Supplemental Material

Data S1. Supplemental Methods

Entropy

Entropy was computed from the gray-scale LGE CMR images by

$$H = \Sigma_k p_k \log(p_k)$$

where k is the specific gray-scale intensity level, and p_k is the probability associated with that gray-scale intensity level. In our application, p_k represents the relative proportion of pixels within the region of interest (core scar, GZ or combined) which have a specific intensity level. Consequently, the total entropy (which is sum over all pixel intensity values within the ROI) represents the heterogeneity of pixel intensity values within the ROI. In this scenario, a histogram of intensity values is computed and used to derive p_k for each intensity level above. Thus, the spatial location of the pixel, or the intensity of its neighbours, is not considered in this analysis. For example, if the pixels of a given image are shuffled, and their intensities are unchanged, then the entropy is unaltered.

Clinical endpoint definitions

The following definitions were used by adjudicators for the purpose of adjudicating clinical endpoints in this study.

CV Death: Sudden Cardiac Death

Death that occurs unexpectedly and not within 30 days of an acute MI. Sudden cardiac death includes the following scenarios:

a) Death witnessed and occurring without new or worsening symptoms.
b) Death witnessed within 60 minutes of the onset of new or worsening cardiac symptoms unless the symptoms suggest acute MI.

c) Death witnessed and attributed to an identified arrhythmia (e.g., captured on an electrocardiographic recording, witnessed on a monitor, or unwitnessed but found on ICD review).
d) Death after unsuccessful resuscitation from cardiac arrest (e.g., ICD unresponsive sudden cardiac death, pulseless electrical activity arrest).
e) Death after successful resuscitation from cardiac arrest and without identification of a specific cardiac or noncardiac aetiology.
f) Unwitnessed death in a subject seen alive and clinically stable ≤24 hours before being found dead without any evidence supporting a specific non-cardiovascular cause of death (information about the patient's clinical status preceding death should be provided if available)

Unless additional information suggests an alternate specific cause of death (e.g., Death due to Other Cardiovascular Causes), if a patient is seen alive ≤24 h before being found dead, sudden cardiac death (criterion [f]) should be recorded.

CV Death: Acute MI

Death by any cardiovascular mechanism (arrhythmia, sudden death, HF, stroke, pulmonary embolus, PAD) within 30 days after an acute MI, related to the immediate consequences of the MI, such as progressive HF or recalcitrant arrhythmia. There may be assessable (attributable) mechanisms of cardiovascular death during this time period, but for simplicity, if the cardiovascular death occurs within 30 days of an acute MI, it will be considered a death due to MI.

Note: Acute MI should be verified to the extent possible by the diagnostic criteria outlined for acute MI or by autopsy findings showing recent MI or recent coronary thrombosis. Death

resulting from a procedure to treat an MI (PCI or CABG), or to treat a complication resulting from MI, should also be considered death due to acute MI. Death resulting from an elective coronary procedure to treat myocardial ischemia (i.e., chronic stable angina) or death due to an MI that occurs as a direct consequence of a cardiovascular investigation / procedure / operation should be considered as a death due to a cardiovascular procedure.

CV Death: HF

Death associated with clinically worsening symptoms and/or signs of HF, regardless of HF aetiology.

CV Death: CVA

Death after a stroke that is either a direct consequence of the stroke or complication of stroke.

CV Death: CV Procedure

Death caused by the immediate complication(s) of a Cardiovascular procedure

CV Death: CV Haemorrhage

Death related to haemorrhage such as a non-stroke intracranial haemorrhage, (e.g., subdural hematoma) nonprocedural or nontraumatic vascular rupture (e.g., aortic aneurysm), or haemorrhage causing cardiac tamponade

CV Death: Other

Cardiovascular death not included in the above categories but with specific, known cause (e.g., pulmonary embolism).

Aborted SCD

Aborted SCD diagnosed if patients have received an appropriate implantable cardioverter-defibrillator (ICD) shock for ventricular arrhythmia, or had a nonfatal episode of ventricular fibrillation or spontaneous sustained ventricular tachycardia causing hemodynamic compromise and requiring cardioversion.

