incremental cost per QALY gained is 21.074 reais. In HCV non-1 genotype patients, PEG2B increases LY by 1.02 and QALY by 0.47 years in comparison to non-PEG. The incremental cost per QALY gained is 15.057 reais. The weighted average incremental cost-effectiveness ratio, using population-based HCV genotype distribution estimates, for all genotypes was 17.832 per QALY. **CONCLUSIONS:** Peginterferon alfa-2b (12 KD)/ribavirin are a cost-effective therapy for treatment of naive adults with CHC compared with standard interferon alfa-2b/ribavirin, regardless of HCV genotype.

PGI6

ESOMEPRAZOLE IS COST-EFFECTIVE COMPARED WITH PANTOPRAZOLE IN THE ACUTE AND MAINTENANCE TREATMENT OF REFLUX ESOPHAGITIS IN FINLAND

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OBJECTIVES: To assess the cost-effectiveness of two treatment strategies for reflux esophagitis (RE) in Finland: acute treatment with esomeprazole 40 mg qd followed by maintenance treatment with 20 mg qd, or acute treatment with pantoprazole 40 mg qd followed by maintenance treatment with 20 mg qd. **METHODS:** A decision analysis model was developed to compare the two treatment strategies with regard to direct medical costs (drugs, physician visits, investigations, procedures) and productivity costs (absence from work and reduced productivity while at work) using a 7-month time horizon. Probabilities for treatment success were based on results from a large multinational, randomised, double-blind clinical study of up to 8 weeks acute (n = 3170) and 6 months maintenance (n = 2766) treatment of RE. The proportion of patients with treatment success and an estimated number of weeks with symptoms of gastro-esophageal reflux disease (GERD) were used as effectiveness measures. Sensitivity analyses were made by using upper and lower 95% confidence limits of the clinical study results, as well as by changing patient management assumptions. **RESULTS:** The proportion of patients with treatment success, defined as healed RE within 8 weeks acute treatment and no relapse during subsequent maintenance treatment, was 83.4% and 69.6% for esomeprazole and pantoprazole, respectively (i.e. an absolute difference of 13.8%). This corresponded to 1.1 weeks less with GERD per patient by using esomeprazole. In the base case analysis, the mean estimated direct medical cost per patient was slightly lower for the esomeprazole strategy (€33) and the estimated productivity loss per patient was considerably lower for the esomeprazole strategy (€114). Sensitivity analyses supported robustness of main findings. **CONCLUSION:** The esomeprazole treatment strategy was found to be cost-effective compared with the pantoprazole treatment strategy, since esomeprazole provides better effectiveness and savings in work productivity costs at similar or lower direct medical costs.

PGI7

COST-EFFECTIVENESS OF PEGINTERFERON ALFA-2A (40KD) (PEGASYS®) COMPARED TO LAMIVUDINE AS FIRST LINE TREATMENT OF CHRONIC HEPATITIS B (CHB) IN THE UK

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OBJECTIVES: A recent study has shown that 48 weeks treatment with peginterferon alfa-2a (40KD) (PEGASYS) compared with lamivudine leads to improved efficacy in patients with HBeAg-positive CHB. However, the cost effectiveness of peginterferon alfa-2a compared with lamivudine has not been assessed. The current analysis was designed to assess the net health consequences, costs and cost-effectiveness of 48 weeks of peginterferon alfa-2a for the treatment of patients with HBeAg-positive CHB, compared with shorter term (48 weeks) and longer term (4 years) lamivudine treatment. **METHODS:** A cost-utility analysis from a payer perspective using a state-transition Markov model simulating the natural history of CHB. Clinical inputs were taken from a randomized trial comparing peginterferon alfa-2a and lamivudine for the treatment of HBeAg-positive CHB. A reference cohort of patients with mean age of 32 years and HBeAg-positive disease was used. Life expectancy, quality-adjusted life years (QALY), lifetime direct health care costs, and incremental cost-effectiveness ratios (ICERs) were estimated. **RESULTS:** Treatment with peginterferon alfa-2a compared with lamivudine (for 48 weeks) resulted in higher total costs, but more QALYs gained, yielding an ICER of £8820/QALY gained. The ICER comparing the two treatments does not exceed £15,400/QALY gained despite variation in each parameter used in the analysis. In the analysis comparing 48 weeks of treatment with peginterferon alfa-2a versus 4 years of treatment with lamivudine, the ICER was £10,100/QALY gained. **CONCLUSIONS:** Defined 48 weeks treatment with peginterferon alfa-2a (40KD) (PEGASYS) compared with either short-term or long-term lamivudine treatment in HBeAg-positive patients offers life expectancy benefits for cost effectiveness ratios that are well below the commonly accepted cost-effectiveness threshold in the UK.

