OBJECTIVES: To carry out a cost and consequences analysis (CCA) of treating Overactive Bladder (OAB) with two flexible-dose of Fesoterodine in routine medical practice in Spain, from the perspective of the Spanish National Health System (NHS).

METHODS: The CCA was populated with data from an observational, retrospective and multicenter study including OAB patients, both genders, aged 18 years and over, with LUTS associated with benign prostatic hyperplasia (BPH) in Spain. Costs were estimated from healthcare resources utilization only and used year 2015 unitary prices. The patient outcomes measures included symptoms severity and health-related quality-of-life by using the OAB-q questionnaire, Patient Perception Bladder Condition (PPBC), Patient Perception Urgency Scale (PPUS), and Treatment Benefit Scale (TBS). Clinician judgment was approached by the Clinical Global Impression (CGI) and the Time to Event Analysis (TTEA) with survival analysis adjusting by covariates were applied.

RESULTS: A total of 350 (156 in maintaining group and 194 in escalating) symptomatic OAB patients were extracted from the study to populate the CCA. Adjusted healthcare total costs were not statistically different; 550.6 (CI:151.4-551.5), p=0.361. However, patient-reported-outcomes were significantly better in the maintaining group than in the escalating. OAB-q symptoms (22.6 vs 26.8, \( p=0.053 \)), less patients with urinary incontinence (29.5% vs. 46.4%, \( OR=0.4 \) (CI:3.0-7.0), \( p=0.001 \)), and better perception or urgency \( OR=1.8 \) (CI:1.2-2.8), \( p=0.008 \). CONCLUSIONS: Despite the study design, this costs-consequences analysis found that initiating 8mg dose of fesoterodine was associated with similar healthcare costs but better patient outcomes.

P12K HOSPITAL COSTS OF CONTRAST-INDUCED NEPHROPATHY
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OBJECTIVES: The use of low-osmolar contrast media has reduced the frequency of Contrast-Induced Nephropathy (CIN), however, it still exists. As no data are available in routine medical practice in Spain, from the perspective of the Spanish National Health System (NHS), and with a gain of 0.01259 QALYs at an additional cost of 3,352, \( p=0.053 \), less patients with urinary incontinence and 29.5% vs. 46.4%, \( OR=0.4 \) (CI:3.0-7.0), \( p=0.001 \), and better perception or urgency \( OR=1.8 \) (CI:1.2-2.8), \( p=0.008 \). CONCLUSIONS: Despite the study design, this costs-consequences analysis found that initiating 8mg dose of fesoterodine was associated with similar healthcare costs but better patient outcomes.

P13K COST-EFFECTIVENESS OF A FIXED-DOSE COMBINATION OF SOLIFENACIN PLUS TAMSULOSIN TOCAS FOR THE TREATMENT OF LOWER URINARY TRACT SYMPTOMS ASSOCIATED WITH BENIGN PROSTATIC HYPERPLASIA IN SPAIN
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OBJECTIVES: To assess the cost-effectiveness of a fixed-dose combination (FDC) of solifenacin 6 mg/day plus an oral controlled absorption system formulation of tamsulosin (TMCAS 0.4 mg/day) compared to tamsulosin 8 mg/day concurrently given with tamsulosin 0.4 mg/day in men with lower urinary tract symptoms (LUTS) associated with benign prostatic hyperplasia (BPH) in Spain.

METHODS: A Markov model with a 4-week cycle period was developed for men aged ≥45 years with LUTS/BPH who have moderate-to-severe storage and voiding symptoms. The model estimated cost-effectiveness over an analytical time horizon of 1 year from the perspective of the Spanish National Health System (NHS). Direct healthcare costs (drug acquisition, primary care physician visits and surgical procedures) were considered. The effectiveness of treatments was measured using quality-adjusted life-years (QALYs) gained. Utility values were derived from EQ-5D-3D data collected from the 300 included patients (150 per treatment arm) by means of face-to-face interviews and the literature or clinical expert opinion. Deterministic and probabilistic sensitivity analyses (SA) were undertaken.

RESULTS: The FDC of solifenacin 6 mg plus TMCAS 0.4 mg was associated with a gain of 0.003 QALYs at an additional cost of 13% in comparison with tamsulosin 8 mg/day. The resulting incremental cost effectiveness ratio (ICER) was €8,471 per QALY gained. Time horizon, discontinuation or withdrawal rates and utility values were the main drivers of cost-effectiveness. The probability of solifenacin 6 mg plus TMCAS being the most effective relative to the other treatments was 97.3% at a willingness to pay threshold of €30,000 per QALY gained. CONCLUSIONS: The FDC of solifenacin 6 mg plus TMCAS is a cost-effective treatment strategy compared with tamsulosin plus tamsulosin for men with storage and voiding LUTS/BPH in the Spanish NHS.

