GENDER DIFFERENCES IN CARDIOVASCULAR RISK IN DIABETIC AND NON-DIABETIC OUTPATIENTS AT RISK OF OR WITH ATHEROTHROMBOSIS IN THE REACH REGISTRY

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Background: The effect of sex on CV risk in diabetes mellitus (DM) patients (pts) remains controversial. Prior reports suggest a more accelerated rate of cumulative CHD in DM women vs. men when compared with their non-DM counterparts.

Methods: We evaluated the magnitude of risk of DM on CV events stratified by sex, independent of other CV risk factors (RF), subclinical atherothrombosis or prior CV ischemia in the international outpatient REACH Registry (n=68,236).

Results: Among the 64,179 eligible REACH pts, the 4-yr risk of CV death/MI/stroke increased incrementally in DM pts treated with diet-only, oral hypoglycemics, or insulin compared with non-DM pts, with an accelerated hazard in men vs. women (p-interaction <.0001). There was a significant sex-difference in the comparative risk of incident CV events in DM pts without (w/o) CVD vs. recurrent events in pts with established CVD but w/o DM (p-interaction=0.002) that remained after full adjustment (p-interaction=0.03). As compared with men with established CVD but w/o DM, DM men on insulin w/o established CVD had significantly increased risk for the composite outcome (HR 1.57 [1.20-2.07]), while DM women on insulin w/o established CVD had similar risk for the composite outcome compared with non-DM women with established CVD (HR 1.05, 0.76-1.44) (figure).

Conclusion: In REACH, male DM pts w/o CVD on insulin, but not other therapies, had a greater risk for future CV events than males with established CVD w/o DM, whereas female counterparts had similar risk.