TIGULLIO 2024 II Congresso Nazionale di ARITMOLOGIA

16-17 Aprile Sestri Levante (GE)

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Paolo Donateo, Lavagna *(Responsabile Scientifico)*
Roberto Maggi, Lavagna

Sede Congressuale
Hotel Vis a Vis ****
Sestri Levante

ELETTROPORAZIONE NELL'ABLAZIONE DELLA FA PERSISTENTE

FRANCESCO SOLIMENE
CLINICA MONTEVERGINE

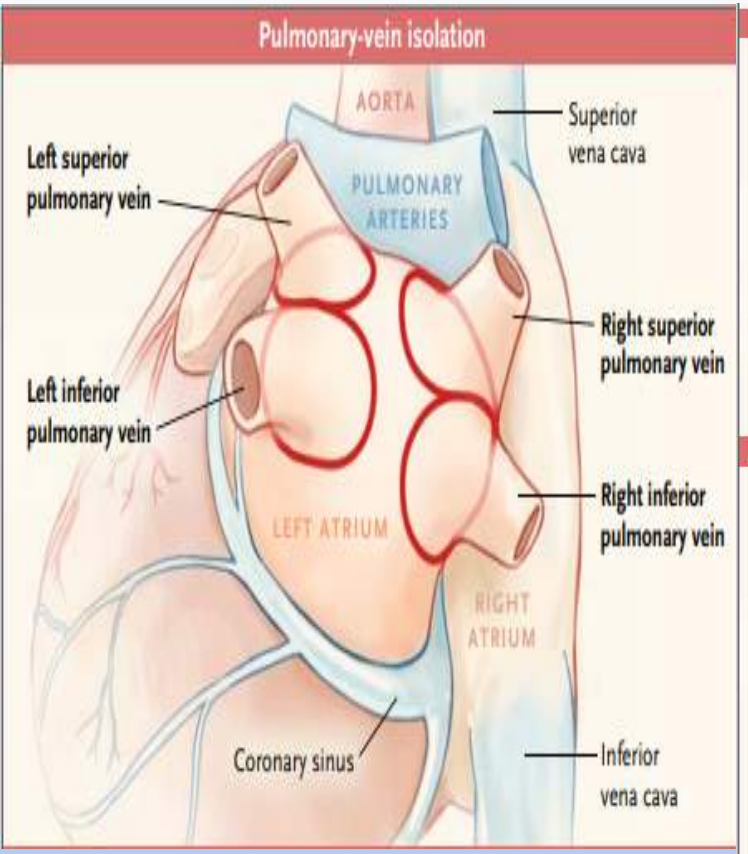
ISOLAMENTO DELLE VENE POLMONARI: PIETRA MILIARE DELL'ABLAZIONE DI FA

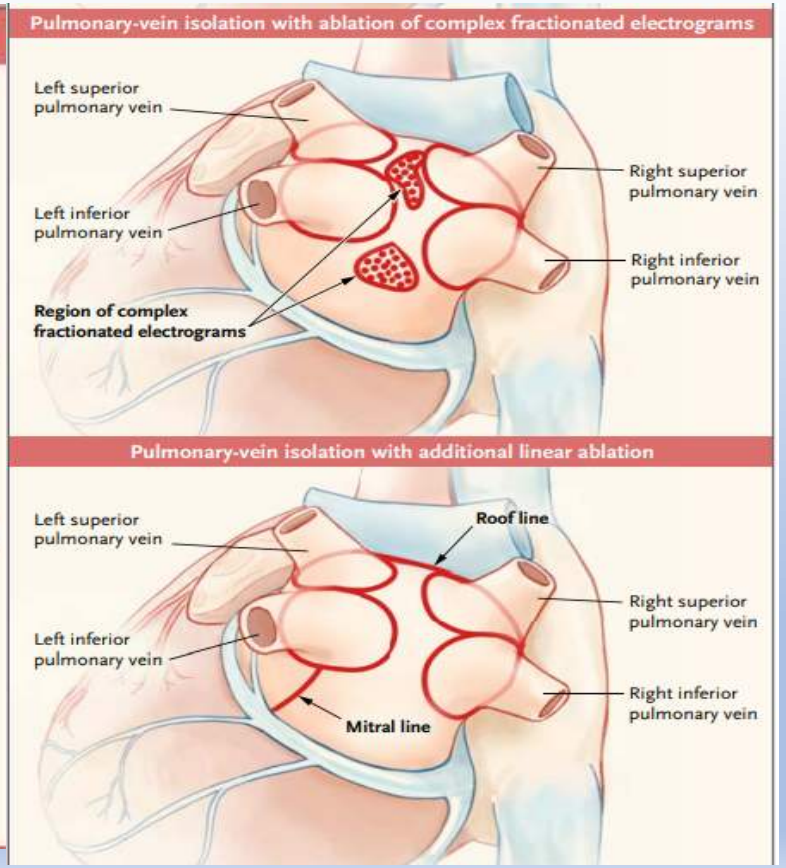
The NEW ENGLAND JOURNAL of MEDICINE

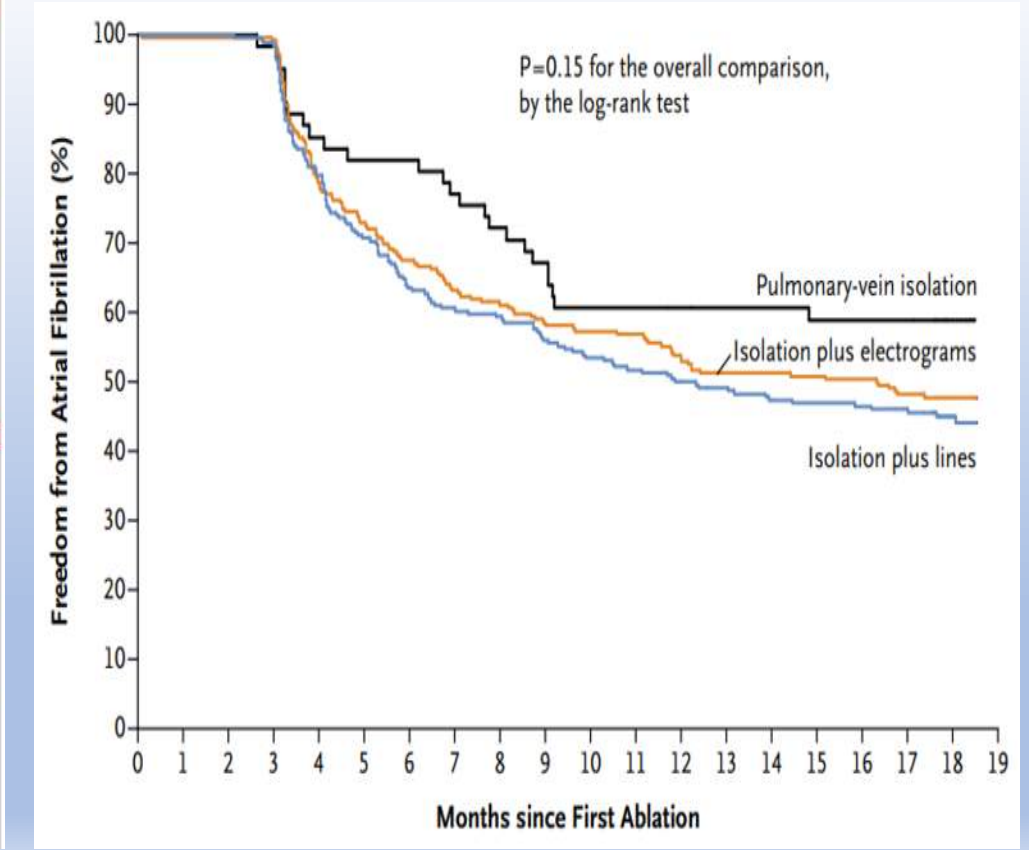
ORIGINAL ARTICLE

Approaches to Catheter Ablation for Persistent Atrial Fibrillation

Atul Verma, M.D., Chen-yang Jiang, M.D., Timothy R. Betts, M.D., M.B., Ch.B.,



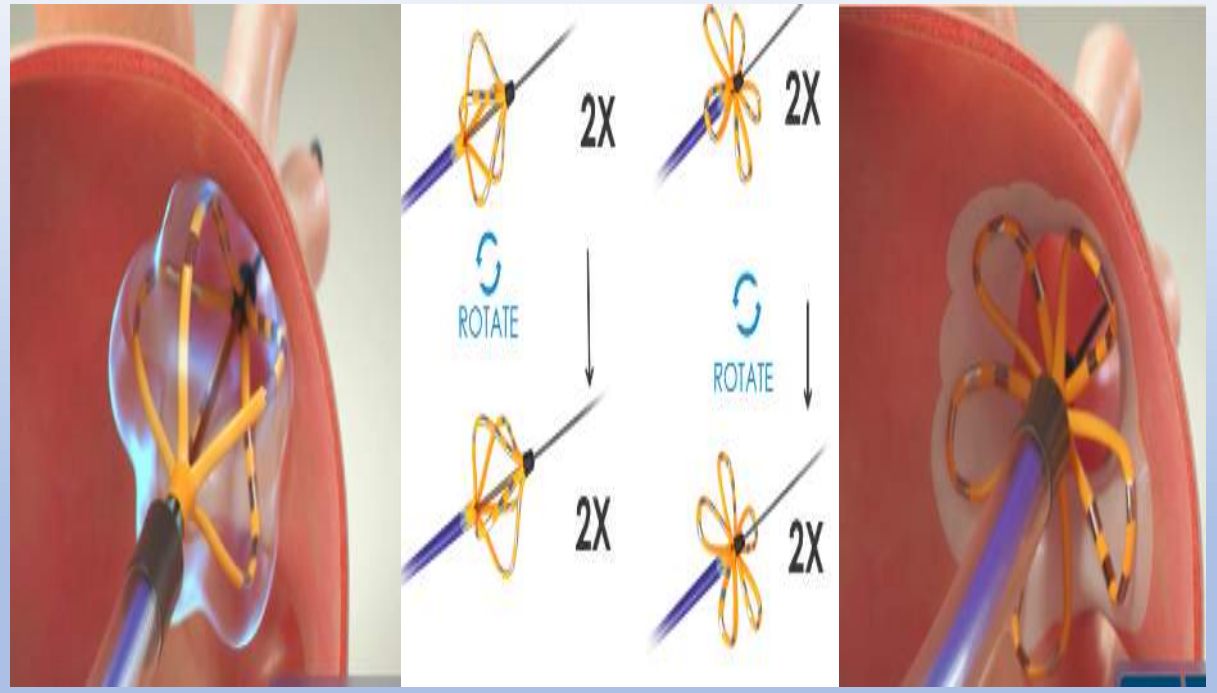




L’ELETTROPORAZIONE NELLA FIBRILLAZIONE ATRIALE PERSISTENTE

GLI APPROCCI PIU’ UTILIZZATI

ISOLAMENTO DELLE VENE POLMONARI

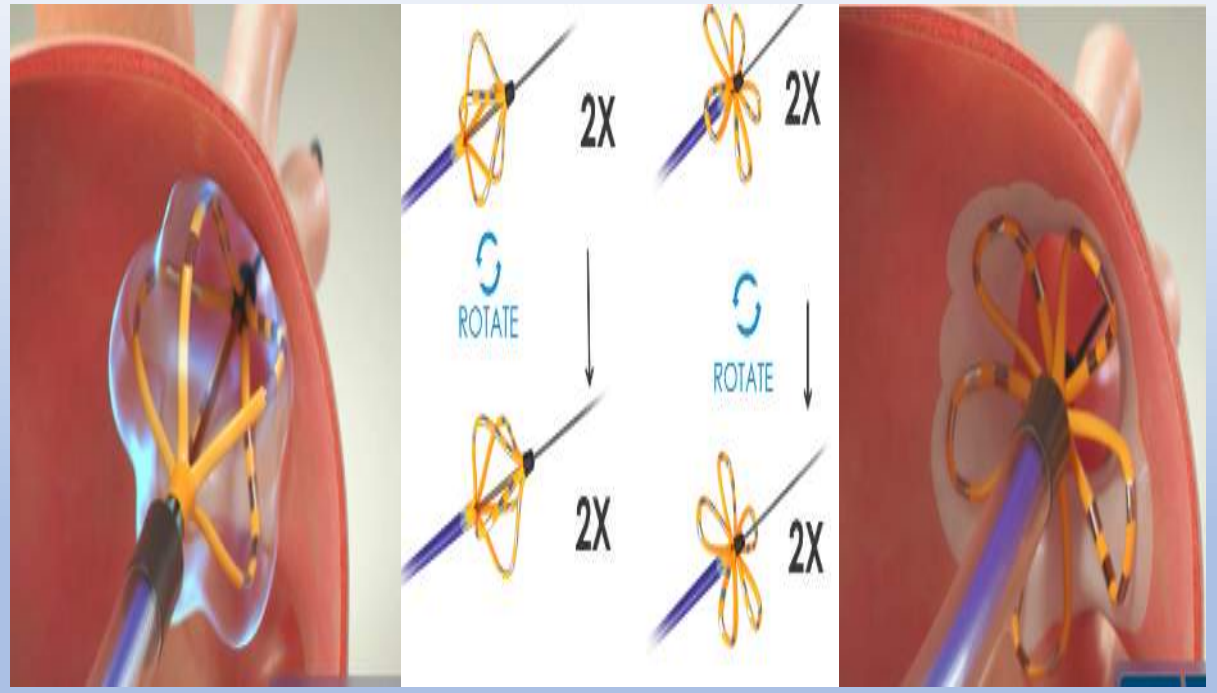


ISOLAMENTO DELLA PARETE POSTERIORE

L’ELETTROPORAZIONE NELLA FIBRILLAZIONE ATRIALE PERSISTENTE

GLI APPROCCI PIU’ UTILIZZATI

ISOLAMENTO DELLE VENE POLMONARI



ISOLAMENTO DELLA PARETE POSTERIORE

PERCHE’ PVI NEI PERSISTENTI CON FARAPULSE

LA LESIONE ANTRALE NEI PERSISTENTI GARANTISCE OUTCOME MIGLIORE

Comparative Effectiveness of Wide Antral Versus Ostial Pulmonary Vein Isolation

A Systematic Review and Meta-Analysis

Riccardo Proietti, MD, PhD; Pasquale Santangeli, MD; Luigi Di Biase, MD, PhD; Jacqueline Joza, MD; Martin Louis Bernier, MD; Yang Wang, MD; Antonio Sagone, MD; Maurizio Viecca, MD; Vidal Essebag, MD, PhD; Andrea Natale, MD

1183 PAZIENTI

Study or Subgroup	Events	Total	Events	Total	Weight	Odds Ratio M-H, Fixed, 95% CI
Arentz T	15	55	28	55	15.9%	0.36 [0.16, 0.80]
Mansour M	10	40	16	40	9.4%	0.50 [0.19, 1.30]
Nilsson B	12	46	34	54	18.1%	0.21 [0.09, 0.49]
Oral H	4	40	13	40	9.1%	0.23 [0.07, 0.79]
Sawhney	10	33	14	33	7.6%	0.59 [0.21, 1.63]
Tan HB	5	45	8	40	5.9%	0.50 [0.15, 1.68]
Yamada	11	51	22	50	13.6%	0.35 [0.15, 0.84]
Yamane T*	6	79	11	44	10.2%	0.25 [0.08, 0.72]
Yamane T**	8	38	14	26	10.2%	0.23 [0.08, 0.68]
Total (95% CI)		**427**		**382**	**100.0%**	**0.33 [0.24, 0.46]**
Total events	81		160			

Heterogeneity: Chi² = 4.66, df = 8 (P = 0.79); I² = 0%
Test for overall effect: Z = 6.64 (P < 0.00001)

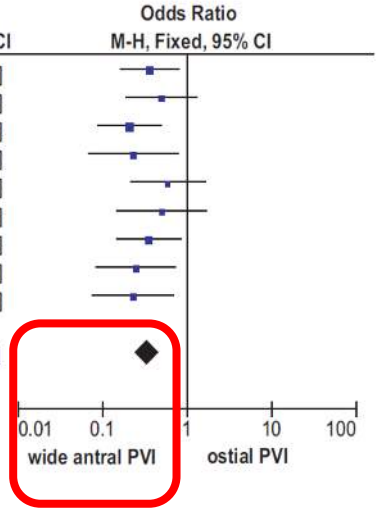
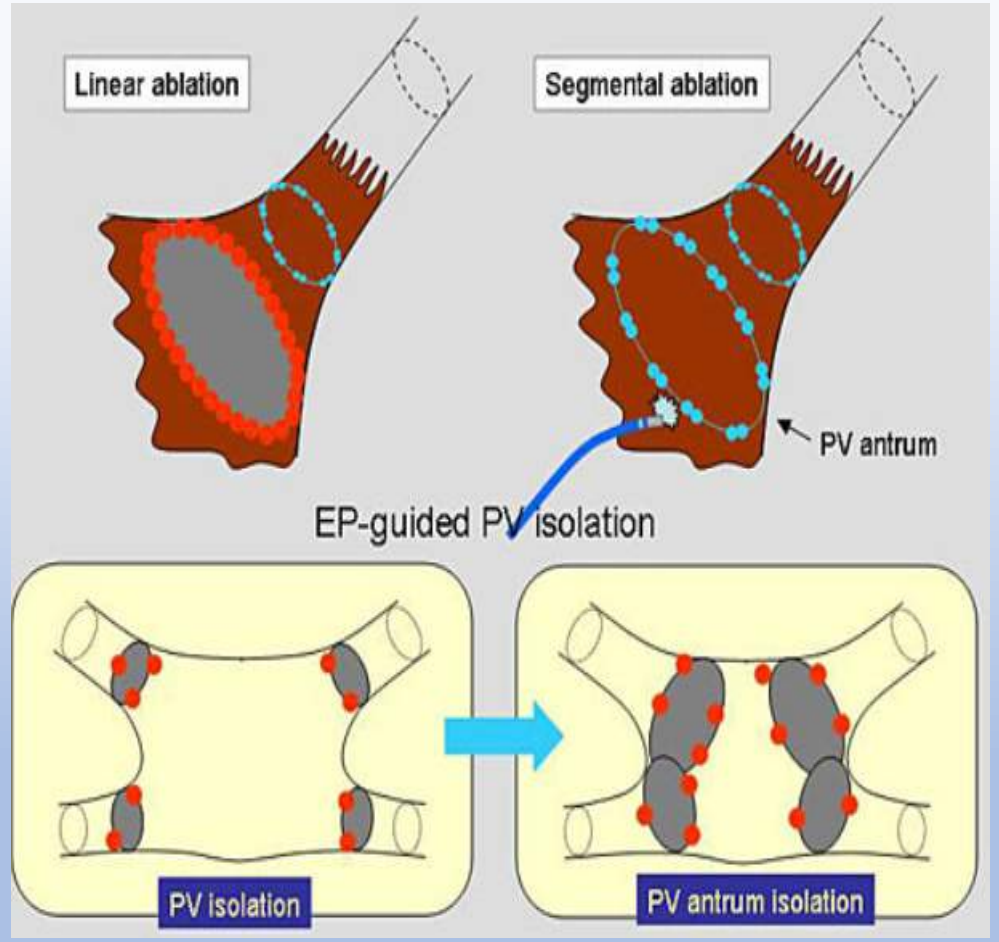


