



Supplemental Figure 1: A simple Bayesian network model modeling risk factors related to LVAD survival.

Supplemental Table 1: Pre-implant variables from INTERMACS included in analysis (n=111) Inclusion criteria ≤ 50% missing		
Demographics (n=21)	% missing	Levels
Age interval	0	19-29, 30-39, 40-49, 50-59, 60-69, 70-79, 80+
Gender	0	male/female
Quarter of Implant	0	Q1, Q2, Q3, Q4
Implant year	0	2006, 2007,...2013
BMI	1	< 24, 24-27, 27-32, > 32
Education level	23	Many: Grade school, High school, Bachelors...
Work status	9	Many: full time, disability, part time...
Work income	7	yes/no
NYHA	9	Class I, II, III, IV
INTERMACS profile	0	Profile 1-7
Device strategy	0	Many: DT, BTT, BTR
VAD indication	0	None, Failure to wean from CPB, post cardiac surgery
Admission reason	0	Many: Acute MI, Heart Failure, Cardiac surgery...
Time since first cardiac diagnosis	4	< 1 month, 1 month-1year, 1-2 years, >2 years
Primary diagnosis	1	Many: Dilated myopathy, coronary artery disease, valvular heart disease...
Known cardiac biopsy	0	Many: no biopsy known, Sarcoidosis, myocarditis...
Previous cardiac operation	0	Many: ECMO, CABG, valve replacement, multiple...
Current ICD	1	yes/no
Events this hospitalization	1	Many: MI, intubation, dialysis...
Intervention within the last 48 hours	0	Many: IABP, ECMO, feeding tube...
Temporary circulatory support	27	yes/no
Co-morbidities (n=30)		
Advanced age	8	yes/no
Frailty	8	yes/no
Patient does not want transplant	8	yes/no
Musculoskeletal limitation for ambulation	8	yes/no
Immunosuppression	8	yes/no
Allosensitization	8	yes/no
Chronic renal disease	8	yes/no
Recent pulmonary embolus	8	yes/no
Thoracic aortic disease	8	yes/no
Large BMI	8	yes/no
Malnutrition cachexia	8	yes/no
Heparin induced thrombocytopenia	8	yes/no
Chronic infectious concerns	8	yes/no

Limited cognition understanding	8	yes/no
Limited social support	8	yes/no
Repeated non-compliance	8	yes/no
History of illicit drug use	8	yes/no
Severe depression	8	yes/no
Other major psychiatric diagnosis	8	yes/no
Other comorbidities	8	yes/no
Pulmonary disease	8	yes/no
Pulmonary hypertension	8	yes/no
Unfavorable mediastinal anatomy	8	yes/no
Severe diabetes	8	yes/no
Major stroke	8	yes/no
Peripheral vascular disease	8	yes/no
History of solid organ cancer	8	yes/no
History of lymphoma leukemia	8	yes/no
History of alcohol abuse	8	yes/no
Currently smoking	8	yes/no
Laboratory (n=16)		
Blood type	2	A, B, O, AB
Creatinine	0	not done, <1.1, 1.1-1.5, >1.5
Sodium	0	not done, <133, 133-137, >137
INR	1	not done, <1.2, 1.2-1.5, >1.5
Albumin	1	not done, <3.2, 3.2-3.8, >3.8
Pre albumin	3	not done, <15, 15-21, >21
BNP	4	not done, <540, 540-1200, >1200
Pro BNP	4	not done, <3000, 3000-7000, >7000
WBC	0	not done, <7, 7-10, >10
Platelet	0	not done, <150, 150-220, >220
AST	1	not done, <25, 25-40, >40
ALT	1	not done, <20, 20-40, >40
Cholesterol	4	not done, <110, 110-150, >150
Potassium	0	not done, <3.9, 3.9-4.3, >4.3
Hemoglobin	0	not done, <10, 10-12.5, >12.5
CRP	4	not done, <3, 3-10, >10
Hemodynamics (n=21)		
LVEF	9	not recorded, <20 (severe), 20-29 (moderate/severe), 30-39 (moderate), 40-49 (mild), >50 (normal)
LVEDD	13	not done, N/A, <6.5, 6.5-7.5, >7.5
RVEF	23	not done, mild, normal, moderate, severe
Pulmonary artery systolic pressure	23	not done, <45, 45-60, >60
Pulmonary artery diastolic	23	not done, <20, 20-30, >30

