La mortalità per tutte le cause è stata del 9,9% a 14 giorni e del 17,2% a 28 giorni, con una bassa incidenza di eventi avversi correlati al trattamento e limitata emergenza di resistenza durante la terapia. Questi dati supportano il **ruolo di cefiderocol nel trattamento di infezioni da ceppi produttori di MBL, incluse NDM e VIM**, in un contesto ad alta complessità microbiologica.

Lo studio osservazionale retrospettivo multicentrico **CONVINCe** (tuttora in corso) ha **confrontato l'efficacia di cefiderocol (72 pazienti) versus ceftolozano/tazobactam (141 pazienti) nel trattamento di polmonite e/o batteriemia da Pseudomonas aeruginosa multiresistente (MDR)**. Nell'analisi preliminare, l'efficacia clinica è risultata sovrapponibile

tra i due trattamenti (67% in entrambi i gruppi di trattamento), nonostante i pazienti trattati con cefiderocol presentassero al basale quadri clinici significativamente più severi e complessi. In particolare, in questo braccio era inclusa una percentuale maggiore di pazienti con un SOFA score più elevato, riceventi trapianto di organo solido, necessitanti di terapia sostitutiva renale e con una maggiore frequenza di isolati classificati come DTR (Difficult-to-Treat Resistance). Questo dato contribuisce a **definire il posizionamento di cefiderocol contro *Pseudomonas aeruginosa* MDR in contesti di elevata complessità clinica.**

Un altro ambito di interesse è rappresentato dalle infezioni da ***Stenotrophomonas spp.***, patogeno opportunisto noto per la resistenza intrinseca a numerosi antibiotici. Nel sottogruppo PROVE dedicato a queste infezioni (119 pazienti), **cefiderocol ha mostrato una clinical cure del 63,9% e una clinical response a fine trattamento del 72,3% nell'intera coorte**, con risultati osservati sia nelle forme monomicrobiche sia in quelle polimicrobiche. **Si tratta della coorte più grande di pazienti affetti da *Stenotrophomonas spp.* trattata con cefiderocol.**

I dati microbiologici presentati durante il congresso documentano importanti evidenze circa i dati di sensibilità di cefiderocol nei confronti di diversi GNB.

I programmi di sorveglianza globale confermano la stabilità dell'attività *in vitro* di cefiderocol nei confronti di *Stenotrophomonas maltophilia*. L'analisi combinata **SIDERO-WT e SENTRY** ha mostrato una **suscettibilità complessiva degli isolati di *Stenotrophomonas maltophilia* prossima al 100% lungo un arco temporale di dieci anni**, con MIC_{50/90} pari a 0,06/0,25 mg/L e mantenimento dell'attività sia prima sia dopo l'introduzione clinica del farmaco. Questi risultati confermano la **robustezza del profilo microbiologico di cefiderocol** nei confronti di tale patogeno responsabile di infezioni in soggetti fragili immunodepressi e notoriamente difficile da trattare.

Ulteriori dati **SENTRY** hanno documentato una

buona attività *in vitro* (determinata mediante microdiluizione in brodo depleto di ferro secondo i criteri CLSI) **di cefiderocol contro 14916 isolati GNB da emocolture raccolti tra il 2020 e il 2024, inclusi *Enterobacterales*** (di cui oltre 3000 MDR e oltre 300 resistenti a carbapenemi), ***Pseudomonas aeruginosa*** (di cui oltre 200 MDR), ***Acinetobacter baumannii-calcoaceticus complex* resistente ai carbapenemi e *Stenotrophomonas maltophilia*.** In questo contesto, cefiderocol si è confermato tra gli agenti più attivi anche nei confronti dei fenotipi più resistenti.

La sorveglianza SENTRY ha inoltre mostrato **un'attività sostanzialmente sovrapponibile di cefiderocol contro 17630 GNB non fermentanti isolati da pazienti ricoverati in unità di terapia intensiva e non**, compresi sottogruppi altamente resistenti di ***Pseudomonas aeruginosa*, *Acinetobacter baumannii-calcoaceticus complex* resistente ai carbapenemi.**

Nell'ambito del programma SENTRY, l'attività di **cefiderocol** è stata determinata mediante microdiluizione in brodo depleto di ferro nei confronti di 21451 ***Enterobacterales* di cui 730 resistenti ai carbapenemi, inclusi isolati produttori di MBL.** Tali dati hanno confermato elevati livelli di attività anche in sottogruppi di isolati con resistenza verso diverse combinazioni β-lattamico/inibitore delle β-lattamasi (BL/BLI), inclusi ceftazidime/avibactam, meropenem/vaborbactam e imipenem/relebactam. Questo aspetto è **particolarmente rilevante nel sottolineare l'efficacia di cefiderocol nei confronti di isolati portatori di carbapenemasi con resistenza crociata anche agli ultimi BL/BLI disponibili.**

Nel complesso, **le evidenze presentate a ESCMID Global 2026 da una parte evidenziano l'attività *in vitro* di cefiderocol nei confronti di patogeni resistenti ai carbapenemi e dall'altra rafforzano l'uso clinico di cefiderocol come opzione terapeutica nel trattamento di pazienti complessi affetti da infezioni gravi da diversi GNB resistenti ai carbapenemi con limitate opzioni terapeutiche.**

PSEUDOMONAS AERUGINOSA



Cefiderocol treatment Versus ceftolozane/tazobactam for the treatment of pneumonia and/or bloodstream INFeCtions due to multidrug-resistant *PsEudomonas aeruginosa* (CONVINCE)

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BACKGROUND

- Ceftolozane/tazobactam (C/T) is a guideline recommended first-line treatment option for invasive infections due to DTR *P. aeruginosa*
- The CACTUS study demonstrated that C/T was associated with increased rates of clinical success at day 30 compared to ceftazidime/avibactam for the treatment of patients with pneumonia or bloodstream infections due to MDR *P. aeruginosa*
- Cefiderocol (FDC) displays potent *in vitro* activity against *P. aeruginosa*, including drug-resistant strains
- Clinical trials for FDC have produced mixed results, but have only included a small number of patients with MDR *P. aeruginosa* infections
- Limited real-world data have been published to date assessing comparative effectiveness of FDC to other novel β -lactams for the treatment of resistant *P. aeruginosa*, and currently available data are confounded by FDC being employed largely for refractory disease
- CONVINCE was designed to overcome the limitations of previously published data, and these data represent an interim analysis of an ongoing study

METHODS

- CONVINCE is an ongoing multicenter retrospective observational study comparing C/T and FDC for the treatment of MDR *P. aeruginosa* across the PRECEDENT Network in the US
- Adult patients were eligible if they had pneumonia or bacteremia due to MDR *P. aeruginosa* and received C/T or FDC for > 48 hours initiated within 7 days of index MDR *P. aeruginosa* culture
- Exclusion criteria included cystic fibrosis, presence of a metastatic infection requiring prolonged treatment, and documented *in vitro* resistance to the study drug
- To minimize confounding, only the first eligible treatment course with either drug was included. Eligibility criteria mandated that study drug was started empirically or as the initial antibiotic switch due to treatment failure or resistance to the initial antibiotic administered. Patients who were prescribed study drug for any subsequent switches in therapy were excluded.
- The primary outcome was clinical success at day 30 defined as survival, infection cure, and an absence of recurrence. Secondary outcomes include 7-day clinical success, 90-day mortality, recurrence, and resistance development
- Multivariate logistic regression was performed to assess the independent impact of treatment on key study outcomes

RESULTS AND DISCUSSION

Table 1. Patient demographics, underlying diseases, severity of illness, and treatment characteristics of patients treated with C/T or FDC for pneumonia or bacteremia

	C/T (n=141)	FDC (n=72)	P-value
Patient demographics and underlying diseases			
Median age in years (IQR)	60 (47 – 68)	60 (47 – 67)	0.84
Male sex, n (%)	87 (62)	42 (58)	0.66
Race, n (%)			0.52
• White	102 (72)	45 (63)	
• Black/African American	29 (21)	18 (25)	
• Other	10 (7)	9 (12)	
Weight, kg (Mean $\pm$ SD)	79.6 $\pm$ 25.4	76.5 $\pm$ 22.3	0.30
Solid-organ transplant recipient, n (%)	22 (16)	26 (36)	<0.01
Neutropenia (ANC <1500), n (%)	7 (5)	6 (8)	0.37
Chronic ventilator dependence, n (%)	56 (40)	32 (44)	0.53
Median Charlson Comorbidity Index (IQR)	4 (3 – 6)	4.5 (3 – 6)	0.81
Origin of hospital admission, n (%)			0.32
• Home	75 (53)	34 (47)	
• LTAC/SNF	29 (21)	14 (19)	
• Outside hospital	33 (23)	24 (33)	
Severity of illness at study drug initiation			
Median SOFA score (IQR)	6 (4 – 9)	8 (4 – 12.75)	0.04
Median NCR-ME ₁ score (IQR)	8 (3 – 8)	8 (3 – 8)	0.72
Receipt of renal replacement therapy, n (%)	34 (24)	32 (44)	<0.01
Residence in the ICU, n (%)	96 (68)	55 (76)	0.21
Septic shock, n (%)	37 (26)	26 (36)	0.15
Mechanical ventilation, n (%)	88 (62)	53 (74)	0.13
Infection types and treatment characteristics			
Bacteremia, n (%)	30 (21)	11 (15)	0.36
Pneumonia, n (%)	111 (79)	61 (85)	0.36
• CAP	15 (11)	3 (4)	
• HAP	15 (11)	10 (14)	
• vHAP	17 (12)	10 (14)	
• VAP	64 (45)	38 (53)	
History of MDR <i>P. aeruginosa</i> **	40 (29)	25 (35)	0.43
Resistance classification***			
• CR	125 (89)	63 (88)	0.82
• MuR	132 (94)	69 (96)	0.76
• D.R	54 (38)	52 (72)	<0.01
Median time to study drug in hours (IQR)	69.8 (42.3 – 94.0)	56.9 (25.8 – 98.2)	0.31
Active treatment before study drug, n (%)	23 (16)	9 (13)	0.55
Receipt of prolonged infusion, n (%)	57 (40)	67 (93)	<0.01
Median treatment duration in days (IQR)	7.4 (5.7 – 12.4)	9.5 (6.4 – 13.4)	0.03
Combination treatment, n (%)	19 (13)	28 (39)	<0.01
• Inhaled antibiotics	15 (11)	16 (22)	
• Intravenous antibiotics	3 (3)	10 (14)	
• Both inhaled and intravenous	1 (1)	2 (3)	
Co-infection, n (%)	53 (38)	31 (43)	0.46
Co-infection appropriately treated	52 (98)	29 (94)	

** Within the preceding 60 days

*** CR = carbapenem-resistant, resistant to ≥ 1 tested carbapenem; MDR = multidrug-resistant, resistant to ≥ 1 agent in ≥ 3 different classes; DTR = difficult to treat-resistant, resistant to all tested traditional anti-pseudomonal β -lactams and fluoroquinolones

- Interim data include 213 patients (72 for FDC and 141 for C/T) from 14 sites within the United States
- Treatment arms were generally similar (table 1), however, patients who received FDC:
 - Were more frequently solid organ transplant recipients (36% vs 16%; $p < 0.01$)
 - Had higher SOFA scores (median 8 vs 6; $p = 0.04$)
 - Were more commonly receiving renal replacement therapy (44% vs 24%; $p < 0.01$)
 - Were more frequently infected with a difficult to treat resistant (DTR) *P. aeruginosa* isolate (72% vs 38%; $p < 0.01$)
 - More frequently received study drug as a prolonged infusion (93% vs 40%; $p < 0.01$)
 - Received a longer duration of therapy (median 9.5 vs 7.4 days; $p = 0.03$)
 - Were more likely to receive combination therapy (39% vs. 13%; $p < 0.01$)
- Rates of clinical success (67% vs 67%), 30-day mortality (17% vs 16%), and 30-day recurrence (13% vs 13%) were similar between patients receiving FDC and C/T.
- Adjusted analyses did not demonstrate a difference between FDC and C/T for any outcome (Table 2)
- Interim results support FDC as an effective treatment option for pneumonia and bloodstream infections due to MDR *P. aeruginosa*, and enrollment is ongoing to reach the target sample size

Table 2. Clinical outcomes of patients treated with C/T or FDC

	C/T (n=141)	FDC (n=72)	P-value	OR (95% CI)	aOR (95% CI)*
Clinical success at day 7, n (%)	121 (86)	66 (92)	0.27		
Clinical success at day 30, n (%)	94 (67)	48 (67)	1.00	1.00 (0.55 – 1.83)	1.62 (0.81 – 3.24)
• Pneumonia	74 (67)	41 (67)			
• Bacteremia	20 (67)	7 (64)			
All-cause mortality at day 30, n (%)	22 (16)	12 (17)	0.84	1.08 (0.50 – 2.33)	0.89 (0.34 – 2.35)
All-cause mortality at day 90, n (%)	39 (28)	21 (29)	0.82	1.08 (0.58 – 2.01)	0.77 (0.37 – 1.58)
Recurrent infection within 30 days, n (%)	18 (13)	9 (13)	0.96	0.98 (0.42 – 2.29)	0.69 (0.27 – 1.76)
Recurrent infection within 90 days, n (%)	43 (31)	16 (23)	0.22	0.66 (0.34 – 1.29)	0.56 (0.28 – 1.12)
Development of resistance, n (%)**	25/127 (20)	8/58 (14)	0.41		
Disposition at hospital discharge, n (%)			0.28		
• Home	38 (27)	13 (18)			
• LTAC/SNF/Rehab	55 (39)	35 (49)			
• Death/hospice	38 (27)	22 (31)			

*Odds Ratios are reported for FDC vs C/T; aOR for clinical success at day 30 adjusted for SOFA score and combination therapy; aOR for 30 day mortality adjusted for SOFA score, RRT, ICU status, combination therapy, vasopressors, and mechanical ventilation; aOR for 90 day mortality adjusted for SOFA score, combination therapy, RRT, and ICU status; aOR for 30-day recurrence adjusted for SOFA score, RRT, combination therapy, vasopressors; aOR for 90 day recurrence adjusted for mechanical ventilation and RRT.

** Rate determined among patients with documented baseline susceptibility to study drug and testing according to local microbiology practices

PSEUDOMONAS AERUGINOSA

1. CONVINCe (POSTER 1885)

J. Pogue et al., Cefiderocol treatment Versus ceftolozane/tazobactam for the treatment of pneumonia and/or bloodstream infections due to multidrug-resistant Pseudomonas aeruginosa (CONVINCE)

Studio multicentrico statunitense che confronta cefiderocol (FDC) con ceftolozano/tazobactam (C/T) per il trattamento di polmoniti o batteriemie da *P. aeruginosa* multiresistente.

