Proposed Susceptibility Testing Criteria for *H. influenzae* (HI) Tested Against Piperacillin/Tazobactam (P/T): Report Using Results from the SENTRY Program and Japan Surveillance Isolates

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**RESULTS**

*Piperacillin/tazobactam* was active against all SENTRY Program (BLNAR) strains as well as recent Japanese *H. influenzae* (BLNAR, BLNAC, BLPACR, BLPAR) of *H. influenzae* (see Tables 1 and 2). This level of activity (MIC ≤0.12 μg/ml) was comparable to ciprofloxacin, meropenem, and ceftriaxone.

In contrast to the existing diagnosis for *H. influenzae* using BLNAR or ampicillin-susceptible (BLNAS), ß-lactamase-negative ampicillin-resistant (BLPAR) and ß-lactamase-positive ampicillin-susceptible (BLNAS, BLPACR) and ciprofloxacin. However, a 100% categorical agreement was observed between the CLSI and US-FDA breakpoints. The same US-FDA methodology was used in all experiments.

The SENTRY Program of influenza isolates (1045-99) were screened for susceptibility to ampicillin-resistant, non-ß-lactamase-producing strain of *H. influenzae* (MIC ≤0.5 μg/ml). These ß-lactamase-negative strains were susceptible to ampicillin (MIC ≤0.12 μg/ml). These ß-lactamase-negative strains were compared to amoxicillin and ampicillin-clavulanate, respectively. False-resistant errors of ≤0.03 were recorded for four drugs.

**CONCLUSIONS**

BLNAR and BLNPCR *H. influenzae* are occurring in clinical practice with greater regularity, especially in Japan.

Some agents previously considered as inactive against BLNAR (amoxicillin-clavulanate) have recently been shown to have excellent potency (piperacillin/tazobactam) and should be given accurate susceptible breakpoints as proposed here (MIC ≤0.5 μg/ml) to correlate disk diffusion zone sizes with ≥21 mm for interpretation were proposed and correlations with the ≤0.12 μg/ml breakpoint was without intermethod errors.

Some clinicians have utilized CLSI interpretive criteria established prior to 2001. In the current study, to determine ß-lactamase-negative strains from the international SENTRY Antimicrobial Surveillance Program (2001-2005), we compared CLSI and US-FDA interpretive criteria for the current study.

These ß-lactamase-negative strains were compared to ampicillin and amoxicillin-clavulanate, respectively. False-resistant errors of ≤0.03 were recorded for four drugs.

**MATERIALS AND METHODS**

The SENTRY Program of influenza isolates (1045-99) were screened for susceptibility to ampicillin-resistant, non-ß-lactamase-producing strain of *H. influenzae* (MIC ≤0.5 μg/ml). These ß-lactamase-negative strains were susceptible to ampicillin (MIC ≤0.12 μg/ml). These ß-lactamase-negative strains were compared to amoxicillin and ampicillin-clavulanate, respectively. False-resistant errors of ≤0.03 were recorded for four drugs.

**INTRODUCTION**

AMERICAN ACADEMY OF PEDIATRICS COMMITTEE ON INFECTIOUS DISEASES

The American Academy of Pediatrics Subcommittee on Influenza has revised the recommendations for influenza prophylaxis and treatment. These recommendations are based on the current evidence regarding the natural history of influenza and the efficacy of antiviral agents. The recommendations are intended to provide guidance for clinicians in the management of influenza infection. The recommendations are reviewed annually and revised as necessary.

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**REFERENCES**


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