Sustained VT

Repetitive ventricular beats in a row lasting over 30 s in duration at a rate greater than 100 beats per minute.

HF Hospitalisation

An event where the patient is admitted to the hospital where each of the following criteria apply:

a) Primary diagnosis of HF.
b) Length of stay is at least 24 hours (or extends over a calendar date if the hospital admission and discharge times are unavailable).
c) The patient exhibits new or worsening symptoms of HF on presentation and objective evidence of new or worsening HF.
d) Receives initiation or intensification of treatment specifically for HF.

Table S1: Phenotypic characteristics of patients with non-ischemic cardiomyopathy and mid-wall/subepicardial fibrosis classified by phenotypic subgroup

	Total Cohort of LGE+ NICM (n = 291)	**LGE+ Dilated Cardiomyopathy (n = 250)**	**LGE+ non-dilated LV cardiomyopathy (n = 41)**	**p**
Age, years	57.0 (49.0-66.0)	58.0 (49.0-66.75)	55.0 (48.0-64.0)	0.081
Male	219 (75.3%)	195 (78.0%)	24 (58.5%)	**0.011**
NYHA functional class				0.075
I	121 (41.6%)	98 (39.2%)	23 (56.1%)	
II	125 (43%)	109 (43.6%)	16 (39.0%)	
III/IV	45 (15.5%)	43 (17.2%)	2 (4.9%)	
CMR measurements				
LV end-diastolic volume index (ml/m^2)	120.0 (102.5-152.5)	129.5 (110.0-163.0)	90.0 (82.0-100.0)	<**0.001**
LV end-systolic volume index (ml/m^2)	72.0 (54.0-107.0)	82.0 (61.0-114.75)	39.0 (35.0-42.0)	<**0.001**
LV ejection fraction (%)	39.0 (26.5-50.0)	36.0 (25.0-46.0)	58.0 (54.0-60.0)	<**0.001**
LV mass index (g/m^2)	90.0 (74.5-112.0)	93.0 (77.0-116.0)	72.0 (62.0-82.0)	<**0.001**
RV end-diastolic volume index (ml/m^2)	85.0 (70.0-103.0)	86.0 (69.5-103.5)	83.0 (71.75-101.25)	0.653
RV end-systolic volume index (ml/m^2)	39.0 (28.5-53.0)	39.0 (29.0-56.0)	35.0 (28.0-46.0)	0.144
RV ejection fraction (%)	54.0 (45.0-61.0)	53.0 (42.5-61.0)	56.0 (53.0-61.75)	**0.015**
Left atrial volume index (ml/m^2)	58.3 (45.8-73.6)	60.1 (47.1-75.2)	50.8 (38.7-60.0)	<**0.001**
Core fibrosis mass, g	6.5 (3.5-10.3)	7.0 (3.9-11.3)	3.9 (2.5-6.6)	<**0.001**
Gray zone fibrosis mass, g	6.7 (3.7-11.2)	7.4 (4.3-11.8)	3.2 (1.6-6.1)	<**0.001**
Combined fibrosis mass, g	13.4 (6.9-22.2)	14.0 (8.6-23.2)	7.0 (4.1-13.1)	<**0.001**
Core fibrosis entropy	15.1 (11.5-19.3)	16.0 (11.8-20.1)	12.8 (9.4-14.6)	<**0.001**
Gray zone fibrosis entropy	10.3 (7.3-14.2)	11.1 (7.9-14.7)	7.0 (5.7-10.2)	<**0.001**
Combined fibrosis entropy	16.5 (12.7-21.5)	17.7 (13.0-22.0)	13.9 (11.1-16.5)	<**0.001**

ACE = angiotensin-converting enzyme; ARB = angiotensin II receptor blocker; CMR = cardiovascular magnetic resonance; LBBB = Left bundle branch block; LGE = late gadolinium enhancement; LV = left ventricular; NYHA = New York Heart Association; RV = right ventricular.

