

SUPPLEMENTAL MATERIAL

Table S1. Clinical features of 33 patients with depression experiencing HCM-related SCD events.

Patients	Age, y	Sex	NYHA Class	LVEF, %	MLVT, mm	Risk Factors	Events	Time to events, month
1	21	M	I	70	16	VT	Death	38
2	22	F	I	67	18	US	Death	42
3	24	F	I	64	16	FH-SCD	Aborted arrest	28
4	24	M	II	66	22	LVOTO	Death	17
5	29	M	II	58	31	MLVT, VT, US	ICD discharge	56
6	32	F	I	66	24	US	Death	50
7	33	M	I	72	21	VT	ICD discharge	33
8	33	M	II	67	24	LVOTO	ICD discharge	16
9	35	F	III	54	29	None	Death	52
10	36	F	I	60	16	US	ICD discharge	10
11	37	M	I	66	32	MLVT	Aborted arrest	6
12	37	F	II	67	18	US	ICD discharge	16
13	39	F	I	71	25	None	Death	35
14	40	M	II	65	25	FH-SCD	Death	42
15	41	M	I	60	24	None	Death	30
16	42	F	I	62	19	None	Death	56
17	44	M	I	65	32	MLVT, LVOTO, US	ICD discharge	12
18	44	M	I	54	27	None	Death	15
19	47	M	I	65	25	US, VT	ICD discharge	5
20	48	F	III	35	16	VT	Death	23
21	51	M	I	56	15	None	Death	50
22	53	F	II	45	19	FH-SCD, VT	ICD discharge	47
23	53	F	II	67	22	LVOTO, FH-SCD	Death	25
24	55	M	I	66	23	LVOTO	Death	9
25	60	F	II	53	29	FH-SCD, VT	ICD discharge	47
26	60	F	I	67	22	LVOTO, VT	Death	33
27	64	M	I	60	20	None	Aborted arrest	8
28	64	M	I	56	19	US	Death	28
29	67	F	II	65	18	LVOTO, FH-SCD	Death	38
30	68	M	II	48	15	None	Death	52
31	68	F	I	56	22	None	Death	18
32	71	M	III	56	27	LVOTO	Death	44
33	73	M	I	70	21	None	Death	39

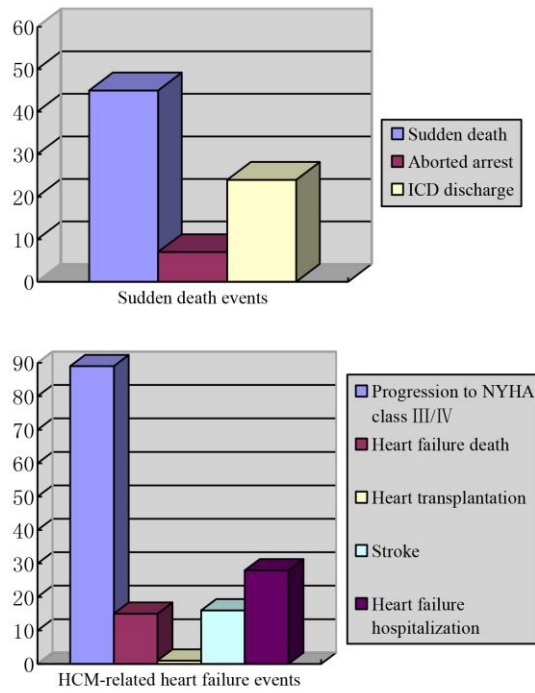
HCM indicates hypertrophic cardiomyopathy; SCD, sudden cardiac death; NYHA, New York Heart Association; LVEF, left ventricle ejection fraction; MLVT, Maximum left ventricle thickness; VT, ventricular tachycardia on ambulatory Holter; US, Unexplained syncope; FH-SCD, Family history of sudden cardiac death; LVOTO, left ventricular outflow tract obstruction; MLVT, Maximum LV wall thickness ≥ 30 mm; ICD, implantable cardioverter defibrillator.

Table S2. Clinical characteristics of the patients classified by level of depression symptoms.

