E-101 Solution contains 2 highly purified therapeutic enzymes, porcine myeloperoxidase (MPO) and horseradish peroxidase (HRP), with selected amino acids formulated in a phosphate buffer. The activity of E-101 Solution, a new topical/local agent for the prevention and treatment of infections. E-101 hypochlorous acid produced is sufficient for singlet oxygen generation, but not substantial enough to cause cell death in a concentration-dependent manner. The extent of kill with E-101 was most active against Staphylococcus aureus, E. coli, and P. aeruginosa. The MIC range was 0.008 to 1.0 µg MPO/mL against S. aureus, E. coli, and P. aeruginosa

Results: Time-kill studies (Figure 2) showed that E-101 Solution is bactericidal against S. aureus, E. coli, and P. aeruginosa in a concentration-dependent manner. The extent of kill with E-101 was most active against S. aureus, E. coli, and P. aeruginosa. The MIC range was 0.008 to 1.0 µg MPO/mL against S. aureus, E. coli, and P. aeruginosa.

Conclusions: E-101 Solution is a potential, broad-spectrum, and rapid bactericidal agent against clinical isolates associated with skin and skin structure infections. The microbicidal activity of E-101 Solution is concentration- and time-dependent in the presence of blood. The MIC50 and MIC90 range was 0.25 to 2.0 µg MPO/mL against S. aureus, E. coli, and P. aeruginosa.

REFERENCES:


