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AN ECONOMIC COMPARISON OF ANTIPSYCHOTICS IN TREATMENT OF SCHIZOPHRENIA

Sorensen SV1, Russell JM2, Mackell JA3
1MEDTAP International, Bethesda, MD, USA; 2University of Texas Medical Branch, Galveston, TX, USA; 3Pfizer Pharmaceuticals Group, Pfizer, Inc, New York, NY, USA

OBJECTIVES: A Markov model was developed to determine costs and outcomes of one year of antipsychotic treatment for patients with schizophrenia. METHODS: The model simulated a 4-armed, randomized, parallel, 12-month observational study of 2000 inpatients and 2000 outpatients initiating treatment on ziprasidone (Z), risperidone (R), olanzapine (O), or haloperidol (H). Equivalent efficacy between treatments was assumed; however, relapse rates on haloperidol were adjusted to be consistent with Csernansky et al. 2002. Weighted averages were used for published treatment-emergent adverse event rates for akathisia (Z = 7.9, R = 15.1, O = 7.8, H = 20.8), other extrapyridimal symptoms (Z = 11.5, R = 9.0, O = 11.6, H = 26.7), weight gain (Z = 10.0, R = 14.8, O = 28.2, H = 11.0), and prolactin-related side effects (Z = 2.2, R = 11.2, O = 5.2, H = 3.0) to estimate tolerability, concomitant medication use, treatment changes, non-compliance, and relapse. Costs for inpatient care, sub-acute chronic care, and outpatient visits were based on published private and public medical claims databases. Medication costs were $170.63/month (Z = 120 mg/d), $242.61/month (R = 4.8 mg/d), $344.17 (O = 13.2 mg/d), and $6.72 (H = 15 mg/d) (RedBook 2002). Outcome measures included days in acute care, total direct medical costs, and incremental costs. RESULTS: Because of greater tolerability, estimated days in acute care were lowest for ziprasidone (42.4) when compared to olanzapine (42.8), risperidone (43.1), or haloperidol (53.6). Due to lower estimated days in acute care and lower maintenance treatment drug costs, estimated annual total healthcare costs for each drug cohort (n = 1000 patients per cohort) were lowest for those patients initiating treatment with ziprasidone vs. risperidone (+$787,000), olanzapine (+$964,000), or haloperidol (+$4,210,000). Sensitivity analyses to changes in model assumptions for adverse event, adherence, and relapse rates, and healthcare costs were robust to these conclusions. CONCLUSION: Ziprasidone has an adverse event profile distinct from those of other atypical antipsychotics and lower pharmaceutical acquisition costs, which potentially lead to improved outcomes and lower total direct costs.

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OLANZAPINE VERSUS RISPERIDONE IN THE TREATMENT OF SCHIZOPHRENIA: A MENTAL HEALTH COST COMPARISON IN A MANAGED CARE SETTING

Sommers S1, Lynch F2, McFarland B3, Muilenburg N2
1Group Health Cooperative, Seattle, WA, USA; 2Kaiser Permanente Northwest, Portland, OR, USA; 3Oregon Health & Science University, Portland, OR, USA

OBJECTIVES: Treatment of schizophrenia is a major cost burden. We compared the cost of treatment among bipolar disorder (BP) patients (recognized and unrecognized) to those of major depression disorder (MDD) patients. METHODS: An employer administrative claims database (covering several managed care health plans from 1998–2001) was used to identify 11,464 patients diagnosed with MDD and initially treated with antidepressants (AD). Of these, unrecognized BP (UBP) patients received their initial BP diagnosis and/or mood stabilizer (MS) prescription after AD initiation, while recognized BP (RBP) patients had these records on/before AD initiation. Induced BP patients were defined as those manifesting mania within six months after starting AD. RESULTS: BP patients accounted for 6.8% of the research sample (3.7% UBP and 3.1% RBP). Induced BP represented 6.6% of all BP patients. RBP patients had a slightly lower rate of induction (6.2%) than UBP patients (6.9%). The use of combination therapies varied in the non-BP, UBP, and RBP patients (11%, 32%, and 43%, respectively) (all pairwise p < 0.01). The use of MS was less frequent among UBP than RBP patients (14% and 34%, respectively) (p < 0.0001). CONCLUSIONS: A substantial number of AD-treated MDD patients could be classified as bipolar (either RBP or UBP), and were at risk for induction of mania. RBP and UBP patients initiated with more combination therapies, as compared to Non-BP patients. MS use increased when BP was recognized. More effort is needed to quickly diagnose and effectively treat BP patients.