

Ablazione della fibrillazione atriale: hot news

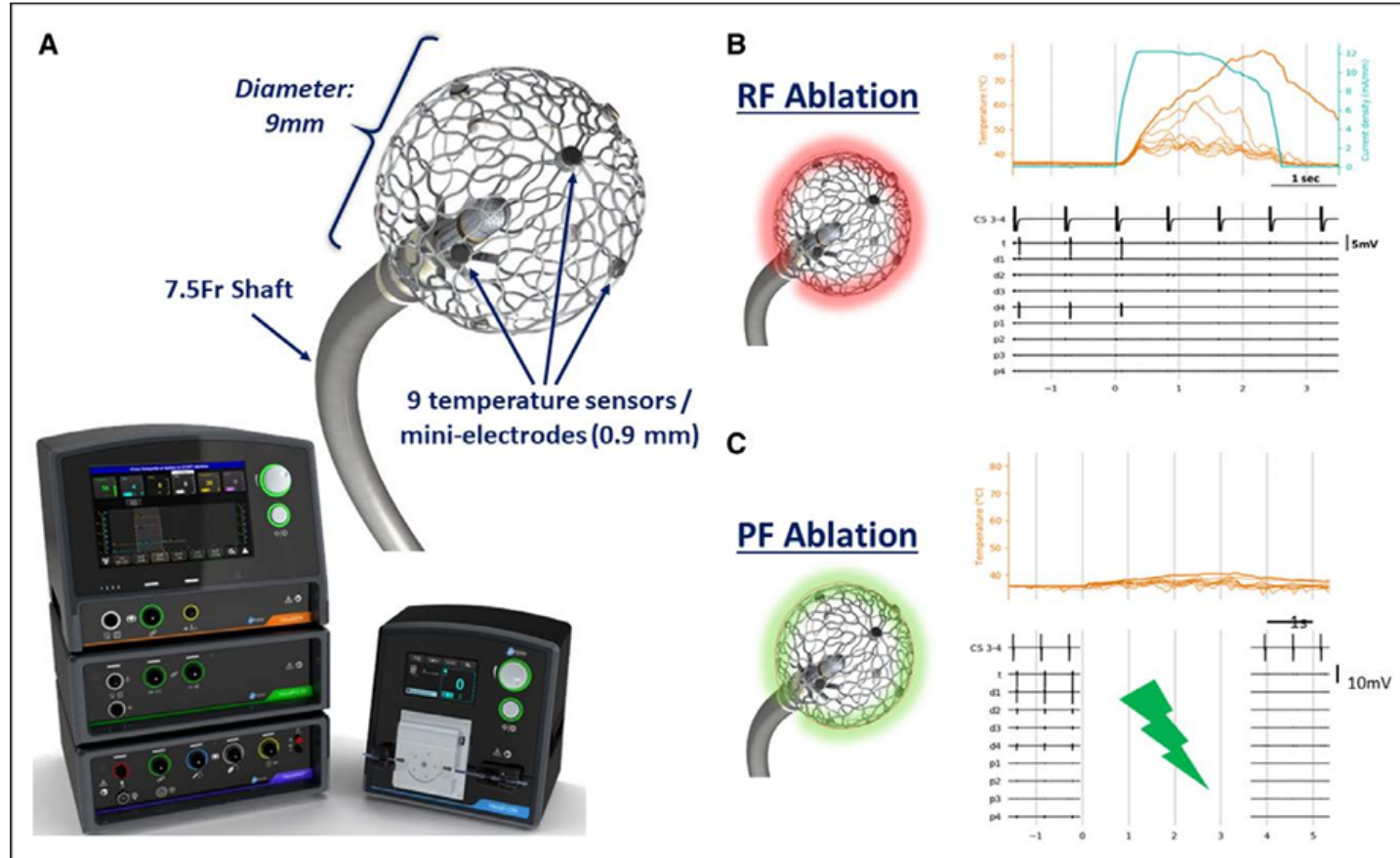
Perché utilizzare cateteri a doppia energia e ampia superficie di contatto per l'ablazione della FA parossistica nell'era del single-shot?

