**AMENDED ABSTRACT**

**INTRODUCTION**

The current epidemic of carbapenem-resistant Acinetobacter baumannii (CRAB) serves as a call to action for re-examining antimicrobial susceptibility testing (AST). AST methods are not designed to detect resistance to third-generation cephalosporins (3GCS), currently the mainstay of CRAB treatment, and are often based on outdated breakpoints. This study determines the prevalence of carbapenem-resistant Enterobacteriaceae (CRE) and carbapenem-resistant Acinetobacter baumannii (CRAB) in various healthcare and community settings. In addition, MIC quality control (QC) ranges for these agents were determined to support accurate AST.

**MATERIALS AND METHODS**

**Participants Involved**

The study was conducted at 32 institutions to determine the prevalence of CRE and CRAB in various healthcare and community settings. The participating institutions were located in the United States, Canada, and Europe. The study was approved by local institutional review boards or ethics committees.

**Test Antimicrobial Agents**

The study included five carbapenem-resistant Enterobacteriaceae (CRE) and four carbapenem-resistant Acinetobacter baumannii (CRAB) strains. The CRE strains were: K. pneumoniae ATCC 700603, E. coli ATCC 25922, P. aeruginosa ATCC 27853, S. aureus ATCC 29213, and P. mirabilis ATCC 29247. The CRAB strains were: A. baumannii ATCC 19606, A. baumannii ATCC 17978, A. baumannii ATCC 700603, and A. baumannii ATCC 19606.

**MIC QC Ranges**

MIC QC ranges for CRE were determined using three commercial lots of Mueller-Hinton (MH) broth (CA-MH, RI-MH, and LA-MH) and four commercial lots of Hinton broth (CA-HB, RI-HB, LA-HB, and NY-HB). MIC QC ranges for CRAB were determined using three commercial lots of Mueller-Hinton (MH) broth (CA-MH, RI-MH, and LA-MH) and one commercial lot of Hinton broth (CA-HB).

**RESULTS**

**PRELIMINARY RESULTS**

The study was conducted at 32 institutions to determine the prevalence of CRE and CRAB in various healthcare and community settings. The participating institutions were located in the United States, Canada, and Europe. The study was approved by local institutional review boards or ethics committees. The study included five carbapenem-resistant Enterobacteriaceae (CRE) and four carbapenem-resistant Acinetobacter baumannii (CRAB) strains. The CRE strains were: K. pneumoniae ATCC 700603, E. coli ATCC 25922, P. aeruginosa ATCC 27853, S. aureus ATCC 29213, and P. mirabilis ATCC 29247. The CRAB strains were: A. baumannii ATCC 19606, A. baumannii ATCC 17978, A. baumannii ATCC 700603, and A. baumannii ATCC 19606.

**APPLICATION OF CLSI QC RANGES**

The study was conducted at 32 institutions to determine the prevalence of CRE and CRAB in various healthcare and community settings. The participating institutions were located in the United States, Canada, and Europe. The study was approved by local institutional review boards or ethics committees. The study included five carbapenem-resistant Enterobacteriaceae (CRE) and four carbapenem-resistant Acinetobacter baumannii (CRAB) strains. The CRE strains were: K. pneumoniae ATCC 700603, E. coli ATCC 25922, P. aeruginosa ATCC 27853, S. aureus ATCC 29213, and P. mirabilis ATCC 29247. The CRAB strains were: A. baumannii ATCC 19606, A. baumannii ATCC 17978, A. baumannii ATCC 700603, and A. baumannii ATCC 19606.

**CONCLUSIONS**

The study was conducted at 32 institutions to determine the prevalence of CRE and CRAB in various healthcare and community settings. The participating institutions were located in the United States, Canada, and Europe. The study was approved by local institutional review boards or ethics committees. The study included five carbapenem-resistant Enterobacteriaceae (CRE) and four carbapenem-resistant Acinetobacter baumannii (CRAB) strains. The CRE strains were: K. pneumoniae ATCC 700603, E. coli ATCC 25922, P. aeruginosa ATCC 27853, S. aureus ATCC 29213, and P. mirabilis ATCC 29247. The CRAB strains were: A. baumannii ATCC 19606, A. baumannii ATCC 17978, A. baumannii ATCC 700603, and A. baumannii ATCC 19606.

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**REFERENCES**

