Treatment of acute bacterial skin and skin structure infections (ABSSSI) in the outpatient setting: clinical and economic outcomes from a real-world multi-center study of oritavancin

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Purpose

In 2014 there were 556,550 hospital admissions for skin and subcutaneous tissue infections (SSTI) at a cost to the US healthcare system of over $15 billion. Hospital costs for these admissions range from $5000 to greater than $50,000, with most hospital stays ranging from 1 to 3 days per admission. In 2014, research has shown that most patients have been readmitted within 30 days. This study was performed to assess the clinical and economic outcomes of outpatient treatment with oritavancin in the treatment of ABSSSI.

Methods:

Study Design

This was a retrospective study of patients 18 years or older treated with oritavancin for non-hospitalized skin and skin structure infections in an observational database study (ODS) sponsored by oritavancin. All patients treated with oritavancin for SSTI during the ODS were included in this analysis. The primary outcomes of interest were the rates of clinical success (cure or improved) at several time points following treatment and the costs associated with the treatment of SSTI patients treated with oritavancin. The costs were estimated and presented on the basis of a sample of patients treated with oritavancin in the outpatient setting outside of the pivotal trials.

The purpose of this study was to evaluate the real-world clinical and economic outcomes of patients treated with oritavancin in the hospital and outpatient setting using data from the ODS.

Methods:

Patient demographics, characteristics, comorbidities, and surgical procedures (if applicable) were determined from the ODS. Clinical outcomes included mean and median hospital costs and the breakdown of costs by service and sub-service for patients with ABSSSI. The costs of patients treated for SSTI were calculated and presented on the basis of a sample of patients treated with oritavancin in the outpatient setting outside of the pivotal trials.

The high use of the inpatient setting can be partially explained by the need for intravenous (IV) antibiotics. Antibiotics are supplied by the Patient Centered Control and Prevention that need IV antibiotics for the sole reason for admission in 0.1% across the range of infection severity.

The success rate (defined as cure or improved) was 99.1% at a mean of 13.2 ± 3.5 days post index treatment. The cure or improvement rates were 99% or 97% which is the difference between the rates of cure or improvement for other antibiotics with or without MRSA. With this study, a new treatment modality was shown to be effective in SSTI where oritavancin was the sole reason for admission in 41% of patients. This was a retrospective study of patients 18 years or older covered by commercial insurance who were treated with oritavancin

Results

Clinical Outcomes

The success rate (defined as cure or improved) was 99.1% at a mean of 13.2 ± 3.5 days post index treatment. The cure or improvement rates were 99% or 97% which is the difference between the rates of cure or improvement for other antibiotics with or without MRSA. With this study, a new treatment modality was shown to be effective in SSTI where oritavancin was the sole reason for admission in 41% of patients. This was a retrospective study of patients 18 years or older covered by commercial insurance who were treated with oritavancin.

Conclusions

This study assessed the clinical and economic outcomes of treatment of skin infections with oritavancin in the outpatient setting. Results suggest that oritavancin is effective in the treatment of skin infections in SSTI. Healthcare resource utilization and savings were estimated to be $182.72 (mean) and $161.09 (median).

Overall efficacy of 99.5% across the range of infection severity.

References


2. Table 1. Inpatient treatment with oritavancin: costs and resource use.

Table 2. Estimated hospital costs for services provided to patients with ABSSSI treatment.

Table 3. All-cause hospital admission rate by sub-group.