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Multiple drugs

Lack of efficacy: 11 case reports

In a retrospective analytical case series involving 13 patients with extensively drug-resistant *Acinetobacter baumannii* (XDR-AB) bloodstream infection (BSI) or ventilator-associated pneumonia (VAP), who received treatment with cefiderocol for XDR-AB infections as compassionate use in the ICU between 15 March 2021 and 30 April 2021, 11 patients (5 male and 6 female patients) were described, who exhibited lack of efficacy with cefdirocol, ampicillin/sulbactam, fosfomycin or colistin, while being treated for the XDR-AB infections [not all dosages stated; routes and durations of treatments to reaction onsets and causes of death not stated].

Patient 1 from Table 1 (a 55-year-old woman): The woman, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. Thereafter, she developed extensively drug-resistant *Acinetobacter baumannii* (XDR-AB) bloodstream infection (BSI). She was placed on extracorporeal membrane oxygenation. Subsequently, she developed ventilator-associated pneumonia. Thereafter, she received IV cefiderocol infusion 1.5g on every 8h as compassionate use protocol, but exhibited microbiological failure.

Patient 2 from Table 1 (a 57-year-old man): The man, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. Thereafter, he developed extensively drug-resistant Acinetobacter baumannii (XDR-AB) bloodstream infection (BSI). He was placed on extracorporeal membrane oxygenation. Thereafter, he received compassionate use of IV cefiderocol infusion 2g on every 8h and exhibited microbiological failure. Eventually, he died thereafter.

Patient 3 from Table 1 (a 15-year-old boy): The boy, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. He was placed on extracorporeal membrane oxygenation. Subsequently, he developed ventilator-associated pneumonia. Thereafter, he received compassionate use of IV cefiderocol infusion 2g on every 8h and exhibited microbiological failure.

Patient 4 from Table 1 (a 75-year-old woman): The woman, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. Thereafter, she developed extensively drug-resistant Acinetobacter baumannii (XDR-AB) bloodstream infection (BSI) and ventilator-associated pneumonia. She was placed on extracorporeal membrane oxygenation and continuous venovenous hemodiafiltration was initiated. Thereafter, she received compassionate use of IV cefiderocol infusion 2g on every 8 h and exhibited microbiological failure and eventually, she died thereafter.

Patient 5 from Table 1 (a 54-year-old man): The man, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. Thereafter, he developed extensively drug-resistant Acinetobacter baumannii (XDR-AB) bloodstream infection (BSI) and ventilator-associated pneumonia. He was placed on extracorporeal membrane oxygenation. Thereafter, he received compassionate use of IV cefiderocol infusion 1.5g on every 8 h. In addition, he received antibiotic treatment ampicillin/sulbactam, fosfomycin and colistin. However, he exhibited microbiological failure.

Patient 6 from Table 1 (a 67-year-old woman): The woman, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. Thereafter, she developed extensively drug-resistant Acinetobacter baumannii (XDR-AB) bloodstream infection (BSI). She was placed on extracorporeal membrane oxygenation and continuous venovenous hemodiafiltration. Thereafter, she received compassionate use of IV cefiderocol infusion 2g on every 8 h and exhibited microbiological failure.

Patient 7 from Table 1 (a 65-year-old man): The man, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. Thereafter, he developed extensively drug-resistant Acinetobacter baumannii (XDR-AB) bloodstream infection (BSI). He was placed on mechanical ventilation. Thereafter, he received compassionate use of IV cefiderocol infusion 2g on every 8 h. In addition, he received antibiotic treatment ampicillin/sulbactam and exhibited microbiological failure. Eventually, he died thereafter.

Patient 8 from Table 1 (a 49-year-old woman): The woman, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. Thereafter, she developed extensively drug-resistant Acinetobacter baumannii (XDR-AB) bloodstream infection (BSI). She was placed on extracorporeal membrane oxygenation. Thereafter, she received compassionate use of IV cefiderocol infusion 2g on every 8 h and exhibited microbiological failure. Eventually, he died thereafter.

Patient 9 from Table 1 (a 76-year-old man): The man, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. Thereafter, he developed ventilator-associated pneumonia. He was placed on mechanical ventilation. Thereafter, he received compassionate use of IV cefiderocol infusion 2g on every 8 h and exhibited microbiological failure.

Patient 11 from Table 1 (a 68-year-old woman): The woman, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. Thereafter, she developed extensively drug-resistant Acinetobacter baumannii (XDR-AB) bloodstream infection (BSI). She was placed on mechanical ventilation and developed ventilator-associated pneumonia. Thereafter, she received compassionate use of IV cefiderocol infusion 1.5g on every 8 h and exhibited microbiological failure.

Patient 13 from Table 1 (a 78-year-old woman): The woman, who had acute respiratory distress syndrome secondary to COVID-19 (coronavirus disease 2019) pneumonia was admitted to the hospital. She was placed on mechanical ventilation. Thereafter, she developed ventilator-associated pneumonia. Thereafter, she received compassionate use of IV cefiderocol infusion 1.5g on every 8 h and exhibited microbiological failure.

Gatti M, et al. A descriptive case series of pharmacokinetic/pharmacodynamic target attainment and microbiological outcome in critically ill patients with documented severe extensively drug-resistant Acinetobacter baumannii bloodstream infection and/or ventilator-associated pneumonia treated with cefiderocol. Journal of Global Antimicrobial Resistance 27: 294-298, Dec 2021. Available from: URL: http://www.journals.elsevier.com/journal-of-global-antimicrobial-resistance/