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

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.

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 design 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 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.

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

OBJECTIVES: Chronic hepatitis B (CHB) treatment necessary, according to European guidelines, to use potent antiviral agents with optimal resistance profiles. Increased health care financial burden means physicians, patients and decision makers need to evaluate CHB treatment cost-effectiveness. This model aims to estimate the medical cost savings of treating nucleoside-naive CHB patients with a potent antiviral agent, from a French payer's perspective.

METHODS: CHB was simulated using a lifetime, 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, hepatocellular cancer (HCC), liver transplant and death) based on available natural history data. The model assumed a 5-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 HBeAg 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-naive CHB patients.

RESULTS: Progression to HCC, liver transplant or death was estimated at 76% for untreated patients compared to 31% for entecavir treated 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]: $8,260; $11,175), $3,086 ($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 $164,000 (average over patient lifetime). Entecavir treatment translated into a cost avoidance of $132,000 and $200,000 compared to no treatment, respectively.

CONCLUSIONS: Treatment of CHB using a potent antiviral agent with high genetic barrier to resistance, such as entecavir, is cost-effective and recommended.

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

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 number of patients with poorly treated GERD that have severe esophagitis is estimated to be 740,364 in Germany, 240,559 in Italy and 225,054 in Spain per year. The number of patients with Barrett's oesophagus is estimated to be 29,678 in Spain, 19,327 in Germany and 10,079 in Italy. The number of patients with H. pylori-associated gastritis is around 13 million patients in Germany, 4.2 million patients in Italy, and 6.9 million patients in Spain. 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. Absenteeism and presenteeism costs due to poorly controlled GERD for employers were calculated for each country.

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.

EFFECTIVENESS ANALYSIS OF ENTECAVIR (BARACLUDE®) IN TURKEY

OBJECTIVES: To evaluate the cost-effectiveness of entecavir (ETV) vs. lamivudine (LVD) in the treatment of nucleoside-naive 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-naive 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 (0.5 mg/day). Direct medical costs 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 considered.

RESULTS: ETV compared with LVD and ADV as salvage therapy gained 0.82LYS and 0.80QALY at an incremental cost of $384 TL/LYS and $768 TL/QALY. In nucleoside-naive HBeAg+ patients, ETV generated 0.66LYS and 0.55QALY at an incremental cost of $275 TL/LYS and $153 TL/QALY. In LVD-refractory patients, ETV is a cost-saving treatment option relative to LVD with ADV as salvage therapy. Cost-benefits with ETV therapy are explained lower overall CHB treatment costs due to slower disease progression rate and avoidance of resistance associated with LVD.