OBJECTIVES: Establish the potential resource and cost savings from using ePTFE covered stent-grafts configured for TIPS (SG) compared to bare metal stents (BMS). Most centres have adopted SGs to treat portal hypertension because of their reduced re-intervention rates, elimination of regular monitoring of patency and improved survival. However there is no published economic analysis identifying the related cost consequences. Understanding the improved efficiencies is essential in the current financial environment. **METHODS:** A Markov economic model was developed to measure the incremental costs of the initial procedure and re-interventions with SG compared to BMS. Re-intervention procedures included angioplasty (67%), introducing a balloon expandable stent (22%) or a second stent (10%). The adverse events were hepatic encephalopathy and clinical relapse. Clinical data came mainly from a published RCT (Bureau 2007), whilst health care costs were from UK national databases. **RESULTS:** Compared to BMS, using SG in TIPS resulted in a cost saving of over £1,150 per patient over 2 years. Modelling 100 patients, compared to BMS, the SG cohort had 25 fewer re-interventions including angioplasties, saving 41 hours staff time in theatre and 16 inpatient days; with fewer cases of encephalopathy (16), recurrent ascites (8), variceal bleeds (5) and a markedly reduced mortality (13). **CONCLUSIONS:** The model showed that ePTFE covered stent-grafts configured for TIPS reduced mortality and re-interventions, saved theatre time and bed-days, and reduced overall costs despite the higher initial device cost.

PGI25

AN ECONOMIC EVALUATION OF THE TRIPLE HCV TREATMENT REGIMEN FOR G1 NAÏVE PATIENTS IN THE GREEK HEALTH CARE SYSTEM

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OBJECTIVES: In 2011 EMA approved Boceprevir and Telaprevir with PegIFN and Ribavirin for the treatment of Genotype 1 Chronic Hepatitis C patients. In 2013 the Greek and other European HCV Guidelines recommend treatment allocation in G1 naïve patients according to the IL28B genotype or the RVR profile. Local studies indicate that the IL28B-CC and the RVR (+) rates are approximately 30%. The objective of this study was to implement this guidance and examine whether triple therapy with PegIFNa-2a+RBV and the two protease inhibitors, Boceprevir or Telaprevir, constitutes a cost-saving option for the treatment of naïve G1 patients in the Greek health care setting. **METHODS:** For the needs of this analysis, a cost-consequence model was utilized, to compare the costs incurred when: i) patients with IL28B CC aplotype (30%) were treated with SoC (PegIFN alfa-2a + RBV) and patients with IL28B non-CC aplotypes (70%) were treated with triple therapy and ii) all patients are treated with triple therapy. The economic inputs are based on official and publically available sources while the clinical inputs are taken from published clinical trial results. The number of patients treated per year was provided by local bibliography. **RESULTS:** The total cost to treat 509 naïve patients with triple therapy was €13,8 million compared to €10.9 million to treat based on IL28B allocation, maintaining the same SVR rate of 70% for either of the treatment strategies. **CONCLUSIONS:** This personalized approach based on a baseline predictor of response such as the IL28B profile was proven to be a cost-saving resource allocation choice compared to the option of treating all treatment naive patients with triple therapy, providing SVR rates of 70% and a constrain of cost for the Greek health care system of €2,9 million/year (aprox.25%).

PGI26

COST-EFFECTIVENESS OF EARLY VERSUS DELAYED HEPATITIS C VIRUS (HCV) TREATMENT WITH TELAPREVIR/PEGYLATED INTERFERON ALPHA/RIBAVIRIN TRIPLE THERAPY IN ADULTS AGED 40+ IN FRANCE

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OBJECTIVES: To assess the cost-effectiveness of treating HCV infection (genotype 1) with telaprevir/pegylated interferon alpha/ribavirin (TPR) at METAVIR fibrosis stage F2 ("early") versus delaying treatment until progression to F3 ("delayed") from the French health care perspective. **METHODS:** A Markov model tracked the HCV+ French population aged 40+ over a lifetime horizon to compare outcomes of early versus delayed treatment. Model health states are defined by fibrosis stage (F0-F4) and complications of advanced HCV including decompensated cirrhosis, hepatocellular carcinoma, liver transplant, and death. During each 1-year cycle, individuals may remain in the current health state, respond to treatment or progress, at probabilities determined by disease status, age at infection, current age, gender, and treatment received. Transition probabilities, treatment efficacy, health-state utilities, resource utilization and costs were derived from published literature and standard French sources. Costs and outcomes were discounted at 4.0% for 30 years and 2% thereafter. Cost-effectiveness was assessed as incremental cost per life year gained (LYG) and QALY gained. **RESULTS:** An estimated 203,644 French residents aged 40+ years are diagnosed with HCV in 2013. Treating with TPR at F2 versus F3 is projected to result in 135,240 versus 113,728 individuals treated, at an incremental lifetime cost of €654.65M from the French health care perspective. Early treatment avoided 2,205 HCV-related deaths and saved 11,384 life-years, and 17,599 QALYs, at a cost of €57,506/LYG and €37,197/QALY gained. Results are most sensitive to efficacy parameters, time horizon, and discount rates and least sensitive to diagnosis and treatment parameters. **CONCLUSIONS:** Treating HCV-infected individuals at F2 is expected to results in better clinical outcomes but at higher cost compared to delaying treatment until the individual progresses to F3. Earlier treatment with TPR should be considered as an efficient choice by the French health care system based on its estimated incremental cost-effectiveness ratio of €37,197/QALY gained.