pressure		
Mean right atrial pressure	27	not done, <10, 10-15, >15
PCWP	27	not done, <20, 20-30, >30
Heart rate	1	not done, <80, 80-95, >95
Systolic blood pressure	1	not done, <100, 100-120, >120
Cardiac output	35	not done, <3.5, 3.5-5, >5
Diastolic blood pressure	1	not done, <60, 60-70, >70
ECG rhythm	3	Many: sinus, paced, Afib...
6 minute walk	5	not done, <465, 465-750, 750-1030, >1030
VO ₂ max	10	not done, <10, 10-13, >13
Peak R	14	not done, <1, 1, 1.1, >1.2
Mitral regurgitation	9	not done, none, mild, moderate, severe
Tricuspid regurgitation	10	not done, none, mild, moderate, severe
Aortic regurgitation	11	not done, none, mild, moderate, severe
Ascites	10	yes/no
Peripheral edema recorded	6	yes/no
Arrhythmia	5	yes/no
Medication (n=13)		
Angiotensin	9	no, known previous use (within past year), currently using
Amiodarone	5	no, known previous use (within past year), currently using
Ace inhibitors	6	no, known previous use (within past year), currently using
Beta blockers	3	no, known previous use (within past year), currently using
Aldosterone	6	no, known previous use (within past year), currently using
Loop diuretics	0	yes/no
Warfarin	5	no, known previous use (within past year), currently using
Antiplatelet	5	no, known previous use (within past year), currently using
Neseritide	1	yes/no
Nitric oxide	1	yes/no
Inotrope infusion	2	yes/no
IV inotrope therapy	1	yes/no
IV inotrope therapy agent	20	Many: Milrinone, Dopamine, Dobutamine...
Quality of Life (n=10)		
Completed EuroQoL	3	yes, N/A
EurQoL main occupation	46	Many: retired, student, working ...
EuroQoL mobility	45	no problem, some problems, major problems
EuroQoL self-care	45	no problem, some problems, major problems
EuroQoL activities	45	no problem, some problems, major problems
EuroQoL pain	45	none, moderate, extreme
EuroQoL anxiety	45	none, moderate, extreme
Visual Analog Status health state	46	<25, 25-40, 40-65, >65
Currently smoke cigarettes	46	yes/no

Trail making status	0	completed, attempted but not completed, no attempted, completed but invalid
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Supplemental Table 1: Many= not all format options listed, DT= destination therapy, BTT= bridge to transplant, BTR= bridge to recovery, CPB= cardiopulmonary bypass, MI= myocardial infarction, ECMO= extracorporeal membrane oxygenator, CABG= coronary artery bypass graft, IABP= intra-aortic balloon pump, INR= international normalized ratio, ICD= implantable cardioverter defibrillator, BNP= B-type natriuretic peptide, WBC= white blood cell, ALT= alanine transaminase, AST= aspartate aminotransferase, CRP= C-Reactive Protein, LVEF= left ventricle ejection fraction, LVEDD= left ventricle end diastolic diameter, RVEF= right ventricle ejection fraction, PCWP= pulmonary capillary wedge pressure, NYHA= New York Heart Association functional class.

