zole, omепразол or pantoprazol (the QALY gains were 0.002, 0.0003 and 0.0003, respectively). There were also marginal cost savings achieved by esomeprazole (1.23 EUR versus lanosoprazol, 2.27 EUR versus omепразол and 1.51 EUR versus pantoprazol), therefore esomeprazole was projected to have a dominant position versus other PPIs in the cost-effectiveness analysis. CONCLUSIONS: Esomeprazole produced lower costs and resulted in higher QALYs compared with other PPIs currently reimbursed in Poland in the treatment of GERD.

PG21
EVALUATION OF THE COST-EFFECTIVENESS OF RIFAXIMIN-$\alpha$ 550MG IN THE REDUCTION OF RECURRENCE OF OVERT HEPATIC ENCEPHALOPATHY IN SWEDEN

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OBJECTIVES: This was a retrospective, non-interventional, economic evaluation using a Markov state transition model. The outcome metric was the ICER, derived from estimates of the cost/QALYs. Parameter uncertainty analyses were carried out. Real world data were also applied into the model for length of stay in hospital and the number of admissions to hospital. Evaluation to less costly and more beneficial. Key parameters that impacted the ICER included a dominant base-case ICER at five years, meaning that rifaximin-corresponding values for benefit were 2.38 QALYs/person and 1.83 QALYs/person, and SEK393,777 ($32,667) for rifaximin-

PG22
ECONOMIC ASSESSMENT OF ELTRUMOBAG IN THE TREATMENT OF THROMBOCYTOPENIA IN ITALY

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OBJECTIVES: This study aimed to estimate the cost-effectiveness ratio of eltrombog in the treatment of thrombocytopenia in Italian patients with advanced liver disease (ALD). METHODS: The cost-effectiveness analysis was conducted according to a Markov model, which enabled the evolution of hypothetical cohorts of patients undergoing different diagnosis and treatment protocols and the respective costs and benefits to be quantified. Three alternative scenarios were set up: 1) thromboprophylaxis in both enabling phase and during AVT; 2) no eltrombog and no AVT; 3) no eltrombog treatment and administration of a reduced dose of peg-IFN (according to platelet count), and no peg-IFN treatment for patients with the lowest platelet count. Parameter uncertainty and robustness of the results were assessed through a one-way sensitivity analysis and a multivariate probabilistic sensitivity analysis. RESULTS: The results demonstrate that scenario 1 associated with a cost per QALY of £0.020.94 in comparison with scenario 2. The ICER reaches a value of 2,752.44/QALY when scenario 1 is compared with scenario 3. The ICERs are therefore considered sustainable considering the threshold value generally taken into account by NICE (20,000–40,000 £/ QALY). CONCLUSIONS: The use of eltrombog in thrombocytopenic patients in patients undergoing antiviral therapy (AVT) in HCV-patients with advanced liver disease (ALD) is cost-effective.

PG23
STUDY ON COST-EFFECTIVENESS ANALYSIS FOR ULCERATIVE COLITIS TREATMENT: A SYSTEMATIC REVIEW OF LITERATURE FROM 2004-2014

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OBJECTIVES: Ministry of Health, Labour and Welfare of Japan aims for the introduction of Health Technology Assessment in FY2016. Compared to foreign countries, a lack of resources for conducting the analysis has been pointed out in Japan. However, pharmacoeconomic and medical device industries are urged to seek practical approaches utilizing best available resources. The objective of this study was to review articles for cost-effectiveness studies of ulcerative colitis (UC) and to evaluate analytical approaches that can be applied to Japanese environment. METHODS: The literature search was conducted in MEDLINE and (DREAM III). Inclusion criteria were studies of 1) treatment for UC, 2) cost-effectiveness analysis (CEA), 3) published in the past 10 years. Studies were assessed for the following: country, model structure, decision tree, simulation method, time horizon, perspective, key parameters, results, and key drivers determined from sensitivity analysis. RESULTS: Nine studies were reviewed in details. Markov (6 articles) and decision tree (2 articles) model approaches were adopted, and time horizon varied from 1 to 12 years. Three time horizons were used in scenario analysis to determine the results. CONCLUSIONS: Cost-effectiveness analysis studies on ulcerative colitis in Japan are limited, further studies will be needed, especially on patients in different phases of UC treatment.

PG24
EVALUATING THE COST-EFFECTIVENESS OF PROLONGED-RELEASE TACROLIMUS RELATIVE TO IMMEDIATE-RELEASE TACROLIMUS IN LIVER TRANSPLANT PATIENTS BASED ON DATA FROM ROUTINE CLINICAL PRACTICE

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OBJECTIVES: As of 2014, there were approximately 8,300 patients with a functioning liver transplant in the UK Transplant Registry, with 880 liver transplant performed in 2013–14 alone. As the number of surviving liver transplant recipient continues to increase, the treatment of patients who pass the first year of treatment needs to be maximized to value for money. With tacrolimus representing the current cornerstone of post-transplant immunosuppressive therapy, the present study objective was to evaluate the cost-effectiveness of prolonged-release (PR) versus immediate-release (IR) tacrolimus. METHODS: A model was developed in Microsoft Excel to evaluate the cost and effectiveness of immunosuppressive regimens in liver transplant recipients. The model captured costs associated with immunosuppressive treatment protocols and the respective costs and benefits to be quantified. Three-year patient and graft survival data were taken from a recent retrospective European registry analysis and initial dose data were taken from the prescribing information. Costs were taken from the British National Formulary and the National Health Service National Tariff and expressed in 2014 pounds sterling. RESULTS: Over a 3-year time horizon, the number needed to treat (NNT) with PR tacrolimus relative to IR tacrolimus was ~13 to avoid one graft loss and 17 to avoid one death. The model was sensitive to dosing assumptions and was developed for GBP 2,926 per treated patient, assuming the same dosing of FR and IR (per kilogram bodyweight) and an increase of GBP 781 using RCT dose data. CONCLUSIONS: Data from a recent analysis of routine clinical practice data in liver transplant recipients on FR and IR tacrolimus showed significant differences in long-term graft survival in favor of PR tacrolimus. Modeling these data in a UK population showed that, over a three-year time horizon one graft would be saved for approximately every 13 patients treated with PR tacrolimus with minimal impact on costs.

