Supplementary Table 1: Baseline Characteristics of Cohort Stratified by Clinically Significant Haemolysis

	Clinically Significant Haemolysis	
	Absent	**Present**
Total sample	184	12
Age (years)	65.88 (55.73–75.37)	65.57 (50.36–69.59)
Gender		
Male	128 (69.6%)	8 (66.7%)
Female	56 (30.4%)	4 (33.3%)
Race*		
Caucasian	143 (77.7%)	11 (91.7%)
Black	24 (13.0%)	0 (0.0%)
Hispanic	3 (1.6%)	0 (0.0%)
Other	14 (7.6%)	1 (8.3%)
BMI	28.30 (25.50–33.90)	27.45 (24.02–37.93)
Hypertension	78 (42.4%)	5 (41.7%)
Diabetes	116 (63.0%)	6 (50.0%)
Smoking history		
Current	19 (10.3%)	1 (8.3%)
Former	76 (41.3%)	3 (25.0%)
Never	68 (37.0%)	5 (41.7%)
Hyperlipidaemia	142 (77.2%)	7 (58.3%)

Coronary artery disease		
Acute	104 (56.5%)	7 (58.3%)
Chronic	44 (23.9%)	3 (25.0%)
None	29 (15.8%)	1 (8.3%)
Baseline serum creatinine	1.30 (0.96–1.83)	1.52 (1.40–1.90)
Atrial fibrillation*	5 (2.7%)	0
Stroke*	22 (12.0%)	0
Peripheral artery disease	30 (16.3%)	0
Prior myocardial infarction	165 (89.7%)	9 (75.0%)
History of aortic valve replacement*	13 (7.1%)	0
History of mitral valve replacement*	4 (2.2%)	0
Baseline haemoglobin	11.35 (9.78–13.70)	10.80 (10.20–13.15)
Left ventricle ejection fraction	30.00 (20.00–48.00)	15.00 (13.00–18.00)
Anticoagulation	79 (42.9%)	1 (8.3%)
Warfarin*	31 (16.8%)	1 (8.3%)
Dabigatran*	1 (0.7%)	0
Apixaban*	26 (14.1%)	0
Rivaroxaban*	9 (4.9%)	0
Enoxaparin	52 (28.3%)	0
Antiplatelet	140 (76.1%)	6 (50.0%)
Prasugrel*	18 (9.8%)	1 (8.3%)

Clopidogrel	117 (63.6%)	3 (25.0%)
Ticagrelor	36 (19.6%)	5 (41.7%)
Device intent*		
Bridge to decision/candidacy	8 (4.3%)	1 (8.3%)
Bridge to recovery	72 (39.1%)	8 (66.7%)
Bridge to transplant	3 (1.6%)	0
Bridge to LVAD	3 (1.6%)	0
Haemodynamic support during high-risk procedure (ex: Impella-assisted PCI)	73 (39.7%)	0
LV venting during ECMO	25 (13.6)	3 (25.0%)
Impella class		
Emergent Impella	90 (48.9%)	9 (75.0%)
Elective Impella	94 (51.1%)	3 (25.0%)
Device type*		
Impella 2.5/CP	164 (89.1%)	12 (100.0%)
Impella 5.0/5.5	10 (5.4%)	0
Right-sided RP Impella	10 (5.4%)	0
Pump speed	7.00 (4.00–8.25)	6.00 (5.00–8.00)
Aetiology of cardiogenic shock		
Acute myocardial infarction*	59 (32.1%)	7 (58.3%)

Acute decompensated heart failure	41 (22.3%)	2 (16.7%)
Post cardiotomy	1 (0.5%)	0
Myocarditis	4 (2.2%)	0
Ventricular tachycardia	6 (3.3%)	2 (16.7%)
Other/unknown	28 (15.2%)	1 (8.3%)
Lactate value		
Baseline	1.80 (1.00–4.80)	2.35 (1.25–4.82)
1 day after insertion	2.60 (1.40–4.12)	1.80 (1.15–4.90)
2 or more days after insertion	1.30 (1.00–2.10)	1.00 (0.90–1.33)
Baseline pulse pressure	36.50 (27.75–49.00)	35.50 (20.75–46.00)
Baseline heart rate	88.50 (74.00–103.00)	98.50 (78.00–109.50)
Device run time	19.75 (1.88–59.75)	114.42 (103.07–122.18)

p-values calculated using Mann-Whitney U-tests for continuous variables and Pearson Chi-squared tests or Fisher's Exact tests (*) for categorical variables.

Values are presented as n (%) or median (IQR).

Supplementary Table 2: Outcomes Associated with Clinically Significant Haemolysis

	Clinically Significant Haemolysis	
	Absent	**Present**
Total sample	184	12
Mortality (%)		
Total	31 (16.8)	3 (25.0)
30 days	61 (33.2)	5 (41.7)
Length of stay (days), median (IQR)	5.24 (2.23–12.29)	15.88 (8.99, 27.29)
Number of transfusions, median (IQR)	0.00 (0.00–3.00)	4.00 (3.75–8.00)
Outcomes (%)		
Recovery	3 (1.6)	0 (0.0)
Transplant	1 (0.5)	1 (8.3)
Renal failure	34 (18.5)	8 (66.7)

p-values calculated using Mann-Whitney U-tests for continuous variables and Pearson Chi-squared tests for categorical variables. LVAD = Left Ventricular Assist Device.