4% 78 USD for pregabalin and gabapentin per patient respectively. Total costs per treatment were 478.15 and 514.73 USD for pregabalin and gabapentin treatments respectively. The cost-effectiveness of lamotrigine was represented by a cost-saving parameter of 36.85 USD per patient. 

CONCLUSIONS: Pregabalin is a cost-saving option compared to gabapentin, representing a treatment that diminishes the health care system resource utilization while shortening patient’s length of treatment and reducing the burden related to other concomitant medications used.

PND17 ECONOMIC VALUE OF SCREENING FOR EARLY PARKINSON’S DISEASE Johnson SL, Siderowf AD

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OBJECTIVES: To model the value of screening for early Parkinson’s Disease (PD). A model to evaluate lifetime economic value from slowing progression over the course of PD was adapted to assess sequential olfactory testing and dopamine transporter (DAT) imaging for screening pre-motor disease in different patient groups. We identified cost-effective strategies to parameterize the model. We assessed screening for patients aged 55 with varying risk: a general population; persons with a relative with PD; persons with LRK2+ genotype; and persons with REM sleep disorder. PD prevalence per 100,000 at screening was 5, 20, 100 and 200 for these groups. Olfactory test and DAT costs were $15 and $2500. We assumed that disease modifying (DM) therapy was available that slowed disease progression by 20% at a cost of $35,000. Economic value was measured in terms of net monetary benefit (NMB), valuing quality-adjusted life-years at $50,000. RESULTS: Of those who took the olfactory test, 13.4% yielded positive results and 96.6% took the DAT. The sensitivity and specificity of screening were 64% and 99%. NMB for the four groups was -$211, $217, $2,495, and $5,344, indicating results and also took the DAT. The sensitivity and specificity of screening were 64% and 99%. NMB for the four groups was -$211, $217, $2,495, and $5,344, indicating negatively correlated with costs of false positives or false negatives, screening cost, age at preclinical onset, age at unscreened diagnosis, Hoehn and Yahr stage at which the unscreened diagnosis is made, and cost of DM therapy. CONCLUSIONS: Under certain scenarios, particularly in high risk groups, screening for early PD may be a cost-effective strategy.

PND18 COST- EFFECTIVENESS OF FINGOLIMOD ON PATIENTS WITH MULTIPLE SCLEROSIS AT THE PUBLIC MEXICAN HEALTH CARE SYSTEM Soria-Cedillo IF1, Baca-Muro V1, García-Conde L2, Lemus-Carmona E2

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OBJECTIVES: To perform a cost-effectiveness analysis of Fingolimod 0.5mg for Relapsing-Remitting Multiple Sclerosis versus first line treatment option available in the Public Health Care System in Mexico. METHODS: A Markov model was designed to analyze the cost-effectiveness of fingolimod vs Glatiramer Acetate and Interferon-ß (IFNß). The model identifies 5 health-states based on the Expanded Disability Status Scale. Transition probabilities were obtained from clinical trials and applied to the model to identify cost-effectiveness results. ENDPOINTS: The endpoint of interest was the economic value of treatment obtained to observe the economic value of treatment, expressed as the incremental cost-effectiveness ratio (ICER) for each health state. RESULTS: The model demonstrated that fingolimod is cost-effective compared to other treatments. The incremental cost-effectiveness ratio was $24,500 per quality-adjusted life-year (QALY). The cost-effectiveness ratio was $21,700 per QALY compared to interferon-ß. CONCLUSIONS: Fingolimod is a cost-effective treatment for patients with relapsing-remitting multiple sclerosis.

