

impacto económico del tratamiento con los Agentes Estimuladores de Eritropoyesis (AEE), DA y EB, teniendo en cuenta el nivel de Hb alcanzado y los costos de los eventos clínicos (Hospitalizaciones por complicaciones cardiovasculares e infecciones y transfusión de sangre). La efectividad se midió por "Paciente en control" definido como paciente vivo y no hospitalizado ni transfundido durante un año. Los insumos clínicos y los costos determinaron sólo de los niveles de Hb objetivo [10 (\pm 1) g/dL y 11 (\pm 1) g/dL] y se extrajeron de la literatura, del manual ISS+30% y de SIMED-2016, posteriormente se validaron mediante un panel Delphi con expertos. Se realizó un análisis de sensibilidad determinístico para las variables más importantes (+/- 30%). **RESULTS:** Darbepoetina alfa demostró ahorros Vs. Epoetina beta en los costos del tratamiento anual y en los costos por paciente controlado. Darbepoetina alfa en el nivel de Hb objetivo [10 (\pm 1) g/dL] generó un ahorro de \$2.840.401 COP por paciente con HD/año controlado, y un ahorro de \$2.125.310 COP por paciente con DP/AC. Para el nivel de Hb [11 (\pm 1) g/dL] DA generó un ahorro de \$3.513.649 COP por paciente con HD/AC, y un ahorro de \$2.654.049 COP por paciente con DP/AC. **CONCLUSIONS:** En la perspectiva evaluada, darbepoetina alfa se asoció con menores costos, en Hemodiálisis o Diálisis Peritoneal, para los niveles de Hb objetivo. Los costos totales por paciente en control se ven afectados principalmente por el costo de transfusiones y de las hospitalizaciones.

PUKS

COST EFFECTIVENESS OF PERITONEAL DIALYSIS PROVISION FOR THE TREATMENT OF CHRONIC KIDNEY DISEASE FROM PUBLIC HEALTH PERSPECTIVE IN CHILE

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OBJECTIVES: To assess the cost-effectiveness of different scenarios of peritoneal dialysis (PD) provision for adults with chronic kidney disease stage 5 who are receiving hemodialysis (HD) as renal replacement therapy from the perspective of the Chilean public healthcare system. **METHODS:** A Markov cohort state transition model was adapted to represent the natural history of disease, and to estimate the economic and health related quality of life impact. Three scenarios were simulated: Scenario 1 (S1) current practice 5% PD vs 95% HD, Scenario 2 (S2) 10% PD vs 90% HD, and Scenario 3 (S3) 20% PD vs 80% HD. Expected costs were measured in Chilean pesos (1 USD = 654 CLP) and expected health benefits in quality adjusted life years (QALYs). Health related quality of life was measured using EuroQoL EQ5D. A 10-year time horizon and 3% discount rate was considered for costs and outcomes. A probabilistic sensitivity analyses was performed to account for second order uncertainty. **RESULTS:** The total expected costs for S1, S2 and S3 are USD 40,750, USD 41,057 and USD 41,671 respectively. The total expected QALYs for S1, S2 and S3 are 4.25, 4.29 and 4.35 respectively. The incremental cost effectiveness ratio (ICER) of changing from S1 to S2 is USD 7,675. The ICER of changing from S2 to S3 is USD 10,233. At a suggested threshold of USD 15,000 both S2 and S3 are expected to be considered as cost effective. The ICER was most sensitive to health utility scores in both PD and HD. **CONCLUSIONS:** Increasing the share of PD in clinical practice is expected to be cost effective from the perspective of the Chilean public healthcare system.

