

EMPEROR-Reduced: Empagliflozin in Heart Failure With a Reduced Ejection Fraction, With and Without Diabetes

Purpose: This trial investigated the safety and efficacy of empagliflozin (an SGLT2i) versus placebo on top of guideline-directed medical therapy in patients with heart failure (HF) with reduced ejection fraction (HFrEF). Patients enrolled in this trial have more severe disease (lower EF and renal function) compared to those enrolled in DAPA-HF.

Trial Design: N = 3730, Phase III randomized, double-blind trial to evaluate efficacy and safety of once daily Empagliflozin 10 mg compared to placebo.

Primary Endpoint: Composite of cardiovascular death or hospitalization for heart failure (HHF)

Secondary Endpoints: Total (first and recurrent) HHF and slope of decline in glomerular filtration rate over time.

	Empagliflozin (n=1863)		Placebo (n=1867)		Hazard Ratio (95% CI)	P value
	Number of events (%)	Events/100 patient-yr	Number of events (%)	Events/100 patient-yr		
Primary composite outcome	361 (19.4%)	15.8	462 (24.7%)	21.0	0.75 (0.65 – 0.86)	<0.001
First hospitalization for heart failure	246 (13.2%)	10.7	342 (18.3%)	15.5	0.69 (0.59 – 0.81)	
Cardiovascular death	187 (10.0%)	7.6	202 (10.8%)	8.1	0.92 (0.75 – 1.12)	

Conclusion: In patients with HF with HFrEF, EMPEROR-Reduced achieved all three endpoints as key outcomes, each with a P<0.001). Empagliflozin reduced the total number of HHF and slow the rate of progression of renal disease. Similar to the DAPA-HF trial, the EMPEROR-Reduced trial shows that it slows the progression of HF and renal disease, irrelevant of diabetes status.

