with RLAI offers the potential for substantial cost savings in the care of these patients.

PMH24

GEO OBSERVATIONAL STUDY: 24 MONTHS CHARACTERISTICS OF SOCIOECONOMIC AND CLINICAL STATUS IN SCHIZOPHRENIA PATIENTS TREATED WITH OLANZAPINE AND HALOPERIDOL IN GERMANY

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OBJECTIVES: To describe real life disease characteristics, clinical status and socioeconomics for schizophrenia in- and outpatients treated with olanzapine or haloperidol over 24 months. **METHODS:** GEO is a two-year prospective naturalistic study in Germany. Quarterly observations were made for 308 patients under olanzapine treatment and 188 patients under haloperidol treatment. **RESULTS:** Compared to haloperidol patients, more patients included into the study under olanzapine lived at home without care (59% vs. 39%), were employed (35% vs. 17%), and fewer were in early retirement (30% vs. 51%). During the observational period, olanzapine and haloperidol treatment was stable (olanzapine: 94% retention vs. haloperidol: 92%; dosage changes occurred in 64% vs. 47%, respectively). Concomitant medication related to schizophrenia was prescribed less frequently for olanzapine patients (52% vs. 68%). Mean disease severity, negative and cognitive symptoms as assessed by CGI (scales from no symptoms (one) to very severe (seven)) ranged between three and four. Positive and depressive symptom values were lower (mean value between two and three). During the course of the study disease severity improved for all symptoms with slightly more improvement in olanzapine patients (mean change in disease severity: olanzapine 0.95; haloperidol 0.76). Throughout the 24-month period, olanzapine patients had lower average EPS, parkinsonism, retardation, dyskinesia and akathisia symptom scores (none (1) to severe (6)) than haloperidol patients (mean EPS: olanzapine 1.3; haloperidol 2.0). Weight gain, depression and other symptoms were reported more frequently for olanzapine (<28% vs. <11%). Nevertheless, olanzapine patients showed a lower mean Body Mass Index (BMI) than haloperidol patients throughout the 24-month study period. **CONCLUSIONS:** Schizophrenia patients under olanzapine treatment showed a higher degree of integration into social and occupational environment. For olanzapine patients, all schizophrenia symptoms improved over time. Throughout the study, olanzapine patients exhibited less EPS and had a lower BMI.

PMH25

EFFECTIVENESS AND TOLERABILITY OUTCOMES OF RISPERIDONE LONG-ACTING INJECTION COMPARED TO CONVENTIONAL DEPOT ANTIPSYCHOTICS IN A LARGE CANADIAN PSYCHIATRIC HOSPITAL

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OBJECTIVE: To compare effectiveness and tolerability outcomes of patients with schizophrenia treated with risperidone long-acting injection and patients treated with conventional depot antipsychotics. **METHODS:** Patients initiated on risperidone long-acting injection during a four-month index period were compared to patients initiated on a conventional depot antipsychotic during the same time period. Patient demographics including age, gender, diagnosis, number of previous psychiatric admissions and in-patient program were evaluated. The effectiveness outcomes of antipsychotic polypharmacy, discharge and readmission rates were compared. Neurological tolerability was assessed as measured by the prescribing of regularly scheduled anticholinergic rescue medications. **RESULTS:** Forty patients initiated on risperidone long-acting injection were compared to 49 patients initiated on a conventional depot antipsychotic. The two patient groups were demographically very similar. The risperidone long-acting injection group was 75% male with an average age of 41-years and 6.0 previous psychiatric admissions. The conventional depot group was 67% male with an average age of 47.5 years and 5.9 previous psychiatric admissions. Antipsychotic polypharmacy was reduced from 63% to 31% in the risperidone long-acting injection group but increased from 29% to 73% in the conventional depot group. The use of anticholinergic rescue medications decreased from 47% to 12% in the risperidone long-acting injection group but increased from 31% to 73% in the conventional depot group. After 12-months of observation, 83% of the risperidone long-acting injection patients had been discharged and none had been readmitted, whereas 58% of the conventional depot group had been discharged and, of those, 26% had already been readmitted. **CONCLUSION:** In this difficult-to-treat population of patients, risperidone long-acting injection conferred significant advantages over conventional depot antipsychotics in terms of effectiveness and tolerability. As well, the substantial differences in discharge and readmission rates infer considerable pharmacoeconomic advantages in favor of risperidone long-acting injection.