Figure 3. Antral vs ostial; outcome: recurrence AF

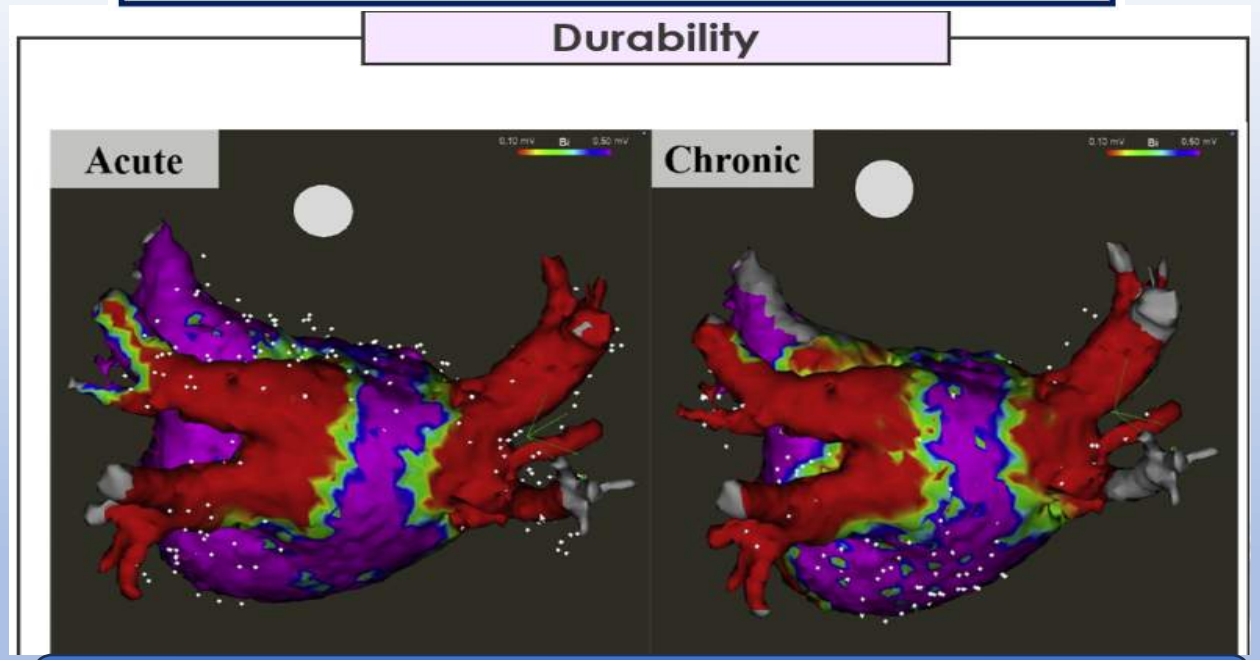


PERCHE’ PVI NEI PERSISTENTI CON FARAPULSE

LA LESIONE FARAPULSE E’ ANTRALE E NON REGREDISCE

Does pulsed field ablation regress over time? A quantitative temporal analysis of pulmonary vein isolation

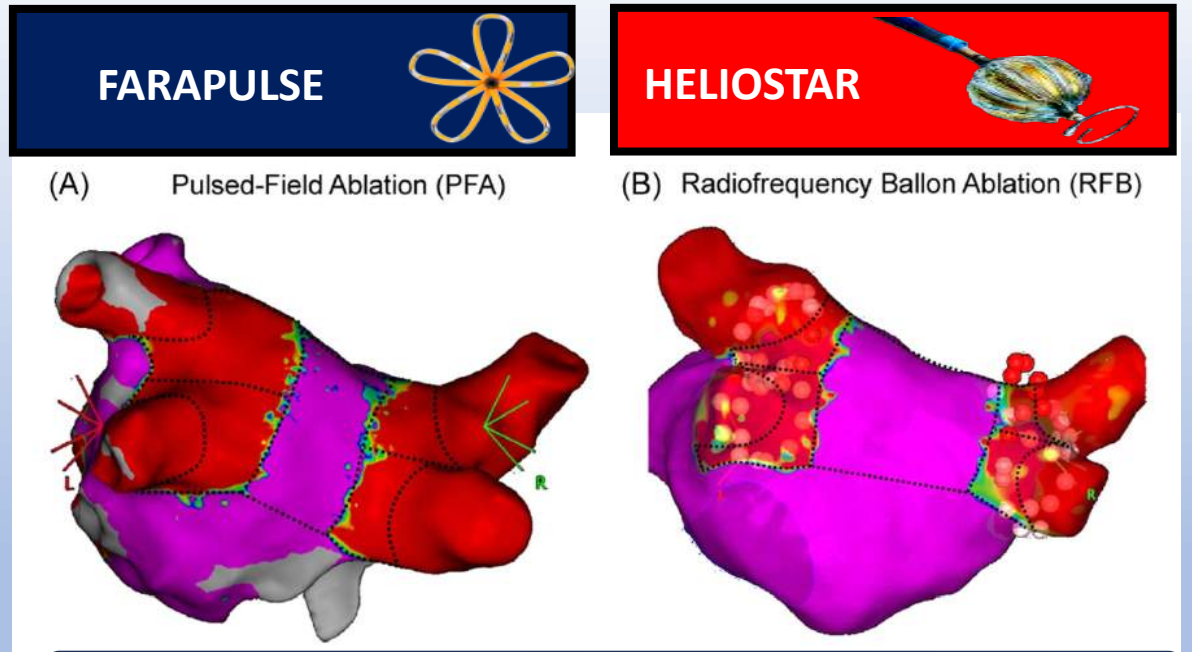
Iwanari Kawamura, MD,* Petr Neuzil, MD, PhD,† Poojita Shivamurthy, MD,*



LA LESIONE NON REGREDISCE DOPO 3 MESI

Acute lesion extension following pulmonary vein isolation with two novel single shot devices: Pulsed field ablation versus multielectrode radiofrequency balloon

Ilaria My MD[1,2] | Marc D. Lemoine MD[1,2] | Mahi Butt[1,2] | Celine Mencke[1,2] | Fabian W. Loeck MD[1,2] | Julius Obergassel MD[1,2] | Laura Rottner MD[1,2] |



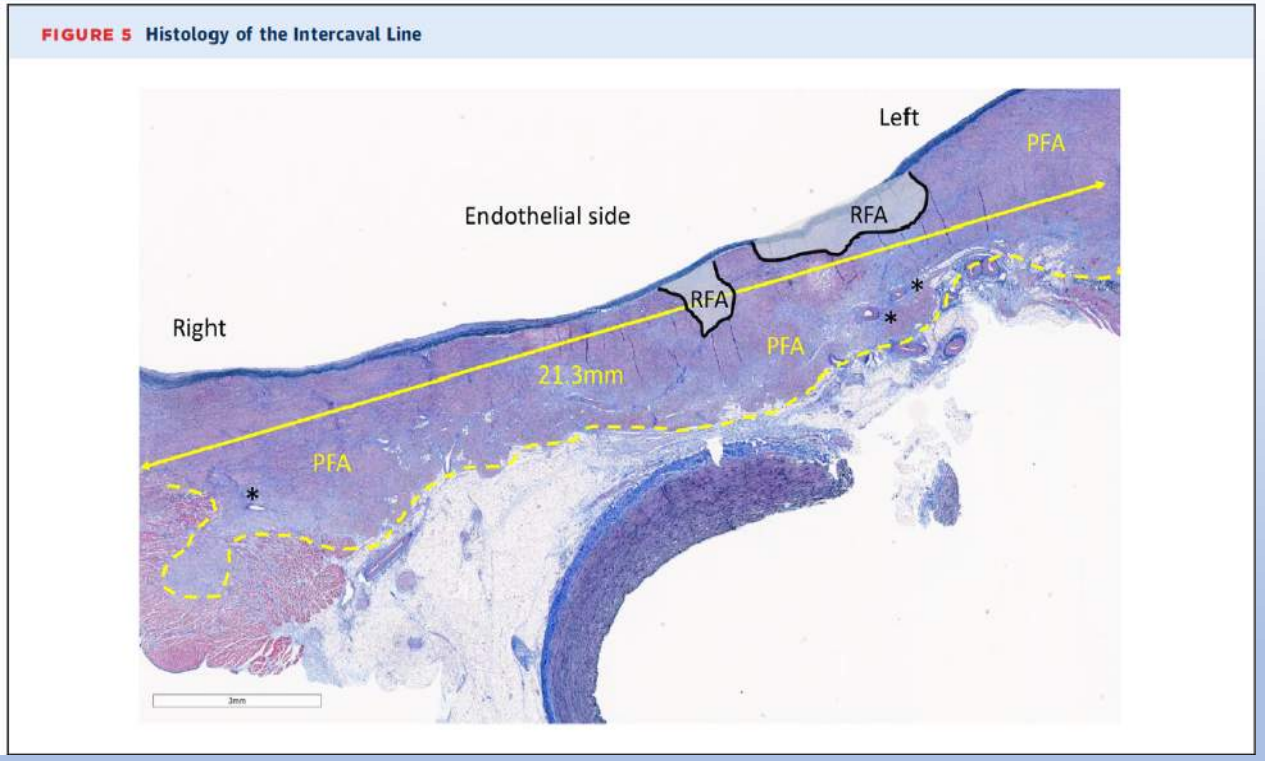
LA LESIONE HA AMPIO VOLUME ANTRALE

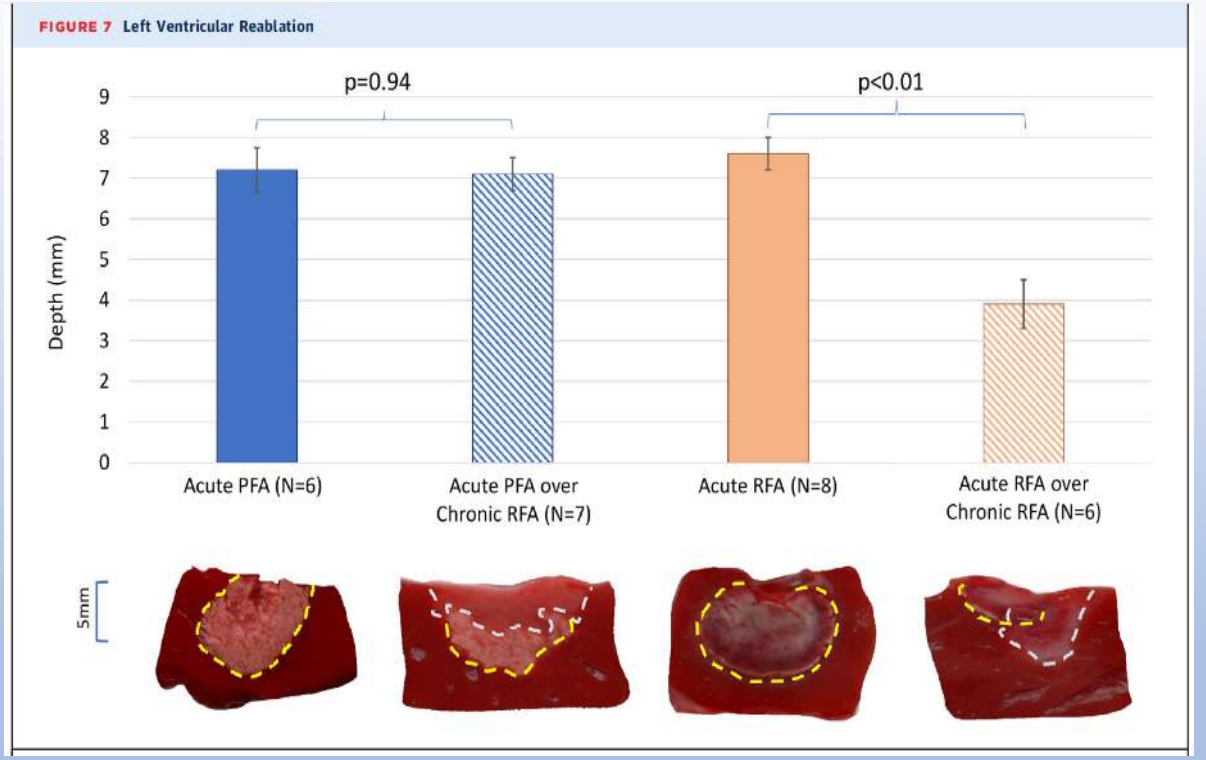
PERCHE’ PVI NEI PERSISTENTI CON FARAPULSE: ANCHE NEI REDO

PFA ESTENDE LE LESIONI RF PREGRESSE

Efficacy of Pulsed Field vs Radiofrequency for the Reablation of Chronic Radiofrequency Ablation Substrate

