

¹Department of NeuroUrology, Royal National Orthopaedic Hospital & University College Hospital, London, UK, ²Stammore, UK, ³Allergan Holdings Ltd., Marlow, UK, ⁴Allergan Holdings Ltd, Marlow, UK, ⁵HealthIQ, London, UK

OBJECTIVES: Anticholinergics drugs (ACHD) are an established first-line pharmacological therapy for overactive bladder (OAB). Despite the fact that many patients cycle through multiple ACHD, there is limited evidence on the relationship between the burden on secondary (hospital) care and these patients whose OAB is inadequately managed with ACHD. The objective of this study was to analyse the variation in health care burden in secondary care of patients who cycle through multiple ACHD. **METHODS:** A retrospective observational study was conducted to examine the relationship between health care burden and number of prior ACHD with each ACHD switch. Data was extracted from the Hospital Episode Statistics (HES) database and 3,059 GP practices for patients with a diagnosis for OAB, or any of the symptoms of OAB (frequency, urgency, incontinence or nocturia) and with at least one prescription for an ACHD between April 2007 and March 2013. Treatment activity and cost burden (including burden associated with comorbid conditions) were analysed following initiation of the second and the third ACHD and compared to the same cohort from the point at which they had received the first ACHD. All costs were calculated by applying national health service (NHS) tariff prices to treatment activity. **RESULTS:** Overall, the number of patients identified was 13,117. Our analysis showed that there were increases of 70%, 40% and 10% in inpatient, outpatient and emergency settings respectively from the initial ACHD prescription to 3+ ACHD. This led to an increase in overall health care costs of 30% from the first to 3+ ACHD or £197 (£642 to £839) per patient over the investigation period. **CONCLUSIONS:** OAB patients who are inadequately managed with ACHD place an increased burden on hospital resources. These findings emphasize the importance of identifying alternative ways to treat these patients to address the cumulative burden they place on health care systems.

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

PUK27

ACCEPT® QUESTIONNAIRE: RELATION BETWEEN ACCEPTANCE AND COMPLIANCE IN LIVER- AND KIDNEY-TRANSPLANTED PATIENTS CONVERTED TO ONCE-DAILY TACROLIMUS

Bourhis Y¹, Chretien S¹, Cantarovich D², Gilet H¹, Bugnard F¹, Arnould B¹
¹Mapi, Lyon, France, ²CHU NANTES, Nantes Cedex 1, France

OBJECTIVES: ACCEPT® is a 32-items self-administered questionnaire recently validated to measure patient acceptance to treatment. Acceptance was defined as the balance between treatment advantages and disadvantages as rated by the patient and may help predict adherence. The objective was to evaluate the relation between early Acceptance and Compliance in liver- and kidney-transplanted patients converted to once-daily tacrolimus (TAC-OD). **METHODS:** 6-month observational, prospective, longitudinal, multicenter study conducted by 23 hepatologists and 56 nephrologists in France. 1106 adult patients with kidney and/or liver transplant, initiating TAC-OD during post-transplant follow-up were included. Acceptance and compliance were assessed 3 and 6 months after TAC-OD initiation using ACCEPT® and Compliance Evaluation Test questionnaires. **RESULTS:** Data from 271 liver-, 824 kidney- and 11 liver+kidney-transplanted patients were analyzed. Mean age was 52.4 (±13.2) years. 61.5% of patients were male. Mean time between graft and TAC-OD initiation was 5.0 (±4.9) years. Mean general acceptance score (range: 0-100) at month 3 was 75.4 (±26.5). At month 6, 25.5% of patients had good treatment compliance, 68.0% minor non-compliance and 6.5% were non-compliant. Higher general acceptance score at month 3 was significantly associated with better compliance at month 6 (good compliance: 85.2±20.7, minor non-compliance: 74.5±26.7, non-compliant: 68.0±29.6, p<0.001). 3-month general acceptance score was particularly low in patients who specified at month 6 having 'omitted to take their treatment this morning' (N=4, mean: 41.7±44.1) or 'ever forgotten to take their treatment because their memory was failing' (N=53, mean: 69.5±29.7). Although not significant, the 17 patients who discontinued TAC-OD before 6 months had lower 3-month mean general acceptance score (64.6±36.5 vs. 75.7±25.9 in patients still treated with TAC-OD). **CONCLUSIONS:** This study highlighted a strong association between early Acceptance and late Compliance to TAC-OD. Further investigations are needed to explore how early detection of low acceptance can help patient management and improve long-term outcomes.

