

for rehabilitation were €27 ( $\leq 1\%$ ), for occupational therapy €14 ( $\leq 1\%$ ). Costs for sick leave payments came to €247 (5%) in 2006. Costs increase when a patient had an inpatient episode. A patient with at least one inpatient visit causes average annual costs of €15,487 (inpatient: €12,938; medication: €1552; outpatient: €322; rehabilitation: €108; occupational therapy: €16; sick leave payments: €551). A total of 2602 (23%) patients had at least one inpatient visit in 2006. **CONCLUSIONS:** The major cost driver in schizophrenia from a health insurance perspective in Germany is inpatient care as well as to a lesser extent medication costs. Patients with at least one inpatient episode cause threefold cost compared with the average cost of schizophrenia.

PMH35

#### BURDEN OF ILLNESS AND COMORBIDITIES IN ADULT PATIENTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD)

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**OBJECTIVES:** To identify direct and indirect costs associated with adult ADHD. **METHODS:** An analysis of health care claims databases (MarketScan) identified adults (aged  $\geq 18$ ) diagnosed with ADHD  $\geq 2$  times within a 12-month period between 2002 and 2007, and with  $\geq 1$  diagnosis of ADHD or an ADHD-related prescription claim in 2006. Control patients with no diagnosis of ADHD were randomly matched 3:1 to ADHD patients based on gender, age, region, and presence of capitated services. Direct health care costs were based on inpatient visits, ER visits, outpatient services and visits, and prescriptions. Indirect costs included work absences (WA), short-term disability (STD), and worker's compensation (WC). Comorbidity was assessed through the Deyo-Charlson Comorbidity Index (CCI) and the presence of specific nonpsychiatric and psychiatric comorbidities known to be associated with ADHD from the medical literature. **RESULTS:** A total of 31,752 ADHD patients and 95,256 controls were identified. Compared with controls, ADHD patients had higher mean costs associated with health care (\$4306 vs. \$2418,  $P < 0.0001$ ) and STD (\$743 vs. \$424,  $P < 0.0001$ ). There were no significant differences in mean costs associated with WA (\$3304 vs. \$3404,  $P = 0.5686$ ) or WC (\$356 vs. \$380,  $P = 0.8689$ ). Although the absolute difference was small, the mean CCI was significantly lower for ADHD patients than for controls (0.15 vs. 0.18,  $P < 0.0001$ ). Compared with controls, ADHD patients were more frequently diagnosed with most of the comorbidities investigated. The top 3 diagnoses with the largest differences in cohort comorbidity rates were injuries, depression, and bipolar disorder ( $P < 0.0001$ ). **CONCLUSIONS:** Patients with ADHD had medical expenditures almost twice as high as patients without ADHD and were more likely to seek medical care for injuries. Given a 4.4% prevalence rate of adult ADHD in the United States, the overall societal and direct medical costs for adult ADHD may be significant. Supported by funding from Shire Development Inc.

PMH36

#### MENTAL HEALTH COSTS INCURRED BY PATIENTS DIAGNOSED WITH MAJOR DEPRESSIVE DISORDER WHO DO NOT RESPOND TO SUCCESSIVE LINES OF TREATMENT

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**OBJECTIVES:** To analyze treatment patterns and costs following first-line treatment of major depressive disorder (MDD). **METHODS:** Using a retrospective cohort design and claims data (January 2003-March 2008), we examined patients who began first-line monotherapy for MDD, and followed them for 1 year through successive lines of therapy. Patients had: at least 1 health care claim due to MDD between January 2004 and March 2007; initiated MDD monotherapy within 7 days of first MDD diagnosis (index date); no previous exposure to index monotherapy in the 180 days prior to index date; continuous enrollment 6 months prior to and 12 months post index date. The adjusted average weekly health care cost attributable to mental health problems was compared across lines of treatment using 2-part regression models with log transformation of costs. **RESULTS:** A total of 14,601 patients were identified. Selective serotonin reuptake inhibitors were the leading treatment choice across first, second, and third lines of therapy, followed by benzodiazepines, bupropion, and serotonin-noradrenaline reuptake inhibitors. Patients either continued with their index treatment (6.7%), added a new therapy (27.2%), switched to another therapy (59.1%), or discontinued treatment (7.1%). Of the 12,597 patients who added or switched therapy, 5714 received third-line therapy, and of these, 2227 progressed to fourth-line therapy within the first year. Average weekly costs for patients initiating 1, 2 and 3 lines of therapy were \$70, \$68, and \$95, respectively. Patients still not achieving an adequate response during fourth-line therapy incurred between \$143 and \$334 per week in health care costs. Patients who switched or added another therapy generally incurred the highest costs. **CONCLUSIONS:** Patients with MDD who do not respond to successive lines of treatment incur higher mental health costs than responsive patients. This pattern is particularly evident between second and third, and between third and fourth lines of treatment. Supported by funding from AstraZeneca Pharmaceuticals LP.

