

METHODS: Patients with ≥ 2 RCC claims (ICD-9 189.0, 198.0) receiving sunitinib (n = 244), sorafenib (n = 234) or bevacizumab (n = 106) were identified from a large US commercial health insurance claims database covering over 39 million people between January 2002–December 2006. Patients were observed from their first angiogenesis inhibitor therapy claim until the last treatment date. Inpatient, outpatient and pharmacy costs (actual payments made by health plans) were calculated on a per-patient per-month (PPPM) basis over the treatment period with costs for the study drugs reported separately. **RESULTS:** PPPM costs for bevacizumab were \$5130 higher than PPPM costs for sorafenib and \$3,261 higher than PPPM costs for sunitinib. Additionally, bevacizumab drug and IV administration costs accounted for 51% of the outpatient costs for those patients. Excluding drug and administration costs, bevacizumab patients still incurred higher PPPM outpatient services costs of \$3956, compared with patients receiving sunitinib or sorafenib at \$2913 and \$2230 respectively. Monthly costs for inpatient services were also higher for bevacizumab patients (\$2467) vs. sunitinib (\$1716) and sorafenib (\$1082) patients. **CONCLUSION:** RCC patients treated with bevacizumab incur an additional \$39,132–\$61,560 total medical cost increase per patient per year compared to those treated with sunitinib or sorafenib. The development of more tolerable and efficacious oral angiogenesis inhibitor therapies may result in additional cost savings to patients and health care payers over IV therapies.

PUK16

COMPARATIVE ECONOMIC EVALUATION OF DUTASTERIDE VERSUS FINASTERIDE FOR MEDICARE-AGED MEN WITH BENIGN PROSTATIC HYPERPLASIA

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OBJECTIVE: Evidence has shown important therapeutic outcome differences between dutasteride and finasteride. The objective of this study was to assess the differences in economic costs between these two pharmacologic treatment options within the first year of initiating therapy for Medicare-aged men with benign prostatic hyperplasia (BPH) from a managed care perspective. **METHODS:** A retrospective analysis of medical and pharmacy claims was conducted using the Ingenix Lab Rx proprietary research database within a 3-year period from July 1, 2003 to June 30, 2006. Male patients aged ≥ 65 years with a diagnosis of BPH treated with either dutasteride or finasteride were identified. To minimize potential biases that arose from differential treatment selection, propensity-score-matching methods were used to identify finasteride and dutasteride patients who were similar in terms of their Charlson Comorbidity Index score, Thomson Medstat staging and other background covariates. Average monthly medical costs were defined as the total amount charged for BPH-specific physician visits, inpatient hospitalizations, outpatient hospital care, emergency department visits and other ancillary medical services during the follow-up period for each patient. **RESULTS:** The matched sample included a total of 4498 patients. Demographics were comparable between the two treatment groups with a mean age of 73.6 years. Patients taking dutasteride had significantly lower medical resource utilization costs per month compared to finasteride-treated patients (\$122 vs. \$173, $P < 0.001$). The absolute difference in cost is \$51 less per month with dutasteride use. The lower costs associated with dutasteride appears to be due to the lower inpatient hospitalization costs (\$35.78 vs. \$72.29 per month

with finasteride). **CONCLUSION:** Medicare-aged patients treated with dutasteride consumed significantly lower medical resources due to lower inpatient hospitalization expenditure, showing cost savings of \$51 per month per treated patient. This study supports the growing body of real-world evidence indicating the clinical and economic benefits associated with dutasteride.

PUK17

ECONOMIC EVALUATION OF SEVELAMER VERSUS CALCIUM-BASED PHOSPHATE BINDERS IN PATIENTS ON DIALYSIS IN THE UNITED KINGDOM SETTING

