In Vitro Activity of a Carbapenem and Novel β-lactamate Inhibitor Combination (RPX2003/RPX7009) Tested Against Contemporary Populations of Gram-negative Organisms

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AMENDMENTS

Amended Abstract

Background: RPX7009 was evaluated in combination studies using 1,107 Gram-negative isolates from hospitals located in 43 countries. A total of 1,107 Gram-negative isolates were selected to represent the contemporary frequency distributions of resistance occurring in those Enterobacteriaceae, particularly KPC-producing strains (60).

Methods: A total of 1,107 isolates were selected from 43 countries and were defmed as Gram-negative isolates from hospitals located in 43 countries. A total of 1,107 isolates were selected to represent the contemporary frequency distributions of resistance occurring in those Enterobacteriaceae, particularly KPC-producing strains (60).

Results: RPX7009 inhibited 98.3% of 181 carbapenem-resistant Enterobacteriaceae, including those caused by BLI at 4 µg/mL and the highest MIC was only 4 µg/mL, whereas 89.2% of the strains were inhibited at ≥1 µg/mL at the same concentration.

Conclusions: Overall, RPX7009/RPX2003 showed similar or slightly lower biapenem against KPC-producing isolates. Biapenem MICs were similar or slightly lower when biapenem was tested alone against KPC-producing isolates, as compared to biapenem alone.

Tables 1-4 include the cumulative % inhibited at MIC (µg/mL) of BP/RPX9 with BLI at 4 µg/mL.

References:

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Bacterial isolates of Enterobacteriaceae, including 102 carbapenem-resistant Enterobacteriaceae, were selected to represent the contemporary frequency distributions of resistance occurring in those Enterobacteriaceae, particularly KPC-producing strains (60).

In this study, we evaluated the activity of the novel β-lactamate inhibitor RPX7009 and its combination with other β-lactams against a wide range of Gram-negative isolates from hospitals located in 43 countries.

In addition, a subset of 108 RPX7009-producing Enterobacteriaceae strains was also tested against biapenem alone and without RPX7009.

Materials and Methods

Bacterial isolates of Enterobacteriaceae, including 102 carbapenem-resistant Enterobacteriaceae, were selected to represent the contemporary frequency distributions of resistance occurring in those Enterobacteriaceae, particularly KPC-producing strains (60).

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