Table S2: Comparison of patients with non-ischemic cardiomyopathy with mid-wall/subepicardial fibrosis and the comparator group of patients with NICM with no myocardial fibrosis

Median (IQR) or n (%)	LGE+ NICM (N = 291)	LGE- NICM (N = 574)	p
Age, years	57.0 (49.0-66.0)	52.0 (41.25-63.0)	**<0.001**
Male	219 (75.3%)	342 (59.6%)	**<0.001**
Caucasian	250 (85.9%)	495 (86.2%)	0.917
Body surface area (m^2)	2.03 (1.84-2.17)	1.97 (1.81-2.16)	**0.046**
Heart rate (beats/min)	70.0 (62.0-82.0)	74.0 (64.0-86.0)	**0.015**
Systolic blood pressure (mmHg)	120.5 (107.0-137.0)	123.0 (112.0-135.0)	0.339
Diastolic blood pressure (mmHg)	71.0 (63.0-83.0)	73.0 (65.0-82.0)	0.374
Diabetes	43 (14.8%)	50 (8.7%)	**0.008**
Hypertension	115 (39.5%)	141 (24.6%)	**<0.001**
LBBB	64 (22.0%)	148 (25.8%)	0.242
Family history of dilated cardiomyopathy	47 (16.2%)	107 (18.6%)	0.398
Family history of sudden cardiac death	38 (13.1%)	78 (13.6%)	0.916
NYHA functional class			**0.003**
I	121 (41.6%)	299 (52.1%)	
II	125 (43.0%)	204 (35.5%)	
III/IV	45 (15.5%)	70 (12.2%)	
Medications			
ACE inhibitor/ARB	251 (86.3%)	420 (73.2%)	**<0.001**
Beta-blocker	221 (75.9%)	354 (61.7%)	**<0.001**
Mineralocorticoid receptor antagonists	124 (42.6%)	156 (27.2%)	**<0.001**
Loop diuretic	152 (52.2%)	190 (33.1%)	**<0.001**
CMR measurements			
LV end-diastolic volume index (ml/m^2)	120.0 (102.5-152.5)	109.0 (97.0-130.0)	**<0.001**
LV end-systolic volume index (ml/m^2)	72.0 (54.0-107.0)	58.0 (45.0-82.25)	**<0.001**
LV ejection fraction (%)	39.0 (26.5-50.0)	46.0 (33.25-54.0)	**<0.001**
LV mass index (g/m^2)	90.0 (74.5-112.0)	79.0 (67.0-95.0)	**<0.001**
RV end-diastolic volume index (ml/m^2)	85.0 (70.0-103.0)	85.0 (70.0-102.0)	0.845
RV end-systolic volume index (ml/m^2)	39.0 (28.5-53.0)	40.0 (29.0-50.0)	0.576
RV ejection fraction (%)	54.0 (45.0-61.0)	55.0 (45.0-62.0)	0.141
Left atrial volume index (ml/m^2)	58.3 (45.8-73.6)	52.4 (42.8-66.2)	**<0.001**
Core fibrosis mass, g	6.5 (3.5-10.3)	n/a	-
Gray zone fibrosis mass, g	6.7 (3.7-11.2)	n/a	-

Combined fibrosis mass, g	13.4 (6.9-22.2)	n/a	-
Core fibrosis entropy	15.1 (11.5-19.3)	n/a	-
Gray zone fibrosis entropy	10.3 (7.3-14.2)	n/a	-
Combined fibrosis entropy	16.5 (12.7-21.5)	n/a	-

ACE = angiotensin-converting enzyme; ARB = angiotensin II receptor blocker; CMR = cardiovascular magnetic resonance; LBBB = Left bundle branch block; LGE = late gadolinium enhancement; LV = left ventricular; NICM = non-ischemic cardiomyopathy; NYHA = New York Heart Association; RV = right ventricular.

