

Appendix 1

Variable	Timepoint	Statistic	Total (N=8)	6H (N=4)	12H (N=4)	P-value
HR (bpm)	Baseline	Mean (SD)	72.63 (6.05)	76.25 (5.25)	69 (4.76)	0.081
		Median (Q1; Q3)	73 (69; 74.5)	74 (73; 79.5)	69 (65; 73)	
	Rp _{10min}	Mean (SD)	87.5 (19.46)	74.25 (7.59)	100.75 (18.93)	0.038
		Median (Q1; Q3)	80 (76.5; 99)	76.5 (68.5; 80)	99 (87; 114.5)	
Rp _{1h}	Mean (SD)	101 (12.2)	101.25 (16.56)	100.75 (8.54)	0.773	
	Median (Q1; Q3)	99.5 (91; 107.5)	96.5 (89; 113.5)	99.5 (94.5; 107)		
Rp _{4h}	Mean (SD)	112.63 (18.24)	118.75 (25.16)	106.5 (6.56)	0.248	
	Median (Q1; Q3)	110.5 (102.5; 125)	125 (103.5; 134)	104.5 (102.5; 110.5)		
P-value				0.039 ^b	0.779	
MAP (mmHg)	Baseline	Mean (SD)	107.63 (20.75)	112.5 (11.62)	102.75 (28.39)	0.661
		Median (Q1; Q3)	112.5 (99; 124)	112.5 (103.5; 121.5)	111.5 (81.5; 124)	
	Rp _{10min}	Mean (SD)	104.38 (21.3)	109.75 (23.6)	99 (20.61)	1.000
		Median (Q1; Q3)	100 (96.5; 113.5)	99 (96.5; 123)	105 (84.5; 113.5)	
Rp _{1h}	Mean (SD)	77.88 (16.07)	71 (19.17)	84.75 (10.44)	0.386	
	Median (Q1; Q3)	81.5 (65; 89)	70 (54.5; 87.5)	83 (76.5; 93)		
Rp _{4h}	Mean (SD)	82.5 (21.63)	72.25 (16.07)	92.75 (23.51)	0.149	
	Median (Q1; Q3)	80.5 (70.5; 87.5)	70.5 (60.5; 84)	81.5 (80.5; 105)		
P-value				0.038	0.472	
SO ₂ (%)	Baseline	Mean (SD)	98.25 (1.39)	98.75 (0.96)	97.75 (1.71)	0.297
		Median (Q1; Q3)	98 (97.5; 99.5)	98.5 (98; 99.5)	97.5 (96.5; 99)	
	Rp _{10min}	Mean (SD)	98 (1.93)	98.5 (1)	97.5 (2.65)	0.655
		Median (Q1; Q3)	98 (97.5; 99.5)	98 (98; 99)	98 (95.5; 99.5)	
Rp _{1h}	Mean (SD)	97 (2.27)	97.25 (2.22)	96.75 (2.63)	0.655	
	Median (Q1; Q3)	98 (95.5; 98.5)	98 (96; 98.5)	97.5 (95; 98.5)		
Rp _{4h}	Mean (SD)	98.25 (1.39)	98 (1.63)	98.5 (1.29)	0.655	
	Median (Q1; Q3)	98 (97.5; 99.5)	98 (97; 99)	98.5 (97.5; 99.5)		
P-value				0.905	0.420	
RR (rpm)	Baseline	Mean (SD)	17.13 (1.25)	17.25 (1.71)	17 (0.82)	0.655
		Median (Q1; Q3)	17 (16.5; 18)	17.5 (16; 18.5)	17 (16.5; 17.5)	
	Rp _{10min}	Mean (SD)	18.38 (1.3)	17.75 (1.26)	19 (1.15)	0.215
		Median (Q1; Q3)	18 (18; 19.5)	18 (17; 18.5)	19 (18; 20)	
Rp _{1h}	Mean (SD)	18.38 (1.3)	18.25 (1.71)	18.5 (1)	1.000	
	Median (Q1; Q3)	18 (18; 19.5)	18.5 (17; 19.5)	18 (18; 19)		
Rp _{4h}	Mean (SD)	18.13 (1.46)	18 (1.83)	18.25 (1.26)	0.769	
	Median (Q1; Q3)	18 (17; 19.5)	18 (16.5; 19.5)	18 (17.5; 19)		
				0.717	0.670	

