

Saxagliptin Assessment of Vascular Outcomes Recorded in Patients with Diabetes Mellitus (SAVOR) – TIMI 53

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TIMI



Primary Objective

- To determine whether when added to background therapy, saxagliptin would be noninferior to placebo for the composite endpoint of CV death, non-fatal MI, or non-fatal ischemic stroke (Upper 95% CI of HR < 1.3).
- And if non-inferiority were met, to determine if saxagliptin would be superior to placebo.





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N = 16,492

Documented Type 2 Diabetes

Established CV Disease or Multiple Risk Factors

RANDOMIZED 1:1 DOUBLE BLIND

SAXAGLIPTIN 5 mg/d

All other DM Rx per treating MD

PLACEBO

2.5 mg/d if eGFR • 50 ml/min

Duration
Event driven (n=1040)
Median duration 2.1y
LTFU 0.2%
W/C 2.4%

Follow up Visits
Q6 months

Final Visit

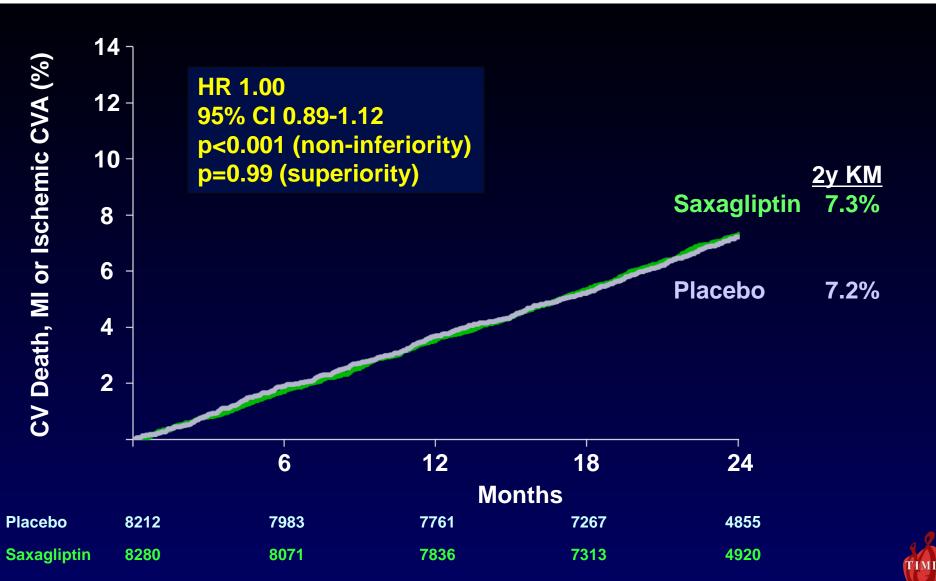
Primary EP
CV Death, MI,
Ischemic Stroke

Major Secondary EP: CV death, MI, ischemic stroke, or hosp. for heart failure, unstable angina, or coronary revascularization





Primary Endpoint





Conclusions

 When added to standard of care in patients with T2DM at high CV risk, saxagliptin neither reduced nor increased the risk of the primary composite endpoint of CV death, MI, or ischemic stroke.





Conclusions

- In addition, saxagliptin:
 - Improved glycemic control
 - Decreased the need for insulin and other diabetes medications
 - Increased hypoglycemic events, but not hospitalization for hypoglycemia
 - Prevented progression of microalbuminuria
 - Did not increase risk of pancreatitis or pancreatic cancer





Conclusions (Heart Failure)

- The higher incidence of hospitalization for heart failure was unexpected, but it was a pre-defined, adjudicated endpoint.
- It merits further evaluation given the history of other diabetic agents and heart failure.
- Additional analyses are ongoing, and preliminary data suggest that the risk is highest in those with elevated baseline clinical risk for heart failure and/or elevated BNP levels.





Implications

- SAVOR-TIMI 53 highlights the importance of performing large trials with clinical cardiovascular endpoints for diabetes drugs.
- Further research is needed to explore the relationship between HbA1c and cardiovascular outcomes.

