NEUROLOGICAL DISORDERS – Clinical Outcomes Studies

PND1 MIXED TREATMENT COMPARISON OF ADVERSE EVENTS FOR BG-12, GLATIAMTRER, AND TERIFLUNOMIDE FOR THE TREATMENT OF RELAPSING FORMS OF MULTIPLE SCLEROSIS

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OBJECTIVES: Clinical trials of two new oral treatments (Teriflumone and BG-12) for relapsing-remitting multiple sclerosis (RRMS) have been recently published. To evaluate this similarity between these drugs and glatiramter, in a comparative treatment of adverse events (AEs) in placebo-controlled randomized clinical trials of BG-12 240 mg BID and TID, Glatiramter 20 mg SID, and Teriflumone 7mg and 14 mg SID in RRMS. METHODS: Articles were selected and reviewed in accordance with the guidelines. Preliminary phase III clinical trials were eligible for inclusion. Data collected were the total number of patients experiencing at least one AE. The odds ratio (OR) of AEs, Credible Interval (CrI), and confidence OR > 1 for all drug pairs were estimated using a Bayesian random effects model. RESULTS: The initial search identified 225 articles for epidemiology and 144 articles for economic studies on adverse events in RRMS. The average number of patients was 6,6% to 56%. Two studies focused on one year incidence rates of insomnia; one study analyzed patients experiencing at least one AE. The odds ratio (OR) of AEs, Credible Interval (CrI), and confidence OR > 1 for all drug pairs were estimated using a Bayesian random effects model. RESULTS: The initial search identified 225 articles for epidemiology and 144 articles for economic studies on adverse events in RRMS. The average number of patients was 6,6% to 56%. Two studies focused on one year incidence rates of insomnia; one study analyzed patients experiencing at least one AE. The odds ratio (OR) of AEs, Credible Interval (CrI), and confidence OR > 1 for all drug pairs were estimated using a Bayesian random effects model.

PND2 EPIDEMIOLOGY AND ECONOMIC STUDIES ON PATIENTS DIAGNOSED WITH INSOMNIA: A REVIEW OF THE LITERATURE

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OBJECTIVES: To conduct a systematic review of literature in peer-reviewed journals on epidemiology and economic studies on patients diagnosed with insomnia. METHODS: The initial search strategy was developed in the PubMed/MEDLINE database and was then translated for the Cochrane and Embase database searches. Search strings for epidemiology and economics studies for insomnia were constructed using varied approaches that included the use of MeSH terms, as well as keywords that would afford the best retrieval. Additional parameters were placed on the final search strategy to limit the retrieval to articles written in English, involving human subjects and published between 2000 and 2010. RESULTS: The initial search identified 225 articles for epidemiology and 144 articles for economic studies on insomnia in PubMed/MEDLINE databases. After removing duplicates and non-relevant articles, 40 articles for epidemiology and 13 for economic studies were included in the study. Twenty-three studies were focused on the prevalence of insomnia and the estimates among all of the studies ranged from 6.6% to 56%. Two studies focused on one year incidence rates of insomnia in Canada and the other in the UK. There were 4 studies each on burden of illness and cost effectiveness and 5 studies on retrospective claims analysis. The average annual direct and indirect per-person cost were $23,411 for individuals with insomnia and $1,431 for individuals presenting with symptoms, and $421 for good sleepers. CONCLUSIONS: There was a significant variation in the prevalence rates of insomnia across different studies and in different countries. Insomnia severity in significant direct and indirect costs and indirect costs in comparison to patients who were not diagnosed with insomnia.

NEUROLOGICAL DISORDERS – Cost Studies

PND3 NATALIZUMAB FOR 2ND LINE TREATMENT IN RELAPSING-REMITTING MULTIPLE SCLEROSIS PATIENTS: 5-YEAR BUDGET IMPACT ANALYSIS (BIA) FROM THE BRAZILIAN PUBLIC PAYERS PERSPECTIVE

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OBJECTIVES: Multiple sclerosis (MS) is a neurodegenerative disease associated with long-term disability and economic impact. With the addition of new agents for the MS treatment armamentarium, the cost-effectiveness of newly developed agents needs to be evaluated. The estimation of the direct and indirect costs and future costs of new therapies in terms of cost, given health care resource constraints in Brazil. Natalizumab is an effective therapeutic option for RRMS patients. Compared to other drugs, it shows better efficacy in terms of disease progression and relapse rates. Although natalizumab is indicated for 2nd line, the Ministry of Health public guidelines recommend natalizumab only in 3rd line treatment for MS. Therefore, a BIA has been created to analyze the impact of introducing natalizumab in 2nd line treatment for MS, and the impact of introducing natalizumab in 8 Brazilian MS treatment lines. Costs due to MS treatment were calculated based on the resource utilization related to inpatient stays, outpatient visits, laboratory and imaging tests, disease modifying Therapies (DMTs), and other associated costs. RESULTS: Conclusions: 1. Natalizumab is cost-effective compared to the current armamentarium. 2. The introduction of natalizumab is recommended in the 2nd line scenario for MS treatment. 3. The introduction of natalizumab in the 2nd line reduces the current cost by 27.7% (increment of 3.9% of the current budget) for MS treatment.