patients were initiated on 25mg of RLAI. At 12-months 63% of patients were still on RLAI. The reasons for discontinuation were lack of response (14%); loss-to-follow-up (10.5%); other (7.5%); patient or family choice (6%); adverse events (6%); tolerability (2%) and adherence (1.5%). Young age at schizophrenia onset and suicidal behavior at baseline were significant risk factors for time to discontinuation (p < 0.04). CONCLUSIONS: The treatment continuation rate with RLAI at 12-months is consistent with the results of Fleischhacker et al (2003), but superior to oral typical and atypical agents (Lieberman et al, 2005). Fleischhacker et al (2003); J Clin Psychiatry 64(10):1250–1257. Lieberman et al (2005); NEJM 353;1209–23.

META-ANALYSIS OF SNRIS, SSRIS, AND TCAS IN THE TREATMENT OF MAJOR DEPRESSIVE DISORDER USING REMISSION AS THE CLINICAL OUTCOME

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OBJECTIVE: To summarize rates of clinical remission and dropouts/withdrawal due to adverse drug reactions (ADRs) or lack of efficacy/effectiveness (LoE) of serotonin-norepinephrine reuptake inhibitors (SNRIs), selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs). METHODS: We searched Medline, Embase, International Pharmaceutical Abstracts, and The Cochrane International Library from 1980 to 2005 for clinical trials using MeSH terms “serotonin-norepinephrine reuptake inhibitors”, “selective serotonin reuptake inhibitors”, “tricyclic antidepressants”, “major depression”, and “clinical remission”. Accepted languages were English, French, German, Portuguese, and Spanish. A meta-analytic approach was used to synthesize outcome rates from published head-to-head clinical trials comparing two or more drugs (in therapeutic doses) from SNRIs, and/or SSRIs, and/or TCAs from 6 to 12 weeks of treatment. Remission was defined as a final score <7 on the Hamilton Depression Rating Scale or =<12 in the Montgomery-Asberg Depression Rating Scale. Data were combined across arms of individual studies using a random effects model, producing point estimates with 95% confidence intervals. RESULTS: Data were gathered from 30 arms of 15 head-to-head trials of 2524 patients. TCAs had the highest overall remission rate (45.7%), followed by SNRIs (45.0%), and SSRIs (38.8%) (p < 0.05 for TCAs versus SNRIs; p < 0.001 for TCAs versus SSRIs; and p < 0.001 for SNRIs versus SSRIs). When patients were categorized as inpatients (n = 582) and outpatients (n = 1613), SNRIs had the highest remission rate (52.0% for 144 inpatients and 49.3% for 559 outpatients). SNRIs had the lowest overall discontinuation rates (24.3%), followed by SSRIs (27.1%), and TCAs (34.9%). Rates of discontinuation due to ADRs and LoE were 9.8% and 5.2% for SNRIs, 7.3% and 7.0% for SSRIs, and 18.9% and 9.1% for TCAs, respectively. CONCLUSIONS: SNRIs have the highest efficacy/effectiveness remission rates (statistically significant for inpatients and outpatients), and the lowest overall dropout/withdrawal rates suggesting clinical superiority for this class in treating major depressive disorders.

INCIDENT DIABETES ASSOCIATED WITH USE OF SECOND-GENERATION ANTIPSYCHOTIC (SGA) THERAPY: AN EVALUATION OF THE IMPACT OF DOSE AND TREATMENT INDICATION

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OBJECTIVE: While SGA therapy has been associated with new-onset diabetes, the relative risk of the agents and the impact of possible confounding variables have been questioned. This study evaluated the impact of dose and treatment indication on the relative risk of new-onset diabetes associated with SGA therapy while controlling for demographic, clinical and medication variables. METHODS: A retrospective database analysis capturing electronic medical records for adult Texas Medicaid enrollees taking antipsychotic monotherapy from January 1997 to December 2001, with a maximum follow-up of 12 months was used. Patients were stratified according to treatment dose (low, medium, high) and a hierarchy of mutually exclusive diagnostic categories: schizophrenia, bipolar disorder, dementia, psychotic disorder, non-psychotic disorder and no mental health indication. The incidence of diabetes was examined using multivariate logistic regression analysis. RESULTS: Data were available for 13,731 patients. At treatment-onset, the prevalence of diabetes was 16.9%. The mean (SD) dose by indication for the most prevalent conditions (schizophrenia, bipolar disorder and dementia, respectively) were as follows: olanzapine (12.04mg (6.73); 8.91mg (5.78); 4.87mg (3.00)); quetiapine (273.16mg (203.86); 146.33mg (142.29); 79.59 (82.57)); and risperidone (3.55mg (2.37); 2.05 (1.76); 1.12 (0.85)). The overall incidence of diabetes was 2.6%. Multivariate logistic regression analysis showed no difference in the incidence of diabetes according to the agent used (p = 0.281). Compared to risperidone, the odds of new-onset diabetes were 0.879 (95% CI: 0.653 to 1.184) and 0.683 (95% CI: 0.414 to 1.126) for olanzapine and quetiapine, respectively. Neither treatment indication (p = 0.876) nor antipsychotic dose (p = 0.274) were associated with the development of diabetes. CONCLUSIONS: Results indicate that the risk of new-onset diabetes does not differ among SGA agents (i.e., olanzapine, quetiapine and risperidone). While the dose of antipsychotic prescribed varied significantly according to treatment indication and patient age, neither dose nor indication were associated with the development of diabetes.