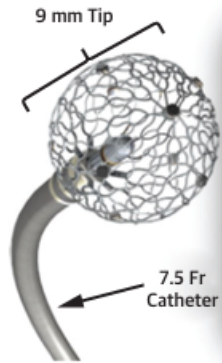
Roberto Rordorf, MD

**Aritmologia ed Elettrofisiologia, IRCCS Fondazione Policlinico
S.Matteo, Pavia**

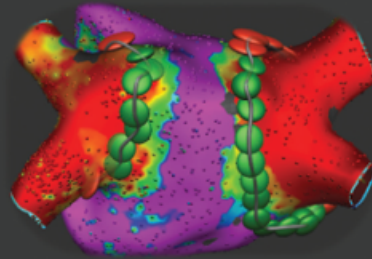


Sfhere 9 e AFFERA

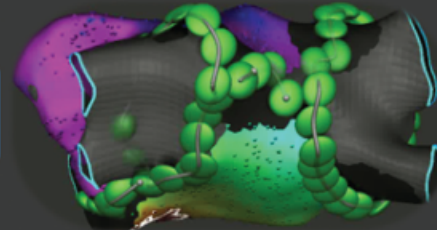




Post-**RF**/**PF** Voltage Map

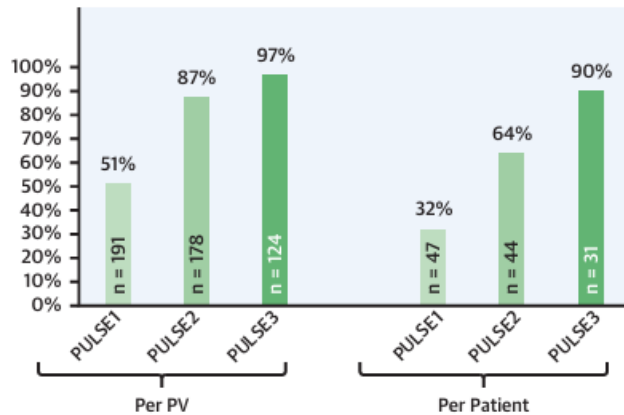


Post-**PF**/**PF** Activation Map

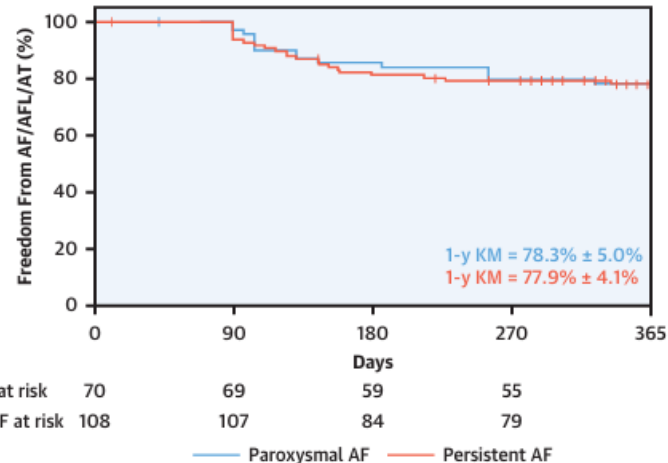


