

Table S1. Results of Multivariable Models with LVEDVi.

	Independent Variables	Estimated HRs (p-value)
Model 1: Full main	Medical risk score	2.19 (<0.001)
effects	LVEDVI	1.00 (0.100)
	LAVI	1.01 (0.169)
	Abrupt thinning	1.55 (0.097)
	Maximal T/ C ratio	0.95 (0.696)
	T/C ratio >3:1 in segments 1–3, 7–16	1.39 (0.246)
	Basal to mid septal hypertrabeculation	1.15 (0.693)
	Basal to mid anterior hypertrabeculation	1.46 (0.264)
	Basal to mid inferior hypertrabeculation	1.47 (0.234)
	Basal to mid lateral hypertrabeculation	0.82 (0.443)
	Apical hypertrabeculation	0.57 (0.094)
Model 2: Reduced	Medical risk score	2.27 (<0.001)
main effects	Abrupt thinning	1.87 (adjusted 0.012)
	LAVI	1.01 (adjusted 0.029)
Model 3: Reduced	Medical risk score	2.08 (<0.001)
main effects with BNP	Abrupt thinning	1.88 (adjusted 0.020)
	LAVI	1.01 (adjusted 0.374)
	Elevated BNP	3.12 (adjusted 0.015)
Model 4: Reduced	Medical risk score	2.25 (<0.001)
main effects with LGE	Abrupt thinning	1.64 (adjusted 0.123)
	LAVI_MRI	1.01 (adjusted 0.188)
	LGE	1.20 (adjusted 0.442)
Model 5: Final Model	Medical risk score	2.11 (<0.001) [95% CI: 1.57, 2.83]
	Abrupt thinning	1.93 (adjusted 0.006) [95% CI: 1.21,
		3.09]
	Elevated BNP	3.53 (adjusted 0.002) [95% CI: 1.64,
		7.57]

BNP: brain natriuretic peptide; LAVI: left atrial volume index; LGE: late gadolinium enhancement; LV: Left ventricular; LVEDVi: left ventricular end diastolic volume index; NC/C: Trabeculated / compacted RV: right ventricular

Figure S1. Flow diagram demonstrating derivation of study cohort.

Database of 26,531 CMR studies performed for clinical concern of CVD between 2000 and 2018

362 individuals with reported non-compaction or hypertrabeculation AND Petersen criteria positive

years (n=10); image unavailability/ suboptimal quality (n=11); incomplete clinical information / no follow-up (n = 9); ICM (n = 2); HCM (n = 2)

Final cohort of 328 patients

CMR: cardiac magnetic resonance; CVD: cardiovascular disease; ICM: ischemic cardiomyopathy; hypertrophic cardiomyopathy,

Figure S2. Example of medical risk calculation.

	Score Components
Age ≥ 50?	+1.9
Male gender?	-11.7
Diabetes ?	-50.8
Atrial arrythmias?	+56.3
History of heart failure?	+141.9
Systemic Embolization?	+74.8
LBBB or RBBB?	+70.3

Example: 58-year-old female with LBBB and a history of heart failure:

$$Score* = 1.9 + 141.9 + 70.3 = 214.1$$

*Note: This is a score indicating relative (not absolute) medical risk of MACE.

LBBB: left bundle branch block; MACE = major adverse cardiovascular events, RBBB: right bundle branch block