DIABETES ASSOCIATED WITH ANTIPSYCHOTIC USE IN VETERANS WITH SCHIZOPHRENIA

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OBJECTIVE

To determine the relative risk of developing Type II diabetes in schizophrenic veterans on atypical antipsychotic monotherapy compared to those on typical antipsychotic monotherapy
# Cox Proportional Hazard Model

Reference: Any Typical

<table>
<thead>
<tr>
<th>HAZARD RATIOS (95% CI)</th>
<th>OLANZAPINE (N = 5981)</th>
<th>RISPERIDONE (N = 5901)</th>
<th>QUETIAPINE (N = 877)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNADJUSTED ALL AGES</strong></td>
<td>1.47 (1.20, 1.80)</td>
<td>1.42 (1.16, 1.75)</td>
<td>1.50 (0.96, 2.37)</td>
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<tr>
<td><strong>ADJUSTED ALL AGES</strong></td>
<td>1.50 (1.22, 1.84)</td>
<td>1.47 (1.19, 1.81)</td>
<td>1.54 (0.98, 2.43)</td>
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<tr>
<td>ADJUSTED &lt;45</td>
<td>1.71 (1.10, 2.66)</td>
<td>1.91 (1.22, 2.98)</td>
<td>1.65 (0.64, 4.26)</td>
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<tr>
<td>45-54</td>
<td>1.75 (1.27, 2.40)</td>
<td>1.57 (1.13, 2.19)</td>
<td>1.19 (0.54, 2.61)</td>
</tr>
<tr>
<td>55-64</td>
<td>1.12 (0.67, 1.87)</td>
<td>1.50 (0.94, 2.37)</td>
<td>1.33 (0.46, 3.81)</td>
</tr>
<tr>
<td>65-74</td>
<td>1.14 (0.64, 2.02)</td>
<td>1.04 (0.56, 1.93)</td>
<td>2.53 (0.86, 7.48)</td>
</tr>
<tr>
<td>≥ 75</td>
<td>1.55 (0.57, 4.21)</td>
<td>1.32 (0.51, 3.39)</td>
<td>1.69 (0.19, 14.6)</td>
</tr>
</tbody>
</table>
CONCLUSION
INCEPTION COHORT

- Olanzapine, risperidone and quetiapine have an increased risk of developing diabetes compared to typical antipsychotics. Quetiapine did not reach statistical significance.

- Other agents were not evaluated
  - Clozapine - due to sample size
  - Ziprasidone - newly marketed
  - Aripiprazole - not available

- Olanzapine and risperidone exposure in younger patients (< 45 years, 45-54 years) has a greater association with development of diabetes.
Study Background for Laurie

- **Total Study Cohort** – 19,878 – (FY 1999-2001)

- **Agents**
  - Olanzapine - (n=5981)
  - Risperidone - (n=5901)
  - Quetiapine - (n= 877)
  - Typicals - (n=7009)
  - Clozapine - (n=110) - NOT STUDIED DO TO SMALL SAMPLE SIZE

- **Diabetes**
  - Olanzapine - 200 (3.3%) developed DM
  - Risperidone - 193 (3.3%) developed DM
  - Quetiapine - 21 (2.4%) developed DM