

economic benefit between two different pneumococcal vaccines. Indirect costs were estimated for both vaccines according to the five approaches to assess the methodological influence on the total disease cost difference between PCV-7 and PHiD-CV. Base-line indirect cost estimates include the cost of productivity losses of paid workers due to disease, sequelae, and earlier death. Some of the approaches include in terms of cost: children's future productivity losses, unpaid work loss and parents' work loss, when looking after their sick children. **RESULTS:** Compared to FCM, HCM based approaches constantly generated higher estimates of indirect cost. Results of HCM ranged between €1.1bn (PHiD-CV), €1.2bn (PCV-7) and €1.9bn (both vaccines), while for FCM they ranged between €0.2bn and €0.9bn (both vaccines). Cost attributed to earlier death varied with a factor of 35; indirect cost due to earlier death as a proportion of total indirect cost varied between 16% (conservative FCM) and 79% (conservative HCM). The overall impact on total disease cost differences between the two vaccines did not alter with any approach selected (PHiD-CV always dominates PCV-7), but the amount of savings significantly differs depending on the used method. **CONCLUSIONS:** Although different approaches for estimating indirect cost have a huge impact on the cost difference between pneumococcal conjugate vaccines in Germany, the rating of these vaccines (PCV-7 dominated by PHiD-CV) stays unaffected. FCM always generates lower estimates than HCM.

PIN26

CLINICAL AND ECONOMIC IMPACTS OF BACTEREMIA CAUSED BY EXTENDED-SPECTRUM BETA-LACTAMASES PRODUCING ESCHERICHIA COLI IN HONG KONG

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OBJECTIVES: To evaluate the clinical and economic impact of bacteremia caused by extended-spectrum beta-lactamases (ESBL) producing *Escherichia coli*. **METHODS:** A case-control study was conducted in a teaching hospital in Hong Kong. Case patients who had blood cultures positive for ESBL-producing *E. coli* were matched with patients who had bacteremia caused by non-ESBL-producing *E. coli* from January 2002 through December 2004. Demographic data, clinical factors and health care resource utilization for bacteremia were retrieved from medical records. Outcome measurements included mortality, infection-related cost and infection-related length of stay. **RESULTS:** Thirty-five case patients with ESBL-producing *E. coli* bacteremia were matched with 35 control patients with non-ESBL-producing *E. coli* bacteremia. The mortality rates were 8/35 (22.9%) in cases and 1/35 (2.9%) in controls. The average total cost for cases and controls were HK\$51,100 ± \$44,292 and HK\$30,300 ± \$19,427 (USD1 = HKD7.8), respectively. Mean infection-related length of stay in cases was 11.5 ± 4.9 days and 8.4 ± 5.2 days in controls. Multiple regression analysis showed that ESBL production was not significantly associated with mortality, but it was a significant predictor of infection-related cost (ME: 1.32; 95% CI = 1.04–1.69; P < 0.001) and infection-related length of stay (ME: 1.42, 95% CI = 1.16–1.73, P = 0.001). **CONCLUSIONS:** ESBL-production was associated with increased length of stay and direct medical cost for treatment of *E. coli* bacteremia.

PIN27

COST-EFFECTIVENESS OF LINEZOLID VS. VANCOMYCIN AND TEICoplanin IN METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS INFECTIONS IN CZECH REPUBLIC

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OBJECTIVES: Published clinical trials have shown similar clinical cure rates and shorter length of stay (LOS) for linezolid compared to vancomycin and teicoplanin in patients with methicillin-resistant *Staphylococcus aureus* (MRSA) infections. The aim of this pharmacoeconomic evaluation was to assess the cost-effectiveness of linezolid vs. vancomycin and teicoplanin from the perspective of Czech health care system. **METHODS:** We have collected the data on health care resource utilisation in patients with MRSA infections treated with linezolid, vancomycin or teicoplanin (drug administration, monitoring, hospitalisations, adverse events). Costs from official price lists of health insurance companies were applied to all collected items. Total costs of linezolid, vancomycin and teicoplanin treatment course were compared. We have analysed two subsets of patients—with MRSA infections after surgery hospitalized in orthopaedic clinic and patients with complicated MRSA infection requiring intensive care. **RESULTS:** Total number of 74 patients was analysed according to resource use and costs. The mean length of stay in MRSA patients in orthopaedic surgery patients was 36.7 days and the mean hospitalisation cost was 94,462 CZK (€3,633). The mean length of stay in MRSA intensive care patients was 45.2 days and the mean hospitalisation cost was 204,775 CZK (€7876). There was a tendency for shorter length of hospitalisation in the group of linezolid patients in comparison to teicoplanin patients (32.7 vs. 43.6 days). The increased antibiotic acquisition cost of linezolid (three times higher in comparison with vancomycin and two times higher in comparison with teicoplanin) was balanced by the estimated cost savings for hospitalisations, and additional savings in laboratory monitoring, concomitant medication and adverse events. **CONCLUSIONS:** Based on the patient-specific data linezolid is cost-effective option for hospitalised MRSA patients in Czech Republic. Despite higher acquisition cost the total hospitalisation costs are very similar to teicoplanin and vancomycin.