HIGHLIGHTS PRINCIPALI

- L'analisi *ad interim* ha coinvolto 213 pazienti (72 trattati con FDC e 141 con C/T).
- I pazienti che hanno ricevuto cefiderocol erano più gravi: avevano punteggi SOFA più alti (mediana 8 vs 6), maggiore necessità di terapia sostitutiva renale (44% vs 24%) e infezioni da ceppi DTR (*Difficult-to-Treat Resistant*) più frequenti (72% vs 38%).
- Nonostante la maggiore gravità del gruppo FDC, il tasso di successo clinico a 30 giorni è stato del 67% per entrambi i gruppi.

TAKE-HOME MESSAGE

I risultati intermedi di tale studio (ancora in corso) confermano che cefiderocol rappresenta un'opzione terapeutica efficace per il trattamento di polmoniti e batteriemie causate da *P. aeruginosa* multiresistente.

In questa analisi cefiderocol si è dimostrato un'opzione terapeutica efficace quanto ceftolozane/tazobactam, pur essendo stato impiegato in una popolazione con quadro clinico più compromesso.

P4814

Cefiderocol as a decisive rescue therapy in Fournier's gangrene caused by extensively drug-resistant *Pseudomonas aeruginosa* after CAR-T therapy

13. Case reports and case series (n<10)

13b. Bacterial infections

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Background

Fournier's gangrene after CAR-T therapy is exceptionally rare and highly lethal. When caused by extensively drug-resistant *Pseudomonas aeruginosa*, therapeutic options narrow dramatically. This case highlights the gap between in vitro susceptibility and clinical efficacy, and shows how cefiderocol enabled recovery despite limited alternatives.

Case(s) description

A 64-year-old man treated with CAR-T therapy for high-grade B-cell lymphoma developed septic shock during profound neutropenia ($N 0.05 \times 10^9/L$). Cultures yielded carbapenem-resistant *Pseudomonas aeruginosa*. He began ceftazidime 6 g/day plus fosfomycin 16 g/day, achieving initial haemodynamic stabilisation.

During neutrophil recovery ($N 6.75 \times 10^9/L$), the infection unexpectedly progressed into rapidly spreading perineal and scrotal necrotising fasciitis with radiological evidence of ischial and pelvic osteomyelitis.

Because the isolate remained susceptible to ceftolozane-tazobactam, therapy was switched to ceftolozane-tazobactam 9 g/day combined with ciprofloxacin 1 g/day, alongside urgent surgical debridement. Despite documented susceptibility, the patient showed minimal clinical response and ongoing necrotising progression. Intraoperative cultures confirmed persistence of extensively drug-resistant *P. aeruginosa*.

Cefiderocol was introduced as rescue therapy at 8 g/day. The clinical response was rapid and marked: systemic inflammation decreased, local tissue stabilised, and delayed scrotal reconstruction became feasible. A later wound dehiscence required further debridement, but infection remained controlled under cefiderocol. Persistent radiological signs of pelvic osteomyelitis warranted extension of cefiderocol to a 12-week course.

At 60-day follow-up, the patient exhibited full secondary-intention healing without recurrence and remained clinically stable despite ongoing rectal colonisation.

Discussion

This case demonstrates that susceptibility in vitro does not guarantee success in vivo, particularly in immunocompromised CAR-T recipients with deep soft-tissue and bone infections. Ceftolozane-tazobactam, despite susceptibility, failed clinically. Cefiderocol produced rapid and sustained control and enabled effective surgical management, including treatment of pelvic osteomyelitis. Cefiderocol should be considered a key therapeutic option for carbapenem-resistant *Pseudomonas aeruginosa* in high-risk CAR-T patients when conventional agents fail despite apparent activity.

References, 300 characters, including spaces (if exceeding 300 characters please provide DOI number only) :

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Conflicts of interest

Do any of the authors have conflicts of interest related to the studies presented in this abstract?

No

PSEUDOMONAS AERUGINOSA

2. CASO CLINICO (POSTER 4814)

A. Sollima et al., Cefiderocol as a decisive rescue therapy in Fournier's gangrene caused by extensively drug-resistant Pseudomonas aeruginosa after CAR-T therapy

Il caso clinico descrive un paziente oncologico che, a seguito di terapia CAR-T, ha sviluppato una gangrena di Fournier causata da *P. aeruginosa* XDR. Lo studio analizza l'efficacia di cefiderocol come terapia di salvataggio dopo il fallimento clinico di precedenti regimi antibiotici documentati come sensibili *in vitro*.

HIGHLIGHTS PRINCIPALI

- Un uomo di 64 anni post-terapia con CAR-T ha sviluppato shock settico da *P. aeruginosa* resistente a carbapenemi, evoluto in gangrena di Fournier e osteomielite pelvica.
- Nonostante la suscettibilità *in vitro*, ceftolozane-tazobactam ha fallito clinicamente, con progressione della necrosi tissutale.
- L'introduzione di cefiderocol (8 g/die) ha portato a una rapida stabilizzazione clinica e alla risoluzione dell'infiammazione sistemica. Dopo un ciclo di 12 settimane, il paziente ha raggiunto la completa guarigione senza recidive a 60 giorni.

TAKE-HOME MESSAGE

Cefiderocol può rappresentare un'opzione terapeutica da considerare **precocemente nei pazienti post-CAR-T ad alto rischio con infezioni profonde da *P. aeruginosa***, specialmente anche quando gli agenti convenzionali falliscono nonostante una apparente attività.

Poster 1861

ESCMID Global 2026
17–21 April 2026
Munich, Germany

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Real-World Efficacy of Cefiderocol for Treatment of Infections Caused by Metallo-Beta-Lactamase-Producing Enterobacterales in Spain

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BACKGROUND

- Carbapenem-resistant (CR) Gram-negative bacterial infections, particularly those caused by metallo-beta-lactamase (MBL)-producing CR Enterobacterales (CRE), are associated with increased mortality and morbidity and have limited treatment options [1–3]. Among newer antibiotic agents with *in vitro* activity against MBL-producing Enterobacterales, cefiderocol [4,5] and aztreonam-avibactam [6,7] are approved for clinical use.
- The objectives of the retrospective CIRCE study were to evaluate the clinical outcomes of cefiderocol treatment in patients with confirmed MBL-CRE infections.

METHODS

- CIRCE was a retrospective, observational, descriptive, multicentre study in Spain (January 2023–April 2025) investigating the clinical outcomes in adult patients with confirmed MBL-producing CRE infections, who received cefiderocol for ≥ 72 hours.
- Patients were excluded if they had concurrent non-MBL Gram-negative infections that were cefiderocol resistant by European Committee on Antimicrobial Susceptibility Testing criteria; cefiderocol use within 28 days before current cefiderocol initiation; receipt of other investigational agent; or MBL infections with cefiderocol minimum inhibitory concentrations > 8 $\mu\text{g/mL}$.
- The main outcomes were clinical cure and clinical response at Day 14, all-cause mortality and survival at days 14 and 28.
- Clinical cure at Day 14: resolution of all signs and symptoms of infection such that no antibiotic therapy was required to treat the infection caused by the MBL-CRE pathogen and where no additional Gram-negative antibiotic was administered to supplement the antibiotic regimen from > 96 hours after cefiderocol initiation to Day 14.
- Clinical response at Day 14: patients who had either complete resolution of signs and symptoms of infection OR showed clinical improvement but not complete resolution, and where no additional Gram-negative antibiotic was administered to supplement the antibiotic regimen from > 96 hours after cefiderocol initiation to Day 14.
- Among data collected, patients' baseline demographics, clinical characteristics, baseline Gram-negative pathogen and susceptibilities, MBL status, and cefiderocol use, and adverse events associated with cefiderocol treatment were evaluated.
- The analyses were mainly descriptive, and no formal sample size calculation was performed.

RESULTS

Demographics and baseline characteristics

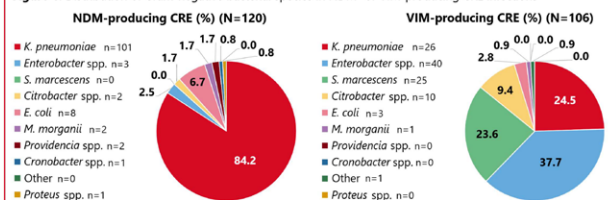
- A total of 232 patients were treated with cefiderocol for MBL-producing CRE infections (Table 1). There were 120 NDM producers and 106 VIM producers (Figure 1). Additionally, six patients had ≥ 2 MBLs (NDM + VIM [n=3]; IMP + VIM [n=1]; NDM + GIM [n=1]; NDM + VIM + OXA-48 [n=1]). Of the overall population, 34.1% (n=79) of patients had a different carbapenemase other than an MBL enzyme, mostly OXA-48.
- K. pneumoniae* and *Enterobacter* spp. were the most frequent NDM-producing and VIM-producing CREs, respectively (Figure 1).
- Almost 40% of NDM-producing CRE infections originated from the urinary tract, whereas more than half of the VIM-producing CRE infections originated from the respiratory tract (28.3%) or the urinary tract (23.6%) (Figure 2).
- Among patients with VIM-producing CRE infections, significantly more patients were admitted to the intensive care unit (ICU) and had septic shock at initiation of cefiderocol treatment compared with NDM-producing CRE infections (Table 2).
- Cefiderocol was administered as targeted therapy or empirical therapy in approximately half of patients in both NDM-producing (51.7% and 45.0%, respectively) and VIM-producing (48.1% and 50.9%, respectively) CRE infections.

Table 1. Baseline demographics, clinical characteristics and antibiotic use in patients with MBL-producing CRE infections

	Overall N=232	<i>K. pneumoniae</i> N=132	<i>Enterobacter</i> spp. N=43	<i>Serratia</i> spp. N=26	<i>E. coli</i> N=11	Other N=20
Sex (male), n (%)	161 (69.4)	95 (72.0)	27 (62.8)	18 (69.2)	8 (72.7)	13 (65.0)
Age (years), median (min; max)	66.0 (19.0; 93.0)	62.5 (28.0; 93.0)	68.0 (19.0; 89.0)	62.0 (21.0; 80.0)	71.0 (49.0; 80.0)	65.5 (20.0; 82.0)
Most frequent pre-existing medical condition, n (%)	N=200 (86.2)	N=117 (88.6)	N=35 (81.4)	N=20 (76.9)	N=10 (90.9)	N=18 (90.0)
Tumour in the past 5 years	70 (35.0)	45 (38.5)	14 (40.0)	4 (20.0)	3 (30.0)	4 (22.2)
Diabetes mellitus	56 (28.9)	26 (22.2)	15 (42.9)	10 (50.0)	2 (20.0)	3 (16.7)
Moderate or severe CKD	51 (25.5)	27 (23.1)	11 (31.4)	5 (25.0)	1 (10.0)	7 (38.9)
Severity of illness						
CCI, median (min; max)	5.0 (0; 13.0)	5.50 (0; 12.0)	5.0 (0; 13.0)	3.5 (0; 13.0)	5.0 (3.0; 9.0)	5.00 (0; 7.0)
ICU, n (%)	62 (26.7)	25 (18.9)	9 (20.9)	24 (92.3)	3 (27.3)	7 (35.0)
Septic shock, n (%)	30 (12.9)	14 (10.6)	7 (16.3)	7 (26.9)	1 (9.1)	1 (5.0)
Immunosuppression, n (%)	67 (28.9)	38 (28.8)	15 (34.9)	3 (11.5)	3 (27.3)	8 (40.0)
Ventilation, n (%)	42 (18.1)	15 (11.4)	4 (9.3)	19 (73.1)	3 (27.3)	1 (5.0)
Renal impairment	N=154 (66.4)	N=89 (67.4)	N=28 (65.1)	N=15 (57.7)	N=9 (81.8)	N=13 (65.0)
Mild	92 (59.7)	58 (65.2)	17 (60.7)	6 (40.0)	8 (88.9)	3 (23.1)
Moderate	34 (22.1)	17 (19.1)	5 (17.9)	6 (40.0)	1 (11.1)	5 (38.5)
Severe	17 (11.0)	6 (6.7)	6 (21.4)	2 (13.3)	0 (0.0)	3 (23.1)
End-stage renal disease	11 (7.1)	8 (9.0)	0 (0.0)	1 (6.7)	0 (0.0)	2 (15.4)
Prior antibiotic treatment, n (%)	152 (65.5)	86 (65.2)	34 (79.1)	7 (26.9)	10 (90.9)	15 (75.0)
Duration of prior antibiotics (days), median (min; max)	3.0 (0; 111.0)	3.5 (0; 76.0)	6.5 (0; 111.0)	0.0 (0; 34.0)	4.0 (0; 46.0)	13.0 (0; 85.0)
Use of cefiderocol, n (%)						
Targeted therapy	114 (49.1)	70 (53.0)	15 (34.9)	12 (46.2)	4 (36.4)	13 (65.0)
Empirical therapy	113 (48.7)	59 (44.7)	28 (65.1)	14 (53.9)	5 (45.5)	7 (35.0)
Unsure if targeted or empirical	5 (2.2)	3 (2.3)	0 (0.0)	0 (0.0)	1 (9.1)	0 (0.0)
Treatment duration (days), median (min; max)	8.0 (2.3; 91.2)	7.8 (2.3; 44.5)	10.0 (3.0; 91.2)	7.7 (3.5; 37.9)	9.7 (3.1; 13.1)	9.5 (3.3; 83.8)
Combination therapy, n (%)	44 (19.0)	24 (18.2)	10 (23.3)	3 (11.5)	3 (27.3)	4 (20.0)
Monotherapy, n (%)	188 (81.0)	108 (81.8)	33 (76.7)	23 (88.5)	8 (72.7)	16 (80.0)

CCI, Charlson Comorbidity Index; CKD, chronic kidney disease; CRE, carbapenem-resistant Enterobacterales; ICU, intensive care unit; MBL, metallo-beta-lactamase. *Solid or haematological.

Figure 1. Distribution of Gram-negative bacterial species in NDM- or VIM-producing CRE infections



CRE, carbapenem-resistant Enterobacterales; MBL, metallo-beta-lactamase; NDM, New-Delhi MBL; VIM, Verona integron-encoded MBL.

Figure 2. Distribution of infection sites for patients infected by NDM- or VIM-producing CRE

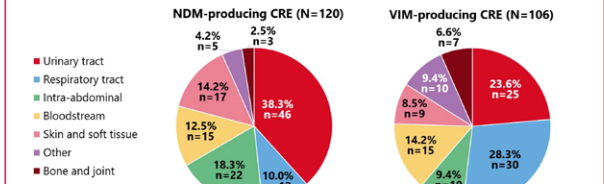


Table 2. Severity of illness in patients infected by NDM- or VIM-producing CRE

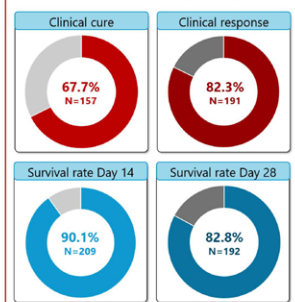
ICU status, n (%)	NDM (N=120)	VIM (N=106)	P value*
No	102 (85.0)	65 (61.3)	0.0001
Yes	18 (15.0)	41 (38.7)	
Presence of septic shock, n (%)			0.0158
No	111 (92.5)	86 (81.1)	
Yes	9 (7.5)	20 (18.9)	

CRE, carbapenem-resistant Enterobacterales; ICU, intensive care unit; MBL, metallo-beta-lactamase; NDM, New-Delhi MBL; VIM, Verona integron-encoded MBL. *Fisher's exact test.

