

## Supplemental Material

### Supplemental Tables

Device type/brand	First Era (N=2,779)	Current Era (N=2,123)
<b>PF-LVAD</b>	<b>1,808</b>	<b>190</b>
HeartMate IP, VE, XVE	1,196	121
Novacor PC, PCq	120	1
Thoratec	481	64
Toyobo	10	4
HeartSaver	1	-
<b>CF-LVAD</b>	<b>338</b>	<b>1,573</b>
HeartMate II	262	1,458
HeartWare	-	61
Jarvik 2000	33	22
Micromed DeBakey	29	-
VentrAssist	14	24
Others	-	8
<b>TAH</b>	<b>46</b>	<b>44</b>
<b>BIVADs</b>	<b>295</b>	<b>233</b>
<b>Temporary VADs</b>	<b>292</b>	<b>83</b>

First Era: January 1999 to April 2008; Current Era: April 2008 to December 2011. BIVADs=biventricular assist device; CF-LVAD=continuous-flow left ventricular assist device; PF-LVAD=pulsatile-flow left ventricular assist device; TAH=total artificial heart. Values are expressed as frequencies.

Supplemental Table 2. Univariable Hazard Ratio Estimates for the Risk of Death on the Waiting List and for the Risk of Death or Delisting Among Heart Transplant Candidates in the First Era (1999-2008)

Variable	Mortality		Mortality or Delisting	
	HR (95% CI)	p-value	HR (95% CI)	p-value
Age (per year)	1.01 (1.00-1.01)	<0.0001	1.01 (1.00-1.01)	<0.0001
Body mass index (per kg/m <sup>2</sup> )	0.99 (0.99-1.00)	0.06	0.99 (0.98-0.99)	0.02
Ischemic vs. Nonischemic CMP	1.09 (1.02-1.17)	0.01	1.13 (1.06-1.21)	<0.0001
Restrictive vs. Nonischemic CMP	1.36 (1.15-1.61)	<0.0001	1.30 (1.10-1.53)	0.002
Valvular vs. Nonischemic CMP	-	-	1.24 (1.03-1.48)	0.02
Diabetes mellitus (yes vs. no)	1.27 (1.18-1.36)	<0.0001	1.29 (1.21-1.38)	<0.0001
Tobacco use (yes vs. no)	1.06 (0.99-1.15)	0.09	1.10 (1.02-1.17)	0.009
Blood type O vs. type A	1.13 (1.06-1.22)	0.001	1.12 (1.04-1.19)	0.002
Serum creatinine (per mg/dl)	1.16 (1.14-1.18)	<0.0001	1.16 (1.14-1.18)	<0.0001
Mean PAP (per mm Hg)	1.02 (1.02-1.03)	<0.0001	1.02 (1.02-1.03)	<0.0001
PCWP (per mm Hg)	1.03 (1.03-1.04)	<0.0001	1.03 (1.03-1.04)	<0.0001
Inotropic support (yes vs. no)	2.22 (2.08-2.38)	<0.0001	2.19 (2.05-2.33)	<0.0001
Need for dialysis (yes vs. no)	1.64 (1.39-1.92)	<0.0001	1.60 (1.37-1.87)	<0.0001
Mechanical ventilation (yes vs. no)	4.08 (3.69-4.51)	<0.0001	3.88 (3.52-4.28)	<0.0001
UNOS status 1A vs. Status 2	7.43 (6.71-8.24)	<0.0001	7.02 (6.36-7.74)	<0.0001
UNOS status 1B vs. Status 2	2.52 (2.30-2.76)	<0.0001	2.48 (2.28-2.71)	<0.0001
PF-LVAD vs. Status 2	2.89 (2.57-3.26)	<0.0001	2.75 (2.46-3.07)	<0.0001
CF-LVAD vs. Status 2	1.78 (1.37-2.30)	<0.0001	1.72 (1.35-2.20)	<0.0001
TAH vs. Status 2	7.31 (3.91-13.65)	<0.0001	7.12 (3.92-12.91)	<0.0001
BIVADs vs. Status 2	10.49 (8.15-13.51)	<0.0001	10.69 (8.44-13.53)	<0.0001
Temporary VAD vs. Status 2	30.72 (25.32-37.28)	<0.0001	30.25 (25.18-36.33)	<0.0001

BIVADs=biventricular assist devices; CF-LVAD= continuous-flow LVAD; CI= confidence interval;

CMP=cardiomyopathy; PAP=pulmonary artery pressure; PCWP=pulmonary capillary wedge pressure; PF-

LVAD=pulsatile-flow LVAD; TAH=total artificial heart; UNOS=United Network for Organ Sharing. Hazard

ratios, 95% CI and p values were generated using a Cox proportional hazard analysis. Multiple group

comparisons were adjusted using the Holm procedure.