- = RF Lesion
- = PF Lesion

PVI Durability

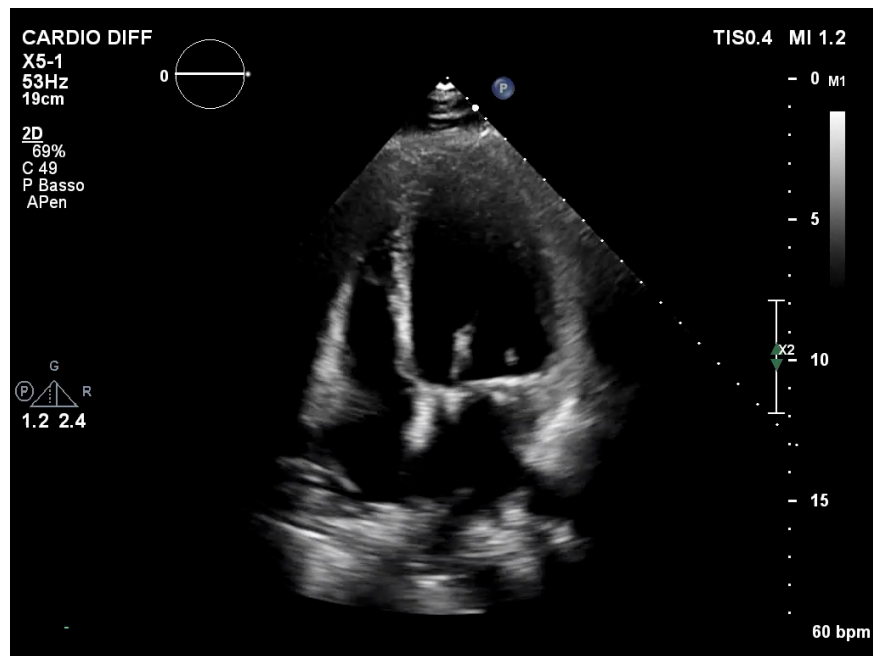


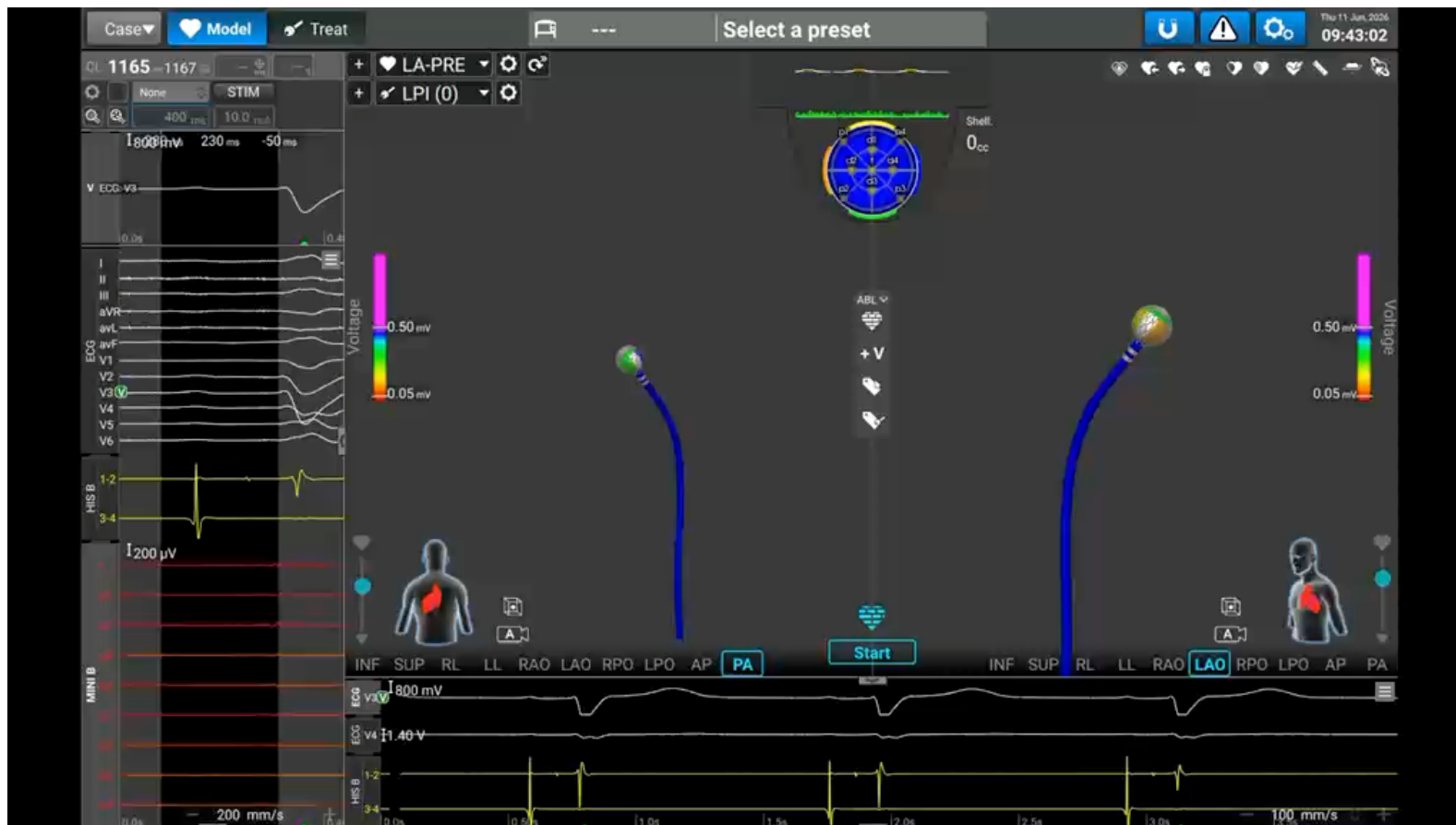
Full Cohort (n = 178)



Clinical Case

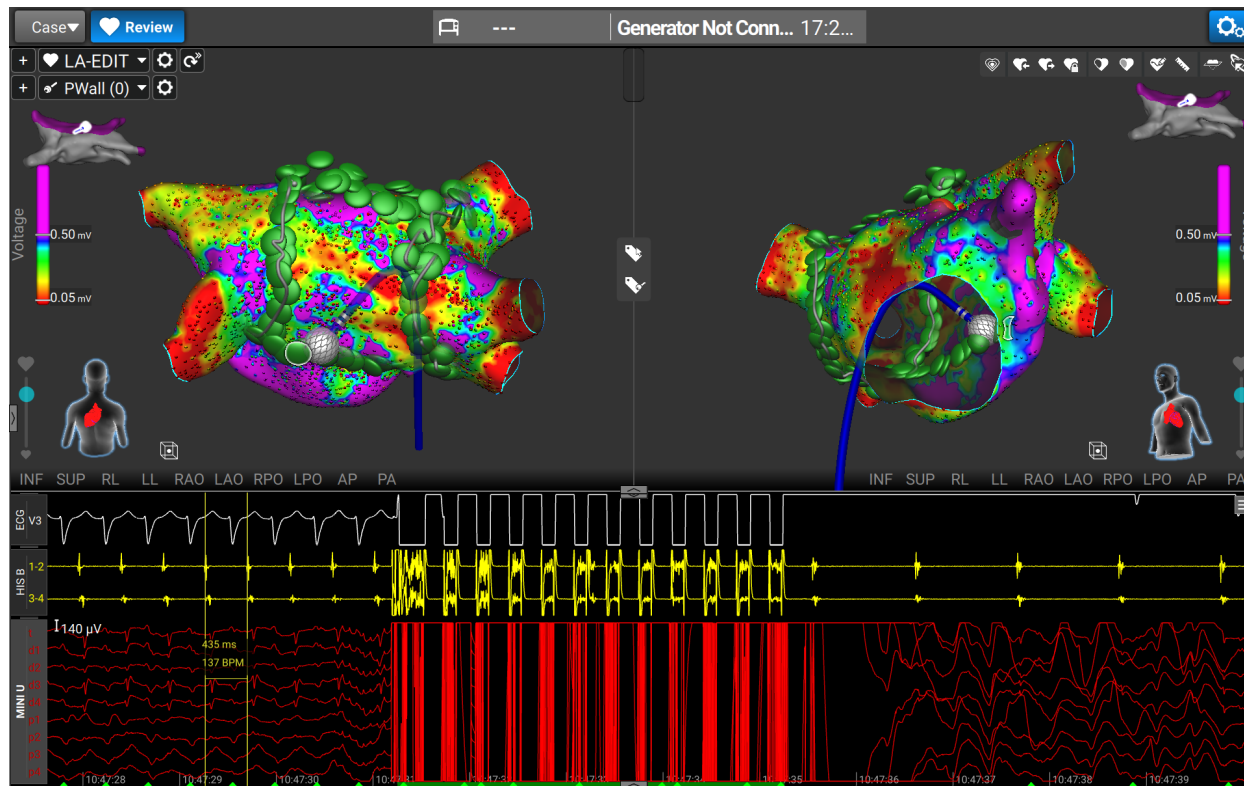
- RN male 54 years
- Non-ischemic cardiomyopathy
LBBB
- CRT-D (2024)
- Paroxysmal AF and
AFL → inappropriate ICD shocks
(2025)
- Recurrences on Amio (2026)