PGI8

ECONOMIC EVALUATION OF ADACOLUMN® APHERESIS FOR THE TREATMENT OF PATIENTS WITH MODERATE TO SEVERE CROHN'S DISEASE (CD)/ULCERATIVE COLITIS (UC)

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The two inflammatory bowel diseases (IBD), Ulcerative colitis CD and Crohn's disease UC are chronic relapsing diseases. As the major part of the health care costs of IBD consists of hospitalizations and surgery, there is a great potential for novel therapies to reduce costs and improve quality of life (QoL) if they could reduce the relapse rate and maintain patients in remission. A novel treatment option in these patients is the Granulocyte and monocyte/macrophage apheresis (Adacolumn®). **OBJECTIVES:** To estimate the cost-effectiveness of treating (CD) and (UC) patients with Adacolumn® aphaeresis compared to standard treatment. **METHODS:** We developed a Markov model for the treatment of UC and CD. The model and our cost-effectiveness application for CD and UC is based on four data sources: (a) an uncontrolled clinical study of the first 100 patients treated with Adacolumn® apheresis for IBD in clinical practice [The Scandinavian study], (b) a cohort of 147 IBD patients treated with usual care from Denmark [Danish Crohn Colitis Database-Copenhagen County)] including 1 304 patient years (c) prices of health care and pharmaceuticals from Sweden, (d) and QALY data from literature. **RESULTS:** Surgical operations and days in hospital were reduced by %90 cent. The cost per QALY gained by treating patients for three years with Adacolumn® is US$19,015 for UC and US$70,142 for CD, respectively. **CONCLUSION:** The comparison between the usual care treatment and the Adacolumn® treatment is based on the matching of two cohorts. Our results will be compared with forthcoming data from a randomized clinical trial. Compared to usual care Ada-

column® treatment of moderate severe UC and CD patients is associated with cost offsets for surgery, hospitalizations, outpatient care and drugs and an increase of QALYs. The cost-effectiveness ratios remain within the acceptable range for treatments to be recommended for use in Sweden.

PGI9

COST-EFFECTIVENESS OF ESOMEPRAZOLE VERSUS GENERIC OMEPRAZOLE IN THE ACUTE TREATMENT OF REFLUX ESOPHAGITIS IN SWEDEN

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OBJECTIVES: To assess cost-effectiveness of esomeprazole 40 mg (SEK 14.68 / tablet: EUR 1 = SEK 9.27, June 15, 2005) once daily (od) versus omeprazole 20 mg od at the lowest available generic drug price (SEK 4.32 / tablet) in the acute treatment of reflux esophagitis (RE) in Sweden. **METHODS:** A decision analysis model was used considering pooled effectiveness data from comparative clinical studies and patient management assumptions based on expert opinions. Results were analysed using an 8-week time horizon and reported separately including work productivity costs or direct medical costs (drugs, physician contacts, investigations) only. Utility values associated with having healed RE (0.84) or unhealed RE (0.69) were derived from a study using the rating scale method in patients with gastro-esophageal reflux disease (GERD). Estimates of GERD-related work productivity loss (absence from work and reduced productivity while at work) were derived from observed differences in productivity before and after treatment in another study. A probabilistic sensitivity analysis (PSA) on direct medical costs was used to assess robustness of results, along with additional analyses extending the time horizon beyond 8 weeks. An acceptable threshold of SEK 500,000 per quality-adjusted life year (QALY) gained was used in the PSA. **RESULTS:** When including direct medical costs only, the analysis resulted in mean additional costs of around SEK 200,000 per QALY gained by using the more effective acid inhibitory treatment strategy (esomeprazole). The PSA on the probability of esomeprazole treatment being below a SEK 500,000 per QALY gained threshold supported robustness of a conclusion that esomeprazole treatment is cost-effective. When work productivity costs were included, results indicated that the esomeprazole strategy is cost-neutral. Extending the time horizon resulted in further cost-effectiveness advantages for esomeprazole. **CONCLUSION:** Esomeprazole 40 mg od is cost-effective compared with generic omeprazole 20 mg od in the acute treatment of reflux esophagitis in Sweden.

