RESULTS

Conclusions

Tigecycline inhibited all Entero bacteria at MICs of 25 mcg/ml and 95.9% at the common breakpoint of 2 mcg/ml.

Tigecycline’s MIC<sub>50</sub> of 1 mcg/ml vs. Entero bacteria was equivalent to imipenem and 4 to 64-fold better than other beta-lactams, beta-lactam-beta-lactamase inhibitor combinations, and levofloxacin.

Although tigecycline demonstrated in vitro activity similar to imipenem against ESBL-positive E. coli and Klebsiella spp. While there were only 8 strains found in this study (5.7% of E. coli and Klebsiella spp. tigecycline inhibited 78 (88) at its susceptibility breakpoint of 2 mcg/ml and imipenem inhibited 8 (100) at its susceptibility breakpoint.

Tigecycline’s MIC<sub>50</sub> of 0.5 mcg/ml against Acinetobacter spp. was the lowest among all broad spectrum antimicrobials tested.

Tigecycline’s MIC<sub>50</sub> value of 0.25 mcg/ml against gram-positive pathogens, including resistant phenotypes, was the lowest of all antimicrobials evaluated in this study.

Tigecycline inhibited the growth of all MSSA and MRSA at a MIC of 0.25 mcg/ml. Tigecycline’s in vitro activity vs MRSA was similar to that of linezolid and vancomycin and greater than that of levofloxacin, imipenem and other beta-lactams.

The absence of interpretive breakpoints for S. pneumoniae precludes conclusive interpretation of tigecycline’s MIC<sub>50</sub> of 0.25 mcg/ml; however, a total of 3 strains (one each from the penicillin-susceptible, penicillin-intermediate, and penicillin-resistant phenotypes) had MICs exceeding the current susceptible breakpoint of 0.25 mcg/ml for non-pneumococcal streptococci, and all 3 strains had MICs of 0.5 mcg/ml.

Tigecycline demonstrated excellent inhibitory activity against H. influenzae, regardless of beta-lactamase production.

The in vitro activity of tigecycline in this study suggests that it is promising composed for the treatment of severe infections due to community isolated pathogens, including those resistant to one or more antimicrobials.