

severity of depression on these outcomes. These preliminary results need to be confirmed on the full dataset.

#### PMH15

##### FACTORS ASSOCIATED WITH EARLY RESPONSE TO OLANZAPINE AND CLINICAL AND FUNCTIONAL OUTCOMES OF EARLY RESPONDERS TREATED FOR SCHIZOPHRENIA IN CHINA

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**OBJECTIVES:** To identify factors associated with early response at 4 weeks of treatment with olanzapine and to assess whether early response is associated with better longer-term outcomes for patients with schizophrenia in China. **METHODS:** A post-hoc analysis was conducted using data from the Chinese schizophrenia subgroup (n=330) of a multicountry, 6-month, prospective, observational study of outpatients with schizophrenia/bipolar mania who were initiated or switched to oral olanzapine. Stepwise logistic regression controlling for baseline clinical characteristics, participation in weight education program at baseline, and compliance with antipsychotics over first 4 weeks of olanzapine treatment was used to identify factors associated with early response. Mixed Models Repeated Measures with baseline covariates were used to compare outcomes over time between early responders and early non-responders to olanzapine. **RESULTS:** A total of 130 patients (40%) achieved early response. The models revealed that significant factors associated with a higher likelihood of achieving early response were higher CGI-Severity score (OR=1.51, 95% CI: 1.15-1.97), fewer years since first diagnosis (OR=0.94, 95% CI: 0.90-0.98), a greater number of social interactions (OR=1.22, 95% CI: 1.05-1.40), participation in a weight education program (OR=1.81, 95% CI: 1.04-3.15) at study entry, and high medication compliance with antipsychotics during the first 4 weeks of treatment (OR=2.98, 95% CI: 1.59-5.58). When compared to early non-responders, early responders achieved a significantly higher endpoint response and significantly greater symptom improvement at end point (CGI-Severity) and a greater improvement in level of functional outcomes (all p<0.05). **CONCLUSIONS:** High levels of compliance to prescribed antipsychotic and participation in a weight education program were associated with early response in schizophrenia patients in China. Early response was associated with greater improvement in symptomatic, functional and quality-of-life outcomes at 6 months compared to early non-response. Current findings are consistent with previous research outside of China.

#### PMH16

##### FACTORS ASSOCIATED WITH PAIN PERSISTENCE IN PATIENT WITH DEPRESSION DURING A 3-MONTH FOLLOW-UP PERIOD

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**OBJECTIVES:** Patients with major depressive disorder (MDD) frequently suffer from concomitant pain symptoms, which are associated with higher depression severity and worse quality of life. We describe the baseline factors associated with pain persistence in patients with MDD during a 3-month follow-up period. **METHODS:** Patients from Asia (n=909) presenting with a new or first episode of MDD were enrolled in a 3-month prospective observational study. This report analyzes the 709 (78%) patients assessed at baseline and 3 months. Demographics, depressive symptoms (Hamilton Depression Scale), overall severity (Clinical Global Impression Severity score), somatic symptoms (Somatic Symptom Inventory) and quality of life (Euro QOL -5D) were assessed. Logistic regression models were fitted to assess the relationship between baseline factors and pain persistence during follow-up. **RESULTS:** Of the 709 patients analyzed, 349 (49%) had pain at baseline. Forty three per cent of the patients (151) having pain at baseline still presented with pain at 3-months. Patients with persistent pain had more frequently suffered from previous MDD episodes (54% vs 39%), were less likely to be older than 60 (11 vs. 21%), and had a higher number of medical comorbid conditions (14% vs 5% with two or more co-morbidities). The logistic model adjusting for other baseline covariates confirmed these results. **CONCLUSIONS:** A high proportion of patients with depression who presented with pain at baseline still suffered from pain symptoms at 3 months. A history of depression and the presence of other medical conditions were risk factors for pain persistence at 3-months.

#### PMH17

##### BAYESIAN ANALYSIS OF MALFORMATION OUTCOME IN SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRI) USE DURING PREGNANCY: AN INDIRECT COMPARISON OF CITALOPRAM, FLUOXETINE, PAROXETINE, AND SERTRALINE

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**OBJECTIVES:** Assessing the safety of selective serotonin reuptake inhibitor (SSRI) use during pregnancy is complicated, especially given the array of treatment option. The objective of this study was to evaluate the risks of fetal malformation of SSRI use during pregnancy. **METHODS:** A search for prospective studies evaluating fetal malformation with maternal use of citalopram, fluoxetine, paroxetine, or sertraline was conducted using the databases of MEDLINE, PsycINFO and EMBASE for the period of 1974 to March 21, 2013. The key terms used were: 'serotonin reuptake inhibitors', 'pregnancy', 'prospective studies'. The inclusion criteria in addition to prospective studies included: 1) malformation outcome; 2) citalopram, fluoxetine, paroxetine, and/or sertraline; 3) drug exposure in first trimester; and 4) compared to control group of either 'no SSRI exposure' or 'nonteratogenic agents'. The exclusion criteria included: 1) evaluation of SSRI as a drug class, and 2) venlafaxine or bupropion. A Bayesian random-effects indirect treatment comparison model was used to perform the analysis. **RESULTS:** The search resulted in 64 articles. Eight articles met inclusion/

