Supplementary Table 1. ICD-9-CM code used in the current study

Variable	Code
Acute myocardial infarction	410.xx
Aortic valve disease	424.1
Pericardial disease	423.xx
Congenital heart disease	745.xx–747.xx (Catastrophic illness card)
Venous thromboembolism	415.1x, 453.xx
Dialysis	585.xx (Catastrophic illness card)
Hypertrophic cardiomyopathy	425.1x
Hypertension	401.xx–405.xx
Hyperlipidemia	272.xx
Diabetes mellitus	250.xx
Heart failure	428.xx
Stroke	430.xx–437.xx
Chronic kidney disease	580.xx–589.xx, 403.xx–404.xx, 016.0x, 095.4x, 236.9x, 250.4x, 274.1x, 442.1x, 447.3x, 440.1x, 572.4x, 642.1x, 646.2x, 753.1x, 283.11, 403.01, 404.02, 446.21
Carotid artery disease	433.1x
Peripheral artery disease	440.0x, 440.2x, 440.3x, 440.8x, 440.9x, 443.xx, 444.0x, 444.22, 444.8x, 447.8x, 447.9x
Atrial fibrillation/atrial flutter	427.31, 427.32
Chronic obstructive pulmonary disease	491.xx, 492.xx, 496.xx
Peptic ulcer disease	531.xx–534.xx
Liver cirrhosis	571.2x, 571.5x, 571.6x
Malignancy	140.xx–208.xx
Gout	274.xx
Atrial fibrillation	427.31
Systemic thromboembolism	444.22, 444.81, 444.21, 557.0, 557.9, 557.1, 593.81, 444.89, 433.8, 444.9x, 415.1x, 433.xx, 434.xx, 435.xx, 436.xx, 437.xx

Supplementary Table 2. Intervention and medication during the index admission after propensity score matching without matching the index date (sensitivity analysis I)

Variable	HCM (n = 257)	Non-HCM (n = 1,028)	P value#
Intervention			
Intubation	41 (16.0)	247 (24.0)	0.005*
Intraaortic balloon pump	4 (1.6)	65 (6.3)	0.002*
Extracorporeal membrane oxygenation	1 (0.4)	11 (1.1)	0.310
Temporary hemodialysis	5 (1.9)	44 (4.3)	0.080
Cardiac rehabilitation	8 (3.1)	46 (4.5)	0.330
Medications during admission			
Aspirin	196 (76.3)	761 (74.0)	0.462
Clopidogrel	120 (46.7)	528 (51.4)	0.181
ACEI/ARB	141 (54.9)	582 (56.6)	0.613
Beta blocker	135 (52.5)	454 (44.2)	0.016*
Calcium channel blocker	70 (27.2)	225 (21.9)	0.068
Diuretics	80 (31.1)	330 (32.1)	0.765
Spironolactone	19 (7.4)	92 (8.9)	0.427
Nitrates	51 (19.8)	228 (22.2)	0.417
Warfarin	18 (7.0)	52 (5.1)	0.219
Statin	49 (19.1)	223 (21.7)	0.357
Proton pump inhibitor	30 (11.7)	118 (11.5)	0.930

* Denotes $P < 0.05$.
ACEI, angiotensin converting enzyme inhibitor; ARB, angiotensin receptor blocker.

Adjusted for year of index admission.

Supplementary Table 3. In-hospital cardiovascular outcome after propensity score matching without matching the index date (sensitivity analysis I)

Variable	HCM (*n* = 257)	Non-HCM (*n* = 1,028)	HCM *vs*. Non-HCM#	
			OR / *B* (95% CI)	*P* value
PCI	45 (17.5)	311 (30.3)	0.49 (0.34, 0.70)	<0.001*
Number of intervened vessels				
0 vessel	212 (82.5)	717 (69.7)	Reference	–
1 vessel	34 (13.2)	226 (22.0)	0.51 (0.34, 0.76)	<0.001*
2 vessels	10 (3.9)	57 (5.5)	0.60 (0.30, 1.20)	0.146
3 vessels	1 (0.4)	28 (2.7)	0.12 (0.02, 0.86)	0.035*
PCI with stenting	16 (6.2)	181 (17.6)	0.30 (0.17, 0.51)	<0.001*
CABG	2 (0.8)	31 (3.0)	0.26 (0.06, 1.10)	0.067
Valvular surgery	3 (1.2)	6 (0.6)	2.06 (0.50, 8.49)	0.315
Pacing device implantation†	7 (2.7)	3 (0.3)	9.68 (2.43, 38.47)	0.001*
New onset of atrial fibrillation	35 (13.6)	32 (3.1)	5.15 (3.09, 8.57)	<0.001*
New onset of VTE	16 (6.2)	55 (5.4)	1.28 (0.72, 2.29)	0.405
Shock	75 (29.2)	433 (42.1)	0.58 (0.43, 0.78)	<0.001*
In-hospital death	28 (10.9)	223 (21.7)	0.44 (0.29, 0.67)	<0.001*
ICU days	4.4±7.2	4.6±7.8	-0.24 (-1.29, 0.81)	0.824
Length of stay	13.7±25.1	12.9±20.1	0.78 (-2.11, 3.68)	0.550

* Denotes $P < 0.05$.

