

SUPPLEMENTAL MATERIAL

Supplemental Table 1: Propensity Matched Cohort

	BTT with CF-LVAD N=5944	Medical Mgmt N= 5944	ASD% (Before PSM)	ASD% (After PSM)
Clinical Characteristics				
Age	53.1 ± 12.3	52.8 ± 12.2	0.36	2.9
Male Gender	4569 (76.9%)	4551 (76.6%)	17.9	0.72
Ethnicity			13.0	1.0
White	3943 (66.3%)	3968 (66.8%)		
Black	1361 (22.9%)	1340 (22.5%)		
Hispanic	418 (7.0%)	419 (7.0%)		
Other	222 (3.7%)	217 (3.7%)		
Diabetes	1795 (30.2%)	1721 (29.0%)	10.3	2.7
AICD	4683 (78.8%)	4729 (79.6%)	2.9	1.9
Smoking	2973 (50.0%)	3047 (1.3%)	15.1	2.5
Blood Type O	2701 (45.4%)	2691 (45.3%)	16.9	0.34
BSA > 2.25	1199 (20.2%)	1143 (9.2%)	20.1	2.4
Heart Failure Diagnosis			42.9	0.58
Dilated Myopathy	5695 (95.8%)	5688 (95.7%)		
Non-Dilated Myopathy	249 (4.2%)	256 (4.3%)		
UNOS status @ Listing			50.2	1.8
Status 1A	1548 (26.0%)	1505 (25.3%)		
Status 1B	2859 (48.1%)	2871 (48.3%)		
Status 2	1537 (25.9%)	1568 (26.4%)		
Functional Status			7.2	2.4
Excellent	1991 (33.5%)	2006 (33.8%)		
Moderate	3133 (52.7%)	3167 (53.3%)		
Poor	820 (13.8%)	771 (13.0%)		
Creatinine > 2.5	115 (1.9%)	123 (2.1%)	0.96	0.99
UNOS Region			32.6	4.7
1	747 (12.6%)	715 (12.0%)		
2	331 (5.6%)	336 (5.7%)		
3	658 (11.1%)	640 (10.8%)		
4	707 (11.9%)	713 (12.0%)		
5	660 (11.1%)	647 (10.9%)		
6	136 (2.3%)	175 (2.9%)		
7	570 (9.6%)	560 (9.4%)		
8	304 (5.1%)	301 (5.1%)		
9	498 (8.4%)	503 (8.5%)		
10	547 (9.2%)	571 (9.6%)		
11	786 (13.2%)	783 (13.2%)		

Supplemental Table 2: Predictors of Death or Delisting and Transplantation

Death or Delisting		
Age > 60	1.48 (1.36 – 1.62), p<0.001	1.56 (1.42 – 1.71), p<0.001
Female Gender	1.16 (1.05 – 1.30), p=0.003	1.21 (1.09 – 1.34), p<0.001
Diabetes	1.27 (1.16 – 1.40), p<0.001	1.24 (1.13 – 1.37), p<0.001
Smoking History	1.10 (1.01 – 1.20), p=0.036	1.11 (1.02 – 1.22), p=0.021
Creatinine > 2.5	3.11 (2.52 – 3.85), p<0.001	2.43 (1.96 – 3.01), p<0.001
AICD	0.88 (0.80 – 0.99), p=0.030	1.02 (0.92 – 1.14), p=0.675
Blood Type O	0.90 (0.82 – 0.98), p=0.016	0.91 (0.83 – 0.99), p=0.048
Non-Dilated Myopathy	1.36 (1.12 – 1.65), p=0.002	1.63 (1.34 – 1.99), p<0.001
UNOS status @ Listing	p<0.001	p<0.001
Status 1A	2.26 (2.01 – 2.55)	1.69 (1.48 – 1.94)
Status 1B	1.20 (1.08 – 1.34)	1.12 (1.00 – 1.25)
Status 2	(Reference)	(Reference)
Functional Status	p<0.001	p<0.001
Excellent	(Reference)	(Reference)
Moderate	1.20 (1.03 – 1.39)	1.17 (1.00 – 1.36)
Poor	2.42 (2.08 – 2.82)	2.04 (1.74 – 2.40)
BTT	0.92 (0.084 – 0.99), p=0.043	0.83 (0.76 – 0.92), p<0.001
Congruous Utilization	0.85 (0.76 – 0.95), p=0.003	0.88 (0.79 – 0.99), p=0.027
Transplantation		
Female Gender	1.09 (1.04 – 1.15), p=0.001	0.97 (0.92 – 1.03), p=0.363
Ethnicity	p<0.001	p<0.001
White	(Reference)	(Reference)
African American	0.91 (0.87 – 0.97)	0.88 (0.83 – 0.93)
Hispanic	1.05 (0.96 – 1.15)	0.99 (0.91 – 1.08)
Other	1.20 (1.06 – 1.35)	1.06 (0.94 – 1.19)
Diabetes	0.87 (0.82 – 0.91), p<0.001	0.90 (0.86 – 0.95), p<0.001
Smoking History	0.93 (0.89 – 0.98), p=0.003	0.95 (0.90 – 0.99), p=0.037
Blood Type O	0.61 (0.58 – 0.63), p<0.001	0.60 (0.58 – 0.63), p<0.001
BSA > 2.25	0.60 (0.57 – 0.64), p<0.001	0.61 (0.58 – 0.66), p<0.001
Non-Dilated Myopathy	0.89 (0.79 – 0.99), p=0.047	0.96 (0.85 – 1.09), p=0.525
UNOS status @ Listing	p<0.001	p<0.001
Status 1A	3.20 (3.00 – 3.42)	3.54 (3.29 – 3.81)
Status 1B	1.96 (1.85 – 2.08)	2.09 (1.97 – 2.22)
Status 2	(Reference)	(Reference)
Functional Status	p<0.001	
Excellent	(Reference)	(Reference)
Moderate	1.16 (1.08 – 1.24)	0.95 (0.88 – 1.03)
Poor	1.46 (1.35 – 1.57)	1.10 (1.02 – 1.18)
BTT	0.78 (0.75 – 0.83), p<0.001	0.68 (0.65 – 0.71), p<0.001
Congruous Utilization	1.14 (1.08 – 1.22), p<0.001	1.14 (1.07 – 1.21), p<0.001

Figure Legend:

Supplemental Figure 1. Propensity Score Modeling for Ventricular Assist Device Utilization in Transplant Listed Patients (A) Distribution of VAD Likelihood Score (B) Congruous Utilization Algorithm.

Supplemental Figure 2. Nationwide Trends in Heart Transplantation Candidates (A) Trends in Ventricular Assist Device Utilization (B) Trends in Wait List Time

Supplemental Figure 3. Correlation between Wait List Time and Device Utilization (A) Overall Wait List Time (B) Days as Status 1A (C) Days as Status 1B (D) Days as Status 2

Supplemental Figure 4. Competing Outcomes Based Upon Bridging Strategy (A) Medical versus Mechanical Bridge (B) Congruous versus Incongruous Strategy