based on the published literature about economic burden of chronic hepatitis B. A discounting rate at 3% was used to discount medical costs happened at different years. A univariate sensitivity analysis was performed to understand the key drivers and general sensitivity of the model. **RESULTS:** The model results showed that the utilization of peginterferon alfa-2a treatment for HBeAg-positive CHB can prolong 0.672 QALYs, compared to the entecavir treatment. The total cost per patient treated with peginterferon alfa-2a was US$28,093, and US$25,768 for patient treated with entecavir. The discounted incremental cost per QALY gained for pegainterferon alfa-2a treatment was US$3,461. **CONCLUSIONS:** The results of the model suggest that pegainterferon alfa-2a improves health outcomes in a cost-effective manner compared with entecavir in the treatment of HBeAg-positive chronic hepatitis B in China.

PIN61

COST-UTILITY ANALYSIS OF ROTAVIRUS VACCINE (ROTARIX®) IN JAPAN

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OBJECTIVES: To conduct a cost-utility analysis of rotavirus vaccine (Rotarix®) for infants in Japan. **METHODS:** A Markov model was constructed to analyze costs and Quality-Adjusted Life Years (QALYs) from the societal perspective. We captured costs and outcomes until infants reached five years old. In the Markov model, one month was set as one cycle. Both costs and utility were discounted at 3 percent annually. Based on suggestions from expert of pediatric infectious diseases, various factors have relationship with immunological status, such as breastfeeding and communal living, were adopted to our model. The health care cost were derived from Japanese data. Effectiveness of vaccination was derived from clinical trial in Europe. Various sensitivity analyses, both univariate and probabilistic ones, were conducted. We used QALY for outcome measurement. Quality weight for each status was derived from the foreign literature. **RESULTS:** In the basecase analysis, Rotarix® increased both costs and QALYs, compared to no vaccination. Rotarix® would increase costs of JPY 9253 (US$93, USD1 = JPY100). and increase 0.0024 QALY in infants in Japan. ICER for Rotarix was JPY3.8 million (US$D38,000) per QALY gained. Sensitivity analyses suggested the robustness of the results. When we set threshold for 1QALY to JPY5.0 million (US$50,000), the probability of the acceptance of Rotarix was 83%. **CONCLUSIONS:** Rotarix® for infants in Japan, is thought to be cost-effective.

PIN62

COST-EFFECTIVENESS OF TARGETED SCREENING FOR HEPATITIS C IN THE NETHERLANDS

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OBJECTIVES: In the past decade, infection with the hepatitis C virus has turned out to be a major health threat among specific risk groups. Given the silent nature, but serious long term complications of hepatitis C infection, case finding is as difficult as it is vital. To improve hepatitis C case finding, the need for public campaigns is increasingly recognized. Three pilot campaigns have been performed in The Netherlands: a campaign aimed at the general population, the same campaign extended with a support programme for primary care and a campaign specifically aimed at hard drug users. The aim of this study is to evaluate cost-effectiveness (from a health care perspective) of these campaigns, when performed on a national scale. **METHODS:** Information gained during the pilot studies and estimations for costs for a national campaign were used to build a mathematical model to estimate the incremental cost-effectiveness ratios. The natural history of hepatitis C was described by a previously developed Markov model, that was adapted to the current Dutch situation. **RESULTS:** For the 'support campaign' the discounted incremental cost per tested person is €326 with an associated gain of 0.022 QALYs (~8 days). The resulting ICER is €14,980 per QALY. For the 'drug users campaign' the discounted incremental cost per tested person is €1960 with an associated gain of 0.168 QALYs. The resulting ICER is €11,747 per QALY. **CONCLUSIONS:** The campaign aimed at the general public without support for primary care did not improve case finding and was therefore not cost-effective. Considering a Dutch cut-off point of an ICER of €20,000 as a favourable cost-effectiveness ratio, both the campaign accompanied by additional support for primary care and the campaign aimed at hard drug users are to be considered a cost-effective investment to improve case finding and prevent future complications of hepatitis C.

PIN63

COST-UTILITY ANALYSIS OF PNEUMOCOCCAL CONJUGATE VACCINES IN GERMANY

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OBJECTIVES: To evaluate the cost-utility of pneumococcal conjugate vaccines in Germany (societal perspective). **METHODS:** An age-compartmental, one-year, steady-state population model was developed to estimate annual incremental cost savings (CS) and QALYs gained (QG) for **pneumococcal non-typeable** *Haemophilus influenzae* protein-D conjugate vaccine (**PHiD-CV**) **and 13-valent pneumococcal candidate** vaccine (PCV-13) **compared with PCV-7. Two scenarios were evaluated: one considering** effectiveness against *Streptococcus pneumoniae* (*Sp*) only, another including effectiveness against non-typable *Haemophilus influenzae* (NTHi) in acute otitis media (AOM) for PHiD-CV. **Invasive pneumococcal disease (IPD) serotype-specific effectiveness** data were taken from US studies; effectiveness data for pneumonia were derived from the PCV-7 Kaiser Permanente trial and for AOM from two randomized European clinical trials. Epidemiological data and utility decrements were taken from published literature. DRGs (2008) provided the basis for stationary cost data, while ambulatory cost for pneumonia and AOM was estimated by experts. Other parameters included: vaccination coverage (90%), discount rate (3%), age-specific IPD herd immunity (30%[<18], 19%[18–64], 38%[>65]), price parity for all vaccines. **RESULTS:** In the scenario considering effectiveness against *Sp* only, PCV-13 dominated both PCV-7 (CS: 5.8mn€, QG: 260.6) and PHiD-CV (CS: €3.2mn, QG: 159.9). In the scenario including effectiveness against NTHi in AOM, PHiD-CV dominated both PCV-7 (CS: €9.0mn, QG: 637.1) and PCV-13 (CS: €3.2mn, QG: 376.5). Results were robust in both one-way and probabilistic sensitivity analysis. **CONCLUSIONS:** Including effectiveness against NTHi in AOM in the analysis, the protein-D conjugate vaccine PHiD-CV is cost saving compared to the CRM conjugate vaccines PCV-7 and the candidate vaccine PCV-13.