Overall clinical outcomes

- Overall clinical cure and clinical response rates were 67.7% and 82.3%, respectively (Figure 3). Overall rates of survival at days 14 and 28 were 90.1% and 82.8%, respectively.
- Among patients with follow-up blood or urine samples, the microbiological eradication rates were high (i.e., $> 80\%$; Figure 4).

Figure 3. Overall clinical outcomes in MBL-producing CRE infections in the CIRCE study (N=232)

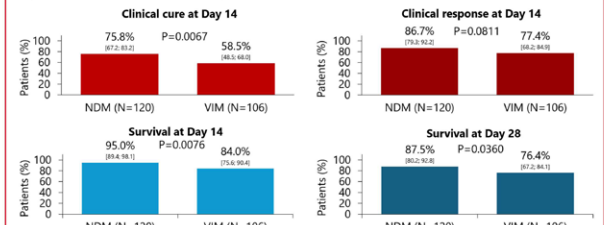


CRE, carbapenem-resistant Enterobacterales; MBL, metallo-beta-lactamase. *Six patients had two MBL enzymes: NDM + VIM (n=3); IMP + VIM (n=1); NDM + GIM (n=1); NDM + VIM + OXA-48 (n=1).

Clinical outcomes by type of MBL

- At Day 14, 75.8% and 58.5% of patients with NDM- and VIM-producing CRE infections, respectively, achieved clinical cure, with clinical response rates of 86.7% and 77.4%, and survival rates of 95.0% and 84.0%, respectively (Figure 5).
- Treatment-emergent resistance was found in 0.8% (n=1) and 1.9% (n=2) of NDM- and VIM-producing CRE isolates, respectively.
- Survival rates at Day 28 were 87.5% and 76.4%, respectively (Figure 5).

Figure 5. Outcomes for NDM- or VIM-producing CRE infections



CRE, carbapenem-resistant Enterobacterales; GIM, German impenemase MBL; IMP, imipenemase MBL; MBL, metallo-beta-lactamase; NDM, New-Delhi MBL; OXA, oxacillinase; VIM, Verona integron-encoded MBL. P values were based on Fisher's exact test. Data are shown as % [95% confidence interval].

CONCLUSIONS

- The results of this real-world study showed that cefiderocol treatment for infections caused by MBL-producing Enterobacterales achieved good clinical outcomes, particularly in infections caused by NDM-producing CRE.
- The less favourable clinical outcomes observed in patients with VIM-producing CRE infections were most likely due to the significantly higher prevalence of septic shock and longer ICU stays.

References

- Tseng G, et al. *Infect Med* 2025;33:249–260. 2. Tan X, et al. *Infect Drug Resist* 2021;14:125–142. Erratum in: *Infect Drug Resist* 2021;14:595.
- Pilinis B, et al. *Int J Antimicrob Agents* 2025;66:107630. 4. Timisi JF, et al. *Clin Infect Dis* 2022;75:1081–1084. 5. Falcone M, et al. *Clin Infect Dis* 2022;75:1085–1087. 6. Daikos GL, et al. *JAC Antimicrob Resist* 2025;7:dlaf131. 7. Huespe IA, et al. *Lancet Reg Health Am* 2025;49:101175.

Conflict of interest

LG, CL and JGC are employees of the Shionogi Group.

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ENTEROBACTERALES

1. CIRCE (POSTER 1861)

J. Boán et al., Real-World Efficacy of Cefiderocol for Treatment of Infections Caused by Metallo-Beta-Lactamase-Producing Enterobacterales in Spain

Lo studio multicentrico spagnolo si è focalizzato sulle infezioni da *Enterobacterales* produttori di metallo-beta-lattamasi (MBL), incluse NDM e VIM.

HIGHLIGHTS PRINCIPALI

- Sono stati inclusi 232 pazienti. I patogeni principali erano *K. pneumoniae* e *Enterobacter spp.*
- 120 pazienti presentavano infezione da NDM, 106 da VIM e 6 da più di una MBL.
- Il tasso di guarigione clinica a 14 giorni è stato del 67,7%, con una sopravvivenza al giorno 28 dell'82,8%.
- Il tasso di guarigione clinica a 14 giorni è risultato del 75,8% per le infezioni da NDM rispetto al 58,5% per quelle da VIM. I tassi di sopravvivenza a 14 giorni è stato del 95,0% per i pazienti NDM e all'84,0% per i pazienti con VIM.

TAKE-HOME MESSAGE

Cefiderocol conferma **un'ottima efficacia clinica contro gli *Enterobacterales* MBL produttori, sia nelle infezioni da ceppi NDM che VIM, inclusi i casi più complessi dal punto di vista clinico.**

ENTEROBACTERALES

2. CIRCE (POSTER 1862)

J. Villa et al., Categorisation of Routine Cefiderocol Susceptibility by EUCAST Zone Diameter Breakpoints Has Low Predictability of Clinical Outcome for Metallo-Beta-Lactamase-Producing Enterobacterales

Lo studio valuta se gli attuali criteri EUCAST per la determinazione della sensibilità a cefiderocol mediante disco diffusione, sono in grado di predire gli esiti clinici nei pazienti con infezioni da MBL.

HIGHLIGHTS PRINCIPALI

- Dall'analisi di 133 pazienti dello studio CIRCE è emerso che il 46,6% degli isolati era categorizzato come "Resistente" (R) secondo i criteri di interpretazione per la disco diffusione di EUCAST.
- Nonostante la categorizzazione, gli esiti clinici sono risultati sovrapponibili a quelli dei pazienti con isolati "Suscettibili".
- La guarigione clinica a 14gg è stata del 67,6% per il gruppo categorizzato come (S) rispetto al 69,4% per il gruppo categorizzato (R) e la sopravvivenza a 28gg del 80,3% del gruppo (S) rispetto al 83,9% del gruppo (R).

TAKE-HOME MESSAGE

Questi dati suggeriscono che i criteri interpretativi della sensibilità a cefiderocol con disco diffusione secondo EUCAST sembrerebbero non correlare all'outcome clinico dei pazienti. Un risultato "R" alla diffusione su disco dovrebbe suggerire un test di conferma in microdiluizione mediante microdiluizione in brodo.

Poster 1336

ESCMID Global 2026
17–21 April 2026
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Activity of Cefiderocol and Comparator Agents Against European Enterobacterales, Including Carbapenem-Resistant Isolates, from the SENTRY Antimicrobial Surveillance Program (2020–2024)

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INTRODUCTION

- Carbapenem-resistant Enterobacterales (CRE) isolates represent a significant global healthcare threat and are recognised by the World Health Organization as critical priority pathogens.
- Cefiderocol, a siderophore cephalosporin, has broad activity against difficult-to-treat Gram-negative bacteria, including CRE and isolates that are resistant to recent beta-lactam-beta-lactamase inhibitor combinations (BL-BLIs).

OBJECTIVE

- In this study, we analysed the contemporary *in vitro* activity of cefiderocol and comparator agents against clinical CRE isolates collected from Europe, Turkey and Israel during 2020–2024 as part of the SENTRY Antimicrobial Surveillance Program.
- The surveillance study was designed to evaluate specifically *in vitro* activity according to major carbapenemase types, including metallo-beta-lactamases, and the activity of cefiderocol against isolates exhibiting cross-resistance to recent beta-lactam-beta-lactamase inhibitor combinations.

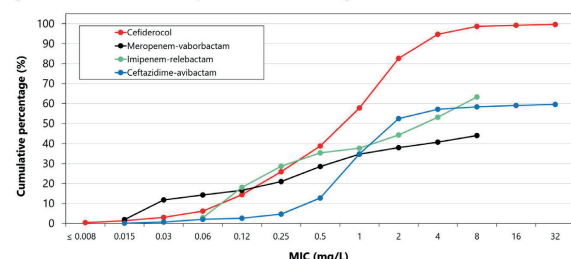
METHODS

- Gram-negative isolates responsible for documented infections were consecutively collected in European (n=38), Israeli (n=2) and Turkish (n=2) hospitals during 2020–2024 as part of the SENTRY Antimicrobial Surveillance Program.
- Minimum inhibitory concentrations were determined according to the Clinical and Laboratory Standards Institute (CLSI) methods using broth microdilution with cation-adjusted Mueller–Hinton broth (CAMHB) for comparator agents and iron-depleted CAMHB for cefiderocol.
- Resistance to carbapenems was based on European Committee on Antimicrobial Susceptibility Testing (EUCAST) breakpoints for non-meningitis infections (meropenem >8 mg/L and/or imipenem >4 mg/L).
- Susceptibility to cefiderocol and comparators was assessed according to both EUCAST (v15) and CLSI/US Food and Drug Administration (FDA) (M100 ED35:2025) breakpoints.

RESULTS

- A total of **21,451** clinical isolates of Enterobacterales were tested, of which 3.4% (n=730) were defined as CRE by EUCAST criteria (**Table 1**).
 - The most prevalent CRE was *Klebsiella pneumoniae* (87.4%).
 - The most prevalent single carbapenemases were KPC (35%), NDM (21%) and OXA-48 type enzymes (17%); 14% of isolates carried both OXA-48 and metallo-beta-lactamases (MBLs) (**Figure 2**).
- Cefiderocol had potent activity against CRE (**Figure 1**) and showed the highest susceptibility rates by both EUCAST and CLSI/FDA breakpoint criteria (**Table 1**).
- High levels of cross-resistance were observed between the three BL-BLI combinations tested, whereas cefiderocol retained high activity against BL-BLI-resistant phenotypes (**Table 1**).
- Cefiderocol retained good activity against isolates carrying carbapenemases from different Ambler classes (**Figure 2**).

Figure 1 MIC distributions of European CRE isolates tested against cefiderocol or BL-BLI combinations.



BL-BLI, beta-lactam-beta-lactamase inhibitor; CRE, carbapenem-resistant Enterobacterales; MIC, minimum inhibitory concentration.

Acknowledgements

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Conflict of interest

CL, HY and YY are employees of the SHIONOGI Group.

CONCLUSIONS

- Cefiderocol had potent activity against CRE isolates from Europe, including MBL-producing strains and the activity was retained against subsets cross-resistant to recent BL-BLI combinations.
- Cefiderocol should be considered as a treatment option when CRE, including those producing MBLs, are suspected or confirmed.

Table 1 Susceptibilities to cefiderocol and comparators tested against European Enterobacterales isolates, including resistant phenotypes.

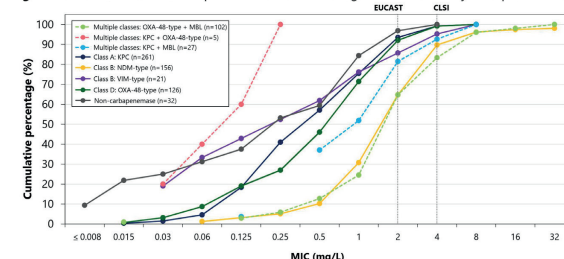
	MIC ₅₀ (mg/L)	MIC ₉₀ (mg/L)	%S EUCAST ^a	%S CLSI/FDA ^a
All Enterobacterales (n=21,451)				
Cefiderocol	0.06	0.5	98.8	99.7
Meropenem	0.03	0.06	96.4	96.1
Meropenem-vaborbactam	0.03	0.06	98.1	97.9
Imipenem-relebactam ^b	0.12	1	97.1	92.7
Ceftazidime-avibactam	0.12	0.5	98.4	98.4
CRE: Meropenem MIC >8 mg/L and/or imipenem >4 mg/L (n=730)^c				
Cefiderocol	1	4	82.6	94.6
Meropenem	>32	>32	4.1	3.6
Meropenem-vaborbactam	>8	>8	43.9	40.7
Imipenem-relebactam ^b	4	>8	44.2	37.7
Ceftazidime-avibactam	2	>32	58.4	58.4
Meropenem-vaborbactam MIC >8 mg/L (n=412)				
Cefiderocol	2	4	73.5	91.0
Meropenem	>32	>32	0.0	0.0
Meropenem-vaborbactam	>8	>8	0.0	0.0
Imipenem-relebactam ^b	>8	>8	12.4	3.4
Ceftazidime-avibactam	>32	>32	33.5	34.0
Imipenem-relebactam MIC >2 mg/L (n=402) excluding Morganellaceae				
Cefiderocol	2	4	72.6	90.8
Meropenem	>32	>32	5.2	2.2
Meropenem-vaborbactam	>8	>8	11.7	7.5
Imipenem-relebactam	8	>8	0.0	0.0
Ceftazidime-avibactam	>32	>32	25.4	25.4
Ceftazidime-avibactam MIC >8 mg/L (n=336)				
Cefiderocol	2	8	68.5	88.1
Meropenem	>32	>32	8.3	6.3
Meropenem-vaborbactam	>8	>8	18.5	12.8
Imipenem-relebactam ^b	>8	>8	4.5	2.7
Ceftazidime-avibactam	>32	>32	0.0	0.0

CLSI, Clinical and Laboratory Standards Institute; CRE, carbapenem-resistant Enterobacterales; EUCAST, European Committee on Antimicrobial Susceptibility Testing; FDA, US Food and Drug Administration; MIC, minimum inhibitory concentration; S, susceptible. ^aCriteria as published by EUCAST, CLSI and FDA (2025).

^bAll Enterobacterales species were included in the analysis, but CLSI and EUCAST breakpoints for imipenem-relebactam exclude Morganellaceae.

^cCRE included *Enterobacter cloacae* species complex (30), *Escherichia coli* (12), *Klebsiella aerogenes* (4), *K. oxytoca* (4), *K. pneumoniae* (538), *Morganella morganii* (2), *Proteus mirabilis* (29), *P. penneri* (1), *Providencia rettgeri* (1), *P. stuartii* (5) and *Serratia marcescens* (4).

Figure 2 MIC distributions of European CRE isolates tested against cefiderocol by carbapenemase type.



CLSI, Clinical and Laboratory Standards Institute; CRE, carbapenem-resistant Enterobacterales; EUCAST, European Committee on Antimicrobial Susceptibility Testing; KPC, *Klebsiella pneumoniae* carbapenemase; MBL, metallo-beta-lactamase; NDM, New-Delhi MBL; OXA, oxacillinase; VIM, Verona integron-encoded MBL; MIC, minimum inhibitory concentration.



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ENTEROBACTERALES

3. SENTRY (POSTER 1336)

C. Longshaw et al., Activity of Cefiderocol and Comparator Agents Against European Enterobacterales, Including Carbapenem-Resistant Isolates, from the SENTRY Antimicrobial Surveillance Program (2020-2024)

L'analisi si concentra nella valutazione della sensibilità *in vitro* di isolati clinici europei e paesi limitrofi di *Enterobacterales* resistente a carbapenemi (CRE), inclusi produttori di MBL a cefiderocol, confrontandola a quella delle più recenti combinazioni beta-lattamico/inibitore delle beta lattamasi (BL/BLI).