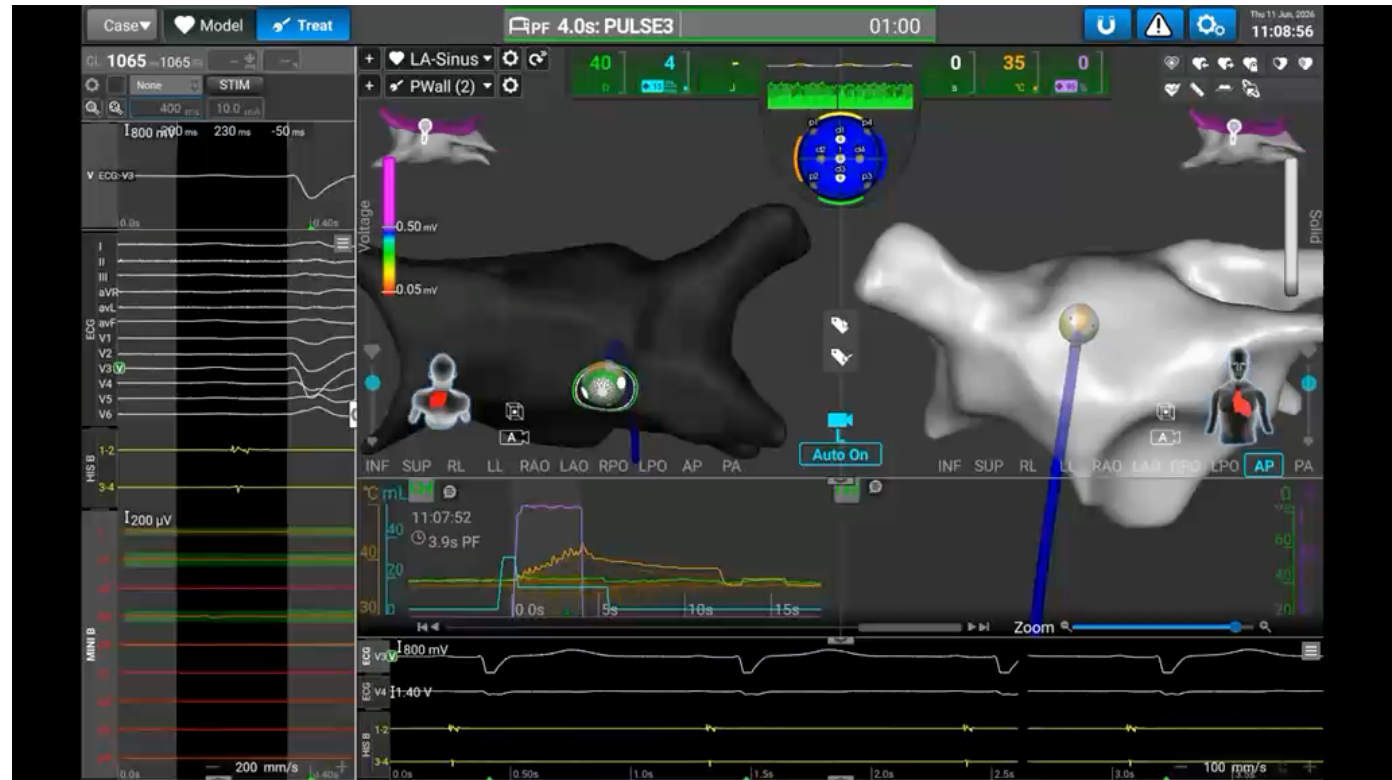




- ✓ **Left PVs encircling:**
26 PFA, 9 RF applications
- ✓ **Right PVs encircling:** 36 PFA applications
- ✓ **Posterior wall:** 43 PFA applications



- ✓ Mapping time: 17 min
- ✓ Fuoro time: 11 min
- ✓ Total proc time (skin-skin): 122 min



