conferenceseries.com

2nd World Congress and Exhibition on

Antibiotics and Antibiotic Resistance

October 13-15, 2016   Manchester, UK

Dalbavancin: A new pathway for the treatment of acute bacterial skin and skin structure infections in Portugal

Helena Sofia Antao[1], Joao Paulo Guimaraes[1], Filipe Froes[2], Diana Ferreira[3], Joao Almeida[3] and Sara Marques[3]
[1]Angelini Farmacêutica, Portugal
[2]Hospital Pulido Valente, Portugal
[3]Exigo Consultores, Portugal

Background: Acute Bacterial Skin and Skin Structure Infections (ABSSSI) are the 4th most frequent cause of in-hospital infections in Portugal and a major driver for resource utilization. Vancomycin and Linezolid are widely used in ABSSSI but have been associated with a prolonged length of stay (LOS) of 26.5 and 19.8 days, respectively. Dalbavancin is a new lipoglycopeptide antibacterial agent that is active against gram positive pathogens and demonstrates a long half-life, allowing for a two-dose regimen to treat ABSSSIs (1000 mg IV followed, one week later, by 500 mg IV). This study aimed to evaluate its effect on LOS and disease burden in Portugal.

Material & Methods: The natural history of ABSSSI and treatment implications was modeled with the following assumptions: Linezolid as comparator for dalbavancin as 1st line treatment and vancomycin as 2nd line treatment for both; efficacy and safety endpoints as reported in randomized clinical trials; health resource utilization estimates based on observational Portuguese data; assessment of results in the overall microbiologically evaluable population and a separate analysis for methicillin-resistant Staphylococcus aureus (MRSA); therapy failure opportunity exists to 1st line therapy but no subsequent therapy failures and time horizon of up to 19.81 days (1st line therapy) and up to 14.0 days (2nd line therapy).

Results: The average LOS with dalbavancin was estimated to be 10.4 days compared to the average LOS for Linezolid (19.8 days), this represents an average reduction of 9.4 days in the hospital LOS for ABSSSI patients. Regarding the burden of disease, dalbavancin is estimated to additionally decrease the in-hospital death rate by 1.6% in the overall microbiologically evaluable population and by 1.8% in MRSA infected population when compared to linezolid.

Conclusions: Dalbavancin may be an effective pathway to provide IV antibiotic therapy for patients with ABSSSI with a favorable safety profile and a two-dose regimen. Its use as an in-hospital 1st line IV antibiotic therapy to treat ABSSSI has the potential to decrease LOS and burden of disease when compared to 1st line use of linezolid.

sofia.antao@angelini.pt

J Drug Metab Toxicol 2016
ISSN: 2157-7609, JDMT an open access journal

Antibiotics 2016
October 13-15, 2016

Volume 7, Issue 3 (Suppl)

Page 75