**Supplementary Table** **2a:** Distribution of ablation index values in the protected and control groups at each site.

|  |  |  |  |
| --- | --- | --- | --- |
| **AI** | **Anterior LA****n=11876** | **Posterior PV****n=8422** | **Posterior wall line****n=1399** |
|  | **Protected****n=5434** | **Control****n=6442** | **Protected****n=3603** | **Control****n=4819** | **Protected****n=636** | **Control****n=763** |
| **0-299** | 312 (5.7%) | 342 (5.3%) | 308 (8.5%) | 445 (9.2%) | 53 (8.3%) | 83 (10.9%) |
| **300-349** | 276 (5.1%) | 270 (4.2%) | 222 (6.2%) | 370 (7.7%) | 34 (5.3%) | 41 (5.4%) |
| **350-399** | 482 (8.9%) | 522 (8.1%) | 1770 (49.1%)\* | 2103 (43.6%)\* | 347 (54.6%)\* | 414 (54.3%)\* |
| **400-449** | 356 (6.6%) | 477 (7.4%) | 729 (20.2%) | 962 (20%) | 122 (19.2%) | 92 (12.1%) |
| **450-499** | 2381 (43.8%)\* | 2638 (41%)\* | 381 (10.6%) | 589 (12.2%) | 51 (8.0%) | 82 (10.7%) |
| **500-549** | 1358 (25%)\* | 1766 (27.4%)\* | 142 (3.9%) | 253 (5.3%) | 19 (3%) | 44 (5.8%) |
| **≥550** | 269 (4.9%) | 427 (6.6%) | 51 (1.4%) | 97 (2.0%) | 10 (1.6%) | 7 (1.0%) |

 Values are presented as count (percentage). Asterisks represent values which are within the target range for the corresponding sites. AI= ablation index; LA= left atrium; PV= pulmonary veins.

**Supplementary Table 2b:** Ablation index values in the anterior left atrium.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **AI** | **Protected****n=5434** | **Z-score** | **Control****n=6442** | **Z-score** | **P value** |
| 0-449 | 1426 (26.2%) | 1.536184 | 1611 (25%) | -1.536184 | 0.001 |
| 450-550 | 3744 (68.9%) | 0.517923 | 4410 (68.5%) | -0.517923 |  |
| >550 | 264 (4.9%) | -3.905193 | 421 (6.5%) | 3.905193 |  |

AI= ablation index. Post hoc test showed that the only significant difference between the protected and control groups is in the ablation index values 551-600 (p<0.001).

**Supplementary Table 2c:** Ablation index values in the posterior pulmonary veins.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **AI** | **Protected****n=3603** | **Z-score** | **Control****n=4819** | **Z-score** | **P value** |
| 0-349 | 530 (14.7%) | -2.729611 | 815 (16.9%) | 2.729611 | <0.001 |
| 350-400 | 1801 (50%) | 5.133222 | 2137 (44.3%) | -5.133222 |  |
| >400 | 1272 (35.3%) | -3.228936 | 1867 (38.7%) | 3.228936 |  |

AI= ablation index. Post hoc test showed a significant difference between the protected and control groups in the ablation index values 0-349 (p= 0.006), values 350-400 (p<0.001) and values 401-600 (p= 0.001).

**Supplementary Table 2d:** Ablation index values in the posterior wall line.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **AI** | **Protected****n=636** | **Z-score** | **Control****n=763** | **Z-score** | **P value** |
| 0-349 | 87 (13.7%) | -1.338713 | 124 (16.3%) | 1.338713 | 0.34 |
| 350-400 | 351 (55.2%) | 0.102535 | 419 (54.9%) | -0.102535 |  |
| >400 | 198 (31.1%) | 0.935246 | 220 (28.8%) | --0.935246 |  |

AI=ablation index.