**PMH3**

**A COST-EFFECTIVENESS COMPARISON OF OLANZAPINE AND RISPERIDONE IN THE TREATMENT OF SCHIZOPHRENIA IN ITALY**

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**OBJECTIVES:** To assess the relative cost-effectiveness of olanzapine compared to risperidone in the treatment of acute episodes and long-term maintenance of schizophrenia in Italy. **METHODS:** A decision analysis approach (based on semi-markov modelling techniques) was used to consider the costs and health outcomes of initiating treatment on patients with an acute episode of schizophrenia and a history of relapsing with no prior atypical antipsychotic treatment. The model compared two alternative atypical antipsychotics to be used before considering patients as being treatment resistant. Clinical response rates were based on changes in BPRS/PANSS scores (≥40% improvement) taken from randomised clinical trials. Relapse rates for the first year of treatment were based on literature estimates. Resource use data covering periods in acute episode, stable maintenance and acute relapse health states were based on a combination of published data and clinical opinion. The model was used to compare the costs and health outcomes of olanzapine versus risperidone as 1st line treatment choices over a 3-year period. **RESULTS:** The base case analysis showed that 1st line use of olanzapine resulted in a reduction of relapses over the 3-year period (37 versus 38 per 100 patients treated). The olanzapine 1st line strategy was associated with an overall cost saving over risperidone of approximately 2% (cost reduction by €6.64 versus €4.19 per day). **CONCLUSIONS:** With the context of the Italian health care services the use of olanzapine as a 1st line atypical antipsychotic appears to provide cost-effective health outcomes advantages over risperidone.

**PMH4**

**ESTIMATING MEDICAL COST REDUCTION IN TREATING SCHIZOPHRENIA WITH CLOzapine**

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**OBJECTIVES:** Clozapine is a drug of choice for treating neuroleptic resistant schizophrenia, but it has serious side effects. Risperidone has shown efficacy in managing neuroleptic-resistant schizophrenia, without agranulocytosis. To our knowledge, economic evaluations of both drugs in this patient population have not been performed. The objective of this study was to estimate a difference in hospitalization costs for schizophrenic patients on clozapine vs. risperidone over one-year period. **METHODS:** Estimates of length of stay (LOS) reduction in patients receiving the clozapine or risperidone were obtained from the medical literature by searching MEDLINE and HEALTHSTAR. Two articles examining LOS reduction for patients receiving risperidone and clozapine were identified, and yearly reduction in LOS was examined. To estimate a reduction in hospitalization costs, average daily hospitalization charges from the Healthcare Cost and Utilization Project database were obtained for the diagnosis of schizophrenia (defined as ICD-9-codes 295.40–295.45, 295.80–295.82, 295.85, 295.90–295.92, and 295.95). Hospital charges were converted to costs by using a cost-to-charge ratio. All costs were expressed in 2000 US dollars. **RESULTS:** After starting risperidone, 35 patients had a decrease in LOS by 51 days per year. After starting clozapine, 172 patients had a 132-day decrease in LOS per year, with a difference of 81 hospitalization days, favoring clozapine. The resulting difference in hospitalization costs between patients on clozapine and risperidone patients was estimated as $1,052 per inpatient day. Estimated benefits of reducing hospitalization costs for clozapine patients as compared to risperidone were $85,212 per patient per year. **CONCLUSIONS:** Clozapine seems to result in reduction in LOS, potentially leading to lower costs of treating schizophrenic patients, as compared to risperidone. More studies are necessary to quantify economic impact of clozapine in this patient population.

**PMH5**

**A DISCRETE EVENTS MODEL OF LONG-TERM OUTCOMES AND COST OF TREATMENT WITH LONG ACTING RISPERIDONE IN SCHIZOPHRENIA**

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**OBJECTIVE:** To estimate the costs and effects of long-acting risperidone (the first long-acting injectable atypical) as first-line treatment for non-compliant schizophrenic patients, versus a conventional depot and continuing short-acting oral atypical formulations over a five year period in the Netherlands. **METHODS:** A discrete event model was developed comparing three scenarios. In scenario 1, patients start with haloperidol depot, after which they may be treated with olanzapine and clozapine. Scenario 2 is similar to 1 except that patients start with long-acting risperidone. In scenario 3, patients start (or continue) with olanzapine, after which they may subsequently be treated with risperidone (oral) and clozapine. The model takes account of patient characteristics...