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Title

Benefits of empagliflozin in Hispanics and non-Hispanics with heart failure: a sub-analysis of the EMPEROR trials

Priority 1 (Research Category)

Cardiovascular disease

Presenters

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Abstract

Context: Race and ethnicity can influence outcome in patients (pts) with heart failure (HF). Hispanics (H) with HF have not been well investigated. Objective: To assess the beneficial effects of the SGLT2 inhibitor empagliflozin (E) in H pts with HF with preserved or reduced ejection fraction. Study Design and Analysis: The pooled data of the EMPEROR trials across all LVEF, with a large number of H would help characterize the effect ethnicity might have on HF hospitalizations (HHF) or cardiovascular (CV) death. Subgroup analysis compared the demographics at baseline by ethnicity (H vs. non-H [NH]). Setting or Dataset: Pooled population from EMPEROR trials (Preserved and Reduced). Population Studied: Self-identified ethnicity; H vs. NH. Intervention: Pts received E 10 mg or placebo. Outcome Measures: The primary outcome was HHF or CV death (hazard ratios with 95% confidence intervals). Secondary endpoints were also assessed. Results: 9558 pts: H 2753 (28.8%), NH 6805 (71.2%) were randomized. H were mostly from Latin America n=2552 (92.7%); NH Europe n=3775 (55.5%). Compared to NH, H were younger, had a lower EF, and more diabetes. NH had higher prevalence of atrial fibrillation/flutter. The KCCQ-CSS and KCCQ-TSS were lower in H than NH. Levels of NT-proBNP, BMI and hypertension were similar between H and NH. Etiology was predominantly non-ischemic in both NH and H, with more CAD in NH compared to H. There was a significant effect for E in the primary composite end-point noted for both H and NH (HR 0.78, 0.77) (interaction p=0.8666). Similar results were noted for the first adjudicated HHF (HR 0.63, 0.73) (interaction p=0.3054) and the total of HHF (interaction p=0.8356). There was no significant difference in CV death (HR 0.96, 0.89) (interaction p=0.5687). H and NH had an overall significant benefit for E on the eGFR slope with no hint of interaction (p=0.8068). There was a significant benefit of E for mean KCCQ TSS in H and NH as early as 3 months which was sustained over 12 months. The overall E effect for mean-KCCQ CSS over 3 months was significant in both groups. E had a similar effect on NT-proBNP in H and NH at 52 wks (interaction p=0.6813). Conclusions: The beneficial effects of E across all EF's were not modified by ethnicity. Empagliflozin is equally effective in the treatment of HF irrespective of LVEF and ethnicity among H and NH pts.