Supplemental Table 3. Univariable Hazard Ratio Estimates for the Risk of Death on the Waiting List and for the Risk of Death or Delisting Among Heart Transplant Candidates in the Current Era (2008-2011)

Variable	Mortality		Mortality or Delisting	
	HR (95% CI)	p-value	HR (95% CI)	p-value
Age (per year)	1.01 (1.00-1.01)	0.04	1.01 (1.00-1.01)	<0.0001
Ischemic vs. Nonischemic CMP	-	-	1.12 (0.99-1.26)	0.06
Restrictive vs. Nonischemic CMP	1.42 (1.08-1.87)	0.01	1.47 (1.16-1.87)	0.002
Diabetes mellitus (yes vs. no)	1.27 (1.11-1.44)	<0.0001	1.30 (1.16-1.46)	<0.0001
Serum creatinine (per mg/dl)	1.22 (1.18-1.27)	<0.0001	1.23 (1.19-1.26)	<0.0001
Mean PAP (per mm Hg)	1.02 (1.02-1.03)	<0.0001	1.02 (1.02-1.03)	<0.0001
PCWP (per mm Hg)	1.03 (1.02-1.04)	<0.0001	1.03 (1.02-1.03)	<0.0001
Inotropic support (yes vs. no)	1.75 (1.54-1.99)	<0.0001	1.64 (1.46-1.84)	<0.0001
Need for dialysis (yes vs. no)	2.72 (2.12-3.48)	<0.0001	2.75 (2.21-3.41)	<0.0001
Mechanical ventilation (yes vs. no)	3.87 (3.07-4.87)	<0.0001	3.30 (2.66-4.10)	<0.0001
UNOS status 1A vs. Status 2	3.76 (3.06-4.61)	<0.0001	3.47 (2.90-4.15)	<0.0001
UNOS status 1B vs. Status 2	1.92 (1.59-2.31)	<0.0001	1.85 (1.58-2.17)	<0.0001
PF-LVAD vs. Status 2	2.11 (1.40-3.19)	<0.0001	1.94 (1.35-2.79)	<0.0001
CF-LVAD vs. Status 2	0.95 (0.75-1.19)	0.64	0.91 (0.75-1.11)	0.37
TAH vs. Status 2	1.83 (0.58-5.73)	0.60	1.83 (0.68-4.92)	0.46
BIVADs vs. Status 2	6.64 (4.68-9.42)	<0.0001	6.03 (4.40-8.26)	<0.0001
Temporary VAD vs. Status 2	15.34 (9.56-24.63)	<0.0001	14.22 (9.26-21.83)	<0.0001

BIVADs=biventricular assist devices; CF-LVAD= continuous-flow LVAD; CI= confidence interval;