Redo Pulsed Field Ablation



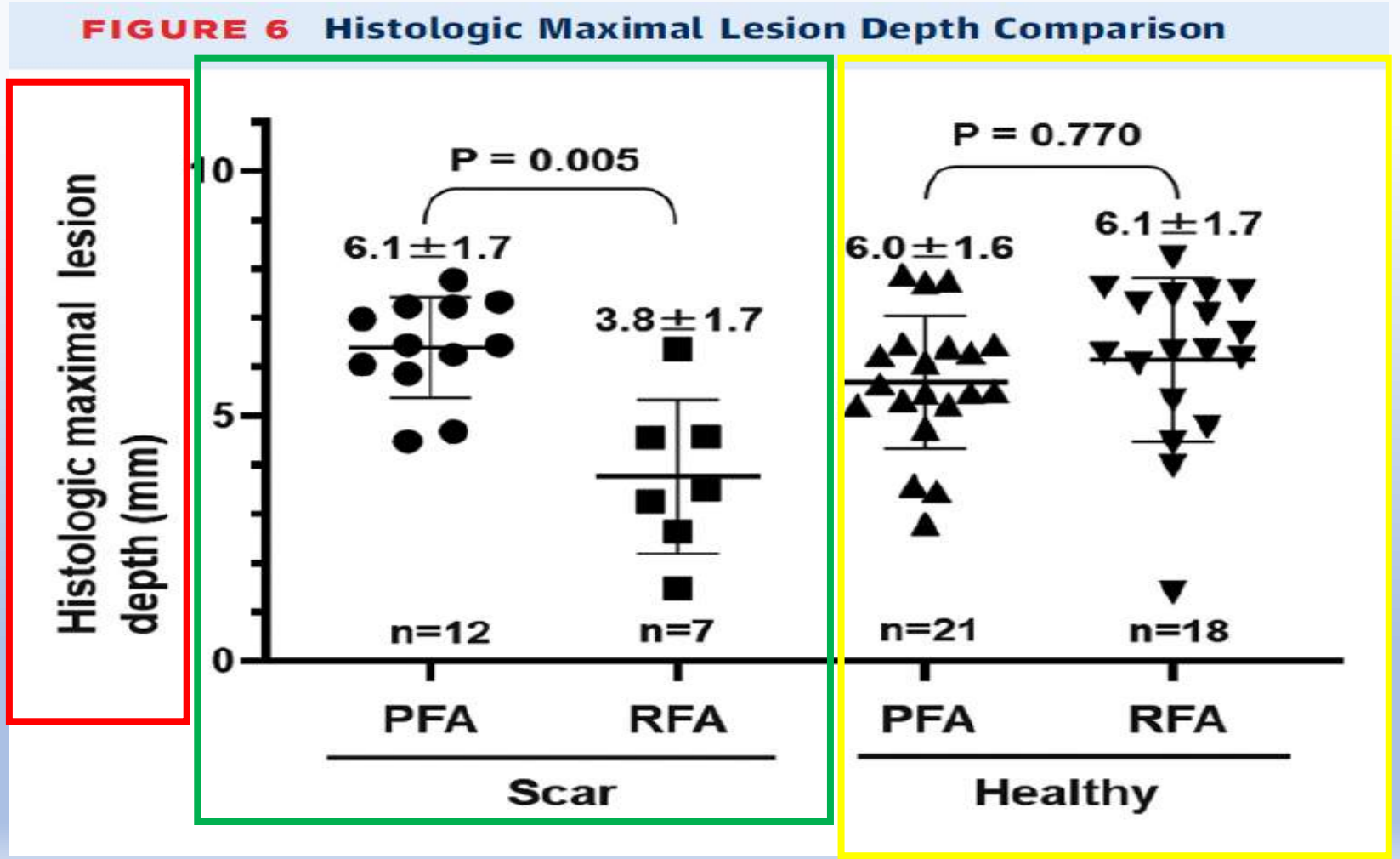


PFA LESION EXPANDS AND HOMOGENIZE THE PREVIOUS RF LESIONS

PFA PENETRATES PREVIOUS RF SCAR BETTER THAN A RF REDO

LA PFA E' PIU' EFFICACE DELLA RF NELLA FIBROSI

PFA CREATES DEEPER LESIONS IN DISEASED TISSUE COMPARED TO RF



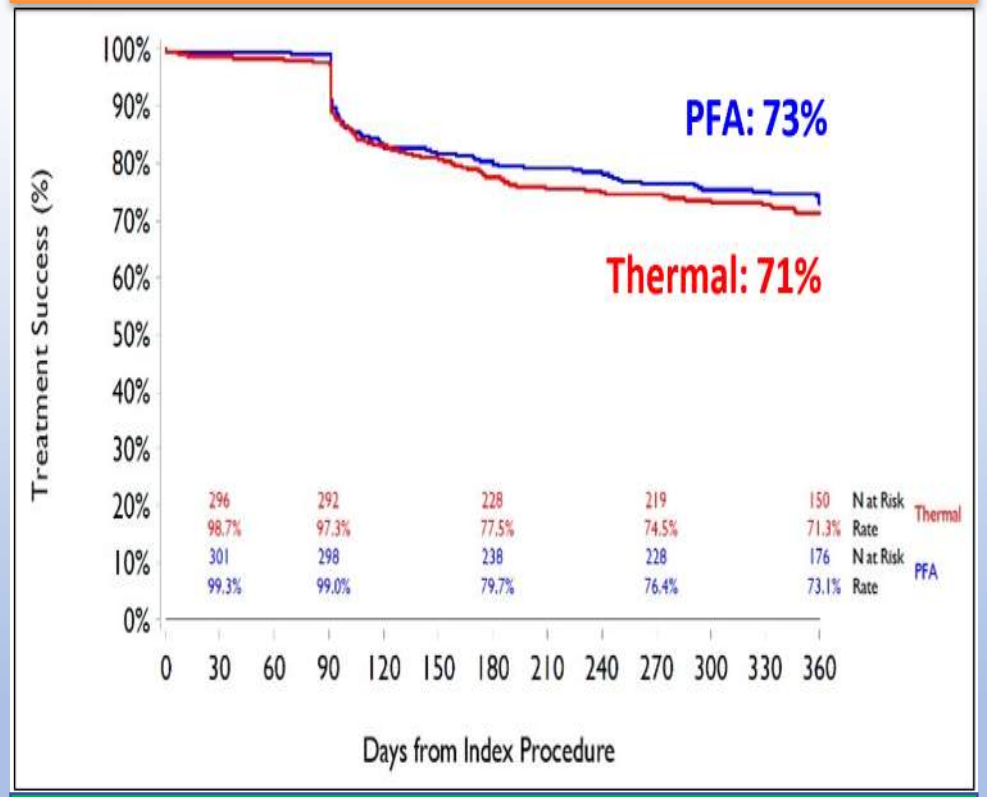
PFA PERFORMS EQUALLY WELL AS RF IN HEALTHY VENTRICULAR TISSUE

PFA CREATES MUCH DEEPER LESIONS THAN RF IN VENTRICULAR SCARS

EFFICACIA DELLA PFA NELLA FA PERSISTENTE

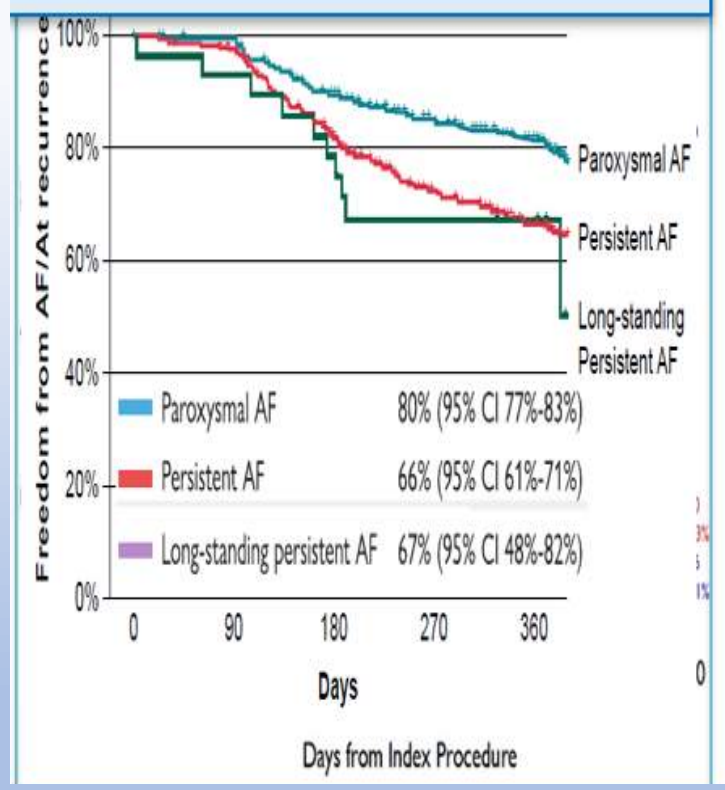
STUDIO DI CONFRONTO SOLO SU FA PAROSSISTICA

STUDIO RANDOMIZZATO ADVENT: 300 PZ

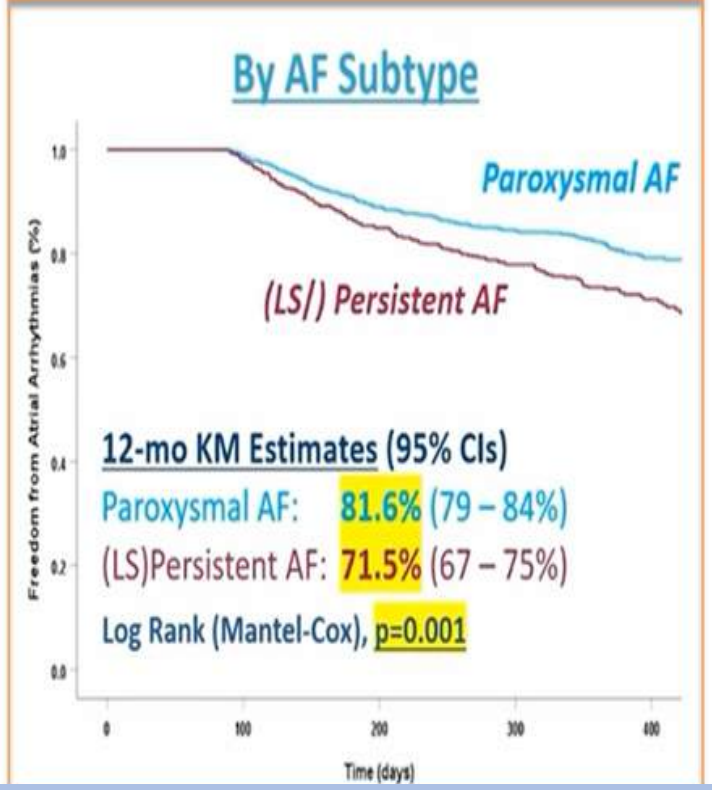


FA PAROSSISTICA (SENZA FARMACI)

EUPHORIA: 1233 PZ



MANIFEST: 1568 PZ



EFFICACIA FA PERSISTENTE

PERCHE' PVI NEI PERSISTENTI CON FARAPULSE: SICUREZZA

- Retrospective observational study of the real-world commercial use of FARAPULSE Pulsed Field Ablation.
- The data expands beyond the previously published MANIFEST-PF registry to include a total of 17,642 (35% PersAF) patients.
- Excluded the initial patients already reported in MANIFEST-PF
  - Excluded 1,758 patients at the original 24 MANIFEST-PF sites
- The first PFA cases from the initial MANIFEST-PF sites were performed an average of 14 months (6/2021) in advance of the expanded MANIFEST-17K sites (8/2022).

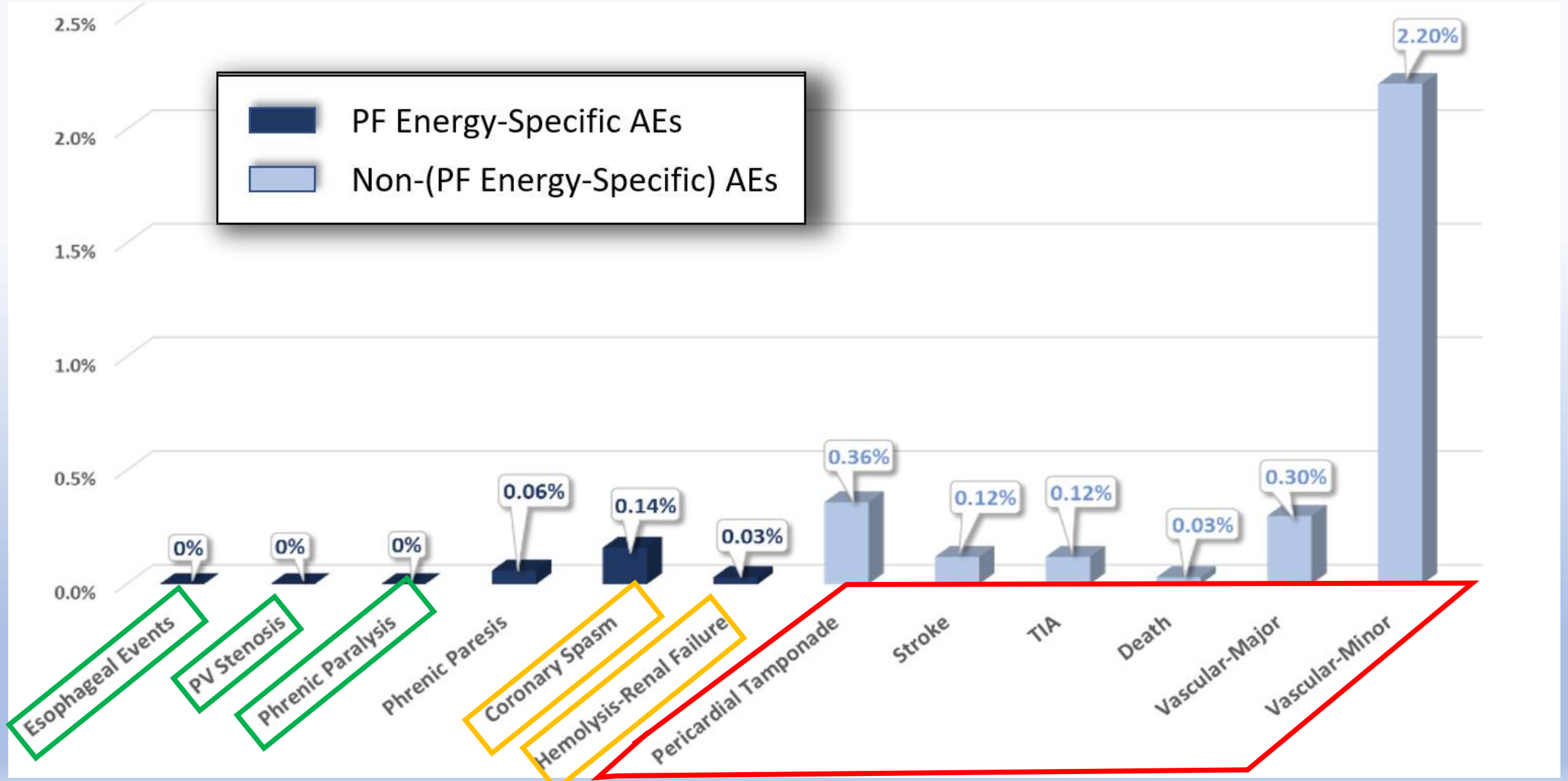
106 Centers

91.4% of all commercial centers using FARAPULSE

413 Operators

17,642 Patients
(35% PersAF)

PERCHE' PVI NEI PERSISTENTI CON FARAPULSE: SICUREZZA



PERCHE' PVI NEI PERSISTENTI CON FARAPULSE: SICUREZZA

META-ANALISI: CRIOABLAZIONE VS PFA

Comparative Safety of Pulsed Field Ablation and Cryoballoon Ablation Technologies for Pulmonary Vein Isolation in Patients with Paroxysmal Atrial Fibrillation: A Critical Literature Review and Indirect Treatment Comparison

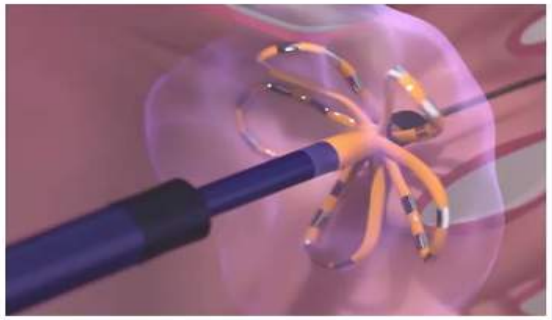
Sonia Maccioni · Reecha Sharma · Donghyun D. Lee · Anja Haltner · Rahul Khanna · Johan Vijgen

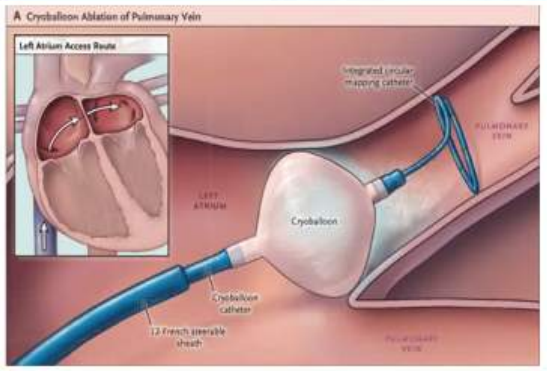
497 PFA patients vs 1113 CRYO patients
With similar clinical characteristics

Device	Trial name (NCT #) Author (Year)	Sample size (relevant arm)	Study design	Intervention	Comparator (control)	Follow-up
Pulsed field ablation	InspIRE (Wave II) (NCT04524364) InspIRE (Wave I) Duytschaever et al. (2023)	226	Prospective, multi-center, single-arm trial	VARIPULSE® Catheter and TRUPULSE™ Generator, Boston Scientific	None	12 months
	IMPULSE / PERCAT / PEFCAT II (NCT03700385 / NCT03714178 / NCT04170608) Reddy et al. (2021)	121 (40/73/ 20)[a]	Prospective, multi-center, single-arm trial	Farapulse, Boston Scientific	None	12 months
	PULSED AF (NCT04198701) Verma et al. (2023)	150	Prospective, multi-center, single-arm trial	PulseSelect, Medtronic	None	12 months
Cryoballoon ablation	Cryo Versus RF (NCT01058815) Hunter et al. (2015)	78	Prospective, single-center, randomized, controlled trial	Arctic Front™ cryoablation catheter, Medtronic	RFA	12 months
	SUPER (NCT01645917) Reddy et al. (2015)	21	Prospective, single-center, single-arm trial	Arctic Front™ cryoablation catheter, Medtronic	None	3.4 (2.9–4.1) months Median (range)
	phaseONE (NCT02789358) Ferrero-de Loma-Osorio et al. (2017)	140	Prospective, multi-center, randomized, controlled trial	Arctic Front™ cryoablation catheter, Medtronic	CBA (new protocol)	12.29 (2.99) months, mean (SD)
	STOP AF PAS (NCT01459939) Knight et al. (2019)	344	Prospective, multi-center, single-arm trial	Arctic Front™ cryoablation catheter, Medtronic	None	34.3 (7.4) months, mean (SD)
	FreezeAF (NCT00774566) Luik et al. (2015)	156	Prospective, randomized, controlled, non-inferiority study	Arctic Front™ cryoablation catheter, Medtronic	RFA	12 months
	Fire and ice (NCT01490814) Kuck et al. (2016)	374	Prospective, randomized, controlled trial	Arctic Front™ cryoablation catheter, Medtronic	RFA	18 months (mean); 35 months (maximum)

Table 4 Number of events for individual safety outcomes in pooled PFA and CBA trials

Events	Pulsed field ablation (n = 497 patients)	Cryoballoon ablation (n = 1113 patients)
Composite major adverse events	4	57
Cardiac perforation	0	NR
Cardiac tamponade	1	1
Pericardial effusion	1	6
Pericarditis	0	NR
Stroke or cerebrovascular accident (CVA)	1	1
Thromboembolism	0	NR
Transient ischemic attack (TIA)	0	2
Major vascular access complication / bleeding[a]	1	12
Myocardial Infarction	0	NR
Phrenic nerve paralysis	0	33
Atrio-esophageal (AE) fistula	0	0
Device- or procedure-related death	0	0
Pulmonary vein (PV) stenosis	0	2





Outcome	Indirect comparison		Single-arm meta-analyses	
	PFA vs. CBA risk difference % (95% CI)	PFA vs. CBA risk ratio (95% CI)	PFA events % (95% CI)	CBA events % (95% CI)
Composite of major adverse events (primary)	− 4.3 (− 5.8, − 2.8)	0.16 (0.07, 0.45)	0.4 (0.0, 1.3)	5.6 (2.6, 8.6)
Composite of prespecified adverse events (secondary)	− 2.5 (− 4.4, − 0.5)	0.53 (0.31, 0.96)	2.7 (1.2, 4.1)	5.8 (2.7, 9.0)

Diffenza Significativa

PERCHE’ PVI NEI PERSISTENTI CON FARAPULSE: EFFICIENZA

Tempi procedurali nei centri esperti

Pulsed Field Versus Cryoballoon Pulmonary Vein Isolation for Atrial Fibrillation: Efficacy, Safety, and Long-Term Follow-Up in a 400-Patient Cohort