Table S3: Late gadolinium enhancement characteristics classified by contrast agent used

	Gadopentetate dimeglumine	Gadobutrol	p
LGE present, n/N (%)	22/65 (33.85)	269/800 (33.63)	1.000
Core fibrosis mass, g	7.90 (4.85-10.41)	6.35 (3.49-10.27)	0.274
Gray zone fibrosis mass, g	6.46 (4.61-11.13)	6.84 (3.65-11.17)	0.851
Total fibrosis mass, g	14.98 (9.68-20.23)	13.33 (6.76-22.26)	0.513
Core fibrosis entropy	14.10 (12.18-15.98)	16.18 (12.02-20.05)	0.307
Gray zone fibrosis entropy	8.17 (7.13-10.75)	11.24 (8.19-14.72)	0.052
Total fibrosis entropy	15.75 (13.30-17.50)	17.81 (13.15-21.80)	0.319
LGE = late gadolinium enhancement			

Table S4: Late gadolinium enhancement characteristics classified by heart rhythm at time of cardiovascular magnetic resonance scan

	Sinus rhythm	Atrial fibrillation	*P*
LGE present, n (%)	228/712 (32.02%)	41/115 (35.65%)	0.454
Core fibrosis mass, g	6.46 (3.52-11.20)	6.55 (2.97-8.76)	0.554
Gray zone fibrosis mass, g	6.85 (3.98-11.93)	6.38 (3.19-9.93)	0.486
Total fibrosis mass, g	13.43 (7.32-24.32)	13.75 (5.98-18.74)	0.474
Core fibrosis entropy	15.85 (11.85-20.03)	13.44 (9.68-18.74)	0.065
Gray zone fibrosis entropy	11.15 (7.78-14.72)	8.84 (6.60-12.86)	0.060
Total fibrosis entropy	17.67 (12.99-22.09)	14.85 (10-01-20.39)	0.062
LGE = late gadolinium enhancement			

No cardiac rhythm was recorded for 38/865 (4.4%) patients in this study at the time of CMR scan.

Table S5: Late gadolinium enhancement characteristics classified by severity of heart failure symptoms using New York Heart Association functional class

	NYHA Class I-III	NYHA Class IV	*P*
LGE present, n (%)	285/857 (33.26%)	6/8 (75%)	**0.020**
Core fibrosis mass, g	6.49 (3.49-10.40)	7.60 (5.45-9.74)	0.538
Gray zone fibrosis mass, g	6.74 (3.57-11.24)	6.71 (5.60 – 8.37)	0.661
Total fibrosis mass, g	13.34 (6.62-22.26)	14.31 (11.54-18.04)	0.583
Core fibrosis entropy	15.08 (11.57-19.28)	19.25 (12.74-22.19)	0.487
Gray zone fibrosis entropy	10.31 (7.4-14.03)	13.85 (8.27-15.52)	0.580
Total fibrosis entropy	16.47 (12.85-21.45)	20.76 (13.98-24.04)	0.521

LGE = late gadolinium enhancement; NYHA = New York Heart Association.

Table S6: Event rates per 100 patient-years for primary and secondary endpoints in patients with NICM and mid-wall/subepicardial fibrosis classified by phenotype

	LGE+ Dilated Cardiomyopathy (n = 250)	**LGE+ non-dilated LV cardiomyopathy (n = 41)**	**p**
LTA event rate (95% CI)	1.85 (1.51 - 2.18)	1.01 (0.3 - 1.72)	0.594
Major heart failure event rate (95% CI)	3.79 (3.41 – 4.16)	0.34 (0 – 1.09)	**<0.001**
Cardiovascular mortality (95% CI)	2.20 (1.88 – 2.53)	0 (0 - 0.69)	**0.004**

CI = confidence interval; LGE = late gadolinium enhancement; LTA = life-threatening arrhythmia.

Table S7: Event rate per 100 patient-years and median time-to-event for life-threatening arrhythmia in patients classified by myocardial fibrosis presence and median core fibrosis entropy

	No LGE (n = 574)	**LGE + core fibrosis entropy ≤ median (n = 146)**	**LGE + core fibrosis entropy > median (n = 145)**	**p**
LTA event rate (95% CI)	0.29 (0.08 – 0.49)	1.08 (0.67 – 1.48)	2.44 (1.99 – 2.9)	**0.043**
Median time to LTA (IQR)	7.80 (9.48-5.61)	7.10 (5.15-9.49)	6.12 (4.15-8.90)	**0.015**

CI = confidence interval; IQR = interquartile range; LGE = late gadolinium enhancement; LTA = life-threatening arrhythmia

Table S8: Event rate per 100 patient-years and median time-to-event for life-threatening arrhythmia in patients classified by myocardial fibrosis presence and median gray zone fibrosis entropy