B, regression coefficient; CABG, coronary artery bypass graft; CI, confidence interval; ICU, intensive care unit; OR, odds ratio; PCI, percutaneous coronary intervention; VTE, venous thromboembolism.

† Includes pacemaker and implantable cardioverter defibrillator.

Adjusted for year of index admission.

Supplementary Table 4. Outcome during the follow up after propensity score matching without matching the index date (sensitivity analysis I)

	HCM	Non-HCM	HCM *vs*. Non-HCM#	
Variable	(*n* = 257)	(*n* = 1,028)	HR (95% CI)	*P* value
1 year follow up				
Recurrent AMI	13 (5.1)	69 (6.7)	0.70 (0.38, 1.28)	0.249
HF hospitalization	17 (6.6)	61 (5.9)	1.10 (0.65, 1.88)	0.717
Systemic VTE	23 (8.9)	63 (6.1)	2.62 (1.06, 6.48)	0.036*
Heart transplant	0 (0.0)	0 (0.0)	NA	NA
All-cause mortality	72 (28.0)	407 (39.6)	0.59 (0.46, 0.76)	<0.001*
CV death	46 (17.9)	217 (21.1)	0.74 (0.54, 1.02)	0.067
At the end of follow up				
Recurrent AMI	23 (8.9)	100 (9.7)	0.86 (0.54, 1.37)	0.528
HF hospitalization	35 (13.6)	101 (9.8)	1.41 (0.96, 2.07)	0.083
Systemic VTE	39 (15.2)	108 (10.5)	1.77 (1.09, 2.88)	0.022*
Heart transplant	0 (0.0)	0 (0.0)	NA	NA
All-cause mortality	159 (61.9)	604 (58.8)	0.82 (0.69, 0.98)	0.031*
CV death	62 (24.1)	246 (23.9)	0.84 (0.63, 1.11)	0.220

* Denoted $P < 0.05$.
AMI, acute myocardial infarction; HR, hazard ratio; CI, confidence interval; CV, cardiovascular; HF, heart failure; VTE, venous thromboembolism; NA = not applicable.

#Additional adjusted for percutaneous coronary intervention, coronary artery bypass graft and pacing device during the index admission and the index year.

The analysis considers death as a competing risk except for all-cause mortality and CV death.

Supplementary Table 5. Intervention and medication during the index admission using multivariable regression adjustment (sensitivity analysis II)#

Variable	HCM (n = 257)	Non-HCM (n = 176,801)	P value
Intervention			
Intubation	41 (16.0)	34,182 (19.3)	0.170
Intraaortic balloon pump	4 (1.6)	11,882 (6.7)	0.001*
Extracorporeal membrane oxygenation	1 (0.4)	932 (0.5)	0.760
Temporary hemodialysis	5 (1.9)	5,877 (3.3)	0.218
Cardiac rehabilitation	8 (3.1)	8,076 (4.6)	0.264
Medications during admission			
Aspirin	196 (76.3)	139,396 (78.8)	0.312
Clopidogrel	120 (46.7)	98,802 (55.9)	0.003*
ACEI/ARB	141 (54.9)	106,910 (60.5)	0.066
Beta blocker	135 (52.5)	87,549 (49.5)	0.335
Calcium channel blocker	70 (27.2)	35,653 (20.2)	0.005*
Diuretics	80 (31.1)	48,383 (27.4)	0.176
Spironolactone	19 (7.4)	13,274 (7.5)	0.944
Nitrates	51 (19.8)	41,146 (23.3)	0.194
Warfarin	18 (7.0)	6,388 (3.6)	0.004*
Statin	49 (19.1)	50,907 (28.8)	0.001*
Proton pump inhibitor	30 (11.7)	14,352 (8.1)	0.037*

* Denotes $P < 0.05$.
ACEI, angiotensin converting enzyme inhibitor; ARB, angiotensin receptor blocker.

Adjusted for sex, gender and 14 comorbidities listed in Table 1.

Supplementary Table 6. In-hospital cardiovascular outcome using multivariable regression adjustment (sensitivity analysis II)#