PIN28

ECONOMIC ANALYSIS ABOUT VALGANCICLOVIR PROPHYLAXIS AGAINST INFECTION FROM CITOMEGALOVIRUS IN PATIENTS WITH RENAL TRANSPLANTATION

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OBJECTIVES: Compare the economic impact of prophylaxis with valganciclovir against cytomegalovirus (CMV) infection versus non-prophylactic decision, in renal transplantation recipients, for analysing cost of treatment. **METHODS:** Economic evaluation through a theoretical cost analysis to assess the impact of using prophylaxis with valganciclovir (450 mg every 12 h for 100 days) compared with no prophylaxis, in patients receiving a renal transplantation with high (D+/R-) and intermediate (R+) risk of CMV disease. Outcomes evaluated were secondary morbidity due to CMV infection, including organ rejection. Calculations about the referred complications were based on informed frequencies from medical literature. Costs were evaluated from the service provider perspective, in US dollars and include the resources used for prophylaxis and complications. Cost analysis results from the difference between symptomatic disease due to CMV, the cost of treating an acute rejection and the financial pressure regarding both situations. The number of patients needed to treat (NPT) for achieving clinical success was calculated. **RESULTS:** Based on a hypothetical scenario of 1 thousand patients, equally distributed in each group, the frequency of symptomatic infection in the valganciclovir group would be 1% against to 31% in the non-prophylaxis group. The same tendency is kept regarding development of asymptomatic infection (4% vs. 32%) as well as organ rejection (1.5% vs 16.1%). **CONCLUSIONS:** With this theoretical pharmacoeconomic evaluation it is demonstrated that the use of prophylaxis with valganciclovir might be a cost-saving alternative for a medium-term perspective, derived from reduction in the frequency of infections and indirect events related with CMV replication like organ rejection. In patients with intermediate risk (R+), a comparison must be established between costs of prophylaxis and pre-emptive intervention, because the last might reduce medications consumption but increasing diagnosis and monitoring costs, as well as not avoiding indirect events related to viral replication.

PIN29

COST OF DIABETIC FOOT INFECTIONS DUE TO MRSA: AN ECONOMIC ANALYSIS OF DATA FROM PATIENTS TREATED WITH LINEZOLID IN SPAIN

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OBJECTIVES: The aim of this study is to calculate direct cost of management diabetic foot infection (DFI) due to MRSA in diabetes mellitus (DM) patient-population treated with linezolid and to identify the most important factors related to treatment costs. **METHODS:** A cost-study was performed with data from 70 prospectively patients with DFI treated with linezolid from-2006-to-2008 in 10 Spanish Hospitals included in a non-comparative clinical trial. Cost for in-patient-stay, and outpatient management were calculated retrospectively from diagnosis until healing or death in those patients where the cost data could be estimated. Cost for linezolid treatment (IV-oral), IV administration and monitoring were also estimated. Resource utilization not collected during the study was based on published literature. Cost data derived from literature and Spanish database. Mean values for each item were used to calculate cost average. All costs are expressed in Euros 2007. **RESULTS:** Mean age was 63.2 years old (SD 13.0), being 68.1% males. Duration of DM was 16.5 years. A total of 55 patients healed without amputation (78.6%) and 9 (12.9%) healed after amputation. Total cost for a patient without amputation was €9429.7 (95% CI 8404.2–10455.3), while corresponding cost for a patient with amputation was €9949.9 (95% CI 6034.3–13865.6). Hospitalization accounts for 54% of cost of treating DFI in patients without amputation and 48% in patients with amputation. Surgery cost was 17% of total cost in patients undergoing amputation. Drug costs didn't account for the major part of costs incurred during in-patient phase. Outpatient costs were 5% and 7% of total cost in patients without and with amputation, respectively. **CONCLUSIONS:** These are the first cost data results for DFI due to MRSA in Spain. Amputations were associated with high cost mainly due to surgery and long-term cost. These findings suggest the potential efficiency of a targeted approach program to prevent amputations in patients with DFI.

PIN30

USE OF NET-BENEFIT REGRESSION FRAMEWORK TO INVESTIGATE THE COST-EFFECTIVENESS OF COMBINATION ANTIVIRAL THERAPY AMONG HCV-INFECTED PATIENTS ENROLLED IN A MANAGED CARE ORGANIZATION

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OBJECTIVES: Whether combination antiviral therapy is cost-effective for patient with HCV in the real-world setting has not yet to be shown. This study is to compare the cost-effectiveness of combination antiviral therapy with no treatment in cirrhotic patients with ≥1 doses of combination prescriptions (base case), and with ≥48 weeks