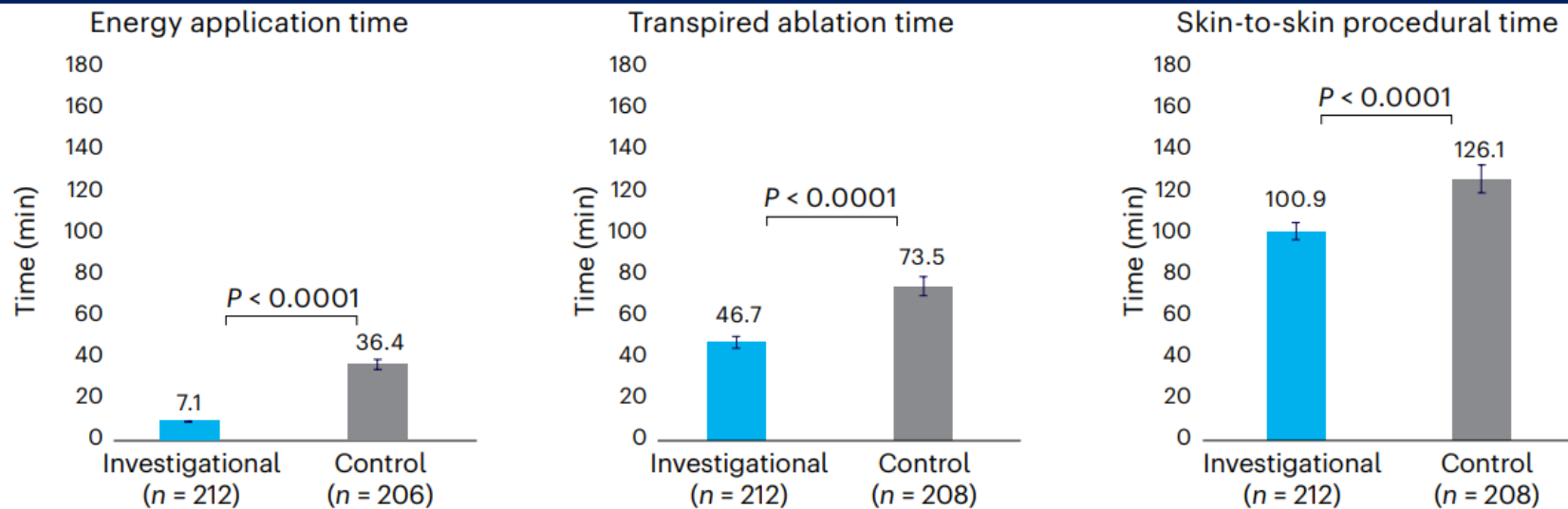
PFA vs. Thermal ablation

Persistent AF

a



c



No. at risk

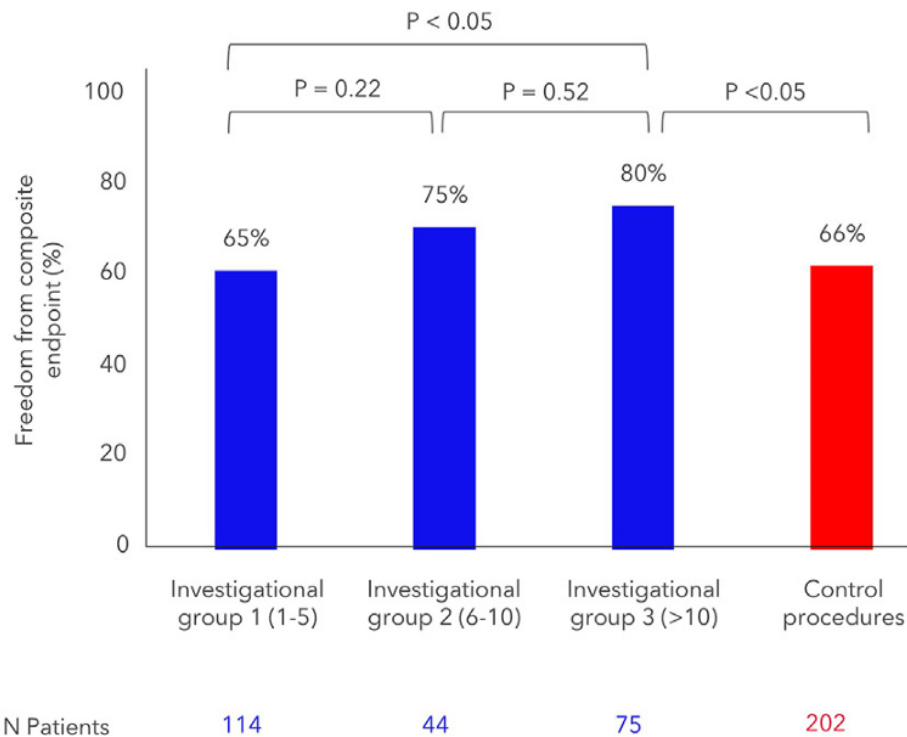
Investigational	212	211	181	166	84
Control	208	202	159	148	82

Days from index ablation procedure

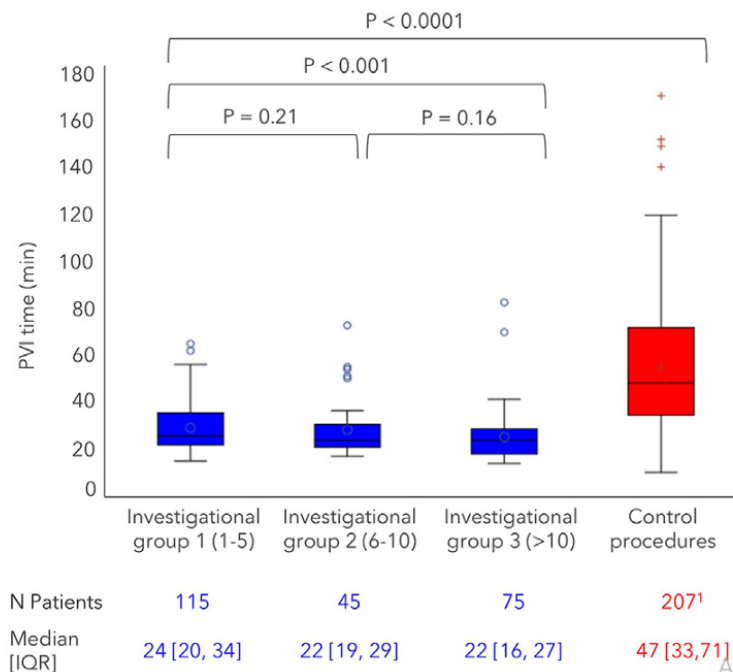
Sistema Socio Sanitario

Learning curve

Primary efficacy endpoint



Pulmonary vein isolation time



N Patients

114

44

75

202

N Patients

115

45

75

207¹

Median
[IQR]

