PG116 EFFECTIVENESS OF THE PHARMACOLOGIC TREATMENT OF IRRITABLE BOWEL SYNDROME AT THE SOCIAL SECURITY MEXICAN INSTITUTE
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OBJECTIVES: Irritable Bowel Syndrome (IBS) is a chronic and relapsing sickness of high social impact on society and patients’ life quality. The purpose of this study is to estimate the cost-effectiveness of treatment with oltionium bromide (OB) compared with pinaverium bromide (PB) and hyoscine butylbromide (HB) in the treatment of abdominal pain in patients with IBS from an institutional perspective.
METHODOLOGY: cost-effectiveness analysis was developed using a Markov modeling approach. The model simulates cost and effectiveness outcomes in a 6 month period for treatment of IBS with OB (40mg every 8 hrs); PB (10-20mg every 8 hrs); and HB (50mg every 8 hrs). Three health conditions were considered (“symptom control”, “continuation control”, and “relapse prevention” within 7-day cycles. Effectiveness measures: clinical success rate and symptom-free time. The probabilities of transition were estimated from international random clinical trials. Costs and resource use were collected from hospital records related to patients with IBS at IMSS in 2010 (n=150). The probabilistic sensitivity analysis was obtained through a second-order Monte Carlo simulation. RESULTS: The greatest effectiveness of clinical improvement was shown by patients treated with OB (76%) followed by those of PB (72%) and HB (66%). The greatest effectiveness in symptomless time was shown by OB (18 weeks) followed by PB (17 weeks) and HB (15 weeks). Thus, mean cost per patient were lower with OB ($US505.22) followed by PB ($US530.74) and HB ($US642.71). Regarding the ICER, OB resulted the dominant therapy. Acceptability curves showed OB as the most cost-effective therapy in 100% independently of IMSS willingness to pay. CONCLUSIONS: In Mexico, OB represents the best cost-effective alternative since it offers greater control and potentially decrease the costs associated with hospitalization, ER visits, and outpatient visits. Interventions are needed to reduce diverticulitis occurrences and possibly decrease the risk of diverticulitis perforation.

PG117 RESOURCE UTILIZATION AND HEALTH CARE COSTS ASSOCIATED WITH DIVERTICULAR DISEASE: RESULTS FROM A RETROSPECTIVE CLAIMS DATABASE ANALYSIS IN THE UNITED STATES
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OBJECTIVES: To compare all-cause resource utilization and health care costs between patients with diverticular disease (DD) and matched controls. METHODS: Medical and pharmacy claims data from the Ingenix IMPACT Managed Care database were analyzed (2005-2008). All geographic regions within the US were included. Patients with DD were defined as those with primary diagnosis of diverticulosis (ICD-9-CM code 563.81) and diverticulitis (ICD-9-CM codes 563.82 and 563.83). Controls from the same database were matched 2:1 based on age, gender, and plan enrollment status. RESULTS: The mean age of the DD group was 61.7 years compared to 51.4 years in controls. Study eligibility required plan enrollment for 6 months pre-index and ≥12 months post-index. Outcomes were evaluated over 12 months post-index. Mean rate of hospitalization and negative outcomes were used to estimate resource utilization and health care costs. Costs were adjusted to 2009 dollars. RESULTS: Rates of resource utilization and health care costs were significantly higher for DD patients than for controls: hospitalization, ER visits, and office visits. Odds ratios of adverse outcomes Rate Ratio (OB vs. PB: 2.06; MNocturnal = 2.3) higher, respectively, than in controls; all P<0.001. Due to higher resource utilization, adjusted mean total annual all-cause costs were substantially higher in DD patients than controls ($5,933 vs. $7,028, P<0.0001). Major drivers for the cost difference were hospitalizations ($6,554 vs $1,374), ER visits ($1,012 vs $120), outpatient/ancillary costs ($4,289 vs $2,168), and office visits ($2,280 vs $1,420), all P<0.0001. CONCLUSIONS: The economic burden of patients with DD is significant, with substantial costs occurring in cost sectors such as hospitalization, ER, and office visits. Interventions are needed to reduce diverticulitis occurrences and potentially decrease the costs associated with hospitalization, ER visits, and outpatient/ancillary services. Supported by funding from Shire Development Inc.