PUK6

A COST-EFFECTIVENESS ANALYSIS OF TACROLIMUS XL IN COMPARISON TO GENERIC TACROLIMUS FROM THE PUBLIC HEALTHCARE SECTOR IN MEXICO

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OBJECTIVES: To assess the cost-effectiveness of tacrolimus extended release (tXL) compared to generic tacrolimus (gxT) in the public sector in Mexico. **METHODS:** A cost-effectiveness analysis of overall survival after kidney transplantation was developed. According to Hariharan variation in serum creatinine predicts long-term renal graft-survival. Weibull survival functions based on this study were calculated to predict the risk of renal graft rejection. Five years of median overall survival were assumed when patients started dialysis. The difference in adherence between both products was obtained from Kuypers, who reported adherence of 88% for tXL vs. 79% for gxT. The outcome calculation was based on Borra 2010, who published that patients with high-variability of tacrolimus levels have shorter graft survival. A Markov-model was developed with five health states: graft survival, peritoneal-dialysis, hemodialysis, re-transplantation, and death. Three Mexican clinicians were interviewed to quantify the use of resources, treatment patterns and graft survival relative risk ratios between both comparators. The analysis was performed with a 5% discount for costs and effectiveness with a 20-year time horizon. A 40% discount was applied to tXL from the third year of analysis assuming LOE. Actual costs were obtained from the Social Security Mexican Institute and results are presented in USD. **RESULTS:** Clinicians interviews with data from over 300 patients, showed that high variability of tacrolimus serum levels was lower in patients with tXL=10% vs. gxT=38% and that variation in creatinine is lower in patients with tXL=13% vs. gxT=25%. This information driven better outcomes in terms of life-year-gained for patients with tXL=9.26 vs. gxT=8.26. Average cost calculated for graft rejection was \$4,516 and \$2,138 for graft failure. The cost-effectiveness results shown ICER of \$22,040 due to avoided or delayed RRT. **CONCLUSIONS:** Tacrolimus XL could be a valuable and cost-effective adjunct for kidney transplantation in the public healthcare sector in Mexico.

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

PUK7

THE EQUIVALENCE BETWEEN THE MALAY AND U.S. ENGLISH VERSIONS OF RAND 36-ITEM HEALTH SURVEY 1.0

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OBJECTIVES: To evaluate the measurement equivalence of the U.S. English and Malay versions of the RAND 36-Item Health Survey 1.0 (SF-36v1). **METHODS:** A cross-sectional study design was utilized where health-related quality of life (HRQOL) for 315 Chronic Kidney Disease (CKD) patients was assessed using the SF-36v1 instrument. Both the Malay and U.S. English versions of the instrument were administered to 315 bilingual (Malay and English speakers) Malaysian CKD patients at Penang General Hospital, Penang, Malaysia. Reliability, test-retest and equivalent forms reliability tests were done for the eight scales of each of the two versions. To further assess equivalence, the mean scores of eight scales of the two versions were calculated and compared. **RESULTS:** Of the 315 consenting participants, 72.4% were females and 27.60% were males. The mean age of participants was 65.8 \pm 9.4 years. Majority (72.7%) of participants were Chinese, followed by Malay (21.9) and Indian participants (5.4%). The results supported the equivalence of the two versions through both items and scales comparisons. Cronbach's alpha for the Malay and U.S. English version was quiet similar with values around or slightly exceeding 0.7 in multiple measurements. Wilcoxon tests showed non-significant differences between the mean scores obtained from the two versions for each of its eight scales. **CONCLUSIONS:** The U.S. English- and Malay-language versions of the RAND 36-Item Health Survey 1.0 (SF-36v1) demonstrated equivalence in bilingual Malaysian CKD patients. Our results suggest that the Malay and U.S. English versions can be used interchangeably in further studies for patients who speak either one of the two languages.

