

Supplemental Materials

Supplemental Table 1: Estimated remaining lifetime risk of heart failure with missing ejection fraction as compared with that of heart failure with preserved ejection fraction and heart failure with reduced ejection fraction at index age 45 without adjustment for competing risk

HF subtype	Lifetime Risk (%) (95% CI)			
	Men	Women	Black	Non-black
HFpEF	12.6 (11.0 – 14.2)	11.9 (10.6 – 13.1)	9.6 (7.4 – 11.7)	12.7 (11.6 – 13.8)
HFrfEF	12.6 (11.1 – 14.1)	6.5 (5.6 – 7.4)	9.0 (7.1 – 10.9)	8.9 (8.0 – 9.8)
HF with missing EF	17.0 (15.1 – 18.9)	14.4 (13.1 – 15.8)	14.2 (11.5 – 16.8)	15.7 (14.5 – 16.9)

Supplemental Table 2: Estimated remaining lifetime risk of different heart failure phenotypes at index age 45 in the extreme case scenario sensitivity analysis assuming all missing EF as HFpEF and then assuming all missing EF as HFrEF.

	Lifetime risk (95% CI)			
	Sensitivity analysis (Extreme Case Scenario)		Primary analysis	
	HFpEF (Assuming all missing EF events as HFpEF)	HFrEF (Assuming all missing EF events as HFrEF)	HFpEF	HFrEF
Men	12.7 (11.2 – 14.1)	12.8 (11.4 – 14.3)	10.4 (9.1 – 11.6)	10.6 (9.4 – 11.8)
Women	13.0 (11.7 – 14.3)	7.2 (6.2 – 8.2)	10.7 (9.6 – 11.8)	5.8 (5.03 – 6.6)
Blacks	9.5 (7.6 – 11.4)	9.4 (7.6 – 11.2)	7.7 (6.0 – 9.4)	7.7 (6.1 – 9.2)
Non-blacks	13.6 (12.4 – 14.7)	9.6 (8.67 – 10.50)	11.2 (10.2 – 12.1)	7.9 (7.1 – 8.7)

Supplemental Table 3: Estimated remaining lifetime risk of heart failure with preserved ejection fraction and heart failure with reduced ejection fraction at index age 45 across different sex- and race-based subgroups using different ejection fraction cut offs

Group	Lifetime Risk (%) (95% Confidence Interval)			
	HFpEF with EF \geq 45% (Primary analysis)	HFpEF with EF > 50% (Sensitivity analysis)	HFrEF with EF < 45% (Primary analysis)	HFrEF with EF < 40% (Sensitivity analysis)
Blacks	7.7 (6.0 – 9.4)	5.3 (3.9 – 6.6)	7.7 (6.1 – 9.2)	6.8 (5.3 – 8.3)
Non-blacks	11.2 (10.2 – 12.1)	8.7 (7.9 – 9.6)	7.9 (7.1 – 8.7)	6.5 (5.8 – 7.2)
Men	10.4 (9.1 – 11.6)	7.2 (6.1 – 8.3)	10.6 (9.4 – 11.8)	9.0 (7.8 – 10.2)
Women	10.7 (9.6 – 11.8)	8.7 (7.7 – 9.8)	5.8 (5.03 – 6.6)	4.8 (4.1 – 5.6)

Supplemental Table 4: Estimated remaining lifetime risk of heart failure with preserved ejection fraction and heart failure with reduced ejection fraction at different index ages among patients with vs. without history of Diabetes Mellitus at the baseline examination

Index Age (y)	Lifetime Risk (%) (95% Confidence Interval)			
	HFpEF		HFrEF	
	DMII	No DMII	DMII	No DMII
45	11.9 (9.6 – 14.2)	10.4 (9.5 – 11.3)	11.6 (9.2 – 13.9)	7.4 (6.6 – 8.1)
55	11.9 (9.6 – 14.2)	10.4 (9.5 – 11.3)	11.6 (9.3 – 14.0)	7.31 (6.6 – 8.0)
65	11.5 (9.2 – 13.8)	10.4 (9.5 – 11.3)	11.4 (9.0 – 13.8)	7.3 (6.5 – 8.0)

Supplemental Figure 1: Age distribution of pooled study participants across the two cohorts

