

Supplemental Table 1. Uni-variate survival analysis, any bleeding within 1-year post-VENDYS®

	All LVAD patients (N=56)	Any bleeding within 1-year post-VENDYS®		Unadjusted HR (95% CI)	p-value
		No (n=40)	Yes (n=16)		
Vascular reactivity index (VRI)					
Poor (<1)	45 (80.4%)	34 (85.0%)	11 (68.8%)	(reference)	0.049
Good (≥1)	11 (19.6%)	6 (15.0%)	5 (31.3%)	2.95 (1.00, 8.70)	
Age (years), median (IQR)	61.7 (51.2, 68.8)	59.7 (50.0, 67.7)	64.4 (61.3, 71.2)	1.05 (1.00, 1.10)	0.06
Gender					
Female	12 (21.4%)	8 (20.0%)	4 (25.0%)	(reference)	0.66
Male	44 (78.6%)	32 (80.0%)	12 (75.0%)	0.78 (0.25, 2.41)	
White					
No	31 (55.4%)	22 (55.0%)	9 (56.3%)	(reference)	

Yes	25 (44.6%)	18 (45.0%)	7 (43.8%)	1.20 (0.45, 3.24)	0.72
BMI, median (IQR)	30.8 (25.8, 34.4)	31.2 (26.0, 34.5)	27.7 (24.2, 33.5)	0.98 (0.90, 1.06)	0.62
BMI					
<30	27 (48.2%)	18 (45.0%)	9 (56.3%)	(reference)	
≥30	29 (51.8%)	22 (55.0%)	7 (43.8%)	0.70 (0.26, 1.88)	0.48
NYHA II					
No	22 (39.3%)	17 (42.5%)	5 (31.3%)	(reference)	
Yes	34 (60.7%)	23 (57.5%)	11 (68.8%)	1.42 (0.49, 4.08)	0.52
Ischemic cardiomyopathy					
No	25 (44.6%)	18 (45.0%)	7 (43.8%)	(reference)	
Yes	31 (55.4%)	22 (55.0%)	9 (56.3%)	1.12 (0.42, 3.00)	0.83

Mean blood pressure, mean (±SD)	87.8 (±15.8)	86.8 (±16.2)	90.3 (±14.8)	1.01 (0.98, 1.04)	0.55
Systolic blood pressure, mean (±SD)	110.7 (±18.2)	110.8 (±16.9)	110.3 (±21.8)	1.00 (0.97, 1.03)	0.90
Diastolic blood pressure, mean (±SD)	72.4 (±15.0)	70.8 (±15.0)	76.4 (±14.7)	1.02 (0.99, 1.05)	0.28
Pulse pressure, mean (±SD)	38.3 (±16.7)	40.1 (±17.8)	33.9 (±13.3)	0.98 (0.95, 1.02)	0.27
Diabetes					
No	20 (35.7%)	13 (32.5%)	7 (43.8%)	(reference)	0.53
Yes	36 (64.3%)	27 (67.5%)	9 (56.3%)	0.73 (0.27, 1.96)	
Hypertension					
No	15 (26.8%)	11 (27.5%)	4 (25.0%)	(reference)	0.97
Yes	41 (73.2%)	29 (72.5%)	12 (75.0%)	1.02 (0.33, 3.18)	

COPD (obstructive sleep apnea)					
No	40 (71.4%)	28 (70.0%)	12 (75.0%)	(reference)	
Yes	16 (28.6%)	12 (30.0%)	4 (25.0%)	0.83 (0.27, 2.57)	0.74
Chronic kidney disease					
No	39 (69.6%)	30 (75.0%)	9 (56.3%)	(reference)	
Yes	17 (30.4%)	10 (25.0%)	7 (43.8%)	2.03 (0.75, 5.45)	0.16
Hyperlipidemia					
No	36 (64.3%)	27 (67.5%)	9 (56.3%)	(reference)	
Yes	20 (35.7%)	13 (32.5%)	7 (43.8%)	1.28 (0.47, 3.43)	0.63
Ejection fraction, mean ($\pm$ SD)	26.2 ($\pm$ 10.2)	25.8 ($\pm$ 10.1)	27.3 ($\pm$ 10.8)	1.01 (0.97, 1.06)	0.63