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OBJECTIVE: To evaluate cost-utility of sevelamer versus calcium-based phosphate binders (CaPB) in different patient cohorts and for different dialysis modalities. **METHODS:** Systematic literature review was conducted with only studies reporting mortality considered. Subgroup analyses were carried out based on results from one trial (DCOR). Costs of dialysis were obtained from a recent UK-based study; dosage of drugs was taken from the DCOR trial, and unit prices from the British National Formulary; costs were expressed in ≤ 2007 ; utilities were sourced from the literature. Markov model was developed for analysis. **RESULTS:** Six RCTs of sevelamer versus CaPB reporting all-cause mortality were identified. No significance was found in meta-analysis: RR = 0.83 [95%CI:0.56–1.17]; difference in cardiovascular mortality was not significant, based on three RCTs: 0.94 [0.76–1.17]. In the general haemodialysed population sevelamer cost ≤ 6491 more than CaPB after ten years of treatment, regardless of dialysis modality. In the 65 and older population, cost of sevelamer was $\leq 30,293$ higher, while efficacy was 0.52 QALYs greater; ICER = $\leq 58,405$. In patients on peritoneal dialysis, sevelamer cost $\leq 17,837$ more than CaPB, with identical efficacy; ICER = $\leq 34,389$. In patients treated for at least two years, sevelamer cost $\leq 27,266$ more, while its efficacy was 0.41 QALYs higher; ICER = $\leq 65,782$. In the 65 + population treated for at least two years, cost of sevelamer was $\leq 38,378$ higher, while efficacy was 0.70 QALYs greater; ICER = $\leq 55,182$. Acceptability curves revealed that probability of sevelamer being cost-effective at $\leq 20,000$ /QALY ranged 1.2–13.4%; EVPI was $\leq 17-194$. With the costs of dialysis excluded, ICER ranged from $\leq 11,944$ to $\leq 22,543$; for all scenarios ICER diminished with longer time horizons. **CONCLUSION:** Sevelamer is not likely cost-effective, but in the older population it is more cost-effective in patients on peritoneal dialysis than on haemodialysis. ICER is relatively high for subgroups, mainly due to the high cost of dialysis of patients who live longer due to sevelamer.

PUK18

STAFF TIME AND COSTS FOR ANEMIA MANAGEMENT WITH ERYTHROPOIETIC STIMULATING AGENTS IN PATIENTS ON HEMODIALYSIS: CASE STUDY OF A BRAZILIAN DIALYSIS CENTER

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OBJECTIVE: This study assessed costs related to anemia management in a reference dialysis center. The study also explored the potential benefit of efficiency improvement and costs reduction with the use of C.E.R.A., a novel continuous erythropoietin receptor activator that is effective for treating anemia with a once monthly injection. **METHODS:** This study was conducted at the

Hospital do Rim from Universidade Federal de São Paulo (dialysis center) where 208 patients make use of human recombinant erythropoietin (ESA) for anemia management. Structured interviews with personnel were arranged to identify workflow for anemia management. Time spent in each activity was registered using a stop watch by a trained professional. Time spent in less frequent activities or in activities were the direct relation with anemia management could not be done were not taken into consideration for this study. For valuing time and supplies the dialysis center's costs data was considered. **RESULTS:** Total time spent for ESA administration by the dialysis center for the treatment of 208 patients was 75 days or R\$19,758. Assuming the usage of C.E.R.A. in 100% patients of the center, the time spent by the staff would be 10 days or R\$2683, representing an 86% reduction versus current practice. Costs of supplies needed for the administration were R\$28,863 for those patients receiving conventional ESA and R\$774 if patients would have received C.E.R.A. As a result, potential total savings generated with the use of C.E.R.A. was R\$ 45,165 per year in this dialysis center or R\$ 217/patient/year. **CONCLUSION:** The study suggests that the adoption of once-monthly C.E.R.A. can bring substantial savings for the dialysis center: R\$44,847 per year or R\$216 per patient per year. Once-monthly C.E.R.A. could also improve resource utilization and enable health care staff to focus more time on other aspects of patient care.

