

Abstract 16590: Underuse of Oral Anticoagulation, High Use of Aspirin and Worse Clinical Outcomes in Patients With Type 2 Diabetes and Atrial Fibrillation: Insights From the TECOS Trial

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Abstract

Introduction: While type 2 diabetes (T2D) is a known risk factor for adverse cardiovascular clinical outcomes in those with atrial fibrillation (AF), little is known about the real world use of antithrombotic treatments among these patients.

Methods: The TECOS trial included 14,671 patients with T2D and prevalent cardiovascular disease randomized to sitagliptin vs placebo added to standard care. We evaluated the use of different combinations of antithrombotic therapies at baseline among patients with a history of AF. Cox proportional hazards models were used to explore the associations between history of AF and the prespecified adjudicated clinical outcomes (cardiovascular death, non-fatal MI, non-fatal stroke, unstable angina, and heart failure).

Results: Overall, 1167 (8%) patients had a history of AF, of whom 56.8% were treated with aspirin, and 51.6% with vitamin K antagonists (VKA). Among patients with prior AF, 7.3% were not using any anti-thrombotic medication, 30.9% were treated with aspirin only, 31.2% VKA only, 2.9% clopidogrel only, 16.9% aspirin plus VKA, 7.3% aspirin plus clopidogrel, 1.8% clopidogrel plus VKA, and 1.7% aspirin, clopidogrel and VKA. Patients with AF had higher risk of clinical outcomes, especially stroke and hospitalization for heart failure, than those without AF (Figure).

Conclusions: Patients with AF, diabetes, and established cardiovascular disease are at high risk of adverse clinical outcomes, but only half of them were receiving anticoagulation therapy. Aspirin, which is not effective or safe for stroke prevention, was used in more than 50% of the patients and in 30% as monotherapy for stroke prevention. Our study identified important gaps in treatment of patients with diabetes and cardiac diseases, which highlight the challenge in managing these patients in clinical practice.

Figure. Clinical Outcomes in Patients with Type 2 Diabetes According to the Presence of Atrial Fibrillation



