the £20,000 and £30,000 willingness-to-pay thresholds for both treatment-naïve patients and treatment-experienced patients regardless of IL-28B subtypes.

PIN43

COST EFFECTIVENESS ANALYSIS OF THE COMBINATION TENOFOVIR (TDF) / EMTRICITABINA (FTC)+ EFAVIRENZ (EFV) IN HIV-INFECTED NAÏVE PATIENTS IN MEXICO

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OBJECTIVES: Develop an economic evaluation of regimes Tenofovir/Emtricitabina (Truvada®)+EFV versus TDF+FTC+LPV/r, ABC+3TC+EFV, ABC+3TC+LPV/r, ZDV+3TC+EFV in naïve patients infected with HIV through a cost-effectiveness study from the public health system Mexican perspective. **METHODS:** We developed an economic Markov model to compare information on the effectiveness, utility and costs of the use of Tenofovir/Emtricitabina (Truvada®)+EFV versus TDF+FTC+LPV/r, ABC+3TC+EFV, ABC+3TC+LPV/r, ZDV+3TC+EFV over a 2 year period with six-month cicles. Efficacy was measured by the percentage of individuals with plasma HIV RNA < 50 copies/mL and Qalys, based on a systematic review and meta-analysis of clinical trial of regimens in treatment-naïve populations. Model follows the recommendations of antiretroviral persons handling Guide with HIV in Mexico (2010 SSA). The direct costs, treatment of adverse events, cost of failure of the treatment and costs of medical attention of HIV were estimated and were obtained from the mexican public health institutions. All costs were calculated in 2011 mexican pesos (MXP). Incremental cost effectiveness ratios were expressed as cost per 1% of individuals with plama HIV RNA<50 copies/ML and Qalys. Costs and outcomes were discounted at 5%. Probabilistic sensitivity analyses via Monte Carlo simulations and a budget impact analysis (BIA) were perfomed. **RESULTS:** Tenofovir/Emtricitabina (Truvada®)+EFV was most effective than others comparators with a probability of 0.562 HIV RNA <50 copies/mL and 1.614 Qalys. Tenofovir/Emtricitabina (Truvada®)+EFV resulted as the alternative with less average total cost per patients ($91,439.77). Tenofovir/Emtricitabina (Truvada®)+EFV is a dominant option and cost saving compared to the alternatives. Deterministic probabilistic sensitivity analysis showed that the findings are robust. The analysis of BIA show that public health system mexican could save about $140,480,959 if they use Tenofovir/Emtricitabina (Truvada®)+EFV rather than other options in these patients. **CONCLUSIONS:** Tenofovir/Emtricitabina (Truvada®)+EFV is an efficient and cost-saving drug on 96 weeks for the treatment of adult naïve patients with HIV infection in Mexico.

PIN44

FROM RANDOMIZED CONTROLLED TRIALS TO REAL WORLD: THE COALA STUDY

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OBJECTIVES: What happens when technologies leave Randomized Controlled Trials and approach the real world? Sometimes no answers are provided to this question. The aim of the COALA study was to evaluate, taking the Italian NHS (payer) perspective, the lifetime cost-utility of lopinavir/ritonavir vs. atazanavir + ritonavir, with a tenofovir-emtricitabine backbone, in a sample of 319 naïve patients starting from, and developing, the assumptions of the Broder (2011) Markov microsimulation model. **METHODS:** The health and monetary outcomes associated with ATV+r and LPV/r regimens, were analyzed considering: 8 health states, incidence of diarrhea and/or hyperbilirubinemia, AIDS events, opportunistic infections, and CHD events and, for the first time in an economic evaluation concerning HIV+ patients, CKD. Patients were enrolled in one of two scenarios: LPV/r or ATV+r (ATV1), and followed first or second line treatment. The two lines were both modelled at an individual patient level. A sensitivity analysis regarding ATV+r arm (ATV2) was assessed, in order to replicate the results of the CASTLE trial study, and to compare them with an ATV1 arm. The total cost per patient was calculated considering drugs costs, clinical effectiveness data, as well as institutional guidelines, protocols and the Lombardy Region reimbursement tariffs. **RESULTS:** LPV was assessed with a gain in terms of QALY equal to 0.150 to 0.447. The model results show a higher incidence of cardiovascular events (6.5 per 1,000 inhabitants) for the LPV arm, and a lower incidence of CKD (27.1 vs. 110.9-135.3) for LPV. **CONCLUSIONS:** Considering the economic performance, there was an annual economic per capita advantage between €73 and €138. This, in terms of QALY and reduction of costs, reveals that LPV/r treatment gives a higher economical performance and is more cost-effective compared with ATV+r.

