OBJECTIVE: Estimate the burden of IBS comparing resource use between IBS-patients (IBSp) and non-IBS subjects (controls) during a 1-year follow up. METHODS: Observational, prospective study involving 517 IBSp, meeting Rome II criteria, and 84 controls. Controls were selected from those subjects who had attended a health centre due to digestive problems (excluding IBS). Both samples were selected from the consulting offices of 92 Spanish gastroenterologists and Primary Care Physicians. IBSp and controls attended a total of 5 visits at 3 month intervals. During first month after each visit patients recorded drug utilization and indirect resource in a diarycard. Direct resource was collected by investigators in follow-up medical controls. RESULTS: Mean patients age (SD) was 43 (14) years and 75% were female. No differences in age and gender were observed between IBSp and controls. 90% of IBSp and 100% of controls visited a clinic at least once (p < 0.01), but only IBSp (52%) did it due to abdominal pain. Hospitalizations were registered in 7.5% of IBSp and 2.9% of controls. Thirty-eight percent of IBSp and 15% of control were assisted in an emergency guard at least once (p < 0.01); abdominal pain was the main reason for IBSp to attend the emergency guard (11%). 43% of IBSp required some specific test due to their abdominal pathology (blood samples, gastroscopy or colonoscopy). Mean patient cost associated with resources used was much higher in IBSp (€143.39) than in controls (€143.94) (p < 0.01). In terms of indirect resources, 59% of IBSp and 26% of controls experienced limited or reduced performance at work (p < 0.01). Mean patient cost associated with absence from work at one year was also much higher for IBSp (€502.21€) than for controls (€109.70) (p < 0.01). CONCLUSIONS: This prospective 1-year follow-up study confirms that IBS is associated with an important burden in terms of direct and indirect costs and that IBSp use more health resources and experience higher productivity loss compared with non-IBS.

PGS6

cost-effectiveness of continuous and on-demand therapy with esomeprazole 20 mg in patients with symptomatic gastroesophageal reflux disease (GERD): the one study

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OBJECTIVE: The primary objective of this multicenter, randomised, open study was to assess the difference in direct medical costs incurred over a 6-months period with a 20mg esomeprazole on-demand maintenance strategy, compared to a 20mg q.d. continuous therapy. Secondary objectives were to assess GERD symptoms and to measure patient satisfaction during the maintenance phase. METHODS: In total, 2884 patients with uninvestigated GERD entered the study and received esomeprazole 40mg q.d for 4 weeks. At the end of the acute treatment phase 93% patients were symptom free (complete resolution of heartburn or not more than 1 day with mild heartburn during the last 7 days prior to the visit), and were randomised to receive either continuous or on-demand treatment (esomeprazole 20mg) during a 6-month maintenance phase (1315 and 1325 patients respectively). Analyses were performed on an intention to treat basis. Direct costs include study, OTC and other GERD medication, unscheduled visits and GERD tests. RESULTS: The proportion of patients heartburn free at 6 months was significantly higher (p < 0.001) in the continuous treatment with esomeprazole 20mg (86.1%) than in the on demand group (78.0%). Patient’s satisfaction reached 94% after the 4 weeks acute treatment and remained 92% in the maintenance phase, similar in both groups. Both treatment arms were well tolerated. Mean daily direct costs were significantly lower (P < 0.001) in the on demand group (€0.96 +/- 0.54 SD) than in the esomeprazole 20mg q.d. arm (€1.39 +/- 0.31 SD). The proportion of patients taking GERD-related drugs was similar in the two groups (8.0% vs 7.3%, p = 0.6). CONCLUSIONS: Continuous or on-demand treatment in patients with uninvestigated GERD offer effective and safe symptom control with a high patient satisfaction. On-demand treatment allows significant reduction in medical costs. Choice of treatment should be considered on patient basis.

PGS7

cost analysis of a new proposal for reimbursement of proton pump inhibitor treatment of gastroesophageal reflux disease (GERD) in Belgium

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OBJECTIVES: To compare the pharmaceutical costs of a new proposal of reimbursement of proton pump inhibitors (PPI) in the treatment of GERD with the present regulation in which PPI’s are reimbursed only when endoscopy demonstrates esophagitis. The new reimbursement proposal includes empiric therapy (without endoscopy), symptomatic treatment of non-erosive GERD, and chronic “on-demand” therapy. METHODS: A decision tree model was developed for treatment of patients with GERD resistant to H2 receptor antagonists. Calculations were performed using MS Excel. Response rates of different therapies and probabilities of findings at endoscopy were derived from literature. Costs from the payer’s perspective were calculated for the first 48 weeks of treatment using the mean price of the PPI on the Belgian market on Jan 1st 2003. RESULTS: The present reimbursement system and the new proposal represented a mean 48 weeks cost per case of respectively €351 and €204. Sensitivity analysis
revealed that the cost increased to €25.5 when the efficiency of empiric treatment rose from 67% to 80% using a double dose during 8 weeks. The cost related to treatment varied from €112 to €236 using respectively the cheapest and the most expensive PPI; as compared to the actual treatment this resulted in a cost decrease of respectively €138 and €233. Number of days treated while on “on-demand” therapy also significantly influenced costs: €171 for 1/7 and €270 for 7/7. CONCLUSIONS: The cost reduction with the new reimbursement proposal is robust to changes in efficiency rate, in PPI-price and in duration of “on demand” therapy.

