

Table S1Features selected via Sequential Forward Feature selection (cm^{-1})

1440	1492	1500	1516	1520	1616	1624
1632	1648	1664	1748	1756	1776	

Table S2**Clinical Characteristics**

Characteristic	Native	C4d+	C4d-
Biopsies, n	14	14	16
Patients, N	14	9	16
Age, years*	47.2 ± 16.3	45.6 ± 21.9	56.8 ± 12.1
Sex (male), %*	71.4	77.8	75.0
Native/Explant diagnosis, N**			
Ischemic CMP	0	3	5
Nonischemic CMP	0	2	8
Inflammatory CMP	0	1	1
Drug-induced CMP	0	0	1
Congenital heart disease	0	2	0
Postpartum CMP	0	1	0
Allograft vasculopathy	0	0	1
Mild-moderate hypertrophy	12	0	0
No diagnostic abnormality	2	0	0

Values are shown as means ± standard deviations or percentages unless otherwise indicated. CMP, cardiomyopathy.

*P value > 0.05.

**P value > 0.05 between C4d+ and C4d- groups.

Transplant-Related Characteristics

Characteristic	C4d+	C4d-	P value
CMV Serology (D ⁺ /R ⁻), % N	22.2	50.0	0.17
Pretransplant PRA, %	42.1 ± 42.6	1.4 ± 3.4	0.004
LVAD, % N	22.2	25.0	0.70
Graft ischemic time, min	212.6 ± 44.6	222.8 ± 64.0	0.87
Biopsy date, days posttransplant* [IQR]	495 [22, 899]	75 [40, 563]	0.95
Immunosuppressive drugs, % n			
Calcineurin inhibitor	93.3	93.8	0.92
Tacrolimus	7.1	6.3	-
Other calcineurin inhibitor	11	15	-
Steroid	92.9	93.8	0.92
Mycophenolate mofetil	64.3	100	0.010
Other**	35.7	0	0.010
Time to first C4d+ biopsy, days	39.6 ± 7.5	NA	NA

CMV, cytomegalovirus; D⁺/R⁻, donor positive/recipient negative; PRA, panel reactive antibodies; LVAD, left ventricular assist device; IQR, interquartile range.

*Median days reported.

**Other immunosuppressive drugs include Sirolimus, intravenous immunoglobulin, Florinef, Rituximab, Cytoxan, and Neoral.

Hemodynamics

Parameter	Native (n)	C4d+ (n)	C4d- (n)	P value*
RAP, mmHg	11.13 ± 7.85 (8)	10.67 ± 7.74 (12)	4.63 ± 3.84 (16)	0.015**
RVSP, mmHg	45.88 ± 21.60 (8)	40.75 ± 9.45 (12)	34.5 ± 10.18 (16)	0.042
RVEDP, mmHg	12.43 ± 6.55 (7)	11.25 ± 7.63 (12)	6.31 ± 3.74 (16)	0.022
PASP, mmHg	45.25 ± 22.31 (8)	40.25 ± 9.77 (12)	33.2 ± 9.53 (15)	0.042
PADP, mmHg	22.75 ± 12.31 (8)	17.92 ± 5.25 (12)	13.73 ± 3.97 (15)	0.010**
PA _{mean} , mmHg	33.0 ± 14.82 (8)	26.75 ± 5.93 (12)	21.07 ± 5.52 (15)	0.021**
PCWP, mmHg	21.63 ± 11.34 (8)	18.42 ± 9.68 (12)	10.4 ± 4.81 (15)	0.006**
CI, L/min/m ²	2.03 ± 0.41 (7)	2.99 ± 0.71 (12)	3.00 ± 0.58 (15)	0.002

RAP, right atrial pressure; RVSP, right ventricular systolic pressure; RVEDP, right ventricular end-diastolic pressure; PASP, pulmonary artery systolic pressure; PADP, pulmonary artery diastolic pressure; PA_{mean}, mean pulmonary artery pressure; PCWP, pulmonary capillary wedge pressure; CI, cardiac index by thermodilution method.

***P value between all 3 groups.**

****P value <0.05 for C4d+ versus C4d- groups.**