PGI10

COST EFFECTIVENESS OF PROTON PUMP INHIBITOR TRIPLE THERAPY REGIMENS FOR HELICOBACTER PYLORI ERADICATION IN THE PRIMARY CARE SETTING IN IRELAND

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OBJECTIVES: To determine the relative cost effectiveness of proton pump inhibitor (PPI) based triple therapy regimens for the eradication of Helicobacter pylori (H. pylori) in the primary care setting in Ireland. **METHODS:** Using decision tree analysis the expected cost for each H. pylori eradication strategy was determined from the cost of each treatment option multiplied by the probability of that option occurring. Only direct costs relating to the primary care setting such as GP consultation and medication costs, extracted from the Monthly Index of Medical Specialties 2003, were included. Probabilities were obtained using the GMS prescribing database where all patients who received amoxycillin, clarithromycin and a PPI in the ERHA region in 2002 were followed for one year. A broad range of clinical and cost inputs was investigated by sensitivity analysis. **RESULTS:** The main outcome measure was the cost per asymptomatic patient for each therapeutic strategy. Depending on the regimen adopted, 40.8% to 46.1% of patients did not require any further medication in the year following H. pylori eradication treatment. The strategy of rabeprazole, amoxycillin and clarithromycin was the most cost effective option with a cost of €466 per asymptomatic patient. Two way sensitivity analysis indicated that the cost of rabeprazole triple therapy and the duration of rabeprazole maintenance therapy would each have to increase by 30% before this strategy ceased to be the most cost effective option. **CONCLUSION:** This study indicates that the triple therapy regimen of rabeprazole, amoxycillin and clarithromycin is the most cost effective of the therapeutic strategies examined for the treatment of H. pylori infection in the community setting in Ireland.

PGI11

IBD: INDIRECT COSTS OF ILLNESS AND QUALITY OF LIFE IN GERMANY

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OBJECTIVE: To determine the differences in indirect costs and quality of life between persons affected by Crohn's Disease (CD) and those affected by Ulcerative Colitis (UC) as part of a cost of IBD study in Germany. **METHODS:** Members of the German Inflammatory Bowel Disease (IBD) Association (DCCV) were recruited by post to prospectively document their IBD-associated costs (sick leave, disability pensions, and medical resource use) in a cost diary over 4 weeks. General demographic information and IBD history were also reported. Health-Related Quality of Life (hrQoL) was determined using the EuroQol EQ5-D. Indirect costs were calculated according to national sources using the human capital approach. **RESULTS:** Cost diaries were returned by 483 persons (CD: 241; UC: 242) whose mean age was 42 years and average disease duration 13 years. Productivity losses were reported by CD (14%) and UC (15%) subjects and average sick leave was similar (CD: 1.2 days; UC: 1.5 days). However, more CD (19%) than UC (7%) patients received a disability pension. The mean 4-week indirect costs for CD were €266 (95%CI: 100, 433) higher than for UC ($p < 0.002$). The mean hrQoL of CD subjects according to EuroQol VAS scores was 5 points lower (95%CI: −8.3, −1.7) than for UC subjects ($p < 0.004$). **CONCLUSIONS:** In Germany, indirect costs of CD are significantly higher than those of UC and hrQoL of CD patients is significantly lower than of UC patients. For CD, factors decreasing occupational disability would decrease costs and since hrQoL is also determined by the ability to work productively, may improve hrQoL. Factors affecting indirect costs, which account for a large part of the costs of IBD, can have a large impact on the overall costs. Furthermore, these findings indicate that determinants of costs must be searched for and evaluated separately for each disease.

PGI12

THE COSTS OF ACUTE-ON-CHRONIC LIVER FAILURE—A BOTTOM-UP ANALYSIS BASED ON INDIVIDUAL PATIENT DATA

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