

time horizon and resources usage from a previous cost-effectiveness study for medications used to treat hepatic encephalopathy from the Mexican Institute of Social Security (IMSS) perspective and to complement it with a budget impact analysis. **METHODS:** CE analysis of treatments used for acute HE, based in a decision tree model, and considering a horizon of 10 days. Alternatives available at the IMSS are: lactulose, L-ornithine L-aspartate (LOLA), neomycin and alpha (a) polymorph rifaximin (the new alternative). Percentage of patients with improvement in signs and symptoms of HE was the effectiveness measure and s based on available published studies (Huang 2007 and Qian 2009). Only direct medical costs were considered and obtained from IMSS. Univariate sensitivity analysis, using pricing discounts and effectiveness were performed and budget impact simulations were developed. **RESULTS:** LOLA US\$4024, lactulose US\$4032, neomycin US\$4060 and rifaximin US\$4039 final costs. In relation to effectiveness, the percentage of patients who presented improved signs and symptoms for each alternative is as follows: lactulose and LOLA 55%, neomycin 64% and rifaximin 90%. Cost effectiveness ratios are: lactulose US\$7331, LOLA \$7316, neomycin US\$6344 and rifaximin US\$4488. The incremental cost effectiveness analysis indicates that LOLA and neomycin are surpassed by lactulose and rifaximin, which are located on the efficiency line. For the sensitivity analysis with one hospitalization day reduced due to the improved efficacy, rifaximin was the dominating alternative. If lactulose and neomycin are substituted by rifaximin in the estimated population (6,194 to 21,680 potential range of patients with HE in the Mexican Health System), the budget impact shows savings equivalent to 77.74 y 72.36%, respectively. **CONCLUSIONS:** Alpha (a) polymorph rifaximin is a highly cost effective alternative for treating acute HE from an institutional perspective in México.

PND14

BUDGETARY IMPACT OF THE TREATMENT OF RELAPSING-REMITTING MULTIPLE SCLEROSIS IN SPAIN

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OBJECTIVES: To estimate the budgetary impact of RRMS treatment from the perspective of the NHS in Spain (valued Euros-2011), in order to determine which treatment is most efficient from the payer's perspective. **METHODS:** IMS sales data for multiple sclerosis drugs were used to estimate the total number of patients treated with each of the drugs used during 2011. The number of patients receiving treatment was calculated from the yearly cost of each treatment per patient (ex-factory price excluding VAT) because IMS presents total sales expressed as ex-factory price, which means that the yearly cost of the drug expressed as ex-factory price must be used to estimate the number of patients from the IMS sales data. Although there are clear differences in the effectiveness of the treatments used, these differences do not always explain differences in prices (higher incremental costs). **RESULTS:** Total expenditure in Spain in 2011 was €259 million. Among the patients, 47% were treated with interferon beta-1a, 27% with interferon beta-1b, 16% with glatiramer acetate and 10% with natalizumab. In the unlikely event that all patients had used interferon beta-1a in Spain, total expenditure would have been between -10% and +6.3%, depending on the drug used. If interferon beta 1b had been used by all patients, the total savings in Spain during 2011 would have been over 12.5%. Nonetheless, the greatest savings (>15% of total expenditure) would have been achieved if all patients had been treated with glatiramer acetate. **CONCLUSIONS:** Despite the limitations of the study (only direct drug costs were considered and the number of patients receiving treatment was extrapolated) this methodology may aid decision-making by policy makers, especially in times of economic difficulty, by showing which medication is more efficient.

PND15

COST-EFFECTIVENESS OF BUCCOLAM® (LICENSED OROMUCOSAL MIDAZOLAM) COMPARED TO BENZODIAZEPINES FOR THE TREATMENT OF ACUTE PROLONGED EPILEPTIC SEIZURES IN GERMANY

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OBJECTIVES: BUCCOLAM (oromucosal midazolam) is approved for the treatment of prolonged, acute, convulsive seizures in children and was the first product to receive a Paediatric-Use Marketing Authorisation (PUMA) in September 2011. The product label includes use by parents and other carers such as teachers. Current care in Germany for first line treatment consists mainly of rectal diazepam with some use of buccal lorazepam, clonazepam and chloral hydrate. Some non-family carers can be reluctant to administer these products due to concerns about social acceptability, dignity or labelling issues. A decision tree model has been developed to assess the cost of BUCCOLAM compared to current care for prolonged acute convulsive seizures initially occurring in the community setting. **METHODS:** The model evaluates costs along the treatment pathway when a child has a seizure including whether or not carers administer treatment, whether an ambulance is required and whether or not patients are taken to hospital and require an inpatient stay. Data were obtained from a variety of sources including clinical effectiveness estimates from McIntyre et al. 2005, and a Delphi panel. Costs were taken from published sources. Estimates of the total eligible population were taken from epilepsy prevalence data and the Delphi panel. **RESULTS:** Over one year, compared to the mix of treatments representing current care, BUCCOLAM showed a reduction in per patient costs of €3,469. Compared to treatment with rectal diazepam alone, the most commonly used treatment, BUCCOLAM showed a cost reduction of €3,533. It was expected that ~36,000 patients would be eligible. At an uptake of 20% BUCCOLAM would reduce health care expenditure by €19.4 million in the first year. **CONCLUSIONS:** Treatment with BUCCOLAM is cost-saving compared to current

care and treatment with rectal diazepam through a reduction in the need for ambulance call-outs and hospital stays.