Variable	Timepoint	Statistic	Total (N=8)	6H (N=4)	12H (N=4)	P-value	
		P-value					
FiO ₂	Baseline	Mean (SD)	0.93 (0.05)	0.95 (0.04)	0.92 (0.06)	0.386	
		Median (Q1; Q3)	0.93 (0.91; 0.97)	0.94 (0.92; 0.98)	0.92 (0.88; 0.96)		
	Rp _{10min}	Mean (SD)	0.88 (0.08)	0.86 (0.11)	0.89 (0.05)	1.000	
		Median (Q1; Q3)	0.91 (0.8; 0.95)	0.87 (0.77; 0.96)	0.91 (0.86; 0.93)		
	Rp _{1h}	Mean (SD)	0.61 (0.14)	0.65 (0.2)	0.57 (0.08)	0.663	
		Median (Q1; Q3)	0.6 (0.51; 0.64)	0.62 (0.53; 0.78)	0.58 (0.51; 0.63)		
	Rp _{4h}	Mean (SD)	0.6 (0.15)	0.6 (0.22)	0.6 (0.06)	0.561	
		Median (Q1; Q3)	0.59 (0.5; 0.65)	0.55 (0.43; 0.77)	0.6 (0.54; 0.65)		
			P-value	0.038		0.024 ^a	
	Vt (ml)	Baseline	Mean (SD)	291.38 (51.54)	284.75 (44.13)	298 (64.3)	0.663
			Median (Q1; Q3)	296 (246; 325)	296 (257; 312.5)	292 (246; 350)	
		Rp _{10min}	Mean (SD)	303 (74.77)	294.25 (105.31)	311.75 (41.82)	1.000
Median (Q1; Q3)			309 (267; 356.5)	309 (213.5; 375)	309 (279.5; 344)		
Rp _{1h}		Mean (SD)	302.5 (67.25)	273 (74.57)	332 (51.7)	0.386	
		Median (Q1; Q3)	307 (282; 344)	299 (226.5; 319.5)	331.5 (290; 374)		
Rp _{4h}		Mean (SD)	284.25 (60.66)	264.5 (84.7)	304 (19.25)	0.564	
		Median (Q1; Q3)	302 (283.5; 317)	294.5 (214.5; 314.5)	307 (291; 317)		
		P-value	0.282		0.779		
IPAP (cmH ₂ O)		Baseline	Mean (SD)	19.5 (4.14)	19.75 (5.74)	19.25 (2.63)	0.770
			Median (Q1; Q3)	18.5 (17; 21)	18 (16; 23.5)	18.5 (17.5; 21)	
		Rp _{10min}	Mean (SD)	19.75 (0.71)	19.5 (1)	20 (0)	0.317
	Median (Q1; Q3)		20 (20; 20)	20 (19; 20)	20 (20; 20)		
	Rp _{1h}	Mean (SD)	19.13 (1.64)	18.75 (1.5)	19.5 (1.91)	0.544	
		Median (Q1; Q3)	19 (18; 20)	19 (17.5; 20)	19 (18; 21)		
	Rp _{4h}	Mean (SD)	19 (1.41)	18.75 (1.89)	19.25 (0.96)	0.877	
		Median (Q1; Q3)	19.5 (18.5; 20)	19.5 (17.5; 20)	19.5 (18.5; 20)		
			P-value	0.368		0.497	

Appendix. Recipient's monitoring parameters throughout the reperfusion period in 6h-CIT and 12h-CIT groups.

Q1 indicates first quartile; Q3, third quartile; SD, standard deviation. HR indicates heart rate; MAP, mean arterial pressure; SO₂, oxygen saturation; RR, respiratory rate; FiO₂, fraction of inspired oxygen; Vt, tidal volume and IPAP, inspiratory positive airway pressure. Rp_{10min}, indicates 10 minutes after the reperfusion of the left lung transplant; Rp_{1h}, 1 hour after the reperfusion of the left lung transplant and Rp_{4h}, 4 hours after the reperfusion of the left lung transplant.

^a P-values obtained from the Mann-Whitney test (6H vs 12H). ^b P-values obtained from the Friedman test (Timepoint Rp_{10min} vs Timepoint Rp_{1h} vs Timepoint Rp_{4h}). ^c P<0.05 with Bonferroni correction for pairwise comparison (Timepoint Rp_{10min} vs Timepoint Rp_{1h}); ^d P<0.05 with Bonferroni correction for pairwise comparison (Timepoint Rp_{10min} vs Timepoint Rp_{4h});

^e P<0.05 with Bonferroni correction for pairwise comparison (Timepoint Rp_{1h} vs Timepoint Rp_{4h}).

