pare the two strategies, each using a Tenofovir-based backbone treatment. Effectiveness was measured by virologic response, defined as the percentage of patients with < 50 viral copies/ml, based on a systematic review of recently published prospective trials. Costs were estimated according to Belgian tariffs. Only direct costs were considered, and were expressed in Euros (€). The time-horizon was of 48 weeks. A probabilistic sensitivity analysis was conducted to evaluate the robustness of the results. **RESULTS:** Two prospective phase III trials were selected for efficacy evaluation: data for Darunavir were extracted from the ARTEMIS trial (Mills et cols.), whereas data for Atazanavir were extracted from the CASTLE trial (Molina et cols.). Both compared the respectives drugs to Lopinavir. Based on an indirect comparison, the rate of virologic response after 48 weeks of follow up was 84% (95% CI: 82-86%) for Darunavir and 78% (95% CI: 76-80%) for Atazanavir, while total costs were 5868,84€ and 4821,60€, respectively. The ICER was 18.011,04€ for Darunavir. Sensitivity analysis showed that ICER depends mainly on the uni costs of the drugs, as well as on their efficacy. However, it is relatively independant from side effects and deaths related to treatment. **CONCLUSIONS:** Our results show that Darunavir, used as the third agent (protease inhibitor), compared to Atazanavir, may be more cost-effective for the treatment of naïve HIV-infected patients, in Belgium.

PIN49

ECONOMIC EVALUATION OF 13-VALENT PNEUMOCOCCAL VACCINE IN HIGH RISK ELDERLY POPULATION, FROM THE PUBLIC PAYER PERSPECTIVE IN BRAZIL

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OBJECTIVES: Invasive pneumococcal disease (IPD) is a major public health challenge. The elderly is a high risk (HR) population to develop IPD and this risk is raised in the presence of chronic illness. This study aims to perform cost-effectiveness analysis of 13-valent pneumococcal conjugated vaccine (PCV13) in elderly HR, from a public payer perspective in Brazil. **METHODS:** A Markov model was developed to simulate IPD outcomes in elderly HR after vaccination with PCV13 versus PPSV23 and no vaccination, with regard to associated direct costs in a 10-year time horizon. Effectiveness parameters are avoided cases of IPD, meningitis, pneumonia, and bacteremia. Medical costs included hospital days, medical personnel time, outpatient visits, diagnostic tests and medications. Clinical data and costs were extracted from literature, presented in 2011USD. **RESULTS:** For an 1,000,000 patients cohort, PCV13 avoided [14,159;14,885] bacteremia, [1,119;1,327] meningitis, [190,831;198,098] hospitalized pneumonia, [153,569;150,599] non-hospitalized pneumonia, and [56,102;58,686] IPD deaths, versus [PPSV23;no vaccination] respectively. Medical and vaccination costs for PCV13 versus PPSV23 and no vaccination were 7,901,973.76 BRL, 8,823,681.28 USD, and 8,327,792.71 USD, respectively. PCV13 was the dominant alternative in this cost-effectiveness analysis. **CONCLUSIONS:** From the public payer perspective in Brazil, PCV13 showed to be dominant compared to PPSV23 and no vaccination in elderly high risk population.

PIN50

A COST-EFFECTIVENESS ANALYSIS OF TELAPREVIR VERSUS BOCEPREVIR IN THE TREATMENT OF HEPATITIS C: A GREEK NATIONAL HEALTH SYSTEM PERSPECTIVE

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OBJECTIVES: Hepatitis C is a disease with significant economic burden to health care systems. Two recently approved protease inhibitors –telaprevir (TVR) and boceprevir (BOC)- are expected to change the current treatment algorithm, since their addition to peginterferon and ribavirin (PR) is associated with significantly improved clinical outcomes compared to PR alone. This analysis aims to evaluate the cost-effectiveness of a triple regimen with telaprevir (TVR+PR) compared to one with boceprevir (BOC+PR) from the Greek National Health Service perspective. **METHODS:** A decision analytic model based on treatment pathways and efficacy data from four phase III clinical trials (Advance, Sprint-2, Realize and Respond-2) was used to assess the cost-effectiveness of TVR+PR and BOC+PR . Clinical outcome was measured in terms of sustained virologic response (SVR) rates. Drug costs were estimated based on available EU prices in March 2012. We estimated the average cost per cured (SVR) patient and ICERs over treatment naïve and experienced patients and over the overall HCV G1 population (with a ratio of 1 to 4). Treatment stopping rules were not considered in this analysis. One way sensitivity analysis was performed over the proportion of naïve patients. Resource allocation implications were also considered under a hypothetical fixed budget scenario. **RESULTS:** The average cost per cured patient in the overall HCV G1 population was €46.635 for TVR+PR and €56.146 for BOC+PR. In treatment naïve patients it was €38.868 for TVR+PR and €42.983 for BOC+PR, whereas in treatment experienced patients it was €48.966 and €59.902 respectively. In terms of ICERs TVR+PR was associated with lower costs and higher SVR rates, with an ICER of - €10.403 per cured patient gained in the overall patient population. Results were robust in sensitivity analysis. **CONCLUSIONS:** TVR+PR was projected to be cost-effective compared to BOC+PR, allowing for more patients to be cured under a hypothetical fixed budget.