PND16

COST-EFFECTIVENESS ANALYSIS OF LACOSAMIDE AS ADJUNCTIVE THERAPY IN ADULTS WITH PARTIAL-ONSET SEIZURES IN MEXICO

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OBJECTIVES: Epilepsy is one of the most common chronic neurological disorders in the world; therefore it is associated with substantial use of medical resources in health institutions. Approximately 60% of patients with epilepsy suffer from partial-onset seizures (POS), and among these, an estimated 30% have refractory disease. The objective of this study was to analyze the cost-effectiveness of lacosamide (LCM), a newer anti-epileptic drug (AED), versus second generation AEDs in patients with refractory POS. **METHODS:** We conducted an economic evaluation, using lamotrigine (LTG) 300 mg/day and topiramate (TPM) 200 mg/day as comparators for LCM 200 and 400 mg/day. The perspective was the Mexican Social Security Institute, in accordance with Mexican guidelines for Economic Evaluations. The model included the cost of drug acquisition and management of adverse events (AE) during the titration and 12 weeks of maintenance. Resource use associated with AEs was defined according to the information gathered in a Delphi Panel. The efficacy measure was the ≥50% responder rate; i.e., the percentage of patients who showed a ≥50% decrease in seizure frequency from baseline. An indirect comparison was made. **RESULTS:** The adjusted response rates were 33% for LCM 200 mg/day (34% unadjusted), 39% LCM 400 mg/day (41% unadjusted), 24% for LTG (20% unadjusted) and 31% for TPM (27% unadjusted). Costs per patient considering the adjustment was MX\$6,872, \$7,836, \$6,954 and \$6,485 for LCM 200 mg, LCM 400 mg, LTG and TPM, respectively. The cost per responder was lower for LCM 200 and 400 mg/day (\$20,825 and \$20,093, respectively) than TPM and LTG (\$20,918 and \$28,974, respectively). Considering unadjusted data, LCM 200 and 400 mg/day had greater differential in costs per responder compared with TPM or LTG. **CONCLUSIONS:** From a Mexican perspective, lacosamide represents a cost-effective treatment option for patients with POS. Sponsored by UCB.

PND17

COMPARING COST OF THERAPEUTIC PLASMA EXCHANGE AND INTRAVENOUS IMMUNOGLOBULIN INFUSION IN TREATING GUILLAIN-BARRÉ SYNDROME

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OBJECTIVES: Controlled trials have found therapeutic plasma exchange (TPE) and intravenous immunoglobulin (IVIg) infusion therapy to be equally efficacious in treating Guillain-Barré syndrome (GBS). Due to increases in the price of IVIg compared to human serum albumin (HSA), used as a replacement fluid in TPE, direct hospital-level expenditures for TPE and IVIg for meaningful cost-differences between these treatments were examined for Turkey. **METHODS:** Cost were calculated with Hacettepe University Hospital procedures for one cycle IVIg and TPE. One cycle were defined for IVIg and TPE as 5 days and 5 series, respectively. A model was developed which allows hospitals to input cost and reimbursement amounts for both IVIg and TPE with HSA that results in real-time valuations of these interventions. Reimbursement amounts were obtained from publicly available Social Security Institution (SGK) data resources to determine payment rates for TPE and IVIg. Only direct cost and payer perspective were used for the calculation. **RESULTS:** The direct cost of IVIg infusion sessions totaling 140,0 grams for 5 days was 18,841 TL compared to a series of five TPE procedures, which had direct costs of 6,529 TL. **CONCLUSIONS:** In GBS patients, direct costs of IVIg therapy are more than twice that of TPE. Given equivalent efficacy and similar severity and frequencies of adverse events, TPE appears to be a less expensive first-line therapy option for treatment of patients with GBS for Turkey.

PND18

IMPACT OF CO-MORBIDITIES ON THE ECONOMIC BURDEN OF PARKINSON'S DISEASE IN GERMANY POST-2000

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OBJECTIVES: To collate the published evidence evaluating economic burden of co-morbidities in patients with Parkinson's disease (PD) in Germany. **METHODS:** A systematic search of electronic literature databases (Embase® and MEDLINE®) was conducted from January 2001 to June 2012 to identify economic studies in English evaluating co-morbidities in patients with PD in Germany. **RESULTS:** Four studies of the 267 citations retrieved met the pre-defined inclusion criteria. During 2000-2002, direct costs were higher in patients with dyskinesias and/or motor fluctuations (€3300 [€4630]) or dementia (€3110 [€5610]) than patients without motor complications (€1450 [€3760]) or dementia (€1530 [3460]). However, indirect costs were higher for patients without dementia (€3780 [€6870]) than patients with dementia (€1080 [€4110]). In 2006, daily total costs and PD drug treatment costs decreased significantly in patients with dementia (€7.3 [7.3]; p<0.05) and depression (€6.6 [5.8]; p<0.05) than patients without dementia (€9.3 [13.9]) and depression (€7.6 [6.8]), respectively. The decrease in the costs observed across patients presenting with these co-morbidities may be attributed to the inadequate treatment of depression or dementia among patients with PD. In 2009, direct costs demonstrated a significant increase in patients with dyskinesia (€16,544 vs. €11,322; p=0.003), dementia (€21,142 vs. €10,619; p<0.001), depression (€15,904 vs. €8826; p<0.001), or psychosis