

utilities were compared to the patient-derived utilities. Treatment data, disease transition probabilities, and hepatitis C related costs were obtained from published literature. The costs of hepatitis C treatments were obtained from an Internet pharmacy. All costs were adjusted to 2004 USD. **RESULTS:** When patient-reported utilities were used for HCV genotype 1, peginterferon gained 1.28 additional quality-adjusted life years (QALYs) compared with no treatment. The QALYs ranged from 0.71 to 2.35 when expert panel-estimated utilities were employed. For HCV genotype 2 or 3 patients, peginterferon group had 2.72 more QALYs than no treatment using patient-reported utilities. When expert panel utilities were used for genotype 2 or 3, peginterferon had 1.61 to 4.85 additional QALYs than no treatment. Using patient-derived utilities, the expected costs per QALY for HCV genotype 1 receiving peginterferon and interferon treatment were \$2439 and \$2335, respectively. For genotype 2 or 3, these costs were \$1152 and \$1085 per QALY, respectively. The lifetime HCV related cost for patients received no treatment was \$1975 per QALY regardless of HCV genotype. **CONCLUSION:** Many expert panel-estimated utilities provided higher estimates of the benefits, and thus lower cost per QALY, for HCV treatments as compared to patient-reported utilities.

## PIN18

**ESTIMATES OF HEALTH CARE COSTS FOR LAMIVUDINE-REFRACTORY CHRONIC HEPATITIS B (CHB) PATIENTS**

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For patients with chronic hepatitis B, emergence of lamivudine resistance is associated with poor clinical outcomes, more rapid disease progression and poor quality of life. The clinical implications of lamivudine resistance are well described but the health care costs are not. **OBJECTIVE:** The objective of this study was to evaluate the health care utilization and direct medical cost within the first year of developing a lamivudine refractory infection in chronic hepatitis B (CHB) patients. **METHODS:** Physician estimates of health care utilization for the care of lamivudine refractory CHB patients were collected in a survey of physicians treating CHB patients in the US. A questionnaire was mailed to 165 physicians of which 51 responded. Data on health care utilization was computed for each health care cost category (Physician visits, hospitalizations, diagnostic tests and radiological examinations). Unit costs were derived based on the Medicare Physician Fee Schedule for procedures, the 2002 Health Care Cost and Utilization Project database for inpatient hospitalization costs, and average wholesale prices for medication costs. **RESULTS:** The total non-drug, direct medical cost within the first year of developing a lamivudine refractory infection in a CHB patient was estimated at \$2925. Among the different cost categories diagnostic tests and specialist visits were the major cost drivers, accounting for an estimated 45% and 41% of the overall cost, respectively. Seventy four percent of the patients were estimated to require a specialist visit. Only 2% of patients were estimated to require a hospitalization accounting for a negligible proportion of the costs. **CONCLUSION:** The estimated non-drug costs for patients refractory to lamivudine represent a substantial economic burden. In addition, the additional costs of rescue therapy further increase the cost impact and make it considerably higher than the annual direct medical cost for CHB patients who do not develop viral resistance.

## PIN19

**UTILISATION OF ANTIBIOTICS WITHIN THE SLOVAK REPUBLIC**

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**OBJECTIVES:** To analyse the utilisation of antibiotics within the Slovak Republic between 1992 and 2003. Adherence to principles of antibiotic policy lead to fundamental short and long term financial savings within health care systems. **METHODS:** For 1992–2003, the data of systemic antibiotic use for ambulatory care, aggregated at the level of the active substance, were collected, in accordance with the Anatomic Therapeutic Chemical (ATC) classification and Defined Daily Dose (DDD) measurement unit (WHO). Data of wholesalers, who are legally obliged provide this information to the Slovak Institute for Drug Control, was used for this detailed analysis of the Slovak consumption of antibiotics. **RESULTS:** Long term analysis shows that the antibiotic consumption had been increasing in human medicine within Slovakia. In 1992 the consumption of antibiotics at the level of 19.4 DDD/1000/day increased to 28.0 DDD/1000/day in 1999. This analysis focused on the situation in antibiotic consumption in 2001 and 2003 in more detail. The results show that in 2003 as opposed to 2001, the consumption of antibiotics decreased by 900,000 packages. In financial figures can be noticed a increase by 1.75 €mill., because the average price for one package of antibiotics was at the level of 4.84€ in 2001 but in 2003 the price increased to a level of 5.64€. From our analysis a significant increase in the ATB consumption expressed by DDD/1000/day can be seen (In 2001 it was 25.78 but in 2003 we can see the consumption 26.95 DDD/1000/day). **CONCLUSIONS:** Inseparable components of the Slovak antibiotic policy must be viewed realistically with regard to the consumption of antibiotics and resistance. Antibiotic resistance is a major public health problem, and antibiotic use is increasingly recognised as the major selective pressure driving this resistance.

## PIN20

**IMPROVEMENT IN ANTIMALARIAL DRUGS ACCESS: RESULTS OF A PROGRAM PERFORMED IN YAOUNDE**

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**OBJECTIVES:** Several studies show that in developing countries, low-income patients use low price counterfeit drugs provided by the illegal drug market. In Cameroon, those false drugs represent 40% of the street market and lead to malaria therapeutic failure and inappropriate medical expenses. The Yaoundé program aims to improve access to efficient antimalarial drugs by providing a differentiated price policy through the official private pharmacy distribution sector, allowing access to efficient antimalarials to low-income population which would otherwise use street market drugs. **METHODS:** In 31 retail pharmacies of Yaoundé, artesunate (Arsumax®) was made available at a “no profit no loss” public price of 1170FCFA (1.78€) instead of 3400FCFA (5.8€), ie: –66%. Eligibility of patients was based on income below the poverty level (established by the Ministry of Economy as 30€ monthly households incomes per number of dependences). Program effectiveness was assessed by evaluating the number of new patients having access to this lower price Arsumax®. **RESULTS:** After 6 months of implementation,