MS EDSS state, convert from RRMS to SPMS or die. Patients have a fixed annual probability of relapse and death. RRMS patients with EDSS score <7 were eligible for disease modifying therapies (DMTs). Patients with SPMS or EDSS score ≥7 received best supportive care. Transition probabilities were based on natural history of RRMS. Efficacy (i.e. on relapse rates and disability progression) was obtained from a mixed treatment comparison of published results. Health utilities were obtained from Orme et al (2007). Resources use (physician consultations; ambulatory care; hospitalization, other drugs, services, DMT monitoring and administration) were validated by an experts' panel and valued using Brazilian official lists. Annual discount rate of 5% was applied both to costs and outcomes. Probabilistic sensitivity analysis (PSA) was performed. **RESULTS:** Adopting WHO threshold, base case analysis showed fingolimod is more effective and less costly (dominant) versus IFN-$\beta$-1a 44mcg (incremental costs: -26,567BRL; QALY: 0.223) and cost-effectiveness versus IFN-$\beta$-1a 30mcg; IFN-$\beta$-1a 22mcg and IFN-$\beta$-1b 300mcg, with ICER (BRL/QALY): 29,306; 6,725 and 52,626, respectively (<3 GDP/capita or BRL 57,000.00; 1USD = 2.055BRL). PSA has confirmed the consistency of base case results. **CONCLUSIONS:** In the treatment of patients with RRMS, fingolimod provides superior effectiveness and represents good value for money in comparison with the most common first line therapies by the health care payer in Brazil.

PND41

THE COST-EFFECTIVENESS OF BUCCOLAM FOR THE TREATMENT OF PROLONGED, ACUTE, CONVULSIVE EPILEPTIC SEIZURES IN SPAIN

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**OBJECTIVES:** Despite the use of anti-epileptics, approximately 20-30 % of epileptic patients in Spain experience recurrent convulsive seizures, which require rescue medication and, sometimes, hospitalisation. Current standard first-line treatment of prolonged, acute, convulsive seizures (PACS) in the community setting comprises rectal diazepam (RD). Buccolam (licensed oromucosal midazolam) is the only oral paediatric formulation approved for the treatment of PACS in children (3 months to <18 years). We assessed the cost effectiveness of Buccolam compared to RD in the community setting in Spain. **METHODS:** A decision-tree model was developed to capture quality-of-life and cost implications of PACS. We assessed the treatment pathway when a child has a seizure in the community including whether or not carers administer treatment; an ambulance is required; patients are taken to hospital and require an inpatient stay. The associated cost and health-related quality of life (HRQL) impacts were calculated. Data were obtained from many sources including clinical-effectiveness estimates from McIntyre et al. 2005, a Delphi panel and a survey of parents to ascertain current practice. Costs were taken from published sources. Sensitivity analyses were conducted on both sets of data. **RESULTS:** Over one year, Buccolam showed a cost reduction of €4,994 per patient compared to RD and HRQL improvement of 0.0075 QALYs. The price of Buccolam would need to be more than €463/patient/year to not be cost saving. Buccolam remained dominant across a range of scenario analyses. Reduction in hospitalisations was the primary reason for overall cost savings (67% from reduced ward costs, 10% from reduced ICU costs). Ambulance and emergency costs were also significantly reduced (23% of total savings). **CONCLUSIONS:** Treatment with Buccolam is cost saving compared to rectal diazepam through a reduction in hospitalisations and ambulance call-outs.

PND42

COST-EFFECTIVENESS OF ONABOTULINUMTOXIN-A FOR THE PROPHYLAXIS OF CHRONIC MIGRAINE

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**OBJECTIVES:** To determine the cost-effectiveness of onabotulinumtoxinA versus placebo in patients with chronic migraine from the Italian National Health Service and a societal perspective. **METHODS:** The economic analysis is based on a Markov Model developed to evaluate costs and effects for a cohort of patients treated with onabotulinumtoxinA or placebo over a 2 year timeframe. The model is based on six health states (headache present on 0-3; 4-9; 10-14; 15-19; 20-23; 24-28 days/month) and combines data from published clinical trials (PREEMPT pooled data) with direct and indirect costs. Costs considered included medications, treatment administration, hospitalizations, GP visits, emergency room visits and loss of productivity. Costs and effects were both discounted at 3% per year. Univariate and multivariate probabilistic sensitivity analysis using 10,000 Monte Carlo simulations were conducted to test the robustness of results. **RESULTS:** In the case-base model, onabotulinumtoxinA was associated with an incremental number of QALYs of 0,04 per patient; the expected incremental cost per patient was € 208; the expected incremental cost per QALY gained was therefore € 2.824. The strategy of chronic migraine treatment with onabotulinumtoxinA is dominant as compared to placebo if the perspective of society is adopted. Results are slightly sensitive to the utility values used for both onabotulinumtoxinA and placebo. Multivariate sensitivity analysis showed that there is a 69% chance that onabotulinumtoxinA is cost-effective if society is willing to pay € 30.000/QALY and 68% at a willingness to pay threshold of € 20.000/QALY. **CONCLUSIONS:** This study suggests that OnabotulinumtoxinA improve clinical outcomes at a reasonable cost, and may actually be cost-saving when compared to placebo if the societal perspective is adopted. Its additional costs are offset by savings associated with a decrease in resource use and an increase in productivity.

