

On-demand use of rabeprazole for the management of symptomatic GERD incurs the least cost in comparison to the other PPIs evaluated. Utility gains were comparable for all on-demand PPIs.

PGI2

THE ECONOMIC EVALUATION OF A RANDOMIZED TRIAL COMPARING “TEST-AND-TREAT” WITH PROMPT ENDOSCOPY IN PRIMARY CARE; THE HEALTH ECONOMICS OF THE SENSE-STUDY

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OBJECTIVES: To assess the cost-effectiveness of two initial management strategies for the general practitioner in dyspepsia. The two strategies investigated are prompt endoscopy and a *Helicobacter pylori* test-and-treat strategy. **METHODS:** Pharmacoeconomic data was gathered alongside the SENSE (Strategy: Endoscopy versus Serology)-study from 1998 up to 2001. Patients were randomized in the endoscopy (n = 105) and test-and-treat (n = 118) group. The costs were standardized costs for 1999. Quality of life was measured at inclusion and one year later, using the validated Dutch translation of the RAND-36 questionnaire. The results obtained were transformed into one overall score, in terms of Quality Adjusted Life Years (QALYs). An incremental cost-effectiveness ratio (ICER) was calculated as incremental cost of test-and-treat over early endoscopy per QALY gained. For estimating the uncertainty we calculated 95% uncertainty limits using parametric bootstrap with angular transformation. **RESULTS:** For the test-and-treat group the total costs per patient were 511.02€ and the number of QALYs gained was 0.074 per patient. For the endoscopy group this was 748.08€ and 0.064 QALYs gained. The point estimate of the ICER indicated cost-savings and QALYs gained. Parametric bootstrap uncertainty limits indicate cost-savings per QALY gained (75.7%) and cost savings per QALY lost ranging from 11,970€ to infinity. **CONCLUSIONS:** According to our data, the *Helicobacter* test-and-treat strategy is more cost-effective than prompt endoscopy in the initial management of dyspepsia in general practice.

PGI3

COST-EFFECTIVENESS OF ESOMEPRAZOLE COMPARED TO PANTOPRAZOLE AND GENERIC OMEPRAZOLE IN ENDOSCOPY POSITIVE GERD PATIENTS IN GERMANY

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OBJECTIVES: To compare the cost-effectiveness of esomeprazole versus pantoprazole and generic omeprazole from the perspective of the statutory health insurance using a decision model reflecting naturalistic treatment behaviour in GERD patients in Germany. **METHODS:** The model applies to patients with endoscopically verified GERD receiving PPI therapy and covers a period of 8 weeks. Therapies included were esomeprazole 20 and 40 mg, omeprazole 20 and 40 mg and pantoprazole 40 mg. Real-life treatment patterns and resource utilization for acute and maintenance treatment were derived from 30 physician interviews, whereas healing rates after 4 and 8 weeks of treatment were derived from published literature. Resource utilization included visits, examinations and laboratory tests at primary care physicians and specialists, drug treatment of GERD, hospitalizations and working incapacity. **RESULTS:** Total costs per

patient ranged between 137€ for esomeprazole and 202€ for pantoprazole with total healing rates after eight weeks between 85% (omeprazole) and 96% (esomeprazole). No hospitalizations were observed and the few sick leaves reported were shorter than 42 days, inducing no costs from the insurance perspective. Costs per patient healed varied between 145€ (esomeprazole) and 218€ (pantoprazole), with most of the treatments ranging closely around 200€. Due to the relatively small sample size, we tested the robustness of the results by conducting sensitivity analyses representing different degrees of standardization in input parameters. Cost-effectiveness did not differ much in either scenario; standardizing e.g. physician costs and treatment duration resulted in costs per patient healed between 163€ (esomeprazole) and 210€ (omeprazole). **CONCLUSIONS:** The results indicate that esomeprazole is a cost-effective treatment option for patients with endoscopically verified GERD treated over 8 weeks. Strongest competitor for esomeprazole is treatment with generic omeprazole. The current model will be extended to a 6 month period as soon as the data from a currently completed study will become available.

PGI4

USE OF CAPSULE ENDOSCOPY IN DIAGNOSING OBSCURE GASTROINTESTINAL BLEEDING: COST-EFFECTIVENESS EVALUATION FROM A EUROPEAN PERSPECTIVE

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OBJECTIVES: To analyze the cost-effectiveness of capsule endoscopy (CE) in diagnosing obscure gastrointestinal bleeding (OGIB) from a health care payer perspective in France, the UK, and Switzerland. **METHODS:** Based on clinical trial data, a microsimulation model incorporating first- and second-order Monte Carlo simulation was developed. The model calculates the costs per correctly diagnosed case in patients with OGIB. Sensitivity and specificity for CE and the comparator push enteroscopy (PE) as well as kind and number of other procedures performed prior to diagnosis were evaluated from 7 controlled clinical trials (n = 184). Procedure cost, cost of diagnostic failure (false positive/negative diagnosis) were considered and incremental cost-effectiveness ratios dependent on disease prevalence are given. Cost data were estimated from a healthcare payer perspective using the “Assurance Maladie” (France), NHS Reference Cost (UK), and the TARMED (Switzerland). **RESULTS:** Sensitivity for CE was 89–99% and 27–60% for PE. Specificity values were 90–99% for CE and 50–70% for PE. In all 5 countries, CE was cost saving when the prevalence of the disease was 10% or higher. Most common use for CE is at a prevalence of 50%. Cost savings at a prevalence of 50% are 1508€ (France), 1695€ (UK) and 2240€ (Switzerland). Probabilistic sensitivity analyses approved a high robustness for these results. **CONCLUSIONS:** CE proved to have a higher effectiveness than PE when diagnosing obscure bleeding. Though procedure costs vary substantially from country to country, incremental analysis shows that the use of CE has a cost-saving potential in all three countries.

PGI5

COSTS BENEFITS WITH ESOMEPRAZOLE 20 MG “ON-DEMAND” TREATMENT IN GASTROESOPHAGEAL REFLUX DISEASE (GERD) PATIENTS IN BELGIUM

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OBJECTIVES: Assessing the potential increase in GERD medical treatment expenses and the impact of on-demand treatment with