comparison to evaluate the efficacy and safety, with the study of Jiao and cols., an hypothesis that PBA symptoms are associated with added healthcare utilization and costs. A study response was associated with added healthcare utilization and costs.

**PND36**

**THE COST-EFFECTIVENESS OF LISDEXAMETAMINE DIMELEYLATE FOR THE TREATMENT OF BINGE EATING DISORDER**

Agh T1, Pawaskar M1, Ziko 2, Nagy B2, Lachaine J1

1Syneos Research Institute, Budapest, Hungary. 2Shire Development LLC,wayne, PA, USA

OBJECTIVES: Lisdexametamine dimeleylate (LDX) demonstrated efficacy in terms of reduced binge eating days per week in adults (18-55 years old) with binge eating disorder (BED). This study examined the cost-effectiveness of LDX compared to placebo for the treatment of adult BED patients in the United States (U.S.).

**METHODS:** A decision-analytic Markov cohort model comparing LDX to placebo was developed using 3 cycles and a 52-week time horizon. Based on the 5th Edition of the Diagnostic and Statistical Manual of Mental Disorders criteria of BED, the model comprised the following health states: non-symptomatic BED, sub-threshold BED, mild BED, moderate BED and severe BED.

**RESULTS:** The incremental cost-effectiveness of LDX compared to placebo was $50,092 per QALY (95% CI: $43,052-$58,132). LDX was considered cost-effective at the commonly used willingness-to-pay thresholds in the United States (U.S.).

**CONCLUSIONS:** Lisdexamfetamine dimesylate (LDX) demonstrated efficacy in terms of reduced binge eating days per week in adults (18-55 years old) with binge eating disorder (BED). This study examined the cost-effectiveness of LDX compared to placebo for the treatment of adult BED patients in the United States (U.S.).

**PND37**

**THE IMPACT OF NEUTRALIZING ANTIBODY TESTING ON THE COST-EFFECTIVENESS OF INJECTABLE DISEASE MODIFYING TREATMENTS FOR RELAPSING REMITTING MULTIPLE SCLEROSIS**

Andreykov M1, Plich A1, Proft M1, Heemstra L1, Van Engen A2

1Teva Pharmaceuticals Europe B.V., Amsterdam, The Netherlands. 2Quantiles Consulting, Hoofddorp, The Netherlands.

**OBJECTIVES:** To evaluate the cost-effectiveness of glatiramer acetate (COPAXONE®) for relapsing-remitting multiple sclerosis (RRMS) compared to interferons-β (IFNs) in scenarios with and without routine testing for the presence of neutralizing antibodies (NABs). A decision-analytic Markov model was used to compare the treatment effect of glatiramer acetate and interferons-β (IFNs).

**METHODS:** The impact of NAB testing was evaluated using a Markov model previously developed for the Netherlands. The model followed patients over 50 years through 2 health states: Expanded Disability Status Scale (EDSS) 0-9 for patients with RRMS and secondary progressive multiple sclerosis, respectively, and death (EDSS 10). Baseline demographics, transition probabilities, treatment-specific relative survival benefits, and utility values were obtained from published literature. Health resource use was based on the products’ Summary of Product Characteristics and treatment guidelines. 2014 unit costs were based on national tariffs and published data from the Netherlands. The analysis was conducted from the societal perspective. In the scenario with routine NAB testing total treatment costs of glatiramer acetate were lower versus most IFNs. It also resulted in higher number of quality-adjusted life-years compared to all IFNs as some IFN patients received ineffective treatment. In the scenario with routine NAB testing total treatment costs of all IFNs were higher than in the other scenario and higher than glatiramer acetate due to switching to more expensive treatments than first-line NAB-free drugs. In both scenarios glatiramer acetate was dominant against most IFNs.

**CONCLUSIONS:** In both scenarios where NAB testing is routine practice or not, glatiramer acetate is less costly and more effective versus interferon-β1a 44mcg, 30mcg, and 22mcg for RRMS.