PG25
COST-EFFECTIVENESS OF RIFAXIMIN-$\alpha$ 550MG IN THE REDUCTION OF RECURRENCE OF OVERT HEPATIC ENCEPHALOPATHY IN UNITED KINGDOM

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OBJECTIVES: Hepatic encephalopathy (HE) is associated with high morbidity and mortality. Rifaximin-$\alpha$ 550mg reduces the recurrence of episodes of overt HE. We determined the cost-effectiveness of rifaximin-$\alpha$ 550mg compared with standard care (lactulose) in patients with cirrhosis in the UK. METHODS: This economic evaluation used a Markov state transition model. The outcome metric was the ICER, derived from estimates of the cost/QALYs. The payer perspective was that of UK National Health Service. Outcome data were from two rifaximin-$\alpha$ 550mg trials. Population outcome data were from a complementary study of patients with liver cirrhosis treated within the NHS. UK Costs data (2012) were derived from published sources. Health-related utility was estimated indirectly from disease-specific quality of life (QALY) data. The time horizon was five years. Costs and benefits were discounted at 3.5%.

PG26
COST-EFFECTIVENESS OF EVEROLIMUS IN LIVER TRANSPLANTATION

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OBJECTIVES: The purpose of this study was to analyze the cost-effectiveness of the association of everolimus (SVE) with reduced tacrolimus doses (5TAC) in liver transplant patients with renal dysfunction. METHODS: A cost-effectiveness analysis
was conducted from the National Public Health System (US) perspective. A Markov model was used for economic evaluation. The model simulates the clinical course of patients with HCV from diagnosis to outcomes of liver transplantation, with a follow-up period of 10 years. The model estimated the cost and effectiveness of EVR plus TAC compared to TT with telaprevir in the treatment of HCV patients that had null or partial response to previous double antiviral therapy.

PGI27 EARLIER DETECTION AND TREATMENT OF NON-ALCOHOLIC FATTY LIVER DISEASE: AN ECONOMIC EVALUATION TO APPRAISE AN INNOVATIVE DIAGNOSTIC PATHWAY TO DETECT AND INTERVENE WHERE THERE ARE KNOWN RISK FACTORS

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OBJECTIVES: The prevalence of liver disease is increasing and often remains undetected until late. The study estimated cost-effectiveness of an innovative diagnostic pathway (IDP) targeting adults with risk factors of non-alcoholic fatty liver disease (NAFLD) from an NHS England perspective. METHODS: Economic evaluation compared IDP (algorithm applied in a general practice to identify adults with risk factors of NAFLD and stratifying disease severity using a Fibroscan to test liver stiffness, followed by hepatologist-led treatment appropriate to disease stage) with standard care (SC, hepatitis C-related death) as the comparator. Participants were eligible if they were 40 years plus with obesity, dyslipidaemia, diabetes or a family history of NAFLD. Transition probability, utility and resource use data were based on up-to-date UK sources, or – if not possible – on expert panel responses to indicate early disease management and its estimated effectiveness. Lifetime Markov cohort modelling with starting age of 48, annual cycle, and costs and utilities discounted at 3.5%-rate, was applied. Cost-effectiveness planes and cost-effectiveness acceptability curves, based on 5000-sample Monte Carlo simulation, were constructed. RESULTS: IDP yielded increased QALYs (95% CI 0.24 [0.18, 0.33]) and reduced costs ($4,406 to $7,099), compared with SC, with 69.7%-probability of dominance, and 88.3%-probability of cost-effectiveness at £20,000/QALY threshold. The results were associated with high levels of uncertainty due to the large transition probabilities in early liver disease. CONCLUSIONS: Indicative economic evaluation showed that IDP may be cost-effective, compared with standard care. Due to large uncertainty of model input parameters and no data around progression and management of early liver disease, further studies on IDP implementation are needed.

PGI29 ECONOMIC EVALUATIONS OF TREATMENTS FOR INFLAMMATORY BOWEL DISEASES

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OBJECTIVE: The last decade witnessed great advances in the treatment of inflammatory bowel diseases (IBD) with the introduction of biologic therapies. Several economic evaluations have been run to evaluate these treatments. The goal of this study was to report the outcomes, evidences and key parameters included in IBD cost-effectiveness studies. METHODS: A systematic literature review was conducted to identify economic evaluations of IBD therapy. Electronic databases (Embase and Medline) were used to identify full economic evaluations published from 2004 to 2014. Cost and QALYs were extracted and grey literature search were also performed to find additional publications. The health outcomes, costs, incremental cost-effectiveness (ICERs) and cost-utility ratios (ICURs) were analyzed. RESULTS: The included studies estimated 5,163,192 QALYs and 7,450,712 may be gained if all patients with IBD were treated with biologic therapies, whereas those treated with concomitant medical therapy would have 3,753,706 QALYs and 5,583,235. The ICERs per QALY gained varied from $110,000 to $850,000. Total treatment costs were $7,180 for adalimumab and $7,190 for infliximab. In contrast, the reconstructed model reported ICERs of $54,077 and $31,210. These are similar to the results from the vedolizumab submission model, indicating that the ICERs are fundamentally driven by the assumption of cost-utility ratios. The key drivers were widely similar between the reconstructed model and submission.