Isolates carrying the KPC gene were screened based on imipenem (S) tested by CLSI broth microdilution method (BMD; M07-A8, 2009). (IMI) or meropenem (MER) MIC values at observed.

**Background**

laboratories. We evaluated the MIC results and current CLSI collection of KPC-producing Enterobacteriaceae.

strains producing β- lactam agents evaluated were retested for the presence of KPC-encoding genes. c. Pip/Tazo = piperacillin/tazobactam. a. Breakpoint concentration.

**ABSTRACT**

**INTRODUCTION**

Several methods for detection of carbapenemases have been employed: enrichment and selective incubation broth; broth methods; and broth microdilution methods. The broth microdilution method (BMD; CLSI, M07-A8, 2009) is a quantitative method that is more readily available in most clinical laboratories. In this study, we evaluated the MIC results and current CLSI breakpoints for KPC-producing Enterobacteriaceae collected during two surveillance studies.

**MATERIALS AND METHODS**

**RESULTS**

**CONCLUSIONS**

- **Ceftazidime** MIC values for KPC-producing Enterobacteriaceae were the lowest noted among all β-lactam agents. In this study, approximately 70% of all β-lactam agents tested were categorized as susceptible according to current CLSI breakpoints (MIC ≤ 0.5 µg/mL) based on ceftazidime. However, the breakpoint would need to be lowered to ≤0.125 µg/mL to recognize all KPC-producing strains.

- The CLSI breakpoints would need to be lowered for β-lactam agents to be accurately categorized.

- Further modification of ceftazidime and ceftazidime/ceftaxime breakpoints to lower MIC values would be contrary to PK/PD principles of adequate target attainment.

**REFERENCES**


