Cost saving opportunities among hospitalized patients with acute bacterial skin and skin structure infections (ABSSSI) with omadacycline, a once-daily antibiotic with IV-to-oral transition capability, relative to current standard of care inpatient

LaPensee, KT*, Lodise, TP*

Paratek Pharmaceuticals, King of Prussia, PA, USA/Albany College of Pharmacy and Health Sciences, Albany, NY, USA

ABSTRACT
Background: Care of patients with acute bacterial skin and skin structure infections (ABSSSI) poses unique challenges for healthcare delivery systems. The present study compared costs of care among hospitalized patients with ABSSSI, treated with omadacycline (OMC) to current standard of care (SOC) treatment. We aimed to identify cost saving opportunities among hospitalized patients with acute bacterial skin and skin structure infections (ABSSSI) with omadacycline, a once-daily antibiotic with IV-to-oral transition capability, relative to current standard of care inpatient.

Method: CONCEPTUAL HEALTHCARE DECISION MODELS WERE DEVELOPED FROM THE HOSPITAL AND 3RD PARTY PAYER’S PERSPECTIVE TO EVALUATE THE POTENTIAL ECONOMIC IMPACT OF OMADACYCLINE AMONG HOSPITALIZED PATIENTS WITH ABSSSI. The models were developed using a staging approach, initially assigning patients to hospital or outpatient treatment based on the severity of systemic symptoms. The models were then expanded to include various scenarios of inpatient and outpatient care, as well as the cost impact of shifting ABSSSI patients from current inpatient standard of care (SOC) treatment to outpatient oral OMC. The goal was to identify cost saving opportunities among hospitalized patients with acute bacterial skin and skin structure infections (ABSSSI) with omadacycline, a once-daily antibiotic with IV-to-oral transition capability, relative to current standard of care inpatient.

OBJECTIVES
• To determine the cost impact of shifting ABSSSI patients from current inpatient standard of care (SOC) treatment to outpatient oral OMC. The goal was to identify cost saving opportunities among hospitalized patients with acute bacterial skin and skin structure infections (ABSSSI) with omadacycline, a once-daily antibiotic with IV-to-oral transition capability, relative to current standard of care inpatient.

METHODS
INTRODUCTION
Three systems with different patient populations were included: (1) a major academic medical center, (2) a community hospital, and (3) a non-university affiliated hospital.

METHODS (CONT.)
• The model was based on the first and second line antibiotic treatment options from the literature. The OMC treatment arm was based on data from the RAPID-1 and RAPID-2 trials and estimated costs for vancomycin were based on the Premier Hospital Database (PHD) and 2016 Medicare Fee Schedule. Costs in the SOC arm were based on the Premier Hospital Database (PHD) for hospital costs and 2016 Medicare Fee Schedule for outpatient costs.

RESULTS
• The daily costs for OMC were varied from 0 to $1000 US dollars per day. In the SOC arm, patients were assumed to receive intravenous (IV) hospital treatment with a median length of stay (LOS) of 7 days. Patients receiving OMC were assumed to receive a 2 days’ LOS reduction at all OMC daily cost levels below $317/day.

• In the SOC arm, patients were assumed to receive intravenous (IV) hospital treatment with a median length of stay (LOS) of 7 days. Patients receiving OMC were assumed to receive a 2 days’ LOS reduction at all OMC daily cost levels below $317/day.

• In the SOC arm, patients were assumed to receive intravenous (IV) hospital treatment with a median length of stay (LOS) of 7 days. Patients receiving OMC were assumed to receive a 2 days’ LOS reduction at all OMC daily cost levels below $317/day.

• In the SOC arm, patients were assumed to receive intravenous (IV) hospital treatment with a median length of stay (LOS) of 7 days. Patients receiving OMC were assumed to receive a 2 days’ LOS reduction at all OMC daily cost levels below $317/day.

CONCLUSIONS
• The overall clinical data, observational study and the hospital discharge data from the hospital and hospital treatment of patients with ABSSSI support the use of OMC as first-line treatment. OMC was associated with a 1-day hospital LOS reduction if the daily cost of OMC was ≤ $383/day, and with a 2 days’ hospital LOS reduction if the daily cost of OMC was ≤ $317/day.

• The overall clinical data, observational study and the hospital discharge data from the hospital and hospital treatment of patients with ABSSSI support the use of OMC as first-line treatment. OMC was associated with a 1-day hospital LOS reduction if the daily cost of OMC was ≤ $383/day, and with a 2 days’ hospital LOS reduction if the daily cost of OMC was ≤ $317/day.

• The overall clinical data, observational study and the hospital discharge data from the hospital and hospital treatment of patients with ABSSSI support the use of OMC as first-line treatment. OMC was associated with a 1-day hospital LOS reduction if the daily cost of OMC was ≤ $383/day, and with a 2 days’ hospital LOS reduction if the daily cost of OMC was ≤ $317/day.

• The overall clinical data, observational study and the hospital discharge data from the hospital and hospital treatment of patients with ABSSSI support the use of OMC as first-line treatment. OMC was associated with a 1-day hospital LOS reduction if the daily cost of OMC was ≤ $383/day, and with a 2 days’ hospital LOS reduction if the daily cost of OMC was ≤ $317/day.

• The overall clinical data, observational study and the hospital discharge data from the hospital and hospital treatment of patients with ABSSSI support the use of OMC as first-line treatment. OMC was associated with a 1-day hospital LOS reduction if the daily cost of OMC was ≤ $383/day, and with a 2 days’ hospital LOS reduction if the daily cost of OMC was ≤ $317/day.

REFERENCES