24 [20, 34]

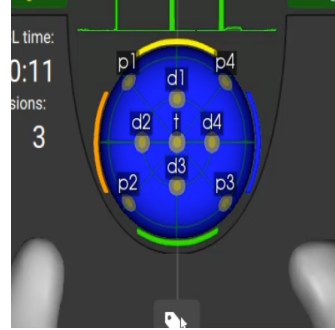
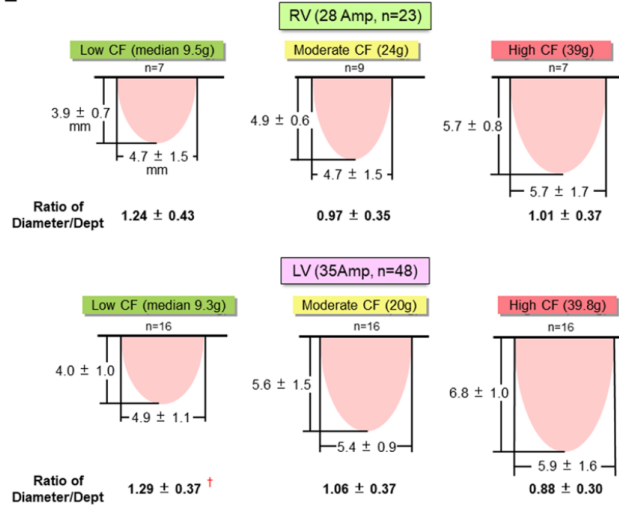
22 [19, 29]

22 [16, 27]

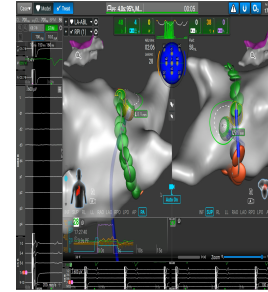
47 [33, 71]

PFA contact force

E

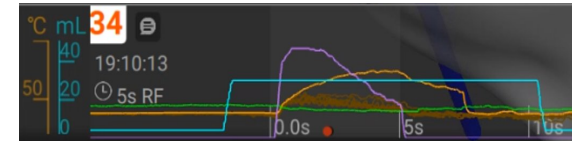
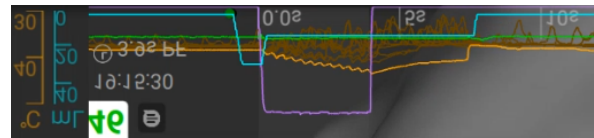


PF



RF

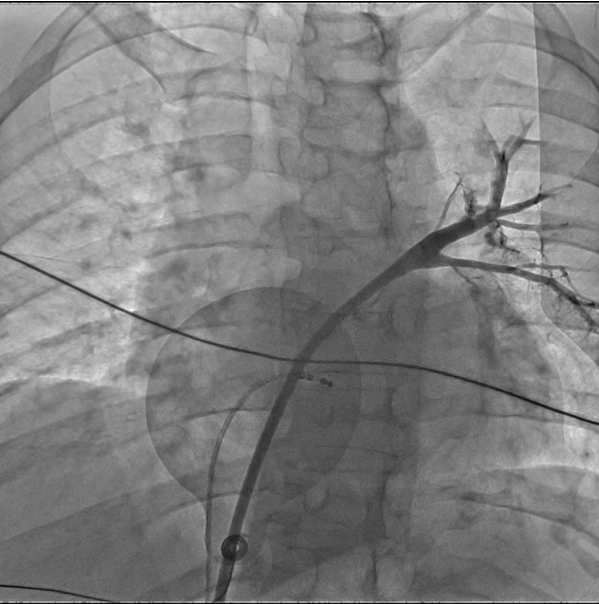
Nakagawa H. et al Circ Arrhythm Electrophysiol.
2024;17:e012026