	No LGE (n = 574)	**LGE + gray zone fibrosis entropy ≤ median (n = 146)**	**LGE + gray zone fibrosis entropy > median (n = 145)**	**p**
LTA event rate (95% CI)	0.29 (0.08–0.49)	1.10 (0.69–1.5)	2.39 (1.93–2.85)	**0.043**
Median time to LTA (IQR)	7.80 (9.48-5.61)	6.71 (5.09 -9.42)	6.34 (4.31-8.95)	0.136

CI = confidence interval; IQR = interquartile range; LGE = late gadolinium enhancement; LTA = life-threatening arrhythmia

Table S9: Event rate per 100 patient-years and median time-to-event for life threatening arrhythmia in patients classified by myocardial fibrosis presence and median combined fibrosis entropy

	No LGE (n = 574)	**LGE + combined fibrosis entropy ≤ median (n = 146)**	**LGE + combined fibrosis entropy > median (n = 145)**	**p**
LTA event rate (95% CI)	0.29 (0.08 – 0.49)	1.08 (0.68 – 1.49)	2.43 (1.97 – 2.89)	**0.043**
Median time to LTA (IQR)	7.80 (9.48-5.61)	6.98 (5.15-9.47)	6.14 (4.20-8.91)	**0.031**

CI = confidence interval; IQR = interquartile range; LGE = late gadolinium enhancement; LTA = life-threatening arrhythmia

Table S10: Multivariable model 1 evaluating association between fibrosis entropy and the primary endpoint

	Core fibrosis entropy – multivariable model 1			Gray zone fibrosis entropy – multivariable model 1			Combined fibrosis entropy – multivariable model 1		
	Hazard ratio	**95% CI**	**p**	**Hazard ratio**	**95% CI**	**p**	**Hazard ratio**	**95% CI**	**p**
Core fibrosis entropy	1.77	1.25-2.52	**0.001**	-	-	-	-	-	-
Gray zone fibrosis entropy	-	-	-	1.97	1.20-2.54	**0.004**	-	-	-
Combined fibrosis entropy	-	-	-	-	-	-	1.98	1.30-3.02	**0.004**
LVEF ≤35%	1.09	0.75-1.59	0.656	1.02	0.7-1.5	0.919	1.03	0.71-1.5	0.875
NYHA class >1	0.87	0.6-1.28	0.482	0.89	0.61-1.29	0.529	0.93	0.64-1.35	0.703

Model 1 adjusted for LVEF ≤35%, NYHA class >1.

CI = Confidence interval; LVEF = left ventricular ejection fraction; NYHA = New York Heart Association.

Tables S11-S13: **Reclassification Tables for the primary endpoint**

Reclassification of patient risk for LTA using net reclassification indices. Predicted overall risk of LTA was first determined by LVEF ≤35% vs >35%. The relative improvement in patient reclassification associated with core fibrosis entropy, GZ fibrosis entropy and combined fibrosis entropy was then assessed. Categorical reclassification was examined stratified by median entropy values (categorical NRI). LVEF = left ventricular ejection fraction; LTA = life-threatening arrhythmia; NRI = net reclassification index; NRI_e = net reclassification index - event; NRI_{ne} = net reclassification index – no event.

Table S11: **Reclassification of risk of LTA using core fibrosis entropy.**

10-year risk		Core Fibrosis Entropy		
		≤ median	> median	Total
LTA	LVEF			
	≤ 35%	6	13	19
	> 35%	8	11	19
	Total	14	24	38
No LTA	LVEF			
	≤ 35%	57	50	107
	> 35%	74	72	146
	Total	131	122	253
NRI_e=0.13 *(p=0.28)*, **NRI_{ne}**=0.09 *(p=0.03)*, ***NRI****=0.23 (p=0.08)*				

Table S12: **Reclassification of risk of LTA using gray zone fibrosis entropy.**

10-year risk		Gray Zone Fibrosis Entropy		
		≤ median	> median	Total
LTA	LVEF			
	≤ 35%	6	13	19
	> 35%	6	13	19
	Total	12	26	38
No LTA	LVEF			
	≤ 35%	57	50	107
	> 35%	76	70	146
	Total	133	120	253
NRI_e=0.18 *(p=0.11)*, **NRI_{ne}**=0.10 *(p=0.02)*, ***NRI***=*0.29 (p=0.02)*				