**PGS8**

**COST-MINIMISATION ANALYSIS OF PPI-BASED TRIPLE THERAPY FOR THE ERADICATION OF HELICOBACTER PYLORI**

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**OBJECTIVE:** To compare the cost of UK licensed PPI-based triple therapies for the eradication of *H. pylori* from the perspective of the National Health Service.

**METHODS:** A recent meta-analysis of trials comparing all UK licensed PPI-based triple therapies using amoxicillin and clarithromycin over a 7-day period found no significant difference in the rate of *H. pylori* eradication. Mean per patient costs were calculated by multiplying the resource utilisation incurred by their respective national published unit costs at year 2003 prices. To estimate the impact of using the least expensive triple therapy on a typical Primary Care Organisation (PCO), differences in mean per patient cost were multiplied by the annual incidence of *H. pylori* compared to current expenditure. Current expenditure was based on national usage pattern of the available treatment options. Sensitivity analysis was conducted to assess the impact of administering omeprazole 40mg once daily vs omeprazole 20mg twice daily and the availability of generic omeprazole.

**RESULTS:** Mean per patient cost for a 7-day esomeprazole-based treatment regimen was £34.24, €5.03 lower than omeprazole-, €2.58 less than lansoprazole- and pantoprazole-, and €2.13 lower than rabeprazole-based triple therapies. The savings with Enteryx™ are mainly due to lower hospital and procedural costs.

**CONCLUSION:** The cost reduction with the new reimbursement proposal is robust to changes in efficiency rate, in PPI-price and in duration of “on demand” therapy.

**PGS9**

**A COST CONSEQUENCE ANALYSIS OF A NEW ENDOSCOPIC INJECTABLE TREATMENT VERSUS SURGERY IN PATIENTS WITH SEVERE GASTROESOPHAGEAL REFLUX DISEASE IN FRANCE**

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**OBJECTIVE:** To conduct a cost consequence analysis of Enteryx™ procedure versus surgery (Laparoscopic Nissen Fundoplication = LNF) in a French public hospital setting. Nissen Fundoplication is the actual technique of reference for severe Gastro Esophageal Reflux Disease (GERD) and Enteryx™ procedure is a new injectable, endoscopic polymer-based treatment for GERD.

**METHODS:** A decision tree model was built in DATATM TreeAge 4.0 to predict the average cost and effectiveness per patient for each of the treatment strategies. The time horizon was one year and a French public hospital perspective was taken. For both strategies, the efficacy criterion was the complete PPI stop after one year. Efficacy data on Enteryx™ were taken from the Enteryx™ multicenter clinical trial. Clinical outcomes with LNF were derived from the literature and validated by a surgical advisory board. Unit cost data were based on the French DRG system (PMSI 2000). DRG costs have been inflated by 2.5% and 5% to obtain current year costs. At 2.5% rate, procedural cost for Enteryx™ were estimated at €2200 (based on DRG 830—ambulatory endoscopy with anaesthesia) and at €6300 for LNF (DRG 215, 216).

**RESULTS:** After one year, the average cost per patient was lower for Enteryx™ (2.5%: €3364–5%: €3541) than for Nissen Fundoplication (2.5%: €6492–5%: €6800). The one way sensitivity analysis shows that the model is most sensitive to the success rate of Enteryx™ and to the procedural cost. CONCLUSION: For patients eligible for surgery, Enteryx™ offers a new less invasive and cheaper alternative compared to LNF. The savings with Enteryx™ are mainly due to lower hospital and procedural costs.

**PGS10**

**COST OF ILLNESS OF GASTROESOPHAGEAL REFLUX DISEASE (GERD) IN ITALY**

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**OBJECTIVES:** Gastroesophageal reflux disease (GERD) is one of the most common chronic disorders of the gastrointestinal tract. The aim of this study was to evaluate the cost of illness in patients affected by GERD visited by general practitioners (GPs). **METHODS:** A cross-sectional observational multicentre cost of illness study was conducted in the urban area of Milan. Information was obtained through a battery of four questionnaires filled out by 317 GERD patients consecutively enrolled by 47 GPs, investigating clinical (severity and frequency