to the WHO Commission on Macroeconomics and Health, RLAI is highly cost-effective (≤1xGDP per-capita/QALY gained) in patients with a BARR between 63% and 72.5% and cost-effective (≤3xGDP per-capita /QALY gained) in patients with a BARR between 35% and 63%. **CONCLUSIONS:** In all published naturalistic studies comparing RLAI with oral medication, where the selection of patients to receive RLAI is left to the physicians, the BARR is greater than 0.71, which suggest that using RLAI in Mexico with similar criteria of patient selection would result in a cost-saving strategy.

PMH29

COST EFFECTIVENESS OF QUETIAPINE EXTENDED RELEASE COMPARED WITH QUETIAPINE IMMEDIATE RELEASE IN SCHIZOPHRENIC PATIENTS IN MEXICO

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OBJECTIVES: Evaluate the effectiveness of quetiapine extended release (XR) versus quetiapine immediate release (IR) in Mexican Schizophrenic patients from a governmental perspective. **METHODS:** Effective measurements were taken from Meulien's, et al, 2010 meta-analysis and a systematic review done for this analysis. Cost-effectiveness and a cost utility analysis were done. Effectiveness measurements were: percentage of patients adherent to treatment, reporting adverse events (AEs) and with relapse. Disease-specific utility values assigned to each of the 6 schizophrenia disease states, based in the possible combinations of adherence levels (full, partial, or nonadherence) and the relapse results, have been estimated by Furiak, 2009 using the Positive and Negative Syndrome Scale, and expert opinion. Costs considered are direct medical care, drug, AEs and relapse treatment. Analysis used a governmental perspective (Mexican Institute of Social Services costs), (published May 2012). A Markov model was performed considering a one year horizon with 3 month cycles simulating schizophrenic Mexican population with the proposed treatment alternatives. Finally a univariated probabilistic sensitivity analysis was done to validate consistency in the model. **RESULTS:** The use of quetiapine XR resulted in more adherent patients with 0.17846 compared with 0.05630 for quetiapine IR; less AEs reported with 0.13716 compared with 0.05462 respectively. In the cost-utility analysis quetiapine XR had an average QALYs of 0.14620 compared to quetiapine IR QALYS of 0.1256. Quetiapine XR generated a cost saving of USD 508.52 (conversion rate: USD=13.14 MxPesos. Average 2012). **CONCLUSIONS:** Based on the data from the review and meta-analysis, quetiapine XR had a similar efficacy and tolerability profile than quetiapine IR but with better results in effectiveness measures (adherence, adverse events and QALYs). It reduces direct treatment costs in Mexican public Institutions with a positive estimate impact. Based on these, quetiapine XR is a dominant alternative, more effective and with less costs tan quetiapine IR.

PMH30

COST-MINIMIZATION-ANALYSIS OF PALIPERIDON PALMITATE IN THE TREATMENT OF SCHIZOPHRENIA IN AUSTRIA

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OBJECTIVES: Schizophrenia is marked by a characteristic interference pattern of various psychological areas such as perception, ego-function, affectivity and psychomotricity. Thus, the objective of this economic analysis is the evaluation of the cost saving potential through the use of Paliperidone Palmitate compared to Risperidon Depot. **METHODS:** The pharmaeconomic evaluation was performed using a cost-minimization analysis, in which the above mentioned therapeutic alternatives with equal effectiveness and efficiency are compared based on the net costs to determine the most cost-effective alternative. The equivalence of the comparators was confirmed in the study of Pandina et al. (2011). Clinical data derived from this 13-week, double-blind "head-to-head" study. The time horizon is 2-years. **RESULTS:** From the perspective of the health insurance, the average costs of the therapy algorithm of Paliperidone Palmitate amount to €5,024.02 for the first year of treatment. A patient treated with Risperidone Depot is causing costs of €4,750.63. If the patient is treated with Paliperidone Palmitate as a first-line treatment in the following year, costs of €4,222.32 arise. In case of a treatment with Risperidone Depot costs amount to €4,594.76 EUR. If a patient is treated with Paliperidone Palmitate throughout the period under observation, the discounted total costs for 2-years amount to €9,247.02. Treatment with Risperidone Depot is causing costs of €9,345.40, resulting in a cost advantage for Paliperidone Palmitate compared to Risperidone Depot of €98.37 for the period of two years. Observing the costs over a time horizon of five years, a treatment with Paliperidone Palmitate is causing costs in the amount of 20,008.15 EUR. For the same period, a treatment with Risperidone Depot is causing costs of €20,851.47. **CONCLUSIONS:** In the treatment of schizophrenia, Paliperidone Palmitate is a cost-effective alternative therapy. Additionally, the sensitivity analysis shows that the analysis is, with the exception of doctor consultations, robust.

