13th Euro Abstracts

A475

GENERIC AZATHIOPRIN FOR KIDNEY TRANSPLANT PATIENTS—ANALYSIS OF COST SAVINGS

Georgova S1, Stoimenova A2, Petrova G2
1Aleksandrovka Hospital, Sofia, Bulgaria; 2Medical University, Faculty of Pharmacy, Sofia, Bulgaria

OBJECTIVES: To analyze the cost savings after an introduction of the generic version of azathioprin for patients with transplanted kidney. METHODS: Prospective observational study of pharmacoeconomic analysis. RESULTS: The average monthly cost of the immunosuppressing treatment when the original product was included was $320.99 and after the introduction of the generic version it became $311.29. In the first year of observation, the cost for immunosuppressive treatment was $3,706.15. In the second year of observation, it was $3,431.95. CONCLUSION: It is possible to save $274.20 per year, which could be useful for further analyses of the economic impact of this cheap generic medicine.

A COST EVALUATION OF PERITONEAL DIALYSIS AND HEMODIALYSIS IN THE TREATMENT OF ESRD IN SÃO PAULO, BRAZIL

Ferraz MB1, Mendes de Abreu M2, Walker DR3, de Castro Cintra Sesso R1
1Universidade Federal de São Paulo, São Paulo, Brazil; 2Universidade Federal de São Carlos, São Carlos, SP, Brazil; 3Baxter Healthcare Corporation, McGraw Park, IL, USA

OBJECTIVES: ESRD patient survival is similar for hemodialysis (HD) and peritoneal dialysis (PD). In Brazil, access to dialysis is universal, although the resources consumed and their costs are poorly understood. We compare the resources used for the treatment of patients undergoing HD or PD who are covered by public insurance. METHODS: A one-year prospective study comparing resource use and total costs of prevalent patients treated with HD (n = 210) and PD (n = 194) was conducted in 5 dialysis units in São Paulo, Brazil. Inclusion criteria: 218 years of age and clinically stable on chronic dialysis. The study period was April 2007 to February 2008. Data were obtained at baseline, 6 and 12 months using surveys and medical records. Cost categories included hospitalizations, diagnostic and therapeutic procedures, medications, professional fees, transportation, and lost productivity (current homemakers who stopped working due to dialysis). Government reimbursement rate was used as a proxy for the direct costs related to the act of dialysis (maintenance). The study took the societal perspective. RESULTS: Approximately 50% of HD and 48% of PD patients were female (p = 0.73), 54% and 38% were white (p = 0.48); mean age was 55.2 and 60.6 years (p = 0.0051); 62% and 71% had diabetes (p = 0.0328); and 59% and 55% had coronary heart disease (p = 0.37), respectively for HD and PD. Overall average costs per patient-year of follow up was US$2,283 and HD US$2,285 for PD patients. The average annual cost per patient-year, per category, for HD and PD are shown in Table 1. The average annual cost of maintenance dialysis costs US$2,089 and US$1,954 for maintenance dialysis costs. CONCLUSIONS: Mean annual total cost per HD and PD are nearly identical, even though the former were significantly older and more lost income due to dialysis.

HEALTH CARE COST OF RENAL REPLACEMENT THERAPY IN HUNGARY

Kalo Z1, Kiss Z2, Gerendy P2, Nagyjanosi L3, Vokó Z4
1Eötvös Loránd University, Budapest, Hungary; 2National Health Insurance Fund Administration, Budapest, Hungary; 3University of Pécs, Pécs, Hungary; 4University of Pécs, Pécs, Hungary

OBJECTIVES: Annual cost of renal replacement therapy is an important benchmark for public reimbursement of all health care services. The last report was presented more than 10 years ago in Hungary, so our objective was to calculate the current annual average cost of waiting listed dialysis and renal transplantation. METHODS: We selected all waiting listed or renal transplanted patients between July 2004 and March 2008. Resource utilization of all health care services with public reimbursement per patient in Q1 2008 were aggregated by linking claims records with anonymised patient IDs. We calculated health care costs of waiting listed and renal transplanted patients. RESULTS: We adjusted to gender, age and onset of ESRD by multilayer regression analysis. A total of 1,351 HUF/USD GDP specific PPP exchange rate was employed to convert results into USD. 2008 cost calculations were compared to results of the 1997 analysis. RESULTS: A total of 229 patients were selected to the analysis. 3 year cost of waiting listed dialysis and renal transplantation was 10,587,420 HUF, respectively. Renal transplantation is cost-saving within 2 years compared to dialysis. CONCLUSIONS: Between 1997 and 2008 the 3-year cost of waiting listed dialysis increased by 60.3%, 3-year cost of renal transplantation increased by 96.8% without correction for inflation. In real values the health care costs waiting listed dialysis and renal transplantation is reduced by 26.7% and 10.0%, respectively. During this period the cost-containment measures of the National Health Insurance Fund were successful.