PUK28

PERSISTENCE AND ADHERENCE WITH MIRABEGRON, A NEW BETA-3 RECEPTOR AGONIST, VERSUS ANTIMUSCARINICS IN OVERACTIVE BLADDER: EARLY EXPERIENCE IN CANADA

Wagg A¹, Franks B², Ramos B³, Berner T²

¹University of Alberta, Edmonton, AB, Canada, ²Astellas Scientific and Medical Affairs, Inc., Northbrook, IL, USA, ³Astellas Pharma Canada, Inc., Markham, ON, Canada

OBJECTIVES: To compare persistence and adherence with mirabegron versus antimuscarinic treatment for overactive bladder (OAB). **METHODS:** This was an exploratory analysis of retrospective claims data from the largest Private Drug Plan database in Canada. Patients aged ≥18y who had a first prescription claim for a target medication during a four-month index period in 2013 were identified. A six-month look-back was used to categorize patients as 'treatment-naïve' (no claims for OAB medication) or 'treatment-experienced' (≥1 prior medication) during this time. Time to end of persistence (defined by a maximum gap in therapy of 30 days or switching to another medication) and adherence (calculated by medication possession ratio) were analyzed after six months. Hazard ratios (HR) with 95% confidence intervals (CI) were calculated for mirabegron versus each antimuscarinic, using Cox proportional hazards modeling. **RESULTS:** Data were analyzed for 13,391 patients (mirabegron, n=993). In the treatment-experienced cohort, six-month persistence was highest with mirabegron (51%), followed by solifenacin (39%) (HR 1.383; CI: 1.109–1.726; p=0.004), ranging to 18% with oxybutynin IR (HR 2.488; CI: 1.961–3.157; p<0.001). In the treatment-naïve cohort, persistence was also highest with mirabegron (40%), followed by fesoterodine (24%)

(HR 1.512; CI: 1.333–1.716; p<0.001), ranging to 13% with oxybutynin IR (HR 2.315; CI: 2.093–2.561; p<0.001). Median number of days on therapy with mirabegron was 183 (treatment-experienced) and 129 (treatment-naïve), compared with 67–120 and 34–90 days with antimuscarinics, respectively. Mean adherence overall was 68% with mirabegron vs 39–55% with antimuscarinics (each p<0.05 vs mirabegron). **CONCLUSIONS:** Patients treated with mirabegron had improved persistence and adherence over antimuscarinics. While differences in patient characteristics among the OAB drugs were accounted for within the model, results should be viewed in the light of the likely characteristics of patients started on any new medication to the market; hence this sample may not be reflective of more mature usage.

PUK29

TREATMENT DISCONTINUATION IN PATIENTS WITH URINARY INCONTINENCE SUFFERING FROM GLAUCOMA

Kostev K¹, Rex J¹, Engelhard J¹, Altmann V¹, Ehken B², Rockel T¹, Kalder M³

¹IMS Health, Frankfurt am Main, Germany, ²IMS Health Germany, Munich, Germany, ³University Hospital of Gießen and Marburg, Marburg, Germany

OBJECTIVES: The frequency of side effects in the treatment with anticholinergic drugs are well described in a number of previous studies. However, little is known about the impact of side effects on therapy discontinuation. The aim of the present study was to estimate the frequency of glaucoma in association with urinary incontinence therapy begin and the impact of glaucoma diagnosis on the therapy discontinuation based on real life data. **METHODS:** Data from Disease Analyzer database including 988 general, 95 urologist and 203 gynecologist practices were used. 26,834 patients (17,125 female and 9,709 male) were identified to have received a first-time anticholinergic prescription of UI, namely darifenacin, fesoterodine, oxybutynin, propiverine, solifenacin, tolterodine or trospium. Co-variables studied included demographic data, concomitant diagnoses and potential drug-induced side-effects. Glaucoma (H40) was defined as strict indication for the use of anticholinergic drugs. A Cox proportional hazard regression model was used to estimate the relationship between non-persistence and the diagnosis of glaucoma for up to 36 months. **RESULTS:** The proportion of patients that were diagnosed with glaucoma during the time of treatment was very similar in each of the study substances. 32 - 38 % of patients received a referral to an ophthalmologist and 0.3 - 1.2 % of patients were first time diagnosed with glaucoma. Not surprisingly, there was a highly increased risk for treatment discontinuation in patients having glaucoma (HR: 1.46; p < 0.0001). **CONCLUSIONS:** Overall, the potential side effects including the aggravation of diagnosed glaucoma that were registered in the database were rarer than in clinical trials; most likely they were under-reported due to the nature of the registry. However, there was a significant impact of glaucoma on therapy discontinuation. This finding should be taken into account in clinical practice for the use of anticholinergic drugs in patients suffering from glaucoma.