PMH31

GENETIC TESTING IN COMBINATION WITH PREVENTIVE DONEPEZIL TREATMENT FOR AMNESTIC MILD COGNITIVE IMPAIRMENT PATIENTS: AN EXPLORATORY ECONOMIC EVALUATION OF PERSONALIZED MEDICINE

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OBJECTIVES: To evaluate the cost-effectiveness of genetic screening for Apolipoprotein ε4 (APOE ε4) allele in combination with preventive donepezil treatment in comparison to the standard of care for Amnestic Mild Cognitive Impairment (AMCI) patients in Canada. **METHODS:** We performed a cost-effectiveness analysis using a Markov model with a societal perspective and a time horizon of 30 years. For each strategy, we calculated quality-adjusted life years (QALYs) using utilities from the literature. Costs were also based on the literature, and when appropriate, Ontario sources. One-way and probabilistic sensitivity analyses were performed. Expected value of perfect information (EVPI) was conducted to explore the value of future research. **RESULTS:** The base case results in our exploratory study suggest combined genetic testing and preventive donepezil treatment resulted in a gain of 0.011 QALYs and an incremental cost of CAD $394 compared to standard of care. The incremental cost-effectiveness ratio (ICER) for the base case was $35,161 per QALY. The ICER was sensitive to the effectiveness of donepezil treatment in delaying progression to AD, and the costs of AD and donepezil. EVPI analysis showed that additional information on these parameters would be of value. **CONCLUSIONS:** Using presently available clinical evidence, this exploratory study illustrates genetic testing combined with preventive donepezil treatment for AMCI patients may be economically attractive. Since our results were based on a secondary post-hoc analysis, our study alone is insufficient to warrant recommending APOE genotyping in AMCI patients. Future research on the effectiveness of preventive donepezil as a targeted therapy is recommended.

PMH32

MODELLING THE COST AND EFFECTIVENESS OUTCOMES ASSOCIATED WITH DIFFERENT SEQUENCES FOR THE TREATMENT OF CHRONIC SCHIZOPHRENIA: AN ECONOMIC EVALUATION OF PALIPERIDONE PALMITATE

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OBJECTIVES: This evaluation aimed to assess the cost-effectiveness of paliperidone palmitate in different lines of therapy for schizophrenia patients compared to the current patient pathway. **METHODS:** A Markov model was developed that examined the use of five different treatment sequences, each involving paliperidone palmitate at different points in the sequence. Variations in treatment sequences were assessed to examine their impact on the model's findings, and were compared with a comparator treatment sequence reflecting current practice. The model simulated the three main schizophrenic health states of remission, minor relapse and major relapse. Adherence with medication is also taken into consideration due to its impact on resource use, quality of life and the probability of relapse. The model adopted a timeline of five years and used a Spanish health care provider perspective. Drug costs are assumed to be ex factory. **RESULTS:** The difference in costs associated with introduction of paliperidone palmitate at different moments of patient course ranges from an additional €260 when used as a fourth-line therapy to a reduction of €2,217 (i.e. cost saving) when directly used as a second-line therapy after a course of daily risperidone treatment. Cost savings arose due to reduced rates of relapse. All five treatment sequences resulted in an increase in QALYs, ranging from 0.043 QALYs for fourth-line therapy to 0.124 QALYs per patient for second-line treatment. Second-line treatment was dominant to all other treatment sequences. Probabilistic sensitivity analysis suggests that the probability of paliperidone palmitate being cost-effective as a second-line therapy is 96.8% at both €30,000 and €45,000 thresholds. One year analysis gave similar results, with palmitate paliperidone as second-line therapy also dominant to all other treatment sequences. **CONCLUSIONS:** Paliperidone palmitate used as second line after a course of daily risperidone treatment is the dominant alternative when compared to the other scenarios.

PMH33

COST EFFECTIVENESS OF PALIPERIDONE PALMITATE VERSUS ORAL MEDICATION IN THE TREATMENT OF SCHIZOPHRENIA IN AUSTRIA

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OBJECTIVES: Schizophrenia is affecting the young adults and amounts to approximately 80,000 people in Austria, suffering at least one time during their life from a psychotic episode, which meet the DSM-IV criteria of schizophrenia. Patients with schizophrenia are at high risk of relapse due to non-adherence of oral antipsychotic medication. The purpose of this analysis was to estimate the cost-effectiveness of switching to Paliperidone palmitate after first-line oral Olanzapine or Risperidone versus an oral treatment algorithm. **METHODS:** We developed a Cost-Utility-Model to simulate the consequences of two treatment algorithms; one with Paliperidone palmitate after treatment failure or stop of Olanzapine or Risperidone versus a second with oral medication (starting with Risperidone, Olanzapine, Quetiapine, Haloperidol, Ziprasidone and last-line Clozapine, followed by no-treatment) over a 5-years horizon. Markov-modeling techniques were used to estimate incidence of relapse, hospitalization, treatment switch and death. Monte-Carlo simulation accounted for uncertainty. The model includes eleven health-states. Probabilities were derived from clinical studies. Direct medical costs from published sources were used and expressed in 2011 Euro from the payer's perspective. QALYs and costs were discounted at 5% p.a. **RESULTS:** Over a 5-year timeframe, costs associated with the use of Paliperidone palmitate amounts to 28,328.94€ and 3.62 QALYs. Costs associated with the oral treatment-path are 26,338.23€ and 3.20 QALYs. The incremental-costs amount to 1,990.71€ per patient and the incremental-cost per QALY gained was 4,739.79€. The Markov-cohort description shows that 55% of patients who receive Paliperidone palmitate are still on treatment after 5-years and 24% have