Gastrointestinal Disorders – Patient-Reported Outcomes & Preference-Based Studies

PG118 FEASIBILITY OF ASSESSING UTILITY BY EQ-5D AND TIME-TRAVEL-OFF METHODS IN TAIWANESE CHRONIC HEPATITIS B PATIENTS
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OBJECTIVES: The extent of difference regarding quality of life (QOL) according to disease severity in chronic hepatitis B virus infection (CHB) has rarely been investigated. The aim of the study was to explore the adaptation and appropriateness of different utility measures of QOL in Taiwanese CHB patients. METHODS: Consecutive adult CHB patients who visited liver clinics at a medical center and a regional hospital from July to December 2010 were invited for interviews. Time-travel-off (TTO), EuroQol group time trade-off (EQ-5D) questionnaire and 100-mm visual analog scale (VAS) were used to measure participants’ utility. Multivariate analysis was used to evaluate the association between patients’ demography (age, marriage, educational status), Charlson co-morbidity index (CCI) and EQ-5D utility. A total of 120 patients (mean age: 48.02±11.04 years, 85% male) were recruited, including 20 patients of cirrhosis and 14 patients of hepatocellular carcinoma. The mean utility and measurement success rates for EQ-5D index, EQ-5D VAS, and TTO were 0.83 (94.9%), 0.77 (89.8%), and 0.14 (99.0%), respectively. The former two utilities were significantly associated with employment status whilst TTO were significantly associated with marriage status. There was no difference in utility of EQ-5D VAS, EQ-5D index and TTO between CHB patients (p=0.103, 0.774, 0.65, 0.28, 0.028, respectively). CONCLUSIONS: EQ-5D questionnaire and EQ-5D VAS are feasible QOL measurement in Taiwanese CHB patients. Since Taiwanese preference weight for transferring EQ-5D assessment into EQ-5D index has not been established, further large-scale study is needed to cross validate this measurement and explore the differences of QOL in terms of disease severity.

PG119 HEALTH-RELATED QUALITY OF LIFE IS LOWER FOR PATIENTS WITH DIURNAL AND NOCTURNAL GERD SYMPTOMS
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OBJECTIVES: This study assessed whether health-related quality of life (HRQoL) differs between patients with both diurnal and nocturnal GERD symptoms and those with no GERD symptoms (non-GERD). METHODS: A mixed methods study was conducted in the US and Taiwan. Generalized linear models and negative binomial regression models were used to estimate resource utilization and health care costs. Costs were adjusted to 2009 dollars. RESULTS: Patients with diurnal-and-nocturnal GERD suffer poorer HRQoL than those with no GERD symptoms (non-GERD) (p<0.005; SE 47.5, 0.729, 0.314; MNon-GERD = 47.5, 0.729, 0.377), respectively. The former two utilities were significantly associated with employment status whilst TTO were significantly associated with marriage status. There was no difference in utility of EQ-5D VAS, EQ-5D index and TTO between CHB patients (p=0.103, 0.774, 0.65, 0.28, 0.028, respectively). CHB patients concomitant with cirrhosis (p=0.06, 0.16, 0.52, 0.03; MNon-GERD = 47.5, 0.729, 0.377, respectively). There were no significant differences in utility of EQ-5D VAS, EQ-5D index and TTO between CHB patients (p=0.103, 0.774, 0.65, 0.28, 0.028, respectively). CONCLUSIONS: Diurnal-and-nocturnal GERD suffer poorer HRQoL than those with no GERD symptoms (non-GERD). Further study to cross validate this measurement and explore the differences of QOL in terms of disease severity.
OBJECTIVES: To assess symptoms reported by IBS-C patients through exploratory open-ended questions in two phase 3 clinical trials. METHODS: Prior to answering a daily symptom diary, patients were asked to list bothersome symptoms of IBS-C in an open-ended manner at the pre-treatment visit. At the randomization visit, patients were asked to list any additional bothersome symptoms. Data on 50 % of the patients were not assessed during the prior two weeks. The data at both time points for random-ized patients were analyzed using ATLAS.ti. Codes were developed using patients’ verbatim words. Frequency counts of symptoms were tabulated. Results were com-pared using t-tests. RESULTS: Across trials, 1496/1610 (92.9 %) and 603/1610 (37.5 %) patients provided responses at the pre-treatment and randomization visit, respectively. The ten most frequently listed bothersome symptoms were: gas (23.1 %), bloating (14.1%), cramping (12.9%), fullness (11.6%), and nausea (11.6%). Only two of these symptoms identified at the randomization visit were not assessed during the trial: gas and nausea. The symptoms most fre-quently reported by patients in the trial were reported during the focus groups. CONCLUSIONS: This method of data collection provided insight on IBS-C patient perspective. Adult IBS-C patients experience many bothersome symptoms, includ-ing both abdominal and bowel symptoms. The results from this analysis confirm the comprehensiveness of four focus groups conducted with IBS-C patients and provides evidence that across different IBS-C patient groups the type of abdominal and bowel symptoms reported by patients is consistent.