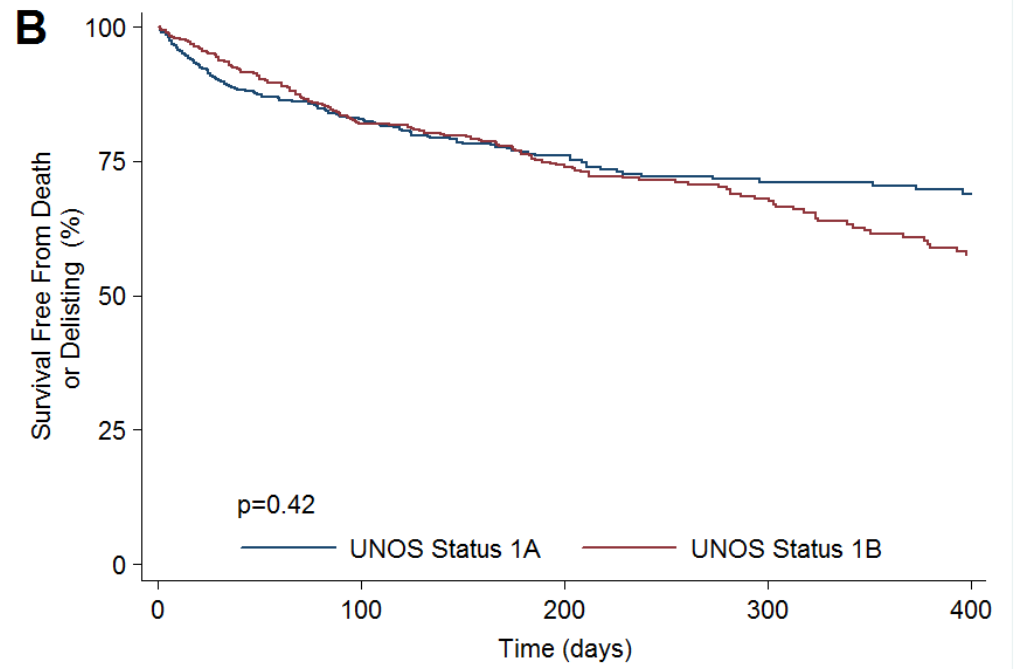
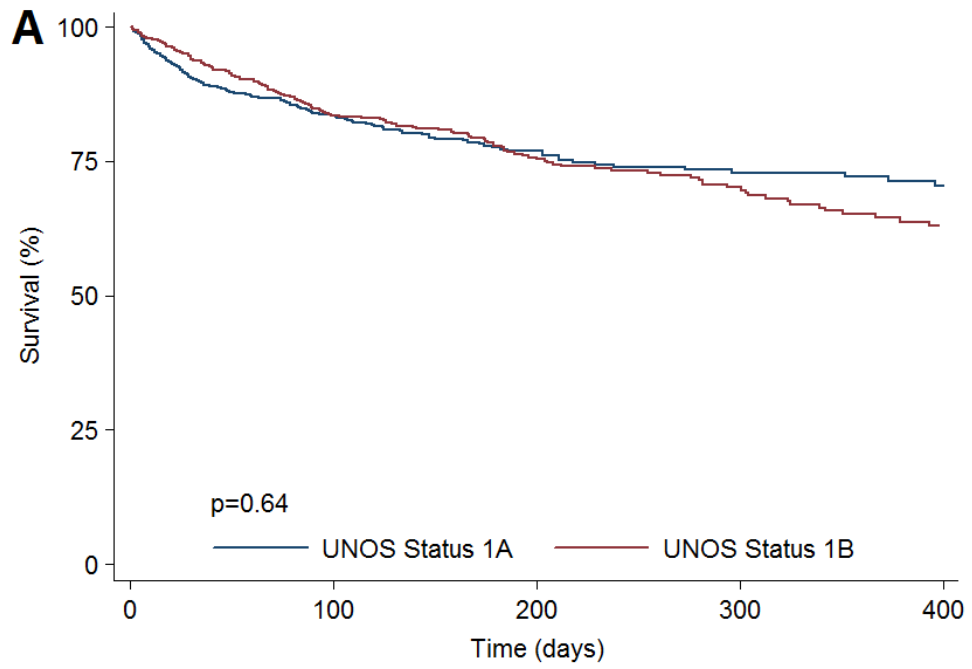
CMP=cardiomyopathy; PAP=pulmonary artery pressure; PCWP=pulmonary capillary wedge pressure; PF-