**PND38**

**TRACKING HEALTHCARE UTILIZATION (COST) IN PSEUDOBULBAR AFFECT PATIENTS WITH MULTIPLE SCLEROSIS (MS): DEXTROMETHORPHAN/HYOSCYAMINE HYDROCHLORIDE (NUDEXTA)**

Palmgren M1, Cybanski A1, Yonan C2, Potente L2

1UOlovision, Marietta, GA, USA. 2AC Analytical Solutions, Barrington, IL, USA. 3Avanir Pharmaceuticals, Inc., Aliso Viejo, CA, USA.

**OBJECTIVES:** Pseudobulbar affect (PBA) is an undiagnosed condition characterized by sudden, involuntary episodes of crying and/or laughing in patients with traumatic brain injury or certain neurologic diseases, including multiple sclerosis, amyotrophic lateral sclerosis, stroke, Alzheimer’s disease, and others. Studies suggest that PBA symptoms are associated with added healthcare utilization and costs. NuDextra (dextromethorphan/hyoscyamine) is the only FDA andEMA approved PBA treatment for the treatment of PBA symptoms in patients with early Parkinson disease (measured by UPDRS) in monotherapy.

**CONCLUSIONS:** Findings of this study indicate that levodopa provides the major effectiveness and the lower cost compared to pramipexole, rasagiline and selegiline treatments. With a time horizon of 5 years, levodopa was 5.04 life years gained and cost $306,750.52, the cost of selegiline was $247,094.21 with 4.1 life years gained, pramipexol had a cost of $247,420.46 with 4.1 life years gained and finally rasagiline $254,006.56 with 3.17 life years gained, all values of ICER were less than one GDP per capital. This results showed that levodopa was the dominant alternative. The sensitivity analysis also confirm the results.

**PND39**

**HEALTH CARE RESOURCE UTILIZATION BEFORE AND AFTER NATAZUMAB INITIATION AMONG MULTIPLE SCLEROSIS PATIENTS IN GERMANY**

Watson C1, Prosser C2, Braun S3, Landsman-Blumberg P4, Naoshy S1

1Biogen Idec, Cambridge, MA, USA. 2Xenda GmbH, Hannover, Germany. 3Xenda LLC, Palm Beach, USA.

**OBJECTIVES:** To evaluate multiple sclerosis (MS)-related health care resource utilization costs prior to and after initiating natalizumab in Germany. All costs were based on national tariffs and published data from Germany. A retrospective claims database analysis was conducted using the Health Risk Institute research database to identify MS patients initiating natalizumab (index date) between 1/1/2009 and 12/31/2012. Patients had 24 months of continuous enrollment (12 months before [pre-period] and 12 months after [post-period] the index date) and at least one natalizumab prescription in the 4th quarter after the index date. Furthermore, patients with and without other disease-modifying treatment (DMT) during the pre-period were examined. Patient characteristics, MS-related inpatient stays, and corticosteroid use compared in both periods using paired statistical tests, where appropriate. The study included 193 patients, mean age 37.1 years (standard deviation 10.2), 64.8% female. The majority (75.1%) used a DMT during the pre-period. After initiating natalizumab, the mean corticosteroid use compared to the pre-period in patients without pre-period DMTs, there was a significant reduction in the percentage of patients with MS-related inpatient stays (49.7% versus 14.0%, P<0.001), MS-related inpatient costs (mean $3,759 versus $815, P<0.001), and length of stay (mean 7.0 days versus 2.7, P<0.001) compared to the pre-period. In patients without pre-period DMTs, there was a significant reduction in the percentage of patients with MS-related inpatient stays (77.3% P<0.001) and costs (+3502.0, P<0.001) and patients with DMTs in the pre-period. In patients with DMTs in the pre-period (–78.6%, P<0.001) and patients with DMTs in the pre-period (–78.6%, P<0.001) and patients with DMTs in the pre-period (–78.6%, P<0.001) and patients with DMTs in the pre-period (–78.6%, P<0.001).