PGI21
HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH MILD-TO-MODERATE ULCERATIVE COLITIS BEFORE AND AFTER 8 WEEKS’ TREATMENT WITH MULTI-MATRIX MESALAMINE: COMPARISON WITH 2009 GENERAL POPULATION NORMS IN THE UNITED STATES
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OBJECTIVES: Ulcerative colitis (UC) is a chronic inflammatory disease of the large intestine and rectum. Symptoms such as abdominal pain, diarrhea, and the per-sistent urge to defecate can impair UC patients’ physical and socio-psychological well-being. This study examined the magnitude of this impairment, and the degree to which treatment improved health-related quality of life (HRQL), of mild-to-moderate UC patients relative to a US general population sample. METHODS: Short-Form (SF)-12v2 baseline and endpoint scores were collected from a multicenter, open-label study in which patients with active mild-to-moderate UC received MMX mesalamine. The strength of inter-scale correlations and the find-ings of similar sensitivity to clinical outcomes indicate convergent validity among these instruments within this patient population.

RESULTS: At baseline, MCS was 47.3 vs. 49.4 (P = 0.001; MCS: 47.3 vs. 49.4, P = 0.05) and on both summary

PGI22
WORK PRODUCTIVITY AMONG GENOTYPE 1 HEPATITIS C VIRUS (HCV) TREATMENT-NAÏVE PATIENTS RECEIVING TELAPREVIR-BASED TREATMENT REGIMENS: RESULTS FROM ADVANCE AND ILLUMINATE STUDIES
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OBJECTIVES: ADVANCE and ILLUMINATE, phase 3 studies, evaluated efficacy and safety of telaprevir (T)/peginterferon alfa-2a/ribavirin (PR) for genotype 1 HCV treatment-naïve patients. ADVANCE patients were randomized to 8 or 12 weeks of T/placebo plus PR (24 or 48 weeks) or PR (48 weeks). ILLUMINATE patients received T /placebo for 12 weeks; those with extended rapid virologic response (eRVR) were randomized to 24- or 48-week total treatment. We report on the patient self-re-port-erated utility of telaprevir-based regimens on work productivity. METHODS: The five-item Work Productivity Questionnaire (WPQ) was administered to patients (N = 932) at day 1, and weeks 4, 12, 24, 46, and 72 (assessed previous 4 weeks). WPQ responses were tabulated at each timepoint by treatment group using de-scriptive statistics. RESULTS: At baseline, days missed from work (mean, SD) due to HCV or its treatment ranged from 0.8 (3.6) to 1.1 (4.4) days across treatment groups (ADVANCE), and from 0.6 (3.1) to 0.7 (3.3) (eRVR+ groups, ILLUMINATE) and in-creased 4-5 fold by week 12 in ADVANCE and ILLUMINATE. Compared to baseline, more patients reported working shorter hours and being less productive by week 12 in ADVANCE and in ILLUMINATE eRVR+ groups. At week 48, days missed from work approached baseline levels in telaprevir treatment groups (1.4 [4.9] T2PR1, 1.0 [4.7] T2PR) but not in FR (1.9 [6.3]); in ILLUMINATE corresponding values were 0.1 (3.0) T212PR, 0.2 (4.8) and 0.8 (2.3) in T2PR48. After week 12, other work productivity measures improved earlier in telaprevir-based groups versus FR (ADVANCE), and in T2PR24 versus T2PR48 in ILLUMINATE (eRVR+). CONCLUSIONS: Among geno-type 1 HCV treatment-naïve patients, work productivity decreased during the first twelve weeks of therapy in all treatment arms. Work productivity, however, re-turned to pre-treatment levels earlier in patients who received telaprevir-based regimens compared with FR and in patients who received shorter treatment duration.

PGI24
DOES UTILITY OR CAPABILITY MATTER FOR IRITABLE BOWEL SYNDROME? - A PRELIMINARY QUALITATIVE STUDY ON TAIWANESE PATIENTS
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OBJECTIVES: Irritable bowel syndrome (IBS), an episodic functional gastrointestinal disorder with continuous nuisance bowel symptoms leading to long-term disturbances on quality of life (Qol). Various conventional and innovative gastrointestinal drugs are available for the symptomatic control of IBS. However, it is uneasy to justify cost-effectiveness of IBS treatments due to the unspecific symp-toms and disorder of Qol. measurements and a lack of clear association between functioning and Qol. This preliminary used a qualitative approach to explore the impacts of IBS on patients and explore underlying attributes to Qol.
METHODS: Semi-structure interviews were conducted at a medical center in southern Taiwan from July 2010 to December 2010. Outpatients with defined diagnosis of IBS and receiving medical treatment were invited to participate, and a topic guide was used to ensure systematic coverage of attributes related to Qol. The interviews were audiotaped and transcribed verbatim for framework analysis. RESULTS: The most disturbing symptoms for 29 participants were recurrent abdominal pain or discomfort, which affect the efficiency of work or study. In addition, the frequent bowel movements reduce patient’s willingness to participate in social activities and jeopardize their interpersonal relationship. Moreover, repeated inspections and movements reduce patient’s willingness to participate in social activities and jeopardize their interpersonal relationship. Furthermore, prolonged medical treatments, the functional impairment was still tolerable yet intangible (anxiety, worries) and social stress may have greater impacts on Qol. Therefore, a capability approach may work better than the utility and functioning Qol. measure.