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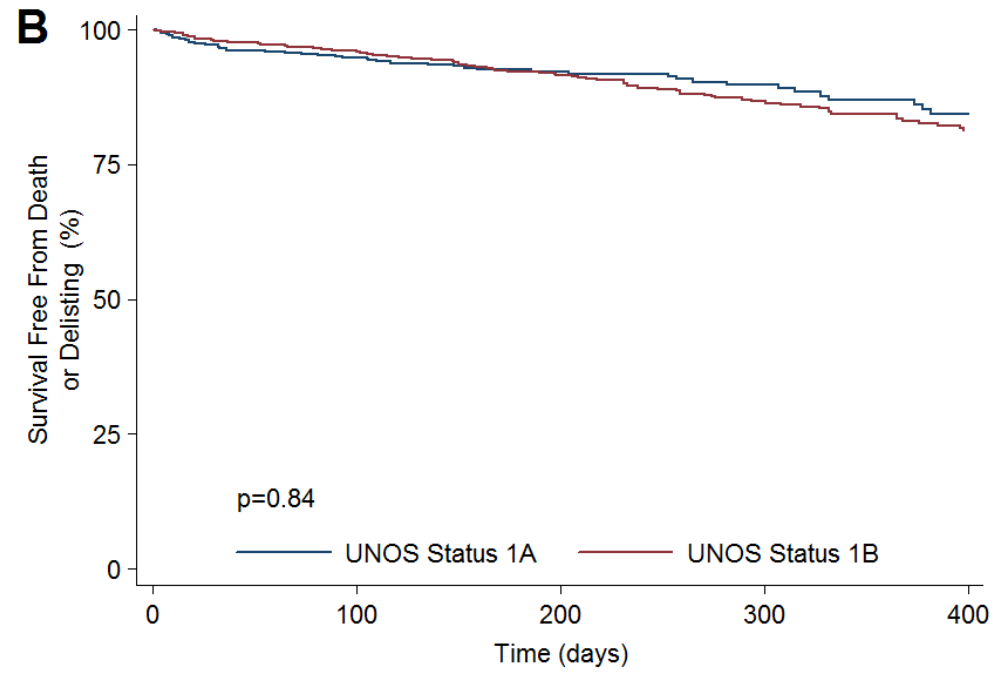
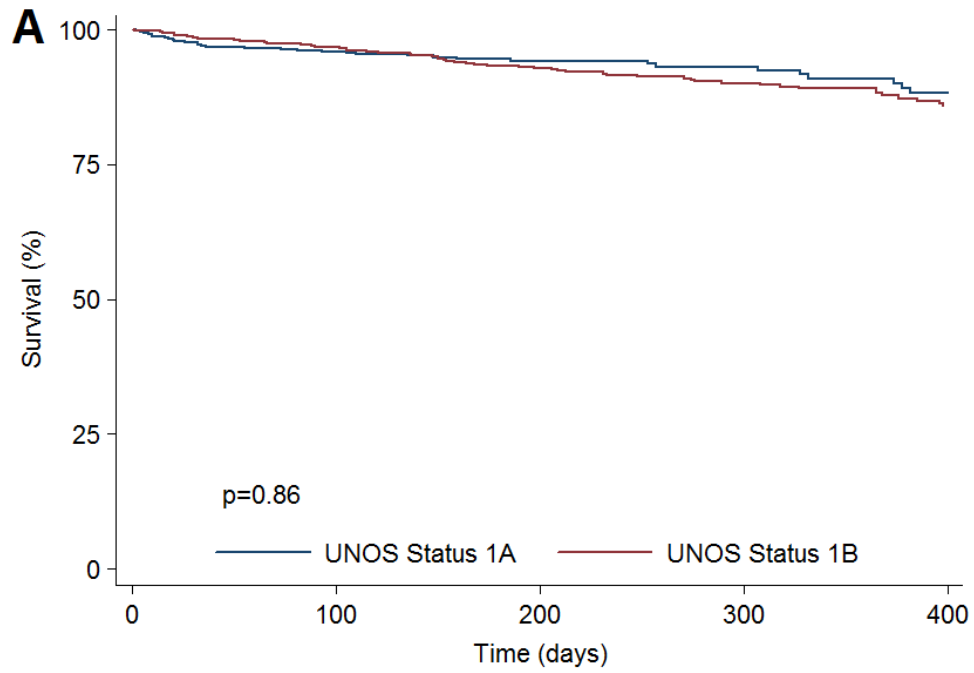
ratios, 95% CI and p values were generated using a Cox proportional hazard analysis. Multiple group

comparisons were adjusted using the Holm procedure.

### Supplemental Figure 1



## Supplemental Figure 2



## Supplemental Figure Legends

**Supplemental Figure 1. Outcomes for heart transplant candidates requiring LVAD support on the UNOS waiting list stratified by their listing status as UNOS Status 1A or 1B in the first era.** (A) Unadjusted waiting list survival and (B) unadjusted waiting list survival free from death or delisting due to worsening clinical status.

**Supplemental Figure 2. Outcomes for heart transplant candidates requiring LVAD support on the UNOS waiting list stratified by their listing status as UNOS Status 1A or 1B in the current era.** (A) Unadjusted waiting list survival and (B) unadjusted waiting list survival free from death or delisting due to worsening clinical status.