SUPPLEMENTAL MATERIAL

Supplemental Table 1. Study population.

Variables	**All Patients (N=205)**
Demographics	
Age at transplant, y (mean, SD)	50.6 ± 12.8
Women	64 (31.2%)
Pre-Transplant Clinical Diagnosis	
Non-ischemic cardiomyopathy*	97 (47.3%)
Ischemic cardiomyopathy†	47 (22.9%)
Anthracycline-induced heart disease	11 (5.4%)
Cardiac sarcoidosis	10 (4.9%)
Hypertrophic cardiomyopathy	10 (4.9%)
Congenital heart disease	9 (4.4%)
Valvular heart disease‡	6 (2.9%)
Restrictive cardiomyopathy§	5 (2.4%)
Myocarditis	5 (2.4%)
Arrhythmogenic cardiomyopathy	2 (1.0%)
Cardiac amyloidosis	2 (1.0%)
Radiation-induced heart disease	1 (0.5%)
Post-Transplant Histologic Diagnosis	
Dilated cardiomyopathy‖	84 (41.0%)
Ischemic cardiomyopathy#	46 (22.4)
Hypertrophic cardiomyopathy**	19 (9.3%)

Anthracycline-induced heart disease	11 (5.4%)
Cardiac sarcoidosis††	10 (4.9%)
Congenital heart disease	9 (4.4%)
Arrhythmogenic cardiomyopathy	8 (3.9%)
Valvular heart disease‡‡	6 (2.9%)
Myocarditis§§	6 (2.9%)
Restrictive cardiomyopathy‖‖	3 (1.5%)
Cardiac amyloidosis	2 (1.0%)
Radiation-induced heart disease	1 (0.5%)
Pre-Transplant Imaging	
FDG PET performed	18 (8.8%)
Cardiac MRI performed	31 (15.1%)
FDG PET and Cardiac MRI performed	7 (3.4%)

(*) Includes: idiopathic, familial, presumed familial, genetic (Becker's muscular dystrophy, glycogen storage disease, phospholamban mutation, Danon disease, Noonan syndrome, MHY7 mutation, LMNA mutation, BAG3 mutation), peripartum, familial vs. peripartum, presumed Chagas-induced, presumed alcohol-induced. (†) Includes: mixed ischemic and valvular, non-atherosclerotic coronary artery disease (CAD) (traumatic coronary artery dissection, peripartum coronary artery dissection, antiphospholipid antibody syndrome (APLAS)), mixed ischemic and familial. (‡) Includes non-ischemic cardiomyopathy in part valvular. (§) Includes familial restrictive, idiopathic restrictive. (‖) Includes: idiopathic, genetic (Becker's muscular dystrophy, glycogen storage disease, phospholamban mutation, Danon disease, LMNA mutation, BAG3

mutation), peripartum. (#) Includes mixed ischemic and valvular, mixed ischemic and dilated, non-atherosclerotic CAD (traumatic coronary artery dissection, peripartum coronary artery dissection, APLAS). (**) Includes Noonan syndrome with features of hypertrophic cardiomyopathy, mixed hypertrophic and ischemic, dilated cardiomyopathy from burned out hypertrophic cardiomyopathy. (††) Includes mixed cardiac sarcoidosis and ischemic. (‡‡) Includes mixed dilated and valvular. (§§) Includes restrictive secondary to acute lymphocytic myocarditis. (||||) Includes idiopathic with restrictive features. FDG, fluorodeoxyglucose. MRI, magnetic resonance imaging. PET, positron emission tomography.

Supplemental Table 2. Pre-fluorodeoxyglucose positron emission tomography clinical history, fluorodeoxyglucose positron emission tomography sarcoidosis likelihood, and pre- and post-transplant diagnoses.

