Table E1. Patient characteristics for prospectively enrolled CIED (*n* = 10), nondevice (*n* = 10) and retrospective CIED control (*n* = 10) groups based on chart review of clinical history.

	CIED (*n* = 10)	Nondevice (*n* = 10)	Retro CIED (*n* = 10)
Age (years)	53.8 (35.6)	59.2 (9.9)	57.7 (15.2)
LVEF (%)	52.5 (11.8)*	64.0 (10.3)*€	39.5 (38.8)€
Heart rate (bpm)	65.0 (8.8)	67.5 (17.5)	65.0 (10.0)
Sex (Male/Female)	7/3 (70%)	4/6 (40%)	5/5 (50%)
ICD	4 (40%)		7 (70%)
CRT-D	2 (20%)		1 (10%)
Pacemaker	3 (30%)		1 (10%)
S-ICD	1 (10%)		1 (10%)
Diabetes	3 (30%)	1 (10%)	2 (2%)
Hypertension	7 (70%)	5 (50%)	8 (80%)
Obstructive CAD	2 (20%)	1 (10%)	5 (50%)
Atrial Fibrillation	3 (30%)	0 (0%)	3 (30%)
LBBB or RBBB	3 (30%)	1 (10%)	6 (60%)
VT or VF	4 (40%)	4 (40%)	9 (90%)
PVC	4 (40%)	4 (40%)	9 (90%)
Heart failure	8 (80%)	2 (20%)	9 (90%)

Values for age, LVEF, and heart rate represent median (interquartile range). For all other variables, numbers in parenthesis represent percentages. All patients had GFR > 60 mL/min/1.73 m². CRT-D: cardiac resynchronization therapy with defibrillator; *S*-ICD: subcutaneous ICD; LBBB: left bundle branch block; RBBB: right bundle branch block; VT: ventricular tachycardia; VF: ventricular fibrillation; PVC: premature ventricular contraction; NICM: nonischemic cardiomyopathy; GFR: glomerular filtration rate. Assuming nonnormal distribution, the Kruskal-Wallis test with Bonferroni correction was conducted for age, LVEF, and heart rate. We did not conduct a statistical comparison for binary variables because the sample sizes are too small.

P < .05 corresponds to statistical significance for the following pairs: *CIED versus nondevice, €nondevice versus retrospective CIED control.

Table E2. Summary of R-R interval, number of MP planes, total scan time for acquiring one AIF plane and MP planes per heartbeat, and skipped heartbeats during perfusion scans.

Patients	R-R Interval	MP Planes	Total scan time	Skipped Heartbeats
CIED 1	943 ± 170 ms	3	580 ms	0
CIED 2	882 ± 19 ms	3	580 ms	0
CIED 3	664 ± 27 ms	3	580 ms	0
CIED 4	1118 ± 221 ms	4	727.5 ms	0
CIED 5	1025 ± 32 ms	4	727.5 ms	0
CIED 6	725 ± 2 ms	3	580 ms	0
CIED 7	1013 ± 31 ms	4	727.5 ms	0
CIED 8	802 ± 27 ms	3	580 ms	0
CIED 9	1274 ± 72 ms	5	875 ms	0
CIED 10	925 ± 19 ms	4	727.5 ms	0
Nondevice 1	955 ± 12 ms	4	727.5 ms	0
Nondevice 2	889 ± 14 ms	4	727.5 ms	0

Nondevice 3	**940 ± 10 ms**	**3**	**580 ms**	**0**
Nondevice 4	**1180 ± 28 ms**	**4**	**727.5 ms**	**0**
Nondevice 5	**956 ± 16 ms**	**4**	**727.5 ms**	**0**
Nondevice 6	**922 ± 65 ms**	**4**	**727.5 ms**	**0**
Nondevice 7	**859 ± 24 ms**	**3**	**580 ms**	**0**
Nondevice 8	**905 ± 13 ms**	**4**	**727.5 ms**	**0**
Nondevice 9	**914 ± 61 ms**	**4**	**727.5 ms**	**0**
Nondevice 10	**1110 ± 18 ms**	**4**	**727.5 ms**	**0**

The R-R interval data were obtained from the DICOM header of retrospective ECG-gated breath-hold cine data. The number of skipped heartbeats was calculated as follows. First, cutoff = (mean R-R interval + 2 × standard deviation of R-R interval) × 1.5, where x denotes multiplication. This corresponds to approximately 1.5 heartbeats. Second, calculate the change in time stamp between two consecutive perfusion images along the repetition dimension by extracting the time stamp embedded in the DICOM headers. Third, any frame with a change in time stamp greater than the cutoff is defined as a skipped heartbeat. This retrospective analysis suggests zero skipped heartbeats for all 20 patients. We note that these results need to interpreted with caution, because both the RR-interval and time stamp data may have been contaminated with distorted ECG trace inside the MRI scanner due to the magnetohydrodynamic effects, particularly for sicker heart disease patients with weak ECG traces. AIF scan time = 137.5 ms. MP scan time per plane = 147.5 ms. Total scan time per heartbeat = AIF scan time + MP scan time per plane x MP planes.