OBJECTIVES: The aim of this study was to estimate the cost-effectiveness of endoscopic sclerotherapy (ES) vs. ligation (EL) in prevention of rebleeding in children with oesophageal varices (OEV) from a Polish hospital perspective. METHODS: Retrospective analysis in 235 consecutive children with OEV treated with ES (206) or EL (29) was performed to quantify effectiveness and costs of alternative treatments. End-points of analysis were: variceal obliteration, referral to surgery or death. Varices were defined as “obliterated” when too small to be treated by endoscopic methods. The effectiveness measure was percentage of obliteration of OEV after ES and EL respectively. Only direct medical costs resulting from the ES and EL, treatment of rebleeding before obliteration, complications and crossover from ES to EL, or from endoscopy to surgery for treatment failures were assessed. The costs were determined from actual resource consumption on a patients-specific basis and estimated using local data on unit costs. Uni- and multivariate and extreme scenario sensitivity analyses were performed. RESULTS: Obliteration of varices was achieved in 65% of children treated with ES and 90% treated with EL (p < 0.01). The number of endoscopic procedures, bleedings, oesophageal dilatations and surgery per patient for ES and EL was 8.2 vs. 2.2; 1.3 vs. 0.2; 0.1 vs. 0.0; 0.2 vs. 0.07, respectively (p < 0.05). The mean cost per patient was 16,577 PLN in ES and 3,742 PLN in EL group (1 PLN = 4 USD). The threshold analysis suggests, that EL would lose the dominance, when the mean number of bleedings/patient decreased two-fold in ES group and increased ten-fold in EL group. CONCLUSION: Since EL in comparison to ES resulted in a better effect at a lower cost, this method was considered to be dominant for children with OEV.

OBJECTIVES: To determine proton pump inhibitor (PPI) utilization and their effect on treatment costs in patients with gastroesophageal reflux disease (GERD). METHODS: Data were extracted from National Health Insurance Health Care claims database in Taiwan. We identified continuously enrolled patients diagnosed with GERD and newly treated with a PPI between Jan 1, 2001 and Dec 31, 2001. Data were analyzed for six months following PPI initiation. Results were stratified by first PPI filled during the study period. GERD severity groupings were measured using a 4-step scale ranging from an endoscopic diagnosis of mild esophagitis to stricture. Compliance (as measured by a medication possession ratio), length of therapy (using total days supplied) and daily average consumption (as measured as number of units consumed per day) were measured. Regression analysis was performed on GERD-related costs using treatment patterns, type of PPI drug, and compliance as independent variables of interest. RESULTS: Of 1600 remained subjects for study, there are 790 (49.4%) omeprazole, 666 (41.6%) lansoprazole, and 144 (9.0%) pantoprazole subjects. The possession ratio was not significantly different between drug subjects. The mean (median) length of therapy of omeprazole subjects was 76 (56) days, 55 (42) days for lansoprazole subjects and 56 (49) days for pantoprazole subjects. Among subjects pantoprazole users did not have a lower daily average consumption (1.00) versus both lansoprazole (1.01) and omeprazole subjects (1.03, p = 0.057). Compliance with PPI therapy had 45.1% higher GERD-related pharmacy costs (p < .001) and 40.4% higher GERD-related total costs (p < .01). Omeprazole subjects had 17.8% higher GERD-related pharmacy costs versus pantoprazole subjects (p < .001). Lansoprazole subjects had 12.7% higher GERD-related total costs versus pantoprazole subjects (p < .01), while Omeprazole subjects had 24.9% higher GERD-related total costs versus pantoprazole subjects (p < .001). CONCLUSIONS: Compliance was not significantly different between the PPIs, nor did increased compliance decrease GERD-related costs. Pantoprazole subjects had lower GERD-related costs, compared to lansoprazole and omeprazole subjects.