PMH26

USING CLAIMS DATA TO ESTIMATE THE ANNUAL PREVALENCE OF SCHIZOPHRENIA IN THE UNITED STATES, 2002

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OBJECTIVES: This study estimates the annual prevalence of schizophrenia in the U.S. based on administrative claims data analyses and a comprehensive literature review. **METHODS:** The 2002 annual prevalence rate of schizophrenia in the U.S. was estimated separately for privately insured, government insured (Medicare, Medicaid), and uninsured populations. The 2002 annual prevalence for privately insured individuals was calculated based on a de-identified administrative claims database of approximately 3.0 million privately insured beneficiaries covering the period from 1999 to 2003. The 2002 prevalence of Medicaid enrollees was calculated from Medi-Cal claims covering the period from 2000–2002. The 2002 schizophrenia prevalence in Medicare population was calculated as a weighted average of the prevalence rates of Medicaid/Medicare dual eligibles and private insurance program enrollees over 65. Published statistics were used to estimate the prevalence of schizophrenia in the uninsured population and to weight prevalence rates in different populations to estimate the 2002 annual schizophrenia prevalence in the general U.S. population. **RESULTS:** The annual prevalence rate of schizophrenia in the U.S. in 2002 was estimated at 0.5%. The Medicaid population was identified as having the highest schizophrenia prevalence rate in the U.S. (1.7% for non Medicare dual eligible enrollees), whereas annual schizophrenia prevalence rates in Medicare and privately insured population were 0.7% and 0.1%, respectively. The disease was also more prevalent in the uninsured population (1.1%). Prevalence rates for women were highest in an older age group (56–65 years), whereas men's prevalence rates peaked somewhat earlier (46–55 years). **CONCLUSIONS:** The results suggest that schizophrenia may be more prevalent in the U.S. general population than previously estimated in some epidemiology survey studies, especially given the fact that claims database analyses usually

provide lower bounds of prevalence estimates. Schizophrenia is most prevalent in the low income and uninsured populations than in the privately insured or Medicare populations.

PMH27

12-MONTH COST-EFFECTIVENESS ANALYSIS OF ORAL ANTIPSYCHOTIC TREATMENTS IN PATIENTS WITH SCHIZOPHRENIA IN THE PAN-EUROPEAN SOHO (SCHIZOPHRENIA OUTPATIENT HEALTH OUTCOMES) STUDY

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OBJECTIVE: To determine the incremental cost-effectiveness for treating schizophrenia patients with olanzapine versus risperidone, quetiapine, amisulpride, or oral typical antipsychotics. **METHODS:** European SOHO is a 3-year, prospective, outpatient, observational study associated with antipsychotic treatment in 10 European countries. Health care resource use and clinical effectiveness data were collected at baseline, 3, 6, and 12 months. Clinical effectiveness was assessed using the Clinical Global Impression (CGI) scale. UK health care costs were applied to resource use data for the 10 countries. Pair-wise incremental costs and effectiveness were estimated between olanzapine-treated patients and patients treated with each of the other oral antipsychotics. Incremental cost-effectiveness ratios (ICERs) were presented as the additional cost per CGI unit gained. **RESULTS:** A total of 10,972 patients were enrolled at baseline, 80% were eligible for analyses at 12 months. Pair-wise cost-effectiveness comparisons, over 12 months, showed treatment with olanzapine is more effective and less costly than quetiapine and amisulpride. Treatment with olanzapine is more effective compared to treatment with risperidone and marginally more costly: ≤226 per patient over 12 months. The incremental cost-effectiveness ratio was £1299 per additional decrease in CGI unit gained. Treatment with olanzapine is more effective than oral typical antipsychotics and marginal more costly: ≤849 per patient over 12 months. The incremental cost-effectiveness ratio for olanzapine versus oral typical treatment was £3166 per additional decrease in CGI unit gained. Treatment maintenance was 77% at 12 months with olanzapine, which was greater than that for the other treatments. **CONCLUSIONS:** Olanzapine was cost saving and more effective than treatment with quetiapine and amisulpride. The cost-effectiveness of olanzapine compared to respirodone and typicals depends on the value assigned to the decrease in GCI unit gained. This needs to be considered, however, in the context of treatment maintenance, which favoured olanzapine.

