costs of aggregate back pain were $14,701,417,650, work-related back pain were $2,643,650,647, and missed workdays back pain were $3,396,355,220. With regard to aggregate back pain, higher proportions of direct costs were incurred for office-based medical provider visits at $3,768,302,826 (mean = $68; 95% C.L. = $61 to $75), inpatient visits at $4,638,655,867 (mean = $10,016; 95% C.L. = $9,463 to $10,570), and outpatient visits at $2,050,207,343 (mean = $274; 95% C.L. = $204 to $345). Lower proportions of direct costs were incurred for prescriptions, home health visits, and emergency room visits. CONCLUSIONS: Direct costs associated with back pain are sizable. As direct costs of occupationally related back pain were substantially lower than total direct costs of $14.7 billion, Workman’s Compensation related back pain were substantially lower than total back pain are sizable. As direct costs of occupationally related back pain were substantially lower than total direct costs of $14.7 billion, Workman’s Compensation related back pain were substantially lower than total back pain are sizable. As direct costs of occupationally related back pain were substantially lower than total direct costs of $14.7 billion, Workman’s Compensation related back pain were substantially lower than total back pain are sizable. As direct costs of occupationally related back pain were substantially lower than total direct costs of $14.7 billion, Workman’s Compensation related back pain were substantially lower than total back pain are sizable. As direct costs of occupationally related back pain were substantially lower than total direct costs of $14.7 billion, Workman’s Compensation related back pain were substantially lower than total back pain are sizable. 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effectiveness, we conducted a retrospective lifetime costutility analysis. METHODS: Effectiveness data were derived from a pivotal placebo-controlled clinical trial, while utility and cost data were retrieved from published information. Our pharmacoeconomic model was similar to that employed in a previous study on lamotrigine (Eur J Clin Pharmacol 1998;53:421), but used UK cost-of-illness data. In the first analysis, aggregated data on effectiveness were used (clinical endpoint = number of patients with 50% or more reduction in seizure frequency) allowing a direct comparison between lamotrigine and topiramate. Our second analysis was based on individual patient data from the topiramate trial (clinical endpoint = individual values of reduction in seizure frequency). Both analyses were intention-to-treat. RESULTS: The analysis based on aggregated data showed that topiramate (200mg/day) implies an incremental lifetime cost of £350,326 and a utility of 90 quality-adjusted life-years (QALYs) for every 100 patients. The same figures for lamotrigine (500mg/day) were £1,324,295 and 58 QALYs, respectively (discounted values, yearly rate = 3%, year of costing = 2001). The cost-utility ratio was £3,893 per QALY gained for adjunctive topiramate as opposed to £22,833 for lamotrigine, both compared to add-on placebo. Sensitivity testing suggested a range of £3,129 to £4,870 and of £14,175 to £45,841 for topiramate and lamotrigine, respectively. Our analysis based on individual data showed that topiramate compared to placebo implies an incremental lifetime cost of £1,024,941 and a utility of 48 QALYs for every 100 patients. The cost utility ratio is £21,353 per QALY gained. CONCLUSIONS: Our results show that, in refractory epilepsy, adjunctive topiramate has a favourable pharmacoeconomic profile. In this analysis, using aggregated clinical information generated more optimistic values of cost effectiveness than using individual patient data.

**PMP9 RETROSPECTIVE EVALUATION OF DYSPORT\textsuperscript{TM} AND BOTOX\textsuperscript{TM} DRUG UTILIZATION IN THE MANAGEMENT OF PATIENTS WITH CERVICAL DYSTONIA OR BLEPHAROSPASM**

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**OBJECTIVE:** To evaluate the clinical utilization of Dysport and BOTOX for cervical dystonia and blepharospasm. Botulinum toxin (BTX) is safe and effective therapy for cervical dystonia and blepharospasm. Two serotype-A toxins, Dysport and BOTOX, are widely prescribed, yet actual clinical utilization is poorly defined or understood. Previous efforts to compare products have been limited by sample size or study designs that mandate drug usage according to protocol. Utilization in actual clinical practice is more appropriate to determine the true effective dose and dose ratios. **METHODS:** Two sites where BTX is prescribed for cervical dystonia and blepharospasm were identified in the UK (Bristol and Hull) as part of a retrospective observational study. Each site culled BTX data from medical records of patients who received Dysport before switching to BOTOX. **RESULTS:** Assessment of 29 patients (14 cervical dystonia, 15 blepharospasm) provided a total of 456 injections for computation of mean dose, which was 839.6 ± 308.5 units (Dysport) versus 162.8 ± 64.9 units (BOTOX) for cervical dystonia; and 109.9 ± 33.9 units (Dysport) versus 23.5 ± 8.0 units (BOTOX) for blepharospasm. The ratios of mean dose ranged from 2:1 (Dysport to BOTOX units) to 9:1 (Dysport to BOTOX units), with over 79% of patients utilizing a ratio > 4:1. When current pricing for Dysport (£164.74/500 units) and BOTOX (£128.93/100 units) is applied, incremental costs of £66.68/patient and £5.90/patient were incurred with Dysport for cervical dystonia and blepharospasm respectively. **CONCLUSION:** Results demonstrate that no one ratio exists between Dysport and BOTOX, consistent with the UK labeling; units of different serotype-A toxins are not interchangeable and comparisons based on simple dosage conversion factors are not applicable. Current pricing suggests incremental cost savings with BOTOX, other outcomes, including adverse events, also should be considered to better understand the overall costs and consequences of treatment.

**PMP10 ECONOMIC IMPACT OF GLATIRAMER ACETATE IN MULTIPLE SCLEROSIS**

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**OBJECTIVE:** To examine the impact of glatiramer acetate (GA) versus beta interferons 1a (1A) and 1b (1B) on relapse rates as well as utilization and costs among patients with multiple sclerosis (MS) in a managed care setting. **METHODS:** Data were obtained from a national retrospective database of patient-linked medical and pharmacy claims from January 1996 to June 2001. Patients were followed from the first prescription for immunomodulatory therapy until plan disenrollment or end of study timeframe. The incidence of all relapses (defined as hospitalization for MS or ambulatory visit followed by use of systemic corticosteroids) as well as utilization and costs of MS-related care were examined for each group. Data were adjusted for variable follow-up using survival techniques; the risk of relapse was evaluated using a Cox proportional hazards model. **RESULTS:** A total of 8,457 patients receiving immunomodulatory therapy were included in the study cohort (1,674, 5,031, and 1,752 for GA, 1A, and 1B respectively); follow-up averaged 17.3 months. Three-quarters of patients were female; the mean age was 42.2 years. The risk of relapse at one year post-therapy initiation was significantly increased for the beta interferons relative to GA (hazard