Antimicrobial Activity of Ceftobiprole (BAL9141) Tested against Staphylococcal Strains with Selected Resistance Patterns

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Methods: 518 staphylococci were selected from various international surveillance programs and other specialized collections to include organisms with known resistance patterns, including those resistant to methicillin (MRSA), vancomycin, and clindamycin.

Background: Ceftobiprole (formerly BAL9141), the active component of prodrug Ceftazidime/Thiopental, is a broad-spectrum parenteral cephalosporin active against oxacillin-resistant staphylococci. It was recently reported in Howe et al. (100), Antimicrob. Agents Chemother.

Materials and Methods: A panel of 518 staphylococcal clinical isolates was assembled from international surveillance programs and other specialized collections to include organisms with known resistance patterns, including those resistant to methicillin (MRSA), vancomycin, and clindamycin. The isolates were subjected to further testing for susceptibility to ceftobiprole for a subset of 33 strains.

Results: Ceftobiprole was more potent than either clindamycin or vancomycin, once considered the drug of last resort, recently has been reported in Howe et al. (100), Antimicrob. Agents Chemother.

Conclusions: Ceftobiprole showed excellent activity against Oxa R CoNS (80 strains; MIC 50 and MIC 90, 0.25 and 0.5 µg/ml), or enhanced activity in the presence of clavulanate against 30% of Oxa S CoNS (MIC 50 and MIC 90, 0.12 and 0.25 µg/ml).

References:

Table 1: In vitro activity of cephalosporin in comparison to selected antimicrobial agents against 165 isolates of coagulase-negative staphylococci.

Table 2: MBC results compared to reference (HICKLS MT-40) MIC values for 57 contemporary isolates of staphylococci.