Target population in Spain is estimated at 500,000 patients and 15% of those receive a monoterapia drug treatment for acute bipolar mania. Nowadays, when considering drug costs, direct medical costs and adverse events treatment, average annual cost per treated patient in Spain is estimated at €4006 and it is likely to be estimated at €4039 after the introduction of ziprasidone. Sensibility analysis showed that at a constant market share of 24% for the forecasted three years, then the introduction of ziprasidone is not likely to have any economic impact on the Spanish National Pharmaceutical budget. **CONCLUSIONS:** This budget impact model shows that the introduction of ziprasidone is likely to have minimal impact on acute bipolar mania medication costs in Spain. Current drug costs due to acute bipolar mania were estimated at €908 millions for the next 3 years and at €916 millions after the introduction of ziprasidone.

PMH9

COST-EFFECTIVENESS OF CLINICALLY PROVEN TREATMENT STRATEGIES FOR ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) IN FIVE JURISDICTIONS

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ADHD is a common disorder of childhood and adolescence in the US and Europe. The NIMH MTA Study is a clinical landmark trial, including 579 children age 7–9.9 years with ADHD according to DSM-IV criteria, who were randomly assigned to 14 months of medication management (MedMgt), intense behavioral treatment (Beh), both combined (Comb), or community care (CC). **OBJECTIVE:** To evaluate the cost-effectiveness of clinically proven treatment strategies (neither placebo nor single drugs) for ADHD and Hyperactivity Disorder (HKD/HKCD, a subgroup meeting ICD-10-based diagnostic criteria used in Europe) in five countries, using patient-level data from the MTA Study over 14 months. **METHODS:** Medical resource utilization data came from the MTA, excluding its research component. Unit costs (year 2005) were calculated from a societal and from a third-party payer's perspective for Germany, The Netherlands, Sweden, UK, and USA. Corresponding to the primary study endpoint, treatment response was defined as normalization of core symptoms (SNAP-IV teacher/parent scores <1). Utility estimates were derived from expert estimates and parent-proxy-ratings. **RESULTS:** Incremental cost-effectiveness ratios (ICERs) were determined for the total study population and subgroups with pure ADHD (without comorbidity, n = 184), pure HKD (n = 77), or HKD/HKCD (n = 145). ICERs per additional patient "normalized" ranged from to dominance to €4200 for MedMgt versus CC and from €21,000 to €100,000 for Comb versus MedMgt. MedMgt dominated Beh and exhibited extended dominance over CC compared to a hypothetical "Do Nothing" alternative. Results were supported by cost-effectiveness acceptability and sensitivity analyses. **CONCLUSIONS:** Despite international differences regarding standards of care, diagnostic criteria, and unit costs, key findings for European jurisdictions were consistent with US results. Although cost-utility estimates for this pediatric population should be interpreted with caution, results indicate acceptable to attractive cost-effectiveness of an intense MedMgt strategy. Further analyses will have to explore the impact of psychiatric comorbidity and broader clinical endpoints.

PMH10

FUNCTIONAL IMPAIRMENT OF PATIENTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD): AN ALTERNATIVE COST-EFFECTIVENESS ANALYSIS OF CLINICALLY PROVEN TREATMENT STRATEGIES BASED UPON THE NIMH MTA STUDY

