at-risk was set to 0.72, and it was assumed that new dialysis modality distribution would reach by year 3. The model allowed various sensitivity analyses. RESULTS: If PD utilization increased to 25% without any reimbursement increase for PD, 5-year savings was estimated to be €13 million. If APD was reimbursed by an additional €1300 per patient, 5-year savings increased to €18 million, assuming overall PD utilization increased to 30% and APD share of PD increased from 4.5% to 30%. If APD reimbursement increased an additional €2300 per patient and APD share of PD increased to 50%, it would require 35% of all PD patients undergoing dialysis treatment to achieve €18 million savings. Finally, at this level of additional APD reimbursement, 5-year savings increase to €25 million as PD utilization increases to 40%. With €25 million in savings, an additional 1478 patient-years of treatment could be provided in Romania. CONCLUSION: With additional reimbursement for PD and the resulting increase in PD utilization, there is an opportunity for government to lower the total dialysis budget. Government can apply the savings to treat additional ESRD patients.

PUK4

IN THE UNITED KINGDOM, AN INCREASED UTILISATION OF PERITONEAL DIALYSIS THERAPY COULD LEAD TO AN INCREASE IN THE NUMBER OF PATIENTS BEING TREATED FOR RENAL REPLACEMENT THERAPY (RRT)

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OBJECTIVES: There is expected to be an increase in the number of patients needing dialysis in the UK over the next 5 years. Outcomes for the different modalities available, haemodialysis (HD) and peritoneal dialysis (PD), have been shown to be similar yet the majority of dialysis patients are treated with HD. Any changes in dialysis delivery that could lead to a more efficient use of resources could increase the number of RRT patients that could be treated. The objective of this evaluation is to project a five-year impact on total dialysis costs when there is a hypothesised shift in modality from HD to PD. METHODS: An Excel-based budget impact model was used to estimate the impact of a shift in modality utilisation. The model takes into account dialysis modality shares, annual average cost of treating patients per modality, annual RRT growth rate and years to reach new modality distribution. Cost data from a recent UK study were used. At baseline (June 2007) there were 23,133 RRT patients undergoing dialysis therapy, 79% using HD and 21% using PD. Annual direct cost per patient was £39,412 for HD, £20,764 for home HD (HHD), £22,350 for automated PD (APD), and £45,355 for continuous ambulatory PD (CAPD). Total costs included drug treatment and transport costs. At baseline, 2% of the HD population was on HHHD and 48% of the PD population was on CAPD. RESULTS: If PD utilisation increases to 30% (of which 60% is APD) by 2011, the cumulative 5-year budget is reduced by a total of £166 million. This cumulative 5-year savings can provide an additional 5,036 patient-years of treatment. CONCLUSIONS: In the UK, an increased use of PD provides an opportunity to treat additional patients within a fixed budget, which is a potential solution to the increased demand for RRT in the coming years.

PUK5

RETROSPECTIVE PHARMACOECONOMIC STUDY OF THE USE OF CYCLOSPORINE A MICROEMULSION (SANDIMMUN® NEORAL®) IN COMPARISON WITH CYCLOSPORINE A GENERICS FOR IMMUNOSUPPRESSION FOLLOWING KIDNEY TRANSPLANTATION

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OBJECTIVES: Identification of the better drug for immunosuppression following renal transplantation. METHODS: Efficacy data sources included completed comparative randomized clinical trials of Sandimmun Neoral and cyclosporine A generics (Stolyarevich E. S. 2006, Taber D. J., et al. 2005, CTS 2001); costs were derived from the wholesale prices of the study drugs (Protek, Cia International, Shrey Corporation, as of 11 October 2006). The study evaluated the costs of initial and maintenance immunosuppression, treatment of rejection episodes, and hemodialysis necessitated by transplant death in the compared groups. RESULTS: Analysis of randomized clinical trials has revealed that Sandimmun Neoral is superior to cyclosporine A generics as regards one-year renal graft survival rates (88% vs. 78%) (CTS 2001). Furthermore, application of cyclosporine A generics entails more frequent episodes of acute rejection (25% vs. 39%), recurrent rejection (4% vs. 13%), and rejection requiring administration of antibodies (8% vs. 19%), Taber D. J. et al. 2005). The total cost of 2-year therapy was over 58.8 million roubles and 72 million roubles per 100 patients in the Sandimmun Neoral and cyclosporine A generics groups, respectively. CONCLUSION: Sandimmun Neoral is the leading alternative for immunosuppression following renal transplantation, i.e. it is preferable from a clinicoeconomic perspective.