HIGHLIGHTS PRINCIPALI

- Su 21.451 *Enterobacterales*, il 3,4% (730 isolati) è rappresentato da CRE. Tra le CRE, gli enzimi più comuni sono stati KPC (35%), NDM (21%) e OXA-48 (17%), mentre il 14% esprimeva contemporaneamente OXA-48 e MBL.
- Cefiderocol ha mostrato un tasso di sensibilità contro le CRE (94,6% secondo CLSI/FDA) più alto rispetto a ceftazidime-avibactam (58,4%), meropenem-vaborbactam (40,7%) e imipenem-relebactam (37,7%).
- Cefiderocol ha mantenuto un'elevata sensibilità anche contro gli isolati resistenti a ceftazidime-avibactam (sensibilità di cefiderocol: 68.5% secondo EUCAST e 88.1% secondo CLSI/FDA), meropenem/vaborbactam (sensibilità di cefiderocol: 73.5% secondo EUCAST e 91% secondo CLSI/FDA) e imipenem/relebactam (sensibilità di cefiderocol: 72.6% secondo EUCAST e 90.8% secondo CLSI/FDA).

TAKE-HOME MESSAGE

Nello scenario europeo, dove la diversità delle carbapenemasi è elevata, cefiderocol ha mostrato **un'attività elevata contro i CRE, inclusi gli isolati produttori di metallo-beta-lattamasi (MBL) e quelli resistenti ai BL/BLI di ultima generazione.**

STENOTROPHOMONAS MALTOPHILIA

Poster 1865

ESCMID Global 2026
17-21 April 2026
Munich, Germany

Real-world cefiderocol outcomes in the treatment of *Stenotrophomonas* spp. infections: data from the PROVE study

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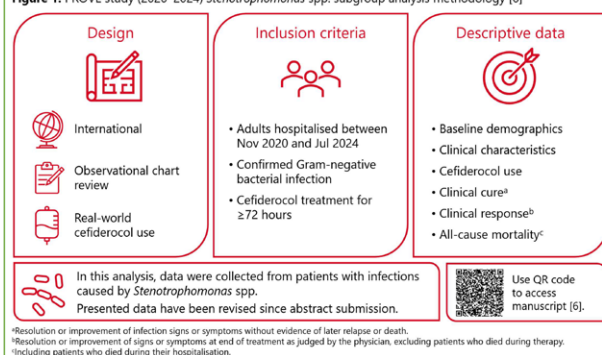


BACKGROUND

- Gram-negative *Stenotrophomonas* spp. have emerged as significant opportunistic pathogens owing to their intrinsic multidrug resistance, which limits treatment options [1].
- Stenotrophomonas* spp. are increasingly implicated in infections among clinically vulnerable patients [2]; however, evidence-based recommendations regarding optimal treatments are lacking [3].
- Cefiderocol is a siderophore cephalosporin antibiotic with potent activity against a broad range of Gram-negative bacteria, including carbapenem-resistant (CR) strains.
- It is approved in the European Union for the treatment of infections due to aerobic Gram-negative organisms in adults with limited treatment options [4].
- In the United States, cefiderocol is indicated for the treatment of complicated urinary tract infections (including pyelonephritis) and hospital-acquired and ventilator-associated bacterial pneumonia [5].
- This subgroup analysis of the PROVE study [6] examined clinical outcomes of individuals with infections caused by *Stenotrophomonas* spp. who received treatment with cefiderocol.

METHODS

Figure 1. PROVE study (2020–2024) *Stenotrophomonas* spp. subgroup analysis methodology [6]



RESULTS

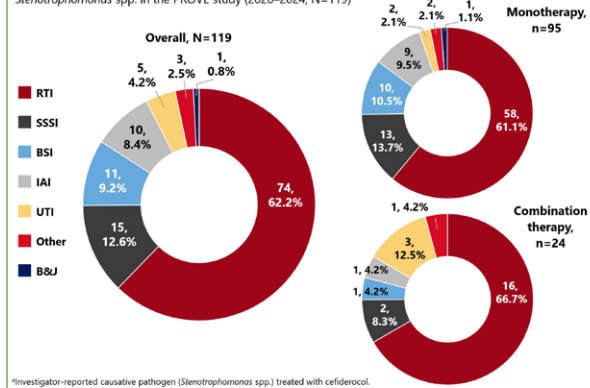
Baseline characteristics

- Patients (N=119) had a median (interquartile range [IQR]) age of 60.0 (47.0–67.0) years, and 66.4% were male (Table 1).
- In total, 73.9% of patients required an intensive care unit stay at the time of cefiderocol initiation, while 63.0% and 49.6% received mechanical ventilation and vasopressors, respectively.
- Overall, 9.2% of patients had sepsis at admission, with 7.6% having septic shock; 31.1% of patients were immunocompromised.
- Median (IQR) length of hospital stay (admission to discharge) was 75.0 (39.0–114.0) days.
- Overall, 66.4% of patients had ≥2 risk factors for acquiring CR Gram-negative infection.
- The respiratory tract was the main primary site of infection (Figure 2).
- Most patients (63.0%) received documented treatment; 22.7% of patients received salvage therapy (Table 1).
- Median (IQR) time from culture to first cefiderocol dose was 5.0 (3.0–8.0) days, and duration of cefiderocol use was 11.0 (7.0–15.0) days.
- Among 58 patients with microbiological results, 57 (98.3%) were susceptible to cefiderocol.
- Monotherapy was the predominant treatment strategy (79.8% of patients vs 20.2% who received combination therapy) (Table 1).
- Patients given combination therapy were more likely to have comorbidities and polymicrobial infections, and to be receiving salvage treatment.

Clinical outcomes

- Clinical cure was attained by 67.4% [95% confidence interval (CI) 57.0%; 76.6%] of patients with *Stenotrophomonas* spp. infection who received cefiderocol monotherapy compared with 50.0% [95% CI 29.1%; 70.9%] of those who received combination treatment and 63.9% [95% CI 54.6%; 72.5%] of patients overall (Figure 3).
- Clinical response to cefiderocol at end of treatment occurred in 72.3% of patients overall (74.7% and 62.5% of patients given monotherapy vs combination therapy, respectively).
- Day 30 all-cause mortality rates were 29.5% with cefiderocol monotherapy and 33.3% with combination therapy.

Figure 2. Primary site of infection* overall and by treatment strategy among patients with *Stenotrophomonas* spp. in the PROVE study (2020–2024; N=119)



*Investigator-reported causative pathogen (*Stenotrophomonas* spp.) treated with cefiderocol. BSI, bone and joint infection; SSSI, skin and skin structure infection; IAI, intra-abdominal infection; RTI, respiratory tract infection; SSSI, skin and skin structure infection; UTI, urinary tract infection.

CONCLUSION

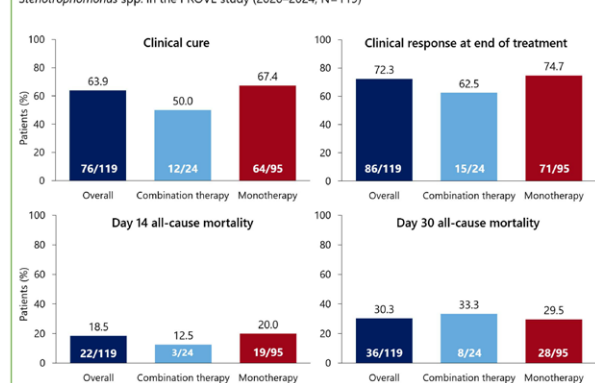
- Cefiderocol demonstrated meaningful clinical outcomes in this population infected with a difficult-to-treat pathogen.
- Baseline clinical characteristics showed that patients with *Stenotrophomonas* spp. in the PROVE study were a high-severity population, demonstrating real-world use of cefiderocol in critically ill patients.
- The rate of susceptibility to *Stenotrophomonas* spp. infection was high (98.3%) in patients with microbiological results.
- In this large cohort of patients with *Stenotrophomonas* spp. infections treated with cefiderocol, relatively few individuals received Infectious Diseases Society of America guideline-recommended combination therapy [7].
- No obvious differences were observed between outcomes with cefiderocol monotherapy and combination therapy.

Table 1. Demographics and infection characteristics by treatment strategy among patients with *Stenotrophomonas* spp. in the PROVE study (2020–2024; N=119)

Parameter	Overall (N=119)	Monotherapy (n=95)	Combination therapy (n=24)
Demographics			
Age (years), median (IQR)	60.0 (47.0–67.0)	60.0 (49.0–67.0)	60.5 (42.5–67.0)
≥65 years old, n (%)	42 (35.3)	36 (37.9)	6 (25.0)
Sex, male, n (%)	79 (66.4)	62 (65.3)	17 (70.8)
Country enrolled, n (%)			
United States	55 (46.2)	45 (47.4)	10 (41.7)
France	16 (13.4)	12 (12.6)	4 (16.7)
Germany	13 (10.9)	10 (10.5)	3 (12.5)
Italy	7 (5.9)	3 (3.2)	4 (16.7)
Spain	21 (17.6)	18 (18.9)	3 (12.5)
United Kingdom	7 (5.9)	7 (7.4)	0
Pre-existing medical conditions, n (%)			
Any pre-existing condition	110 (92.4)	87 (91.6)	23 (95.8)
Diabetes	20 (16.8)	14 (14.7)	6 (25.0)
Chronic pulmonary disease	26 (21.8)	18 (18.9)	8 (33.3)
Congestive heart failure	17 (14.3)	13 (13.7)	4 (16.7)
Medical condition at admission, n (%)			
COVID-19	17 (14.3)	12 (12.6)	5 (20.8)
Sepsis	11 (9.2)	7 (7.4)	4 (16.7)
Septic shock	9 (7.6)	8 (8.4)	1 (4.2)
Immunocompromised patients, n (%)	37 (31.1)	33 (34.7)	4 (16.7)
Severity of illness			
ICU stay at time of cefiderocol initiation, n (%)	88 (73.9)	70 (73.7)	18 (75.0)
Any organ support at cefiderocol initiation, n (%)	77 (64.7)	61 (64.2)	16 (66.7)
Type of organ support, n (%)			
Mechanical ventilation	75 (63.0)	59 (62.1)	16 (66.7)
Continuous renal replacement therapy/dialysis	28 (23.5)	21 (22.1)	7 (29.2)
ECMO	14 (11.8)	7 (7.4)	7 (29.2)
Vasopressor use	59 (49.6)	46 (48.4)	13 (54.2)
Reason for cefiderocol use (as per eCRF), n (%)			
Documented infection	75 (63.0)	62 (65.3)	13 (54.2)
Empirical use	11 (9.2)	9 (9.5)	2 (8.3)
Salvage therapy	27 (22.7)	18 (18.9)	9 (37.5)
Other/unknown	6 (5.0)	6 (6.3)	0
Infection type, n (%)			
Monomicrobial	61 (51.3)	52 (54.7)	9 (37.5)
Polymicrobial	58 (48.7)	43 (45.3)	15 (62.5)

*Reported by the investigator. Documented infection: the pathogen and susceptibilities were known, and cefiderocol use was not due to failure of a prior antibiotic regimen. Empirical use: cefiderocol use started before the pathogen, and/or susceptibilities were available to help guide the choice. Salvage therapy: cefiderocol was used after a prior antibiotic regimen had failed; patients usually received at least 3 days of prior antibiotic therapy to see if there was an adequate response before the next course of antibiotic would be considered salvage. Other/unknown: any other reason provided by the physician. COVID-19, coronavirus disease 2019; eCRF, electronic case report form; ECMO, extracorporeal membrane oxygenation; ICU, intensive care unit; IQR, interquartile range.

Figure 3. Outcomes by cefiderocol treatment strategy and infection type among patients with *Stenotrophomonas* spp. in the PROVE study (2020–2024; N=119)



References

1. Bostanghadr N, et al. *Ann Clin Microbiol Antimicrob* 2024;23:26. 2. Mojica M, et al. *JAC Antimicrob Resist* 2022;4:dlac040. 3. Chang Y, et al. *ASM Case Rep* 2025;10:0127-25. 4. Fetroja® 1 g powder. Summary of Product Characteristics. Shionogi B.V. Herengracht 464, 1017CA Amsterdam, Netherlands; 2024. 5. Fetroja® (cefiderocol) for injection for intravenous use. Prescribing Information. Shionogi Inc. Florham Park, NJ, USA; 2021. 6. Clancy CJ, et al. *Infect Drug Resist* 2024;17:4427–43. 7. Tamura PD, et al. *Clin Infect Dis* 2023;ciad428.

Conflict of interest

JFT: reports lecture fees for Shionogi, Pfizer, Advanz Pharma, Mundipharma, Gilead, Merck, bioMérieux, and Glaxo. J-T: has received fees from Shionogi for consulting or training activities as well as compensation for attending conferences. IM: has received honoraria from Shionogi for consulting, training, and conference participation. EK: has served as a speakers' bureau member for Shionogi. ASH, KS, STN: employees of Shionogi.

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STENOTROPHOMONAS MALTOPHILIA

1. PROVE (POSTER 1865)

J.F. Timsit et al., Real-world cefiderocol outcomes in the treatment of Stenotrophomonas spp. infections: data from the PROVE study

Questo sottogruppo dello studio PROVE approfondisce l'uso di cefiderocol contro *Stenotrophomonas spp.*, un patogeno opportunisto noto per la sua resistenza intrinseca a molte classi di antibiotici e opzioni di trattamento limitate.

HIGHLIGHTS PRINCIPALI

- Sono stati inclusi 119 pazienti con età mediana di 60 anni. Il 73,9% era in terapia intensiva al momento dell'inizio del trattamento e il 64,7% al momento dell'inizio della terapia con cefiderocol riceveva un supporto d'organo.
- Nel gruppo trattato con monoterapia è stata osservata una guarigione clinica del 67,4% contro il 50,0% della terapia di combinazione. La risposta clinica a fine trattamento è stata del 74,7% per la monoterapia e il 62,5% della terapia di combinazione.
- La mortalità a 30 giorni è stata del 29,5% con la monoterapia e del 33,3% per la combinazione.

TAKE-HOME MESSAGE

Cefiderocol ha mostrato una buona efficacia clinica **in pazienti critici affetti da infezioni causate da *Stenotrophomonas spp.*** Non sono state trovate differenze di efficacia nella terapia in monoterapia rispetto alla terapia combo in questo setting di pazienti.

STENOTROPHOMONAS MALTOPHILIA

E0656

ESCMID Global 2026

17–21 April 2026

Munich, Germany

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Activity of cefiderocol against *Stenotrophomonas maltophilia* clinical isolates collected in multi-national antimicrobial surveillance studies SIDERO-WT (2014–2019) and SENTRY (2020–2024)

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SHIONOGI

INTRODUCTION

- Stenotrophomonas maltophilia* is an opportunistic life-threatening pathogen with high intrinsic resistance to a variety of antimicrobials, thereby limiting treatment options.
- Cefiderocol is a siderophore cephalosporin with activity against a variety of Gram-negative bacteria, including *S. maltophilia*. It was approved for clinical use in the United States (US) in 2019 and in Europe in 2020.
- This study assessed the *in vitro* activity of cefiderocol against *S. maltophilia* isolates that were collected between 2014 and 2024 in Europe and the USA, including the pre-marketing surveillance SIDERO-WT and the post-marketing surveillance SENTRY studies. Trends in cefiderocol susceptibility over time were analyzed.

