

Table 1. Study characteristics of included randomized controlled trials

First author, Trial abbreviation, year	Country	Study population/ Inclusion criteria	Major exclusion criteria	Analyzed participants (n)		Ablation procedure	AAD therapy	Endpoint for recurrence, follow-up period	Recurrence at the last follow-up (%)	
				Ablation group	AAD group				Ablation group	AAD group
Andrade, EARLY-AF, 2020 [18]	Canada	Symptomatic pAF lasting >30s without history of regular use of class I or III AADs	Previous LA ablation/surgery, reversible causes of AF, recent MI, structural or valvular heart disease, LA diameter>5.5 cm, HF NYHA III-IV, LVEF<35%	154	149	Mapping: N/A Ablation: 28mm cryoballoon catheter (Arctic Front Advance, Medtronic, Minneapolis MN) Procedural endpoint: Conduction block of all PV	First-line: flecainide (76%), propafenone (5%), sotalol (15%), dronedarone (3%)	Time to the first AT lasting >30s detected by ICM at 91 and 365 days	42.9%	67.8%
Morillo, RAAFT-2, 2014 [10]	Canada, Germany, Czech Republic, United States, Italy	Symptomatic, recurrent pAF lasting >30s and had never used AADs	Previous LA ablation/surgery, CAD, significant LVH, valvular heart disease, LA diameter>5.5 cm, LVEF<40%	66	61	Mapping and Ablation: N/ A (RF) Procedural endpoint: Conduction block of all PV	First-line: flecainide, propafenone, sotalol, dofetilide; Second line: amiodarone	Time to the first AT lasting >30s detected by either ECG, Holter, or rhythm strip after 90-day blanking period up to 2 years	55.4%	72.1%
Neilson, MANTRA-PAF, 2012 [11]	Denmark	Symptomatic pAF without any history of class IC and III AAD use	Previous LA ablation/surgery, HF NYHA III-IV, LA diameter>5 cm, LVEF<40%, mitral valve disease, secondary causes of AF	146	148	Mapping: CARTO® Ablation: RF with irrigated tip, NaviStar Thermocool (Biosense Webster, Sunnyvale, CA) Procedural endpoint: Elimination of all electrical activity >0.2 mV	First-line: flecainide, propafenone; Second line: amiodarone	Time to first any AF lasting >60s detected by Holter after 90-day blanking period up to 2 years	15.0%	28.8%
Wazni, RAAFT-1, 2005 [12]	United States, Italy, Germany	symptomatic pAF without any history of AAD use	Previous LA ablation or any open-heart surgery	33	37	Mapping: N/A Ablation: RF, 8-mm tip ablation catheter (Biosense Webster, Baldwin Park, Calif, and EP Technologies, Sunnyvale, Calif) Procedural endpoint: electrical disconnection of the PV antrum from LA	First-line: flecainide, propafenone, sotalol; Second line: amiodarone	Time to first any AF lasting >15s detected by Holter between 60 days to 1 year	15.2%	68.3%
Wazni, STOP AF First, 2020 [19]	United States	Symptomatic pAF without history of class I and III AAM use for >7 days	History of any cardiac surgery, HF NYHA III-IV, LA diameter>5 cm, LVEF<45%, valvular heart disease, secondary causes of AF	104	99	Mapping: N/A Ablation: 2 nd generation cryoballoon catheter (Arctic Front Advance, Medtronic, Minneapolis, MN) Procedural endpoint: entrance block of all PV	flecainide (61%), propafenone (7%), sotalol (7%), dronedarone (12%), amiodarone (2%)	Time to the first AT lasting >30s detected by ambulatory monitoring or >10s detected by 12-lead ECG after 90-day blanking period up to 1 year	20.2%	35.4%

AAD: Antiarrhythmic drugs, AF: Atrial fibrillation, AT: Atrial tachyarrhythmia, HF: Heart failure, LA: Left atrium, LVEF: Left ventricular ejection fraction, NYHA: New York Heart Association, pAF: Paroxysmal atrial fibrillation, PVI: Pulmonary vein isolation