

Supplementary Materials

Table S1. Comparison of patient characteristics between 30-day survivors and non-survivors.

Patient characteristics		30-day survivors (n=127)	30-day non-survivors (n=16)	p-value
Gender (female) [%]		30% (38)	44% (7)	0.262
Age (Years)		48 (33-57)	53.5 (41.25-59)	0.318 [±]
Hypertension		13% (16)	19% (3)	0.448
Aetiology of Heart Failure	Dilated cardiomyopathy	56% (71)	25% (4)	0.031
	Ischaemic cardiomyopathy	25% (32)	50% (8)	0.038
	Myocarditis	5% (6)	6% (1)	0.791
	Restrictive cardiomyopathy	3% (4)	13% (2)	0.08
	Congenital disorders	6% (8)	6% (1)	0.994
	Noncompaction cardiomyopathy	1% (1)	0% (0)	0.723
	Arrhythmogenic cardiomyopathy	2% (3)	0% (0)	0.536
Stroke		12% (15)	38% (6)	0.006
Diabetes		9% (11)	0% (0)	0.222
Pre-transplant MCS		39% (50)	69% (11)	0.026
Donor Recipient Sex match		80% (104)	81% (13)	1
OCS duration (Mins)		248 (198-307)	306.5 (259-385.3)	0.005 [±]
Cold ischaemic time (Mins)		80.5±14	77.85±13.93	0.524 [§]
MCS pre-transplant	HeartWare	23% (29)	25% (4)	0.847
	Levitronix	2% (2)	0% (0)	1
	Heart Mate II	6% (8)	6% (1)	1
	TAH	2% (2)	19% (3)	0.01
	Impella	4% (5)	0% (0)	1
	BiVAD	2% (2)	19% (3)	0.01
	Circulite	2% (2)	0% (0)	1
BSA R/D ratio		0.96 (0.9-1.03)	1.015 (0.95-1.08)	0.048 [±]
OCS last lactate		2.3±1.0	2.31±1.04	0.997 [§]
PVR baseline		2.22 (1.45-2.95)	1.9 (1.495-3.67)	0.962 [±]
OHT urgency	Elective	12% (15)	13% (2)	0.936
	Urgent	81% (103)	88% (14)	0.533
	Super Urgent	7% (9)	0% (0)	0.273
Pre-transplant creatinine		90 (72-109)	93 (62.5-119.75)	0.773 [±]
Pre-transplant bilirubin		14 (9-23)	11 (9-16)	0.36 [±]
Pre-transplant ALT		25 (19-37)	20 (14-24.75)	0.012 [±]
Pre-transplant albumin		40±5.9	38.31±8.52	0.442 [§]
Pre-transplant CRP		5 (2-16.5)	15 (8.5-33)	0.02 [±]
Average Cardiac Index		2.8±0.7	1.96±0.59	0.001 [§]
Recipient pre-transplant lactate (mmol/l)		2.09 (0.4-6.9)	3.67 (0.6-15)	0.061 [±]
Lactate on ITU arrival (mmol/l)		9.0±3.9	12.16±6.20	0.062 [§]
Lactate min (mmol/l)		2.2 (1.4-3.4)	5.85 (3.45-9.125)	<0.001 [±]
Lactate max (mmol/l)		10.5±4.1	13.47±6.24	0.08 [§]
Duration mechanical ventilation (Days)		2.77 (1.46-13.11)	10.235 (2.99-18.04)	0.078 [±]
Maximum SOFA Score in first 24h		15.4±2.9	18.5±2.31	<0.001 [§]
Maximum to Minimum lactate (Mins)		1075 (839-1242)	1151 (656.75-1260)	0.873 [±]
ITU Admission to Max lactate (Mins)		155 (0-300)	147 (0-369.75)	0.966 [±]
ITU Admission to Min lactate (Mins)		1328.9(1148.64-1401)	1357.2(796.75-1430.8)	0.701 [±]
Lactate Clearance		0.79 (0.63-0.85)	0.56 (0.35-0.67)	<0.001 [±]
Renal replacement therapy		72.4% (92)	93.8 (15)	0.072
SOFA – Sequential Organ Failure Assessment, PVR – Peripheral Vascular Resistance		± Non-parametric variables expressed as median (IQR)		
MCS – Mechanical circulatory support, OCS – Organ Care System, TAH – Total Artificial Heart		§ Parametric variable expressed as mean±SD		

Table S2. Multivariate logistic regression model for the association between 1-year mortality and pretransplant lactate with demographic and baseline confounders.

Variables	Model A		
	OR	95% CI	<i>p</i>
Age	1.03	0.99-1.06	<i>0.124</i>
Female sex	1.57	0.57-4.33	<i>0.388</i>
History of stroke/TIA	4.18	1.34-13.03	<i>0.014</i>
Pre-transplant MCS	4.89	1.92-12.48	<i>0.001</i>
Pre-transplant lactate	1.4	1.08-1.8	<i>0.011</i>

Figure S1. Receiver operating characteristic curve comparisons of 30-day mortality for 1A. *Ex vivo* Organ Care System (OCS) perfusion lactate, 1B. Recipient Pre-transplant lactate, 1C. Lactate on ITU arrival, 1D. Maximum lactate, 1E. Minimum lactate, 1F. 1/lactate clearance.



