

## PGI9

**COST-UTILITY-ANALYSIS OF PEGINTERFERON ALFA-2B PLUS RIBAVIRIN VERSUS INTERFERON ALFA-2B PLUS RIBAVIRIN AS INITIAL THERAPY FOR CHINESE NAIVE PATIENTS WITH CHRONIC HEPATITIS C**Tarn YH<sup>1</sup>, Lin WA<sup>2</sup><sup>1</sup>Taipei City Hospital, Taipei, Taiwan, <sup>2</sup>National Defence Medical Center, Taipei, Taiwan

**OBJECTIVE:** Aims: To estimate the cost effectiveness of treatment with peginterferon alfa-2b plus ribavirin compared with interferon alfa-2b plus ribavirin for initial treatment of patients with chronic hepatitis C. **METHODS:** Individual patient level data from a randomised clinical trial with peginterferon plus ribavirin were applied to a Markov model to project lifelong clinical outcomes. Economic estimates and quality of life were based on Taiwan patient data and published data. We used a societal perspective and applied a 3% annual discount rate. **RESULTS:** Compared with no antiviral therapy, interferon alfa-2b plus weight based dosing of ribavirin or peginterferon alfa-2b plus weight based dosing of ribavirin 24 weeks therapy increased quality adjusted life year (QALY) on overall hepatitis C patients by 6.5 and 6.7 years, respectively. And the life long treatment costs are lower than no antiviral therapy. The peginterferon plus weight based dosing of ribavirin therapy on genotype I patients is dominate. On the other hand, use interferon plus weight based dosing of ribavirin to treat non-genotype I Chinese patients is the most cost-effectiveness therapy. If the SVR of interferon plus weight based dosing of ribavirin is below 67.8%, the best strategy of treating non-genotype I Chinese patients will be The peginterferon plus weight based dosing of ribavirin. **CONCLUSIONS:** Peginterferon alfa-2b plus ribavirin should reduce the incidence of liver complications, prolong life, improve quality of life, and be cost effective for the initial treatment of Chinese chronic hepatitis C.

## PGI10

**COST OF ILLNESS IN US EMPLOYEES WITH AND WITHOUT GASTROESOPHAGEAL REFLUX DISEASE**Brook R<sup>1</sup>, Campbell S<sup>2</sup>, Wahlqvist P<sup>3</sup>, Wallander MA<sup>4</sup>, Kleinman N<sup>2</sup>, Wiklund I<sup>4</sup>, Smeeding J<sup>5</sup><sup>1</sup>The JeSTARx Group, Newfoundland, NJ, USA, <sup>2</sup>The HCMS Group, Cheyenne, WY, USA, <sup>3</sup>AstraZeneca R&D, Mölndal, AL, Sweden, <sup>4</sup>AstraZeneca R&D, Mölndal, Sweden, <sup>5</sup>The JeSTARx Group, Dallas, TX, USA

**OBJECTIVE:** To assess the Annual Cost of Illness (CoI) of GERD in an employed population. **METHODS:** A retrospective analysis was conducted using the Human Capital Management Services Research Reference database of multiple large geographically diverse US based employees with data from 2001 through 2004. Data included medical, pharmacy, payroll and demographic data. The analysis compared the direct medical costs by Place of Service (PoS: doctor's office, inpatient hospital, outpatient hospital or clinic, emergency department, laboratory, other) for a subset of employees where this data was available. ICD-9 Codes were used to distinguish employees with GERD from the non-GERD cohort. The index date in the GERD cohort was defined as the date of first diagnosis during 2001 or later, while the average GERD index date was used in the non-GERD cohort. Regression modelling was used to measure the cost differences between employees with GERD and employees without GERD while controlling for age, job tenure, gender, salary, region, and comorbidities. **RESULTS:** Data were available for 267,269 employees (4.3% with GERD). The mean age of employees with GERD was 43 years, and 94% were full time employees. All of the annual CoI and PoS comparisons were sta-

tistically different (all  $P < 0.001$ ). GERD was associated with an annual mean incremental cost of \$3,355, of which direct medical costs accounted for 65%, prescription drug costs for 17%, and indirect costs in terms of sick leave, short- and long-term disability, and workers' compensation for 19%. The largest PoS component (47%) was in the category "outpatient hospital or clinic". **CONCLUSIONS:** GERD is associated with substantial direct and indirect costs, of which direct medical costs excluding prescription medications contributed to 65% of total incremental costs in this study.

## PGI11

**ECONOMIC BURDEN OF ENDOSCOPY-RELATED INFECTIONS, PSEUDO-INFECTIONS AND TOXIC REACTIONS**Seoane-Vazquez E<sup>1</sup>, Rodriguez Monguio R<sup>1</sup>, Visaria J<sup>1</sup>, Carlson A<sup>2</sup><sup>1</sup>Ohio State University, Columbus, OH, USA, <sup>2</sup>Data Intelligence Consultants, LLC, Eden Prairie, MN, USA

**OBJECTIVES:** The objective of this study is to analyze the economic burden of exogenous endoscopy-related infections, pseudo-infections and toxic reactions in the U.S. in 2004. **METHODS:** The economic burden was estimated from the U.S. health care perspective. The number of events and patients involved was estimated based on a review of the literature. An analysis of the causes of contamination was conducted to evaluate preventable events. The use of resources was estimated for patients exposed, contaminated and experiencing clinical symptoms. The use of resources included chart reviews, physician visits, clinical tests, and interventions required for the treatment of the infections and toxic reactions. The valuation of resources was based on a review of the literature. A sensitivity analysis of the incidence of endoscopy-related events and the use and valuation of resources was conducted. **RESULTS:** The analysis yielded a baseline incidence of 2741 patients exposed to endoscopy-related events; 208 patients contaminated; and 113 patients experiencing clinical symptoms. It was estimated that 91.7% of the cases could be prevented if better infection control practices were implemented, and that 93.3% of the cases could be prevented if protective endoscope sheaths were used during procedures. The total direct medical cost associated with endoscopy-related infections occurring in the US in 2004 was estimated at \$7.6 million (range = \$2.8–\$14.7 million). Health care expenditures for patients experiencing clinical symptoms and evaluation of patient exposed represented 61.3% and 34.8% of the total cost respectively. **CONCLUSIONS:** The analysis of the economic burden associated with endoscopy-related events reveals the significance of the costs related to the care of patients experiencing clinical symptoms, and the review of patients' medical charts and the clinical evaluation of exposed patients. The use of protective endoscope sheaths during procedures, improved infection control, and surveillance systems could reduce the economic burden associated with endoscopy-related events.

## PGI12

**COST-UTILITY ANALYSIS OF TEGASEROD FOR THE TREATMENT OF IRRITABLE BOWEL SYNDROME**

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**OBJECTIVES:** Tegaserod appears to be safe and effective for treating constipation-predominant irritable bowel syndrome (IBS-C). The present study evaluates whether tegaserod is cost-effective compared to usual care, which consists of education, reassurance, suggestions on lifestyle and diet, and discussion about psychosocial issues. **METHODS:** The study employed a Markov-cycle tree to evaluate the medical and economic out-