**PCV1**

**DOES ROUTE OF ADMINISTRATION FOR ESTROGEN THERAPY IMPACT THE RISK OF VENOUS THROMBOEMBOLISM (VTE)?**

**SYSTEM VERSUS ORAL ESTROGEN-ONLY HORMONE THERAPY**

**OBJECTIVES:** To examine the difference between typical and atypical antipsychotic users in the risk of cardiovascular events. This study examines whether the exposure to the corresponding cardiovascular events. **METHODS:** The study was based on California Medicaid (Medi-Cal) fee-for-service administrative claims data from January 1995 to December 2002. The study population consisted of patients >50 years with records of diagnoses of osteoporosis followed from diagnoses to the end of eligibility. Patients were excluded for prior use of the supplement or diagnosis of cardiovascular events or drug induced osteoporosis. Propensity score matching based on age, gender, elixhausener comorbidities and eligibility data created case (n=1,594) and control groups (n=4,782). Chi-square analysis was conducted for comparison of the cardiovascular events defined as ICD9 codes for myocardial infarction and searchable terms of "cerebral infarction, hemorrhage, ischemia" for stroke. **RESULTS:** No statistically significant relationship was found between the study groups for stroke (p=0.56) and myocardial infarction (p=0.54). Components of stroke included cerebral artery occlusion (p=0.04), precrural artery (p=0.27), intracranial hemorrhage (p=0.05) and subarachnoid hemorrhage (p=0.05). The clinical benefits of the supplements were evident with subarachnoid hemorrhage with 0 recorded diagnoses in the case group compared to 12 recorded diagnoses in the control group, however statistical significance was not established. **CONCLUSIONS:** The use of calcium and vitamin D supplementation for the prevention of osteoporosis is associated with a reduced risk of cardiovascular outcomes. Moreover, no broad cardio-protective effects can be concluded from the study.

**PCV2**

**THE RISK OF CARDIOVASCULAR EVENTS ASSOCIATED WITH DIETARY CALCIUM AND VITAMIN D SUPPLEMENTS IN PATIENTS WITH OSTEOFORISIS**

**OBJECTIVES:** Calcium and vitamin D supplements have been widely used and recommended for women to prevent or delay the onset of osteoporosis and the risk of bone fractures. Other benefits include the improvement of blood pressure and lipid levels and a lowering of body weight. In theory, the beneficial effects of calcium and vitamin D suggest improvements in cardiovascular health. Recent publications suggest the contrary and allow to increase serum calcium as a risk factor for adverse cardiovascular events. This study examines whether the exposure to these supplements are associated with cardiovascular events. **METHODS:** The study was California Medicaid (Medi-Cal) fee-for-service administrative claims data from January 1995 to December 2002. The study population consisted of patients >50 years with records of diagnoses of osteoporosis followed from diagnoses to the end of eligibility. Patients were excluded for prior use of the supplement or diagnosis of cardiovascular events or drug induced osteoporosis. Propensity score matching based on age, gender, elixhausener comorbidities and eligibility data created case (n=1,594) and control groups (n=4,782). Chi-square analysis was conducted for comparison of the cardiovascular events defined as ICD9 codes for myocardial infarction and searchable terms of "cerebral infarction, hemorrhage, ischemia" for stroke. **RESULTS:** No statistically significant relationship was found between the study groups for stroke (p=0.56) and myocardial infarction (p=0.54). Components of stroke included cerebral artery occlusion (p=0.04), precrural artery (p=0.27), intracranial hemorrhage (p=0.05) and subarachnoid hemorrhage (p=0.05). The clinical benefits of the supplements were evident with subarachnoid hemorrhage with 0 recorded diagnoses in the case group compared to 12 recorded diagnoses in the control group, however statistical significance was not established. **CONCLUSIONS:** The use of calcium and vitamin D supplementation for the prevention of osteoporosis is associated with a reduced risk of cardiovascular outcomes. Moreover, no broad cardio-protective effects can be concluded from the study.

**PCV3**

**RISK OF HOSPITALIZATIONS FOR VENOUS THROMBOEMBOLISM IN ATYPICAL VERSUS TYPICAL ANTIPSYCHOTIC USERS IN A NATIONAL SAMPLE OF MEDICARE BENEFICIARIES: A CLAIMS DATA ANALYSIS**

**OBJECTIVES:** To examine the difference between typical and atypical antipsychotic drug use in the risk of hospitalization for venous thromboembolism (VTE) in an older adult Medicare population. **METHODS:** This is a retrospective cohort study using a 5% national sample of 2006-2007 Medicare claims data. Medicare beneficiaries with continuous Part A, B, and D enrollment in 2006-2007 and who initiated atypical or typical antipsychotic drug therapy in July 2006-June 2007 were included. All study subjects were followed for a period of 180 days from the date of index prescription. Atypical and typical users were matched on propensity score, calculated using pre-index demographics, clinical comorbidities, and medication use. A conditional logistic regression model stratified on the propensity score-matched pair using the Greuning matching algorithm was used to compare the risk of hospitalization for VTE in new users of atypical and typical antipsychotic drugs. Sensitivity analysis in the unmatched cohort was performed using propensity score as a continuous, linear term in logistic regression. **RESULTS:** A total of 15,637 new users of atypical and 2,337 new users of typical antipsychotic drugs were identified. There were 472 (2.6%) hospitalizations with a diagnosis code for VTE diabetes in the atypical and 55 were typical antipsychotic users. A 1:1 propensity score match yielded 2,333 matched pairs (4,666 individuals). In the matched cohort, 55 typical and 64 atypical drug users were hospitalized for VTE in the follow-up period. Compared to typical antipsychotic users, users of atypical antipsychotics were less likely to have