MATERIALS AND METHODS

Bacterial strains

- A total of 4,202 non-duplicate clinical isolates of *S. maltophilia* were collected in the US and Europe from the SIDERO-WT surveillance study (788 isolates from the US and 1,068 isolates from Europe during 2014–2019) and the SENTRY surveillance study (1,291 isolates from the US and 1,055 isolates from Europe during 2020–2024) (Table 1).

Table 1. Number of isolates in SIDERO-WT and SENTRY studies

	SIDERO-WT (2014–2019)	SENTRY (2020–2024)
USA (2,079)	788	1,291
Europe (2,123)	1,068	1,055
Overall (4,202)	1,856	2,346

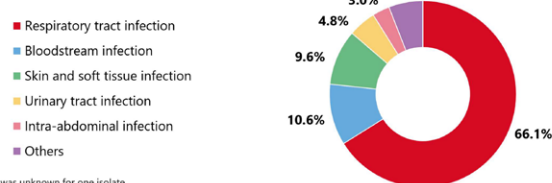
Minimum inhibitory concentration (MIC) determination

- MICs for cefiderocol and comparators were determined according to Clinical and Laboratory Standards Institute (CLSI) guidelines using broth microdilution with iron-depleted cation-adjusted Mueller-Hinton broth (ID-CAMHB) and CAMHB, respectively.
- Susceptibility to cefiderocol and comparators was determined using CLSI 2025 breakpoints.
- The MIC₅₀, MIC₉₀, and susceptibility percentages (%S) of cefiderocol across 10 years were assessed for each region (Europe and the USA).

RESULTS

- Isolates collected in this study were mainly from respiratory infections (66.1%), followed by bloodstream infections (10.6%), skin and soft tissue infections (9.6%), urinary tract infections (4.8%), and intra-abdominal infections (3.0%) (Figure 1).

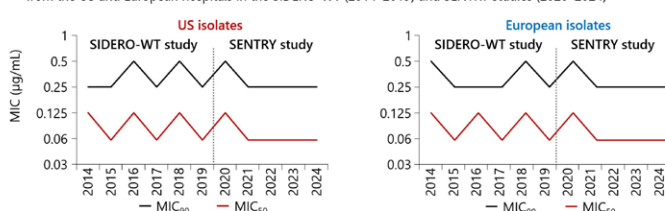
Figure 1. Prevalence of infection sources^a of the *S. maltophilia* isolates (N=4,202) from the SIDERO-WT and SENTRY studies



^aInfection site was unknown for one isolate.

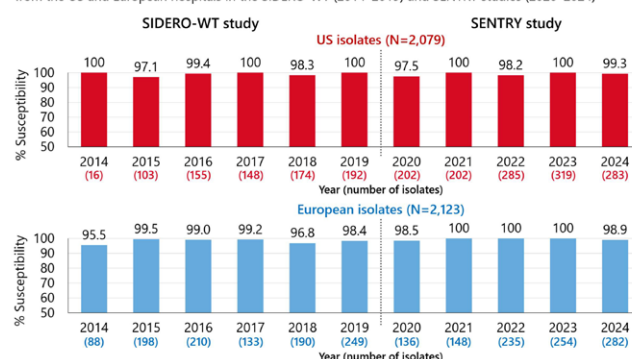
- Overall, a consistent high activity (MIC₅₀, MIC₉₀, and %S) of cefiderocol against *S. maltophilia* was observed over time, with MIC₅₀ values ranging from 0.06 to 0.12 µg/mL, MIC₉₀ values ranging from 0.25 to 0.5 µg/mL, and %S ranging from 95.5% to 100%, irrespective of region (Figures 2 and 3).

Figure 2. Susceptibility (MIC₅₀, MIC₉₀) trend of cefiderocol by year against *S. maltophilia* isolates collected from the US and European hospitals in the SIDERO-WT (2014–2019) and SENTRY studies (2020–2024)



MIC, minimum inhibitory concentration.

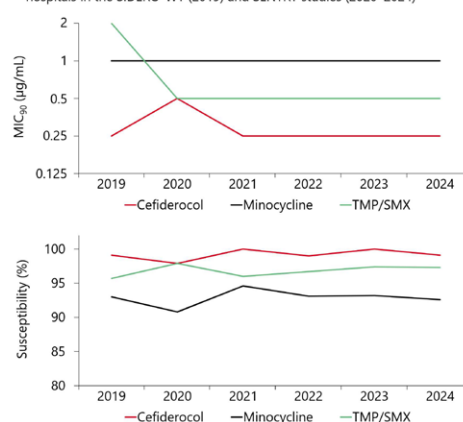
Figure 3. Susceptibility percentages (%S) of cefiderocol by year against *S. maltophilia* isolates collected from the US and European hospitals in the SIDERO-WT (2014–2019) and SENTRY studies (2020–2024)



The susceptibility percentage by year was determined based on the CLSI breakpoints. CLSI, Clinical and Laboratory Standards Institute.

- In comparison to comparator agents (trimethoprim/sulfamethoxazole, levofloxacin, and minocycline), cefiderocol showed the highest %S (97.9–100%) and lowest MIC₅₀ (0.25–0.5 µg/mL) from year 6 in the SIDERO-WT study (2019) and across 5 years from the SENTRY study (2020–2024) (Figure 4 and Table 2).

Figure 4. Susceptibility (MIC₅₀, %S) trend of cefiderocol and comparators by year against *S. maltophilia* isolates collected from the US and European hospitals in the SIDERO-WT (2019) and SENTRY studies (2020–2024)



MIC, minimum inhibitory concentration; %S, susceptibility percentage; TMP/SMX, trimethoprim/sulfamethoxazole.

Table 2. Susceptibility of cefiderocol and comparators against *S. maltophilia* isolates collected from the US and European hospitals in the SIDERO-WT (2019) and SENTRY studies (2020–2024)

Antimicrobials	N	Range (mg/L)	MIC ₅₀ (mg/L)	MIC ₉₀ (mg/L)	%S ^a	%I	%R
Cefiderocol	2787	≤0.03 to >64	0.06	0.25	99.2	– ^b	– ^b
Trimethoprim/sulfamethoxazole	2786	≤0.25 to >4	≤0.25	1	96.9	– ^b	3.1
Minocycline	2786	≤0.06 to 16	0.5	1	92.9	5.2	1.9

^a%S, %I, and %R were determined based on CLSI 2025 breakpoints. ^bNo breakpoints defined. CLSI, Clinical and Laboratory Standards Institute; I, intermediate; R, resistant; S, susceptible.

CONCLUSIONS

- Cefiderocol consistently demonstrated high activity against *S. maltophilia* over a 10-year period, with no significant change in susceptibility before or after its market introduction.
- Continued monitoring of cefiderocol susceptibility is warranted to assure its activity is maintained over time.

Funding: The study was funded by Shionogi & Co., Ltd., Osaka, Japan.
Conflict of interests: YY, CL, STN, HY, BLMDel are employees of Shionogi.

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STENOTROPHOMONAS MALTOPHILIA

2. SIDERO E SENTRY (POSTER E0656)

Y. Yamano et al., Activity of cefiderocol against Stenotrophomonas maltophilia clinical isolates collected in multi-national surveillance studies SIDERO-WT (2014-2019) e SENTRY (2020-2024)

Il lavoro analizza la stabilità dell'attività *in vitro* di cefiderocol verso *Stenotrophomonas maltophilia* nell'arco di dieci anni, coprendo i periodi pre e post-commercializzazione.

HIGHLIGHTS PRINCIPALI

- Sono stati analizzati 4.202 isolati raccolti tra il 2014 e il 2024 (studi SIDERO-WT e SENTRY).
- Cefiderocol ha mostrato una sensibilità complessiva del 99,2%, più alta rispetto a quella di TMP/SMX (96,9%) e di minociclina (92,9%).
- L'introduzione del farmaco nel mercato non ha portato alla comparsa di resistenze significative nel tempo.

TAKE-HOME MESSAGE

Cefiderocol ha mostrato **un'attività *in vitro* elevata (95,5%-100%) e costante contro *Stenotrophomonas maltophilia* in un periodo di osservazione di 10 anni**, mostrando un'attività superiore rispetto ai comparatori sia nel periodo pre che post marketing.

Poster 1864

ESCMID Global 2026

17–21 April 2026

Munich, Germany

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Cefiderocol treatment in polymicrobial infections: subgroup analysis of the real-world PROVE observational study

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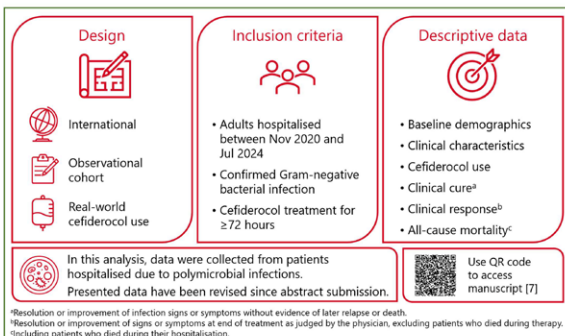


SHIONOGI

BACKGROUND

- Despite the approval of several treatments for carbapenem-resistant (CR) Gram-negative bacterial infections, outcomes often remain poor with high rates of morbidity and mortality [1].
- For patients infected with two or more CR Gram-negative pathogens, significantly higher 30-day mortality has been observed, with polymicrobial infections proposed as a risk factor for 30-day mortality [2,3].
- Moreover, when compared with monomicrobial infections, empirical therapy of polymicrobial infections is often suboptimal [4].
- Cefiderocol, a siderophore cephalosporin antibiotic, has demonstrated potent activity against a broad range of Gram-negative bacteria, including CR strains.
- Cefiderocol is approved in Europe for the treatment of infections due to aerobic Gram-negative organisms in adults with limited treatment options [5].
- In addition, cefiderocol is approved in the United States for the treatment of complicated urinary tract infections (including pyelonephritis) and hospital-acquired and ventilator-associated bacterial pneumonia [6].
- This subgroup analysis of the PROVE study [7] assessed real-world outcomes and infection characteristics of patients with polymicrobial infections who were treated with cefiderocol.

METHODS



RESULTS

Baseline characteristics

- A total of 306 patients, with a median (interquartile range) age of 58 (44.0–69.0) years, had polymicrobial infections (Table 1).
- Country of enrolment for patients with polymicrobial infections is shown in Figure 1A.
- The incidence of polymicrobial infections ranged from 17.9% in Germany to 34.7% in Italy (Figure 1B).
- Respiratory tract infections and skin and skin structure infections were the most common infection types (Figure 2).
- Key pathogens were Enterobacterales, *Pseudomonas* spp., and *Acinetobacter* spp. (Figure 3).
- Overall, 25 (8.2%) and 52 (17.0%) patients were previously colonised or infected by the same pathogen.
- Cefiderocol was primarily used in documented infections, with smaller proportions of patients receiving empirical or salvage treatment (Table 1).

Clinical outcomes and all-cause mortality

- Overall, 65.0% of patients had clinical cure, and 72.9% clinical response at end of treatment (Table 2).
- Clinical cure was 59.6–75.0% and clinical response was 67.2–83.3% for key pathogens (Table 2).
- Overall, 22.5% of patients died by Day 30.
- By infection site, clinical cure rates ranged from 47.4% in bloodstream infections to 95.5% in urinary tract infections, with numerical differences in all-cause mortality rates at Day 30 (Table 2).
- Clinical cure and clinical response were higher in patients who received cefiderocol for documented infection compared with those who received empirical or salvage treatment (Figure 4).

Table 1. Patient demographics, baseline clinical characteristics, and cefiderocol use

Characteristic	Polymicrobial infections (N=306)
Median (IQR) age, years	58.0 (44.0–69.0)
Age ≥ 65 years, n (%)	107 (35.0)
Sex, male, n (%)	201 (65.7)
Any pre-existing medical condition, n (%)	281 (91.8)
Diabetes	68 (22.2)
Diabetes with end organ damage	39 (12.7)
Chronic pulmonary disease	66 (21.6)
Moderate-to-severe CKD	62 (20.3)
Any medical condition at admission, n (%)	
COVID-19	47 (15.4)
Sepsis	47 (15.4)
Septic shock	14 (4.6)
Secondary BSI, n (%)	34 (11.1)
Previous colonisation by the same pathogen	25 (8.2)
Previous infection by the same pathogen	52 (17.0)
CR infection, n (%) ^a	266 (86.9)
ICU stay at time of cefiderocol initiation, n (%)	179 (58.5)
Any organ support at time of cefiderocol initiation, n (%)	141 (46.1)
Type of organ support, n (%)	
Mechanical ventilation	141 (46.1)
Vasopressor use	105 (34.3)
Renal replacement therapy	45 (14.7)
ECMO	15 (4.9)
Reason for cefiderocol use, n (%)	
Documented infection	222 (72.5)
Empirical use	37 (12.1)
Salvage therapy	39 (12.7)
Unsure empirical or documented	1 (0.3)
Other/unknown	7 (2.3)
Median (IQR) time from culture to first cefiderocol dose, days	4.0 (2.0–7.0)
Median (IQR) duration of cefiderocol use, days	11.0 (7.0–15.0)
Gram-negative combination therapy (any), n (%)	80 (26.1)

*CR infection: presence of any CR pathogen in the index culture reported in the medical charts.
BSI, bloodstream infection; CKD, chronic kidney disease; COVID-19, coronavirus disease 2019; CR, carbapenem-resistant; ECMO, extracorporeal membrane oxygenation; ICU, intensive care unit; IQR, interquartile range.

CONCLUSIONS

- Cefiderocol, predominantly administered as monotherapy, demonstrated benefits in this difficult-to-treat population of patients with polymicrobial infections.
- Benefits were observed across infection sites and for infections caused by various Gram-negative pathogens, including Enterobacterales, *Pseudomonas* spp., *Acinetobacter* spp., and *Stenotrophomonas* spp.
- Mortality risk was highest in those with respiratory infections, while patients with polymicrobial urinary tract infections demonstrated a high rate of clinical cure.
- Clinical cure and clinical response rates with therapy for documented infections and empirical use were high, however, poorer outcomes were observed for patients who received cefiderocol as salvage therapy.

