238 The once-daily tacrolimus extended-release formulation provides similar drug exposure in non-CF and CF lung transplant recipients when compared to the conventional twice-daily formulation

I. Etienne1, J-B. Woulard2, P. Marquet3, M. Estenne1, C. Knoop1, C. Monchaud2,
1CHU Erasme, Unité de Transplantation Cardiaque et Pulmonaire, Brussels, Belgium; 2INSERM URM-S850, CHU Limoges, Service de Pharmacologie, Toxicologie et Pharmacoépidémiologie, Limoges, France.

Non-compliance with immunosuppressive drug therapy is a significant risk factor for graft rejection. The aim of the present study was to compare the safety and efficacy of the once-daily tacrolimus (PRO) extended-release formulation (AD) instead of the conventional twice-daily formulation (P) in stable lung transplant (LTx) recipients. Non-CF LTx recipients were converted from PRO to AD and to compare PK data obtained with AD in non-CF and CF LTx recipients.

Method: 238 patients (136 females) were post-LTx and participated with mean (SD) age, FEV1%, BMI and FMMI of 43.3 years (SD 9.5), 76.4% (SD 24.1) and 26.1kg/m2 (0.5) respectively. Amongst CF LTx recipients the mean (SD) age was 36.4 years (SD 10.2), 47.2% (SD 26.8) and 23.3kg/m2 (0.8) respectively. Patients were post-LTx when exposed to PRO for 1.2 years (SD 20.2 months) and to AD for 6.4 years (SD 27.0 months). PK profileswere collected at steady-state on 3 consecutive days. Patients were then switched to AD on a 1:1.1 mg basis and AD PK profiles were collected at steady-state on 3 consecutive days. Tac exposure over 24 hrs was calculated as the area under the concentration-time curve (AUC0-24h) for PRO and as the AUC0-12h x 2 for AD. The AUC was determined by Bayesian graphic and anthropometric data were collected.

Conclusion: The mean METS per day equates to very low activity levels such as kneeling or sitting. Non-CF and CF patients important difference in mean tac exposure between PRO and AD (244±56 vs. 226±76 h·mg/L, p = 0.722). In CF LTx recipients the mean PRO and AD dose was 3.3±1.6 mg·BID and 7.2±3.8 mg·QD; mean tac exposure with PRO was marginally superior to AD (287±60 vs 275±37 h·mg/L, p = 0.019) with this conversion ratio. PRO and AD provided similar mean tac exposures in non-CF and CF LTx recipients. These encouraging results should be confirmed in a larger patient sample.

This work was supported by Astellas Pharma, Belgium.

238 Medication reconciliation in Wales – a problem shared

B. Richards1, M. Lea-Davies1, L. Speight1, D. Lau1, R.I. Ketchell1, J. Duckers1,
1All Wales Adult Cystic Fibrosis Centre (AWACFC), University Hospital Llandough, Penarth, United Kingdom.

Aim: Cystic Fibrosis Trust Standards of Care Guidelines promote the provision of “prescription monitoring and medication review services” within specialist centres [1]. We reviewed the effectiveness of medication reconciliation taking place amongst patients registered at the AWACFC in 2013.

Method: For each patient registered at the AWACFC the most recent medication record was compared to the contemporaneous medication list from the AWACFC medical notes. This allowed discrepancies to be identified between prescribing of 16 key CF medications at the interface of care between the AWACFC and GP.

Results: Of the 226 patients attending the AWACFC 216 patients had prescription records available from the GP. Of these 216 patients (118 male) the mean age, FEV1% and BMI were 22.3 years (SD 9.4), 63.1% (SD 25.1) and 23.3kg/m2 (0.8) respectively. 165 of the 216 (76%) patients were found to have at least one medication reconciliation error on their prescription, including omission, commission, dosing and frequency errors. The most accurately reconciled medication was Cocodan (95%). The highest rate of non-reconciliation with 25% of patients was detected in patients where the medication was not prescribed by the GP, with the highest rate of non-reconciliation with 25% of patients where the medication was not prescribed by the GP.

Conclusion: With increasingly complex and expensive treatment regimes adding to treatment burden and affecting adherence it is clear that medical reconciliation service provision needs to be more thoroughly addressed. Many records were found to have prescribing discrepancies and we need to identify the reasons for these and take steps to remedy them and improve communication between primary and secondary care.