INFECTION – Patient-Reported Outcomes & Patient Preference Studies

PIN45

THE IMPACT OF HIV TREATMENT-RELATED ADVERSE EVENTS ON ADHERENCE TO ANTIRETROVIRAL THERAPY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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OBJECTIVES: Poor adherence to HIV antiretroviral therapies (ART) increases the risk of incomplete viral suppression, development of viral resistance, progression to acquired immune deficiency syndrome, and death. However, there is little understanding of the impact of specific treatment-related adverse events (AEs) on adherence. This meta-analysis was conducted to assess the effects of treatment-related AEs on adherence to ART in adult HIV-infected patients. **METHODS:** A systematic review of studies involving HIV-infected patients aged ≥16 years and reporting an odds ratio (OR) for factors affecting adherence to ART was conducted. Embase and MEDLINE databases were searched between 1996 and 2010. Bibliographies of identified review papers were also searched. Studies conducted in populations limited to a particular demographic characteristic or behavioral risk factor were excluded. To qualify for inclusion into the meta-analysis, treatment-related AEs had to be defined similarly across studies. Multiple ORs from the same study were included where study sub-groups were distinct. Random effects models were used to pool ORs. **RESULTS:** Nineteen studies and 18 ART-related AEs were included in the analysis. Adherence to ART was significantly lower in patients with non-specific AEs than in patients who did not experience any AEs (OR=0.62; 95% CI: 0.46-0.83). Patients with specific AEs such as cough (OR=0.65; 0.53-0.79), fatigue (OR=0.63; 0.43-0.92), confusion (OR=0.35; 0.18-0.66), anxiety (OR=0.63; 0.41-0.95), taste disturbances (OR=0.49; 0.30-0.77), nausea (OR=0.57; 0.43-0.77), and loss of appetite (OR=0.54; 0.32-0.93) were significantly less likely to adhere to ART compared to patients without these AEs. Diarrhea, insomnia, sexual dysfunction, lipodystrophy, numbness, pain when swallowing, tingling in mouth/tongue, dermatological conditions, abdominal pain, and vomiting were not significantly associated with adherence, although trends toward decreased adherence were observed. **CONCLUSIONS:** Specific treatment-related AEs can significantly decrease adherence to ART. Knowledge of these effects may allow for targeted management of AEs to improve ART adherence and clinical outcomes.

PIN46

THE EFFECT OF ANEMIA ON HEALTH STATUS AND WORK PRODUCTIVITY AMONG TREATED HEPATITIS C PATIENTS

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OBJECTIVES: The standard of care for hepatitis C (ribavirin and peginterferon) has been found to be associated with an increased risk of anemia. The objective of this study was to investigate the effect anemia has on health status and work productivity among patients currently treated for hepatitis C. **METHODS:** Data from the 2011 U.S. National Health and Wellness Surveys were used. Among respondents who were currently or had formerly been treated for hepatitis C, those with and without a diagnosis of anemia were compared on health status (using the SF-12v2) and work productivity (using the WPAI questionnaire) using general linear models. Demographics, health behaviors, and comorbidities were also measured and included as covariates. **RESULTS:** A total of 305 patients were currently or formerly treated for hepatitis C. Of these patients, 22 reported having been diagnosed with anemia (7.21%). The presence of anemia was associated with significantly lower mental component summary scores (Mean=37.00 vs. Mean=45.21) and worse health utilities (Mean=0.53 vs. Mean=0.67) (all ps<.05). Impairment in daily activities was significantly higher among those with anemia (Mean=65.00% vs. Mean=39.33%, p<.05). Few patients were currently employed (n=7 with anemia vs. n=121 without anemia), however, absenteeism (Mean=34.00% vs. Mean=5.79%), presenteeism (Mean=51.43% vs. Mean=23.67%), and overall work impairment (Mean=61.00% vs. 25.98%) were all significantly higher among those with anemia (all ps<.05). The health status and activity impairment differences remained after controlling for age, gender, ethnicity, smoking and the Charlson comorbidity index. **CONCLUSIONS:** These results suggest that presence of anemia is associated with a substantial humanistic and indirect cost burden among patients who are treated for hepatitis C. Novel treatments which reduce the rate of anemia may result in a substantial improvement in patient outcomes.

PIN47

THE HUMANISTIC AND ECONOMIC BURDEN OF HEPATITIS C ACROSS THE UNITED STATES, EUROPE, AND ASIA

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OBJECTIVES: Although prior studies have examined the burden of hepatitis C (HCV) within individual countries, no study has compared the burden across countries using a consistent methodology. The aim of this study was to quantify the burden of HCV in the United States (US), France, Germany, Italy, Spain, the UK, China, and Japan. **METHODS:** The 2010 5EU (N=57,805), 2009 US (N=75,000), 2008/2009 Japan (N=37,683), and 2009/2010 urban China (N=33,261) waves of the National Health and Wellness Survey were used as data source. Within each country, patients with a self-reported diagnosis of HCV were compared with those who did not report a diagnosis of HCV on sociodemographics, health behaviors, comorbidities, and health outcomes (health status using the SF-12v2, work productivity using the WPAI, and healthcare resource use in the past six months). The effect of HCV was examined using regression analysis applying sampling weights. **RESULTS:** The prevalence of HCV ranged from 0.26% (China) to 1.42% (Italy). Patients in Japan and Italy (61.60 and 61.02 years, respectively) were the oldest, while patients in the US were the most likely to be obese (39.31%) and have concomitant anxiety (38.43%) and depression (46.05%) compared with other countries. Pooling countries and adjusting for sociodemographics, health behaviors, and comorbidities, HCV was associated with significantly lower physical component summary scores (b=-2.51) and health utilities (b=-0.04) and greater overall work impairment (b=8.79), physician visits (b=2.91), and emergency department visits (b=0.30) (all ps<.05). The effects on health status were strongest in the US and UK while the effects on healthcare resource use were strongest in Japan. **CONCLUSIONS:** HCV was associ-