P14K COMBINED CLINICAL AND ECONOMIC IMPACT OF GRAZOPREVIR (GZR, MK-5172)/ELABSVIR (EVR, MK-8742) FOR CHRONIC HCV GENOTYPE 1 INFECTION IN CHRONIC KIDNEY DISEASE
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OBJECTIVES: The health and economic burden of Hepatitis C Virus (HCV) infection in chronic kidney disease (CKD) patients in the United States is significant. GZR/MK-8742 is a protease inhibitor/NS5A inhibitor (NDA) that has been shown to be highly effective and well tolerated in HCV G1 patients with advanced CKD. Our objective was to project the clinical and economic impact of GZR/EBR compared with no treatment (NoT) and pegylated interferon plus ribavirin (peg-IFN/RBV).

METHODS: A state-transition Markov model of chronic HCV, liver disease, and CKD was developed to project lifetime incidence of liver complications, including hepatocellular carcinoma (HCC), liver expectancy, discounted quality-adjusted life years (QALY), and discounted disease management, as well as the adverse effects of treatment, in OAB patients over a period of 5 years. Direct health care costs (i.e., year 2015 US dollars) of GZR/MK-8742 were included in two groups according with initiation and maintaining 8mg (maintaining group). Consequences included a phase 2/3, randomized, double-blind, placebo-controlled trial of GZR/EBR in HCV G1 patients in CKD stages 4/5. In the pre-specified primary population, the proportion of patients achieving sustained viral response 12 weeks after the completion of therapy was estimated. Adjusting by covariates were applied.

RESULTS: A total of 350 (156 in maintaining group and 194 in escalating) symptomatic OAB patients were extracted from the study to populate the CCA. Adjusted healthcare total costs were not statistically different; 550.6 (CI:151.4-551.5), p=0.361. However, patient-reported-outcomes were significantly better in the maintaining group than in the escalating. OAB-q symptoms (22.6 vs 26.8, \( p=0.053 \)), less patients with urinary incontinence and 29.5% vs. 46.4%, \( OR=0.4 \) (CI:3.0-7.0), \( p=0.001 \), and better perception or urgency \( OR=1.8 \) (CI:1.2-2.8), \( p=0.008 \). CONCLUSIONS: Despite the study design, this costs-consequences analysis found that initiating 8mg dose of fesoterodine was associated with similar healthcare costs but better patient outcomes.
PULK7
PHARMACOECONOMIC ANALYSIS OF EVEROLIMUS IMMUNOSUPPRESSIVE THERAPY AFTER RENAL TRANSPLANTATION
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BACKGR/ON: Immunosuppressive therapy after organ transplantation is financed from federal budget in Russia, but only when certain drugs are prescribed, i.e. mycophenolic acid, mycophenolate moefilit, cyclosporine, tacrolimus. Everolimus had demonstrated good efficacy and safety in renal transplantation patients but has not been included into federal drug provision program yet. OBJECTIVES: to calculate cost difference between two approaches for immunosuppressive therapy after renal transplantation: everolimus plus reduced-exposure cyclosporine (Ev+CyC_red) and mycophenolic acid plus standard-exposure cyclosporine (MA+Cyc_st) for Russian healthcare system. METHODS: We calculated the two-year difference in costs that resulted from efficacy and safety differences of compared alternatives employing the probabilistic sensitivity analysis. The model was built from the payer perspective in Russia, compared strategies were taken from D. Cibrik et al. randomized control trial (2013). Direct medical costs were calculated from the Russian healthcare system point of view. We also estimated the 5-year budget impact of everolimus inclusion into the drug provision program. RESULTS: Ev+CyC_red leads to cost reduction by €2.5 thousand (17%) per patient in a two-year period when compared to MA+Cyc_st. The reduction mainly results from less costs for immunosuppressive drugs in Ev+CyC_red arm as compared to costs in MA+Cyc_st arm. Everolimus inclusion prevention and treatment are smaller in Ev+CyC_red approach compared to MA+Cyc_st. Also costs for cytomegalovirus infection are thousands (17%) per patient in a two-year period when compared to MA+Cyc_st treatment (more effective with lower costs) versus fesoterodine 4 and 8 mg/day with t8. Pharmacoeconomic analysis was conducted according to the hospital perspective and were considered the only consumption associated with the purchase of the drugs administered. RESULTS: The combination of LC plus standard therapy has produced a significant increase in the percentage of patients who achieved the target range as defined by the K/DOQI Guidelines (P<0.001). The reduced mean phosphorus in FR (6.55 mg/dL) than in the FR (6.77 mg/dL) was statistically significant (P<0.001). The average expected cost/year for patients treated with LC plus standard therapy (€ 5 257.88) was higher of 419.60 (+ 16.6%) compared to the standard therapy alone (€ 2,108.28). The analysis of cost-effectiveness showed an incremental cost per patient to therapeutic target of € 492.69 for Lts compared to TS (projected annual cost).
CONCLUSIONS: The introduction of the LC in the treatment of hemodialysis patients is associated with a significant cost-effective and has allowed a significant increase in the achievement of therapeutic targets with minimal increase in costs for the National Health System.