Lukas Urbanek, MD*; Stefano Bordignon, MD*; David Schaack, MD; Shaojie Chen, MD; Shota Tohoku, MD; Tolga Han Efe, MD; Ramin Ebrahimi, MD; Francesco Pansera, MD; Jun Hirokami, MD; Karin Plank, MD; Alexander Koch, MD; Britta Schulte-Hahn, MD; Boris Schmidt, MD; K.R. Julian Chun, MD

Balanced Cohorts

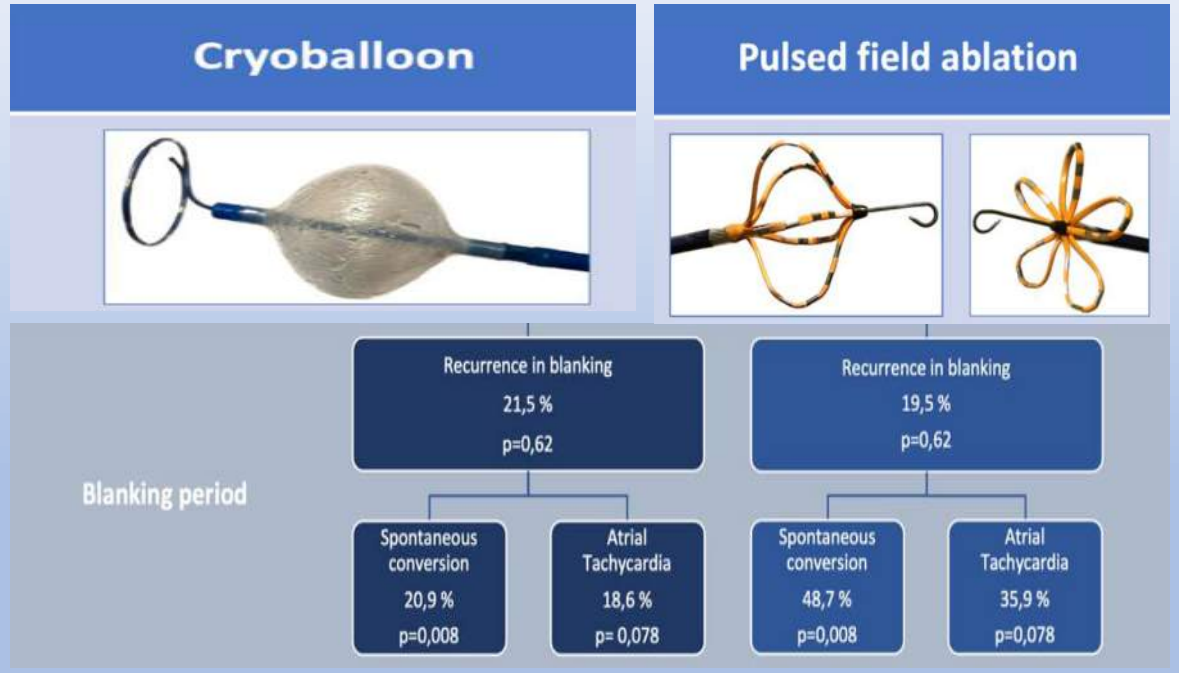
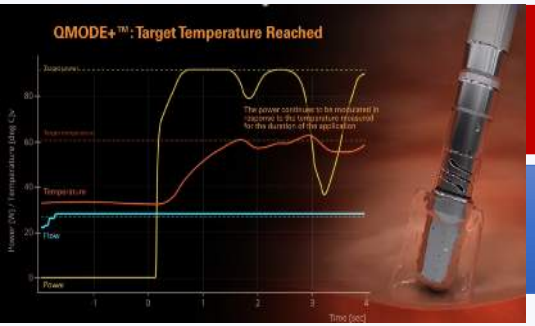


Table 2. Procedural Data

Procedural data	CB (n=200)	PFA (n=200)	*P* value
Procedural time, min	50 (45–60)	34.5 (29–40)	<0.001
Fluoroscopy time, min	6.9 (5.5–8.8)	7.1 (5.5–8.9)	0.958
Fluoroscopy dose, uGym^2	491 (292–874)	414.5 (263–712)	0.058
PVs identified	783	787	
PVs acutely isolated with CB/PFA	779/783 (99.5%)	787/787 (100%)	0.062
CTI ablation	3/200 (1.5%)	3/200 (1.5%)	

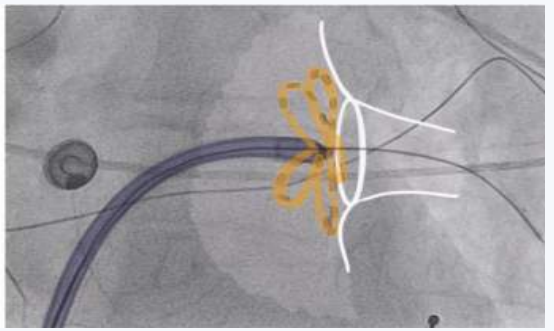
Table 3. Procedural Complications

Procedural complications	CB (n=200)	PFA (n=200)	*P* value
Complications at access site	7 (3.5%)	5 (2.5%)	0.558
Persistent PNP	3 (1.5%)	0	0.248
Tamponade	0	1 (0.5%)	
Stroke or TIA	1 (0.5%)	0	
Esophageal injury	1 (0.5%)	0	
Hemoptysis	1 (0.5%)	0	
Total	13 (6.5%)	6 (3.0%)	0.1



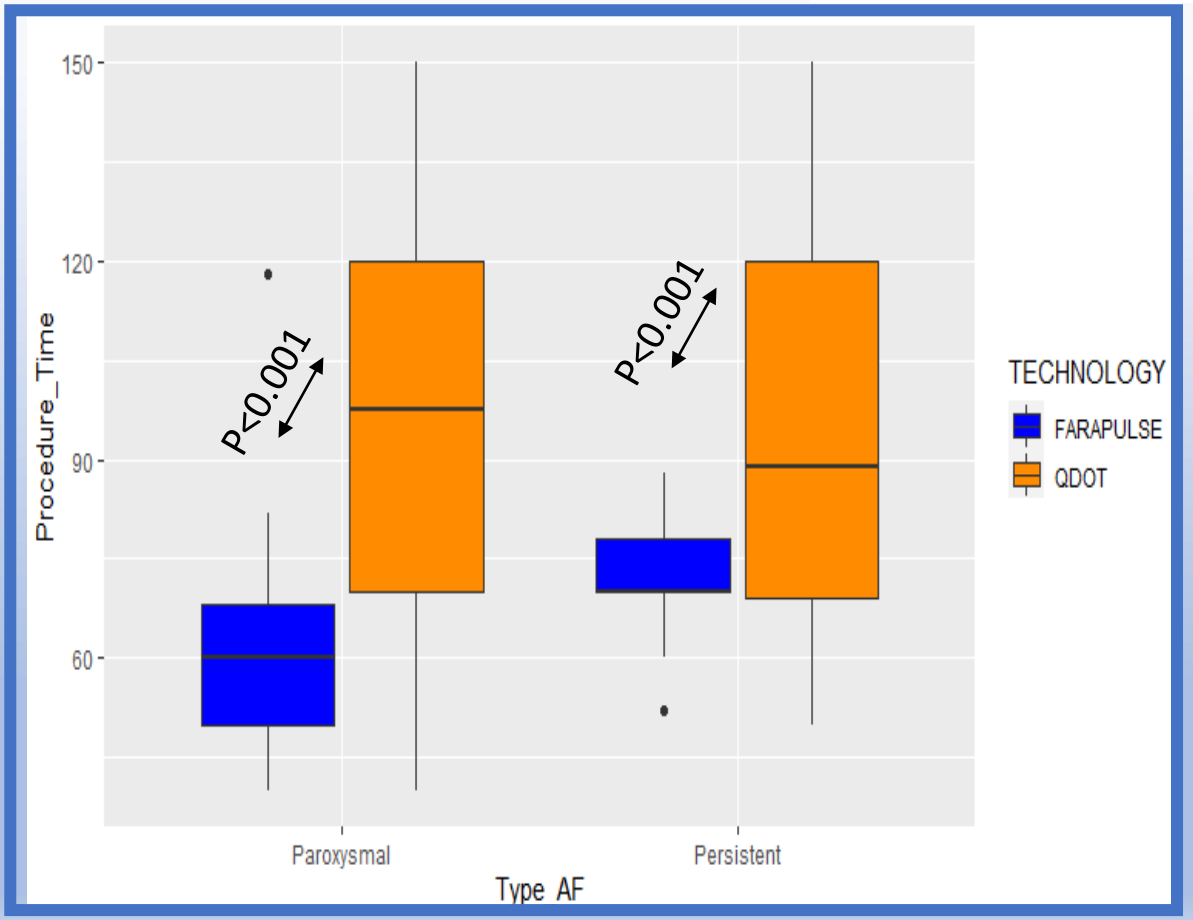
90 W/4s VS FARAPULSE:IN REVIEW

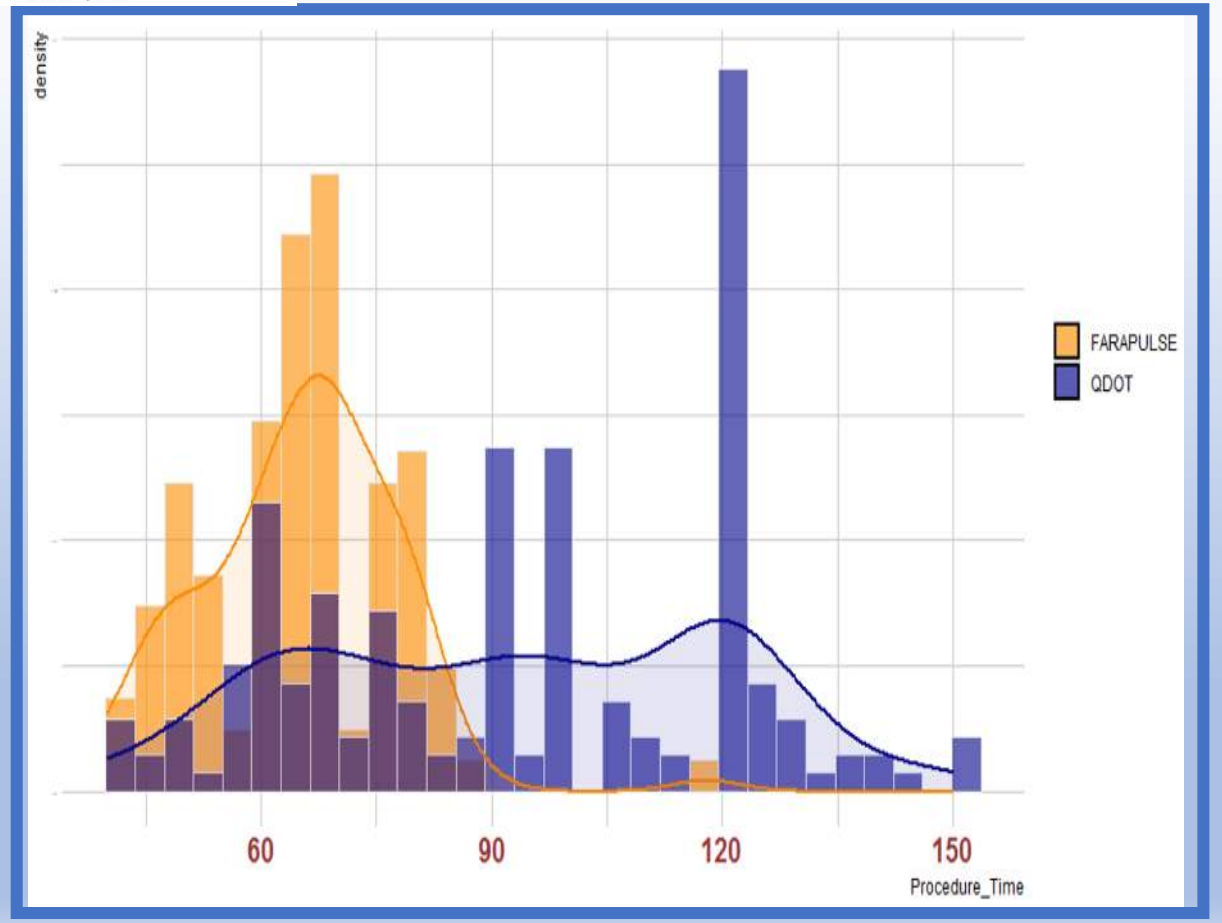
PROCEDURE TIME



Pulsed Field versus Very-High Power Short Duration Radiofrequency Ablation for Atrial Fibrillation: Results of a Multicenter, Real-World Experience

Antonio Dello Russo, MD, PhD[1,2*]; Paolo Compagnucci, MD, PhD[1*]; Matteo Anselmino, MD, PhD[3,4]; Vincenzo Schillaci, MD[5]; Francesca Campanelli, MD[1,2]; Maria Rosaria Ascione, MD[4,5]; Giovanni Volpato, MD[1,2]; Laura Cipolletta, MD, PhD[1]; Quintino Parisi, MD, PhD[1]; Yari Valeri, MD[1,2]; Leonardo D'Angelo, MD[1,2]; Paola Chiariello, MD[6]; Michela Casella, MD, PhD, FEHRA[1,7]; Francesco Solimene, MD[2,5]