PIN64

A PROBABILISTIC COST-EFFECTIVENESS MODEL FOR PROPHYLAXIS OF INVASIVE FUNGAL INFECTIONS IN PATIENTS WITH NEUTROPENIA IN SPAIN

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OBJECTIVES: This study aims to estimates cost and effectiveness of itraconazole and posaconazole in prophylaxis of invasive fungal infections (IFI) patients with neutropenia in Spain. **METHODS:** From the payer's perspective, a Markov model was developed to represent the transition of a neutropenic cohort of patients with prophylaxis of IFI through different health states: patient in prophylaxis of IFI, IFI, no-IFI, death by IFI and death by some other causes. Efficacy data on incidence of proven or probable IFI, survival data and health-state utilities were obtained from published studies. Deterministic results were estimated and a probabilistic sensitivity analysis was conducted using statistical distributions in order to capture parameter uncertainty in the decision model. Treatment costs were obtained from a panel of clinical experts. Costs were referred to year 2009 and a time horizon of 1 year was chosen. Results were presented as expected cost per quality adjusted life years (QALYs) gained and represented in cost-effectiveness acceptability curves (CEACs). **RESULTS:** In the deterministic analysis, the expected cost per patient was greater in the posaconazole cohort (€19,522) in comparison with itraconazole cohort (€19,508). The estimated effectiveness was the same (0.42 QALY gained) in both cohorts. In the probabilistic analysis CEACs showed that the probability that the treatment with itraconazole was more cost-effective than the treatment with posaconazole using alternative values for the maximum value that the health service would be willing to pay for an additional QALY in prophylaxis of IFI was greater in the itraconazole cohort. **CONCLUSIONS:** When itraconazole has been compared to posaconazole we may conclude that the first one is a dominant strategy. Results from probabilistic sensibility analysis show that the choice of optimal strategy is independent on the maximum that the health service is prepared to pay per additional QALY gained because itraconazole has a greater probability of being cost-effective for all threshold values.

PIN65

IMPACT OF ETRAVIRINE (ETR) ON HOSPITALISATIONS AND HOSPITAL-RELATED COSTS CALCULATED BY GERMAN-DRGS: 48-WEEK FINDINGS FROM POOLED DUET TRIALS

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OBJECTIVES: DUET-1 and DUET-2 are two identically designed, randomized, double-blind, placebo-controlled, Phase-III-trials, which have demonstrated superiority of etravirine (ETR)+ background regimen (BR) (ETR-arm) versus placebo + BR (PLAC-arm) in HIV-1-infected, treatment-experienced patients. Hospitalisation events and duration of hospital stay were recorded for each patient. The objective of this study was to calculate the costs of hospitalisations observed in the DUET trials for the German health care setting. **METHODS: The number and duration of hospitalisations** were analyzed at 48 weeks. Hospitalisation rates were analyzed by negative binomial regression. Hospital costs in the German setting were calculated by applying the German-DRG system for each patient based on individually recorded disease characteristics and diagnoses. For all psychiatric admissions, where DRGs are not applicable, the fixed daily rate was used (€241/d). **RESULTS:** A total of **1203 patients** were included: 599 vs 604 in the ETR- versus PLAC-arms. Numbers (%) of patients hospitalised were 105 (17.5%) vs. 139 (23.0%) for ETR-arm vs. PLAC-arm, respectively ($p = 0.0006$). The mean durations of stays for second (13.5d) or subsequent hospitalisations (15.6d) were longer than for first admission (10.4d) overall, and for all stays were longer and therefore more expensive in PLAC-arm (12.3d) vs. ETR-arm (11.0d). Patients with baseline-CD4-cell-counts of <50 cells/mm^3 had a statistically significant lower hospitalisation rate in the ETR-arm versus PLAC-arm ($p = 0.0001$). Total hospital days observed during the 48-week follow-up period were 1702 vs. 2747 for ETR-arm vs. PLAC-arm. Calculated total hospital costs were €633.238 (ETR-arm) vs. €975,750 (PLAC-arm), resulting in a mean saving for hospitalisation costs of €572 for each patient treated within the ETR-arm. **CONCLUSIONS: At Week 48, ETR +**