Table S13: **Reclassification of risk of LTA using combined fibrosis entropy.**

10-year risk		Total Fibrosis Entropy		
		≤ median	> median	Total
LTA	LVEF			
	≤ 35%	5	14	19
	> 35%	6	13	19
	Total	11	27	38
No LTA	LVEF			
	≤ 35%	57	50	107
	> 35%	77	69	146
	Total	134	119	253
NRI_e=0.21 *(p=0.07)*, **NRI_{ne}**=0.11 *(p=0.02)*, ***NRI***=*0.32 (p=0.01)*				

Table S14: **Multivariable model 2 evaluating association between core fibrosis entropy and the primary endpoint**

	Core fibrosis entropy – multivariable model 2		
	Hazard ratio	**95% CI**	**p**
Core fibrosis entropy	1.70	1.02-2.82	**0.042**
LVEF ≤35%	1.09	0.46-2.59	0.850
NYHA class >1	0.51	0.21-1.23	0.132
Core fibrosis mass	1.32	0.9-1.95	0.153

Model 2 adjusted for LVEF ≤35%, NYHA class >1, core fibrosis mass.

CI = Confidence interval; LVEF = left ventricular ejection fraction; NYHA = New York Heart Association.

Table S15: **Multivariable model 3 evaluating association between gray zone fibrosis entropy and the primary endpoint**

	Gray zone fibrosis entropy – multivariable model 3		
	Hazard ratio	**95% CI**	**p**
Gray zone fibrosis entropy	1.59	1.06-2.37	**0.024**
LVEF ≤35%	0.96	0.65-1.43	0.852
NYHA class >1	0.9	0.61-1.32	0.578
Gray zone fibrosis mass	1.14	0.76-1.71	0.526

Model 3 adjusted for LVEF ≤35%, NYHA class >1, gray zone mass.

CI = Confidence interval; LVEF = left ventricular ejection fraction; NYHA = New York Heart Association.

Table S16: Further multivariable analyses evaluating the association between fibrosis entropy and the primary endpoint, adjusting sequentially for fibrosis position, pattern and interface area

	Multivariable model 4*		**Multivariable model 5****		**Multivariable model 6*****	
	Hazard ratio 95% CI	**p**	**Hazard ratio 95% CI**	**p**	**Hazard ratio 95% CI**	**p**
Core fibrosis entropy	1.47 (1.07 - 2.02)	**0.018**	1.57 (1.23 - 2.01)	**< 0.001**	1.59 (1.08 - 2.34)	**0.022**
Gray zone fibrosis entropy	1.60 (1.23 - 2.09)	**0.001**	1.62 (1.29 - 2.04)	**< 0.001**	1.46 (1.0 - 2.15)	0.053
Combined fibrosis entropy	1.60 (1.23 - 2.09)	**0.001**	1.59 (1.24 - 2.02)	**< 0.001**	1.52 (1.04 - 2.23)	**0.041**

* Model 4 adjusted for fibrosis position (septal vs free-wall vs both)
**Model 5 adjusted for fibrosis position (septal vs free-wall vs both) and fibrosis pattern (mid-wall vs subepicardial vs focal vs multiple patterns)
***Model 6 adjusted for fibrosis interface area

CI = Confidence interval.

