

based on Brazilian guidelines for HTA (Vianna, 2007). The study was based on clinical data published by AWAD 2007, showing PHS device has lower recurrence rate compared to Polypropylene mesh (0.6% versus 2.7%, $p = 0.04$) in 17 months. The recurrence rate was projected to 60 months (PHS 2.1%; Polypropylene mesh 9.2%) to evaluate clinical and economic long-term impact. The average incidence rate of 2% for inguinal hernia was based on Brazilian specialist's opinions. The economic impact of recurrence was calculated considering 200,000 patients. Procedure costs, hospital stay, devices costs and medical staff fees were obtained from Brazilian public lists (CBHMP 4a. ed., Boletim Proahsa and SIMPRO). According to local guidelines, 5% of discount rate was adopted. One-way sensitivity analysis was performed to verify the robustness of the results. **RESULTS:** According to the model, 108 patients will need reintervention in the Polypropylene mesh group versus 24 in the PHS group in 17 months, representing 74% on reoperation reduction. In 60 months, 368 patients will need reintervention in the Polypropylene group versus 84 in the PHS, 77% reoperation reduction. There was a positive impact of recurrence in the PHS group of R\$ 105,401 for a 17 months period (R\$ 100,382 discounted) and R\$ 355,821 for a 60 months period (R\$ 292,730 discounted). **CONCLUSIONS:** Findings suggest PHS as a safe and efficient alternative for inguinal hernia repair when compared with Polypropylene mesh and can generate resource economy under the payer perspective in Brazil.

PGI7

MANAGEMENT OF OPIOID INDUCED CONSTIPATION (OIC) IN PAIN PATIENTS: A COST OF ILLNESS STUDY IN BELGIUM AND THE NETHERLANDS

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OBJECTIVES: Opioid induced constipation (OIC) is an important adverse event in the management of patients with chronic pain. The aim of this project was to describe the current management (prevention, treatment, complications) and resource use of OIC in Belgium (B) and The Netherlands (NL), and to estimate to estimate the associated cost (societal perspective). **METHODS:** A 2-round Delphi panel was performed in a sample both of 24 general practitioners (GPs) (12 per country). Questions were related to current medical practice (medical treatment, tests and imaging, consultations, hospitalizations, treatment of complications and impact of OIC on work productivity). Pain was defined as persisting for at least three months and for which opioids were permanently administered. Costs were calculated by multiplying average resource use obtained from the Delphi panel with specific unit costs (official tariffs). **RESULTS:** The cost per day for prevention of OIC (before a first episode (primary) or to prevent a new episode (secondary)) was respectively €1.33 and €2.13 for Belgium and The Netherlands. Respectively 68%/89% of the patients in Belgium/The Netherlands received primary laxative-prophylaxis (average duration per 3 months: 47 days (B) and 58 days (NL)). Secondary prophylaxis was given in 100% of the patients. The cost of a constipation-episode was 130€ in Belgium, €102 in The Netherlands. The higher cost in Belgium was mainly due to higher cost for tests and treatment. Cost of complications (B: 8% of patients, NL: 12%) of OIC ranged in Belgium between €71 (abdominal pain) and €1386 (rectal prolapse). Cost of complications in The Netherlands ranged between €23 (vomiting) and €410 (faecal impaction). Work absenteeism due to OIC and related complications resulted in a cost of €42 for Belgium and €128 for The Netherlands. **CONCLUSIONS:** Management of OIC has an important economic impact both in Belgium and The Netherlands, especially when complications occur.

PGI8

COST-EFFECTIVENESS OF HIGH-DOSE INTRAVENOUS PROTON PUMP INHIBITORS (IV PPI) FOR THE PREVENTION OF GASTRIC OR DUODENAL ULCER REBLEEDING AFTER THERAPEUTIC ENDOSCOPY

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OBJECTIVES: To compare the cost-effectiveness of iv PPI (80 mg bolus followed by 8 mg/h infusion for 72 h) in patients considered at risk of gastric or duodenal ulcer (peptic ulcer) rebleeding after therapeutic endoscopy. **METHODS:** A systematic review and mixed treatment comparison (WinBUGS) provided estimates of the relative risk of peptic ulcer rebleed, repeat endoscopy and emergency surgery with acute iv PPI using placebo as a common comparator. A decision analytic model was then used to determine the cost per quality adjusted life years (QALYs) gained for iv esomeprazole, iv pantoprazole and iv omeprazole. Patients with no rebleed received 28-day treatment with the respective oral PPI (esomeprazole 40 mg od, pantoprazole 40 mg od or omeprazole 20 mg od). Costs of medical and operative procedures were sourced from the National Schedule of Reference Costs (2007/08). Disutilities for repeat endoscopy and surgery were estimated from a published study that used time trade off interviews in adults with peptic ulcer disease. A 30-day time horizon was used. The analysis was conducted from the perspective of the UK National Health Service (NHS). Uncertainty was investigated through one way sensitivity analysis and probabilistic Monte Carlo simulation. **RESULTS:** Intravenous esomeprazole was the preferred treatment strategy. Probabilistic Monte Carlo simulation indicated that, at a threshold of £20,000/QALY, there was a 66% probability that iv esomeprazole was the most cost-effective compared to 33% and 1% for iv omeprazole or iv pantoprazole, respectively. The NHS would need to adopt a cost-effectiveness threshold in excess of £65,000/QALY for iv omeprazole to be considered the most cost-effective treatment for this indication. **CONCLUSIONS:** Based on the current best available

evidence, iv esomeprazole, the only European licensed iv PPI for the prevention of recurrent peptic ulcer bleed after therapeutic endoscopy, is the most cost-effective treatment option and represents good value for money for the NHS.

