ECONOMIC ANALYSIS OF CEFTI O FUR HYDROCHLORIDE FOR TREATMENT OF BOVINE CY T HALIC MASTITIS CAUSED BY GRAM-NEGATIVE PATHOGENS IN DAIRY COWS IN THE UNITED STATES

Purpose: Abnormal cell culture, SSD included. NSSD overall mortality at 1-year post-dcg was 61% and 39%, respectively. Mean cost of hospitalization was $75k/107k, with SSD costing almost double NSSD ($123k/$149k). In all three models, NSSD incurred higher costs ($18k/$34k vs $14k/$27k) for SSD, $54k/$102k vs $42k/$81k for 30D-6M, and $34k/$67k vs $27k/$56k for 6M-1YR.

CONCLUSIONS: SSD patients have higher rates of mortality, both during hospitalization and in the year following, compared to NSSD patients. The higher mean hospitalization costs for SSD may be due to longer LOS/ more intensive resource use. The lower overall 1-year mortality rate in NSSD may be associated with higher follow-up costs.

ECONOMIC BURDEN OF SURGICAL SITE INFECTIONS IN HIP AND KNEE ARTHROPLASTY - A COST-OF-ILLNESS STUDY FOR GERMANY

OBJECTIVES: The treatment of surgical site infections (SSI) is associated with high costs for the statutory health insurance (SHI) and for hospitals. The DRG-reimbursement for septic revisions seems to be not cost-covering for hospitals. Without an Arthroplasty Register for Germany, exact numbers for SSI in hip arthroplasty and knee arthroplasty are not available. Also there is no approximation for the financial impact. Yet, the purpose of this work is to estimate the financial impact and possible risk of SSI in knee and hip arthroplasty for SHI and hospitals.

METHODS: To estimate the number of SSI for Germany, a projection for all SSI in primary hip and knee replacements in Germany (N=725.851) was made with data from the KISS modular surgical (“Krankenhaus-Infektions- Surveillance-System”). Two scenarios were used: First, treatment from the Barmer GEK report were used and second a bottom-up analysis based on the medical and pharmaceutical costs of the treatment algorithm for SSI. RESULTS: The revision treatment of SSI resulted in a financial burden of at least €2.407.350 for hip replacement and €3.760.280 for knee replacement for the SHI. Due to the even higher medical and pharmaceutical costs for the treatment of SSI in hospitals, SSI can cause a financial loss to them. CONCLUSIONS: To achieve a cost-covering treatment of SSI in hospitals, the several methods of reducing the risk of SSI should be checked with a cost-minimization-analysis. Then, hospitals have the opportunity to calculate the risk of higher SSI-rates against higher costs for the primary re-placement with a reduced risk of SSI. For the SHI a cost-benefit-analysis could be helpful to make a decision about requirements on methods used in primary replacement in hospitals to reduce the rate off SSI. A German Arthroplasty Register should include the collection of SSI data in its dataset.

COST COMPARISON OF LINEZOLID VERSUS VANCOMYCIN FOR TREATMENT OF NOSOCOMIAL PNEUMONIA AND COMPLICATED SKIN AND SOFT TISSUE INFECTION CAUSED BY MRSA IN QUEBEC

OBJECTIVES: In Canada, nosocomial pneumonia (NP) and complicated skin and soft tissue infection (CSSTI) caused by MRSA are often treated with antibiotics administered in hospital, with the cost of care considered to be high at home for stable patients. Typically, IV vancomycin is used when MRSA is the proven or suspected pathogen. Our objective was to evaluate the potential treatment cost impact using oral (PO) linezolid vs IV vancomycin for NP and CSSTI treatment, using a Net Impact Analysis approach for Quebec (CA). Data on healthcare costs associated with linezolid and vancomycin therapy were collected for patients with NP or CSSTI in Quebec. Costs were assigned to healthcare resources (antibiotics, medical supplies, laboratory testing and healthcare professionals’ time) based on unit prices. Based on expert opinion, analyses assumed IV vancomycin is administered in hospital for an average of 10 or 5 days followed by 11 or 9 days at home for NP or CSSTI, respectively, whereas linezolid is administered in hospital for 5 or 2 days IV then 3 or 5 days PO, followed by 11 or 9 days PO at home for NP or CSSTI, respectively. RESULTS: Antibiotic acquisition costs were higher for linezolid than for vancomycin, both in hospital (Cand326,696.20 vs Cand286,339.00 for NP and CSSTI, respectively) and for home therapy ($1,655.30 vs $1,531.05 and $1,355.67 vs $1,242.08 for NP and CSSTI, respectively). However, total treatment costs including costs for preparing, administering and monitoring drug levels were lower for linezolid vs vancomycin, thus offsetting the higher costs. First, treatment expenses for total treatment costs: €6,582.62 vs $7,599.00 and €3,849.80 vs $5,141.02 for NP and CSSTI, respectively. CONCLUSIONS: In this net impact study, using linezolid compared to vancomycin to treat NP and CSSTI, for hospital and home courses combined, reduces healthcare resource utilization and costs.

TREATMENT PATTERNS AND DRUG TREATMENT COSTS ASSOCIATED WITH NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITOR (NNRTI)-BASED ANTIRETROVIRAL THERAPY IN TREATMENT-NAIVE HIV-1 INFECTED PATIENTS

OBJECTIVES: Guidelines recommend that patients with HIV infection who are naïve to treatment receive two nucleoside reverse transcriptase inhibitors (NRTI) plus a third agent which may be a non-nucleoside reverse transcriptase inhibitor (NNRTI), protease inhibitor (PI), or integrase inhibitor (I). This study examined...