

Table S3. Association between carvedilol versus metoprolol initiation and 1-year mortality among clinically relevant subgroups: intent-to-treat analysis^a

Patients with hypertension (n = 19,673)									
Beta-blocker	n	1-year all-cause mortality ^b				1-year cardiovascular mortality ^c			
		No. events (%)	Rate per 1,000 p-y	Unadjusted HR (95% CI)	Adjusted HR (95% CI) ^d	No. events (%)	Rate per 1,000 p-y	Unadjusted HR (95% CI)	Adjusted HR (95% CI) ^d
Metoprolol	12,652	2,273 (18.0%)	234.7	1.00 (ref.)	1.00 (ref.)	975 (7.7%)	100.7	1.00 (ref.)	1.00 (ref.)
Carvedilol	7,021	1,401 (20.0%)	266.0	1.13 (1.06, 1.21)	1.09 (1.02, 1.17)	664 (9.5%)	126.1	1.25 (1.13, 1.38)	1.18 (1.07, 1.31)
Patients with atrial fibrillation/flutter (n = 3,761)									
Beta-blocker	n	1-year all-cause mortality ^b				1-year cardiovascular mortality ^c			
		No. events (%)	Rate per 1,000 p-y	Unadjusted HR (95% CI)	Adjusted HR (95% CI) ^d	No. events (%)	Rate per 1,000 p-y	Unadjusted HR (95% CI)	Adjusted HR (95% CI) ^d
Metoprolol	2,525	707 (28.0%)	406.1	1.00 (ref.)	1.00 (ref.)	303 (12.0%)	174.1	1.00 (ref.)	1.00 (ref.)
Carvedilol	1,236	378 (30.6%)	458.4	1.13 (0.99, 1.28)	1.08 (0.94, 1.23)	178 (14.4%)	215.9	1.23 (1.02, 1.48)	1.12 (0.93, 1.35)
Patients with heart failure (n = 9,358)									
Beta-blocker	n	1-year all-cause mortality ^b				1-year cardiovascular mortality ^c			
		No. events (%)	Rate per 1,000 p-y	Unadjusted HR (95% CI)	Adjusted HR (95% CI) ^d	No. events (%)	Rate per 1,000 p-y	Unadjusted HR (95% CI)	Adjusted HR (95% CI) ^d
Metoprolol	5,251	1,280 (24.4%)	336.7	1.00 (ref.)	1.00 (ref.)	551 (10.5%)	144.9	1.00 (ref.)	1.00 (ref.)
Carvedilol	4,107	995 (24.2%)	335.8	1.00 (0.92, 1.08)	1.02 (0.94, 1.11)	467 (11.4%)	157.6	1.09 (0.97, 1.24)	1.09 (0.96, 1.23)
Patients with a recent myocardial infarction (n = 1,793)									
Beta-blocker	n	1-year all-cause mortality ^b				1-year cardiovascular mortality ^c			
		No. events (%)	Rate per 1,000 p-y	Unadjusted HR (95% CI)	Adjusted HR (95% CI) ^d	No. events (%)	Rate per 1,000 p-y	Unadjusted HR (95% CI)	Adjusted HR (95% CI) ^d
Metoprolol	1,151	315 (27.4%)	395.6	1.00 (ref.)	1.00 (ref.)	149 (12.9%)	187.1	1.00 (ref.)	1.00 (ref.)
Carvedilol	642	194 (30.2%)	443.6	1.12 (0.94, 1.34)	1.02 (0.84, 1.23)	107 (16.7%)	244.7	1.31 (1.02, 1.69)	1.19 (0.92, 1.53)

An intent-to-treat design was employed in all analyses.

^a Patient counts, event counts (% of patients) and event rates presented are based on the unweighted cohort.

^b Cox proportional hazards models were used to estimate the associations between carvedilol (versus metoprolol) initiation and 1-year all-cause mortality.

^c Fine and Gray proportional subdistribution hazards models were used to estimate the associations between carvedilol (versus metoprolol) initiation and 1-year cardiovascular mortality. Non-cardiovascular death was treated as a competing risk.

^d Adjusted analyses controlled for all the baseline covariates listed in Table 1 using inverse probability of treatment weighting. Subgroups of interest were excluded the corresponding propensity score models. For example, in subgroup analyses of patients with hypertension, the hypertension covariate was excluded from the propensity score model.

Abbreviations: CI, confidence interval; HR, hazard ratio; no., number; p-y, person-years; ref., referent