Antimicrobial Activity of Tigecycline and Cefoperazone/Sulbactam Tested against 14,850 Gram-negative Organisms from Europe and the Asia-Pacific Region (2013-2014)

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AMENDED ABSTRACT

Background: A total of 1,485 organisms, including 1,282 Enterobacteriaceae, were isolated from Western Europe (390), Eastern Europe (341), Eastern Asia (498) and Western Asia (112) from surveillance studies conducted in 2013-2014 as part of the SENTRIN Surveillance Program. Tigecycline and Cefoperazone/Sulbactam were assayed against Enterobacteriaceae (n=372) by broth microdilution in the MICAST (Bial, Portugal) and ECOF (ECCMID) methods, respectively. 

Methods: A total of 14,850 enterobacteriaceae were susceptible (n=1,282, ECOF/CLSI) with regional ECOF susceptibility rates significantly higher than the ECOF/CLSI (p<0.05). Over 14,000 isolates were Enterobacteriaceae (99.9%), with 489 isolates from Eastern Asia. Tigecycline and Cefoperazone/Sulbactam were assayed against Enterobacteriaceae (n=372) by broth microdilution in the MICAST (Bial, Portugal) and ECOF (ECCMID) methods, respectively. 

Results: Tigecycline and Cefoperazone/Sulbactam demonstrated good in vitro activity against Enterobacteriaceae isolated from Europe and APAC medical centers. Tigecycline and Cefoperazone/Sulbactam are two broad-spectrum antibiotics with a broad spectrum of activity. Overall, the susceptibility rates were 92.4%, 92.5%, and 92.5% for Tigecycline and Cefoperazone/Sulbactam, respectively. Tigecycline and Cefoperazone/Sulbactam were assayed against Enterobacteriaceae (n=372) by broth microdilution in the MICAST (Bial, Portugal) and ECOF (ECCMID) methods, respectively. 

REFERENCES


CONCLUSIONS

• Tigecycline and Cefoperazone/Sulbactam demonstrated good in vitro activity against Enterobacteriaceae isolated from Europe and APAC medical centers.

• Based on the potency and spectrum, tigecycline continues to have a role for treating infections caused by indicated Enterobacteriaceae organisms, and remains among the most active compounds in vitro against Enterobacteriaceae spp.

Table 1. Summary of tigecycline in vitro activity when tested against Enterobacteriaceae, Cefoperazone/sulbactam, and 3.5 methicillin from Europe and the Asia-Pacific Region.

Table 2. Activity of tigecycline, cefoperazone/sulbactam, and comparators, against Enterobacteriaceae from Asia-Pacific Region.

AMENDMENT TO PAPER: The word "and" has been added to the sentence "Tigecycline and Cefoperazone/Sulbactam demonstrated good in vitro activity against Enterobacteriaceae isolated from Europe and APAC medical centers. Tigecycline and Cefoperazone/Sulbactam are two broad-spectrum antibiotics with a broad spectrum of activity."