

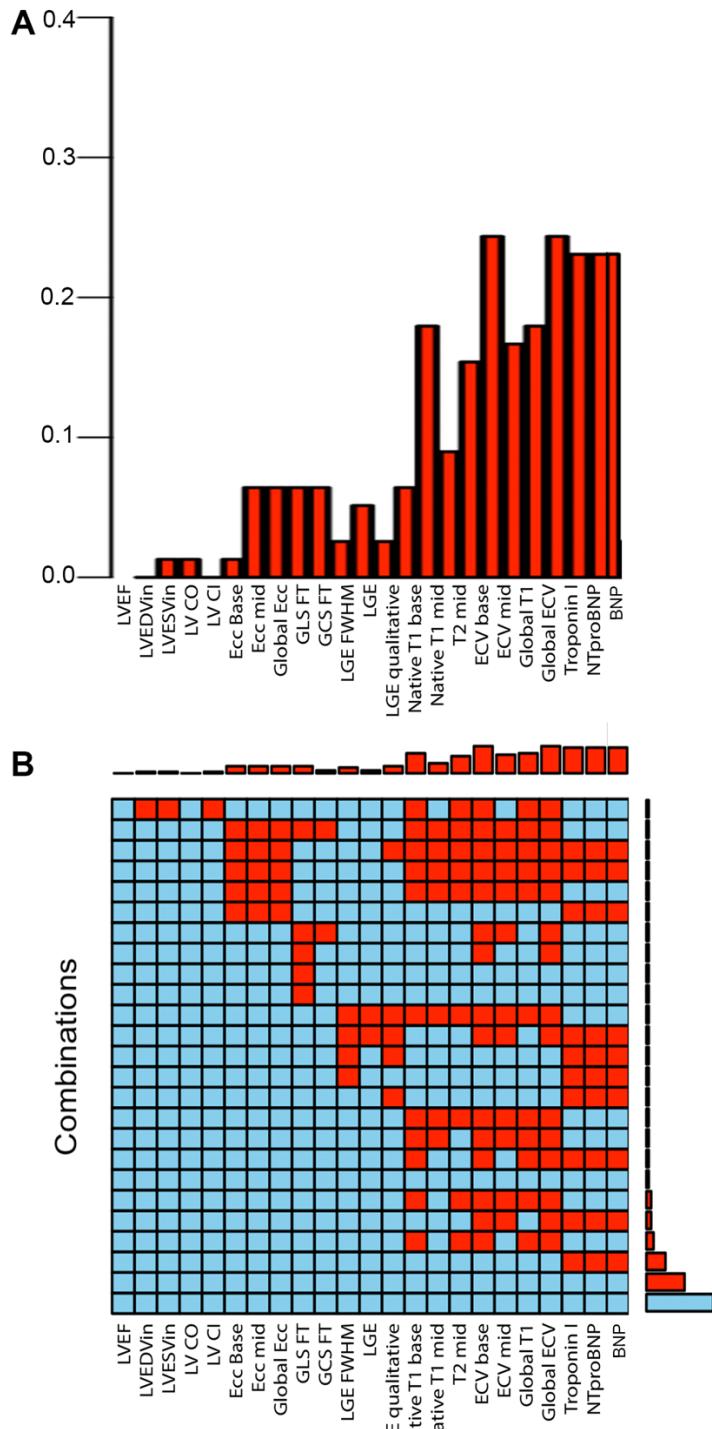
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SUPPLEMENTAL MATERIAL

