Antimicrobial Activity of Aztreonam-Avibactam Against a Large Collection of *Stenotrophomonas maltophilia* and *Burkholderia cepacia* Species Complex Causing Infections in United States (US) Medical Centers (2016–2021)

INTRODUCTION

- *S. maltophilia* has become a major cause of hospital-associated pneumonia in US medical centers.
- Aztreonam is a monobactam stable to hydrolysis by metallo-β-lactamases (MBLs), including those intrinsically produced by *S. maltophilia*.
- Avibactam is a non–β-lactam β-lactamase inhibitor that inhibits most clinically relevant serine β-lactamases, such as ESBLs, KPCs, AmpCs, and some OXAs.
- Aztreonam-avibactam is being developed for treatment of serious infections caused by Gram-negative bacteria, including MBL producers.
- We evaluated the activity of aztreonam-avibactam against *S. maltophilia* and *B. cepacia* from US hospitals.

METHODS

- 1,565 *S. maltophilia* and 219 *B. cepacia* were consecutively collected (1/patient) in 77 US medical centers in 2016–2021.
- This isolate collection was recovered mainly from patients with pneumonia and bloodstream infection (BSI; Figure 1).
- Only isolates determined to be the probable cause of infection were included.
- Susceptibility testing was performed by the CLSI broth microdilution method.
- CLSI/US FDA breakpoints were applied when available.