A80

showed a strong trend for less CV-events (p = 0.098). Costeffectiveness of screening for elevated albuminuria was. €16,559/LYG (from €7,030 to €24,125 in sensitivity analysis). Stochastic analysis indicated that the probability of costeffectiveness below the suggested Dutch threshold for costeffectiveness of €20,000 per LYG is 60% in the baseline analysis, increasing to 91% if only those subjects are treated with fosinopril showing a UAE >50 mg/24 hr. Also, limiting screening to only those aged greater or equal than 50; improved costeffectiveness considerably. **CONCLUSION:** Primary prevention by screening the general population for the risk marker albuminuria greater or equal to 15 mg/24 hr and subsequent treatment with fosinopril of those found positive to reduce the incidence of CV events may well be cost effective.

COST-EFFECTIVENESS OF PARICALCITOL IN THE TREATMENT OF SECONDARY HYPERPARATHYROIDISM: THE EXPERIENCE IN ITALY

PUK9

PUK10

Chiroli S¹, Lucioni C², Brancaccio D³

¹Abbott SpA, Campoverde, LT, Italy; ²Wolters Kluver Health Adis International Ltd, Milano, Italy; ³Ospedale San Paolo, Milano, Italy OBJECTIVES: To evaluate short-term (12 months) costeffectiveness (CE) of intravenous (iv) vitamin D preparations (paricalcitol and calcitriol) to control hyperparathyroidism in hemodialysis patients. METHODS: A decision analytic model was constructed and analysed from the hospital and the Italian National Health System (INHS) perspectives. Following the indications of the Italian Nephrology Society on the use of iv Vitamin D analogues, patients were simulated to start a 12-month iv Vitamin D treatment when parathormone (PTH) plasmatic level was >700 pg/ml. Starting doses were 27 µg/week for paricalcitol and 9µg/week for calcitriol; subsequent maintenance dose was adjusted assuming decreasing PTH levels over time. Model parameters were derived from multiple published sources. Clinical course of treatment and efficacy in controlling hyperparathyroidism were based on a RCT (Sprague SM. Kidney Int 2003); effect on survival, hospitalisation rate and length-of-stay (LOS) were based on retrospective studies (Teng M. NEJM 2003; Dobrez DG. Nephrol Dial Transplant 2004). Cost included drug costs (hospital prices excluding taxes), cost per hospitalization (national mean DRG value, 2002), in the INHS perspective, or cost per day of hospitalization (general medical ward, Lucioni C. et al. Treat Endocrinol 2003), in the hospital perspective. **RESULTS:** Per patient one-year drug acquisition costs were €3364.74 for paricalcitol and 1883.25 for calcitriol. Calcitriol patients had an average of 0,846 hospitalizations/year more than paricalcitol at an incremental cost, in the INHS perspective (DRG tariffs), of €2868.69. Calcitriol patients had an average of 9.17 hospitalization/days more than paricalcitol at an incremental cost, in the hospital perspective (LOS), of €2249.58. Paricalcitol strategy resulted dominant in both perspectives. Robustness of these findings was demonstrated in multiple sensitivity analyses. CONCLUSIONS: In Italy, paricalcitol greater acquisition costs are offset by reduction in hospitalizations and LOS both from an NHS perspective and from the hospital perspective.

COST-EFFECTIVENESS OF MIMPARA AMONG DIALYSIS PATIENTS IN BELGIUM USING A MARKOV SIMULATION MODEL

<u>Roze S</u>¹, Palmer AJ¹, Standaert B², Van Kriekinge G² ¹CORE Center for Outcomes Research, Binningen, Switzerland; ²Amgen n.v, Brussels, Belgium

Abstracts

OBJECTIVES: To demonstrate cost-effectiveness (ICER) of Mimpara (MIM), a drug against secondary hyperparathyroidism (sHPT) in dialysis, compared to standard treatment of care (SOC). METHODS: A Markov model operates in $\frac{1}{2}$ year cycles and runs over 16 years until the starting cohort reaches 70 years. Mortality risk per cycle was calculated from a 2-year cohort dialysis database $(n = 13,000)^1$. The model uses specific distributions for parathyroid hormone (PTH), Calcium (Ca) x Phosphor (P), age, vintage and MIM dosages (30-120 mg/day) from phase III trials. Patients withdrawing from MIM were treated with SOC. Average drug costs were €3109/year first cycle and €2617/year subsequent cycles as only drug responders (85%) remained on study drug. Other treatment costs were taken from a retrospective cost study in Belgium² using average daily cost of €214 per dialysis patient plus €50/day for sHPT-sufferer. Annual 3% discount rate was applied to cost and outcome data. RESULTS: Running the model in Monte-Carlo simulation (10,000 iterations) over 16 years, delivered a mortality difference of 0.17 years favoring MIM-use for an extra cost of €8027 (+ dialysis cost) resulting in an ICER of €47,218 per Life Year Gained. Excluding dialysis costs the ICER was €36,970. Sensitivity analyses ranging discount rates from 0% to 6% independently for both outcome and cost data showed ICERs of €36,970 and €59,459 for outcome and €64,517 and €35,088 for cost results, respectively. Evaluating the ICERs over time indicates that costsavings may appear early in MIM-treatment (first 2 to 3 years) due to reductions in co-morbidities without observable survival benefit. CONCLUSION: Including dialysis costs in the ICERequation maintained a reasonable CE-result (<€50,000/LYG) favoring the use of Mimpara for sHPT.

PUKII

COST ANALYSIS OF RENAL REPLACEMENT THERAPIES IN LATVIA

<u>Babarykin D</u>¹, Rozental R², Nikolajenko A³, Bicans J², Spudass A², Misane l², Adamsone l², Folkmane l², Michule L²

¹University of Latvia, Riga, Latvia; ²P. Stradins University Hospital, Riga, Latvia; ³Medical Consulting Service Ltd, Riga, Latvia

OBJECTIVES: Kidney transplantation (KT) is generally acknowledged as the most clinically effective and cost-effective option in managing ESRD patients. The objective of our study was to identify costs and estimate cost-effectiveness of various ESRD treatment modalities in Latvia. METHODS: We retrospectively analysed files of 250 patients in an in-center hemodialysis treatment mode (HD), 60 patients in continuous ambulatory peritoneal dialysis treatment mode (CAPD) and 51 patients after successful KT for the first 3 years of treatment. All direct medical costs were registered. Cost-effectiveness was estimated by costs per 3 life-years gained. RESULTS: Mean direct costs (in 2003 €) for one patient for the first year and all three years of treatment were: for CAPD 16,250.0 + €1,577.4 and 48,327.7 ± 1, €162.2 respectively, for HD 14,131.7 \pm €1,212.4 and 42,052.4 \pm €1,203.2 respectively, and for KT 15,880.0 ± €4,744.7 and 25,460.0 ± €2,994.4 respectively. Average treatment costs per patient over the 3 years were the highest in the CAPD group (P < 0.05 vs. HD, P < 0.001 vs. KT) and KT was the least expensive (as expected). The initial higher costs of KT were fully recouped within 15 months after surgery. Probability of life expectancy for CAPD, HD and KT for the first and third year were: 77.3%, 84.1% and 91.3% respectively, and 45.0%, 43.1% and 83.7% (P < 0.001 vs. CAPD and HD), respectively. The cost of 3 life-years gained by KT was significantly less (P < 0.001) than the cost associated with CAPD and HD (€29,598.5 vs. €106,661.1 and €97,798.5 respectively). CONCLUSIONS: Compared to CAPD and HD, KT provided greater survival ben-