Supplemental Table 2: Significant Univariate Correlations with 90-day mortality		
Demographics (n=12)	HR (95% CI)	p-value
Education level: grade school (0-8)	0.53 (0.28-0.98)	0.045
Work status: retired	1.35 (1.14-1.58)	0.0004
NYHA class III: marked limitation	0.71 (0.58-0.87)	0.0015
INTERMACS profile		
1 Critical cardiogenic shock	1.45 (1.20-1.75)	0.0001
3 Stable but inotrope dependent	0.64 (0.52-0.78)	<0.0001
4 Resting symptoms	0.73 (0.57-0.93)	0.01
Device strategy		
Bridge to Transplant (patient currently listed for transplant)	0.60 (0.49-0.73)	<0.0001
Possible Bridge to Transplant - likely to be eligible	0.61 (0.50-0.74)	<0.0001
Rescue Therapy	2.66 (1.26-5.60)	0.01
Admission reason: acute MI	1.43 (1.02-2.00)	0.04
Time since first cardiac diagnosis: 1 month - 1 year	0.74 (0.56-0.99)	0.04
Primary diagnosis		
Dilated myopathy: idiopathic	0.43 (0.22-0.87)	0.02
Restrictive myopathy: amyloidosis	0.72 (0.60-0.86)	0.0004
Restrictive myopathy: sarcoidosis	3.04 (1.14-8.12)	0.03
Valvular heart disease	1.70 (1.03-2.80)	0.04
Previous cardiac operation		
CABG	1.80 (1.52-2.14)	<0.0001
Mitral valve replacement/repair and CABG	2.00 (1.32-3.04)	0.0012
Previous ECMO	5.75 (1.86-17.81)	0.0025
Events this hospitalization		
Cardiac arrest, intubation and dialysis	13.45 (5.05-35.82)	<0.0001
Dialysis	3.76 (2.38-5.93)	<0.0001
Dialysis and intubation	6.78 (3.38-13.60)	<0.0001
IABP	1.42 (1.05-1.92)	0.02
IABP and major MI	3.38 (1.09-10.46)	0.03
Major MI, intubation and cardiac arrest	2.88 (1.29-6.43)	0.0099
Major MI, intubation and dialysis	7.37 (1.05-51.94)	0.05
Other cardiac surgery, intubation and cardiac arrest	7.00 (2.26-21.65)	0.0008
Other surgical procedures and intubation	2.84 (1.18-6.84)	0.02
Other surgical procedures, intubation and cardiac arrest	4.82 (1.21-19.18)	0.03
Several events	1.71 (1.31-2.24)	0.0001
Intervention within the last 48 hours		
Aortic valve replacement/repair	9.42 (1.34-66.37)	0.02
Dialysis	4.72 (2.60-8.56)	<0.0001
ECMO	2.56 (1.22-5.38)	0.01
ECMO and ventilator	5.33 (2.85-9.96)	<0.0001
ECMO, ventilator and IABP	5.65 (2.93-10.90)	<0.0001
Feeding tube and dialysis	33.14 (4.69-233.98)	0.0005
Feeding tube and IABP	3.95 (1.64-9.49)	0.0023
Feeding tube, ventilator, dialysis and IABP	13.87 (4.48-42.97)	<0.0001

IABP	1.35 (1.13-1.60)	0.0007
IABP and dialysis	3.89 (1.85-8.18)	0.0004
IABP, dialysis and ultrafiltration	5.11 (1.28-20.38)	0.02
Other/several interventions	3.15 (2.22-4.46)	<0.0001
Ultrafiltration	4.02 (2.15-7.52)	<0.0001
Ventilator, dialysis and IABP	4.63 (1.74-12.34)	0.0023
Ventilator and IABP	1.95 (1.28-2.97)	0.0018
Temporary circulatory support = yes	1.44 (1.23-1.71)	<0.0001
Co-morbidities (n=10)		
Advanced age: yes	1.37 (1.13-1.64)	0.001
Frailty: yes	1.61 (1.17-2.22)	0.0037
Chronic renal disease: yes	1.62 (1.31-2.00)	<0.0001
Chronic infectious concerns: yes	2.43 (1.34-4.40)	0.0034
Limited social support: yes	0.57 (0.34-0.96)	0.04
Other comorbidities: yes	1.47 (1.16-1.87)	0.0015
Pulmonary disease: yes	1.57 (1.14-2.18)	0.0064
Unfavorable mediastinal anatomy: yes	2.31(1.45-3.67)	0.0005
Major stroke: yes	1.87 (1.03-3.39)	0.04
Peripheral vascular disease: yes	1.64 (1.13-2.39)	0.01
Laboratory (n=14)		
Blood type: A	1.19(1.02-1.40)	0.0276
Creatinine		
1.1-1.5	1.41 (1.15-1.73)	0.0008
>1.5	1.97 (1.65-2.34)	<0.0001
INR \geq 1.5	1.39 (1.17-1.66)	0.0002
Albumin		
3.2-3.8	0.76 (0.64-0.91)	0.0023
>3.8	0.54 (0.44-0.66)	<0.0001
not done	0.69 (0.52-0.90)	0.0064
Pre albumin \leq 15	1.38 (1.14-1.67)	0.0011
BNP \leq 540	0.79 (0.62-1.00)	0.05
Pro BNP \leq 3000	0.66 (0.44-0.99)	0.04
WBC \geq 10	1.28 (1.07-1.54)	0.0073
Platelet \leq 150	1.61 (1.36-1.92)	<0.0001
AST \geq 40	1.70 (1.42-2.04)	<0.0001
ALT \geq 40	1.39 (1.17-1.65)	0.0002
Cholesterol \geq 150	0.73 (0.57-0.93)	0.01
Hemoglobin		
>12.5	0.65 (0.54-0.79)	<0.0001
<10	1.35 (1.15-1.59)	0.0003
C Reactive Protein (CRP) \leq 3	0.65 (0.46-0.93)	0.02
Hemodynamics (n=12)		
LVEF		