PGI27

COST-EFFECTIVENESS OF LINACLOTIDE COMPARED TO ANTIDEPRESSANTS IN THE TREATMENT OF IRRITABLE BOWEL SYNDROME WITH CONSTIPATION IN SCOTLAND

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OBJECTIVES: Presently, linaclotide is the only EMA approved therapy indicated for the treatment of irritable bowel syndrome with constipation (IBS-C). This study sought to determine the cost-effectiveness of linaclotide compared to antidepressants for the treatment of adults with moderate to severe IBS-C who have previously received antispasmodics and/or laxatives from the perspective of the Scottish National Health System (NHS). **METHODS:** A Markov model was created to estimate costs and QALYs over a 5-year time horizon from the perspective of NHS Scotland. Health states were based on treatment satisfaction (satisfied, moderately satisfied, not satisfied) and death. Transitions between states were based on satisfaction data from the linaclotide pivotal studies (MCP-103-302 and LIN-MD-31) and Scottish general all-cause mortality statistics. Treatment costs were calculated from the British National Formulary. NHS resource use and disease-related costs for each health state were estimated from Scottish clinician interviews in combination with NHS Reference costs. Quality of life was based on EQ-5D data collected from the pivotal studies. Costs and QALYs were discounted at 3.5% per annum. Uncertainty was explored through extensive deterministic and probabilistic sensitivity analyses. **RESULTS:** Over a 5-year time horizon, the additional costs and QALYs with linaclotide were £659 and 0.089, resulting in an incremental cost-effectiveness ratio of £7,370 per QALY versus antidepressants. Results were most sensitive to health state transitions probabilities, NHS resource use assumptions and health state utilities. Threshold analyses showed that the effectiveness of linaclotide would have to be at least 11% lower than the base case to exceed a willingness-to-pay threshold (WTP) of £20,000 per QALY. Based on the probabilistic sensitivity analysis, the likelihood that linaclotide was cost-effective at a WTP of £20,000 per QALY was 74%. **CONCLUSIONS:** Linaclotide is a cost-effective treatment for adults with moderate to severe IBS-C who have previously received antispasmodics and/or laxatives.

PGI28

COST-EFFECTIVENESS OF HEPATITIS C VIRUS (HCV) TREATMENT WITH TELAPREVIR/PEGYLATED INTERFERON ALPHA/RIBAVIRIN TRIPLE THERAPY VERSUS WAITING FOR NEW REGIMENS IN FRANCE

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OBJECTIVES: To assess the cost-effectiveness of treating chronic HCV infection (genotype 1) with currently available telaprevir+pegylated interferon alpha/ribavirin (TPR) compared to waiting for new regimens with improved efficacy (hypothetical treatment assumed) currently in development from the French health care perspective. **METHODS:** A Markov model tracked the adult naïve HCV+ French population over a lifetime horizon. Model health-states are defined by METAVIR fibrosis stage (F0-F4) and complications of advanced HCV (decompensated cirrhosis, hepatocellular carcinoma, liver transplant, and death). During each 1-year cycle, individuals may remain in the current health-state, respond to treatment or progress, at probabilities determined by disease status, age at infection, current age, gender, and treatment received. Individuals were eligible for treatment in F2-F4. Transition probabilities, treatment efficacy, health-state utilities, resource utilization and costs were derived from published literature and standard French sources. The efficacy of a new hypothetical treatment regimen was based on currently published results; cost for the new treatment was assumed at €50,000 for a full treatment (excluding PR backbone). **RESULTS:** A treatment lag of 1, 2, and 3 years resulted in 142,777 individuals, 140,417 individuals, and 137,930 individuals being treated by the new regimen, respectively, versus 145,010 with immediate TPR treatment. The new treatment option resulted in additional life years saved (range 11,230-27,536), QALYs gained (range 12,528-29,359), and prevented more HCV-related deaths (range 3,839-5,756). Total costs incurred were higher for the new regimen versus TPR, from the health care perspective. ICERs were €58,294.49/QALY, €73,295.59/QALY, and €107,403.02/QALY gained for a 1, 2, and 3 year treatment lag, respectively. **CONCLUSIONS:** These findings suggest waiting for new regimens currently in development should not be the most efficient choice to be considered by French Health care system. Waiting for new treatments should yield better clinical outcomes, but with higher costs and ICERS that may be challenging for the payer.

PGI29

CROHN'S DISEASE: AN ECONOMIC ASSESSMENT OF BIOLOGICAL DRUGS IN ITALY

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OBJECTIVES: This study had a dual objective: verify the improvements in quality of life (QoL) due to biological drugs administration and evaluate their cost-effeffectiveness versus the standard steroid-based therapy in Crohn's Disease (CD). High-cost biological drugs' efficacy is well-established, but they still lack of cost-effectiveness studies. **METHODS:** A survey was prepared with clinicians and pharmacoeconomists and administered in 9 centers in Italy. The questionnaire was set up to detect QoL through a Visual Analogue Scale and EQ-5D and to assess patients' profile (age, gender, job) and clinical features (time-to-first diagnosis, current and at-diagnosis Montreal classification, current and at-diagnosis treatments, past surgical procedures, hospitalizations). Collected data were then used in a statistical regression model and an economic assessment complete of probabilistic sensitivity analysis was performed comparing costs and utilities of the considered treatments. **RESULTS:** A total of 348 questionnaires were collected, giving back a