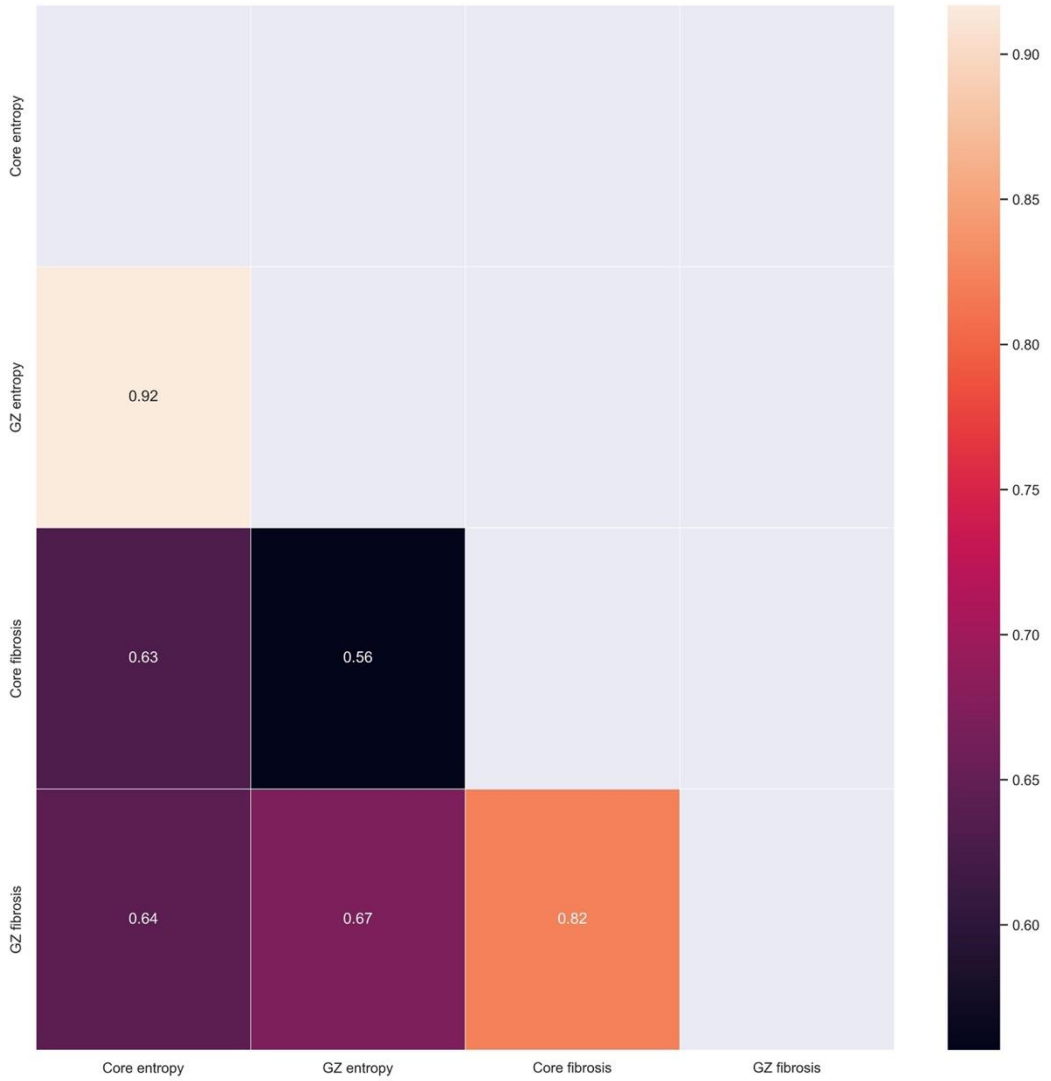
Table S17: Multivariable model assessing the association between fibrosis entropy and the primary endpoint, adjusting for NYHA class >2 and LVEF ≤35%

	Hazard ratio 95% CI	p
Core fibrosis entropy	1.58 (1.21 - 2.04)	< **0.001**
Gray zone fibrosis entropy	1.64 (1.29 - 2.10)	< **0.001**
Combined fibrosis entropy	1.59 (1.22 - 2.07)	< **0.001**

Adjusted for NYHA class >2 and LVEF ≤35%.