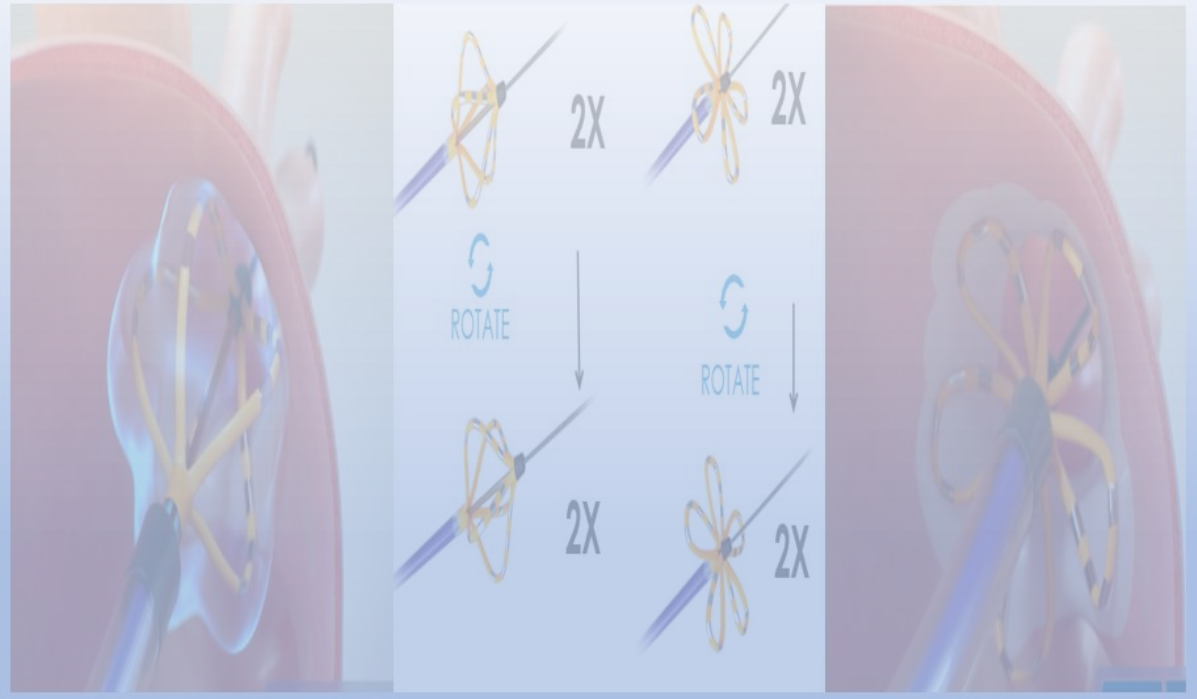




L’ELETTROPORAZIONE NELLA FIBRILLAZIONE ATRIALE PERSISTENTE

GLI APPROCCI PIU’ UTILIZZATI

ISOLAMENTO DELLE VENE POLMONARI

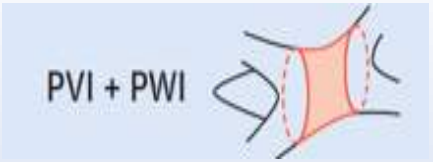


ISOLAMENTO DELLA PARETE POSTERIORE

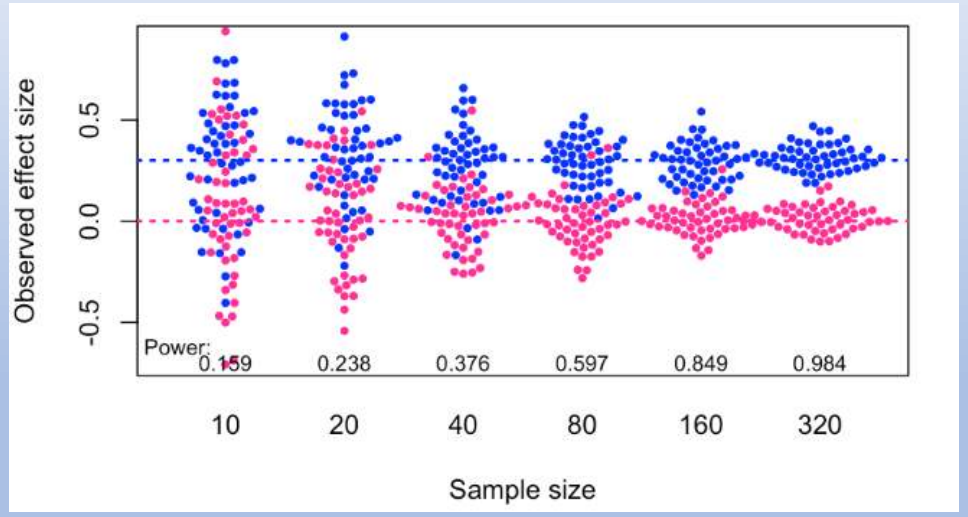
L'ISOLAMENTO DELLA PARETE POSTERIORE NEI PERSISTENTI

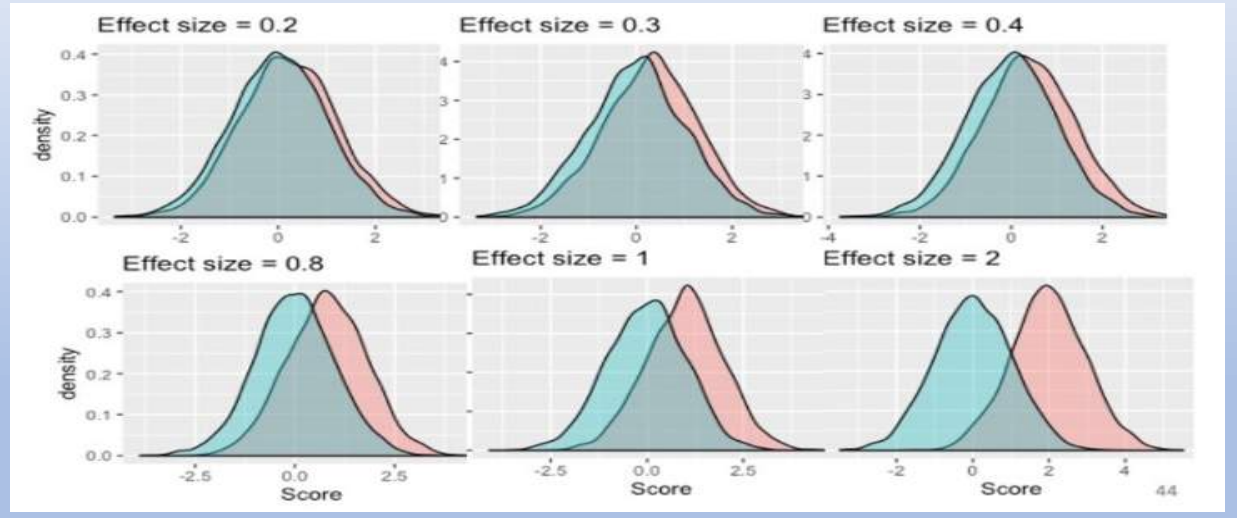
L'EVIDENZA SUL VALORE AGGIUNTO DELL'ISOLAMENTO DELLA PARETE POSTERIORE NON E' CONCLUSIVA

STUDI SINGOLI ANCHE RANDOMIZZATI TENDONO A MOSTRARE NESSUN BENEFICIO



META-ANALISI TENDONO A MOSTRARE UN BENEFICIO





ESISTE UNA PROBLEMATICA NELLA DEFINIZIONE DELLA NUMEROSITA' CAMPIONARIA E DELL'EFFETTO ATTESO?

L'ISOLAMENTO DELLA PARETE POSTERIORE NEI PERSISTENTI: CAPLA

LA DIMENSIONE CAMPIONARIA E LA STIMA DELL'EFFETTO SONO ' IMPORTANTI NEGLI STUDI SULLA PARETE POSTERIORE

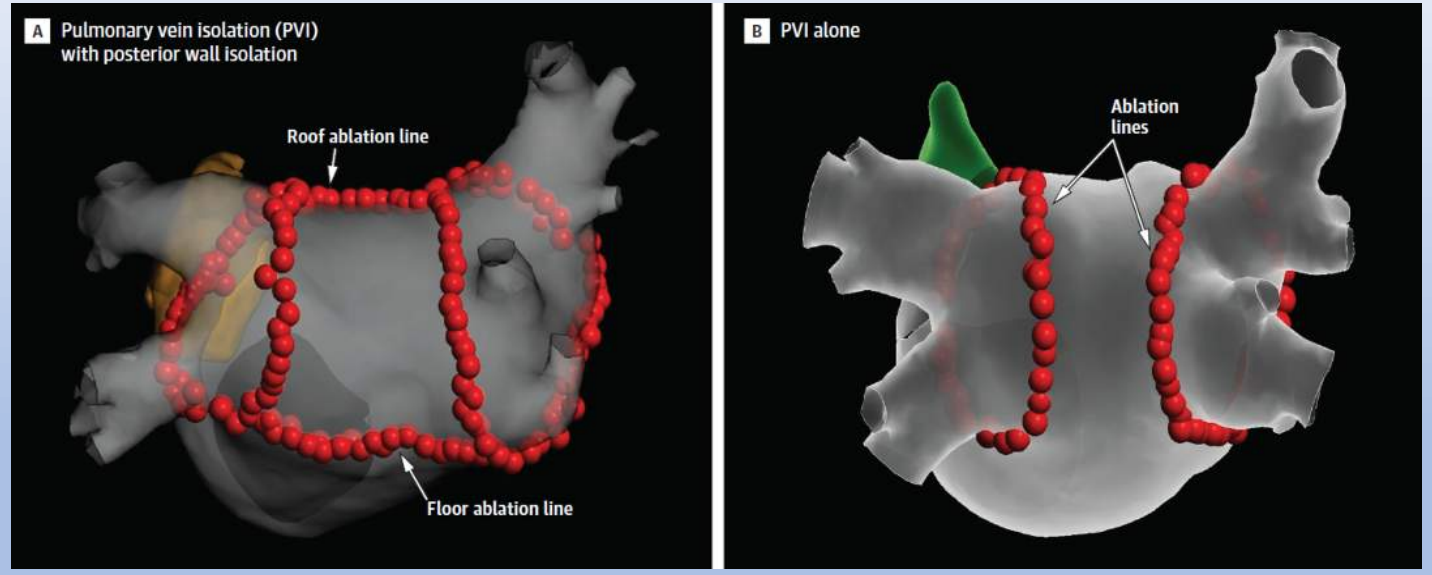
JAMA | Original Investigation

Effect of Catheter Ablation Using Pulmonary Vein Isolation With vs Without Posterior Left Atrial Wall Isolation on Atrial Arrhythmia Recurrence in Patients With Persistent Atrial Fibrillation
The CAPLA Randomized Clinical Trial

Peter M. Kistler, MBBS, PhD; David Chieng, MBBS; Hariharan Sugumar, MBBS, PhD; Liang-Han Ling, MBBS, PhD; Louise Segan, MBBS; Sonia Azzopardi, RN; Ahmed Al-Kaisey, MBBS; Ramanathan Parameswaran, MBBS, PhD; Robert D. Anderson, MBBS, PhD; Joshua Hawson, MBBS; Sandeep Prabhu, MBBS, PhD; Aleksandr Voskoboinik, MBBS, PhD; Geoffrey Wong, MBBS, PhD; Joseph B. Morton, MBBS, PhD; Bhupesh Pathik, MBBS, PhD; Alex J. McLellan, MBBS, PhD; Geoffrey Lee, MBChD, PhD; Michael Wong, MBBS, PhD; Sue Finch, PhD; Rajeev K. Pathak, MBBS, PhD; Deep Chandh Raja, MBBS, MD; Laurence Sterns, MD; Matthew Ginks, MD; Christopher M. Reid, MBBS, PhD; Prashanthan Sanders, MBBS, PhD; Jonathan M. Kalman, MBBS, PhD

EFFETTO STIMATO: 15%

NUMEROSITA' NECESSARIA: 338



Statistical Analysis

Sample size calculation was based on prior studies which reported a single-procedure success rate of 60% with PVI alone.[8] An incremental benefit of 15% from adding PWI was assumed based on findings from an observational study by O'Neill et al,[14] which reported a 75% success rate from PWI. Based on this, 152 participants were needed in each group to reject the null hypothesis that the success rates for experimental and control participants were equal, with a power of 80% and type I error probability (2-sided) of .05. To account for a possible 10% participant dropout, 169 participants in each group were needed, resulting in a total sample size of 338.

L'ISOLAMENTO DELLA PARETE POSTERIORE NEI PERSISTENTI: CAPLA

JAMA | Original Investigation

Effect of Catheter Ablation Using Pulmonary Vein Isolation With vs Without Posterior Left Atrial Wall Isolation on Atrial Arrhythmia Recurrence in Patients With Persistent Atrial Fibrillation
The CAPLA Randomized Clinical Trial

Peter M. Kistler, MBBS, PhD; David Chieng, MBBS; Hariharan Sugumar, MBBS, PhD; Liang-Han Ling, MBBS, PhD; Louise Segan, MBBS; Sonia Azzopardi, RN; Ahmed Al-Kaisey, MBBS; Ramanathan Parameswaran, MBBS, PhD; Robert D. Anderson, MBBS, PhD; Joshua Hawson, MBBS; Sandeep Prabhu, MBBS, PhD; Aleksandr Voskoboinik, MBBS, PhD; Geoffrey Wong, MBBS, PhD; Joseph B. Morton, MBBS, PhD; Bhupesh Pathik, MBBS, PhD; Alex J. McLellan, MBBS, PhD; Geoffrey Lee, MBChD, PhD; Michael Wong, MBBS, PhD; Sue Finch, PhD; Rajeev K. Pathak, MBBS, PhD; Deep Chandh Raja, MBBS, MD; Laurence Sterns, MD; Matthew Ginks, MD; Christopher M. Reid, MBBS, PhD; Prashanthan Sanders, MBBS, PhD; Jonathan M. Kalman, MBBS, PhD

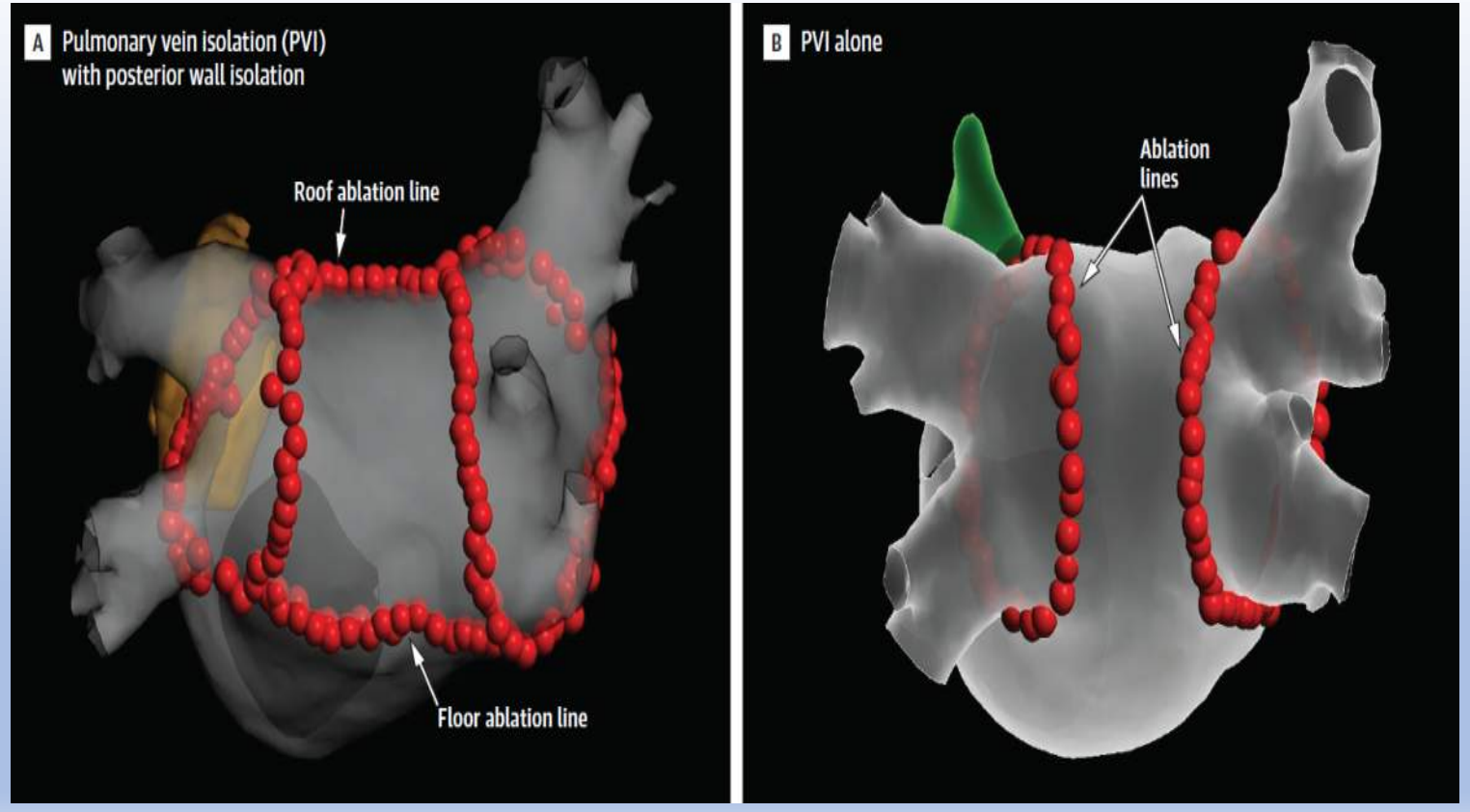
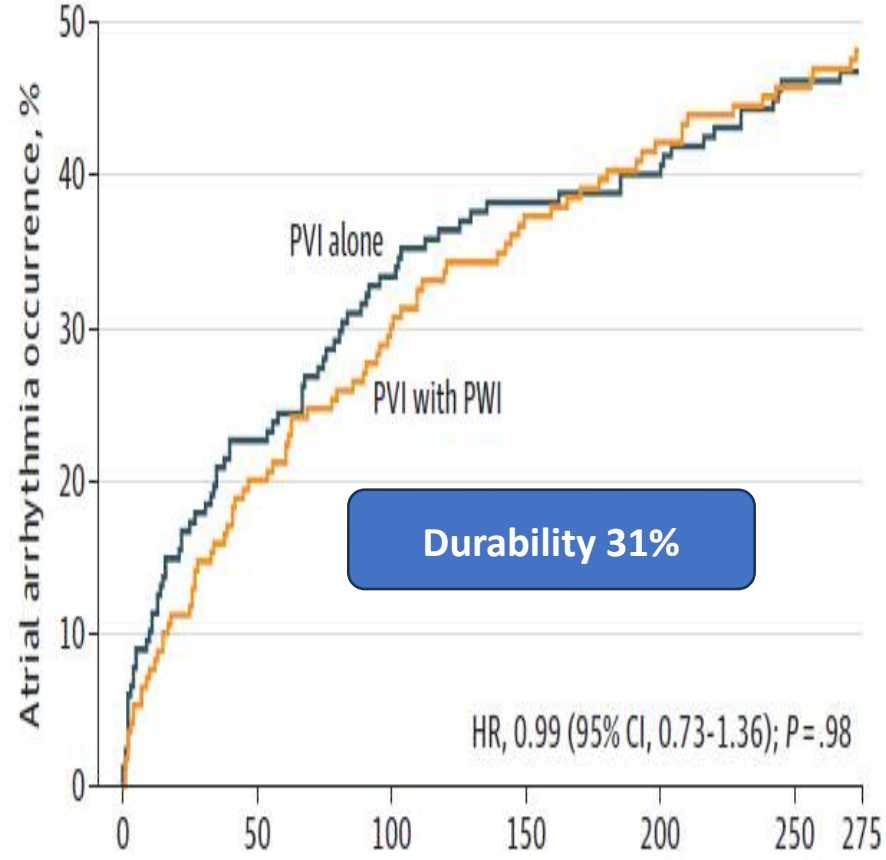


Figure 3. Any Atrial Arrhythmia Recurrence, Without Antiarrhythmic Medication, After a Single Ablation Procedure



EVIDENZE DALLE METAANALISI SU MIGLIAIA DI PAZIENTI

Adjunctive Left Atrial Posterior Wall Isolation in Treating Atrial Fibrillation

Insight From a Large Secondary Analysis

Xi Jiang, MD,[a] Jia Liao, MD,[a] Zhiyu Ling, MD, PhD,[a] Christian Meyer, MD,[b,c,d] Philipp Sommer, MD,[e]

Pooled Analysis:

3,287 AF patients

Age 61.7 ± 10.8 yrs

22.6% Par-AF

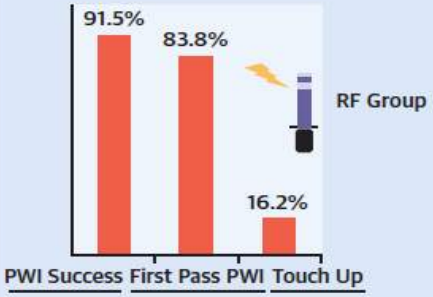
77.4% Per-AF

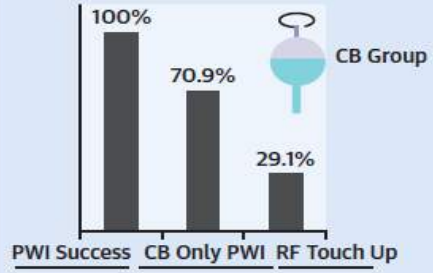
LVEF: 57.8 ± 10.8%

LAD: 44.0 ± 7.4 mm

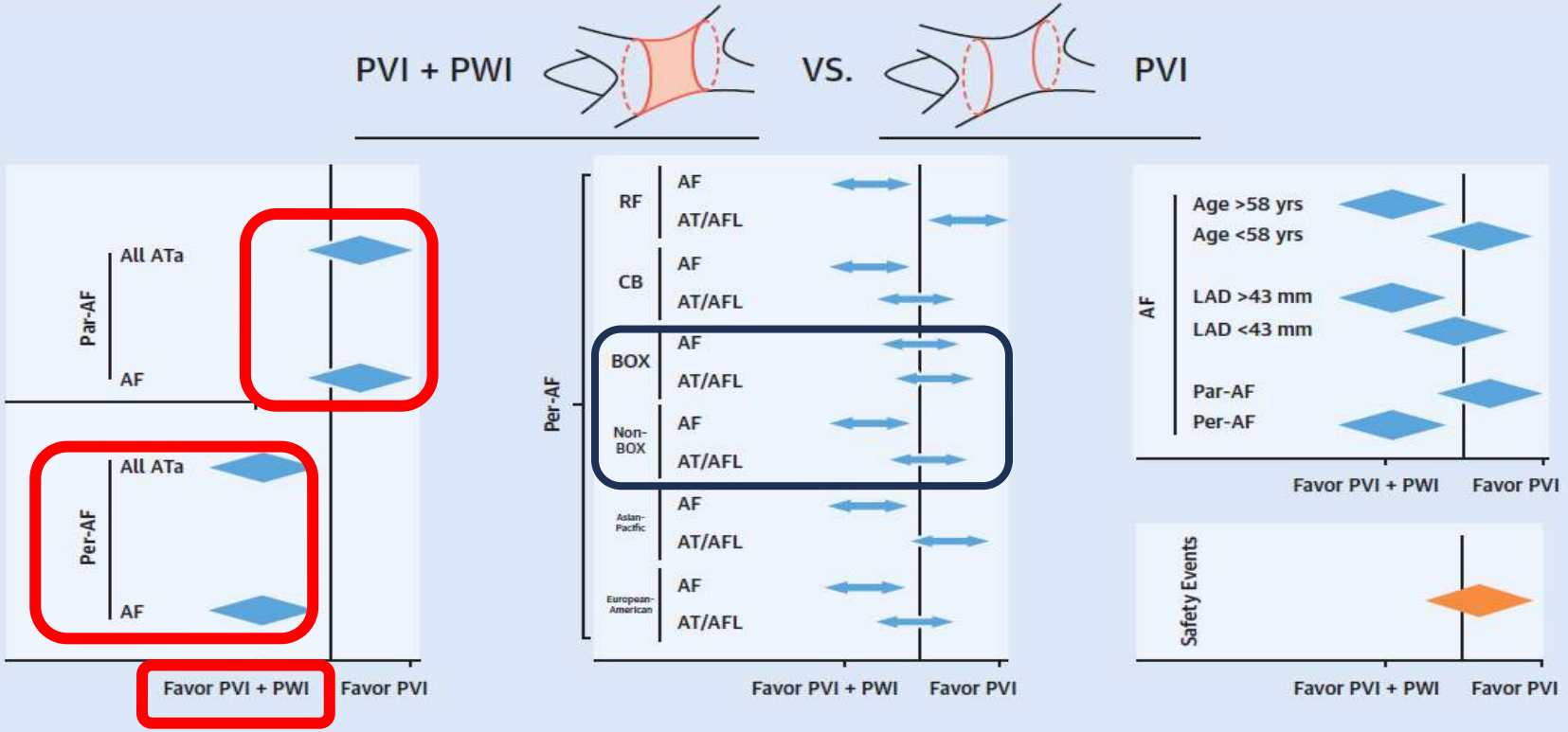
FU: 15.2 ± 8.4 M

Demographic Character





Overall Procedural Success of PWI 92.8%

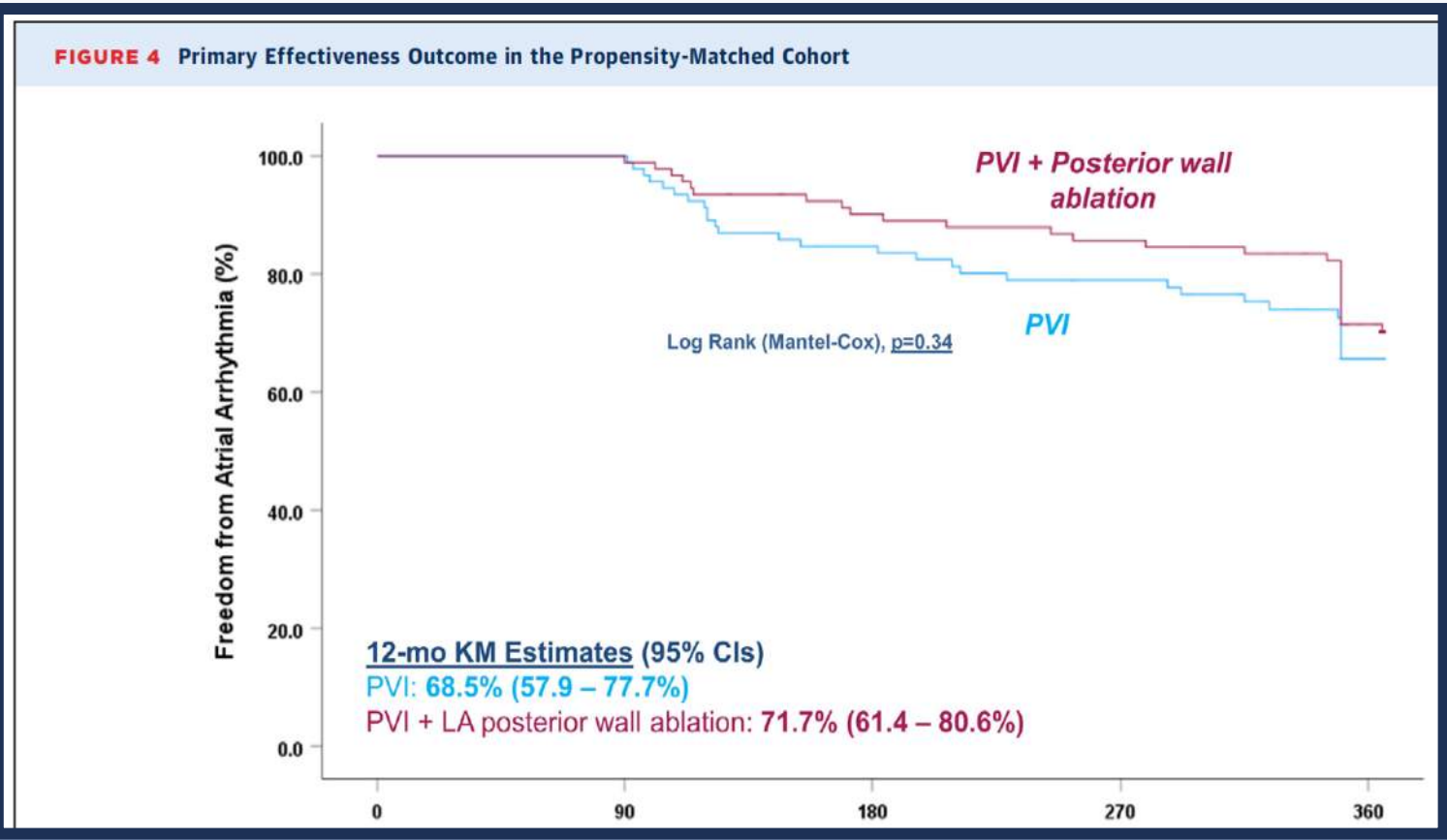


Pooled Analysis and Subgroup Analyses

PVI vs PVI e Parete Posteriore con PFA

Impact of Left Atrial Posterior Wall Ablation During Pulsed-Field Ablation for Persistent Atrial Fibrillation

Mohit K. Turagam, MD,[a] Petr Neuzil, MD, PhD,[b] Boris Schmidt, MD,[c] Tobias Reichlin, MD,[d] Kars Neven, MD, PhD,[e,f] Andreas Metzner, MD,[g] Jim Hansen, MD,[h] Yuri Blaauw, MD,[i] Philippe Maury, MD,[j,k] Thomas Arentz, MD,[l] Philipp Sommer, MD,[m] Ante Anic, MD,[n] Frederic Anselme, MD,[o] Serge Boveda, MD, PhD,[p,q] Tom Deneke, MD,[r] Stephan Willems, MD,[s] Pepijn van der Voort, MD,[t] Roland Tilz, MD,[u,v] Moritoshi Funasako, MD,[b,w]



Propensity Score Matching

91 pazienti PVI
Vs
91 Pazienti PVI + parete posteriore

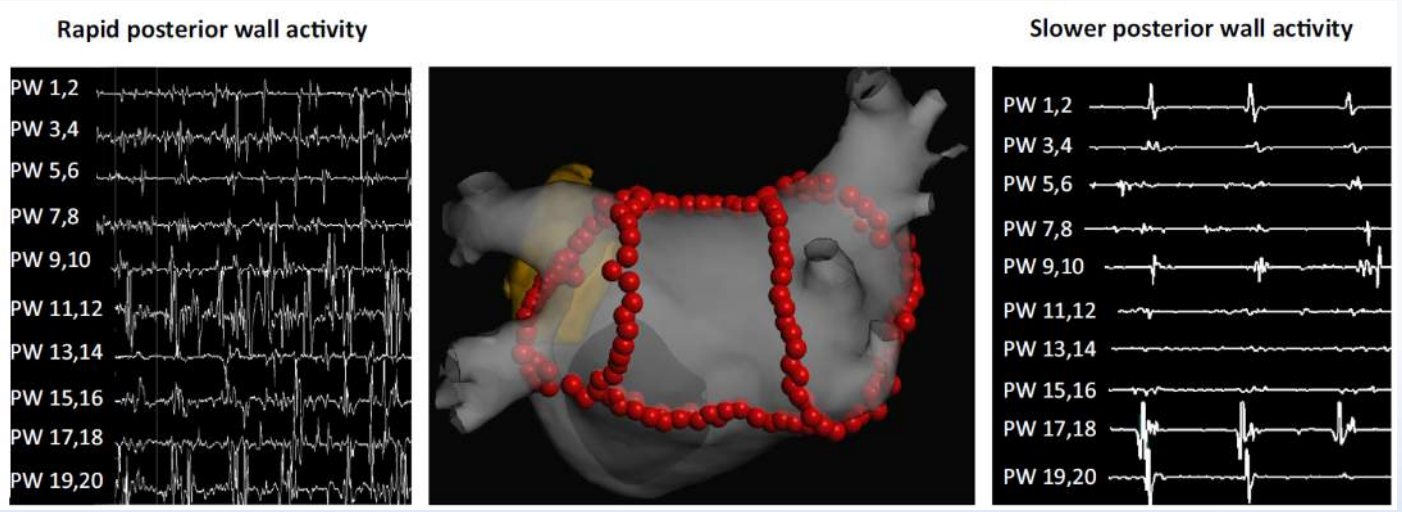
Nessun protocollo condiviso per effettuare e verificare l'isolamento della parete posteriore

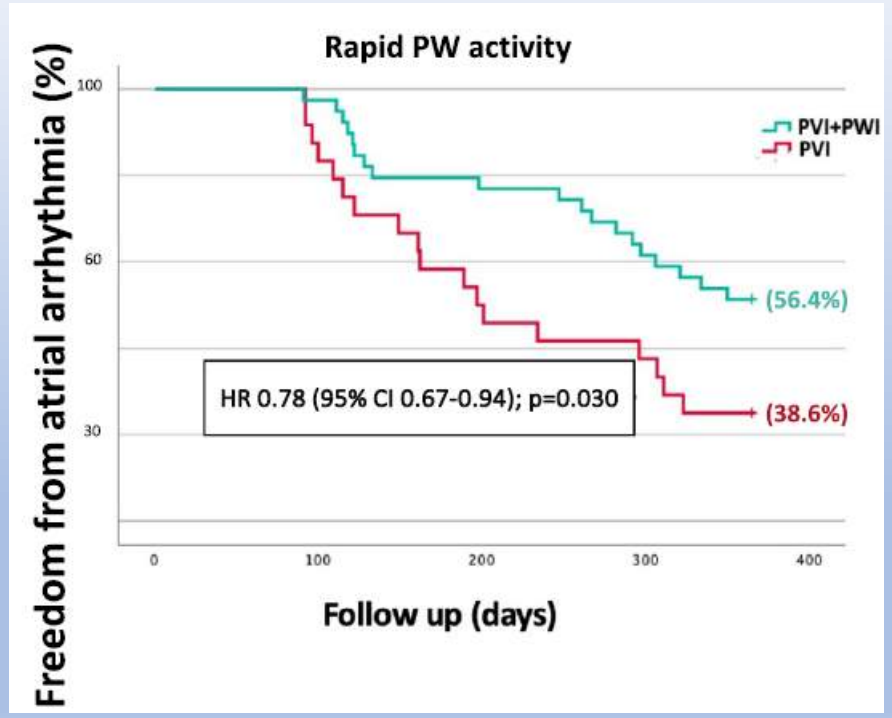
Benefici dell'isolamento della parete posteriore in specifici casi

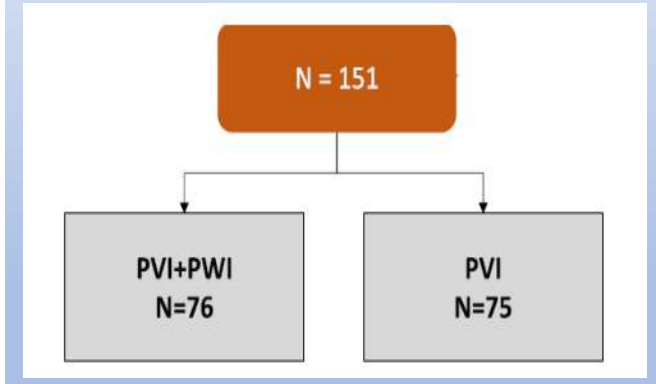
Posterior Wall Isolation Improves Outcomes for Persistent AF With Rapid Posterior Wall Activity

CAPLA Substudy

Louise Segan, MBBS, MPH,[a,b,c] David Chieng, MBBS,[a,b,c] Sandeep Prabhu, MBBS, PhD,[a,b,c] Andrew Hunt, BSc, BA,[d] Troy Watts, BSc,[e] Brian Klys, BSc,[f] Aleksandr Voskoboinik, MBBS, PhD,[a,b,c] Hariharan Sugumar, MBBS, PhD,[a,b,c] Liang-Han Ling, MBBS, PhD,[a,b,c] Geoff Lee, MBChD, PhD,[c,f] Joseph Morton, MBBS, PhD,[c,f]