PMH28

COST-EFFECTIVENESS ANALYSIS OF ZIPRASIDONE VERSUS NO TREATMENT FOR SCHIZOPHRENIA RELAPSE PREVENTION

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OBJECTIVE: The aim of this study was to estimate the cost-effectiveness of treatment with ziprasidone vs. no-treatment (placebo) for schizophrenia relapse prevention, in Spain. **METHODS:** Treatment of schizophrenia was modeled over one year, by means of a retrospective deterministic model, from the National Health System (NHS) perspective (year 2005). The primary outcome was the probability of relapse occurring within a 52 weeks period of treatment with ziprasidone daily doses of 40–160 mg vs. placebo. Data was obtained from a randomized, double-blind, placebo-controlled clinical trial (N = 218 patients). Antipsychotic cost, concomitant drugs to treat adverse events (extrapiramidal symptoms, etc.) and medical costs associated to adverse events were derived from the clinical trial results and from a Spanish Health Cost database. The average cost of a patient with acute psychosis relapse admitted to hospital in Spain (€3421) was obtained from a retrospective analysis of medical records of 200 patients admitted for acute psychosis in eight Spanish hospitals (The Psychosp Study), previously published. **RESULTS:** The probability of psychosis relapse was 0.77 with placebo, and 0.43, 0.35, 0.36 and 0.38 for ziprasidone daily dose of 40, 80, 160 mg or weighted doses, respectively ($p < 0.01$ vs. placebo in all cases). The number needed to treat (NNT) to avoid 1 relapse was 1.3 (95% CI 1.2–1.4), 2.3 (2.0–2.8), 2.9 (2.4–3.7), 2.8 (2.2–3.3), and 2.6 (2.2–3.3), respectively. The yearly average incremental cost per relapse avoided was €186 for the weighted dose of ziprasidone, and ranged from savings of €557 (80 mg/day) to incremental of €1015 (160 mg/day), lower in all cases than the cost of a relapse (€3421). **CONCLUSIONS:** According to this evaluation, and compared with no treatment, the psychosis relapse prevention with ziprasidone is cost-effective from the Spanish NHS perspective.

PMH29

DRUG UTILIZATION PATTERNS AND COSTS AND TOTAL COSTS OF SCHIZOPHRENIA TREATMENT IN AN INSURED POPULATION

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OBJECTIVES: Schizophrenia is a chronic, disabling and costly disease which affects 2.2 million in US. No study has looked at the patterns of drug therapy and cost of the disease in a previously insured population and how closely treatment guidelines are followed. Problem: Using data from Blue Shield of California, we determine drug utilization patterns and costs and the relationship between these patterns and the American Psychiatric Association treatment guidelines and total costs of schizophrenia treatment. **METHODS:** We used claims data from Blue Shield of California during 2001–2004 to select all patients with ICD-9 diagnoses of schizophrenia. Data was available for utilization and costs of health care use, including mental health carve-out care. We used a 6 month run-in and ending period in case of incomplete claims data. Drug categories were typical and atypical antipsychotics and mood stabilizers. Drug patterns were monotherapy, combination therapy with and without mood stabilizers, and several switch patterns. We used chi-square tests and linear regression analysis to detect associations between utilization patterns and costs. **RESULTS:** The 799 schizophrenia patients had a mean age of 42.6 years (20.4–86.2) and 46.3% were males. Total annual direct costs of treatment were $6301/patient, 46% acute care services, and 45% prescription drugs. The combination treatment group (2 antipsychotics/mood stabilizer) as well as a monotherapy group (one switch antipsychotic therapy) had the highest utilization and costs. Our regression showed higher total costs correlated with males and patients with an average of 1.8 therapy switches while on otherwise single stable antipsychotic therapy. Older patients and those on a mood stabilizer contributed the least to cost. **CONCLUSION:** The total annual costs of these insured schizophrenic patients ($6301) were substantially lower than the $25,940 reported for Medicaid patients. Health care utilization and costs increased as