

***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

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

# **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