PND19 COST-EFFECTIVENESS OF LACOSAMIDE COMPARED TO LAMOTRIGINE AND TOPIRAMATE AS ADJUVANT TREATMENT IN PATIENTS WHIT UNCONTROLLED PARTIAL-ONSET SEIZURES IN COLOMBIA Mayor LC1, Burbano-Levy X2, Gonzáles W3

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OBJECTIVES: Patients with refractory seizures have higher morbidity and mortality rates, and poorer quality of life scores, than those with controlled seizures. To select an adequate therapy aimed to control seizures, decision must be based not only on clinical criteria but also in cost-effectiveness evidence. The objective of this study is to analyze the cost-effectiveness of lacosamide 200 & 400 mg/d compared to lamotrigine 300 mg/d and topiramate 200 mg/d as adjunctive therapy for patients with uncontrolled partial-onset seizures in Colombia from the health system perspective. METHODS: An Excel-based, tree-decision model was developed to assess the cost-effectiveness of the compared therapies. Treatment efficacy was measured using the proportion of individual with a 50% or greater reduction in seizure frequency from baseline to maintenance period. Other model parameters and adverse events rates were extracted from randomized clinical trials identified through a systematic literature review. Placebo adjustment was performed and horizon was established as the titration period plus maintenance of 12 weeks. Direct costs associated with interactions were added to treatment costs. CONCLUSIONS: Lacosamide was cost-effective compared to lamotrigine and topiramate in patients with uncontrolled partial-onset seizures in Colombia.

PND20 COST EFFECTIVENESS OF RASAGILINE AND PRAMIPEXOL IN EARLY PARKINSON’S DISEASE IN THE MEXICAN SETTING Pizarro M1, Rizzoli A2, Salmeron G1, Gonzalez N1, SotoH2

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OBJECTIVES: To compare the long-term cost effectiveness of rasagiline and pramipexole over a 5 year period and to identify the best cost-effective treatments compared to lamotrigine-200mg and topiramate-200mg in patients without controlled partial-onset seizures in Colombia.

RESULTS: Rasagiline was the dominant strategy. Evidence from the model suggests that in comparison with pramipexole, early use of rasagiline is associated with a health gain reflected in prolonged time to initiate levodopa by 23.57% through a gain of 0.18 and 0.20 in QALY per patient, respectively. Drug and adverse events rates were extracted from randomized clinical trials identified through a systematic literature review. Placebo adjustment was performed and horizon was established as the titration period plus maintenance of 12 weeks. Direct costs associated with interactions were added to treatment costs. CONCLUSIONS: The model demonstrated that rasagiline is a cost-effective alternative to pramipexol in the treatment of early PD in Mexico.

PND21 COST-EFFECTIVENESS ANALYSIS OF ANTIPEPTIC DRUGS IN THE TREATMENT OF LENNOX-GAUSTAD SYNDROME Skonicki M, O'Sullivan AK

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OBJECTIVES: Effective drug control is integral to treatment of Lennox-Gastaut syndrome (LGS), a debilitating form of epilepsy characterized by developmental disorders and frequent drop attacks. In an indirect comparison of antiepileptic drugs (AEDs) FDA-approved for LGS, clobazam was associated with the greatest effect size for decreasing drop attacks. We developed an economic model to evaluate outcomes and costs of clobazam, from a payer perspective, vs. lamotrigine, rufinamide, and topiramate as adjunctive therapy for LGS. METHODS: Baseline seizure frequency (15/month) and AED efficacy were modeled through clinical trial data. Costs of treating drop seizures were derived from a study of administrative claims data from a large US managed health care plan affiliated with OptumInsight, with the assumption that 2.3% of drop seizures led to medical care. Seizure frequency and percentage of patients free of drop seizures were evaluated over 3-month horizon. Clobazam and rufinamide were also evaluated over 2 years (assumption: 128 seizures/month at baseline). Sensitivity analyses were performed. RESULTS: Results suggest that LGs patients receiving clobazam had 226 drop seizures/month, compared to 275, and 281 for lamotrigine, rufinamide, and topiramate, respectively. More than 21% of patients receiving clobazam were free of drop seizures after 3 months, vs. ~5% in each comparator group. Drug and medical costs for patients receiving clobazam totaled $29,000, vs. $32,000–33,000 for comparators. Clobazam was also more efficacious and less costly than rufinamide over a 2-year horizon. Alternative analyses with assumptions of lower rates of seizures upon discontinuation did not alter conclusions. Assumption that fewer drop seizures require medical care (0.5% vs. 2.3%) reduced the short-term but not the long-term cost effectiveness of clobazam. CONCLUSIONS: Medically attended drop seizures are a major cost driver in LGS. For these LGS patients, clobazam may be cost-saving.