**Amended Abstract**

**Background:** Ceftazidime-avibactam (CAZ-AVI) consists of CAZ combined with the novel non-β-lactam-β-lactamase (BL-BL) inhibitor AVI, which inhibits Ambler class A β-lactamase (ESBL) and KPC, and C and some class D enzymes. We evaluated the activity of CAZ-AVI tested against contemporary isolates causing intrabdominal infections (IAI).

**Methods:** A total of 1,541 isolates (one per patient) were collected from 57 United States (US) hospitals from patients with IAI in 2012-2014. Susceptibility (S) testing was performed with the reference broth microdilution (BMD) method as described in NCCLS (2001). All isolates were tested against CAZ-AVI (Table 1) and S rates were compared with meropenem (MER), piperacillin/tazobactam (P/T) and gentamicin (GEN). All QC MIC results were within acceptable ranges as published in CLSI (2015). Successful testing was performed with the reference broth microdilution (BMD) method as described in NCCLS (2001). All isolates were tested against CAZ-AVI (Table 1) and S rates were compared with meropenem (MER), piperacillin/tazobactam (P/T) and gentamicin (GEN). All QC MIC results were within acceptable ranges as published in CLSI (2015). Successful testing was performed with the reference broth microdilution (BMD) method as described in NCCLS (2001).

**Results:** Enterobacteriaceae (35% of total) and 97.1% of strains were susceptible to CAZ-AVI (Table 3 and Figure 1). This study was supported by JMI Laboratories, North Liberty, Iowa, USA. Further investigation performed after the submission of this abstract revealed that the P. mirabilis strain was mixed with a McFarland strain, which is an environmental contaminant carrying an intrinsically resistant P. mirabilis. The P. mirabilis isolate susceptible to CAZ-AVI does not have an ESBL-phenotype.

**Methods:** A total of 1,541 Gram-negative organisms, including 1,313 Enterobacteriaceae and 228 non-Enterobacteriaceae BMD replicates were collected from 57 United States hospitals from patients with IAI between April and October 2014. This study was supported by JMI Laboratories, North Liberty, Iowa, USA. Further investigation performed after the submission of this abstract revealed that the P. mirabilis strain was mixed with a McFarland strain, which is an environmental contaminant carrying an intrinsically resistant P. mirabilis. The P. mirabilis isolate susceptible to CAZ-AVI does not have an ESBL-phenotype.

**Results:** Enterobacteriaceae (35% of total) and 97.1% of strains were susceptible to CAZ-AVI (Table 3 and Figure 1). This study was supported by JMI Laboratories, North Liberty, Iowa, USA. Further investigation performed after the submission of this abstract revealed that the P. mirabilis strain was mixed with a McFarland strain, which is an environmental contaminant carrying an intrinsically resistant P. mirabilis. The P. mirabilis isolate susceptible to CAZ-AVI does not have an ESBL-phenotype.

**Conclusions:** Ceftazidime-avibactam demonstrated potent in vitro activity against aerobic Gram-negative organisms isolated from IAUs in US hospitals. Ceftazidime-avibactam overall coverage (88.6% inhibited at 16 μg/ml) was greater than that observed for meropenem (53.7% inhibited at 16 μg/ml). Ceftazidime-avibactam represented an important addition to the armamentarium of antimicrobial agents used for the treatment of IAIs, especially those caused by multidrug-resistant organisms.

**References:**

- Clinical and Laboratory Standards Institute. 2015. Performance standards for antimicrobial susceptibility testing; fourteenth informational supplement, M100–S16
- Clinical and Laboratory Standards Institute. 2015. Performance standards for antimicrobial susceptibility testing; thirteen informational supplement, M100–S15
- Clinical and Laboratory Standards Institute. 2015. Performance standards for antimicrobial susceptibility testing; twelfth informational supplement, M100–S14
- Clinical and Laboratory Standards Institute. 2015. Performance standards for antimicrobial susceptibility testing; eleventh informational supplement, M100–S13
- Clinical and Laboratory Standards Institute. 2015. Performance standards for antimicrobial susceptibility testing; tenth informational supplement, M100–S12

---

**ICAA 2015**

---

**Ceftazidime-avibactam Activity Tested Against Aerobic Gram-negative Organisms Isolated From Intraabdominal Infections in United States Hospitals (2012-2014)**

**First Author:** S Mader, K Castanheira, M Flamm, D Huband, D Farrell, R Jones

**Institutions:** JMI Laboratories, North Liberty, Iowa, USA

**Contact:** sader@jmilabs.com