PGI9

COST-EFFECTIVENESS OF INTRAVENOUS IRON IN INFLAMMATORY BOWEL DISEASE PATIENTS INTOLERANT TO ORAL IRON

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BACKGROUND: Iron deficiency and anaemia (Hb-level < 12 g/dl) is common in patients with inflammatory bowel disease (IBD). First line treatment for correcting iron deficiency is oral iron. In patients intolerant to oral iron, intravenous (IV) iron is recommended. **OBJECTIVES:** To evaluate incremental costs and effects (ICER) of IV iron compared to discontinuation of oral iron, in IBD patients intolerant to oral iron. **METHODS:** A micro-simulation model of the Hb-level and intravenous or oral iron treatment was developed using published data, a chart review of IBD patients and calibration. QALYs and costs for drug (including administration), transport and loss of production due to IV iron administration in an outpatient setting were estimated using a one-year time frame with two relapses causing anaemia. At treatment start, patients are in relapse with a Hb-level of 10 g/dl and treated with oral iron. As they become intolerant, the model either switches them to IV iron or discontinues treatment. Sensitivity analyses were carried out with respect to initial Hb and number of relapses per year. **RESULTS:** In the base case, treatment with IV iron generates a QALY gain of 0.0334 at a cost of €1,530, i.e. an ICER of €45,800. A treatment start at lower initial Hb-levels generates higher QALY-gains and lower costs per QALY, e.g. €35,900 per QALY gained with an initial Hb-level of 9 g/dl. The ICER in patients with one relapse per year gain is €61,460, reflecting a high initial cost when determining appropriate iron treatment regimen. **CONCLUSIONS:** In a health care perspective, IV iron compared to oral iron is cost-effective in patients in relapse. In a societal perspective, IV iron is cost-effective provided that <50% of the patients work during relapse.

PGI10

ECONOMIC EVALUATION OF A MULTIDISCIPLINARY SUPPORT PROGRAM IN HEPATITIS C TREATMENT: PRELIMINARY RESULTS

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OBJECTIVES: Adherence to the prescribed treatment regimen is an important factor that impacts on the success of therapy in chronic hepatitis C. The aim of this study was to develop a cost-effectiveness analysis of a multidisciplinary support program (MSP) versus conventional treatment in a group of Hepatitis C (HC) patients. **METHODS:** A total of 278 naive and mono-infected patients with HC were included in the study: 131 in Group 1 (MSP strategy) and 147 in Group 2 (conventional treatment approach). All patients were treated with Peg-IFN-alfa-2a and Ribavirin. The MSP not only included hepatologists and nurses, but also, pharmacists, psychologists and assistants; additionally uniform patient education, open and flexible visits scheduling, continued evaluation of psychiatric risk and active medication were carried out. A decision-tree model was built to estimate the incremental cost-effectiveness ratio (ICER) of MSP vs. conventional control. Unitary costs of HC drugs and professionals were included. Effectiveness was measured in terms of sustained virological response (SVR), adherence was defined as >80% dose administered. **RESULTS:** For genotypes 1/4 (G-1/4), adherence was achieved in 92.4% of patients in group 1 and 69.3% in group 2 ($p = 0.0005$), for genotypes 2/3 (G-2/3) adherence was achieved in 96.9% and 93.2% in groups 1 and 2 respectively ($p > 0.05$). SVR differed in the two groups: 66.7% in group 1 and 48.9% in group 2 for G-1/4 ($p = 0.03$) and 87.7% and 81.4% for G-2/3 ($p > 0.05$) for groups 1 and 2 respectively. Cost per SVR was higher in group 2 than in group 1 (€24,079 and €20,197 in G-1/4; €8,351 and €7,723 in G-2/3). The ICER was €9,533/SVR in G-1/4 patients and group 1 was dominant over group 2 in G-2/3 patients. **CONCLUSIONS:** The MSP could improve the adherence to the HC treatment and therefore the virological response, and could be also a cost-effective strategy compared with the conventional approach.

PGI11

THE COST EFFECTIVENESS OF INFlixIMAB IN THE TREATMENT OF ACUTE ULCERATIVE COLITIS PATIENTS IN SCOTLAND

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OBJECTIVES: To estimate the cost effectiveness of infliximab treatment among patients with severely active ulcerative colitis (UC) hospitalised with an acute exacerbation. **METHODS:** A decision analytic model was used to simulate the progression of hypothetical cohorts of patients with an exacerbation of UC receiving different treatment strategies, infliximab, ciclosporin, standard care or surgical intervention. For extrapolation beyond the trial period, a Markov model was used. The relative risk of disease progression on different treatment alternatives was determined by an indirect comparison between clinical trial. The primary outcome was quality adjusted life years (QALYs) using EQ-5D estimates. A time horizon of one year was selected based on the decision problem and the availability of evidence. Costs and benefits