30-39 (moderate)	1.43 (1.03-2.00)	0.03
40-49 (mild)	3.84 (1.92-7.70)	0.0002
LVEDD		
6.5-7.5	0.77 (0.64-0.93)	0.0072
>7.5	0.60 (0.48-0.75)	<0.0001
Mean right atrial pressure		
10-15	0.76 (0.61-0.94)	0.01
<10	0.62 (0.51-0.76)	<0.0001
Diastolic BP		
60-70	0.76 (0.64-0.90)	0.0016
>70	0.73 (0.61-0.88)	0.001
ECG rhythm		
Atrial fibrillation	1.47 (1.14-1.88)	0.0026
Paced	1.49 (1.26-1.76)	<0.0001
6 minute walk		
not done: other	0.64 (0.53-0.77)	<0.0001
>1030	0.60 (0.39-0.92)	0.02
465-750	0.62 (0.41-0.95)	0.03
VO₂ max		
Not done/other	0.72 (0.61-0.84)	0.0001
10-13	0.61 (0.40-0.94)	0.03
>13	0.31 (0.15-0.62)	0.001
Peak R: 1	0.30 (0.10-0.94)	0.04
Tricuspid regurgitation		
2 (moderate)	1.25 (1.06-1.48)	0.0098
3 (severe)	1.41 (1.13-1.76)	0.0026
Ascites: yes	1.67 (1.31-2.13)	<0.0001
Peripheral edema: yes	1.59 (1.38-1.84)	<0.0001
Arrhythmia: yes	1.28 (1.10-1.49)	0.0019
Medication (n=6)		
Amiodarone		
Currently using	1.48 (1.27-1.72)	<0.0001
Known previous use (within past year)	1.85 (1.39-2.46)	<0.0001
Ace inhibitors: currently using	0.84 (0.71-0.99)	0.04
Beta blockers: known previous use (within past year)	1.21 (1.01-1.45)	0.04
Aldosterone: currently using	0.73 (0.62-0.85)	0.0001
Antiplatelet: previous use (within past year)	1.31 (1.07-1.61)	0.0088
IV inotrope therapy agent		
Epinephrine	2.74 (1.23-6.10)	0.01
Milrinone, Dobutamine and Dopamine	2.20 (1.34-3.61)	0.002
Norepinephrine	3.19 (1.52-6.72)	0.0023
Norepinephrine and Dobutamine	4.65 (1.50-14.39)	0.008
Norepinephrine and Epinephrine	3.68 (1.38-9.80)	0.0095
Norepinephrine, Epinephrine and Dobutamine	4.57 (1.15-18.2)	0.03
Norepinephrine, Epinephrine and Milrinone	4.08 (1.83-9.10)	0.0006
Norepinephrine and Milrinone	2.36 (1.06-5.27)	0.04
Several Inotropes	2.40 (1.44-4.01)	0.0008

Quality of Life (n=5)		
EurQoL main occupation		
Keeping house	0.61 (0.38-0.97)	0.04
Too sick to work (disabled)	0.73 (0.56-0.96)	0.03
EuroQoL mobility		
I am confined to bed	1.43 (1.14-1.79)	0.002
I have no problems walking about	0.79 (0.64-0.99)	0.04
EuroQoL self-care: I am unable to wash or dress myself	1.52 (1.18-1.97)	0.0015
Visual Analog Status health state \geq 65	0.77 (0.61-0.98)	0.04
Trail making status: completed	0.81 (0.69-0.94)	0.0057