Appendix 2

Variable	Timepoint	Statistic	Total (N=8)	6H (N=4)	12H (N=4)	P-value ^a	
Interstitial edema	CIT ₀	Mean (SD)	0 (0)	0 (0)	0 (0)	1.000	
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0)	0 (0; 0)		
	CIT ₁	Mean (SD)	0.13 (0.35)	0.25 (0.5)	0 (0)	0.317	
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0.5)	0 (0; 0)		
	Rp _{30min}	Mean (SD)	0.25 (0.46)	0.25 (0.5)	0.25 (0.5)	1.000	
		Median (Q1; Q3)	0 (0; 0.5)	0 (0; 0.5)	0 (0; 0.5)		
	Rp _{4h}	Mean (SD)	0 (0)	0 (0)	0 (0)	1.000	
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0)	0 (0; 0)		
	P-value ^b				0.368	0.368	
	Alveolar edema	CIT ₀	Mean (SD)	0 (0)	0 (0)	0 (0)	1.000
Median (Q1; Q3)			0 (0; 0)	0 (0; 0)	0 (0; 0)		
CIT ₁		Mean (SD)	0 (0)	0 (0)	0 (0)	1.000	
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0)	0 (0; 0)		
Rp _{30min}		Mean (SD)	0.13 (0.35)	0.25 (0.5)	0 (0)	0.317	
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0.5)	0 (0; 0)		
Rp _{4h}		Mean (SD)	0 (0)	0 (0)	0 (0)	1.000	
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0)	0 (0; 0)		
P-value ^b				0.368	1.000		
Hemorrhaghe		CIT ₀	Mean (SD)	0 (0)	0 (0)	0 (0)	1.000
	Median (Q1; Q3)		0 (0; 0)	0 (0; 0)	0 (0; 0)		
	CIT ₁	Mean (SD)	0.13 (0.35)	0 (0)	0.25 (0.5)	0.317	
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0)	0 (0; 0.5)		
	Rp _{30min}	Mean (SD)	0.5 (0.76)	0.25 (0.5)	0.75 (0.96)	0.405	
		Median (Q1; Q3)	0 (0; 1)	0 (0; 0.5)	0.5 (0; 1.5)		
	Rp _{4h}	Mean (SD)	1 (0.76)	0.5 (0.58)	1.5 (0.58)	0.061	
		Median (Q1; Q3)	1 (0.5; 1.5)	0.5 (0; 1)	1.5 (1; 2)		
	P-value ^b				0.223	0.097	
	Cell infiltration	CIT ₀	Mean (SD)	1.13 (0.35)	1.25 (0.5)	1 (0)	0.317
Median (Q1; Q3)			1 (1; 1)	1 (1; 1.5)	1 (1; 1)		
CIT ₁		Mean (SD)	1.38 (0.74)	1.5 (1)	1.25 (0.5)	0.850	
		Median (Q1; Q3)	1 (1; 1.5)	1 (1; 2)	1 (1; 1.5)		
Rp _{30min}		Mean (SD)	1.88 (0.64)	2.25 (0.5)	1.5 (0.58)	0.096	
		Median (Q1; Q3)	2 (1.5; 2)	2 (2; 2.5)	1.5 (1; 2)		
Rp _{4h}		Mean (SD)	1.75 (1.04)	2 (0.82)	1.5 (1.29)	0.549	
		Median (Q1; Q3)	2 (1; 2.5)	2 (1.5; 2.5)	1.5 (0.5; 2.5)		
P-value ^b				0.097	0.761		
Hyaline membrane formation		CIT ₀	Mean (SD)	0 (0)	0 (0)	0 (0)	1.000

Variable	Timepoint	Statistic	Total (N=8)	6H (N=4)	12H (N=4)	P-value ^a
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0)	0 (0; 0)	
	CIT ₁	Mean (SD)	0 (0)	0 (0)	0 (0)	1.000
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0)	0 (0; 0)	
	Rp _{30min}	Mean (SD)	0 (0)	0 (0)	0 (0)	1.000
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0)	0 (0; 0)	
	Rp _{4h}	Mean (SD)	0 (0)	0 (0)	0 (0)	1.000
		Median (Q1; Q3)	0 (0; 0)	0 (0; 0)	0 (0; 0)	
		P-value ^b		1.000	1.000	
TOTAL	CIT ₀	Mean (SD)	1.13 (0.35)	1.25 (0.5)	1 (0)	0.317
		Median (Q1; Q3)	1 (1; 1)	1 (1; 1.5)	1 (1; 1)	
	CIT ₁	Mean (SD)	1.63 (0.74)	1.75 (0.96)	1.5 (0.58)	0.752
		Median (Q1; Q3)	1.5 (1; 2)	1.5 (1; 2.5)	1.5 (1; 2)	
	Rp _{30min}	Mean (SD)	2.63 (1.41)	2.75 (0.96)	2.5 (1.91)	0.659
		Median (Q1; Q3)	2.5 (1.5; 3.5)	2.5 (2; 3.5)	2 (1; 4)	
	Rp _{4h}	Mean (SD)	3 (1.31)	2.5 (1.29)	3.5 (1.29)	0.304
		Median (Q1; Q3)	3 (2; 4)	2.5 (1.5; 3.5)	3.5 (2.5; 4.5)	
		P-value ^b		0.135	0.168	

Appendix 2. Lung injury scale parameters throughout the experiment in 6h-CIT and 12h-CIT groups.

CIT: cold ischemia time; CIT₀, beginning of the CIT; CIT₁, end of the CIT; LT, lung transplant; Rp_{30min}, 30 minutes after the reperfusion of the left LT; Rp_{4h}, 4 hours after the reperfusion of the left LT. ^a P-values obtained from the Mann-Whitney test (6H vs 12H). ^b P-values obtained from the Friedman test (Timepoint Rp_{10min} vs Timepoint Rp_{1h} vs Timepoint Rp_{4h}).