**In vitro Activity of Tebipenem against Recent Collection of Fastidious Organisms Recovered from Respiratory Tract Infections**

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**Materials and Methods**

- The susceptibility of 3,475 fastidious organisms were tested, including:
  - Haemophilus influenzae (92 isolates, including fluoroquinolone-resistant, β-lactamase-positive, and β-lactamase-negative ampicillin-resistant (SBLNAR))
  - Haemophilus parainfluenzae (226 isolates, including β-lactamase-positive, and β-lactamase-negative ampicillin-resistant (SBLNAR))
  - Moraxella catarrhalis (400 isolates)
  - Streptococcus pneumoniae (1,264 isolates, including penicillin-resistant)

- Bacterial isolates were identified by JMI Laboratories at a central laboratory (JMI Labs) using standard microbiology methods and manual-based detection of cell morphology (via light microscope). The isolates were collected in 2017–2019 (95% from 2019) as part of the SENTRY antimicrobial surveillance program and selected to be representative of these fastidious organisms recovered from community-acquired respiratory tract infections (CARTIs).

- This study evaluated the in vitro activity of tebipenem against various fastidious organisms recovered from community-acquired respiratory tract infections (CARTIs).

**Results**

- **Activity against Haemophilus influenzae isolates**
  - Tebipenem and ertapenem had similar activity, with MIC₉₀ values of 0.12/0.5 μg/mL and 0.02/0.25 μg/mL, respectively, when tested against the overall collection of strains (Table 2).

- **Similar MIC results for tebipenem were observed against β-lactamase-positive Haemophilus influenzae isolates (MIC₉₀ ≤0.12 μg/mL, Table 4).**
  - Against 14/19 β-lactamase-sensitive isolates, tebipenem and ertapenem MIC results ranged from 0.015–0.25 μg/mL (MIC₉₀ 0.12 μg/mL, respectively) (Table 1 and data not shown).

- **Lower susceptibility rates were observed for trimethoprim-sulfamethoxazole (65.5%, Table 5).**
  - Against β-lactamase-negative ampicillin-resistant (BLNAR) isolates, tebipenem and ertapenem MIC results ranged from 0.03–1 μg/mL (MIC₉₀ 0.03/0.03 μg/mL) and 0.06–0.25 μg/mL, respectively (Table 1 and data not shown).

**References**


**Contact**

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