Supplemental Table 2: CI= confidence interval, HR= hazard ratio, Many= not all format options listed, DT= destination therapy, BTT= bridge to transplant, BTR= bridge to recovery, CPB= cardiopulmonary bypass, MI= myocardial infarction, ECMO= extracorporeal membrane oxygenator, CABG= coronary artery bypass graft, IABP= intra-aortic balloon pump, INR= international normalized ratio, ICD= implantable cardioverter defibrillator, BNP= B-type natriuretic peptide, WBC= white blood cell, ALT= alanine transaminase, AST= aspartate aminotransferase, CRP= C-Reactive Protein, LVEF= left ventricle ejection fraction, LVEDD= left ventricle end diastolic diameter, RVEF= right ventricle ejection fraction, PCWP= pulmonary capillary wedge pressure, NYHA= New York Heart Association functional class.

Supplemental Table 3: Significant Univariate Correlations with 1 year mortality		
Demographics (n=12)	HR (95% CI)	p-value
Education level: post-college graduate degree	1.29 (1.04-1.61)	0.02
Work status: patient choice-retired	1.24 (1.10-1.40)	0.0006
NYHA class III: marked limitation	0.77 (0.66-0.90)	0.001
INTERMACS profile		
1=critical cardiogenic shock	1.22 (1.05-1.42)	0.008
3=stable but inotrope dependent	0.71 (0.62-0.82)	<0.0001
4=resting symptoms	0.80 (0.68-0.95)	0.01
6=exertion limited	0.58 (0.35-0.97)	0.04
Device strategy		
BTT (patient currently listed for tx)	0.76 (0.66-0.88)	0.0004
Possible BTT (likely to be eligible)	0.72 (0.62-0.84)	<0.0001
Rescue Therapy	2.52 (1.35-4.69)	0.0038
Admission reason: VAD placement	0.86 (0.75-0.98)	0.03
Time since first cardiac diagnosis: 1 month - 1 year	0.81 (0.66-1.00)	0.05
Primary diagnosis		
Dilated myopathy: familial	0.63 (0.40-0.99)	0.05
Dilated myopathy: idiopathic	0.75 (0.65-0.85)	<0.0001
Dilated myopathy: other	0.81 (0.66-1.00)	0.05
Dilated myopathy: post-partum	0.57 (0.33-0.98)	0.05
Restrictive myopathy: amyloidosis	2.96 (1.41-6.20)	0.0043
Previous cardiac operation		
Aortic and mitral valve replacement/repair	2.55 (1.51-4.31)	0.0005
CABG	1.58 (1.39-1.80)	<0.0001
Congenital cardiac surgery and aortic valve replacement/repair	4.19 (1.05-16.68)	0.04
Mitral valve replacement/repair and CABG	1.78 (1.29-2.45)	0.0005
Other and CABG	1.41 (1.00-1.99)	0.05
Previous ECMO	4.20 (1.36-12.98)	0.01
Events this hospitalization		
Cardiac arrest, intubation and dialysis	25.97 (9.75-69.22)	<0.0001
Dialysis	2.36 (1.56-3.57)	<0.0001
Dialysis and intubation	4.05 (2.11-7.79)	<0.0001
IABP	1.30 (1.03-1.64)	0.03
Major infection, intubation and dialysis	3.78 (1.22-11.66)	0.02
Major MI, intubation and cardiac arrest	2.13 (1.07-4.26)	0.03
Other cardiac surgery, intubation and cardiac arrest	7.17 (2.99-17.20)	<0.0001
Other cardiac surgery, intubation and dialysis	5.29 (1.33-21.04)	0.02
Other surgical procedures and intubation	2.64 (1.32-5.28)	0.0062
Several events	1.44 (1.16-1.77)	0.0008
Intervention within the last 48 hours		
Dialysis	3.2 (1.82-5.65)	0.0001
Dialysis and ultrafiltration	5.74 (1.44-22.84)	0.01
ECMO and IABP	2.13 (1.02-4.48)	0.05
ECMO and ventilator	4.02 (2.38-6.80)	<0.0001
ECMO, ventilator and IABP	3.04 (1.63-5.65)	0.0005
Feeding tube and dialysis	25.93 (3.67-182.96)	0.0012
Feeding tube and IABP	2.94 (1.32-6.54)	0.0084