PIN51

HEALTH ECONOMIC EVALUATION OF THE VACCINATION AGAINST HERPES ZOSTER AND POSTHERPETIC NEURALGIA IN GERMANY

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OBJECTIVES: After infection, varicella-zoster-virus can reactivate as herpes zoster (HZ), a painful skin rash most commonly among the elderly. A HZ-complication is long-lasting pain after rash disappearance: postherpetic neuralgia (PHN). A vaccine has been licensed in Europe to prevent HZ/PHN in individuals aged ≥50 years. To support decision-making concerning a possible vaccination-recommendation in Germany we performed a health economic evaluation. **METHODS:** We developed a 5-state Markov-model with age-specific transition probabilities. We compared a vaccination-strategy to a scenario without vaccination targeting different population-cohorts aged 50+ in Germany (50-54, 55-59, etc.) to identify the most cost-effective strategy. Besides the payer-perspective (PP), the societal-perspective (SP) - covering in addition to direct also indirect costs - was considered. Country-specific demographic, epidemiological, and cost-of-illness input-data were utilized. We assumed a vaccine price of 100 Euro/dose, lifelong duration of protection, and 20% vaccination-coverage. All monetary amounts were in Euro 2010. The cycle-length was a quarter, and the model ended when individuals died. The discount-rate was 3% for both, outcomes and costs. Outcomes were number of HZ- and PHN-cases avoided. Results were presented as incremental cost-effectiveness ratios (ICERs) and number-needed-to-vaccinate (NNV). Univariate deterministic sensitivity-analyses (DSA) were performed. **RESULTS:** When targeting a cohort aged 50-54 years, preventing one HZ-case costs approximately 400€ from PP and approximately 280€ from SP. In this age-cohort the NNV was 6. DSA showed that results were most sensitive to target-age at vaccination, vaccine price, and discount rate. When increasing the target-age to 85+ year-olds, ICERs were 3,646€ (PP) and 3,634€ (SP) per adverted HZ-case, respectively, indicating a lower cost-effectiveness of vaccination in this age-cohort; NNV increased to 37. When considering prevention of PHN-cases ICERs became less favourable. **CONCLUSIONS:** Vaccination appears as valuable prevention-option especially when targeting the 50-54-years age-cohort. However, target-age at vaccination, price, and duration of protection will be key-factors in decision-making.

PIN52

PHARMACOECONOMICAL ASPECTS OF TREATING ACUTE BRONCHITIS AMONG ADULTS

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OBJECTIVES: To study economic efficiency of three regimes for pharmacotherapy of acute bronchitis. Apart from classic therapy the first and second regimes included the usage of drugs of human recombinant interferon-a2b in the form of suppositories. **METHODS:** Patients suffering from acute bronchitis were randomly split into three groups comprising 50 people each. The first group got classic therapy (mucolytics, vitamins, alkaline drinks, heat reduction drugs) and suppositories of interferon-a2b (genferon) by 1 mln ME injected rectally twice a day for the period of 5 days. The second group was cured with interferon (viferon) by 1 mln ME twice a day for the period of 5 days. The third group got the classic therapy only. The pharmacoeconomical analysis estimated the general treatment cost and minimization of expenses. **RESULTS:** The average period of overcoming acute bronchitis took 9 days for the first two groups and 12 days for the third group. The average period of temporary work disability lasted for 7 [6; 8] days for the first two groups and 10 [9; 12] days for the third group. The general cost for the first group amounted to € 168.9, 167.1 for the second group and € 230.4 for the third group. The minimization of expenses reached € 61.5 for the first group and € 63.3 for the second one in comparison with the classic method. Considering minimal costs of drugs the minimization of expenses amounted to € 56.5 and € 61 respectively. Considering expenses for antibacterial therapy the minimization of expenses when taking into account the average costs of drugs reached € 62.1 and € 64.4 respectively. **CONCLUSIONS:** As a result, the pharmacotherapy of acute bronchitis when using interferon is more justified than the classic method of therapy.

PIN53

THE COST EFFECTIVENESS OF MATERNAL AND INFANT ANTIRETROVIRAL REGIMENS TO PREVENT VERTICAL TRANSMISSION IN A RESOURCE POOR COUNTRY

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OBJECTIVES: To assess the cost-effectiveness of maternal triple-drug ART or infant nevirapine to reduce HIV transmission during breastfeeding from HIV-infected Malawian mothers, not meeting treatment guidelines for their own health. Strategies were evaluated at two entry points into the health system: 1) time of delivery, for mothers who have not accessed ART antenatally, and 2) antenatally. **METHODS:** Cost-effectiveness was evaluated in terms of health care costs per HIV transmission averted, life-years gained, quality adjusted life-years (QALYs) gained, and disability adjusted life-years (DALYs) averted. The risks of HIV transmission associated with the interventions were taken from the Kesho Bora and BAN studies. Antenatal regimens were 1) zidovudine (ZDV); 2) ZDV, lamivudine (3TC), lopinavir/ritonavir; and (3) no antenatal regimen. The postnatal regimens were 1) maternal antiretrovirals (ZDV, 3TC, lopinavir/ritonavir); 2) infant nevirapine (NVP); and 3) no extended post-natal prophylaxis. Scenario analyses included: alternate drug combinations and prices, and earlier antenatal initiation. **RESULTS:** For mothers presenting at delivery, infant NVP during breastfeeding is likely to be considered cost-effective. Incremental cost-effectiveness ratios (ICERs) compared to standard of care are $264 per HIV transmission averted, $15 per life-year saved, $16 per QALY and $15 per DALY averted. For mothers presenting antenatally, antenatal ZDV plus infant NVP during breastfeeding appears cost-effective. ICERs compared to ZDV plus standard of care are $667 per HIV transmission averted, $37 per life-