**Amended Abstract**

**Background:** Carbapenem-resistant bacteria (C. P. A. T. E. M. S. L. M.) are becoming increasingly prevalent worldwide. The emergence of carbapenem-resistant Enterobacteriaceae (CRE) isolates is of great concern, as CREs are resistant to all available classes of antibiotics. In this study, we evaluated the activity of ceftaroline-avibactam and comparator agents tested against 701 isolates collected from 72 USA hospitals located in the nine USA Census regions.

**Methods:** A total of 7,736 isolates of 475 species (257 Enterobacteriaceae) were collected from 72 hospitals in 2012. All isolates were tested using the Clinical and Laboratory Standards Institute (CLSI) breakpoints. We evaluated the activity of ceftaroline-avibactam and comparator agents against bacteria categorized into antimicrobial resistance phenotypes. All Enterobacteriaceae isolates were tested against 16 antimicrobials (15 bacterial cultures and 1 tetracycline culture) in microdilution methods and evaluated for the presence of genes encoding ESBLs, KPC and plasmidic AmpC enzymes by PCR.

**Results:** A total of 7,736 isolates of 475 species (257 Enterobacteriaceae) were collected from 72 hospitals in 2012. All isolates were tested using the Clinical and Laboratory Standards Institute (CLSI) breakpoints. We evaluated the activity of ceftaroline-avibactam and comparator agents against bacteria categorized into antimicrobial resistance phenotypes. All Enterobacteriaceae isolates were tested against 16 antimicrobials (15 bacterial cultures and 1 tetracycline culture) in microdilution methods and evaluated for the presence of genes encoding ESBLs, KPC and plasmidic AmpC enzymes by PCR.

**Conclusions:** Carbapenem-resistant Enterobacteriaceae isolates were collected from 72 hospitals located in the nine USA Census regions.

**References**


**Acknowledgements**

The authors thank *Klebsiella* spp. and *Pseudomonas aeruginosa* isolates identified using the Clinical and Laboratory Standards Institute (CLSI) breakpoints for the provision of control *P. aeruginosa* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CLSI breakpoints were developed in collaboration with the Centers for Disease Control and Prevention (CDC). The authors appreciate the strong interest of the CDC in the study and the willingness to get involved and support the study and the data collection. The authors also thank the CDC for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains. The CDC provided the CDC-developed breakpoints for the provision of control *K. pneumoniae* strains and *Klebsiella* spp. isolates for the provision of control *K. pneumoniae* strains.