COST-EFFECTIVENESS ANALYSIS ON THE USE OF TEGASERO
COMPARRED TO STANDARD THERAPY IN PATIENTS WITH IRRITABLE
BOWEL SYNDROME WITHIN AN INSTITUTIONAL SETTING IN MEXICO
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OBJECTIVES: Irritable bowel syndrome (IBS) is a functional gastrointestinal disorder prevalent in up to 35% of the adult population in Mexico, thus rendering high costs for health institutions. Tegaserod, a 5-HT3 receptor agonist approved for the treatment of IBS, could potentially render a beneficial economic impact. An economic evaluation was performed to assess the economic impact of treating IBS patients with tegaserod in comparison to standard therapy in an institutional setting in Mexico. METHODS: A health economic analysis (CEA) was conducted for a non-institutional setting at the U.S. National Institute of Social Security (IMSS). The drug comparator used was buspicline, as it is the recommended standard therapy available in the National Formulary, as published in the institution’s IBS clinical guidelines. Resource utilization data was obtained from previous literature, patient consults, drug use, laboratory tests, and endoscopic procedures, non-endoscopic diagnostic procedures, and surgical procedures were used for the analysis; a triangular probability distribution was used. Efficacy data was obtained from published meta-analysis studies. The source of the unit costs was the institution, current for 2009. Discount rate was not used because the time horizon was for 1 year. A probabilistic sensitivity analysis was obtained through a Monte Carlo simulation with 100,000 iterations in the widest parameters. RESULTS: The expected annual cost with standard therapy was $19,431.92 per patient in local currencies (Mexican Pesos, MXP), as compared to $18,394.68 with tegaserod. Tegaserod was more effective than the standard therapy. Probabilistic sensitivity analysis showed the same conclusions, regardless of the variability in resource utilization and efficacy. CONCLUSIONS: From an institutional perspective in Mexico, tegaserod is a cost-effective therapeutic option (dominant) for the treatment of IBS in comparison with the current standard therapy featured in the National Formulary.

COST-EFFECTIVENESS OF SEROLOGIC TESTING FOR DIAGNOSING CELIAC DISEASE
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OBJECTIVES: To assess the cost-effectiveness of tests for diagnosing celiac disease (CD). The following tests were assessed: biopsy; endomysial antibody (EMA); anti-gliadin antibody (AGA); deamidated gliadin peptide (DGP); tissue transglutaminase (TTG). METHODS: A decision analytic model was constructed to compare costs and outcomes based on sensitivity, specificity and prevalence estimates from a primary systematic literature review. Study results were pooled using a bivariate, binomial, generalized linear mixed model (SAS 9.2). The target population was adults and children experiencing symptoms consistent with CD. Biopsy was assumed to have sensitivity and specificity of 1 since it is considered the gold standard. In the model, positive cases (true or false) were assumed to be confirmed with biopsy. A family physician consult was incurred with serologic testing and results were assumed to be accurate,binomial, generalized linear mixed model (SAS 9.2). The target population was adults and children experiencing symptoms consistent with CD. Biopsy was assumed to have sensitivity and specificity of 1 since it is considered the gold standard. In the model, positive cases (true or false) were assumed to be confirmed with biopsy. A family physician consult was incurred with serologic testing and results were assumed to be accurate. RESULTS: Four strategies were either strictly or extendedly dominated. IgGTTG was the least costly and most effective strategy ($178.95, 0.1553 FNs). Biopsy was the most costly and most effective strategy. Otherwise, either IgGTTG, IgATTG or EMA is the most cost-effective strategy. Biopsy was assumed to have sensitivity and specificity of 1 since it is considered the gold standard. In the model, positive cases (true or false) were assumed to be confirmed with biopsy. A family physician consult was incurred with serologic testing and results were assumed to be accurate. Sensitivity analyses were performed using TreeAge Pro Suite 2009. All other strategies were either strictly or extendedly dominated. IgGTTG was the least costly and most effective strategy ($178.95, 0.1553 FNs). Biopsy was the most costly and most effective strategy. Otherwise, either IgGTTG, IgATTG or EMA is the most cost-effective strategy.

ECONOMICS OF A SYMPTOM BASED PATIENT MANAGEMENT APPROACH FOR GASTRO-ESOPHAGEAL REFLUX DISEASE (GERD), OROESOPHAGEAL DISORDERS, COMPPARED TO AN INVASIVE APPROACH USING GASTROSCOPY AND PH-METRY
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OBJECTIVES: In Norway, proton pump inhibitor (PPI) therapy for GERD can only be reimbursed for patients with a diagnosis verified by gastroscopy or pH-metry. The purpose of this study (NCT00042387) was to evaluate the economic aspects of an alternative, structured treatment pathway based on GERD—a validated PRO tool for the diagnosis and treatment decisions in GERD. METHODS: A two treatment pathways in patients presenting with reflux, but no alarm symptoms were evaluated in an open randomized, parallel-group 8 week study. In the New Structured Pathway (NSP) diagnosis and treatment were based on GERD scores dividing patients into high impact GERD (treated with esomeprazole 40 mg), medium impact GERD (treated with generic PPI) and low probability of GERD (treated at the physician’s discretion). In the Ordinary Clinical Pathway (OCP), the physician was kept blinded to the GERD score and diagnosis was based on findings at gastroscopy or, if needed, pH-metry. Treatment was given according to normal clinical practice. Direct medical cost was estimated based on diagnostic procedures, medication and unscheduled health care visits. RESULTS: Treatment success with NSP diagnostic method was not inferior to OCP. The response rates were 86.5% and 80.1%, respectively. The health economic evaluation could thus be performed as a cost-minimization analysis. More patients in the NSP arm were treated with esomeprazole 40 mg than in the OCP arm (28.4% vs. 7.9%). By integrating the New Structured Pathway into clinical practice, direct health care resource use may be reduced without any loss in clinical effectiveness.