Abstract: **P1009**

**Inter-operator reproducibility of pulmonary vein isolation guided by the ablation index**

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Background. Atrial fibrillation (AF) ablation outcome is still operator dependent. Ablation Index (AI) is a new lesion quality marker that has demonstrated to allow acute durable pulmonary vein (PV) isolation followed by a high single-procedure arrhythmia-free survival.

Purpose. This prospective, multi-center study was designed to evaluate the inter-operator reproducibility of acute PV isolation guided by the AI.

Methods. A total of 490 consecutive patients with paroxysmal (80.4%) and persistent (19.6%) AF underwent first-time PV encircling and were divided in four study groups according to operator preference in choosing the ablation catheter (a contact force (ST) or contact force surrounding flow (SF) catheter) and the AI setting (330 at posterior wall and 450 at anterior wall or 380 at posterior wall and 500 at anterior wall). Radiofrequency energy was delivered to produce a wide area circumferential ablation around the proximal part of each PV’s ostium or around ipsilateral PVS. In all patient radiofrequency was delivered targeting interlesion distance = 6 mm.

Results. Procedure (ST330 129±44 min, ST380 144±44 min, SF330 120±72 min, SF380 125±73 min, p<0.001) and fluoroscopy time (ST330 542±285 s, ST380 540±416 s, SF330 257±356 s, SF380 379±454 s, p<0.001) significantly differed among the four study groups, whereas the rate of first-pass PV isolation (ST330 90±16 %, ST380 87±19 %, SF330 90±17 min, SF380 91±15 min, p= ns) was similar. A complication was observed in 7 (1.4%) patients without any difference among the four study groups.

Conclusions. Ablation protocol respecting strict criteria for contiguity and quality lesion results in high and comparable rate of acute PV isolation among operator with different skill performing ablation with different procedure and fluoroscopy times.