Characteristics	Percent of patients with events (n)				P value
	HDRS <8 (n=463)	HDRS 8-13 (n=148)	HDRS 14-18 (n=122)	HDRS ≥19 (n=87)	
Demographics					
Age, mean±SD, y	48.2±12.9	48.1±12.8	47.9±12.6	48.5±12.6	0.62
Male, n (%)	266 (57.5)	88 (59.5)	66 (54.1)	50 (57.5)	0.23
BMI, mean±SD, kg/m ²	24.7±3.9	24.8±3.6	24.3±3.7	24.4±3.7	0.58
Maximum LV thickness, mean±SD, mm	20.2±4.8	20.0±4.7	20.1±4.6	20.2±4.5	0.87
NYHA class, n (%)					
I/II	413 (89.2)	130 (87.8)	106 (86.9)	76 (87.4)	0.44
III/IV	50 (10.8)	18 (12.2)	16 (13.1)	11 (12.6)	0.19
Comorbid condition, n (%)					
Atrial fibrillation	43 (9.3)	15 (10.1)	11 (9.0)	9 (10.3)	0.53
Stroke history	3 (0.6)	3 (2.0)	2 (1.6)	2 (2.3)	0.77
Diabetes	63 (13.6)	18 (12.2)	17 (13.9)	13 (14.9)	0.63
Hypertension	77 (16.6)	24 (16.2)	21 (17.2)	17 (19.5)	0.16
Risk factors, n (%)					
Non-sustained VT on Holter	80 (17.3)	27 (18.2)	22 (18.0)	18 (20.7)	0.12
Unexplained syncope	40 (8.6)	13 (8.8)	10 (8.2)	10 (11.5)	0.11
Family history of SCD	48 (10.4)	20 (13.5)	19 (15.6)	18 (20.7)	0.03
LVOTO	95 (20.5)	33 (22.3)	33 (27.0)	21 (24.1)	0.04
Maximum LV wall thickness ≥ 30mm	22 (4.8)	7 (4.7)	6 (4.9)	4 (4.6)	0.77
Echocardiography, mean ± SD					
LVEF (%)	63.3±6.7	61.2±6.3	62.5±6.2	61.0±6.0	0.79
Left atrial diameter	39.6±9.7	40.2±9.5	39.9±9.3	40.2±9.0	0.65
ICD implantation					
ICD, n (%)	48 (10.4)	15 (10.1)	13 (10.7)	9 (10.3)	0.78
Medications at discharge, n (%)					
β-Blockers	290 (62.6)	99 (66.9)	77 (63.1)	52 (59.8)	0.19
Calcium channel blockers	79 (17.1)	27 (18.2)	23 (18.9)	16 (18.4)	0.74
RAAS inhibitors	72 (15.6)	23 (15.5)	21 (17.2)	14 (16.1)	0.69
Diuretic	34 (7.3)	11 (7.4)	8 (6.6)	6 (6.9)	0.48
Amiodarone	11 (2.4)	5 (3.4)	4 (3.3)	2 (2.3)	0.65
Laboratory parameters, mean ± SD					
Pro-BNP (pg/mL)	641.0±513.5	589.4±502.0	599.0±493.5	584.0±471.1	0.32
Creatinine (umol/L)	75.2±14.2	73.9±13.9	74.1±13.8	74.2±13.6	0.52
HDRS score	4.5±2.5	10.3±2.6	16.1±1.8	22.6±3.2	<0.001

HDRS indicates 17-item Hamilton Depression Rating Scale; SD, standard deviation; BMI, body mass index; LV, left ventricle; NYHA, New York Heart Association; VT, ventricular tachycardia; SCD, sudden cardiac death; LVOTO, left ventricular outflow tract obstruction; LVEF; left ventricular ejection fraction; ICD, implantable cardioverter defibrillator; RAAS, rennin-angiotensin-aldosterone system; Pro-BNP, pro-brain natriuretic peptide.

Figure S1. Clinical profile of sudden death events and HCM-related heart failure events



HCM indicates hypertrophic cardiomyopathy; ICD, implantable cardioverter defibrillator; NYHA, New York Heart Association.