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**ABSTRACT**

Telavancin (TLV) is approved in the United States for the treatment of community-acquired skin and skin structure infections (cSSSI) and hospital-acquired and ventilator-associated bacterial pneumonia caused by susceptible (S) pathogens. Resistance rates for most comparators remained steady, the MRSA rate fell, and the MDR MRSA rate increased during the study period. Resistance rates for most comparators remained steady, the MRSA rate fell, and the MDR MRSA rate increased during the study period.

**RESULTS**

- TLV is a 2-µg/mL (n = 54, 39%) and ATCC 29213 serum peak (2 µg/mL; 0.4% of all SA) was 0.12 µg/mL.
- No VAN-resistant SA isolates were detected. Overall S rates were: CLI (84.4%), DAP (99.9%), ERY (41.3%), GEN (97.6%), LEVO (62.1%), LZD (>99.9%), TET (95.5%), and TMP-SMX (98.2%), and no significant changes were observed over the 3 years. MRSA rates declined overall (from 46.8% to 43.6%). MDR MRSA increased from 27.3% (2014) to 30.2% (2016). All TLV MIC values for daptomycin nonsusceptible (n = 8) and linezolid-resistant isolates (n = 5) were ≤0.06 µg/mL (data not shown).

**INTRODUCTION**

- A total of 15,882 US clinical isolates were collected from 82 sites located in 37 states and all 9 US Census Bureau divisions from 2014 to 2016. This longitudinal study evaluated TLV activity and comparator resistance trends against *S. aureus* isolates resistant to ≥3 additional drug classes were considered multidrug-resistant (MDR) MRSA isolates resistant to ≥3 additional drug classes were considered multidrug-resistant (MDR) isolates. The research and publication process was supported by Theravance Biopharma R&D, Inc. Telavancin MIC (µg/mL) were ≤0.06 µg/mL (n = 112), CLSI edition.

**MATERIALS AND METHODS**

- Resident sample culture was collected from 37 states and 41 US Census Divisions.
- Isolates were screened for vancomycin-resistant (VAN-resistant) and daptomycin-resistant (DAP-resistant) MRSA.
- All US isolates were tested in the 2015 Clinical and Laboratory Standards Institute (CLSI) M100-S27. The research and publication process was supported by Theravance Biopharma R&D, Inc. Poster production support was

**CONCLUSIONS**

- Telavancin and comparator agents achieved 70% to 100% of total Susceptible (S) S. aureus isolates with elevated MIC values at least 8-fold more potent than comparator values. Resistance rates for most comparators remained steady, the MRSA rate fell, and the MDR MRSA rate increased during the study period. Resistance rates for most comparators remained steady, the MRSA rate fell, and the MDR MRSA rate increased during the study period.

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