Subject Number	Notable History at Time of FDG PET	FDG PET CS Likelihood Probability	Abnormal Extracardiac Uptake on FDG PET	Pre-Transplant Clinical Diagnosis	Post-Transplant Histologic Diagnosis
82	HFrEF, VT, CHB, biopsy-proven CS	Highly Probable	Yes	CS	CS
102	HFrEF, VT/VF, pAF, CHB	Highly Probable	Yes	CS	CS
107	HFrEF, CHB, CMR highly probable CS, biopsy-proven extracardiac sarcoidosis	Highly Probable	Yes	CS	CS
137	HFrEF, VT	Highly Probable	Yes	CS	CS
157	HFrEF, PVCs, CHB, biopsy-proven extracardiac sarcoidosis	Highly Probable	Yes	CS	CS
77	HFrEF, pAF	Probable	No	NICMP	AC
186	HFrEF, VT, OSH CMR concerning for ARVD	Probable	No	AC	AC
198	HFrEF, VT, pHTN	Probable	No	CS	AC
89	HFrEF, VT, AF	Probable	No	NICMP	DCM
204	HFrEF, VT, AF, non-obstructive CAD	Probable	No	CS	DCM
12	HFrEF, VT/VF, CHB, non-obstructive CAD, biopsy-proven extracardiac sarcoidosis	Probable	No	CS	CS
23	HFrEF, pAF, non-obstructive CAD, CMR unlikely CS	Probable	No	RCMP	HCM
140	HFrEF, PVCs, pAF, pulmonary sarcoidosis (not biopsy-proven)	Probable	No	CS	Multifocal lymphocytic myocarditis
158	HFpEF, pAF/pAFL, immune-mediated myositis, CMR highly probable CS	Probable	No	RCMP	RCMP
60	HFrEF, VT, LMNA mutation, CMR unlikely CS	Possible	No	LMNA-CMP	LMNA-CMP
178	HFrEF, pAFL, CHB, CMR possible CS	Possible	No	LMNA-CMP	LMNA-CMP
114	HFpEF, PVCs, pAF, CHB, non-obstructive CAD, CMR unlikely CS	Possible	No	RCMP due to lymphocytic myocarditis	RCMP due to lymphocytic myocarditis
162	HFrEF, CMR highly probable CS	Possible	No	NICMP	DCM

Notable clinical history at time of fluorodeoxyglucose (FDG) positron emission tomography (PET), FDG PET cardiac sarcoidosis probability, pre-transplant clinical diagnosis, and post-transplant histologic diagnosis for all patients (N=18) who underwent FDG PET during pre-transplant course. Listed first from highest to lowest probability, second by frequency. AC, arrhythmogenic cardiomyopathy. AF, atrial fibrillation. AFL, atrial flutter. ARVD,

arrhythmogenic right ventricular dysplasia. CAD, coronary artery disease. CHB, complete heart block. CMR, cardiac magnetic resonance imaging. CS, cardiac sarcoidosis. DCM, dilated cardiomyopathy. FDG, fluorodeoxyglucose. HCM, hypertrophic cardiomyopathy. HFpEF, heart failure with preserved ejection fraction. HFrEF, heart failure with reduced ejection fraction. LMNA-CMP, LMNA-mutation related cardiomyopathy. NICMP, nonischemic cardiomyopathy. OSH, outside hospital. pAF, paroxysmal atrial fibrillation. pAFL, paroxysmal atrial flutter. PET, positron emission tomography. pHTN, pulmonary hypertension. PVCs, premature ventricular contractions. RCMP, restrictive cardiomyopathy. VF, ventricular fibrillation. VT, ventricular tachycardia.

Supplemental Table 3. Pre-cardiac magnetic resonance imaging clinical history, cardiac magnetic resonance imaging sarcoidosis likelihood, and pre- and post-transplant diagnoses.

