PG12
BAYESIAN HIERARCHICAL MODELING OF RANDOMIZED AND NON-RANDOMIZED STUDIES COMPARING CICLOSPORIN WITH IMMEDIATE- AND PROLONGED-RELEASE TACROLIMUS IN LIVER TRANSPLANT RECIPIENTS

Muždum G1, Pollick R2, Odeyemi IA1, Saunders R1
1Atlassian Pharma EMEA, Cheshunt, UK, 2Ossian Health Economics and Communications GmbH, Basel, Switzerland

OBJECTIVES: Several meta-analyses comparing ciclosporin with immediate-release (IR) tacrolimus have been conducted, but there have insufficient one antibiotic available for evidence synthesis including prolonged-release (PR) tacrolimus. In the present study, a network meta-analysis (NMA) was conducted to compare the efficacy of ciclosporin, IR and PR tacrolimus in liver transplant recipients. METHODS: Systematic literature review of PubMed, EMBASE and the Cochrane Library identified randomized controlled trials and large-scale observational studies (>500 patients) published since January 2000 comparing IR tacrolimus with PR tacrolimus or ciclosporin as induction therapy in liver transplant. A Bayesian random-effects model was used to evaluate likelihood of death, graft loss, and acute rejection (AR) at 12 months. Outcomes were adjusted for recipient gender and age, hepatitis C (HCV) status, hepatocellular carcinoma, mycophenolate mofetil, azathioprine, and steroid use. RESULTS: Head-to-head comparisons showed that PR tacrolimus versus IR tacrolimus (n=2). Relative to ciclosporin, IR and PR tacrolimus were associated with reduced likelihood of death within 12 months of transplant (median odds ratios [OR] of 0.78 and 0.60), respectively. Mortality outcomes were superior with PR versus IR tacrolimus (median OR of 0.70). AR was less common with IR tacrolimus compared with ciclosporin (median OR of 0.69), whereas limited data for PR tacrolimus was evidenced by large credible intervals. There were no significant associations with reduced likelihood of death within 12 months of transplant. Compared with ciclosporin, IR tacrolimus was superior with respect to patient survival. CONCLUSIONS: PR tacrolimus was evidenced by large credible intervals. There were no significant associations with reduced likelihood of death within 12 months of transplant.

PG13
SYSTEMATIC LITERATURE REVIEW, META-ANALYSIS AND INDIRECT TREATMENT COMPARISON OF PROLONGED-RELEASE TACROLIMUS RELATIVE TO CICLOSPORIN AND IMMEDIATE-RELEASE TACROLIMUS AS THE PRIMARY IMMUNOSUPPRESSANT IN LIVER TRANSPLANT RECIPIENTS

Muždum G1, Saunders R2, Odeyemi IA1, Pollick R2
1Atlassian Pharma EMEA, Cheshunt, UK, 2Ossian Health Economics and Communications GmbH, Basel, Switzerland

OBJECTIVES: Several meta-analyses comparing ciclosporin with tacrolimus have been conducted since the 1994 publication of the tacrolimus registration trials, but most captured data from randomized controlled trials (RCTs) predate high-dose DOX. Acknowledgment: Supported by the Ministry of Education, Science and Technological Development, Republic of Serbia, grant No III/012.

CONCLUSIONS: TT is found to be more effective and safer in comparison to DT for eradication of Helicobacter pylori.