In Vitro Activity of a Novel Carbapenem, Doripenem, Tested Against Bacterial Pathogens Recovered From Patients Hospitalized With Pneumonia (North America; 2004-2005)

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ABSTRACT

Background: Hospital-acquired pneumonia (HAP) is a leading cause of mortality and morbidity in hospitalized patients, and emerging resistance (R) further complicates management. This report summarizes the activity of doripenem (DOR; formerly S-4661), an investigational parenteral carbapenem, against leading bacterial pathogens recovered from patients with HAP.

Methods: A total of 1,696 non-duplicate, consecutive isolates obtained from 25 US hospitals were collected as part of a regional surveillance program (2004 to 2005). In-hospital HAP isolates were stratified by etiology: P. aeruginosa (ASP; 97), E. coli (ECC; 26%), Enterobacter spp. (KSP; 160), Serratia spp. (SRT; 168), and Acinetobacter spp. (ATCC; 2005). For each species, MAPs were determined using CLSI methods and interpretive criteria, including those for ESBLs, phenotypes.

Results: Doripenem inhibited 94.8% (1,603 PRIs) of the 1,696 pathogens within its spectrum of activity using break points equivalent to those of imipenem.

Conclusions: Doripenem was broadly active against this collection, inhibiting 94.8% of the top-20 pathogens with activity at or above the equivalent break point of imipenem.