PUK8

LOWER HEMOGLOBIN (HB) LEVELS NEGATIVELY IMPACT QUALITY OF LIFE (QOL) AMONG PERITONEAL DIALYSIS (PD) PATIENTS: RESULTS FROM A NATIONAL REPRESENTATIVE COHORT STUDY IN BRAZIL (BRAZPD)

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OBJECTIVES: To verify the association between Hb and QoL among incident PD patients in a representative Brazilian cohort. **METHODS:** This cross-sectional study included 3,407 incident PD patients from BRAZPD who had at least one completed QoL assessment and concurrent monthly measurement of hemoglobin. QoL was measured using the Portuguese version of the SF-36 v.1. Linear regression was used to assess the association between Hb as defined by the current treatment recommendations (< 10 [ref], 10-11.5, and > 11.5 g/dl) and QoL scales, adjusting for age, sex, BMI, diabetes, hypertension, previous HD, pre-dialysis care, Davies score, and use of any erythropoietin (EPO) and Iron. QoL is measured on a 0-100 scale with higher values indicating better QoL. A 5-point difference in subscales and a 3-point difference in summary scales is clinically significant. **RESULTS:** The sample was on average 59 years, 48% male, 44% diabetic, and 77% hypertensive. 80% of the sample was prescribed EPO and 46% were prescribed iron therapy during the month evaluated. Average Hb was 11.4 \pm 2.1 (25% <10, 28% 10-11.5, and 47% >11g/dl). QoL scores were lowest for the General Health (45.3) and Role Physical scales (45.6) and highest for Bodily Pain (73.2) and Social Functioning (63.9). Individuals with Hb < 10g/dl (vs. > 11.5g/dl) had significantly lower scores on all measures (p<0.003). Clinically meaningful differences were seen in the Physical Functioning (-5.5 pts.), Role Physical (-6.6 pts.), and Role Emotional (-7.4 pts.) scales. Although less striking, significant differences were also observed for the Hb 10-11.5 group (vs. > 11.5g/dl) in the Physical Functioning (-3.6 pts., p<0.0001), Emotional Well-being (-1.8 pts., p=0.004), Energy/Fatigue (-1.9 pts., p=0.006), and Physical Component Summary scales (-0.8 pts., p=0.005). **CONCLUSIONS:** Our results reinforce the negative impact of low Hb (<10 g/dl) on many aspects of QoL, and support the recommendation of keeping the current thresholds for clinical practice.

PUK9

EVALUATION OF HEALTH-RELATED QUALITY OF LIFE AMONG MALAYSIAN NON DIALYSIS DEPENDENT CHRONIC KIDNEY DISEASE PATIENTS

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OBJECTIVES: To evaluate the influence of Non-dialysis-dependent Chronic Kidney Disease (ND-CKD) on the Health-Related Quality Of Life (HRQOL) of ND-CKD patients. **METHODS:** A cross-sectional study design was utilized to assess the effect of ND-CKD on HRQOL measures of ND-CKD patients at Penang General Hospital in Penang, Malaysia. A total of 526 CKD patients who fulfilled the inclusion criteria were asked to fill the 36-Item Short-Form Health Survey (SF-36). SF-36 instrument measures health based on eight multiple-item dimensions that cover functional status, wellbeing and overall health evaluation. The English version of SF-36 was translated into Malay language, validated and administered to the subset of participants who don't speak English. **RESULTS:** Nearly 67% of participants were Females, and the mean (\pm SD) age of respondents was 70 (\pm 10.4) years. The Chinese race represented 53.2% of participants, 59% of respondents earned less than 2000 Malaysian Ringgit (MYR) a month, and 42% of them were stage III ND-CKD patients. The HRQOL scores were significantly affected by the severity of ND-CKD, as it were consistently lower at advanced ND-CKD stages especially in elderly patients. Female gender was associated with lower HRQOL in all scales except the bodily pain (P) one. Patients with higher monthly income showed significantly higher role-function (RF) score than their counterparts. **CONCLUSIONS:** These observations highlight the strong impact of ND-CKD on HRQOL that needs to be appropriately considered and addressed. Further studies to design and evaluate potential interventions for improvement of HRQOL in ND-CKD patients are warranted.