Table 2. Clinical outcomes and all-cause mortality at days 14 and 30 overall, by key pathogen, and by infection site

	Clinical cure ^a	Clinical response at EOT ^b	Day 14 ACM	Day 30 ACM
All polymicrobial infections	199/306 65.0 [59.4; 70.4]	223/306 72.9 [67.5; 77.8]	36/306 11.8 [8.4; 15.9]	69/306 22.5 [18.0; 27.7]
Key pathogens ^c				
Enterobacterales	146/221 66.1 [59.4; 72.3]	163/221 73.8 [67.4; 79.4]	22/221 10.0 [6.3; 14.7]	45/221 20.4 [15.3; 26.3]
<i>Pseudomonas</i> spp.	125/188 66.5 [59.3; 73.2]	140/188 74.5 [67.6; 80.5]	17/188 9.0 [5.4; 14.1]	34/188 18.1 [12.9; 24.3]
<i>Acinetobacter</i> spp.	81/136 59.6 [50.8; 67.9]	92/136 67.6 [59.1; 75.4]	21/136 15.4 [9.8; 22.6]	40/136 29.4 [21.9; 37.8]
<i>Stenotrophomonas</i> spp.	35/58 60.3 [46.6; 73.0]	39/58 67.2 [53.7; 79.0]	9/58 15.5 [7.4; 27.4]	14/58 24.1 [13.9; 37.2]
Other NF-GN	18/24 75.0 [63.3; 90.2]	20/24 83.3 [62.6; 95.3]	1/24 4.2 [0.1; 21.1]	3/24 12.5 [2.7; 32.4]
Infection site				
Respiratory	100/163 61.3 [53.4; 68.9]	116/163 71.2 [63.6; 78.0]	25/163 15.3 [10.2; 21.8]	47/163 28.8 [22.0; 36.4]
Skin and skin structure	33/52 63.5 [49.0; 76.4]	37/52 71.2 [56.9; 82.9]	4/52 7.7 [2.1; 18.5]	8/52 15.4 [6.9; 28.1]
Urinary tract	21/22 95.5 [77.2; 99.9]	21/22 95.5 [77.2; 99.9]	1/22 4.5 [0.1; 22.8]	1/22 4.5 [0.1; 22.8]
Intra-abdominal	16/22 72.7 [49.8; 89.3]	16/22 72.7 [49.8; 89.3]	2/22 9.1 [1.1; 29.2]	3/22 13.6 [2.9; 34.9]
Bone and joint	14/19 73.7 [48.8; 90.9]	15/19 78.9 [54.4; 94.0]	1/19 5.3 [0.1; 26.0]	5/19 26.3 [9.2; 51.2]
Bloodstream	9/19 47.4 [24.5; 71.1]	12/19 63.2 [38.4; 83.7]	3/19 15.8 [3.4; 39.6]	4/19 21.1 [6.1; 45.6]
Other	6/9 66.7 [29.9; 92.5]	6/9 66.7 [29.9; 92.5]	0/9 0 [0; 33.6]	1/9 11.1 [0.3; 48.3]

Data are expressed as n/N, % [95% confidence interval]. *Patients were considered as clinically cured if the Principal Investigator reported the case to be resolved or improved, excluding those who relapsed. *Patients were considered as having clinical response if the Principal Investigator reported the case to be resolved or improved at EOT. *These infections are not mutually exclusive. ACM, all-cause mortality; EOT, end of treatment; NF-GN, non-fermenting Gram-negative.

Figure 1A. Country of enrolment among patients with polymicrobial infections in the PROVE study (2020–2024; N=306)

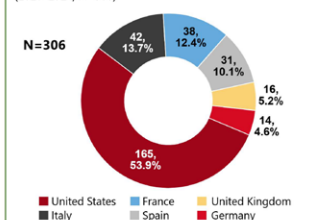


Figure 2. Primary site of infection among patients with polymicrobial infections in the PROVE study (2020–2024; N=306)

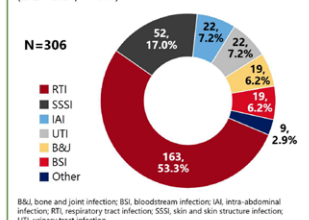


Figure 1B. Proportion of polymicrobial infections by country

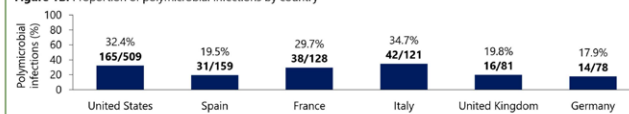


Figure 3. Key causative pathogens among patients with polymicrobial infections in the PROVE study (2020–2024; N=306)

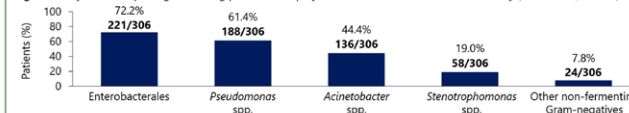
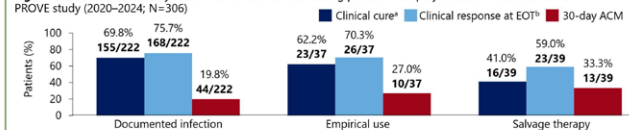


Figure 4. Clinical outcomes by reason for cefiderocol use among patients with polymicrobial infections in the PROVE study (2020–2024; N=306)



*Patients were considered as clinically cured if the Principal Investigator reported the case to be resolved or improved, excluding those who relapsed. *Patients were considered as having clinical response if the Principal Investigator reported the case to be resolved or improved at EOT. ACM, all-cause mortality; EOT, end of treatment.

References

1. Jeon SS, et al. *Front Cell Infect Microbiol* 2022;12:823684.
2. Kordula KS, et al. *Infection* 2020;48:169–77.
3. Cilinciu C, et al. *Arch Biochem Biophys* 2020;614:10408–16.
4. Patanku A, et al. *Acta Microbiol Hell* 2020;70:39.
5. Fetroja® (cefiderocol) for injection for intravenous use. Prescribing Information. Shionogi Inc, Florham Park, NJ, USA; 2021.
6. Clancy CJ, et al. *Infect Drug Resist* 2024;17:4427–43.

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Conflict of interest

VG: none to declare.
NN: none to declare.
SV: none to declare.
STN: employees of Shionogi.



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ALTRI DATI REAL WORLD EVIDENCE

1. PROVE (POSTER 1864)

V. Galfo et al., Cefiderocol treatment in polymicrobial infections: subgroup analysis of the real-world PROVE observational study

Questa sottoanalisi dello studio osservazionale PROVE si focalizza sulle infezioni polimicrobiche da Gram-negativi, uno scenario clinico in cui la presenza di più patogeni complica drasticamente la scelta terapeutica e peggiora la prognosi.

HIGHLIGHTS PRINCIPALI

- L'analisi ha incluso 306 pazienti con infezioni polimicrobiche, età mediana 58 anni.
- Il 53.3% dei pazienti era affetto da infezioni del tratto respiratorio e il 58.5% era ospedalizzato in unità di terapia intensiva al momento dell'insorgenza dell'infezione.
- Il tasso di guarigione clinica è stato del 65,0%, e la risposta clinica a fine trattamento del 72,9%.
- I tassi di guarigione sono rimasti consistenti tra i patogeni chiave: *Enterobacteriales* (66,1%), *Pseudomonas spp.* (66,5%), *Acinetobacter spp.* (59,6%) e *Stenotrophomonas spp.* (60,3%).

TAKE-HOME MESSAGE

Cefiderocol si conferma **un'opzione terapeutica nel complesso scenario delle infezioni polimicrobiche**, con risultati particolarmente positivi quando utilizzato per **infezioni documentate e utilizzo empirico (quindi precoce) rispetto alla terapia di salvataggio.**

Poster 1863

ESCMID Global 2026

17–21 April 2026

Munich, Germany

Cefiderocol in clinical practice for bone and joint infections: insights from the PROVE study

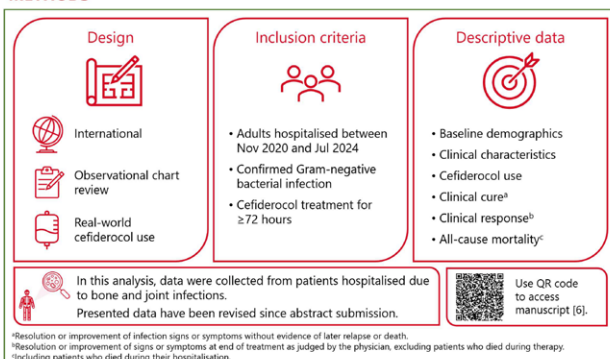
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SHIONOGI

BACKGROUND

- Bone and joint infections (BJI), including septic arthritis, prosthetic joint infections, and osteomyelitis, are a significant cause of morbidity and mortality [1].
- Although Gram-positive organisms predominate, Gram-negative pathogens, including Enterobacterales and non-fermenters such as *Pseudomonas aeruginosa*, are increasingly reported in BJI [1,2].
- BJI pose significant treatment challenges requiring prolonged durations of therapy, with treatment success rates of 82–100% reported in Gram-negative infections [1,3].
- The siderophore cephalosporin cefiderocol has demonstrated potent *in vitro* activity against a broad spectrum of Gram-negative bacteria, including strains with carbapenem resistance.
- In the European Union, cefiderocol is approved for the treatment of infections due to aerobic Gram-negative organisms in adults with limited treatment options [4].
- In addition, cefiderocol is approved in the United States for the treatment of complicated urinary tract infections (including pyelonephritis) and hospital-acquired and ventilator-associated bacterial pneumonia [5].
- This subgroup analysis of data from the PROVE study [6] examined clinical outcomes for patients with BJI who received treatment with cefiderocol.

METHODS



RESULTS

- A total of 54 patients were enrolled in PROVE with BJI and comprised the patient population for this analysis.
- Median (interquartile range [IQR]) patient age was 58.0 years, and 68.5% of patients were male (Table 1).
- Approximately two-thirds (66.7%) of patients were enrolled in the United States (Figure 1).
- Pre-existing medical conditions, which could predispose patients to BJI, were common (Table 1).
- At hospital admission, 13.0% of patients had sepsis, and 1.9% had septic shock.
- Only 11.1% of patients required intensive care unit stay at the time of cefiderocol initiation, and 7.4% required organ support.

Table 1. Patient demographics and baseline characteristics for patients with bone and joint infections in the PROVE study (2020–2024; N=54)

Characteristic	Patients with bone and joint infections (N=54)
Median (IQR) age, years	58.0 (46.0–67.0)
Age ≥ 65 years, n (%)	18 (33.3)
Male, n (%)	37 (68.5)
Any pre-existing medical conditions, n (%)	46 (85.2)
Diabetes	19 (35.2)
Peripheral vascular disease	11 (20.4)
Musculoskeletal abnormality/degenerative disease	11 (20.4)
Moderate-to-severe CKD	9 (16.7)
Any medical condition at admission, n (%)	
Sepsis	7 (13.0)
Septic shock	1 (1.9)
Severity of illness, n (%)	
ICU stay at time of cefiderocol initiation	6 (11.1)
Any organ support at time of cefiderocol initiation	4 (7.4)
Monomicrobial infections, n (%)	35 (64.8)
Polymicrobial infections ^a , n (%)	19 (35.2)
Patients had the same pathogen (index culture) prior to the current hospitalisation, n (%)	
None	32 (59.3)
Yes, previously colonised	3 (5.6)
Yes, previously infected	16 (29.6)
Unknown	7 (13.0)
Number of risk factors for carbapenem-resistant Gram-negative bacterial infection	
0	5 (9.3)
1	15 (27.8)
2	19 (35.2)
3	12 (22.2)
≥ 4	3 (5.6)
Treatment characteristics	
Median (IQR) time from culture to first cefiderocol dose, days	5.0 (0–8.0)
Median (IQR) duration of cefiderocol use, days	22.5 (12.0–40.0)
Gram-negative combination therapy, n (%)	25 (46.3)
Reason for cefiderocol use (as per eCRF), n (%)	
Documented infection	44 (81.5)
Empirical use	4 (7.4)
Salvage therapy	5 (9.3)
Other/unknown	1 (1.9)
Median (IQR) time from admission to cefiderocol initiation, days	5.0 (4.0–8.0)
Median (IQR) total length of stay, days	44.0 (22.0–61.0)
Discharge status, n (%)	
In-hospital death	6 (11.1)
Home	23 (42.6)
Healthcare facility (including nursing home)	24 (44.4)

^aIncludes *Acinetobacter* spp. (10), *Pseudomonas* spp. (10), Enterobacterales (13), any *Stenotrophomonas maltophilia* (1), other non-fermenter Gram-negative bacteria (5) [*Acinetobacter* spp. 4, *Burkholderia* spp. 1]. CKD, chronic kidney disease; eCRF, electronic case report form; ICU, intensive care unit; IQR, interquartile range.

CONCLUSIONS

- In this subgroup of patients treated with cefiderocol for BJI, high clinical cure rates and low mortality were observed.
- Patients were predominantly treated for documented infections, with a high use of combination therapy.
- Compared with other cohorts from the PROVE study, patients with BJI were a low-severity population despite the presence of BJI-specific risk factors.
- Cefiderocol was observed to be effective for BJI across pathogen types.
- Infections were predominantly monomicrobial (64.8%) (Figure 2).
- Carbapenem-resistant infections were observed in 91% of patients with monomicrobial infection and 73.6% of those with polymicrobial infection.
- Cefiderocol was primarily used for documented infections (81.5% of patients), with a median duration of use of 22.5 days, a relatively high use of combination regimens (46.3%), and a median total length of hospital stay of 44.0 days.
- Overall, 83.3% of patients with BJI achieved clinical cure (Figure 3A), and 88.9% had a clinical response at end of treatment with cefiderocol (Figure 3B), with 14- and 30-day all-cause mortality of 3.7% and 11.1%, respectively (Figure 3C).
- Clinical outcomes stratified by monotherapy or combination therapy are shown in Table 2.
- Clinical cure in patients with monomicrobial infections ranged from 81.3% to 100% depending on pathogen; clinical cure was numerically lower in those with polymicrobial infections (Figure 3A).

Figure 1. Country of enrolment among patients with bone and joint infections in the PROVE study (2020–2024; N=54)

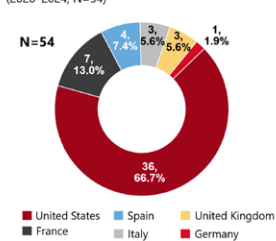


Figure 2. Primary cause of infection among patients with bone and joint infections in the PROVE study (2020–2024; N=54)

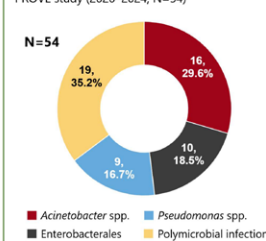


Figure 3. Clinical outcomes by pathogen among patients with bone and joint infections in the PROVE study (2020–2024; N=54)

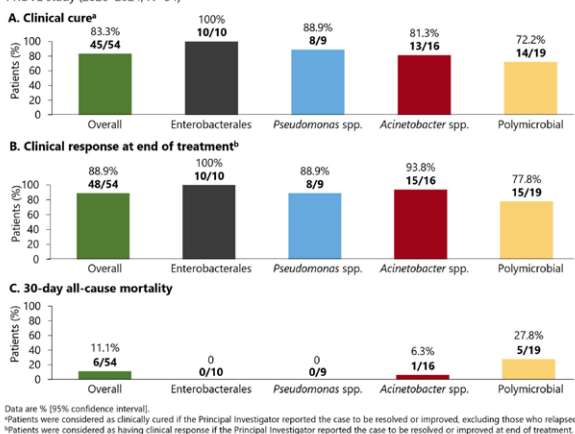


Table 2. Clinical outcomes by monotherapy or combination therapy

	n/N, % [95% confidence interval]	
	Monotherapy (N=41)	Combination therapy (N=13)
Clinical cure ^a	35/41 (85.4 [70.8; 94.4])	10/13 (76.9 [46.2; 95.0])
Clinical response at end of treatment ^b	36/41 (87.8 [73.8; 95.9])	12/13 (92.3 [64.0; 99.8])
14-day all-cause mortality	2/41 (4.9 [15.3; 16.5])	0/13 (0 [0; 24.7])
30-day all-cause mortality	4/41 (9.8 [2.7; 23.1])	15/45 (33.3 [19.4; 48.5])

^aPatients were considered as clinically cured if the Principal Investigator reported the case to be resolved or improved, excluding those who relapsed.
^bPatients were considered as having clinical response if the Principal Investigator reported the case to be resolved or improved at end of treatment.