GFR, mean ($\pm$ SD)	52.3 ($\pm$ 18.5)	53.4 ($\pm$ 20.0)	49.5 ($\pm$ 14.4)	0.99 (0.96, 1.02)	0.46
Creatinine, median (IQR)	1.5 (1.1, 1.8)	1.4 (1.1, 1.9)	1.5 (1.2, 1.7)	1.11 (0.41, 2.97)	0.84
Albumin, median (IQR)	3.7 (3.3, 4.1)	3.6 (3.3, 4.0)	3.8 (3.4, 4.2)	1.01 (0.99, 1.03)	0.21
ALT, median (IQR)	20.0 (15.0, 28.0)	21.0 (15.0, 29.0)	19.0 (15.5, 25.0)	0.97 (0.92, 1.02)	0.27
AST, median (IQR)	26.0 (21.0, 36.0)	27.0 (21.0, 38.0)	25.0 (21.5, 34.5)	1.01 (0.97, 1.06)	0.52
Bilirubin, median (IQR)	0.5 (0.4, 0.7)	0.5 (0.3, 0.7)	0.5 (0.4, 1.0)	1.06 (0.50, 2.25)	0.89
Hemoglobin, median (IQR)	10.3 (9.5, 12.3)	11.2 (9.8, 13.4)	9.6 (9.1, 10.3)	0.63 (0.44, 0.91)	0.01
Hematocrit, median (IQR)	33.4 (30.5, 38.7)	35.2 (31.1, 41.1)	31.8 (28.0, 33.4)	0.86 (0.76, 0.97)	0.02

Platelets, median (IQR)	197.0 (162.0, 233.0)	206.0 (145.5, 233.5)	196.0 (168.0, 199.0)	1.00 (0.99, 1.01)	0.89
INR, median (IQR)	1.9 (1.6, 2.2)	1.9 (1.6, 2.1)	2.1 (1.8, 2.5)	1.36 (0.71, 2.59)	0.36
PT, median (IQR)	21.6 (18.5, 24.1)	21.2 (18.5, 23.3)	23.2 (20.5, 26.3)	1.05 (0.97, 1.13)	0.24
Warfarin					
No	3 (5.4%)	1 (2.5%)	2 (12.5%)	(reference)	
Yes	53 (94.6%)	39 (97.5%)	14 (87.5%)	0.21 (0.05, 0.94)	0.04
Beta blockers					
No	9 (16.1%)	5 (12.5%)	4 (25.0%)	(reference)	
Yes	47 (83.9%)	35 (87.5%)	12 (75.0%)	0.66 (0.21, 2.07)	0.48
Aspirin					
No	7 (12.5%)	4 (10.0%)	3 (18.8%)	(reference)	

Yes	49 (87.5%)	36 (90.0%)	13 (81.3%)	0.46 (0.13, 1.62)	0.23
ACE inhibitors					
No	34 (60.7%)	23 (57.5%)	11 (68.8%)	(reference)	
Yes	22 (39.3%)	17 (42.5%)	5 (31.3%)	0.68 (0.24, 1.96)	0.47
Any pre-VENDYS bleeding or thrombosis event					
No	29 (51.8%)	23 (57.5%)	6 (37.5%)	(reference)	
Yes	27 (48.2%)	17 (42.5%)	10 (62.5%)	2.38 (0.86, 6.57)	0.10
Any pre-VENDYS bleeding event					
No	32 (57.1%)	26 (65.0%)	6 (37.5%)	(reference)	
Yes	24 (42.9%)	14 (35.0%)	10 (62.5%)	2.92 (1.05, 8.08)	0.04

Pre-VENDYS GI bleeding event					
No	37 (66.1%)	29 (72.5%)	8 (50.0%)	(reference)	
Yes	19 (33.9%)	11 (27.5%)	8 (50.0%)	2.51 (0.94, 6.73)	0.07
Any pre-VENDYS thrombotic event					
No	48 (85.7%)	34 (85.0%)	14 (87.5%)	(reference)	
Yes	8 (14.3%)	6 (15.0%)	2 (12.5%)	0.94 (0.21, 4.14)	0.94

HR, hazard ratio; CI, confidence interval. *Angiotensin converting enzyme; † chronic obstructive pulmonary disease;

‡glomerular filtration rate; §New York Heart Association class II