Title: Efficacy of Dalbavancin and Telavancin in the Treatment of Acute Bacterial Skin and Skin Structure Infections

Abstract

Objectives: Two glycopeptide analogues, such as dalbavancin and telavancin, with improved pharmacokinetic/pharmacodynamic parameters have been developed. These two glycopeptide analogues are approved by Food and Drug Administration (FDA) for treatment of various Gram-positive bacterial skin infections.

Materials and methods: We have conducted an open labelled prospective randomized study to compare the efficacy of these two drugs. A total of 200 patients diagnosed with acute bacterial skin and skin structure infections (ABSSSI) were recruited for the study. They were randomized to receive either a single dose of dalbavancin 1500 mg i.v (Group I) or telavancin 10 mg/kg intravenously (i.v.) every 24 hours for six days (Group II). The skin infection rating score (SIRS) was calculated on Day 0 for all patients at the time of diagnosis. Signs and symptoms of the lesions were assessed based on the following factors: blistering, exudate/pus, erythema/inflammation and itching/pain. Each factor was classified as one of the following: absent – 0, minimal – 1, moderate – 2 and severe – 3.

Results: Clinically successful treatment was defined as complete resolution of clinically meaningful signs and symptoms of infection, including SIRS score of 0. The outcome measure was the percentage of patients with SIRS score of 0 on day 7 (clinical success). The third most common diagnosis at baseline (13% in both groups). Patients who received dalbavancin had a higher clinical success rate than those receiving telavancin.

Conclusion: Findings of the present study show that single i.v dose of dalbavancin is better than telavancin repeated doses in treatment of ABSSSI.

Keywords: Dalbavancin, Telavancin, efficacy, acute bacterial skin, skin structure infections.

For more information: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6290182/