References

- Colston J, Atkins B. Clin Med (Lond) 2018;18:150–4.
- Chang Y, et al. Int Wound J 2023;20:3315–23.
- Osmon DR, et al. Clin Infect Dis 2013;56:1–10.
- Fetroja® 1 g powder. Summary of Product Characteristics. Shionogi B.V. Herengracht 464, 1017 CA, Amsterdam, Netherlands; 2024.
- Fetroja® (cefiderocol) for injection for intravenous use. Prescribing Information. Shionogi Inc., Florham Park, NJ, USA; 2021.
- Clancy CJ, et al. Infect Drug Resist 2024;17:4427–43.

Conflict of interest

KCM: consultant for Shionogi; AD: consultant for Shionogi; STN, SV, ASH: employees of Shionogi.

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ALTRI DATI REAL WORLD EVIDENCE

2. PROVE (POSTER 1863)

K. Molina et al., Cefiderocol in clinical practice for bone and joint infections: insights from the PROVE study

L'analisi si focalizza sulle infezioni ossee e articolari (BJI) causate da bacilli Gram-negativi (GNB), che spesso richiedono terapie prolungate e presentano sfide di penetrazione tissutale.

HIGHLIGHTS PRINCIPALI

- Sono stati inclusi 54 pazienti per due terzi arruolati negli Stati Uniti.
- In questo sottogruppo dello studio PROVE, l'11,1% dei pazienti era ospedalizzato in unità di terapia intensiva.
- Le infezioni da GNB resistenti ai carbapenemi erano documentate nel 91% delle infezioni monomicrobiche e nel 73,6% delle infezioni polimicrobiche.
- La guarigione clinica complessiva è stata del 83,3%, la risposta clinica a fine trattamento del 88,9%.
- La guarigione clinica è stata del 100% per *Enterobacterales*, dell'88,9% per *Pseudomonas spp.* e del 81,3% per *Acinetobacter spp.*

TAKE-HOME MESSAGE

Cefiderocol si **dimostra altamente efficace nelle infezioni osteo-articolari da GNB, inclusi i GNB resistenti ai carbapenemi, con tassi di guarigione elevati**, indipendentemente dalla specie causa dell'infezione.

P3021

CLINICAL USE AND EFFECTIVENESS OF CEFIDEROCOL IN CRITICALLY ILL PATIENTS: A REAL-WORLD INTENSIVE CARE UNIT EXPERIENCE

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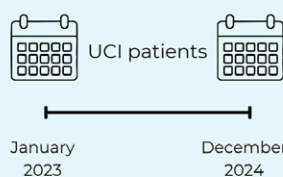
Background and importance

Multidrug-resistant (MDR) and difficult-to-treat resistance (DTR) Gram-negative infections in the Intensive Care Unit (ICU) are associated with high mortality and limited treatment options. **Cefiderocol** is indicated for infections due to Gram-negative pathogens when no alternative therapies are available.

Aim and objectives

To evaluate the real-world clinical utilization and microbiological effectiveness of cefiderocol in critically ill patients at a Spanish tertiary-care hospital (2023–2024).

Material and methods



Single-centre, observational, retrospective study

- Demographic variables (age and sex)
- Clinical variables (primary diagnosis, antimicrobial therapy, isolated microorganism, type of clinical specimen, antimicrobial susceptibility testing, treatment duration, prior antibiotic exposure, and clinical outcomes)

PATIENT AND PATHOGEN PROFILES

11 clinical episodes in 10 patients

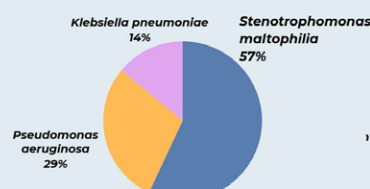


41.3 days: mean ICU length of stay



12.5 days: mean duration of cefiderocol therapy

ISOLATED MICROORGANISMS*

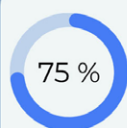


*Predominantly respiratory samples (72%)

MAIN REASONS FOR ICU ADMISSION



CLINICAL AND MICROBIOLOGICAL OUTCOMES



MICROBIOLOGICAL CURE

defined by culture negativization after ≥ 7 days of therapy



No relapse or reinfection by the same pathogen



36% Mortality rate

Conclusion and relevance

- ✓ Cefiderocol demonstrates **effectiveness** in MDR Gram-negative infections, particularly in patients with no viable alternative treatment options, achieving >70% microbiological cure.
- ✓ It may provide clinical benefit in ICU patients despite their high mortality risk and comorbidities.

ALTRI DATI REAL WORLD EVIDENCE

3. ESPERIENZA REAL-WORLD (POSTER 3021)

M. Gomez Diaz et al., Clinical use and effectiveness of cefiderocol in critically ill patients: a real-world ICU experience

Questo studio osservazionale monocentrico valuta l'utilizzo clinico e l'efficacia microbiologica di cefiderocol in pazienti critici ricoverati in unità di terapia intensiva nel periodo 2023-2024 che hanno ricevuto tale antibiotico per una infezione documentata.

HIGHLIGHTS PRINCIPALI

- Sono stati coinvolti 10 pazienti critici che hanno sviluppato 11 episodi di infezione
- Il 50% dei pazienti erano ricoverati in terapia intensiva per shock settico.
- La maggior parte dei pazienti aveva infezione da *Stenotrophomonas maltophilia* (57%), seguito da *Pseudomonas aeruginosa* (29%) e *Klebsiella pneumoniae* (14%)
- L'eradicazione microbiologica è stata del 75%, mentre la mortalità per tutte le cause del 36%.
- Il 92% dei pazienti non ha mostrato recidive o reinfezioni causate dallo stesso patogeno

TAKE-HOME MESSAGE

Sebbene la numerosità della popolazione inclusa sia limitato, questo dato real-world supporta l'uso di cefiderocol come opzione terapeutica nelle infezioni Gram-negative MDR in unità di terapia intensiva da diversi bacilli Gram-negativi.

Poster 1356

ESCMID Global 2026
17–21 April 2026
Munich, Germany

Contact: Samuel Simon
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Activity of Cefiderocol Against Non-Fermenting Gram-Negative Isolates Collected from Intensive Care Unit Patients in US and European Medical Centers as Part of the SENTRY Antimicrobial Surveillance Program (2020–2024)

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SHIONOGI

INTRODUCTION

- Intensive care units (ICUs) are a source of highly resistant Gram-negative bacteria, which may have reduced antimicrobial *in vitro* susceptibilities compared with other areas of the hospital [1].
- Cefiderocol is a siderophore-conjugated cephalosporin, which utilizes the iron-uptake systems of bacteria to facilitate cell entry, with excellent *in vitro* activity against non-fermenting Gram-negative bacteria (NFGNB) including organisms resistant to carbapenems and novel β -lactam/ β -lactamase inhibitors (BL-BLIs).
- The objective of this study was to compare the *in vitro* activity of cefiderocol and comparators against NFGNB collected in ICUs and non-ICU settings.

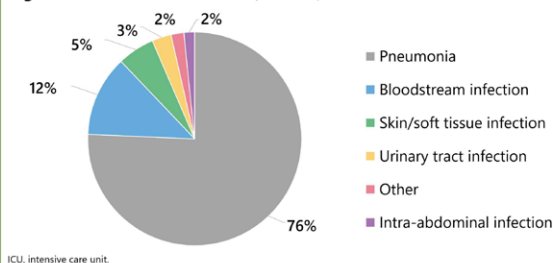
METHODS

- Isolates were collected during 2020–2024 from European and US hospitals participating in the SENTRY Antimicrobial Surveillance Program.
- Minimum inhibitory concentrations (MICs) were determined according to Clinical and Laboratory Standards Institute (CLSI) methods, using broth microdilution with cation-adjusted Mueller–Hinton broth (CAMHB) for comparator agents and iron-depleted CAMHB for cefiderocol.
- Susceptibility was determined according to 2025 CLSI, US Food and Drug Administration (FDA) and European Committee on Antimicrobial Susceptibility Testing (EUCAST) breakpoints.
- Carbapenem resistance was defined as non-susceptibility to meropenem and/or imipenem by CLSI breakpoints (2025).
- Difficult-to-treat resistance was defined as non-susceptibility to piperacillin-tazobactam, ceftazidime, cefepime, aztreonam, meropenem, imipenem, ciprofloxacin, and levofloxacin by CLSI breakpoints (2025).

RESULTS

- Among 17,630 NFGNB isolates collected, 6,759 originated from ICU settings and were predominately from patients with pneumonia and bloodstream infections (Figure 1).
- Pseudomonas aeruginosa* (54.6%) was the most common organism followed by *Acinetobacter baumannii-calcoaceticus* complex (25.4%) and *Stenotrophomonas maltophilia* (14.7%).
- Cefiderocol retained similar activity against NFGNB collected in ICUs vs. non-ICUs and was the most active agent *in vitro* against highly resistant subsets of ICU isolates, including *P. aeruginosa* resistant to novel BL-BLIs (Tables 1–3).
- Cefiderocol MIC_{50/90} values were low for *Achromobacter* spp. (0.03/0.25 μ g/mL) and *Burkholderia cepacia* species complex (0.06/0.5 μ g/mL) collected from the ICU (Table 1).

Figure 1. ICU source of infection (N=6759).



ICU, intensive care unit.

CONCLUSIONS

- Cefiderocol demonstrated excellent *in vitro* activity against NFGNB collected in ICUs, with no meaningful differences compared with isolates from non-ICU settings.
- These data suggest that cefiderocol is an important treatment option for patients with infections due to a broad range of suspected or confirmed NFGNB in the ICU, including those with resistance to carbapenems and novel BL-BLIs.

Table 1. Activity of cefiderocol against NFGNB isolated from ICU and non-ICU settings as part of the SENTRY program (2020–2024)

Isolate set	n	MIC ₅₀ (μ g/mL)	MIC ₉₀ (μ g/mL)	MIC range (μ g/mL)	CLSI ^a %S	FDA ^a %S	EUCAST ^a %S
<i>P. aeruginosa</i>							
ICU	3695	0.12	0.5	≤ 0.004 –>64	99.5	98.2	99.1
Non-ICU	6652	0.12	0.5	≤ 0.004 –64	99.7	98.6	99.4
CRPA ^b							
ICU	885	0.12	0.5	≤ 0.004 –>64	98.4	95.0	97.5
Non-ICU	939	0.12	0.5	≤ 0.004 –64	98.7	94.7	97.2
DTR PA ^c							
ICU	159	0.25	2	≤ 0.004 –>64	97.5	88.1	96.2
Non-ICU	232	0.12	2	≤ 0.004 –64	97.0	87.9	95.3
ABC complex							
ICU	1714	0.25	1	0.008–>64	95.9	90.7	93.8
Non-ICU	2197	0.25	1	≤ 0.004 –>64	97.5	93.7	96.2
CRAB ^b							
ICU	957	0.25	2	0.008–>64	93.8	85.9	90.3
Non-ICU	837	0.25	2	0.015–>64	94.1	85.5	90.9
<i>S. maltophilia</i>							
ICU	991	0.06	0.25	≤ 0.004 –4	99.3	99.3	99.8
Non-ICU	1037	0.06	0.25	≤ 0.004 –>64	99.2	99.2	99.6
<i>Achromobacter</i> spp.							
ICU	83	0.03	0.25	≤ 0.004 –8	–	–	–
Non-ICU	173	0.03	0.25	≤ 0.004 –2	–	–	–
<i>B. cepacia</i> species complex							
ICU	103	0.06	0.5	≤ 0.004 –64	–	–	–
Non-ICU	134	0.06	4	≤ 0.004 –>64	–	–	–

ABC complex, *Acinetobacter baumannii-calcoaceticus* complex; CLSI, Clinical and Laboratory Standards Institute; CRAB, carbapenem-resistant *A. baumannii-calcoaceticus* complex; CRPA, carbapenem-resistant *Pseudomonas aeruginosa*; DTR PA, difficult-to-treat resistant *P. aeruginosa*; EUCAST, European Committee on Antimicrobial Susceptibility Testing; FDA, US Food and Drug Administration; ICU, intensive care unit; MIC, minimum inhibitory concentration; MIC_{50/90}, MIC required to inhibit growth of $\geq 50\%/90\%$ of isolates; NFGNB, non-fermenting Gram-negative bacteria; S, susceptible; ^aCriteria as published by CLSI (2025), US FDA (2025), and EUCAST (2025). ^bResistant to meropenem and/or imipenem by CLSI breakpoints. ^cNon-susceptible to piperacillin-tazobactam, ceftazidime, cefepime, aztreonam, meropenem, imipenem, ciprofloxacin, and levofloxacin by CLSI breakpoints (2025).

Table 2. Activity of cefiderocol and comparators against highly resistant NFGNB ICU isolates collected as part of the SENTRY program (2020–2024)

Isolate set, N	MIC ₅₀ (μ g/mL)	MIC ₉₀ (μ g/mL)	MIC range (μ g/mL)	CLSI ^a %S	FDA ^a %S	EUCAST ^a %S
CR <i>P. aeruginosa</i> (N=885)^b						
Cefiderocol	0.12	0.5	≤ 0.004 –>64	98.4	95.0	97.5
Imipenem-relebactam	1	8	0.25–>8	81.4	81.4	81.4
Ceftazidime-avibactam	4	32	0.5–>32	82.0	82.0	82.0
Ceftolozane-tazobactam	1	>16	0.25–>16	81.9	81.9	81.9
Cefepime	8	>32	1–>32	54.4	54.4	54.4
Piperacillin-tazobactam	32	>128	4–>128	42.3	42.3	42.3
Ciprofloxacin	0.5	>4	0.03–>4	60.3	60.3	–
Amikacin	4	32	≤ 0.25 –>32	87.3 ^c	87.3	87.3
Colistin	0.5	1	0.12–8	0	99.8	–
DTR <i>P. aeruginosa</i> (N=159)^d						
Cefiderocol	0.25	2	≤ 0.004 –>64	97.5	88.1	96.2
Imipenem-relebactam	4	>8	0.25–>8	45.9	45.9	45.9
Ceftazidime-avibactam	16	>32	1–>32	44.7	44.7	44.7
Ceftolozane-tazobactam	8	>16	1–>16	48.4	48.4	48.4
Amikacin	16	>32	≤ 0.25 –>32	64.8 ^c	64.8	64.8
Colistin	1	1	0.12–2	0	100	–
CR <i>A. baumannii-calcoaceticus</i> complex (N=957)^b						
Cefiderocol	0.25	2	0.008–>64	93.8	85.9	90.3
Ampicillin-sulbactam	64	>64	4–>64	1.9	1.9	–
Minocycline	8	16	0.12–>32	17.0	17.0	–
Sulbactam-durlobactam (n=335)	2	4	≤ 0.25 –>32	93.4	93.4	–
Colistin	0.5	>8	0.12–>8	0	–	82.8
<i>S. maltophilia</i> (N=991)						
Cefiderocol	0.06	0.25	≤ 0.004 –4	99.3	99.3	99.8
Aztreonam-avibactam	4	4	0.12–>16	–	–	–
Levofloxacin	1	4	≤ 0.015 –>32	84.7	–	–
Minocycline	0.5	1	≤ 0.06 –8	92.9	–	–
SMX/TMP	≤ 0.12	0.5	≤ 0.12 –>4	97.2	–	97.2

CLSI, Clinical and Laboratory Standards Institute; CR, carbapenem-resistant; DTR, difficult-to-treat resistant; EUCAST, European Committee on Antimicrobial Susceptibility Testing; FDA, US Food and Drug Administration; ICU, intensive care unit; MIC, minimum inhibitory concentration; MIC_{50/90}, MIC required to inhibit growth of $\geq 50\%/90\%$ of isolates; NFGNB, non-fermenting Gram-negative bacteria; S, susceptible; SMX/TMP, sulfamethoxazole-trimethoprim; ^aCriteria as published by CLSI (2025), US FDA (2025), and EUCAST (2025). ^bResistant to meropenem and/or imipenem by CLSI breakpoints. ^cUsing urinary tract infection breakpoints only. ^dNon-susceptible to piperacillin-tazobactam, ceftazidime, cefepime, aztreonam, meropenem, imipenem, ciprofloxacin, and levofloxacin by CLSI breakpoints (2025).

Table 3. Activity of cefiderocol and comparators against ICU isolates of *Pseudomonas aeruginosa* resistant to BL-BLIs.

		%Susceptible per CLSI/FDA/EUCAST ^a						
Resistance phenotype (resistant to)	n	Cefiderocol			CAZ-AVI	C-T	IMI-REL	MEM-VAB
		CLSI	FDA	EUCAST				
CAZ-AVI	195	91.3	79.5	87.7	0	27.2	44.1	0/0/21.0
C-T	200	91.5	79.0	88.0	29.0	0	41.0	0/0/30.5
IMI-REL	168	94.0	85.0	91.1	34.7	29.8	0	0/0/6.5
MEM-VAB	442	96.6	91.6	95.2	65.1	68.6	64.5	0

BL-BLI, β -lactam- β -lactamase inhibitor; CAZ-AVI, ceftazidime-avibactam; CLSI, Clinical and Laboratory Standards Institute; C-T, ceftolozane/tazobactam; EUCAST, European Committee on Antimicrobial Susceptibility Testing; FDA, US Food and Drug Administration; ICU, intensive care unit; IMI-REL, imipenem-relebactam; MEM-VAB, meropenem-vaborbactam. ^aIf only one value is shown, the CLSI, FDA, and EUCAST breakpoints are equivalent.

References: 1. Sader HS, et al. Diagn Microbiol Infect Dis. 2022 Jan;102(1):115557.

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Conflict of interest: SS, STN, BLMD, CL, HY, YJ are employees of the SHIONOGI Group. JMM and REM are employees of Element, which received funding for this study.



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ALTRI DATI IN VITRO - SENTRY

1. SENTRY (POSTER 1356)

S. Simon et al., Activity of Cefiderocol Against Non-Fermenting Gram-Negative Isolates Collected from Intensive Care Unit Patients in US and European Medical Centers as part of the SENTRY Antimicrobial Surveillance Program (2020-2024)

Lo studio confronta l'attività di cefiderocol e comparatori contro i batteri Gram-negativi non fermentanti (NFGNB) isolati nelle unità di terapie intensive (ICU) rispetto ai reparti ordinari, contesti dove la pressione antibiotica è massima.

HIGHLIGHTS PRINCIPALI

- Tra i 6.759 isolati NFGNB provenienti da ICU, la specie più rappresentata è stata *Pseudomonas aeruginosa* (54,6%), seguita dal complesso *Acinetobacter baumannii* (25,4%) e da *Stenotrophomonas maltophilia* (14,7%)
- Non sono emerse differenze significative nell'attività di cefiderocol tra i due setting (ICU e non-ICU).
- Contro *Pseudomonas aeruginosa* DTR, cefiderocol ha mostrato una sensibilità del 96,2% secondo i criteri EUCAST; inoltre, negli isolati ICU resistenti alle nuove combinazioni BL/BLI, ha mantenuto un'elevata attività *in vitro*, con valori di sensibilità compresi tra 91,3% e 96,6% secondo CLSI e tra 87,7% e 95,2% secondo EUCAST.

TAKE-HOME MESSAGE

Cefiderocol rappresenta un'opzione terapeutica per i pazienti ospedalizzati in unità di terapia intensiva con infezioni da bacilli Gram-negativi non fermentanti, inclusi quelli resistenti ai carbapenemi e alle più recenti associazioni β -lattamico/inibitore delle beta-lattamasi

Poster 1313

ESCMID Global 2026
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Activity of Cefiderocol Against Resistant Isolates Collected From Bloodstream Infections During 2020 to 2024 as Part of the SENTRY Antimicrobial Surveillance Program

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INTRODUCTION

- Bloodstream infections (BSIs) caused by Gram-negative bacteria can become life threatening for patients, and many of these pathogens are becoming increasingly resistant to antimicrobials.
- The main objective of this surveillance study was to evaluate the *in vitro* activity of cefiderocol against contemporary Gram-negative bloodstream infection isolates, collected as part the SENTRY Surveillance Program, particularly those with limited treatment options due to high levels of resistance.

METHODS

- Isolates from patients with BSIs caused by Gram-negative pathogens were consecutively collected in US (*n*=62 sites), European (*n*=37), Israeli (*n*=2) and Turkish (*n*=2) hospitals during 2020–2024 as part of the SENTRY Antimicrobial Surveillance Program.
- Minimum inhibitory concentrations (MICs) were determined according to Clinical and Laboratory Standards Institute (CLSI) methods using broth microdilution with cation-adjusted Mueller–Hinton broth (CAMHB) for comparator agents and iron-depleted CAMHB for cefiderocol.
- Non-susceptibility for comparator agents was based on CLSI breakpoints and susceptibility for cefiderocol was assessed according to CLSI, US Food and Drug Administration, and European Committee on Antimicrobial Susceptibility Testing breakpoints. Resistance phenotypes are defined in **Table 1**.

RESULTS

- A total of 14,916 Gram-negative bacterial isolates were collected. The majority of isolates were Enterobacterales, with *Escherichia coli* being the most prevalent species (**Figure 1**).
- Susceptibility to cefiderocol remained high for multidrug-resistant, carbapenem-resistant (CR), and extensively drug-resistant Enterobacterales and *Pseudomonas aeruginosa*, as well as for difficult-to-treat resistant *P. aeruginosa*, CR *Acinetobacter baumannii-calcoaceticus* species complex, and *Stenotrophomonas maltophilia* (**Table 1**).
- Cefiderocol showed low MIC values (MIC ranges 0.008–1 µg/mL) against *Burkholderia cepacia* species complex, *Achromobacter* spp., and *Chryseobacterium* spp. isolates (**Table 2**).

Figure 1. BSI isolates collected as part of the SENTRY program (2020–2024). A. Prevalence of Gram-negative isolates (*n*=14,916). B. Enterobacterales isolates (*n*=12,435)*.

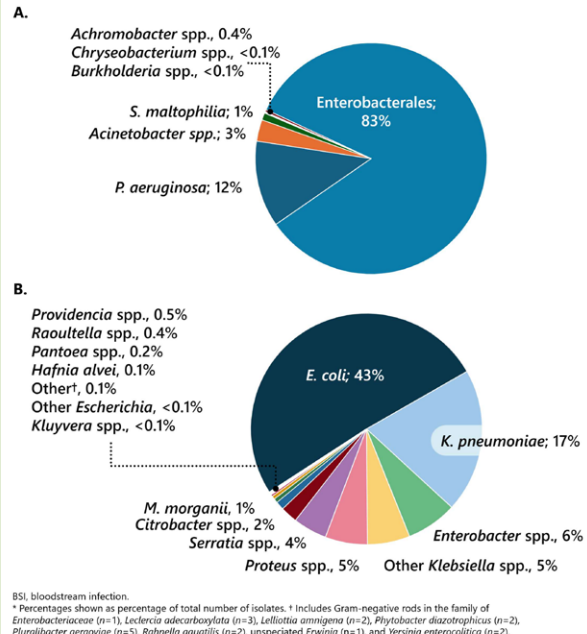


Table 2. MIC distribution (number and cumulative percentage of isolates) of cefiderocol against rare Gram-negative BSI isolates collected as part of the SENTRY program (2020–2024). MIC₅₀ and MIC₉₀ (for *n*≥10) values are shaded light and dark grey, respectively.

Species (<i>n</i>)	Number and cumulative percentage of isolates inhibited at cefiderocol MIC (µg/mL) of:							
	0.008	0.015	0.03	0.06	0.12	0.25	0.5	1
<i>B. cepacia</i> species complex (<i>n</i> =13)	1 (7.7%)	2 (23.1%)	2 (38.5%)	4 (69.2%)	2 (84.6%)	2 (100%)		
<i>Achromobacter</i> spp. (<i>n</i> =57) ^a	3 (5.3%)	29 (56.1%)	9 (71.9%)	6 (82.5%)	5 (91.2%)	3 (96.5%)	1 (98.2%)	1 (100%)
<i>Chryseobacterium</i> spp. (<i>n</i> =7) ^b			1 (14.3%)	0 (14.3%)	4 (71.4%)	1 (85.7%)	1 (100%)	

BSI, bloodstream infection; MIC, minimum inhibitory concentration; MIC₅₀, MIC required to inhibit growth of ≥50%/90% of isolates.
^aOrganisms included: *Achromobacter insolitus* (*n*=1), *A. xylosoxidans* (*n*=1), *unspecified Achromobacter* spp. (*n*=4).
^bOrganisms included: *Chryseobacterium arthrophaerae* (*n*=2), *C. hominis* (*n*=1), *C. indologenes* (*n*=4).

Table 1. Activity of cefiderocol against BSI isolates collected as part of the SENTRY program (2020–2024).

Isolate set	MIC ₅₀ (µg/mL)	MIC ₉₀ (µg/mL)	MIC range (µg/mL)	CLSI ^a	FDA ^a	EUCAST ^a
				%S	%S	%S
Enterobacterales (<i>n</i> =12,435)	0.06	0.5	≤0.004–>64	99.7	99.7	99.0
Multidrug-resistant (<i>n</i> =3,508) ^b	0.25	2	≤0.004–>64	99.0	99.0	96.6
Carbapenem-resistant (<i>n</i> =309) ^c	1	4	0.015–>64	92.9	92.9	82.8
Extensively drug-resistant (<i>n</i> =114) ^d	2	8	0.015–32	84.2	84.2	71.9
<i>P. aeruginosa</i> (<i>n</i> =1,723)	0.12	0.5	≤0.004–32	99.8	98.8	99.5
Multidrug-resistant (<i>n</i> =211) ^b	0.25	1	≤0.004–32	98.1	93.4	95.7
Carbapenem-resistant (<i>n</i> =253) ^c	0.12	0.5	≤0.004–32	98.4	94.5	96.4
Extensively drug-resistant (<i>n</i> =62) ^d	0.25	2	0.008–32	95.2	88.7	91.9
Difficult-to-treat resistant (<i>n</i> =43) ^e	0.25	1	0.008–32	97.9	93.0	95.3
<i>A. baumannii-calcoaceticus</i> species complex (<i>n</i> =356)	0.25	2	0.008–>64	95.8	88.8	–
Carbapenem-resistant (<i>n</i> =240) ^c	0.25	2	0.03–>64	94.6	85.0	–
<i>S. maltophilia</i> (<i>n</i> =219)	0.06	0.25	0.008–16	99.5	99.5	–

BSI, bloodstream infection; CLSI, Clinical and Laboratory Standards Institute; EUCAST, European Committee on Antimicrobial Susceptibility Testing; FDA, US Food and Drug Administration; I, intermediate; MIC, minimum inhibitory concentration; MIC₅₀, MIC required to inhibit growth of ≥50%/90% of isolates; R, resistant; S, susceptible.
^aCriteria as published by CLSI (2025), US FDA (2025), and EUCAST (2025). ^bNon-susceptible to ≥1 agent in three or more antimicrobial categories by CLSI breakpoints; ^cResistant to meropenem and/or imipenem by CLSI breakpoints; ^dNon-susceptible to ≥1 agent in all but two or fewer antimicrobial categories by CLSI breakpoints; ^eNon-susceptible to β-lactams and fluoroquinolones by CLSI breakpoints.

CONCLUSION

Highly resistant Gram-negative isolates collected from BSIs, for which treatment options are limited, remained susceptible to cefiderocol.

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ALTRI DATI IN VITRO - SENTRY

2. SENTRY (POSTER 1313)

B.L.M. Dejonge et al., Activity of Cefiderocol Against Resistant Isolates Collected From Bloodstream Infections During 2020 to 2024 as Part of the SENTRY Antimicrobial Surveillance Program

Lo studio ha valutato l'attività *in vitro* di cefiderocol contro un vasto set di isolati Gram-negativi responsabili di infezioni del torrente ematico (BSI), con un focus su isolati con opzioni di trattamento limitate.

HIGHLIGHTS PRINCIPALI

- Sono stati raccolti 14.916 isolati tra il 2020 e il 2024 in ospedali di USA, Europa, Israele e Turchia. La maggior parte degli isolati apparteneva alle *Enterobacterales* (83%).
- Cefiderocol ha mantenuto tassi di sensibilità molto alti (secondo i criteri CLSI) per *Enterobacterales* (99,7%), *Pseudomonas aeruginosa* (99,8%) e il complesso *Acinetobacter baumannii-calcoaceticus* (95,8%).
- Cefiderocol ha mostrato una sensibilità elevata anche nei confronti di isolati con opzioni di trattamento limitate: 92,9% per le *Enterobacterales carbapenem-resistenti* (CRE) e 97,9% per *Pseudomonas aeruginosa* DTR.

TAKE-HOME MESSAGE

Cefiderocol ha mostrato **un'elevata attività *in vitro* contro patogeni Gram-negativi multiresistenti isolati da circolo ematico, inclusi fenotipi CRE e *Pseudomonas aeruginosa* DTR**, in contesti in cui le opzioni terapeutiche possono essere limitate.



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