Tigecycline is a glycylcycline antimicrobial recently approved by the FDA for treatment of infections caused by Gram-negative and Gram-positive aerobic pathogens. Tigecycline is a bacteriostatic agent which inhibits protein synthesis without killing the bacterial cell. Tigecycline has been shown to be active against a wide range of Gram-positive and Gram-negative aerobic pathogens, including methicillin-resistant Staphylococcus aureus (MRSA), vancomycin-resistant Enterococcus (VRE), Pseudomonas aeruginosa, Acinetobacter spp., and ß-haemolytic streptococci (highest for Group B, 83.1%). Tigecycline was active against a variety of ß-lactamase producers, including ß-lactamase enzymes found within this collection of isolates. Tigecycline was also active against Enterobacteriaceae spp. (MIC90, 1 mg/L). However, >99% of strains among these species were resistant to ß-lactams. Tigecycline was not active against P. aeruginosa (MIC90, 2 mg/L) and Enterococcus spp. (MIC90, 4 mg/L). Tigecycline was active against almost all Enterococcus spp. (99.2%), Enterococcus faecalis and Enterococcus faecium (99.4%), Enterococcus hirae (99.6%), and Enterococcus durans (99.6%). Tigecycline was active against these species (Table 2).

To assess the contemporary potency and spectrum of Tigecycline, antimicrobial susceptibility tests were performed on 7,133 isolates of Gram-positive and -negative aerobic pathogens from 13 nations (2008). These included isolates from south east Asia, Europe, South America, and the Mediterranean regions. All isolates were tested against tigecycline and other antimicrobials with current breakpoint criteria established by the FDA and the CLSI. The results of these tests are presented in Table 3. The MIC50 and MIC90 values for tigecycline were determined for each species group. The MIC50 and MIC90 values for tigecycline were 0.12 mg/L and 0.25 mg/L, respectively, for all species groups. Tigecycline was more active than tetracycline (MIC50 = 8 mg/L) against these isolates. Tigecycline was more active than tetracycline (MIC50 = 8 mg/L) against these isolates. Tigecycline was more active than tetracycline (MIC50 = 8 mg/L) against these isolates.

**RESULTS**

- Against the S. aureus and CoNS tested in this study, 92.2% of isolates were inhibited by ≤0.25 mg/L of tigecycline, respectively (Table 1). All Staphylococcus spp. were inhibited by ≤0.25 mg/L. The susceptibility breakpoint criteria for tigecycline and these pathogens.

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**REFERENCES**

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