

Table 1 Patients' clinical characteristics, echocardiographic variables, and left atrial pressure, per study group

| | LVZ Group (n=29) | No LVZ Group (n=73) | P value* |
|-----------------------------|---------------------|------------------------|----------|
| Clinical characteristics | | | |
| Age (years) | 67±9 | 63±10 | 0.06 |
| Male sex | 17 (58%) | 60 (82%) | 0.01 |
| BW (kg) | 62±14 | 69±12 | 0.01 |
| BMI (kg/m ²) | 24±5 | 25±4 | 0.27 |
| Paroxysmal AF | 13 (45%) | 38 (52%) | 0.51 |
| Hypertension | 17 (59%) | 41 (56%) | 0.82 |
| Diabetes mellitus | 2 (7%) | 7 (10%) | 0.67 |
| Heart failure | 4 (14%) | 8 (11%) | 0.69 |
| Prior stroke | 4 (14%) | 5 (7%) | 0.26 |
| CHADS ₂ score | 1 (1–2) | 1 (0–2) | 0.27 |
| Antiarrhythmic drug use | 20 (69%) | 37 (51%) | 0.09 |
| Class I | 5 (17%) | 13 (18%) | 0.95 |
| Class III | 1 (3%) | 1 (1%) | 0.49 |
| Class IV | 16 (55%) | 26 (36%) | 0.07 |
| β blocker | 12 (41%) | 37 (51%) | 0.40 |
| Serum creatinine (mg/dL) | 0.88±0.20 | 0.86±0.17 | 0.56 |
| NT-proBNP (pg/mL) | 224 (119–1203) | 218 (74–774) | 0.24 |
| Post-ablation recurrence | 6 (21%) | 14 (19%) | 0.86 |
| Echocardiographic variables | | | |
| LVEF (%) | 65±10 | 66±10 | 0.67 |
| LAD (mm) | 42±7 | 41±8 | 0.77 |
| LVDd (mm) | 45±6 | 48±5 | 0.052 |
| LVDs (mm) | 29±7 | 30±6 | 0.57 |
| E/e' | 10.8±3.8 | 10.0±4.2 | 0.43 |
| LA pressure | 18 (62%) | 40 (55%) | 0.50 |
| Maximum (mmHg) | 18±4 | 15±5 | 0.03 |
| Minimum (mmHg) | 7±4 | 5±3 | 0.10 |
| Average (mmHg) | 11±4 | 9±3 | 0.06 |

Mean ± SD or median (interquartile range) values or number (%) of patients are shown.

*LVZ Group vs. No LVZ Group.

AF = atrial fibrillation; BMI = body mass index; BW, body weight; LA = left atrial; LAD = left atrial diameter; LVDd = left ventricular diastolic diameter; LVDs = left ventricular systolic diameter; LVEF = left ventricular ejection fraction; LVZ = low voltage zone.

Table 2 Electrophysiologic and computed tomography-based study data, per study group

| | LVZ Group (n=29) | No LVZ Group (n=73) | P value* |
|--|---------------------|------------------------|----------|
| Electrophysiologic features | | | |
| Number of voltage mapping points | 1431±757 | 1197±553 | 0.10 |
| LVZ size (mm ²) (at LA-ascending aorta contact areas) | 2.3 (1.1–4.0) | 0 (0–0) | <0.0001 |
| CT-based measurements | | | |
| Aorta-LA angle (°) | 21.0±7.0 | 24.9±7.1 | 0.02 |
| Aorta-LV angle (°) | 131.3±8.8 | 126.0±7.9 | 0.005 |
| NCC diameter (mm) | 20.4±2.2 | 19.3±2.5 | 0.04 |
| LCC diameter (mm) | 18.7±2.5 | 19.3±2.7 | 0.35 |
| RCC diameter (mm) | 18.6±2.5 | 19.3±2.7 | 0.26 |
| NCC-LA distance (mm) | 2.29±0.68 | 2.76±0.79 | 0.006 |
| LCC-LA distance (mm) | 2.75±0.89 | 2.87±0.97 | 0.60 |

Mean ± SD or median (interquartile range) values are shown.

*LVZ Group vs. No LVZ Group.

LA = left atrium; LCC = left coronary cusp; LVZ = low voltage zone; NCC = non coronary cusp; RCC = right coronary cusp.