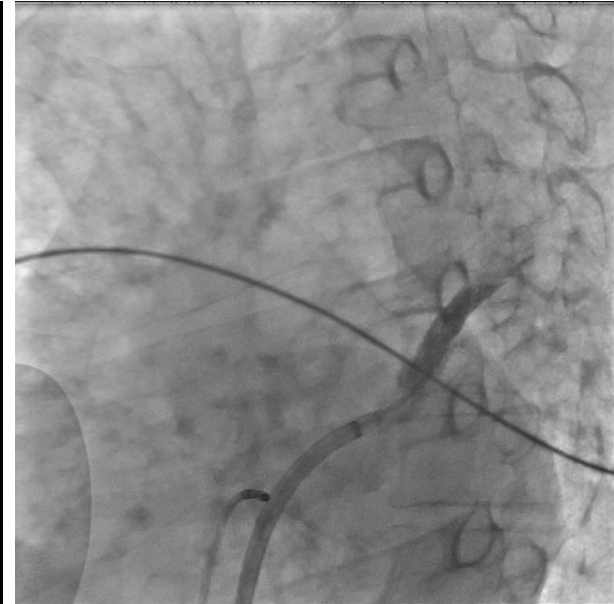
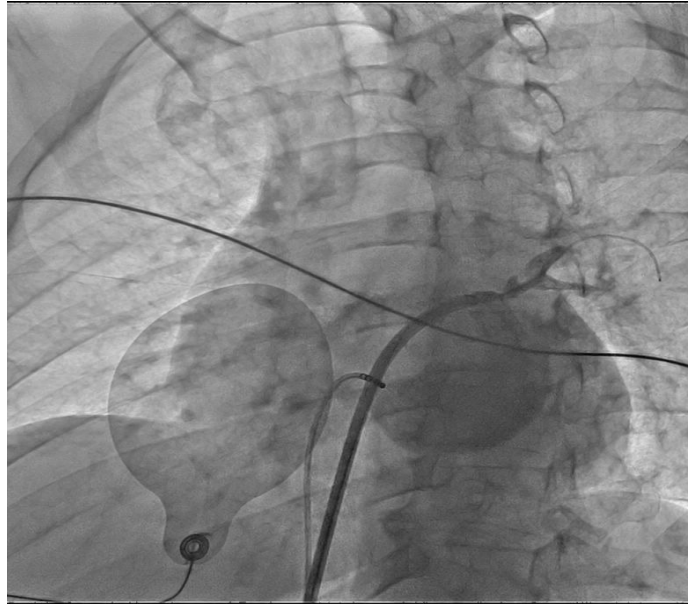
Sistema Socio Sanitario

PV stenosis

Baseline

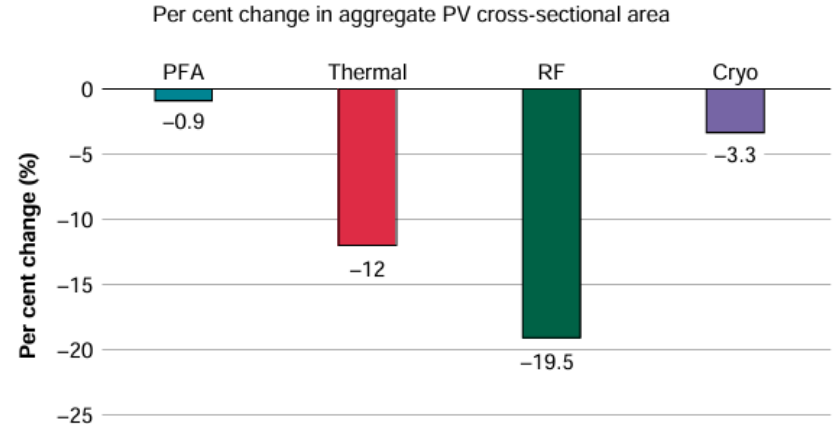
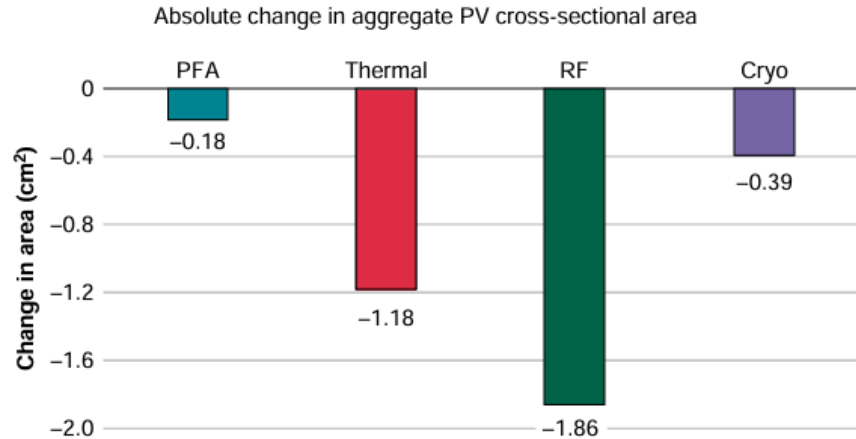


After LSPV stenting



PV stenosis/narrowing after PVI

ADVENT Trial



**CT performed at baseline
ad 3-months after PVI**

Large foot-print dual energy ablation for PAF

Pro

- Versatility for different anatomies
- Substrate mapping: prognostic information
- Shorter procedure (vs. point by point RF)
- Extra PV lesions (lines, PWI, non PV firing)
- Dual energy (advantages of both PFA and RF)
- Catheter maneuverability and 7.5 Fr long sheath



