OBJECTIVES: Triptan medication use is contraindicated in adults with migraine who have uncontrolled hypertension or cardiovascular disease (CVD) or risk factors (i.e., hypertension, diabetes, hyperlipidemia, and obesity). The objective of this study is to compare Triptan use among Migraineurs with and without cardiovascular disease (CVD) or CVD risk factors such as those with diabetes, hypertension, hyperlipidemia, and obesity. METHODS: This was a retrospective cross-sectional study using data from 2009 and 2011 Medical Expenditure Panel Survey (MEPS). The study sample consisted of adults with migraine aged 22–64 years and alive during the calendar years (N = 1,142). Chi-square tests were used to compare rates of Triptan use among adults with and without CVD/CVD risk factors. Multiple logistic regressions were used to compare the likelihood of Triptan use among Migraineurs with and without CVD/CVD risk factors. All analyses accounted for the complex survey design of the MEPS. RESULTS: Among adult Migraineurs, 36.3% with CVD/CVD risk factors and 34.8% without CVD reported Triptan medication use. After controlling for gender, age, race/ethnicity, marital status, education, employment, income level, insurance and medication coverage, perceived physical and mental health, current smoking and exercise, adults with CVD/CVD risk were less likely to use Triptans compared to adults without CVD/CVD risk. (Adjusted Odds Ratio: 0.59, 95% Confidence Interval [0.43-0.82]). CONCLUSIONS: Although adults with CVD/CVD risk were less likely to use Triptans, the rate of use compared to adults without CVD/CVD risk, nearly 26% of Migraineurs with CVD/CVD risk reported Triptan use. The study findings suggest that medication use among adults with CVD/CVD risk is not consistent with recommended clinical guidelines.

NEUROLOGICAL DISORDERS – Cost Studies

PND10 BUDGET IMPACT OF ADDING DELAYED-RELEASE DIMETHYL FUMARATE TO THE FORMULARY FOR THE TREATMENT OF RELAPSING FORMS OF MULTIPLE SCLEROSIS

Matsuoka Y1, Fay M2, Iyer R2, Livingston T3
1RTI Health Solutions, Research Triangle Park, NC, USA; 2Biogen Idec, Weston, MA, USA; 3Biogen Idec, Cambridge, MA, USA

OBJECTIVES: To estimate the budget impact of adding delayed-release dimethyl fumarate, a new oral drug indicated for the treatment of relapsing forms of multiple sclerosis, to the formulary of a managed care organization (MCO) with 1,000,000 covered lives over 3 years (or $0.016 to $0.032 per member per month) in a hypothetical cohort of 1000 RRMS patients treated with first-line disease-modifying drugs (DMDs). The modelled cohort evaluated the consequences of treatment with subcutaneous (SC) interferon beta-1a versus intramuscular (IM) interferon beta-1a, as this was the only comparison whose data quality was assessed. Methods: This was a 2-year data from the Cochrane Review network meta-analysis. The analysis was performed from a US payer perspective. The cost of a relapse was sourced from Fitch et al., 2015, and adjusted to 2012 US dollars. Net annual cost of treatment was based on wholesale acquisition cost. Given the model’s short time horizon, disability-related costs were not included as these tend to be an important economic driver only over the long-term progression of the disease. In order to test how variability in the model’s inputs might impact the analysis’ results, two-way sensitivity analyses were performed based on the reported 95% of relapse credible intervals for SC interferon beta-1a and IM interferon beta-1a. RESULTS: In a hypothetical cohort of 1000 RRMS patients, treatment with SC interferon beta-1a in comparison to IM interferon beta-1a in terms of result in the avoidance of 173 (€230 and $300) to 399 relapses versus IM interferon beta-1a over 2 years. Assuming a direct cost of relapse of $5141, this represents a savings of $890,123 (sensitivity analysis range – $102,138 to $5140,954) versus IM interferon beta-1a. CONCLUSIONS: Subcutaneous interferon beta-1a is likely to result in fewer relapses and lower direct costs of relapse versus IM interferon beta-1a over a 2-year period treatment.