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Beyond disease-defining core symptoms of inattention, hyperactivity, and impulsivity, ADHD is characterized by functional impairment of patients. The Columbia Impairment Scale (CIS) is a parent rating scale with relatively strong psychometric properties, tapping four major dimensions: interpersonal relations, psychopathology, schoolwork, and use of leisure time. **OBJECTIVES:** CIS ratings from the NIMH MTA Study (n = 579 children with ADHD according to DSM-IV-criteria) were used as an alternative outcome measure to evaluate the cost-effectiveness of medication management (MedMgt), intense behavioral treatment (Beh), both combined (Comb), or community care (CC) in the study population and in three subgroups: hyperkinetic disorder (according to ICD-10-criteria preferred in Europe); pure HKD or HKD/HKCD, and in pure ADHD, over 14 months. **METHODS:** For costing (societal and third-party payer's perspectives), patient-level resource utilization data were combined with country-specific unit costs for Germany, The Netherlands, Sweden, UK, and United States (year 2005). Incremental cost-effectiveness ratios (ICERs) were determined using functional improvement (CIS effect size [ES], Cohen's d) as clinical outcome criterion. Four treatment strategies and a hypothetical "Do Nothing" alternative were compared with each other. **RESULTS:** The four MTA treatment strategies were all clinically effective. Across jurisdictions, both CC versus "Do Nothing" (ICERs ranging from €1200/ES to €2600/ES) and MedMgt (ICERs versus "Do Nothing" from €1000/ES to €2700/ES, ICERs versus CC from dominance to €3000/ES) appeared attractive on grounds of cost-effectiveness. MedMgt dominated Beh, and ICERs for Comb versus MedMgt ranged from €500,000/ES to €1,000,000/ES. Results for subgroups with pure ADHD, HKD/HKCD, and pure HKD were broadly similar. Sensitivity analyses including probabilistic evaluations using non-parametric bootstrapping supported these findings. **CONCLUSIONS:** Despite notable international differences in terms of diagnostic criteria, standards of care, and unit costs, the cost-effectiveness of MTA-based clinical treatment strategies for patients with pure ADHD seemed remarkably similar across jurisdictions. The impact of comorbidity remains to be explored.

PMH11

RATIONAL CHOICE OF TREATMENT STRATEGY IN MODERATE TO SEVERE ALZHEIMER'S DISEASE PATIENTS LIVING IN CANADA

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OBJECTIVE: In light of recent clinical evidence, the indication of the NMDA antagonist memantine has been extended to "moderate to severe Alzheimer's disease (AD)". No pharmacoeconomic evaluation has been performed in this indication to

date. This study provides an estimate of the cost-effectiveness of memantine compared with standard care (no pharmacotherapy) in moderate to severe AD adapted to a Canadian setting and including all available evidence. No other pharmacological treatment was included in the evaluation as memantine is currently the only drug approved in this indication. **METHODS:** The progression of AD in terms of cognitive severity, functional disability and mortality was simulated over two-years using a state-transition (Markov) model. Outcomes of the model were Quality-Adjusted Life-Years (QALY) and costs from a societal perspective. The main cost and epidemiological input parameters of the model were computed using data from the Canadian Study on Health and Aging (CSHA). All relevant published and unpublished clinical trials of memantine versus placebo in moderate to severe AD were used to compute the transition probabilities between health states. A priori distributions were associated to all relevant parameters in order to enable stochastic analyses. **RESULTS:** Compared with standard care, the memantine strategy produced 0.03 additional QALYs, with no additional overall cost. Probabilistic sensitivity analyses give 83.3% chance that memantine treatment is cost neutral, 89.5% chance of being cost-effective if the decision-maker is willing to pay $20,000 for a quality-adjusted life year and 96.2% chance for a willingness-to-pay of $100,000 per QALY. Robustness of the results was confirmed through one-way and scenario-based sensitivity analyses. **CONCLUSIONS:** Our evaluation found memantine dominant over standard care. Results were comparable with those published for acetylcholinesterase inhibitors indicated for treatment of earlier stages of AD.