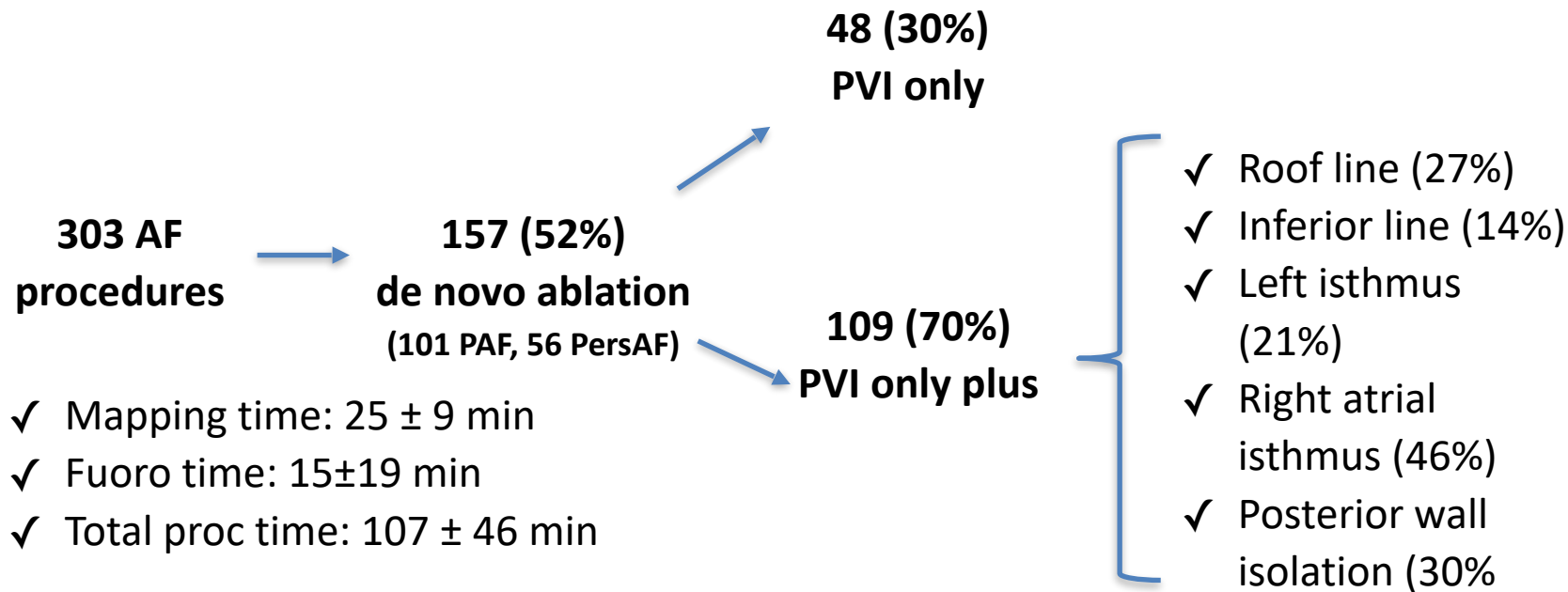
Con

- General anesthesia
- Risk of map shift (deep sedation)
- Longer procedure (vs. single shot cryo or PFA)
- Costs

Large foot-print dual energy ablation: who is the ideal candidate?

- ✓ Paroxysmal AF in pts with structural heart disease (enlarged LA)
- ✓ Paroxysmal AF in pts with particular anatomies
- ✓ Paroxysmal AF with concomitant typical or atypical FLA
- ✓ Paroxysmal AF redo procedures

The Italian Experience: 1 STOP Project



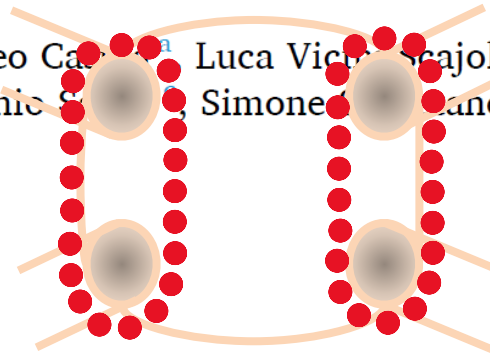
First catheter ablation for persistent atrial fibrillation

Posterior left atrial wall isolation for treatment of persistent atrial fibrillation during first catheter ablation: a systematic review and meta-analysis

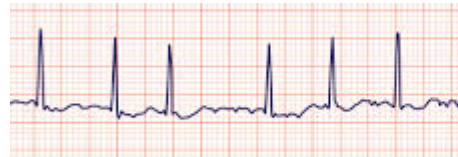
Meta-analysis on 15 studies (8 RCT, 7 observational studies)
3072 patients with persistent AF (1533 treated with PVI and 1539 with the addition of PWI)

Matteo Cappelletti^a, Luca Vicini^{b,c}, Scajola^{b,c}, Federico Quilico^{b,c}, Benvenuto^{b,c}, Cesarano^a, Antonio Sanna^c, Simone Di Biase^c, Roberto Rordorf^{c,*}

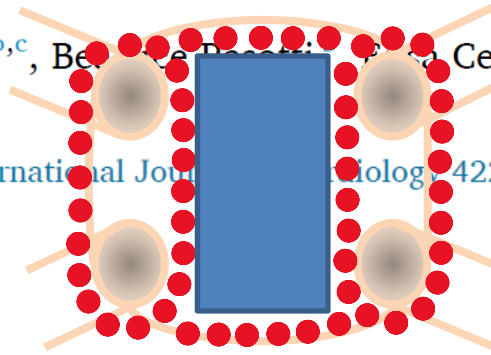
International Journal of Cardiology 422 (2025) 132987



Pulmonary vein isolation only
(PVI)



VS



Pulmonary vein isolation plus
posterior wall isolation
PVI + PWI

Any tachyarrhythmias recurrence: RR 0.83; 95% CI 0.66-1.03; P=0.10

AF recurrence: RR 0.63; 95% CI 0.48-0.84; p=0.002 AT/AFlu recurrence: RR 1.51; 95% CI 0.92-2.49; p=0.10

Major procedural complications: RR 0.94; 95% CI 0.50-1.78; p=0.85

Why to use large footprint catheter?



Thanks for
your
attention