NEW-ONSET DIABETES MELLITUS ASSOCIATED WITH USE OF ATYPICAL ANTIPSYCHOTICS AMONG SCHIZOPHRENIC PATIENTS IN TAIWAN

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OBJECTIVE: Atypical antipsychotic-induced diabetes has raised concerns recently, while the extent of atypical antipsychotic-induced diabetes mellitus among Asians with schizophrenia is not well known. This study aims to compare the association of atypical antipsychotic treatments and diabetes mellitus with that of haloperidol treatment and diabetes mellitus among schizophrenic patients in Taiwan. METHODS: Data used in this study came from Taiwan’s National Health Insurance claims database for the period 2000–2004. This study identified antipsychotic treatment episodes of clozapine, olanzapine, risperidone, quetiapine, amisulpride, ziprasidone, and haloperid-
Mental Health—Cost Studies

ANNUAL COSTS ASSOCIATED WITH PATTERNS OF ANTIDEPRESSANT TREATMENT RESPONSE AMONG EMPLOYEES

OBJECTIVES: Describe the annual direct health care and indirect work loss costs for employees treated with antidepressants and compare them across patients with different treatment response. METHODS: We examined 1999–2003 data from a claims database of 1.2 million beneficiaries, from 7 large U.S. employers. Analysis was restricted to employees aged 18–64, with at least one diagnosis of major depressive disorder (ICD-9: 296.2x, 296.3x) and at least one prescription of selective serotonin reuptake inhibitors (SSRIs/SNRI). Patients were classified as combination antidepressant therapy users, switchers, discontinuers, or monotherapy maintainers. Annual direct health care costs, including drug and medical costs (comprising inpatient, outpatient, and emergency visits), and indirect work loss costs (comprising absenteeism and disability) were calculated for the 12-month period following therapy initiation. Results were compared descriptively across treatment responses using t-tests and ANOVA analyses.

RESULTS: Of the 3971 patients, 18.4% were on combination therapy, 19.7% switchers, 45.1% discontinuers, and 16.8% monotherapy maintainers. Patients on combination therapy had similar direct and indirect costs compared to switchers (all p > 0.08). The average direct and indirect costs for patients on combination therapy and switchers ($7986 and $2806 respectively) were higher than those for discontinuers ($6013 and $1680 respectively, all p < 0.001) or maintainers ($5193 and $1467 respectively, all p < 0.001). Compared to patients on combination therapy and switchers, maintainers had similar drug costs ($1980 vs. $2068, p = 0.469). Compared to discontinuers, maintainers had higher drug costs but lower medical and disability costs compared to discontinuers.

Cost-Effectiveness of Venlafaxine: A Canadian Perspective

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OBJECTIVE: To estimate the incremental cost-effectiveness of venlafaxine extended-release compared to Selective Serotonin Reuptake Inhibitors (SSRIs) in the treatment of major depressive disorder (MDD) in Canada. METHODS: A previously validated decision-tree model for the treatment of MDD was adapted to the Canadian clinical practice setting. Probabilities used to populate the decision-tree were derived from the literature and where needed, from a Delphi panel consisting of two General Practitioners and two Psychiatrists. The Ontario Ministry of Health and Long-term Care perspective was used in this study. The relevant direct medical costs (year 2005 Canadian dollar values) were derived from the Ontario Health Insurance Policy (OHIP) and the Ontario Case Costing Initiative (OCCI). The drug acquisition cost for venlafaxine (brand) and SSRIs (generic) was derived from the Ontario Drug Benefit formulary (ODB). The time horizon was six months; therefore the costs and outcomes were not discounted. Various one-way sensitivity analyses were performed. RESULTS: The average six-month expected cost per patient for venlafaxine and SSRIs were CDN$4136 and CDN$4224 respectively. The average six-month SFDs were 33.4 and 46.7 days for venlafaxine and SSRIs respectively. The cost-effectiveness as measured by cost per SFDs was CDN$77.86 for venlafaxine and CDN$90.36 for SSRIs. The incremental cost-effectiveness analysis showed a treatment strategy using venlafaxine as first line was dominant. CONCLUSION: Despite a higher drug acquisition cost, venlafaxine extended-release may be cost-effective and even cost saving compared to SSRIs when used as first line treatment of MDD in a Canadian clinical practice setting.

Cost-Effectiveness of Atypical Antipsychotics in the Treatment of Acute Mania

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OBJECTIVES: To estimate the cost-effectiveness of atypical antipsychotics (AAPs) in the treatment of acute mania in patients with bipolar I disorder from a managed care perspective. METHODS: The model estimated the cost-effectiveness (CE) ratios for each AAP when used as monotherapy for the acute (3-week) treatment of patients with bipolar mania. CE ratios were defined as the total annual cost per responder, and responders were defined as patients with a 50% improvement on the YMRS scale at 3 weeks. Data sources included published literature, package inserts, and primary data analysis of a managed care claims database. The median response rate for each AAP was used in the base case scenario; 45.5%, 50.0%, 58.0%, 53.3%, and 56.7% for aripiprazole, ziprasidone, risperidone, quetiapine, and olanzapine, respectively. Since there are no pub-