PUK30

HEALTH-RELATED QUALITY OF LIFE (HRQL) OF ASIAN PATIENTS WITH END-STAGE RENAL DISEASE (ESRD) IN SINGAPORE

Yang P¹, Griva K², Lau T³, Vathsala A³, Lee E³, Ng H², Mooppil N⁴, Newman SP⁵, Chia KS¹, Luo N¹

¹Saw Ssee Hock School of Public Health, National University of Singapore, Singapore,

²Department of Psychology, Faculty of Arts and Social Sciences, National University of Singapore, Singapore, ³Division of Nephrology, University Medicine Cluster, National University Health System, Singapore, ⁴National Kidney Foundation, Singapore, ⁵City University London, London, UK

OBJECTIVES: This study aimed to assess the health-related quality of life (HRQL) of multiethnic Asian end-stage renal disease (ESRD) patients treated with dialysis and to identify factors associated with the HRQL of those patients. The role of dialysis modality was also explored. **METHODS:** Data used in this study were from two cross-sectional surveys of Singaporean ESRD patients on haemodialysis [HD] or peritoneal dialysis [PD]. In both surveys, participants were assessed using the Kidney Disease Quality of Life (KDQOL) instrument and questions assessing socio-demographic characteristics. Clinical data including co-morbidities, albumin level, haemoglobin level, and dialysis-related variables (e. g. dialysis vintage and dialysis adequacy) were retrieved from medical records. The 36-item KDQOL (KDQOL-36) was used to generate three summary scores (physical component summary [PCS], mental component summary [MCS], kidney disease component summary [KDCCS]) and two health utility scores (Short Form 6-Dimension [SF-6D] and EuroQol 5-Dimension [EQ-5D]). Multivariate analysis was performed to examine the association of demographic, social and clinical variables with each of the HRQL scores. **RESULTS:** Five hundred and two patients were included in the study (HD: 236, PD: 266; mean age: 57.1 years; female: 47.6%). The mean (standard deviation [SD]) were PCS 37.9 (9.7), MCS 46.4 (10.8) and KDCCS 57.6 (18.1); the mean (SD) of the health utility were 0.66 (0.12) for SF-6D and 0.60 (0.21) for EQ-5D. In multivariate regression analysis, factors found to be significantly associated with better HRQL included: fewer co-morbidities, higher albumin level, and higher haemoglobin level with PCS and EQ-5D; higher albumin level with SF-6D; longer dialysis vintage with MCS; and Malay ethnicity, PD modality, and longer dialysis vintage with KDCCS. **CONCLUSIONS:** Socio-demographic and clinical factors are both associated with HRQL in ESRD patients on dialysis in Singapore. Dialysis modality has no impact on the health utility of those patients.

PUK31

HEALTH-RELATED QUALITY OF LIFE AND SUBJECTIVE HAPPINESS OF PATIENTS WITH BENIGN PROSTATIC HYPERPLASIA: FIRST RESULTS OF A CROSS-SECTIONAL SURVEY FROM HUNGARY

Rencz F¹, Kovács Á¹, Gulacsi L¹, Majoros A², Nyírády P², Tenke P³, Németh Z³, Nagy GJ⁴, Nagy J⁵, Buzogány I⁶, Bösörövényi-Nagy G⁷, Brodsky V¹

¹Corvinus University of Budapest, Budapest, Hungary, ²Semmelweis University, Budapest, Hungary, ³Jahn Ferenc South-Pest Hospital and Clinic, Budapest, Hungary, ⁴Saint Borbála Hospital of Tatabánya, Tatabánya, Hungary, ⁵Szentgotthárd Clinic, Szentgotthárd, Hungary, ⁶Péterfy Sándor Hospital, Budapest, Hungary, ⁷Bajcsy-Zsilinszky Hospital, Budapest, Hungary