low protein diet is cost effective relative to no-treatment in an Italian setting. Further studies should test this model in other countries with different dialysis costs and diet-related support.

### PUK25

**ASSESSING THE LIKELY COST-UTILITY OF ALEMTUZUMAB VERSUS RABBIT ANTI-THYMCYTE GLOBULIN AS INDUCTION THERAPY FOR HIGH-RISK KIDNEY TRANSPLANT RECIPIENTS**

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**OBJECTIVES:** Induction therapy is administered at the time of kidney transplantation to prevent acute rejections. The agent of choice depends on the degree of patient risk for acute rejection. In the US, rabbit anti-thymocyte globulin (rATG) is the standard agent administered to high-risk patients. A monoclonal antibody approved for use in chronic lymphocytic leukemia—alemtuzumab—has been shown in lab studies to be equally safe and efficacious (IT). However, due to the high cost of alemtuzumab, the incremental cost-effectiveness ratio (ICER) of alemtuzumab compared to rATG in high-risk patients is unknown. The objective of this study was to estimate the incremental cost-effectiveness ratio (ICER) of alemtuzumab compared to rATG in high-risk patients. **METHODS:** A decision analytic model was constructed to model costs and outcomes specific to the first 12 months post-transplantation, such as for delayed graft function and acute rejection, long-term (30-year) outcomes were estimated with a Markov model with outcomes measured in life years (LYs) and quality-adjusted life years (QALYs). Clinical probabilities were obtained from randomized controlled trials, preference weights from direct patient measures in previously published literature, and costs from previously published cost-effectiveness studies on kidney transplantation. **RESULTS:** In the base case, alemtuzumab was associated with a gain of 1.18 LYs and 1.09 QALYs gained when compared with rATG. The estimated ICER of alemtuzumab compared to rATG was CNY5,368 per QALY. Sensitivity analysis revealed that the ICER was most sensitive to the costs of graft failure. **CONCLUSIONS:** Alemtuzumab was cost-effective across all parameter ranges, with the greatest ICER being CNY21,133. **CONCLUSIONS:** In kidney transplant patients at high risk of acute rejection, our model suggests that alemtuzumab is likely to be cost-effective, yielding an ICER below often-cited thresholds.

### PUK26

**IDENTIFICATION OF REASONS FOR NON-ADHERENCE AND ELICITATION OF LIFE-RELATED QUALITY IMPROVEMENTS IN KIDNEY TRANSPLANT RECIPIENTS**

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**OBJECTIVES:** Adherence to immunosuppressive therapy after kidney transplantation is crucial to avoid graft rejection and optimise long term patient and graft survival. However, patient’s adherence is not always optimal. Our aim was to identify reasons for non-adherence and health-related quality of life (HRQoL) dimensions for adherence to immunosuppression (IT) after kidney transplantation (KT) including patient preference of once daily over twice daily immunosuppressive regimen. **METHODS:** A literature review on adherence to immunosuppressive therapy (IT) and impact of IT on HRQoL through the Embase database was performed. **RESULTS:** The results showed that non-adherence was mostly unintentional among the participants. The reason for non-adherence included forgetfulness, interference with lifestyle, being asleep at the time the medication should be taken, change in routine and respect of side effects. The twice daily regimen was more problematic in relation to adherence. Overall, participants were of the opinion that a once daily IT regimen would help them be more adherent. Also, IT impacts on the HRQoL of the patient in a number of ways including: restricting the patients’ lifestyle, causing anxiety or impairing the patient’s ability to work. Although the patients happily oblige to the necessity of taking IT medication, patients preferred to reduce the burden associated with adhering to IT. **CONCLUSIONS:** This study suggests a strong-valued adherence to IT medication and saw a change in the regimen from twice daily to once daily as one way to improve their adherence to IT. Results also suggested that a once daily regimen could improve patient’s HRQoL.

### PUK27

**UNDERSTANDING MIDs FOR MICTURITION FREQUENCY, A PIVOTAL ENDPOINT FOR STUDIES**

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**OBJECTIVES:** Although pivotal studies of overactive bladder (OAB) medications treat incontinence (CON) symptoms as a primary endpoint, few studies have examined minimal important difference (MID) values for this parameter. This study explored MID values for LF using data from a Phase IIb study in OAB patients with urge predominant incontinence along with estimates for OAB symptoms of urinary urgency (UU), urgency incontinence (UIU), and total incontinence (TI). **METHODS:** The endpoint was defined as the change from baseline to 8 weeks in the number of daily episodes averaged over a diary week for each parameter. Anchor- and distribution-based methods using statistical criteria (e.g. half standard deviation) were used to estimate MID ranges for all diary parameters. Anchors were selected as a +1 change score representing slight improvement in measurement score. The data obtained was compared to anchors and MID was defined as the difference between 5.67 QALYs vs. 5.38 QALYs obtained with BoNTA with 0.28 incremental QALYs. A 10 years horizon and a 3% discount rate were used. Deterministic and probabilistic sensitivity analyses were performed. Results: The sample included 769 OAB patients with (80.4%) and without (19.6%) incontinence. The baseline mean number of micturitions was 11 and the mean % change from baseline representing the MID for MF ranged from 3.1% to 3.4% (16.3-16.4%) and for UIU was 5% to 7% and for 2.4-2.5 (42.7-42.7%), respectively. For total incontinence, the baseline and mean (%) change was 3 and 1.5-1.7 (64.3-76.2%), respectively, with similar values for UIU. Distribution-based values were much smaller than those derived using anchor-based methods. **CONCLUSIONS:** The mean changes representing MID estimates for micturition frequency were comparable to those observed for incontinence but constituted smaller percent changes given the larger number of concepts relative to CON and UIU. **MIDS** were defined for OAB patients have focused mainly on incontinence, these results present useful information for designing studies which routinely include change in micturition frequency as the primary endpoint of interest.

### PUK28

**A SYSTEMATIC REVIEW OF LIFE-RELATED QUALITY OF LIFE ASSESSMENT IN CHILDREN AND ADOLESCENTS WITH CHRONIC KIDNEY DISEASE**

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**OBJECTIVES:** To evaluate health-related quality of life (HRQoL) assessment in children and adolescents with chronic kidney disease (CKD). **METHODS:** A systematic literature review and a narrative synthesis were conducted. MEDLINE and EMBASE were searched from the inception of each database until October 2013. Search terms included kidney disease, children (or adolescents), health-related quality of life, and instruments. The following inclusion criteria were applied to the studies: (1) published in English, (2) in a peer reviewed journal, (3) about children or adolescents with CKD or end-stage renal disease (ESRD), and (4) had one of the following outcomes—development/validatioin of a disease-specific HRQoL instrument OR use of HRQoL as a primary endpoint. A data extraction tool was developed using Microsoft Excel and colleagues was used to evaluate the quality of studies that report HRQoL outcomes. The consensus-based standards for the selection of health measurement instruments (COSMIN) was used to evaluate the methodological quality of studies that report on the development or validation of HRQoL instruments. **RESULTS:** A