**INFLUENCE OF ANTICOAGULATION ON STROKE AND MORTALITY RATES IN A SUBSET OF PATIENTS WITH ATRIAL FIBRILLATION: REAL WORLD OUTCOMES FROM REVIEW OF A LARGE ELECTRONIC DATABASE**

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**Background:** Atrial Fibrillation (AF) is associated with increased morbidity and mortality with the mainstay of treatment being oral anticoagulation (AC). Limited data are available on oral AC utilization and the incidence of ischemic/hemorrhagic stroke in the context of all cause mortality. We reviewed the outcomes of AC usage and non-usage on one-year stroke and mortality rates in a large population of AF patients followed at a major health system.

**Methods:**We queried the electronic database of 26,952 unique patients with a diagnosis of AF followed at the University of Pittsburgh Medical Center with input terms of stroke risk factors, anticoagulation use, stroke diagnosis and mortality on one-year follow-up. We elected to concentrate our study on traditional anticoagulation indicated patients with CHA2DS2VASc (CV) scores of 2 through 8 on AC (13,884) and off AC (8,449). Patients were grouped in CV score groups 2,3,4,5 and 6-8. CV groups 7 and 8 were grouped with 6 because of a small number of patients represented in these subsets.

**Results:** The one-year all cause mortality was 5.6% in patients on AC compared to 12.6% off AC with a relatively increasing linear mortality trend observed with ascending CV score groups. The ischemic stroke rate at 1 year in the on AC group was 1.7% compared with the off AC group at 1.3%. The hemorrhagic stroke rate in the on AC group at 1 year was 0.5% versus 0.6% in the off AC group.

**Conclusions:** At one-year follow-up, there appears to be more than a two-fold mortality reduction in the dominant cohort of AC-indicated patients in AF who receive AC when compared with those who do not. This reduction in mortality is seen despite the fact that one-year follow-up ischemic and hemorrhagic stroke rates do not differ significantly between patients on or off AC. The data suggests a need to identify the causes of high one-year mortality in patients in AF and to understand the mechanism of mortality reduction that is associated with the utilization of anticoagulation.