2 Supplemental Figures and Figure Legends

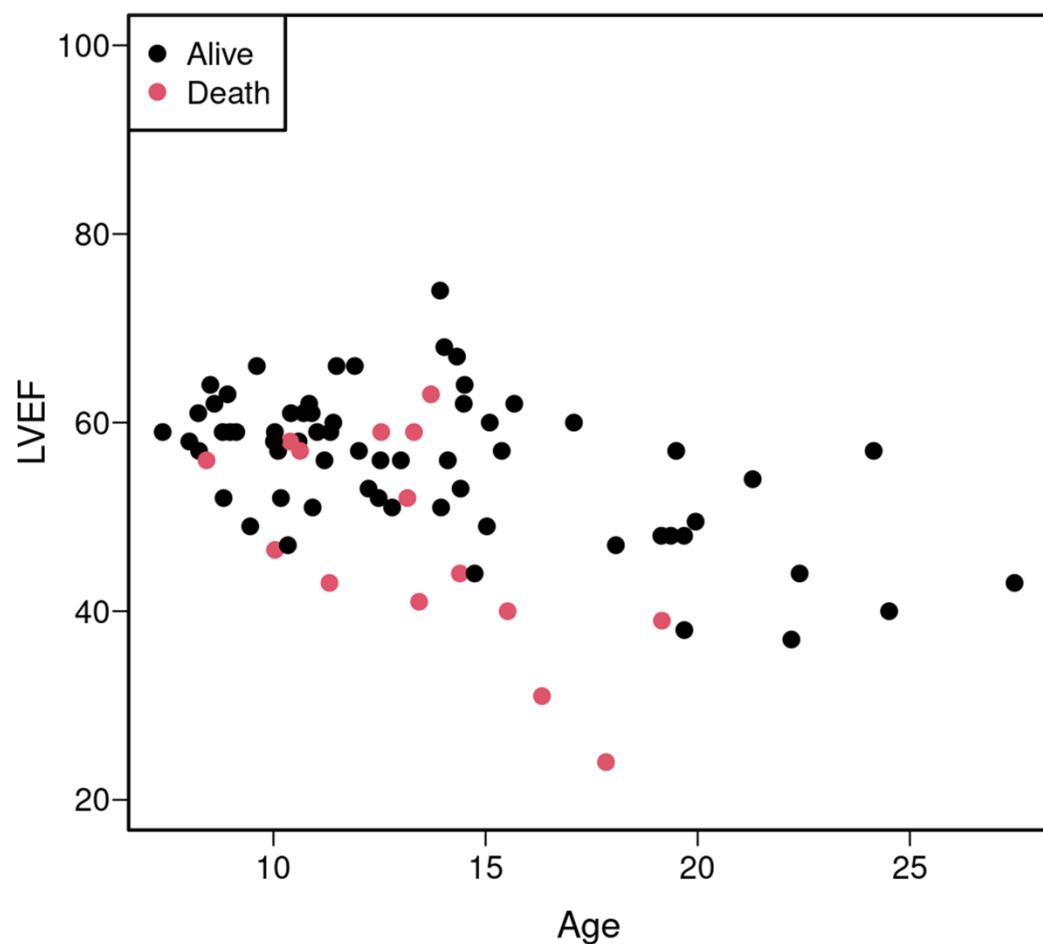
3 Figure S1. Proportion of missing values and missing values for first cardiac magnetic

4 resonance study (A, B).



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1 Figure S2. Scatterplot demonstrating age and left ventricular ejection fraction (LVEF) at
2 first cardiac magnetic resonance (CMR) study as well as outcome.



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1 **Supplemental Tables**

2 Table S1: Pearson correlation between predictors of interest and skeletal muscle
3 strength, as measured using total indexed quantitative muscle testing (QMT).

| Measure | Correlation with total indexed QMT* | P-value |
|---|-------------------------------------|---------|
| | 95% CI | |
| Left ventricular (LV [†]) ejection fraction | 0.13 -0.15-0.39 | 0.40 |
| LV end diastolic volume indexed | -0.01 -0.28-0.26 | 0.90 |
| LV end systolic volume indexed | -0.07 -0.34-0.20 | 0.60 |
| Global Ecc [‡] per 1% increase | -0.19 -0.44-0.10 | 0.20 |
| LGE [§] full width half maximum per 1% increase | 0.05 -0.23-0.32 | 0.70 |

4 * QMT – quantitative muscle testing

5 [†] LV – left ventricle

6 [‡] Ecc – circumferential strain

7 [§] LGE – late gadolinium enhancement

Table S2: Evaluation of association between confounders of interest and all-cause mortality

| Measure | N | N_e* | P-value |
|---|----|------|---------|
| Age at first cardiac magnetic resonance (CMR [†]) | 78 | 15 | 0.46 |
| Ambulatory | 78 | 15 | 0.95 |
| Use of positive pressure ventilation | 78 | 15 | 0.80 |
| Use of corticosteroids | 78 | 15 | 0.74 |
| Use of cardiac therapy | 77 | 14 | 0.74 |