PUK6

RETROSPECTIVE PHARMACOECONOMIC STUDY OF THE USE OF CYCLOSPORINE A MICROEMULSION (SANDIMMUN® NEORAL®) IN COMPARISON WITH TACROLIMUS (PROGRAF®) FOR IMMUNOSUPPRESSION FOLLOWING KIDNEY TRANSPLANTATION

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OBJECTIVES: Identification of the better drug for immunosuppression following renal transplantation. METHODS: Efficacy data sources included completed comparative randomized clinical trials of cyclosporine microemulsion (Sandimmun Neoral, CsA) and tacrolimus (Prograf, Tac). Costs were derived from the wholesale prices of the study drugs (international drug distributor Shrey Corporation, as of 25 September 2006). Costs of other medicines with the exception of calcineurin inhibitors (Mycophenolate Mofetil, corticosteroids, Azathioprine), transplantation surgery, diagnostic laboratory procedures, and pharmacokinetic monitoring of blood concentrations of drugs were considered constant and left out of calculations in this comparative study. RESULTS: Analysis of randomized clinical trials has revealed similar efficacies for both analyzed treatment options, whereas the safety profile of tacrolimus is more of a problem: the frequency rates of the new onset post-transplant diabetes mellitus for CsA and Tac are 26.5% and 33.6%, respectively, according to Vincenti F. (2005), or 9.8% and 15.4%, respectively, as reported by Keown P. (2004). The rates of diarrhea in the study of Levy G. (2005) were 14% in the CsA group and 29% in those treated with Tac. This study evaluated the costs of initial and maintenance immunosuppression with Sandimmun Neoral and Prograf, which were approximately 22,600 roubles vs. 58,700 roubles for initial therapy and 176,300 roubles vs. 952,300 roubles for one-year maintenance immunosuppression, respectively. The amount of
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money saved annually with the Sandimmun Neoral-based maintenance immunosuppression regimen was found to be about 776,000 roubles per transplant recipient per year. CONCLUSION: Sandimmun Neoral is the leading alternative for immunosuppression following renal transplantation, i.e. it is preferable from a clinicoeconomic perspective.

PUK7
A COST-MINIMIZATION ANALYSIS OF OXYBUTYNN (TRANSERMAL DELIVERY SYSTEM) COMPARED TO TOLTERODINE (TABLETS) IN THE TREATMENT OF PATIENTS WITH URGE OR MIXED URINARY INCONTINENCE IN SWEDEN
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OBJECTIVES: Standard medicinal care of patients with urge or mixed urinary incontinence is muscarinic receptor antagonists. Alternative forms of administration are available for these drugs. The objective of this analysis was to compare the cost effectiveness of the only available transdermal oxybutynin patch with oral long-acting tolterodine tablets in the treatment of patients with urge or mixed urinary incontinence in Sweden. METHODS: The efficacy of oxybutynin patches (3.9 mg/day), and tolterodine tablets (4 mg/day) was compared in a 12 weeks randomized controlled trial with 361 patients. The study demonstrated a comparable clinical efficacy between the treatment alternatives in number of daily incontinence episodes, average void volume and QoL. A cost minimization analysis (CMA) was performed based on this trial where direct medical costs related to drug treatments and the costs of treating the major adverse events (AE) (erythema, pruritus, rash, dry mouth, diarrhoea and constipation) were included. Resource utilization associated with the treatment of the adverse events in Swedish clinical practice was assessed by Swedish specialists in the field. RESULTS: The CMA shows that the total costs for 12 weeks tolerodine treatment is 1113.- SEK (~119.- €) per patient while the total costs for 12 weeks oxybutynin treatment is 1067.- SEK (~114.- €). The results also demonstrate that the cost of treating AE of oxybutynin is a significant fraction of the total treatment costs. This is due to the low frequency of AE of tolerodine, treatment, together with the low costs for treating each AE. A number of sensitivity analyses demonstrate the robustness of the results, including various scenarios for extrapolating the findings over 52 weeks. CONCLUSION: This CMA finds that oxybutynin patches (3.9 mg/day) is a cost-effective treatment alternative to tolerodine tablets (4 mg/ day) for treating patients with urge or mixed urinary incontinence in Sweden.