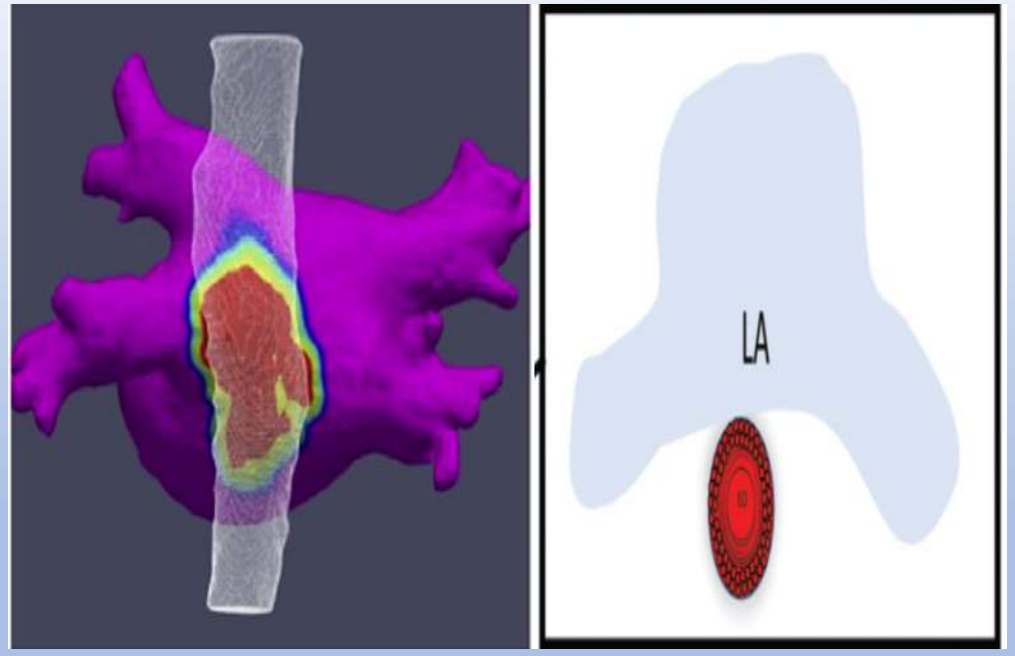


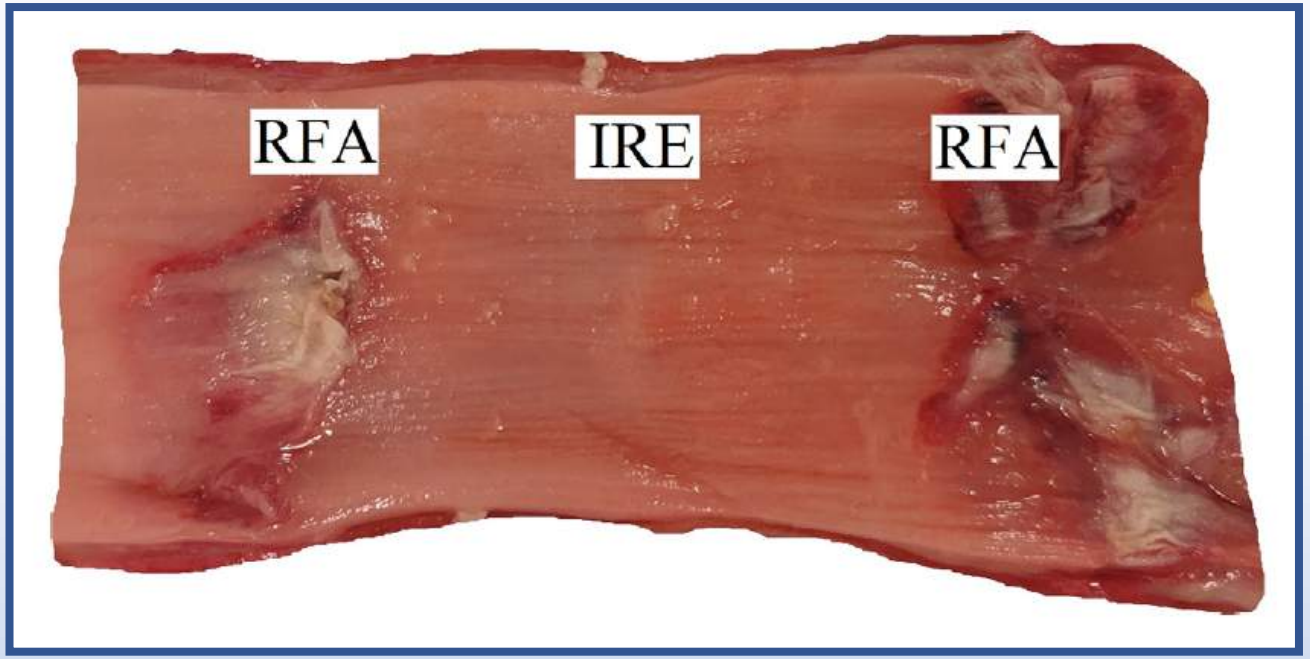
SICUREZZA SULL'ESOFAGO

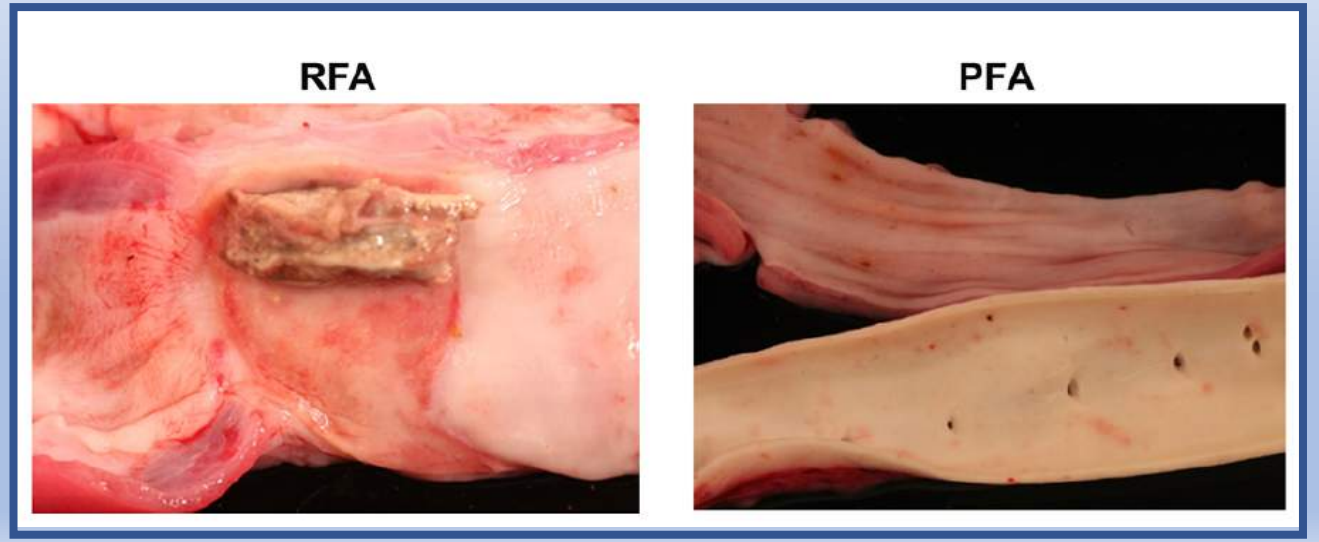
Catheter-Based Electroporation

A Novel Technique for Catheter Ablation of Cardiac Arrhythmias

Chadi Tabaja, MD, Arwa Younis, MD, Ayman A. Hussein, MD, Tyler L. Taigen, MD, Hiroshi Nakagawa, MD, PhD, Walid I. Saliba, MD, Jakub Sroubek, MD, PhD, Pasquale Santangeli, MD, PhD, Oussama M. Wazni, MD, MBA

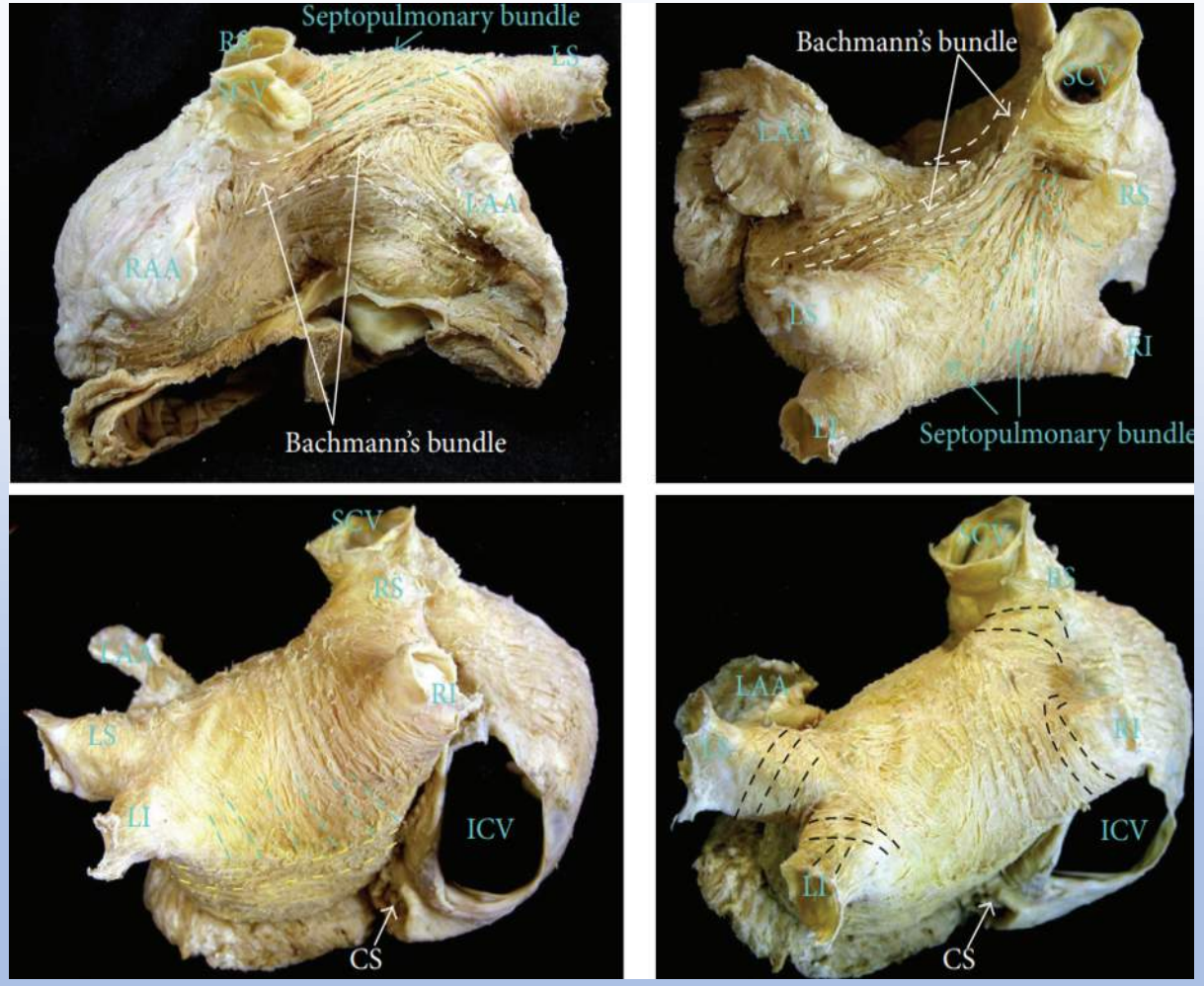




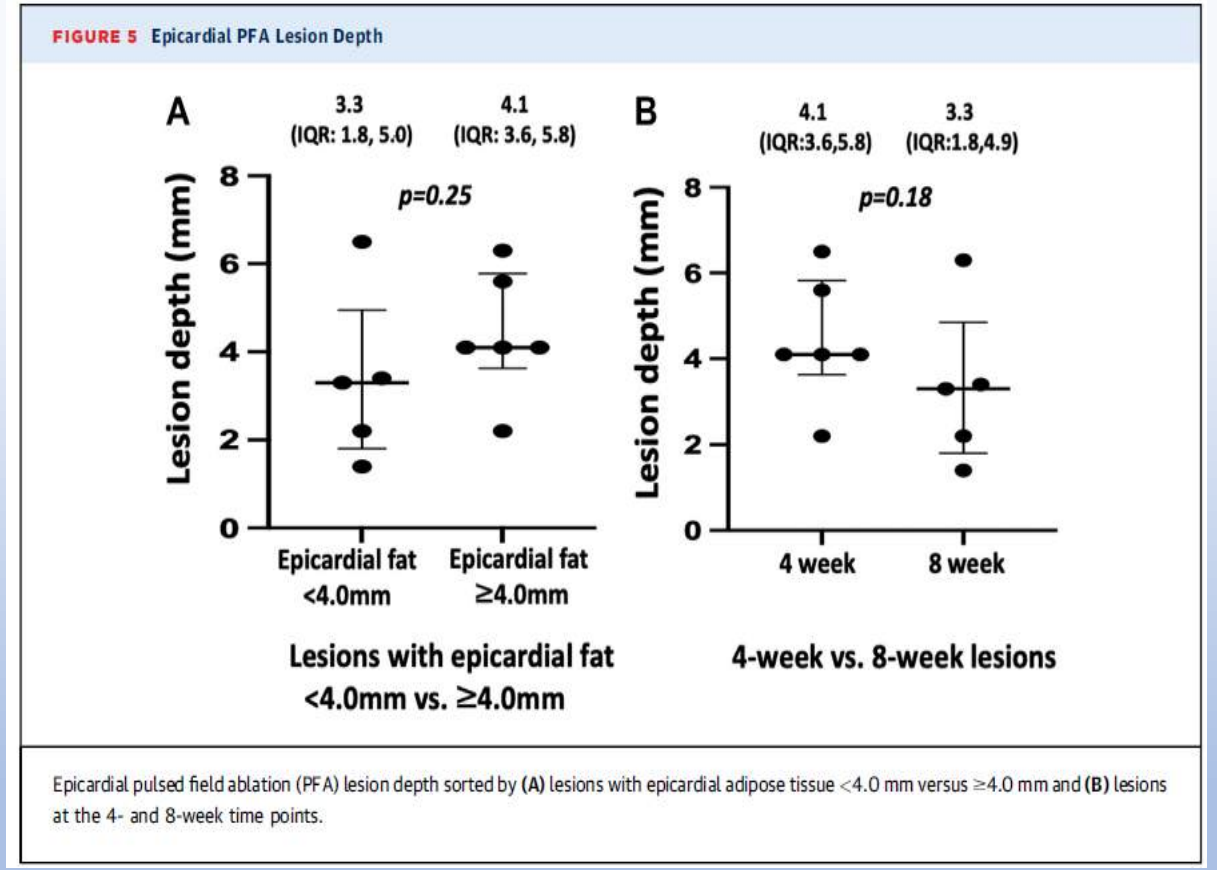


ANISOTROPIA E STRATI ADIPOSI

ANISOTROPIA DELLE FIBRE NELLA PARETE POSTERIORE



LA PFA RIESCE A CREARE LESIONE OLTRE STRATI ADIPOSI



Epicardial pulsed field ablation (PFA) lesion depth sorted by **(A)** lesions with epicardial adipose tissue <4.0 mm versus ≥4.0 mm and **(B)** lesions at the 4- and 8-week time points.

JACC: CLINICAL ELECTROPHYSIOLOGY VOL. 8, NO. 12, 2022
DECEMBER 2022:1486-1496

Higuchi *et al*
Epicardial PFA on Coronary Arteries

TRANSMURALITA’ DELLA LESIONE PFA IN PARETE POSTERIORE

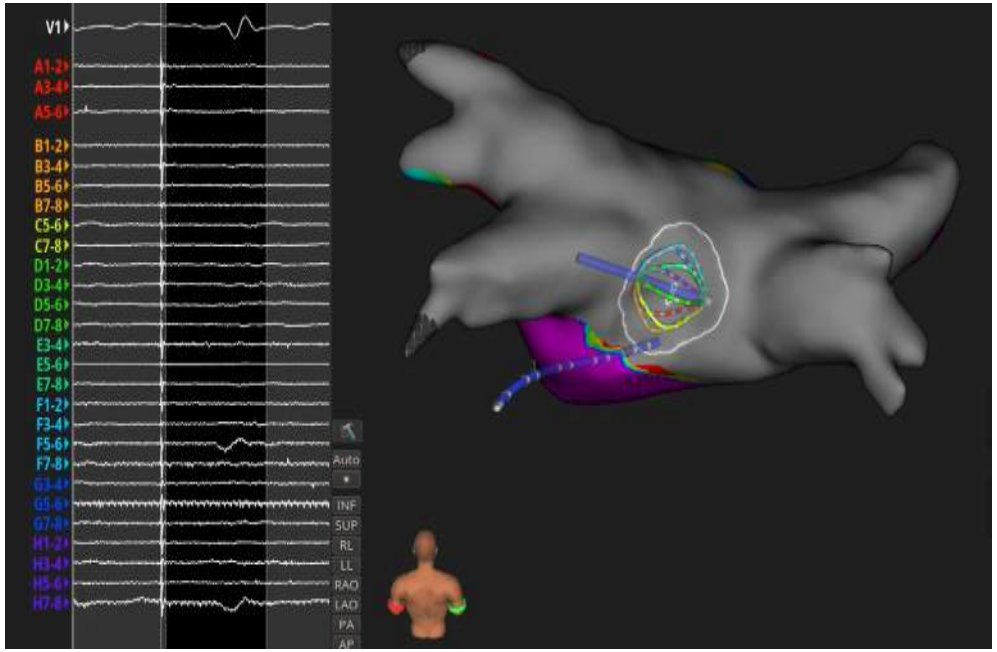
JACC JOURNALS

Direct Epicardial Validation of Posterior Wall Isolation in Persistent Atrial Fibrillation: Pulsed Field versus Radiofrequency Ablation

Francesco Solimene, MD[a,b*]; Paolo Compagnucci, MD, PhD[c*§]; Claudio Tondo, MD, PhD[d,e]; Vincenzo Mirco La Fazia, MD[f]; Vincenzo Schillaci, MD[a]; Laura Cipolletta, MD, PhD[c]; Gaetano Fassini,MD[d]; Giovanni Volpato, MD[b,c]; Quintino Parisi, MD, PhD[c]; Paola Chiariello, MD[g]; Gaetano Mottola, MD[a]; Michela Casella, MD, PhD[c,h]; Marco Schiavone, MD[d,i§]; Antonio Dello Russo, MD, PhD[b,c]; Andrea Natale, MD[b,f#]

MAPPA EPI PRIMA DELL’ABLAZIONE

MAPPA ENDO POST ABLAZIONE FARAPULSE



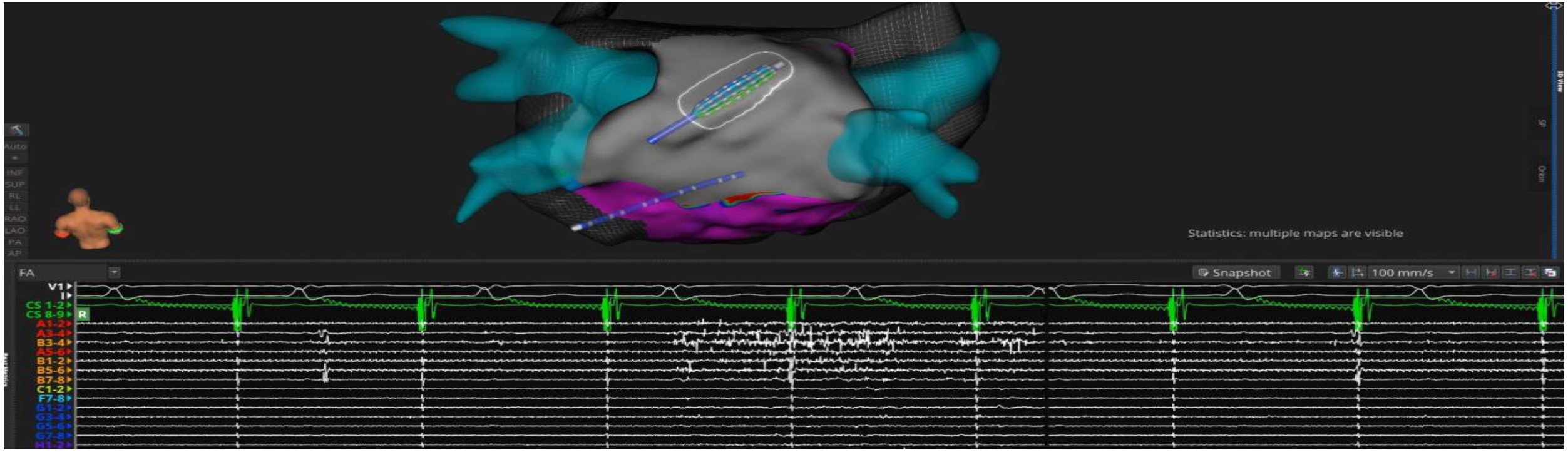
JACC Journals › JACC: Clinical EP › Archives › Just Accepted