PMH12

PHARMACOECONOMIC ANALYSIS OF ANTIDEPRESSANTS IN BRAZIL

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OBJECTIVE: To determine cost-effectiveness of antidepressant groups (SNRIs, SSRIs, and TCAs) in treating major depressive disorder (MDD) over a 6-month time horizon from the viewpoint of the Brazilian Ministry of Health. **METHODS:** An existing decision tree model developed by our group was adapted to Brazil, based on Brazilian treatment guidelines. Clinical data were obtained from a published meta-analysis of remission rates published by Machado et al. Patients included adults >= 18 with MDD, diagnosed using DSM-III/IV or comparable, with moderate-to-severe disease (HAMD >= 15 or MADRS >= 18), without comorbidities or comedications, and followed by >= 6 weeks of treatment. Treatments included: SNRIs (venlafaxine, duloxetine, milnacipran), SSRIs (citalopram, escitalopram, fluoxetine, paroxetine, sertraline) and/or TCAs (clomipramine, amitriptyline, nortriptyline, imipramine). SSRIs were used as secondary treatment for SNRIs and TCAs, TCAs were used as secondary treatment for SSRIs. Clinical outcome was remission, defined as a final HAMD score <= 7 or MADRS <= 12. Included were all direct costs of treatment (drug, physician visits, hospitalization). Drug costs were obtained from the 2006 Brazilian National Drug Price List. Costs of hospitalizations and physician visits were taken from the 2006 Health care System database (DATASUS). All costs were presented in undiscounted 2006 Brazilian Reais (1R$ = USD$0.46). Univariate and Monte Carlo sensitivity analyses were performed. **RESULTS:** The primary ITT remission rate of SNRIs was significantly (P < 0.05) higher than SSRIs and TCAs. Expected costs/patient treated were: SNRIs = R$4698; SSRIs = R$5341; TCAs = R$4867. Overall success rates (primary + secondary treatment across all decision tree branches) were: SNRIs = 78.1%; SSRIs = 74.0%; TCAs = 76.4%. Average costs/success were: SNRIs = R$6017; SSRIs = R$7217; TCAs = $6368. Monte Carlo analysis confirmed the relative positions. Break-even analysis showed that results were sensitive to variations to primary success rates. **CONCLUSIONS:** SNRIs dominated the other two antidepressant classes. Using SNRIs on average could save the government R$775 million annually. Further analyses are warranted to confirm results since they were sensitive to primary remission rates.

PMH13

COST-EFFECTIVENESS OF ESCITALOPRAM VERSUS CITALOPRAM IN OUTPATIENTS SUFFERING FROM MAJOR DEPRESSIVE DISORDER

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OBJECTIVES: Economic models have demonstrated the cost-effectiveness of escitalopram versus citalopram in major depressive disorder (MDD), but no head-to-head clinical trials have evaluated their cost-effectiveness to date. The objective of this study was to assess the relative cost-effectiveness of escitalopram compared with citalopram in outpatients with MDD. **METHODS:** An economic evaluation was conducted alongside a double-blind randomized clinical trial conducted by French general practitioners and psychiatrists, comparing fixed doses of escitalopram (20 mg/day) or citalopram (40 mg/day) over 8 weeks in outpatients with MDD (baseline Montgomery-Åsberg Depression Rating Scale (MADRS) score ≥30). A standardised health care services form was used to record physician visits, hospitalisations, treatments and days of sick leaves for the 2-month pre-study period and the 8-week study period. **RESULTS:** Statistically significant improvements in remission rates were observed in patients treated with escitalopram (56% vs. 43%, p < 0.05). Using the price of the generic citalopram, mean per-patient costs from a health care perspective for the escitalopram group were 45% lower than the citalopram group (€79 vs. €144; p < 0.05). Differences were mostly related to lower hospitalisation costs. Bootstrapped distributions of the cost-effectiveness ratios also showed better effectiveness and lower costs for escitalopram compared with citalopram with more than 85% of the draws located in the southeastern quadrant of the cost-effectiveness plan, indicating that escitalopram was the dominant strategy. Sensitivity analyses confirmed the dominance of escitalopram over citalopram from a payer perspective. **CONCLUSIONS:** Escitalopram is significantly more effective than citalopram and is associated with lower health care costs. This prospective economic analysis demonstrated that escitalopram is a cost-effective first-line treatment option for MDD.

PMH14

PHARMACOECONOMIC POSITIONING OF SERTINDOLE AMONG ANTIPSYCHOTICS IN THE MANAGEMENT OF SCHIZOPHRENIA: THE HUNGARIAN EXPERIENCE

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OBJECTIVES: Despite progress in the treatment of schizophrenia following the introduction of atypical antipsychotics in the late 1990s, current pharmacological options still carry limitations, as highlighted in a recent, pragmatic study in the US. Sertindole is an atypical antipsychotic with a good tolerability profile likely to favour long-term adherence, reductions in relapse and re-hospitalisation rates, and improvements in overall