URINARY/KIDNEY DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

PULK8
LAPAROSCOPIC SURGERY VERSUS TRADITIONAL OPEN SURGERY FOR KIDNEY IMPLANTATION: A COST-EFFECTIVENESS MODEL
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OBJECTIVES: Laparoscopic surgeries are commonly used to remove the kidney from a donor in kidney transplant but was recently used for the first time in the UK to remove the kidney from a living donor. The objective of this study was to analyze the cost-effectiveness of using laparoscopic surgery compared to open surgery in kidney recipients. METHODS: A decision tree model with a time-horizon of 10 days was constructed to capture short-term costs and benefits of patients undergoing laparoscopic transplantation. The model was built from a third-party payer perspective in the UK. The costs for work-up, surgery, blood transfusion during surgery, equipment, hospital stay and post-operative complications were obtained from a national dataset. RESULTS: The total costs for laparoscopic surgery arm were lower than those for open surgery arm ($25,891 versus $25,962) – although the laparoscopic procedure itself was more expensive. The costs were offset by savings from reduced blood loss and lower risk of complications. The total quality adjusted life years (QALYs) were higher for laparoscopic surgery (0.0178 versus 0.01369) because of the lower number of days needed for recovery. At a threshold of €20,000 per QALY, the probability that laparoscopic surgery is cost-effective was 0.595. The key drivers of the model were lengths of hospital stay after open and laparoscopic surgery and duration of laparoscopic surgery. The incremental cost-effectiveness ratio was dominant in the base case but could be as high as €15,000 per QALY if risk of complications after open surgery decreases from 0.512 to 0.960. This study suggests that the laparoscopic surgery improves quality of life at a lower cost, but is subject to uncertainty.

PULK9
PHARMACOECONOMIC ANALYSIS: ANALYSIS OF COST-EFFECTIVENESS OF LANTHANUM-CARBONATE (LC) IN UNCONTROLLED HYPERPHOSPHATAEMIA IN DIALYSIS
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OBJECTIVES: The objective of this study is to evaluate the difference in terms of efficacy and costs of standard treatment (LC plus standard therapy (TS) compared to standard therapy alone (TS) in the treatment of hemodialysis patients with persistent hyperphosphatemia. METHODS: We selected 14 consecutive patients (8 males and 7 females) on hemodialysis with more than four phosphorus values greater than 4.5 mg/dL in 2 months, got them treated in therapy with lantha- num carbonate. The data analysis has been done considering a phase retrospective (FR) of three months and a phase prospective (FF) of six months, analyzing for each subject consumption and the effectiveness of therapy before and after enrollment. The effectiveness of treatment, was evaluated as the percentage of patients who reached the therapeutic target set by the K/DOQI Guidelines (P<5.5 mg/dL). The total standard evaluation was conducted according to the hospital perspective and were considered the only consumption associated with the purchase of the drugs administered. RESULTS: The combination of LC plus standard therapy has produced a significant increase in the percentage of patients who achieved the target range as defined by the K/DOQI Guidelines (P<0.001). The reduced mean phosphorus in FR (6.55 mg/dL) than in the FR (6.77 mg/dL) was statistically significant (P<0.001). The average expected cost/year for patients treated with LC plus standard therapy (€ 5 257.88) was higher of 419.60 (+ 16.6%) compared to the standard therapy alone (€ 2,108.28). The analysis of cost-effectiveness showed an incremental cost per patient to therapeutic target of € 492.69 for Lts compared to TS (projected annual cost).
CONCLUSIONS: The introduction of the LC in the treatment of hemodialysis patients is associated with a significant cost-effective and has allowed a significant increase in the achievement of therapeutic targets with minimal increase in costs for the National Health System.