TRANSMURALITA’ DELLA LESIONE PFA IN PARETE POSTERIORE

Direct Epicardial Validation of Posterior Wall Isolation in Persistent Atrial Fibrillation: Pulsed Field versus Radiofrequency Ablation

Francesco Solimene, MD[a,b*]; Paolo Compagnucci, MD, PhD[c*§]; Claudio Tondo, MD, PhD[d,e]; Vincenzo Mirco La Fazia, MD[f]; Vincenzo Schillaci, MD[a]; Laura Cipolletta, MD, PhD[c]; Gaetano Fassini,MD[d]; Giovanni Volpato, MD[b,c]; Quintino Parisi, MD, PhD[c]; Paola Chiariello, MD[g]; Gaetano Mottola, MD[a]; Michela Casella, MD, PhD[c,h]; Marco Schiavone, MD[d,i§]; Antonio Dello Russo, MD, PhD[b,c]; Andrea Natale, MD[b,f#]

MAPPA EPICARDICA POST ABLAZIONE

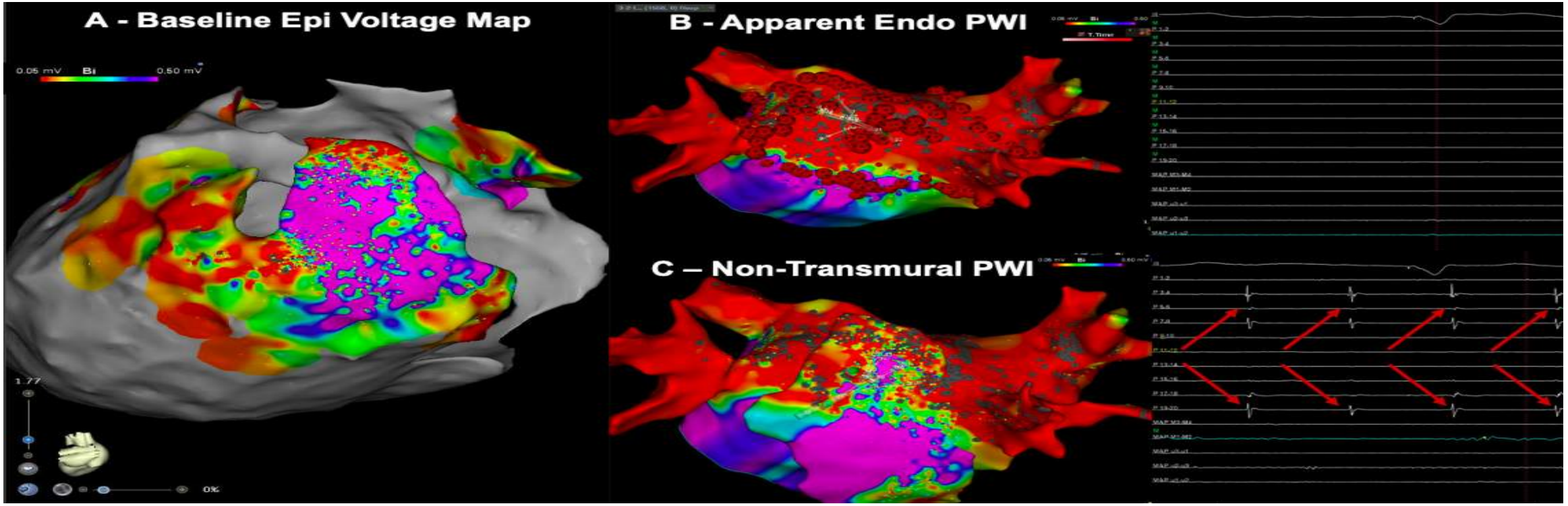


TRANSMURALITA’ DELLA LESIONE PFA IN PARETE POSTERIORE

Direct Epicardial Validation of Posterior Wall Isolation in Persistent Atrial Fibrillation: Pulsed Field versus Radiofrequency Ablation

Francesco Solimene, MD[a,b*]; Paolo Compagnucci, MD, PhD[c*§]; Claudio Tondo, MD, PhD[d,e]; Vincenzo Mirco La Fazia, MD[f]; Vincenzo Schillaci, MD[a]; Laura Cipolletta, MD, PhD[c]; Gaetano Fassini,MD[d]; Giovanni Volpato, MD[b,c]; Quintino Parisi, MD, PhD[c]; Paola Chiariello, MD[g]; Gaetano Mottola, MD[a]; Michela Casella, MD, PhD[c,h]; Marco Schiavone, MD[d,i§]; Antonio Dello Russo, MD, PhD[b,c]; Andrea Natale, MD[b,f#]

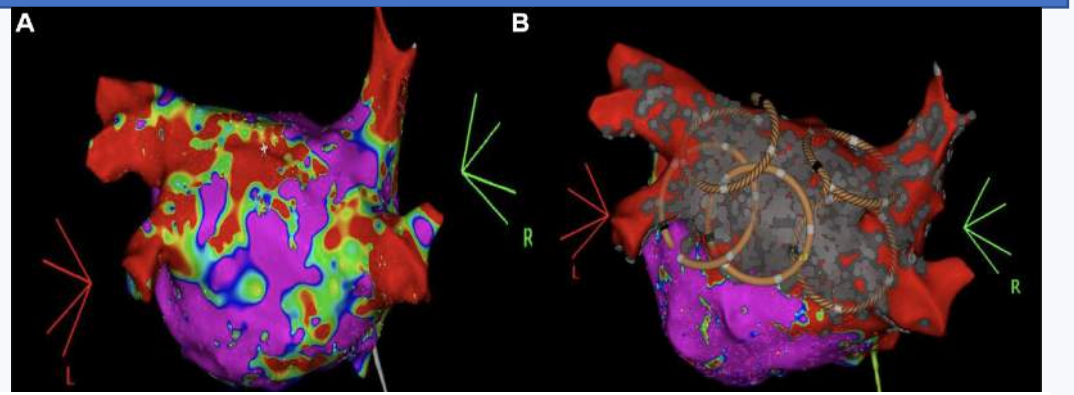
MAPPA EPI POST ABLAZIONE RF

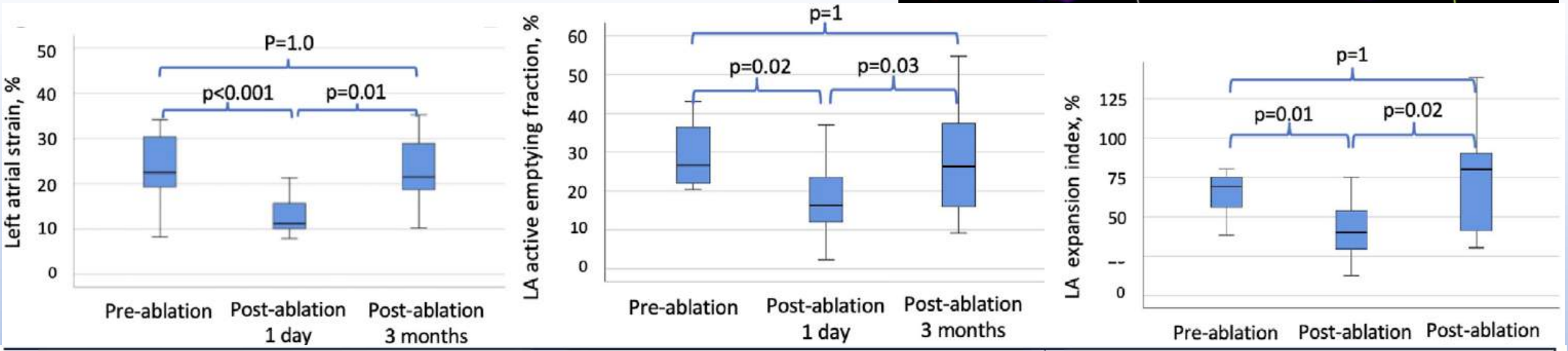


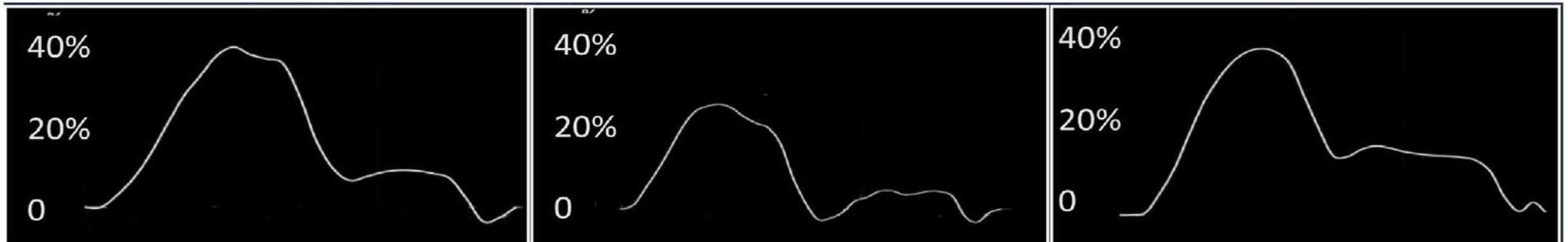
LA PFA CON FARAPULSE PRESERVA LA MECCANICA ATRIALE

Pulsed field ablation prevents left atrial restrictive physiology after posterior wall isolation in patients with persistent atrial fibrillation

Ariel Banai, MD, Ehud Chorin, MD, Arie Lorin Schwartz, MD, Yuval Levi, MEng, Hend Sliman, MD, Omri Feder, MD, Dana Viskin, MD, Sami Viskin, MD, Shmuel Banai, MD, Raphael Rosso, MD



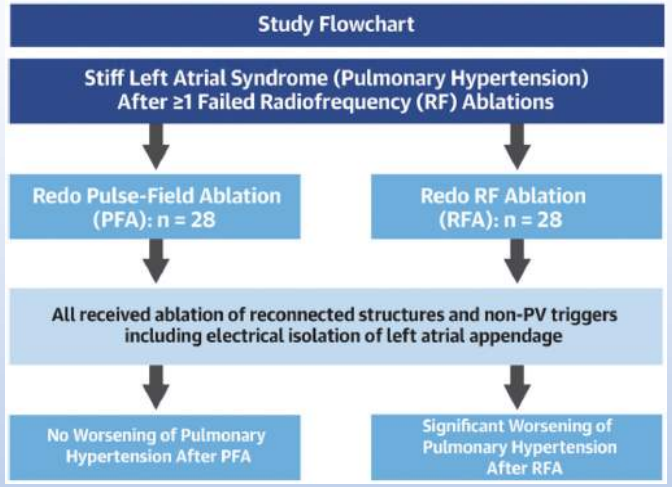




LA PFA CON FARAPULSE NON MODIFICA LA PRESSIONE POLMONARE

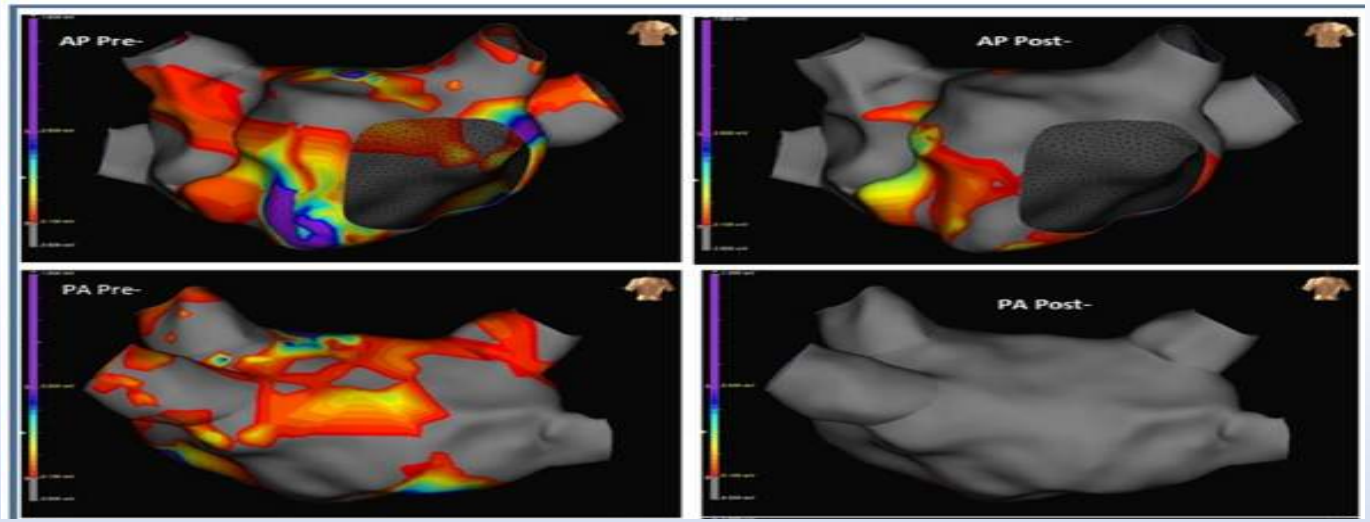
Pulsed-Field Ablation Does Not Worsen Baseline Pulmonary Hypertension Following Prior Radiofrequency Ablations

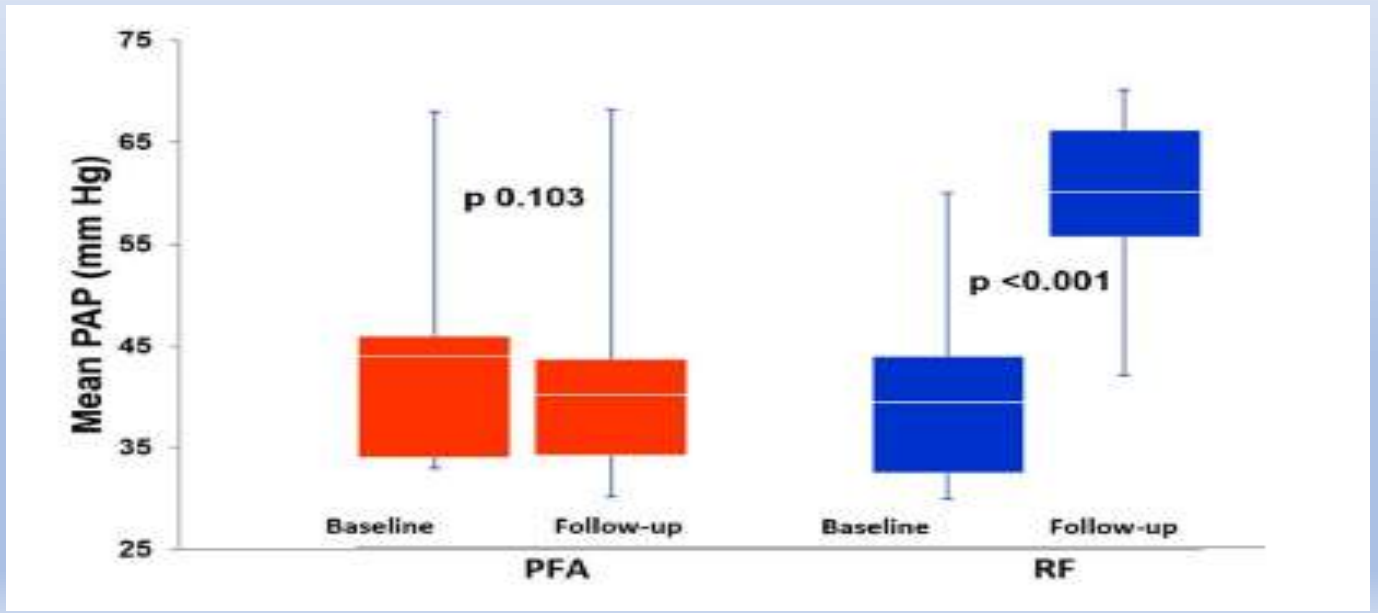
Sanghamitra Mohanty, MD, MS,[a] Domenico Giovanni Della Rocca, MD, PhD,[b] Prem Geeta Torlapati, MD, MPH,[a] Gian-Battista Chierchia, MD, PhD,[b] Antonio Dello Russo, MD,[c] Michela Casella, MD,[c] Carola Gianni, MD, PhD,[a] Bryan MacDonald, MD,[a] Angel Mayedo, MD,[a] Vincenzo Mirco La Fazia, MD,[a] Mohamed Bassiouny, MD,[a] G. Joseph Gallinghouse, MD,[a] John D. Burkhardt, MD,[a] Rodney Horton, MD,[a] Amin Al-Ahmad, MD,[a] Luigi Di Biase, MD, PhD,[d] Luigi Pannone, MD,[b] Carlo de Asmundis, MD, PhD,[b] Andrea Natale, MD[a,e,f]



28 RF vs 28 PFA propensity score matched

All patients redo after 1 RF with pulmonary hypertension (PAP>20mmHg)





CONCLUSIONI

LA PFA E' UNA TECNICA SICURA EFFICACE ED EFFICIENTE PER L'ABLAZIONE DELLA FA Persistene

NELL'ISOLAMENTO DELLE VENE, LA PFA CONSENTE DI OTTENERE UN LIVELLO ANTRALE DELLA LESIONE SENZA RISCHI PER LA SICUREZZA E CON UN TEMPO PIU' RAPIDO DELL'ENERGIA TEMICA

SULL'ISOLAMENTO DELLA PARETE POSTERIORE, L'ABLAZIONE CON PFA NON COMPROMETTE LA SICUREZZA ESOFAGEA E LA MECCANICA ATRIALE GARANTENDO IL MIGLIOR RISULTATO POSSIBILE