PND43

COST-UTILITY ANALYSIS PATIENTS WITH LOW BACK PAIN AFTER TREATMENT INTRAOSSEOUS BLOCKADES

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**OBJECTIVES:** To assess the cost-utility analysis of intraosseous blockades vs conservative treated of patients with low back pain over 12 months. **METHODS:** A total of 62 patients between 22 and 73 years old with a diagnosis of low back pain. Low back pain patients were randomized of two group. Patients of the first (main) group received a course of intraosseous blockades (Sokov EL, 1996), while patients of the second (control group) received a course of conservatively treatment (analgetics, NSAIDs, myorelaxants, physical therapy). Measured direct costs at 1-year follow-up. Quality of life was measured with the Oswestry low back pain disability questionnaire, converted into utilities and transformed into quality-adjusted life years - QALY. The analysis will be performed for the health systems. Costs were measured in EUR. **RESULTS:** Quality of life improved significantly at 1-year follow-up in first group. Mean QALY in the first group was 0.358 and 0.105 in the second group. The medical costs were much lower for intraosseous blockades treatment. The cost-utility ratio for first group was 705,7 EUR for 1 QALY, and for standard therapy it was 3701,5 EUR for 1 QALY. The difference in QALY's gained during 1 year between both the groups was in fivefold in favor of the first group – 2995,8 EUR. **CONCLUSIONS:** Use of intraosseous blockades compared with conservatively treated offer significant long-term benefits in quality of life. The total costs for intraosseous blockades were lower due to lower a reduction in the duration of episodes the low back pain than conservatively treatments. Lower total costs and better utility resulted in a better cost-utility for intraosseous blockades treatment. Our analysis have demonstrated the cost-utility of intraosseous blockades.

PND44

COST-UTILITY ANALYSIS AND COST-MINIMISATION ANALYSIS OF SABRIL® (VIGABATRIN) IN DRUG-RESISTANT EPILEPSY FROM PAYER'S PERSPECTIVE IN POLAND

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**OBJECTIVES:** To determine cost-utility of Sabril®in the treatment of drug-resistant epilepsy compared to lamotrigine, gabapentin, topiramate, tiagabine, oxcarbazepine or levetiracetam in Polish conditions. **METHODS:** In order to determine long-term costs and health effects of interventions, a Markov model was built and it assumed two-step treatment of epileptics. The Cost Effectiveness Analysis Registry Database was searched to find health state utilities. Costs in the analysis were presented from Polish payer's perspective, in lifetime horizon which was divided into 3-month cycles. Only direct medical costs regarding 1st and 2nd line drug costs, diagnostic costs, ambulatory and hospital treatment were taken into account. Costs and health effects were discounted at 5% and 3.5% rate, respectively. A cost-utility analysis was conducted for comparison with gabapentin and lamotrigine while a cost-minimisation analysis was an analytical technique for comparisons with topiramate, tiagabine, oxcarbazepine and levetiracetam. Cost of adverse events after vigabatrin administration was not taken into consideration due to heterogenous information about risk of adverse events. **RESULTS:** Epilepsy therapy with vigabatrin brought 0.0172QALYG comparing to gabapentin however it was more expensive by 1526.75PLN. The administration of lamotrigine was less costly in reference to vigabatrin (by 532.45PLN) and health effects of treatment with lamotrigine were superior (by 0.0091QALY). Incremental costs of vigabatrin administration were positive in comparison to topiramate and tiagabine (3637PLN and 1831PLN) and negative in reference to oxcarbazepine and levetiracetam (-1461PLN and -2942PLN). **CONCLUSIONS:** The administration of vigabatrin in drug-resistant epilepsy was cost-effective in comparison to gabapentin however it was dominated by treatment with lamotrigine. Epilepsy therapy with vigabatrin was more expensive than treatment with topiramate or tiagabine while it was less expensive treatment option than the administration of oxcarbazepine and levetiracetam.

PND45

DIFFERENTIAL OUTCOMES IN PATIENTS WITH ALZHEIMER'S DISEASE (AD) TREATED WITH DONEPEZIL 23

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**OBJECTIVES:** To examine use of donepezil 23 (D23) in a real-world setting among medicare and commercially insured patients. **METHODS:** Patients diagnosed with Alzheimer's disease (ICD-9-CM 331.xx), ≥ 50 years old initiating D23 (index date) during 7/1/2010-5/31/2011 with 3 months pre- and 6 months post-index eligibility were identified from Humana claims database (medicare 60%, commercial 40%). Demographic characteristics were measured pre-index. Clinical characteristics were measured pre- and post-index. Patients were categorized into 2 cohorts: continued (CON), discontinued (DIS). Discontinuation was defined as a gap of ≥ 30 days post-index. Outcomes assessed: time on 10 mg donepezil (pre-index), AD-related health care resource utilization and costs, length of therapy and time to discontinuation and use of memantine. **RESULTS:** A total of 479 patients were identified: 204 CON, 275 DIS. Mean age [SD] was less for CON (78.8 [7.5] v 80.5 [7.3]; p=0.012) with no differences in comorbidity scores (0.37). 59.3% of CON patients, and 67.3% of DIS patients were female (p=0.073). Over half used memantine, with greater percentage of CON patients using memantine compared to DIS patients pre-(68.1% v 52.0%; p=0.0004) and post-index (77.0% v 58.9%; p<0.0001). More CON patients had ≥ 60 days of pre-index 10 mg donepezil use (62.2% v 45.4%; p=0.0003). More DIS patients had an ER visit (10.2% v 3.9%; p=0.035) compared to CON patients. Length of stay in