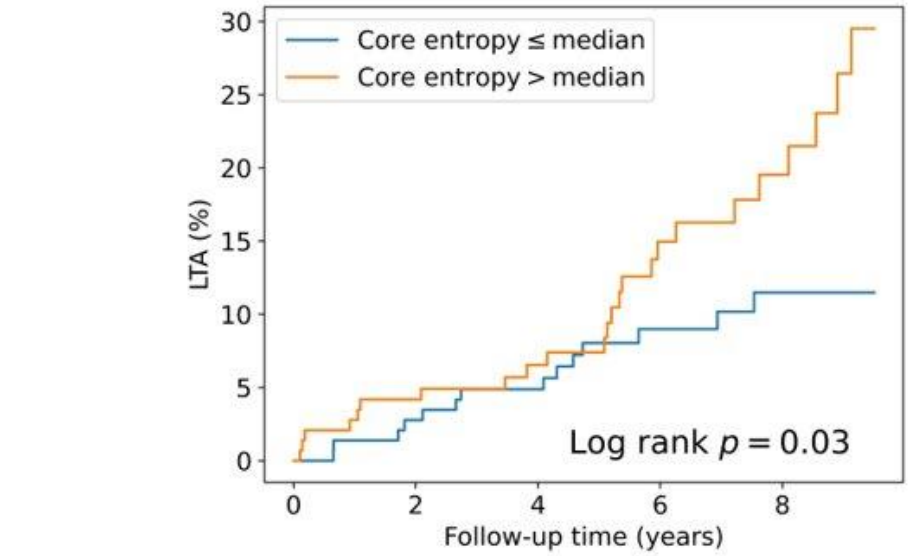
CI = Confidence interval; LVEF = left ventricular ejection fraction; NYHA = New York Heart Association.

Figure S1: Correlation between fibrosis mass and entropy



Correlation matrix for measures of core and gray zone fibrosis mass and entropy derived from late gadolinium enhancement cardiovascular magnetic resonance. Correlation is depicted using colour scale for Pearson's correlation coefficients. GZ = gray zone.

Figure S2: **Core fibrosis entropy in relation to the primary endpoint**

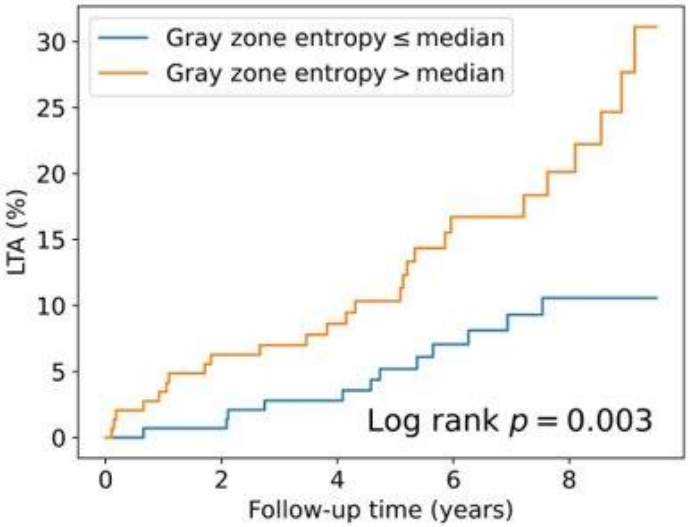


Core entropy ≤ median					
At risk	146	140	126	90	60
Censored	0	2	13	44	72
Events	0	4	7	12	14
Core entropy > median					
At risk	145	133	111	68	42
Censored	0	6	25	60	83
Events	0	6	9	17	20

Cumulative incidence curve for life-threatening arrhythmia, stratified by core fibrosis entropy above median, illustrating that core fibrosis entropy values greater than the median were associated with an increased cumulative incidence of life-threatening arrhythmia.

LTA = life-threatening arrhythmia.

Figure S3: **Gray zone fibrosis entropy in relation to the primary endpoint**



Gray zone entropy ≤ median					
At risk	146	142	127	91	63
Censored	0	3	15	46	71
Events	0	1	4	9	12
Gray zone entropy > median					
At risk	145	131	110	67	39
Censored	0	5	23	58	84
Events	0	9	12	20	22

Cumulative incidence curve for life-threatening arrhythmia, stratified by gray zone fibrosis entropy above median, illustrating that gray zone fibrosis entropy values greater than the median were associated with an increased cumulative incidence of life-threatening arrhythmia. LTA = life-threatening arrhythmia.

Figure S4: Combined fibrosis entropy in relation to the primary endpoint, stratified by Youden's J Statistic

Youden J statistic was calculated for combined fibrosis entropy from receiver operating characteristic analyses in relation to the primary endpoint

Optimal Cut-off = 17.811

Log-rank p = 0.19