Subject Number	Notable History at Time of Cardiac MRI	Cardiac MRI CS Likelihood Probability	Pre-Transplant Clinical Diagnosis	Post-Transplant Histologic Diagnosis
107	CHB, biopsy-proven extracardiac sarcoidosis	Highly Probable	CS	CS
133	HFrEF, AF	Highly Probable	NICMP	End-stage HCM
158	HFpEF, pAF/pAFL, immune-mediated myositis	Highly Probable	RCMP	RCMP
162	HFrEF	Highly Probable	NICMP	DCM
153	HFrEF	Probable	NICMP	DCM
179	HFrEF	Probable	NICMP	DCM
120	HFrEF, CAD, APLAS	Probable	APLAS	APLAS
151	HFrEF, HCM, AF	Probable	HCM	End-stage HCM
93	HFrEF	Possible	NICMP	DCM
154	HFrEF	Possible	NICMP	DCM
165	HFrEF	Possible	Presumed familial DCM	DCM
188	HFrEF, AF	Possible	NICMP	DCM
178	HFrEF, pAFL, CHB	Possible	LMNA-CMP	LMNA-CMP
37	HFrEF, non-obstructive CAD	Unlikely	NICMP	DCM
122	HFrEF	Unlikely	Presumed peripartum CMP	DCM
138	HFrEF	Unlikely	NICMP	DCM
144	HFrEF	Unlikely	NICMP	DCM
60	HFrEF, VT, LMNA mutation	Unlikely	LMNA-CMP	LMNA-CMP
183	HFrEF, VT	Unlikely	Peripartum CMP	Peripartum CMP
5	HFrEF, CAD s/p CABG, AF	Unlikely	ICMP	ICMP
18	HFrEF, CAD s/p CABG, AS s/p AVR, AF	Unlikely	Mixed ICMP and valvular cardiomyopathy	Mixed ICMP and valvular cardiomyopathy
172	HFrEF, CAD	Unlikely	ICMP	ICMP
23	HFrEF, pAF, non-obstructive CAD	Unlikely	RCMP	HCM
68	HCM	Unlikely	HCM	HCM
173	HFpEF, HCM	Unlikely	HCM	End-stage HCM
85	HFrEF, anthracycline exposure, severe MR s/p MVR	Unlikely	Anthracycline-induced heart disease	Anthracycline-induced heart disease
175	HFrEF, AF, anthracycline exposure	Unlikely	Anthracycline-induced heart disease	Anthracycline-induced heart disease
203	HFrEF, pAF, anthracycline exposure	Unlikely	Anthracycline-induced heart disease	Anthracycline-induced heart disease
114	HFpEF, PVCs, pAF, CHB, non-obstructive CAD	Unlikely	RCMP due to lymphocytic myocarditis	RCMP due to lymphocytic myocarditis

180	HFrEF, CAD, radiation exposure	Unlikely	Radiation-induced heart disease	Radiation-induced heart disease
193	HFpEF, situs inversus, ASD, pulmonary AVM, pHTN	Unlikely	Congenital heart disease	Congenital heart disease

Notable clinical history at time of cardiac magnetic resonance imaging, cardiac magnetic resonance imaging cardiac sarcoidosis probability, pre-transplant clinical diagnosis, and post-transplant histologic diagnosis for all patients (N=31) who underwent cardiac magnetic resonance imaging during pre-transplant course. Listed first from highest to lowest probability, second by frequency. APLAS, antiphospholipid antibody syndrome. AS, aortic stenosis. ASD, atrial septal defect. CMP, cardiomyopathy. ICMP, ischemic cardiomyopathy. MR, mitral regurgitation. MRI, magnetic resonance imaging. MVR, mitral valve replacement. All other abbreviations as in Supplemental Table 2.

Supplemental Table 4. Fluorodeoxyglucose positron emission tomography and cardiac magnetic resonance imaging sarcoidosis likelihood, and post-transplant histologic diagnoses for all patients who underwent both studies.

Subject Number	**FDG PET CS Likelihood Probability**	**Cardiac MRI CS Likelihood Probability**	**Post-Transplant Histologic Diagnosis**
23	Probable	Unlikely	HCM
60	Possible	Unlikely	LMNA-CMP
107	Highly Probable	Highly Probable	CS
114	Possible	Unlikely	RCMP due to lymphocytic myocarditis
158	Probable	Highly Probable	RCMP
162	Possible	Highly Probable	DCM
178	Possible	Possible	LMNA-CMP

Fluorodeoxyglucose positron emission tomography and cardiac magnetic resonance imaging sarcoidosis likelihood, and post-transplant histologic diagnoses for all patients who underwent both studies in the cohort (N=7). Listed in Subject Number order. CS, cardiac sarcoidosis. DCM, dilated cardiomyopathy. FDG, fluorodeoxyglucose. HCM, hypertrophic cardiomyopathy. LMNA-CMP, LMNA-mutation related cardiomyopathy. MRI, magnetic resonance imaging. PET, positron emission tomography. RCMP, restrictive cardiomyopathy.