Feeding tube, ventilator, dialysis and IABP	17.54 (5.67-54.31)	<0.0001
IABP	1.23 (1.08-1.40)	0.0017
IABP and dialysis	2.26 (1.08-4.73)	0.0017
Other/several interventions	2.11 (1.56-2.86)	<0.0001
Ultrafiltration	2.88 (1.70-4.87)	0.0001
Ventilator, dialysis and IABP	2.81 (1.06-7.46)	0.04
Ventilator and IABP	1.54 (1.09-2.16)	0.01
Ventilator and ultrafiltration	4.99 (1.61-15.41)	0.0055
Temporary circulatory support: yes	1.29 (1.13-1.47)	0.0002
Co-morbidities (n=11)		
Advanced age: yes	1.24 (1.08-1.42)	0.0019
Frailty: yes	1.68 (1.34-2.12)	<0.0001
Chronic renal disease: yes	1.46 (1.25-1.71)	<0.0001
Thoracic aortic disease: yes	4.58 (2.06-10.17)	0.0002
Malnutrition cachexia: yes	1.71 (1.20-2.46)	0.0035
Chronic infectious concerns: yes	1.71 (1.01-2.89)	0.04
Limited social support: yes	0.62 (0.43-0.89)	0.01
Other comorbidities: yes	1.21 (1.01-1.46)	0.04
Pulmonary disease: yes	1.39 (1.08-1.78)	0.0093
Unfavorable mediastinal anatomy: yes	1.71 (1.17-2.49)	0.006
Peripheral vascular disease: yes	1.49 (1.13-1.96)	0.0047
Laboratory (n=12)		
Blood type		
A	1.21 (1.07-1.35)	0.0018
B	1.21 (1.02-1.44)	0.03
Creatinine		
1.1-1.5	0.77 (0.67-0.87)	0.0001
<1.1	0.61 (0.54-0.69)	<0.0001
INR \geq 1.5	1.24 (1.08-1.41)	0.0017
Albumin \geq 3.8	0.70 (0.61-0.81)	<0.0001
BNP \leq 540	0.74 (0.63-0.88)	0.0009
Pro BNP \leq 3000	0.70 (0.53-0.94)	0.02
Platelet \leq 150	1.33 (1.17-1.51)	<0.0001
AST		
>40	1.34 (1.17-1.53)	<0.0001
Not done	1.27 (1.04-1.55)	0.02
ALT \geq 40	1.16 (1.02-1.32)	0.02
Cholesterol		
110-150	0.74 (0.63-0.87)	0.0002
>150	0.73 (0.61-0.87)	0.0006
Hemoglobin		
>12.5	0.69 (0.60-0.80)	<0.0001
<10	1.24 (1.09-1.40)	0.0007
C Reactive Protein (CRP) \leq 3	0.56 (0.43-0.74)	<0.0001
Hemodynamics (n=15)		
LVEF		
>50 (normal)	2.21 (1.15-4.24)	0.02
20-29 (moderate/severe)	1.21 (1.06-1.37)	0.0039
30-39 (moderate)	1.48 (1.16-1.89)	0.0017