URINARY/KIDNEY DISORDERS— Patient-Reported Outcomes

PUK19

COMPARISON OF THE HEALTH-RELATED QUALITY OF LIFE BETWEEN PATIENTS UNDERGOING PERITONEAL DIALYSIS AND HAEMODIALYSIS

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OBJECTIVE: To compare the health-related quality of life (HRQOL) between patients undergoing continuous ambulatory peritoneal dialysis (CAPD), automated peritoneal dialysis (APD) and haemodialysis (HD) in the "IMSS" (Mexican Institute of Social Security) in Guadalajara. **METHODS:** Transverse analytic study included 131 patients, in peritoneal dialysis, ≥ 18 years, any gender, or time under dialysis. Patients with acute technique-related complications, in terminal phase of illness, or with physical or mental disability were excluded. An interview, clinical history and detailed physical examination were carried out. Using the Kidney Disease Quality of Life Short Form (KDQOL-SFTM), we measured HRQOL. Analysis of variance was used to examine differences. **RESULTS:** Patients were studied (50 undergoing CAPD, 34 APD and 47 HD). The average age was 46.2 ± 18.3 years, 53% were females, and 49% were males. The time in CAPD was 23.4 ± 17.2 , APD 23.9 ± 14.2 and HD 37 ± 34 months. Physical functioning (37 ± 28), pain (69 ± 25), emotional well-being (52 ± 26), social function (57 ± 30), and energy/fatigue (37 ± 27) were significantly lower scores in CAPD in comparison with APD (65 ± 31 , 93 ± 12 , 75 ± 28 , 91 ± 15 , 60 ± 28) and HD (57 ± 29 , 82 ± 17 , 69 ± 23 , 80 ± 21 , 53 ± 28). The Effects of Kidney Disease (86 ± 15) and Burden of Kidney Disease (58 ± 36) subscales were lower in APD in comparison with CAPD (76 ± 16 and 24 ± 29 , respectively); no differences between CAPD and HD.

The physical component summary was significantly higher in APD (58 ± 22) in comparison with CAPD (46 ± 15) and HD (34 ± 15). Mental component summary was less in CAPD (36 ± 15) in comparison with APD (60 ± 22) and HD (46 ± 15). **CONCLUSION:** The HRQL in patients undergoing CAPD was less in comparison with patients with APD and HD. The physical dimension was higher in patients with APD in comparison with CAPD and HD, whereas the mental dimension was less in the CAPD group. There was no significant difference between the APD and HD groups.

PUK20

IMPROVEMENTS IN HEALTH-RELATED QUALITY OF LIFE WITH FESOTERODINE: KING'S HEALTH QUESTIONNAIRE ITEM ANALYSIS

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OBJECTIVE: Subjects with overactive bladder (OAB) have decreased health-related quality of life (HRQL). The positive effects of fesoterodine (FESO) and tolterodine extended release (TER) have been established in subjects with OAB using patient-reported outcomes. This analysis assessed the effects of FESO and TER on individual items of the King's Health Questionnaire (KHQ). **METHODS:** This is a post hoc analysis of data from a multicenter, double-blind, placebo (PBO)-controlled trial. Eligible subjects with frequency and urgency or urgency urinary incontinence were randomized to PBO, FESO 4 mg, FESO 8 mg, or TER 4 mg for 12 weeks. Subjects completed the KHQ at baseline and end of treatment. The KHQ includes 9 domains with 21 items and a Symptom Severity scale; lower scores indicate better HRQL. Analysis of covariance was used to assess treatment-related effects on the 21 individual items of the 9 KHQ domains, with treatment and region as factors and baseline value as a covariate. **RESULTS:** By the end of the study, FESO 8 mg significantly improved responses to 13 items vs. PBO; in comparison, FESO 4 mg and TER improved responses to 9 and 8 items, respectively (all $P < 0.01$). There were no significant differences between treatment groups. Seven items did not improve with any treatment; most of these items were part of the Personal Relationships and General Health Perception domains. In general, items that improved the most with treatment had higher baseline values (ie, worse HRQL) compared with those that did not improve. **CONCLUSION:** Both doses of FESO (4 and 8 mg) significantly improved HRQL in subjects with OAB as evidenced by significantly better scores for 9 and 13 items of the KHQ vs PBO, respectively. The domains showing improvement were those for which improvement with OAB treatment would be expected.

PUK21

THE PSYCHOMETRIC VALIDATION OF AN US ENGLISH SATISFACTION MEASURE IN PATIENTS WITH BENIGN PROSTATIC HYPERPLASIA

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OBJECTIVE: Measuring the treatment effectiveness from the patients' perspectives is recommended in managing benign prostatic hyperplasia (BPH). The purpose of this study was to validate the US English Patient Perception of Study Medication Questionnaire (PPSMQ) administered to BPH patients in a randomized clinical trial. **METHODS:** Patients with moderate-