PMH37

#### COST-EFFECTIVENESS OF PREGABALIN VERSUS USUAL CARE IN DULOXETINE-REFRACTORY OUT-PATIENTS WITH GENERALIZED ANXIETY DISORDER: AN ECONOMIC EVALUATION UNDER MEDICAL USUAL PRACTICE IN MENTAL HEALTH CENTERS

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**OBJECTIVES:** To carry-out a 6-month cost-effectiveness analysis (CEA) of the effect of Pregabalin (PGB) versus Usual Care (UC) in Duloxetine-refractory out-patients with Generalized Anxiety Disorder (GAD) treated according with usual medical practice in Mental Health Centers in Spain. **METHODS:** This CEA used secondary data extracted from a 6-month cohort prospective observational study (the ADAN study) designed to ascertain cost and health care resources utilization in subjects with GAD (DSM-IV criteria). Duloxetine-refractory subjects were defined as those who claimed of persistent symptoms of anxiety and showed suboptimal response (HAM-Anxiety scale  $\geq 16$ ) after a course of standard doses of duloxetine for 6 month. At baseline, patients could switch to PGB, monotherapy or add-on, or to UC which could include ISRS/ISRN/ other antidepressants, benzodiazepine, anti-epileptics different than PGB or a combination. Health outcomes included quality-adjusted life years (QALYs) gain by EQ-5D questionnaire. The perspective of CEA was that of a 3<sup>rd</sup>-payer in year 2009. Sensitivity analysis was performed by means of bootstrapping techniques (10000 re-samples were obtained) in order to obtain a cost-effectiveness acceptability curve. **RESULTS:** A total of 132 duloxetine-refractory subjects (mean baseline HAM-A; 25.6 pts) were identified; 103 and 29 in the PGB and UC groups, respectively. Compared with UC, PGB therapy was associated with significant QALY gain after 6 months of treatment;  $0.1191 \pm 0.1163$  vs  $0.0810 \pm 0.0777$ ,  $p = 0.043$ , but higher health care costs;  $\text{€}1,402.1 \pm 849.1$  vs  $\text{€}1,051.5 \pm 789.1$ ,  $p = 0.048$ . The deterministic ICER ratio was  $\text{€}9,210$  per QALY gained with a re-sampling ICER of  $\text{€}11,234$  (95 CI: 1,591–20,877). The 90% of re-samples fold below  $\text{€}20,513$  threshold and 95% below  $\text{€}29,901$ . **CONCLUSIONS:** Despite the small sample and observational design, this evaluation could suggest that pregabalin may be cost-effective in comparison with usual care in duloxetine-refractory subjects with Generalized Anxiety Disorders managed in Mental Health Centers under usual medical practice in Spain.

PMH38

#### COST-EFFECTIVENESS OF PREGABALIN VERSUS ISRS/ISRN IN BENZODIAZEPINE-REFRACTORY OUT-PATIENTS WITH GENERALIZED ANXIETY DISORDER: AN ECONOMIC EVALUATION UNDER MEDICAL USUAL PRACTICE IN MENTAL HEALTH CENTERS

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**OBJECTIVES:** To carry-out a 6-month cost-effectiveness analysis (CEA) of the effect of Pregabalin (PGB) versus ISRS/ISRN in benzodiazepine refractory out-patients with Generalized Anxiety Disorder (GAD) treated according with usual medical practice in Mental Health Centers in Spain. **METHODS:** This CEA used secondary data extracted from a 6-month cohort prospective observational study (the ADAN study) designed to ascertain cost and health care resources utilization in subjects with GAD (DSM-IV criteria). Benzodiazepine-refractory subjects were defined as those who claimed of persistent symptoms of anxiety and showed suboptimal response (HAM-Anxiety scale = 16) after a course of standard doses of benzodiazepines, alone or in combination, for 6 months. At baseline, patients could switch to PGB monotherapy or add-on or to ISRS/ISRN alone or in combination. Outcomes included quality-adjusted life years (QALYs) gain using the EQ-5D questionnaire. As the perspective of CEA was that of a 3<sup>rd</sup>-payer, only health care resources use and corresponding costs were computed in year 2009. Sensitivity analysis was performed by means of bootstrapping techniques (10000 re-samples were obtained) in order to obtain a cost-effectiveness acceptability curve. **RESULTS:** A total of 231 benzodiazepine-refractory subjects (mean baseline HAM-A; 25.1 pts) were identified; 116 in the PGB and 115 in the ISRS/ISRN group, respectively. Compared with ISRS/ISRN, PGB therapy was associated with higher QALY gain;  $0.1126 \pm 0.09857$  vs.  $0.1008 \pm 0.09460$ , but increased health care costs;  $\text{€}998.1 \pm 691.5$  vs.  $\text{€}894.2 \pm 648.5$ . The deterministic ICER ratio was  $\text{€}8,89$  per QALY gained with a re-sampling ICER of  $\text{€}6,214$  (95 CI: 1,825–10,604). The 90% of re-samples fold below  $\text{€}26,556$  threshold and 92% below  $\text{€}30,000$ . **CONCLUSIONS:** Despite the observational design of the primary study, this evaluation could suggest that pregabalin may be cost-effective in comparison with ISRS/ISRN in benzodiazepine refractory out-patients with Generalized Anxiety Disorders managed in Mental Health Centers under usual medical practice in Spain.