Variable	HCM (*n* = 257)	Non-HCM (*n* = 176,801)	HCM *vs*. Non-HCM	
			OR / *B* (95% CI)	*P* value
PCI	45 (17.5)	73,391 (41.5)	0.44 (0.31, 0.61)	<0.001*
Number of intervened vessels				
0 vessel	212 (82.5)	103,410 (58.5)	Reference	–
1 vessel	34 (13.2)	55,066 (31.1)	0.45 (0.31, 0.66)	<0.001*
2 vessels	10 (3.9)	11,924 (6.7)	0.57 (0.30, 1.08)	0.085
3 vessels	1 (0.4)	6,401 (3.6)	0.11 (0.02, 0.77)	0.026*
PCI with stenting	16 (6.2)	39,233 (22.2)	0.31 (0.18, 0.53)	<0.001*
CABG	2 (0.8)	6,759 (3.8)	0.25 (0.06, 1.002)	0.0503
Valvular surgery	3 (1.2)	756 (0.4)	2.12 (0.67, 6.69)	0.200
Pacing device implantation†	7 (2.7)	549 (0.3)	8.04 (3.73, 17.31)	<0.001*
New onset of atrial fibrillation	35 (13.6)	6,543 (3.7)	4.57 (3.15, 6.63)	<0.001*
New onset of VTE	16 (6.2)	7,242 (4.1)	1.50 (0.89, 2.52)	0.127
Shock	75 (29.2)	63,077 (35.7)	0.64 (0.49, 0.85)	0.002*
In-hospital death	28 (10.9)	29,396 (16.6)	0.46 (0.30, 0.69)	<0.001*
ICU days	4.4±7.2	4.4±7.1	0.04 (-0.81, 0.89)	0.595
Length of stay	13.7±25.1	11.1±17.3	2.66 (0.60, 4.72)	0.360

* Denotes $P < 0.05$.

B, regression coefficient; CABG, coronary artery bypass graft; CI, confidence interval; ICU, intensive care unit; OR, odds ratio; PCI, percutaneous coronary intervention; VTE, venous thromboembolism.

† Includes pacemaker and implantable cardioverter defibrillator.

Adjusted for sex, gender and 14 comorbidities listed in Table 1.

Supplementary Table 7. Outcome during the follow up using multivariable regression adjustment (sensitivity analysis II)#

Variable	HCM (*n* = 257)	Non-HCM (*n* = 176,801)	HCM *vs*. Non-HCM	
			HR (95% CI)	*P* value
1 year follow up				
Recurrent AMI	13 (5.1)	13,774 (7.8)	0.68 (0.38, 1.19)	0.174
HF hospitalization	17 (6.6)	7,790 (4.4)	0.98 (0.60, 1.60)	0.946
Systemic VTE	23 (8.9)	9,496 (5.4)	2.08 (1.12, 3.86)	0.021*
Heart transplant	0 (0.0)	89 (0.1)	NA	NA
All-cause mortality	72 (28.0)	54,007 (30.5)	0.69 (0.55, 0.87)	0.002*
CV death	46 (17.9)	29,667 (16.8)	0.85 (0.64, 1.14)	0.284
At the end of follow up				
Recurrent AMI	23 (8.9)	20,316 (11.5)	0.85 (0.56, 1.28)	0.429
HF hospitalization	35 (13.6)	15,708 (8.9)	1.16 (0.82, 1.62)	0.405
Systemic VTE	39 (15.2)	18,155 (10.3)	1.67 (1.13, 2.47)	0.010*
Heart transplant	0 (0.0)	188 (0.1)	NA	NA
All-cause mortality	159 (61.9)	88,884 (50.3)	0.93 (0.79, 1.08)	0.338
CV death	62 (24.1)	36,481 (20.6)	0.93 (0.72, 1.19)	0.539

* Denoted $P < 0.05$.
AMI, acute myocardial infarction; HR, hazard ratio; CI, confidence interval; CV, cardiovascular; HF, heart failure; VTE, venous thromboembolism; NA = not applicable.

The analysis considers death as a competing risk except for all-cause mortality and CV death.
Adjusted for sex, gender and 14 comorbidities listed in Table 1.

Supplementary Table 8. Outcome during the follow up after propensity score matching using classical Cox proportional hazard model (sensitivity analysis III)

Variable	HCM (*n* = 257)	Non-HCM (*n* = 1,028)	HCM *vs*. Non-HCM HR (95% CI)	*P* value
1 year follow up				
Recurrent AMI	13 (5.1)	70 (6.8)	0.63 (0.34, 1.16)	0.136
HF hospitalization	17 (6.6)	66 (6.4)	0.88 (0.52, 1.50)	0.643
Systemic VTE	23 (8.9)	64 (6.2)	1.31 (0.63, 2.71)	0.473
Heart transplant	0 (0.0)	1 (0.1)	NA	NA
All-cause mortality	72 (28.0)	406 (39.5)	0.66 (0.51, 0.85)	0.001*
CV death	46 (17.9)	211 (20.5)	0.83 (0.60, 1.14)	0.252
At the end of follow up				
Recurrent AMI	23 (8.9)	109 (10.6)	0.72 (0.46, 1.14)	0.165
HF hospitalization	35 (13.6)	112 (10.9)	1.10 (0.76, 1.62)	0.609
Systemic VTE	39 (15.2)	107 (10.4)	1.38 (0.88, 2.17)	0.162
Heart transplant	0 (0.0)	1 (0.1)	NA	NA
All-cause mortality	159 (61.9)	604 (58.8)	0.97 (0.81, 1.16)	0.732
CV death	62 (24.1)	262 (25.5)	0.89 (0.67, 1.17)	0.401

* Denoted $P < 0.05$.

AMI, acute myocardial infarction; HR, hazard ratio; CI, confidence interval; CV, cardiovascular; HF, heart failure; VTE, venous thromboembolism; NA = not applicable.