THE ECONOMIC IMPACT OF RENAL GRAFT FAILURE: A COST ANALYSIS IN A UK SETTING

Sun Y1, Carr K2
1London School of Economics and Political Science, London, UK; 2Bristol-Myers Squibb, Brussels, Belgium

OBJECTIVES: Compared to dialysis, kidney transplantation is a highly cost-effective choice for most patients with ESRD. Post transplantation, a key objective is to maintain the graft function. When graft failure occurs, the majority of patients return to dialysis. This study is performed to assess the cost of renal graft failure in a UK setting. METHODS: A model was built using data from the UK renal registry (2007–2008) to estimate the number of graft failures occurring in the first year after transplantation. Costs for procurement, transplantation, and for the treatment of graft failure, were derived from the result of a systematic review. This study adopted an investment perspective—all the medical resource used from organ procurement to the treatment of graft failure were taken into consideration. RESULTS: In the UK, the cost of renal graft failure was approximately £58,847 when taking account the medical resource used from an investment point of view (including transplantation cost, immunosuppressive medication cost and resource to treat post transplantation adverse events for graft failure). The post graft failure cost was £43,481. CONCLUSION: The post graft failure cost contributed 62.4% (61.1% in 1997) to the total cost of ESRD. The economic impact of graft failure should be taken into account the cost of management of patients post graft failure, as well as previous medical investment that is lost with the graft (including costs associated with procurement of the organ and transplantation). Improvements in the management of renal transplant patients are needed to reduce the risk of graft loss and the economic burden of graft failure to the health care system.
**COST-EFFECTIVENESS ANALYSIS OF ALISKIREN IN TYPE 2 DIABETES AND HYPERTENSION PATIENTS WITH NEPHROPATHY IN MEXICO**

**NEVARA A1, GARCÍA-GONZÁLEZ E2, OLIVERA K1**

1 Mexican Institute of Social Security, Mexico City, DF, Mexico; 2Novartis, Mexico City, DF, Mexico

**OBJECTIVES:** To determine the most cost-effective alternative between a) Losartan, and b) Losartan + Aliskiren in type 2 diabetes and hypertension patients with microalbuminuria in the Mexican Institute of Social Security. METHODS: A complete economic evaluation was performed from the institutional perspective, using a Markov model as analytical tool with semi-annual cycles and follow up until death, with transition probabilities taken from large US epidemiological studies. Transition probabilities were obtained from a large US epidemiological study. Costs were derived from IMS databases. Both univariate and Monte Carlo multivariate sensitivity analyses were performed. RESULTS: The ICER was $27,858/QALY (IC not included), providing NHBs of [0.09] [0.01], TDR 1.37 additional QALY/patient. The multivariate sensitivity analyses showed that TDR was efficient in [54%] [31%] and dominant in [28%] [27%] of the simulations. The probability of accepting TDR was [55%] [50%]. CONCLUSIONS: TDR is an efficient scenario when compared to LDR, providing a greater number of QALYs with yet an effort increase costs. However, our results support the use of Aliskiren as a good alternative to Losartan in type 2 diabetes, hypertension, and microalbuminuria.

**THE COST-EFFECTIVENESS OF LANTHAMUM CARBONATE VS. SEVELAMER HYDROCHLORIDE IN PATIENTS WITH END-STAGE RENAL DISEASE**

**PUK19**

**PUK20**

**THE COST-EFFECTIVENESS OF LANTHAMUM CARBONATE VS. SEVELAMER HYDROCHLORIDE IN PATIENTS WITH END-STAGE RENAL DISEASE**

**Park H1, Rascati KL2, Keith MS1, Hodgkins PS1, Smyth MD1, Goldsmith D1, Alkehurst RL2**

1 The University of Texas at Austin, Austin, TX, USA; 2Shire Pharmaceuticals, Wayne, PA, USA

**OBJECTIVES:** To assess the cost-effectiveness between two non-calcium binders, lanthanum carbonate (LC) and sevelamer hydrochloride (SH), in end-stage renal disease (ESRD) patients previously treated with calcium-based binders. METHODS: A Markov model was developed to estimate incremental costs for three health outcomes: 1) quality-adjusted life-years (QALYs), 2) Life-years saved (LYS) and 3) percent who successfully met serum phosphorus (SP) level goals (3.5–5.5 mg/dl) between the two non-calcium binders. The model incorporated patient-level data from a randomized head-to-head crossover study which compared the reduction of SP using fixed doses of LC for 4 weeks. For this analysis the model included patients previously treated with calcium-based binders. The ‘intent-to-treat’ (ITT) population and the ‘completer’ population were assessed. Baseline risks of cardiovascular disease (CVD), overall mortality, and CVD mortality were derived from a large US epidemiological study. Utilities, costs and relative risks of CVD were derived from published sources. Patient outcomes were modeled for 10 years, and incremental cost-effect ratios (ICERs) were calculated for LC relative to SH. Clinical and economic outcomes were dis-