2 * N_e – number of events

3 [†] CMR – cardiac magnetic resonance

Table S3: Multivariable model for all-cause mortality including age as a covariate

| Measure | N | Hazard Ratio | P-value |
|--|---------------------|-------------------|---------|
| | Confidence interval | | |
| Left ventricular (LV*) ejection fraction per 3% decrease | 78 | 1.65 1.33-2.05 | <0.001 |
| Age per 1 year increase | | 0.26 0.10-0.67 | 0.006 |
| LV end diastolic volume indexed per 1.5ml/m2 increase | 78 | 1.07 1.03-1.11 | <0.001 |
| Age per 1 year increase | | 0.72 0.40-1.30 | 0.28 |
| LV end systolic volume indexed per 3ml/m2 increase | 78 | 1.37 1.12-1.35 | <0.001 |
| Age per 1 year increase | | 0.50 0.25-1.0 | 0.05 |
| Circumferential strain (Ecc [†]) at base per 1.7% increase (less negative) | 63 | 1.57 1.06-2.34 | 0.024 |
| Age per 1 year increase | | 0.52 0.22-1.23 | 0.14 |
| Ecc at mid-LV per 1.1% increase (less negative) | 62 | 1.52 1.16-1.99 | 0.002 |
| Age per 1 year increase | | 0.4 0.14-1.09 | 0.07 |
| Global Ecc per 1.5% increase (less negative) | 63 | 1.51 1.10-2.07 | 0.012 |

| | | | |
|---|----|-----------|--------------|
| Age per 1 year increase | | 0.51 | 0.12 |
| | | 0.21-1.19 | |
| LGE [‡] full width half maximum per 12% increase | 61 | 1.55 | 0.005 |
| Age per 1 year increase | | 0.76 | 0.38 |
| | | 0.41-1.40 | |
| Native T1 mid per 20ms decrease | 67 | 0.95 | 0.83 |
| Age per 1 year increase | | 0.61-1.48 | |
| | | 0.67 | 0.54 |
| | | 0.19-2.4 | |
| N-terminal pro b-type natriuretic peptide per 50 pg/ml increase | 40 | 1.17 | 0.032 |
| Age per 1 year increase | | 0.72 | 0.45 |
| | | 0.31-1.69 | |

1 * LV – left ventricle

2 † Ecc – circumferential strain

3 ‡ LGE – late gadolinium enhancement

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Table S4: Model for all-cause mortality based on most recent visit that included a cardiac MRI

| Measure | N | Hazard | P-value |
|--|----|--------------------------------|------------------|
| | | Ratio | |
| Left ventricular (LV*) ejection fraction per 5% increase | 78 | 0.69 0.54-0.89 | <0.004 |
| LV end diastolic volume indexed per 4ml/m2 increase | 78 | 1.12 1.05-1.19 | <0.001 |
| LV end systolic volume indexed per 2ml/m2 increase | 78 | 1.07 1.03-1.10 | <0.001 |
| LV cardiac index per 1L/min/m2 increase | 77 | 1.01 0.54-1.86 | 0.98 |
| Circumferential strain (Ecc [†]) at base per 1% increase | 63 | 1.2 1.04-1.38 | 0.011 |
| Ecc at mid-LV per 1% increase | 62 | 1.16 1.04-1.30 | 0.009 |
| Global Ecc per 1% increase | 63 | 1.17 1.04-1.31 | 0.001 |
| Presence of late gadolinium enhancement (LGE [‡]) | 72 | 451 0-1.05x10 ²³ | 0.800 |
| LGE global severity score per 1 unit increase | 69 | 1.53 0.90-2.61 | 0.120 |
| LGE full width half maximum per 1% increase | 61 | 1.00 0.95-1.04 | 0.850 |

| | | | |
|---|----|-----------|-------------|
| Native T1 mid per 1ms increase | 67 | 1.00 | 0.580 |
| | | 0.99-1.01 | |
| T2 mid per 1ms increase | 60 | 1.08 | 0.540 |
| | | 0.85-1.36 | |
| Extracellular volume mid-LV per 1% increase | 58 | 1.07 | 0.200 |
| | | 0.96-1.20 | |
| Brain natriuretic peptide per 1pg/ml increase | 41 | 1.01 | 0.160 |
| | | 0.99-1.01 | |
| N-terminal pro b-type natriuretic peptide per 50 pg/ml increase | 40 | 1.18 | 0.03 |
| | | 1.00-1.39 | |
| Troponin I per 1pg/ml increase | 40 | 1.00 | 0.450 |
| | | 0.99-1.00 | |

1 * LV – left ventricle

2 † Ecc – circumferential strain

3 ‡ LGE – late gadolinium enhancement