exclusion criteria. The combined odds ratio was 1.72 (95% CI: 1.432 to 2.070), indicating the odds of fetal malformation is higher among women taking antidepressants than those not receiving SSRIs. In the pairwise analysis, 2 of the 14 pairwise comparisons were statistically significant: fluoxetine compared to control (OR 1.774, 95% CI 1.008 to 2.925); paroxetine compared to control (OR 1.752, 95% CI 1.057 to 2.953). The resulting pairwise odds ratios suggested a lowest odds of malformation to highest odds was citalopram, sertraline, paroxetine, fluoxetine. **CONCLUSIONS:** The risk of malformation is an important consideration when treating pregnant women. This study suggests that there is an increase in the odds of fetal malformation when exposed to SSRIs in utero during the period of organogenesis. The risk appears to be highest with fluoxetine and paroxetine, and lower for citalopram.

#### MENTAL HEALTH – Cost Studies

#### PMH18

##### BUDGET IMPACT OF PALIPERIDONE PALMITATE IN AUSTRIA

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**OBJECTIVES:** The costs of schizophrenia in Austria are high and new long acting injectable (LAI) antipsychotics might be able to reduce costs due to a reduction of hospital stays. We aim to estimate budget effects of the introduction of a new LAI (Paliperidone Palmitate) in Austria. **METHODS:** A budget impact analysis was conducted that took direct costs of illness into account (i.e. costs for inpatient and outpatient services and drug costs). We used official Austrian remuneration prices as input parameters. The robustness of the model was checked by means of deterministic sensitivity analyses with regard to switch rates to Paliperidone Palmitate and rehospitalisation rates. **RESULTS:** According to our calculations, direct total costs of schizophrenia in Austria reach € 254.36 million a year. The drug costs are € 26.14 million and the costs for inpatient and outpatient services are € 228.22 million. Within the next five years, drug costs will slightly decrease to € 25.77 million due to a bigger market share of generic Quetiapine which offsets the higher drug costs of Paliperidone palmitate. The use of Quetiapine is associated with a higher rate of rehospitalisation. Therefore, costs for inpatient and outpatient services will increase to € 228.65 million, which results in an overall effect of € 60,000 additional costs compared to the situation without paliperidone palmitate. **CONCLUSIONS:** The introduction of a new treatment of schizophrenia in Austria is budget neutral.

#### PMH19

##### ASSOCIATION BETWEEN COGNITIVE FUNCTION AND 3 MONTH HEALTH CARE COSTS AMONG PATIENTS INITIATING AN ANTIDEPRESSANT FOR DEPRESSIVE DISORDER IN AN AMBULATORY CARE SETTING

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**OBJECTIVES:** Depression is associated with reduced cognitive function and significant health care costs; however, the extent to which these two are related remains unclear. This study compared follow-up health care costs for major depressive disorder patients with and without cognitive dysfunction after antidepressant (AD) initiation. **METHODS:** A large US health plan affiliated with Optuminsight was used to identify depressed patients with a newly prescribed AD who could be surveyed to assess cognitive function. Patients with neurological diseases associated with cognitive dysfunction were excluded. Patients were mailed a survey invitation and consent form. Patients maintained eligibility by confirming a depressive diagnosis and no excluding diagnoses. Consenting, eligible patients were interviewed by telephone and completed 4 cognitive function tests. Patients were classified as "cognitive normal (CN)" or "cognitive dysfunction (CD)" based on test scores relative to normative data. All-cause health care costs in the 3 months post-AD initiation were calculated from pharmacy and medical claims. T-tests compared 3-month costs of CN versus CD. Gamma models with log link compared health care costs between CD and CN patients, adjusting for race, sex, age, education, employment, depression severity, and comorbidities. **RESULTS:** A total of 13,537 patients were invited to participate in the study and 564 patients maintained eligibility and completed the study. Patients were mostly female (80%), mean age was 41 years, 98% had a high school degree or higher, and 84% were employed. A total of 45% (n=255) met criteria for CD. Mean health care costs were \$4,996 for all patients. Costs were \$6,457 for the CD group compared to \$3,787 for the CN (p = 0.038). In the gamma models with costs as the outcome, CD patients had costs 1.43 times higher than CN patients (95% CI: 1.13, 1.81). **CONCLUSIONS:** In this study population, health care costs were significantly higher in patients with cognitive dysfunction compared to those without cognitive dysfunction.

#### PMH20

##### ASSESSING THE ECONOMIC BURDEN AND HEALTH CARE UTILIZATIONS OF VETERAN PATIENTS DIAGNOSED WITH POST-TRAUMATIC STRESS DISORDER IN THE UNITED STATES

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**OBJECTIVES:** To assess the economic burden and health care utilizations of patients diagnosed with post-traumatic stress disorder (PTSD) in the U.S. veteran population. **METHODS:** Patients diagnosed with PTSD were identified (International Classification of Disease 9<sup>th</sup> Revision Clinical Modification [ICD-9-CM] diagnosis code 309.81) from the Veterans Health Administration (VHA) dataset from October 01, 2009 through September 30, 2011. The first diagnosis date was designated as the index date. A comparator group was created by identifying patients without PTSD but with the same age, region, gender and index year, and who were matched by baseline Charlson Comorbidity Index. A randomly chosen index date served to