966. Risk-Benefit Analysis of Therapy in Multiple Sclerosis

Nawab Qizilbash,[1,2] Ignacio Méndez,[2] Rainel Sánchez de la Rosa.[3] [1]*Oxon Epidemiology Limited, London, United Kingdom;* [2]*Oxon Epidemiology Limited, Madrid, Spain;* [3]*Medical Department, TEVA Pharma SLU, Madrid, Spain.*

Background: Benefit–risk (BR) analysis has been introduced by the European Medicines Agency to evaluate drugs as part of its approval process, but no systematic quantitative BR analysis is available for glatiramer acetate (GA) as a firstline therapy for relapsing-remitting multiple sclerosis.

Objectives: To undertake a systematic BR analysis of GA in relapse-remitting multiple sclerosis and clinical isolated syndrome using controlled studies, according to the EMA guideline.

Methods: We searched PubMed, Embase, the Cochrane Trials Register for eligible articles according to explicit criteria to obtain trials and controlled cohort studies. Fixed and random effects meta-analysis techniques were applied for pooling data. Qualitative and quantitative benefit-risk analyses were performed.

Results: A total of 4,451 patients in 15 studies were included in the meta-analysis. The overall reduction in clinical progression was 40% (RR = 0.60, 95% CI: 0.48–0.75) for GA compared with placebo/untreated and 23% (RR = 0.77, 95% CI: 0.65–0.92) for GA compared with interferons. The rate of patients free from relapse was higher with GA compared with placebo/standard treatment (RR = 1.35, 95% CI: 1.21–1.50) and similar compared with interferons (RR = 1.04, 95% CI: 0.98–1.11). For GA compared with interferons there was a13% reduction in discontinuation due to all causes (RR = 0.87, 95% CI: 0.72–1.04) and a similar proportion of serious adverse events leading to discontinuation (RR = 0.89, 95% CI: 0.56–1.41). Based on these results, for being free from disease progression at 24 months against placebo/untreated, the number needed to benefit was of 22.7 and the risk-benefit ratio was 1.69. Compared with placebo/untreated, the relative net benefit-risk was 9% using a multi-criteria decision analysis.

Conclusions: GA was found to reduce relapses and clinical progression compared with placebo, and clinical progression in comparison with interferons. Serious adverse events were comparable with interferons. Qualitative and quantitative methods demonstrated that the benefits of GA outweigh the risks but the results differ substantially depending on the quantitative risk-benefit model used.

967. Intensive Monitoring of Duloxetine, Results from a Web-Based Intensive Monitoring Study

Linda Harmark,[1,2] Eugene van Puijenbroek,[1] Kees van Grootheest.[1,2] [1]*Netherlands Pharmacovigilance Centre Lareb, s-Hertogenbosch, Netherlands;* [2]*Pharmacotherapy and Pharmaceutical Care, University of Groningen, Netherlands.*

Background: Duloxetine (Cymbalta®) is a serotonin, 5-HT, and norepinephrine, NE, re-uptake inhibitor indicated for the treatment of depression, diabetic peripheral neuropathic pain and general anxiety disorder.

Objectives: The aim of this study is to gain insight in the user- and safety profile of duloxetine in daily practice, reported by patients via a web-based intensive monitoring system during their first 6 months of use.

Methods: First time users of duloxetine were identified through the first dispensation signal in the pharmacy. Patient demographics and information about drug use and ADRs were collected through electronic questionnaires sent 2 and 6 weeks, 3 and 6 months after start of duloxetine. ADRs were quantified and signal detection was performed on a case by case basis.

Results: Of 398 patients registered for the study. Of 69.1% were female. Depression was the main indication. Of 303 patients (76.1%) filled in at least one questionnaire and 78,9% of these reported an ADR. Serious ADRs were reported by four patients. Three new signals were identified, amenorrhoea, shock-like paraesthesias and micturition problems.

Conclusions: Web-based intensive monitoring is an observational prospective cohort study mirroring the use and ADRs of duloxetine in daily practice. This study indicates that duloxetine is a relatively safe drug as used by patients during 6 months in daily practice, but the aforementioned signals need to be evaluated in more detail. Web-based intensive monitoring shows to be a useful and efficient method to get insight in the behavior of new drugs in daily practice.

968. Nested Case–Control Study in Psychiatric In-Patients: AMSP +

Eveline Jaquenoud Sirot,[1] Patrik Stephan,[1] Chin B Eap,[2] Jan-Willem van der Velden,[3] Pierre Baumann.[2] [1]*mediQ, Psychiatrische Dienste Aargau AG, Königsfelden, Brugg, Switzerland;* [2]*Université de Lausanne, DP-CHUV, Lausanne, Switzerland;* [3]*Mesama Consulting, Schinznach Bad, Switzerland.*

Background: From experiences with patients we learned that high plasma level and certain CYP450 genotypes are associated with a higher risk for SADR. However, there exist no studies in psychiatry which confirm this and might justify routine TDM and/or routine pharmacogenetic testing.