40-49 (mild)	3.06 (1.59-5.88)	0.0008
LVEDD		
6.5-7.5	0.77 (0.67-0.89)	0.0004
>7.5	0.64 (0.55-0.76)	<0.0001
RVEF: mild	0.83 (0.69-0.99)	0.04
Mean right atrial pressure		
10-15	0.80 (0.69-0.94)	0.0067
<10	0.74 (0.64-0.85)	<0.0001
not done	0.84 (0.71-1.00)	0.05
PCWP \geq 30	0.82 (0.69-0.97)	0.02
Cardiac output \leq 3.5	0.84 (0.72-0.97)	0.01
Diastolic BP		
60-70	0.83 (0.74-0.95)	0.0053
>70	0.78 (0.68-0.89)	0.0004
ECG rhythm		
Atrial fibrillation	1.26 (1.05-1.53)	0.02
Paced	1.38 (1.22-1.56)	<0.0001
6 minute walk		
Not done	0.73 (0.64-0.84)	<0.0001
>1030	0.66 (0.48-0.89)	0.008
VO ₂ max		
Not done	0.78 (0.69-0.88)	<0.0001
10-13	0.59 (0.42-0.81)	0.0013
>13	0.62 (0.42-0.92)	0.02
Tricuspid regurgitation		
2 (moderate)	1.15 (1.02-1.31)	0.03
3 (severe)	1.20 (1.01-1.43)	0.04
Aortic regurgitation: 2 (moderate)	1.58 (1.22-2.05)	0.0006
Ascites: yes	1.47 (1.21-1.78)	0.0001
Peripheral edema	1.35 (1.22-1.51)	<0.0001
Arrhythmia: yes	1.20 (1.07-1.35)	0.0023
Medication (n=5)		
Amiodarone		
Currently using	1.27 (1.14-1.42)	<0.0001
Known previous use (within past year)	1.40 (1.11-1.77)	0.0047
Ace inhibitors: currently using	0.78 (0.69-0.89)	0.0001
Aldosterone: currently using	0.76 (0.68-0.86)	<0.0001
Antiplatelet: known previous use (within past year)	1.28 (1.10-1.49)	0.0018
IV inotrope therapy agent		
Epinephrine	2.21 (1.15-4.25)	0.02
Levosimendan	9.72 (2.44-38.69)	0.0013
Milrinone, Dobutamine and Dopamine	1.71 (1.10-2.66)	0.02
Norepinephrine	2.55 (1.32-4.90)	0.005
Norepinephrine and Epinephrine	2.79 (1.16-6.68)	0.02
Norepinephrine, Epinephrine and Milrinone	3.46 (1.65-7.26)	0.0011
Several inotropes	1.64 (1.07-2.50)	0.02
Quality of Life (n=4)		
EurQoL main occupation: too sick to work (disabled)	0.69 (0.55-0.86)	0.0009
EuroQoL mobility		

I am confined to bed	1.25 (1.05-1.50)	0.01
I have no problems walking about	0.82 (0.70-0.96)	0.01
EuroQoL self-care: I am unable to wash or dress myself	1.30 (1.06-1.59)	0.01
Trail making status: completed	0.88 (0.78-0.98)	0.02

Supplemental Table 3: CI= confidence interval, HR= hazard ratio, Many= not all format options listed, DT= destination therapy, BTT= bridge to transplant, BTR= bridge to recovery, CPB= cardiopulmonary bypass, MI= myocardial infarction, ECMO= extracorporeal membrane oxygenator, CABG= coronary artery bypass graft, IABP= intra-aortic balloon pump, INR= international normalized ratio, ICD= implantable cardioverter defibrillator, BNP= B-type natriuretic peptide, WBC= white blood cell, ALT= alanine transaminase, AST= aspartate aminotransferase, CRP= C-Reactive Protein, LVEF= left ventricle ejection fraction, LVEDD= left ventricle end diastolic diameter, RVEF= right ventricle ejection fraction, PCWP= pulmonary capillary wedge pressure, NYHA= New York Heart Association functional class.

Supplemental Table 4: HMRS results summary		
	90 day mortality	1 year mortality
Total patients (N)	7762	6575
Low Risk N (% of total)	7226 (93.1)	6118 (93.0)
alive N (% of low risk, % of total)	6571 (90.9, 84.6)	4918 (80.4, 74.8)
dead N (% of low risk, % of total)	655 (9.1, 8.4)	1200 (19.6, 18.3)
Medium Risk N (% of total)	343 (4.4)	293 (4.5)
alive N (% of medium risk, % of total)	288 (84.0, 3.7)	206 (70.3, 3.1)
dead N (% of medium risk, % of total)	55 (16.0, 0.7)	87 (29.7, 1.3)
High Risk N (% of total)	192 (2.3)	164 (2.5)
alive N (% of high risk, % of total)	164 (85.4, 2.1)	116 (70.7, 1.8)
dead N (% of high risk, % of total)	28 (14.6, 0.4)	48 (29.3, 0.7)

Supplemental Table 4: HeartMate II Risk score= HMRS, HMRS low risk <1.58, 1.58 ≤ HMRS medium risk ≤ 2.48, HMRS high risk > 2.48