Assessment of MIC Increases with Meropenem-Vaborbactam (VABOMERE) and Ceftazidime-Avibactam in TANGO II (a Phase 3 Study of the Treatment of CRE Infections)

Olga Lomovskaya1, Mariana Castanheira2, Jose Vazquez3, Keith S. Kaye4, Kirk Nelson5, Dongxu Sun6, Elizabeth Alexander7, Michael Dudley7, Michael Yin7

1The Medicines Company, San Diego, CA, USA; 2JMI Laboratories, North Liberty, IA, USA; 3Medical College of Georgia, Augusta, Georgia, Augusta, GA, USA; 4University of Michigan Medical School, Ann Arbor, MI, USA; 5The Medicines Company, Parsippany, NJ, USA; 6Columbia University Medical Center, New York, NY, USA

Revised Abstract

Background

TANGO II is a Phase 3 randomized trial of meropenem-vaborbactam (M-V) versus ceftazidime-avibactam (CAZ-AVI) in emergency department (ED) patients with bloodstream infections (BSI) caused by non-extended-spectrum β-lactamase (ESBL)-producing K. pneumoniae (K. pneumoniae (KP)) and non-ESBL K. pneumoniae (K. pneumoniae (KP)) in the United States. The efficacy and safety results of TANGO II have been previously reported. The current abstract focuses on analysis of MIC results in the post-baseline isolate and describes potential mechanisms of resistance.

Methods

MICs were conducted on baseline and post-baseline isolates. MIC results were determined using CLSI reference methods and MIC post- baseline isolates of M-V (≤ 8 ug/ml) were reviewed. Resistance mechanisms were assessed by supportive laboratory work.

Results

In TANGO II, 25 patients were treated with M-V and 4 treated with CAZ-AVI producing DAH. The mean days of treatment was 8.5 and 12.4 days, respectively. In the M-V arm, MICs of > 8 ug/ml were seen in 8.4 for M-V and CAZ-AVI, respectively. The mean days of treatment was 8.5 and 12.4 days, respectively. In the M-V arm, MICs of > 8 ug/ml were seen in 8.4 for M-V and CAZ-AVI, respectively. The mean days of treatment was 8.5 and 12.4 days, respectively. The mean days of treatment was 8.5 and 12.4 days, respectively. The mean days of treatment was 8.5 and 12.4 days, respectively.

Conclusion

The MIC results in TANGO II were consistent with previous reports demonstrating MIC increases with M-V treatment. The presence of cephalosporinases with increased MICs in the post-treatment isolates suggest a potential mechanism of resistance.

Disclosures

The author(s) declare no competing interests.

References