SUPPLEMENTAL ANALYSIS

An analysis of variables potentially associated with pump thrombosis, in addition to Lavare activation, was performed. Variables assessed include: age, gender, race, heart failure etiology, body mass index (BMI), Intermacs profile, history of atrial fibrillation, prior bloodstream infection, VAD RPM, aortic valve opening, and INR history. For the latter, we used both time below the therapeutic range and average INR (prior to pump thrombosis for thrombosis patients; through last follow-up for non-thrombosis patients). We did not analyze aspirin dose because our patients are typically on multiple antiplatelet agents, not aspirin monotherapy. Logistic regression was used to model the association between these variables and pump thrombosis.

The univariate results are shown in Table S1. Only Lavare activation and Intermacs profile demonstrated a significant association with pump thrombosis. A bivariate model with these two variables demonstrated a marginally significantly improved fit (Chi-squared p-value 0.047 comparing log-likelihood values) versus a univariate model with Lavare activation alone.

TABLE S1. Univariate association between clinical variables and pump thrombosis

	No Thrombus (N = 50)	Thrombus (N = 10)	p-value
Age (yrs)	52.6 ± 12.6	48.4 ± 15.6	0.36
Gender (% Male)	78	90	0.35
Race (% White)	38	40	0.75
Heart failure etiology (% ischemic)	26	10	0.24
BMI (kg/m^2)	29.0 ± 7.4	30.1 ± 6.1	0.68
Atrial fibrillation (%)*	54	50	0.82
Intermacs profile	2.3 ± 1.0	3.1 ± 0.7	**0.01**
Prior bloodstream infection (%)*	30	30	1.00
VAD speed (RPM)	2673 ± 224	2696 ± 152	0.76
Aortic valve opening (%)	58	50	0.64
INR: time-averaged value*	2.52 ± 0.24	2.57 ± 0.15	0.47
INR: time below therapeutic range (%)	24	22	0.72
Lavare activated > POD1 (%)	30	70	**0.02**

* Assessed prior to pump thrombus event in pump thrombus patients