PUK8
CMA OF MYCOPHENOLAN MOFETIL (MMF; CELLCEPT) OR TACROLIMUS (TAC; PROGRAF) IN KIDNEY TRANSPLANT IMMUNOSUPPRESSIVE THERAPY SCHEMES FROM PUBLIC PAYER’S PERSPECTIVE IN POLAND
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OBJECTIVES: To assess clinical effectiveness and costs of MMF or TAC use in immunosuppressive treatment from public payer’s perspective in Poland. METHODS: Results of a SR of published clinical trials conducted in December 2006 according to Polish HTA Guidelines were used to assess effectiveness and safety for immunosuppressive therapy schemes: TAC + AZA + GCS or MMF + CsA + GCS. Weibull survival function was used to assess the risk of acute kidney rejection, graftectomy, dialysis, retransplantation (post-transplantation events) caused by use therapy. Costs of treatment valid from public payer’s perspective were taken into account. Pharmacotherapy, drug administration and monitoring, patient monitoring, post-transplantation events influenced the total treatment cost. Markov model was used to assess costs of immunosuppressive therapies. Sensitivity analysis was conducted according to range of costs of MMF or TAC (+/-20%) available in Poland, MMF reimbursement categories and discount rates for effects and costs in line with the Polish HTA Guidelines (0% or 5%). All calculations were performed for 2007 (1EUR=3.8PLN). RESULTS: Indirect comparison of immunosuppressive therapy schemes were taken into account: TAC + AZA + GCS and MMF + CsA + GCS (CsA + AZA + GCS as common comparator). Review of RCTs for these therapies included in indirect comparison revealed no significant differences in their effectiveness and safety. TAC use was associated with significantly higher costs from public payer’s perspective compared to MMF (difference: 97457PLN-135616PLN) per patient in accordance with assumed reimbursement category for MMF (lump cost-share 50% co-payment). Sensitivity analysis confirmed that MMF’s scheme was cheaper compared to TAC’s scheme from public payer’s perspective in Poland. CONCLUSION: MMF’s therapeutically scheme use in place of TAC’s scheme lead to significant savings for public payer in kidney transplant immunosuppressive therapy in Poland.

PUK9
HEALTH STATUS AND COSTS OF PATIENTS UNDERGOING HAEMODIALYSIS TREATMENT IN HUNGARY
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OBJECTIVES: The aim of our study was to assess the health status and costs of patients with renal failure undergoing haemodialysis treatment in Hungary. METHODS: A questionnaire survey was performed between November-December, year 2006 in the BBraun Dialysis Centre of Kistarcsa. All patients receiving haemodialysis were invited to participate in the study. Demographic data, health care utilisation, informal care, transportation and other disease related expenses were surveyed. A generic health status measure, the EQ-5D (range −0.6–1) was applied. Mobility was measured by the Timed Up and Go Test (normal < 20 sec). Costing was performed using human capital approach method, productivity loss was based on average gross wage (629Euro/month). RESULTS: Seventy-one patients (35 women, 36 men) were involved, mean age 62.3(15.0) years, duration of haemodialysis was mean 3.9(4.2) years. 34 (47.8%) patients were retired as many as on maintenance of disabled, 1-1-1 was on permanent sick-leave, unemployed or student. Patients’ residence was mean 18.6(14.2) km from the dialysis centre, 23(32.4%) had a car in their household, 2(2.8%) driven on his own and 4(5.6%) were taken by a relative regularly, 9(12.7%) patients were living alone, 24(33.8%) with spouse, 37(52.1%) with other relatives, 1 in a nursing home, 28(39.4%) came by ambulance as much as travelled by bus or train. Patients’ residence was mean 18.6(14.2) km from the dialysis centre, 23(32.4%) had a car in their household, 2(2.8%) driven on his own and 4(5.6%) were taken by a relative regularly, 9(12.7%) patients were living alone, 24(33.8%) with spouse, 37(52.1%) with other relatives, 1 in a nursing home, 28(39.4%) received regular informal care mean 35.8(25.5) hours/week. 1-1-1 was on permanent sick-leave, unemployed or student. Patients’ residence was mean 18.6(14.2) km from the dialysis centre, 23(32.4%) had a car in their household, 2(2.8%) driven on his own and 4(5.6%) were taken by a relative regularly, 9(12.7%) patients were living alone, 24(33.8%) with spouse, 37(52.1%) with other relatives, 1 in a nursing home, 28(39.4%) received regular informal care mean 35.8(25.5) hours/week. EQ-5D score was mean 0.635(0.3) and the score was significantly lower (p < 0.01) in all age-groups than in the Hungarian population. The Up and Go Test was mean 19.8(17.09) sec. Mean cost was 21 572 Euro/patient/year, direct medical costs 85.4%, direct non-medical costs 5.8%, indirect costs 8.8%. CONCLUSION: Health status loss is significant in chronic renal