CONCLUSIONS: Among patients treated for MDD, brexpiprazole use resulted in a lower trend in hospitalizations and approximate savings of \$400 in total medical cost.

SPONSORSHIP: Otsuka Pharmaceutical Development & Commercialization and Lundbeck.

F12 Budget Impact Analysis of Long-Acting Injectable Aripiprazole Once-Monthly 400 mg in Bipolar I Disorder

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BACKGROUND: Long-acting injectable (LAI) aripiprazole oncemonthly 400 mg/300 mg (AOM 400), an extended release injectable suspension of aripiprazole, is under clinical investigation for the maintenance treatment of bipolar I disorder (BP-I).

OBJECTIVE: This analysis evaluated the budget impact of introducing AOM 400 as a maintenance treatment for BP-I, using LAI risperidone, paliperidone palmitate, oral cariprazine, oral asenapine, and best supportive care (BSC) as comparator treatments.

METHODS: A budget impact model was developed from a U.S. payer perspective, using treatment-related, hospitalization, and adverse event (AE) cost estimates for a hypothetical 1,000,000-member health plan. The analysis examined three steps: (1) estimation of the number of patients eligible to receive maintenance treatment, (2) prediction of the proportion of eligible patients treated with the comparator treatments for each year of a 5-year time horizon, and (3) estimation of the costs associated with drug acquisition, hospitalization, and AEs for each treatment.

RESULTS: Assuming a prevalence rate of 0.6%, a cohort of 1,000,000 insured health plan members represents a population of 6,000 patients eligible for BP-I maintenance treatment. Market share for AOM 400 was predicted to increase from 0.6% in year 1 (current scenario) to 1.3% in year 5 (predicted scenario). Increased use of paliperidone palmitate and oral asenapine were also projected (from 2.1% to 4.1% and from 1.2% to 2.6%, respectively, in year 5), with a corresponding decrease in oral cariprazine and BSC. Treatment-related costs had the greatest impact on total budget increases, followed by AE management costs. Conversely, hospitalization costs had the greatest cost-saving impact. For the hypothetical cohort of 1,000,000 insured health plan members, per member per month (PMPM) incremental cost would range from \$0.06 PMPM in year 1 increasing to \$0.26 PMPM in year 5.

CONCLUSIONS: The model demonstrated that utilizing AOM 400 as a maintenance treatment for BP-I would result in a modest impact on a health plan's budget over a 5-year time horizon.

SPONSORSHIP: Otsuka Pharmaceutical Development & Commercialization and Lundbeck.

Cost-Effectiveness Analysis of Long-Acting Injectable Aripiprazole Once-Monthly 400 mg in Bipolar I Disorder

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BACKGROUND: With the approval of new long-acting injectable (LAI) formulations in the maintenance treatment of bipolar I disorder (BP-I), cost-effectiveness is a concern for health plan decision-makers.

OBJECTIVE: This analysis evaluated the cost-effectiveness of aripiprazole once-monthly 400 mg/300 mg (AOM 400) in the maintenance treatment of BP-I versus the comparator treatments LAI risperidone, paliperidone palmitate, oral cariprazine, oral asenapine, and best supportive care (BSC).

METHODS: A Markov state transition model with yearly cycle lengths up to 74 years (patient's lifetime) was utilized based on evaluation of published economic models in BP-I, recommendations in a systematic literature review on U.S. economic models, and assessment of the available data for AOM 400. The target population included U.S. patients diagnosed with BP-I per the DSM-5 criteria, confirmed by the Mini International Neuropsychiatric Interview, and who maintained stability on AOM 400 for at least 8 weeks. The model considered all costs and outcomes from the U.S. healthcare payer perspective. Key outputs included total costs, quality-adjusted life years (QALYs), incremental costs and QALYs, and incremental cost-effectiveness ratios (ICERs). Future costs and health effects were discounted at a rate of 3%. Both probabilistic and deterministic sensitivity analyses were performed to access the robustness of the results to parameter uncertainty.

RESULTS: The cost per QALY gained with AOM 400 versus comparators ranged from \$2,007 versus oral asenapine to being a dominant strategy (i.e., lower costs and better outcomes) versus oral cariprazine, LAI risperidone, paliperidone palmitate, and BSC. Patients treated with AOM 400 were estimated to have fewer hospitalizations and mood episodes per patient (5.37) than comparators (range 6.33 for oral treatments to 6.54 for LAI risperidone, 7.64 for paliperidone palmitate, and 8.93 for BSC) for a lifetime horizon. The sensitivity analyses demonstrated that the results were robust to parameter uncertainty.

CONCLUSIONS: These results showed that AOM 400 may be a cost-effective alternative in the treatment of BP-I for U.S. payers when compared to other treatments.

SPONSORSHIP: Otsuka Pharmaceutical Development & Commercialization and Lundbeck.

Treatment Patterns and Healthcare Resource Use Among Patients Admitted with a Diagnosis of Major Depressive Disorder Who Are at Imminent Risk for Suicide

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BACKGROUND: Major depressive disorder (MDD) is associated with substantial economic burden, and patients hospitalized because of MDD have up to a 35% lifetime risk of committing suicide.

OBJECTIVE: The objectives of this analysis were to evaluate and compare healthcare resource use, admission and readmission measures among MDD patients with imminent risk for suicide receiving ECT vs. no ECT during their initial hospitalization.

METHODS: Using the Premier Perspective Database, patients admitted between 1/1/2010 and 9/30/2015 with a diagnosis of MDD and Suicidal Ideation or Suicidal Attempt were included in the analysis. The first hospitalization was defined as the index hospitalization. Two cohorts of patients were identified based on receipt of ECT during their index hospitalization. Demographics, clinical characteristics, medication usage and healthcare resource utilization were compared between the two cohorts. Hospital readmission rates during the 6-months post-index hospitalization were also compared between the cohorts. We hypothesized patients receiving ECT during their index hospitalization were refractory to anti-depressant treatments, were clinically more severe requiring excessive healthcare utilizations compared to those that did not receive ECT during admission.