and higher QALYs. The results were robust to sensitivity analyses. **CONCLUSIONS:** ETV is a dominant treatment option across all populations in the treatment of patients with CHB, compared to LVD and ADV. The results clearly suggest that suppressing VL is economically attractive.

PIN8

COST-EFFECTIVENESS OF INTERVENTIONS ENSURING BLOOD TRANSFUSION SAFETY IN AFRICA

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OBJECTIVES: The risk of HIV, HBV and HCV transmission by blood transfusion in sub Saharan Africa is (very) high compared to the developed world. In this economic evaluation the cost-effectiveness of interventions (donor management, quality of testing, administration and additional tests) improving blood transfusion safety is explored. **METHODS:** The residual risks of HIV, HBV and HCV transmission were derived for Angola, Benin, Botswana, Côte d'Ivoire, Ethiopia, Kenya, Mozambique, Namibia, Rwanda, Uganda and Zambia from the Global Database on Blood Safety (GDBS; WHO, 2004). Cost-effectiveness ratios of the scenarios were determined by using a decision tree combined with a Markov-model. Health gains and costs were discounted by 3%. **RESULTS:** The CURRENT (current status) scenario is cost-saving compared to the NONE (no screening, no donor management) scenario, averting 2.0 million Disability Adjusted Life Years (DALYs) and saving US$ 82 million annually. Over 94,000 new HIV infections are averted and 27,674 and 3360 new HBV and HCV infections respectively. Improving the blood transfusion services from the CURRENT to the BEST (100% screening, no errors) scenario shows a cost-effectiveness ratio of 56.24 US$/DALY averted. With this step 2792 new HIV infections are averted and 1723 and 1622 new HBV and HCV infections respectively. In addition to the BEST scenario, HIV p24 and HCV-antigen testing would avert 19 DALYs at annual net costs of US$ 1.2 million (63,957 US$/DALY averted). Extending the BEST scenario with single donation multiplex NAT averts 60 DALYs at annual net costs of US$ 9.7 million (161,051 US$/DALY averted). **CONCLUSIONS:** The current level of blood transfusion safety provided in the included countries is cost-saving. However, maximizing the effects of donor management and screening (coverage and errors) shows a favorable cost-effectiveness ratio. Introducing additional tests alongside antibody testing is associated with high costs and limited reduction of transmission risks.

PIN9

COST-EFFECTIVENESS ANALYSIS OF COMBINED THERAPY WITH PEGINTERFERON ALFA-2A (40KD) (PEGASYS) AND RIBAVIRIN (COPEGUS) IN PATIENTS WITH CHRONIC C HEPATITIS (CHC) AND HUMAN IMMUNODEFICIENCY VIRUS (HIV) CO-INFECTION

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OBJECTIVE: The AIDS Pegasys Ribavirin International Coinfection Trial (APRICOT) demonstrated the efficacy and safety of peginterferon alfa-2a plus ribavirin (RBV) and interferon alfa plus ribavirin (IFN/RBV) in patients co-infected with HIV-HCV. However, the cost-effectiveness of treating CHC with peginterferon alfa-2a/RBV in this patient population has not assessed from the Spanish National Health care System (NHS) perspective. The objective was to establish the clinical prognosis, costs and cost-effectiveness of peginterferon alfa-2a (180 mcg/week) plus RBV versus IFN (3 million IU, three times a week) plus RBV, in patients with HIV-HCV co-infection from a Spanish national health care system (NHS) perspective. **METHODS:** A Markov model was developed to simulate the disease progression of 40-year old patients with HIV-HCV co-infection. Fibrosis progresión rates were obtained from published studies. Efficacy, in terms of sustained virological response (SVR), for peginterferon alfa-2a plus RBV and IFN/RBV in patients with genotype 1, genotypes 2/3 and genotypes 1/2/3 was obtained from APRICOT. Transition probabilities and quality of life estimates were obtained from published literature. Unit costs were obtained from a Spanish database. Cost and outcomes were discounted by 3.5% annually. **RESULTS:** In genotype 1 patients, peginterferon alfa-2a plus RBV compared with IFN/RBV increases patientxs life expectancy by 1.27 years (0.77 quality-adjusted life years (QALYs)), yielding an incremental cost-effectiveness ratio (ICER) of €3,677/life year gained (LYG) (€6077/QALY gained). In genotypes 2/3 patients, peginterferon alfa-2a plus ribavirin increases life expectancy by 4.63 years (2.33 QALYs), yielding an ICER of €569/LYG (€1130/QALY gained). In genotypes 1/2/3 patients, the ICER is €1487/LYG (€2762/QALY gained). **CONCLUSIONS:** From the Spanish NHS perspective, peginterferon alfa-2a (40KD) (PEGASYS®) plus ribavirin (COPEGUS®) in patients with HIV-HCV co-infection is a cost-effective treatment option, regardless of HCV genotype.

PIN10

COST-EFFECTIVENESS OF PEGINTERFERON ALFA-2A (40KD) FOR THE TREATMENT OF CHRONIC HEPATITIS B IN ITALY

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Chronic Hepatitis B (CHB) is caused by chronic infection with Hepatitis B Virus (HBV) and represents a major global health problem. Traditional CHB treatments are lamivudine (LAM) and interferon alfa-2a (IFN). Peginterferon alfa-2a (PEG) has been recently approved for the treatment of CHB disease. **OBJECTIVES:** To assess the economic and clinical impact of the use of peginterferon alfa-2a (40KD) versus LAM for the treatment of HBeAg-negative CHB and versus IFN for the treatment of HBeAg-positive CHB disease in Italy. **METHODS:** The CHB disease course was simulated with the use of a Markov model. The simulation was prolonged over a cohort's lifetime. Comparative evaluation of PEG vs. LAM was based on a recent phase III clinical trial in HBeAg-negative CHB. Comparative evaluation of PEG vs. IFN was based on a phase II clinical trial comparing the two treatments in HBeAg-positive CHB. Considered scenarios were: 48-week PEG vs LAM treatment; 48-week PEG vs 4-year LAM; 24-week PEG vs. IFN. Clinical outcomes measured were average life years gained (LYs) and quality-adjusted life years (QALYs). Direct costs were considered and valued according to current Italian national prices, tariffs and published literature. Deterministic and probabilistic sensitivity analyses were performed and acceptability curves generated. Costs and outcomes were discounted at a 3.5% annual rate. **RESULTS:** 0.82, 0.68, and 0.26 discounted QALYs per patient are gained with PEG vs 48-week LAM, 4-year LAM and IFN, respectively. Discounted incremental costs per patient are €7021, €5725, and €2304. Corresponding cost-effectiveness and cost-utility ratios are €9440/LY and €8603/QALY, €9218/LY and €8368/QALY,