PND13 POTENTIAL BUDGET IMPACT OF INTEGRATING TALIGLUCLARE ALFA THERAPY FOR GAUCHER DISEASE IN THE UNITED STATES

Perez N1, Meletiche D.M.2, Guo S3, Andel V4, Sandor S5
1Evidera, Lexington, MA, USA; 2Piramal, Boston, MA, USA

OBJECTIVES: Gaucher disease (GD), a lysosomal storage disorder caused by mutations in the gene encoding the enzyme glucocerebrosidase, requires lifelong treatment with enzyme replacement therapy (ERT). Currently available ERTs include imiglucerase, velaglucerase alfa, and taliglucerase alfa. Taliglucerase alfa is the first plant-cell-expressed beta-glucocerebrosidase ERT approved for adults with type 1 (GD1) or type 2 (GD2) GD. The purpose of this study was to model the potential budget impact of taliglucerase alfa therapy for GD in the United States. METHODS: A hypothetical budget impact model analysis was performed, based on total estimated number of GD patients, treatment costs, and estimated treatment distribution of each ERT. Results: Costs in USD ($) per 200-unit vial were based on wholesale acquisition costs on ReadyPrice and Medi-Span databases. Annual costs were calculated using number of vials required. Actual cost savings may vary with factors beyond drug acquisition costs, including drug distribution and re-imbursement programs. No or small changes in performance may not reflect actual costs paid. Results: The estimated number of GD patients treated with ERT in the United States was 3,000. Drug costs for 200 units of ERT were: taliglucerase alfa-$595, velaglucerase alfa-$675, and imiglucerase-$793. Annual costs for 2 patients were estimated at $326,440, $372,600, and $437,736 for taliglucerase alfa, velaglucerase alfa, and imiglucerase, respectively. Switching 50 patients to taliglucerase alfa, assuming same market share as national average, could save up to $48,247 annually. The system could save $100,000/patient annually if patients were switched to taliglucerase alfa. A 20% increase in the number of patients receiving taliglucerase alfa could translate to an overall savings of $46 million annually. Conclusions: Taliglucerase alfa has the potential to provide a cost-saving alternative to other ERTs. This study was sponsored by Pfizer. Editorial support was provided by Peloton Advantage, LLC with funding from Pfizer.

PND14 SOUVENAI® FOR THE DIETARY MANAGEMENT OF MILD ALZHEIMER’S DISEASE: 5-YEAR BUDGET IMPACT ANALYSIS (BIA) FROM THE BRAZILIAN PUBLIC PAYER PERSPECTIVE (PPP)

Borges L1, Feijo LF1, Clark OA2, Souza TT3, Sturon C4, Gumbs F5, Wallace M3
1Evânicas, Campinas, Brazil; 2Donone Specialized Nutrition, São Paulo, Brazil; 3Nutrics, Amsterdam, The Netherlands

OBJECTIVES: Souvenai® is a medical food - an enriched nutritional formula - that contains specific nutrients reported to be deficient in patients with Alzheimer’s Disease (AD) and that are important in cognitive function, synapse formation and function. Clinical studies demonstrate that dietary management with Souvenai® for 12 to 24 weeks results in a significant improvement in memory in patients with early AD. This study aims to estimate the budget impact of Souvenai® for the dietary management of MILD AD using a 5-year horizon (2015–2019) from the perspective of SUS payer. The most relevant related incidence of AD approach was used. Population size, according to different age categories, was derived from Brazilian statistics (IBGE) and combined to estimate the number of patients in each age stratum. Average cost of AD was derived from a 7-state Markov model developed to estimate the effect of Souvenai® for mild AD versus no dietary management (NDM) of mild AD and combined with demographic data in each age stratum. Only direct costs, obtained from a public hospital in Brazil, were considered. The budget impact for inclusion of Souvenai® in the Brazilian NDM will be computed and the 5-year budget impact estimated for SUS. RESULTS: Considering a market penetration of 1%, 13%, 15%, 17% and 20% each year, the estimated number of patients under Souvenai® treatment in 2011 is 11,022, 15,723, 18,969, 22,894 and 27,816, respectively, for years 1-5. Compared to NDM, the inclusion of Souvenai® in the protocol of mild