HOSPITAL COST FOR TREATMENT OF PATIENTS WITH PEPTIC ULCER BLEED (PUB) IN SWEDEN—DATA FROM THE KPP (COST PER PATIENT) DATABASE

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OBJECTIVES: Treatment with esomeprazole or placebo was investigated in patients with PUB (NCT00251979). In all, 102 of 764 patients from 16 countries in Europe, Asia and Africa were Swedish. Following successful endoscopic hemostasis, patients were randomized to 72 hours intravenous esomeprazole or placebo with subsequent oral esomeprazole 40 mg for 27 days. Rebleeding was the primary variable and occurred in 7.2% and 12.9% in the esomeprazole and placebo group, respectively. The objective of this study was to describe hospital costs in Sweden for patients with and without rebleeding. METHODS: The KPP database includes 60% of all Swedish episodes of somatic in-hospital care and reports total hospital costs. Six out of the 12 participating Swedish hospitals utilize KPP. Here, individual cost data was collected and matched with the in-hospital episode and the study definition of rebleeding.

RESULTS: Data was collected from all 60 patients in the six KPP reporting clinics. Information structure and level of detail varied considerably between clinics, why only total costs are reported. Six patients (10%) were defined as rebleeders, and accounted for 20% of the total costs for all patients. The mean total cost/patient was SEK 39,882 (median 29,082, range: 10,377–263,520) for all patients without rebleeding and SEK 88,928 (median 82,273, range: 52,464–160,090) for all patients without rebleeding (€1 = SEK 8.78) per patient without rebleeding varied between clinic from SEK 14,791 to 45,636. CONCLUSIONS: Hospital costs for patients with PUB vary considerably. The cost of patients with rebleeding was more than double that of patients without rebleeding, and in all the 10% of patients who rebleeded accounted for 20% of the total hospital costs. In conclusion, a treatment which successfully prevents rebleeding is important not only from a clinical perspective, but also from a cost point of view to reduce hospital costs.

MODLING THE IMPACT OF TREATMENT WITH ENTECAVIR ON HEALTH CARE COSTS OF CHRONIC HEPATITIS B IN FRANCE

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OBJECTIVES: Chronic hepatitis B (CHB) treatment necessity, according to European guidelines, to use potent antiviral agents with optimal resistance profiles. Increased health care financial burden means physicians, payers and decision makers need to evaluate CHB treatment cost-effectiveness. This model aims to estimate the medical cost savings of treating nucleoside-naïve CHB patients with a potent antiviral agent, from a French payer’s perspective. METHODS: CHB was simulated using a disease-state transition model with states defined as mild fibrosis ( Ishak F0/F1), significant fibrosis ( F2–F4), advanced fibrosis/cirrhosis ( >F4) and complicated states (decompensated cirrhosis (DC), hepatocellular carcinoma (HCC), liver transplant and death) based on available clinical data. The model assumed a 3-year entecavir treatment and 30-year follow-up and was based on available clinical data. The transition probabilities between states increased with detectable viral load levels and varied by HBAg status. Direct medical costs included CHB and liver complications management. The primary model output is the estimated cost avoided per patient per day of treatment, compared to no treatment in nucleoside-naïve CHB patients. RESULTS: Progression to HCC, liver transplant or death was estimated at 76% for untreated patients compared to 31% for entecavir patients, while the progression to DC, HCC, liver transplant or post-liver transplant resulted in annual costs/patient of €9,718 [95% confidence interval (CI): 8,266; 11,175], €3,066 [4,306; 5,826], €87,105 [74,039; 100,171] and €19,421 [16,508; 22,335], for 2008, respectively. Cost of not treating CHB patients was estimated at €16,640 (average over patient lifetime). Entecavir treatment translated into €11,171 cost avoidance, representing a savings of 31% of entecavir treatment (95% CI: −9.6; 4.6). CONCLUSIONS: Treatment of CHB using a potent antiviral agent with high genetic barrier to resistance, such as entecavir, is cost-effective as associated with improved clinical outcomes and lower health care costs compared with no treatment.

ECONOMIC CONSEQUENCES OF POORLY CONTROLLED PATIENTS WITH GASTROESOPHAGEAL REFUX DISEASE IN GERMANY, ITALY, AND SPAIN

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OBJECTIVES: The aim of this study was to estimate the implications of poorly controlled GERD for patients and the economic implications for health care providers and employers in Germany, Italy and Spain. METHODS: Based on the prevalence and incidence for GERD and its implications and cost data, the number of patients with poorly treated GERD and their implications, as well as the economic consequences for health services and employers were calculated for each country. RESULTS: The amount of patients with poorly treated GERD that have severe esophagitis are estimated to be 74,364 in Germany, 245,559 in Italy and 225,054 in Spain per year. The number of patients with Barrett's esophagus are estimated to be 29,678 in Spain, 19,327 in France, and 10,079 in Italy. The number of patients with atrophic gastritis are around 71 and 15 patients in Germany and Spain. CONCLUSIONS: GERD costs for poorly treated GERD patients for the health services were estimated to be €18 million for Spain, €12 million for Germany and €7 million for Italy. Absen- teeism and presenteeism costs due to poorly controlled GERD for employers were almost none. CONCLUSIONS: Costs for complications in patients with poorly controlled GERD added costs for health care systems for all three countries but almost no extra costs were found for employers.

MODELING THE LONG-TERM CONSEQUENCES OF SUPPRESSING VIRAL REPLIATION IN CHRONIC HEPATITIS B:A COST-EFFECTIVENESS ANALYSIS OF ENTECAVIR (BARACLUDE®) IN TURKEY

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OBJECTIVES: To evaluate the cost-effectiveness of entecavir (ETV) vs. lamivudine (LVD) in the treatment of nucleoside-naïve CHB patients and vs. adefovir (ADV) in LVD refractory CHB patients in Turkey. METHODS: A decision-tree model compared cost and effect of treating CHB patients over a 10-year period. Treatment effect in terms of viral load (VL) reduction predicted risk of long-term liver complications. Two CHB patient populations were studied: 1) nucleoside-naïve patients treated for 2 years with ETV (0.5 mg/day) vs. LVD (100 mg/day) and ADV as salvage therapy; and 2) LVD- refractory patients treated for 10 years with ETV1 mg/day vs. ADV10 mg/day. Effectiveness was measured as LYS and QALY. Efficacy data were obtained from pivotal trials, relative-risk estimations were derived from the R.E.V.E.A.L.-HBV Study cohort. A Turkish health care payer perspective was consid- ered from a Turkish payer’s perspective. RESULTS: Incremental cost-effectiveness ratios were €12,834 per QALY for nucleoside-naïve patients treated for 2 years with ETV vs. LVD and ADV. In LVD- refractory patients, Incremental cost-effectiveness ratios were €1,375 per QALY for nucleoside-naïve patients treated for 2 years with ETV vs. ADV. CONCLUSIONS: Entecavir is a cost-saving treatment option relative to LVD with ADV with 0.48LYS and 0.4QALY with a saving of 14,117TL in Turkey; in the Turkish health care payer perspective, ETV is a cost-effective treatment option relative to LVD.