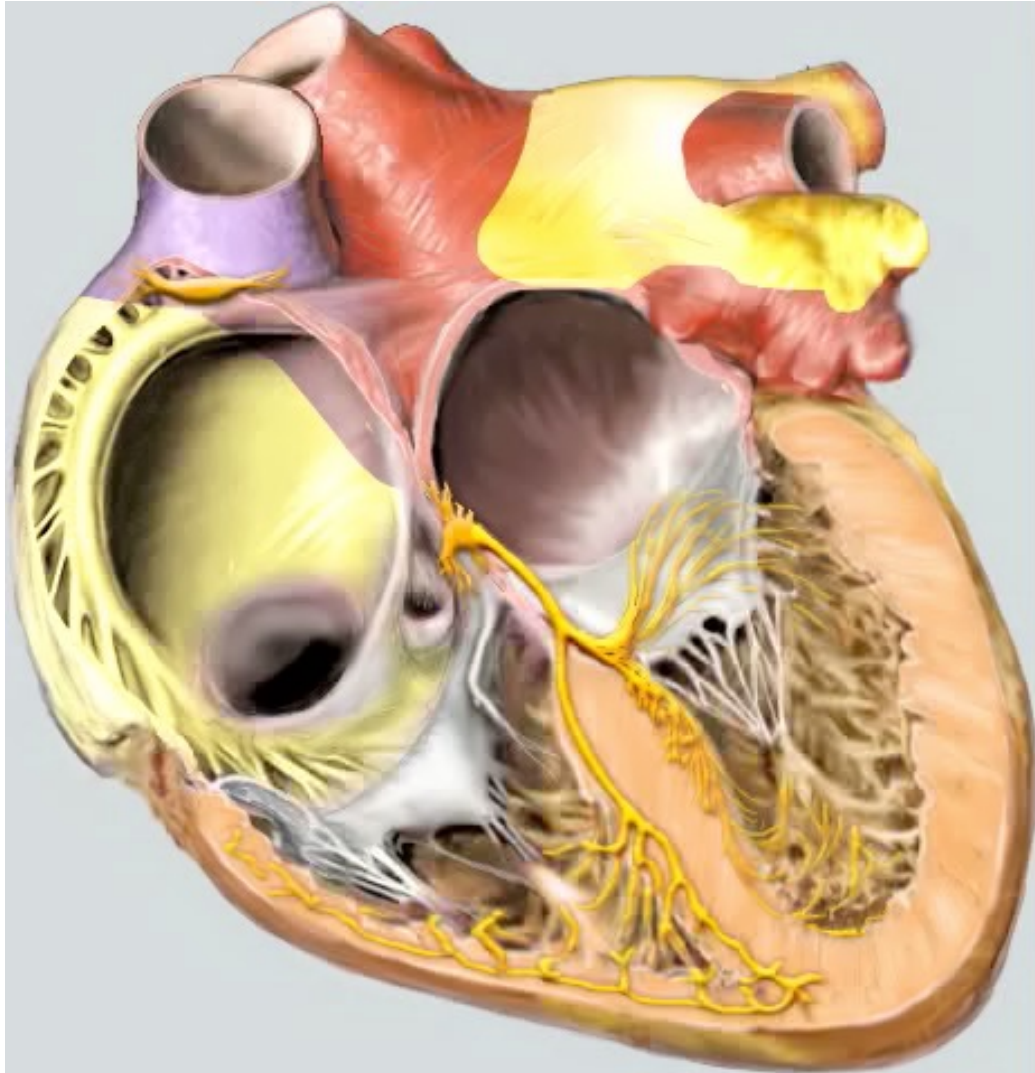


# Atrial Fibrillation: Management

Tuesday 20<sup>th</sup> February 1pm

John Whitaker, Consultant Cardiologist and Electrophysiologist

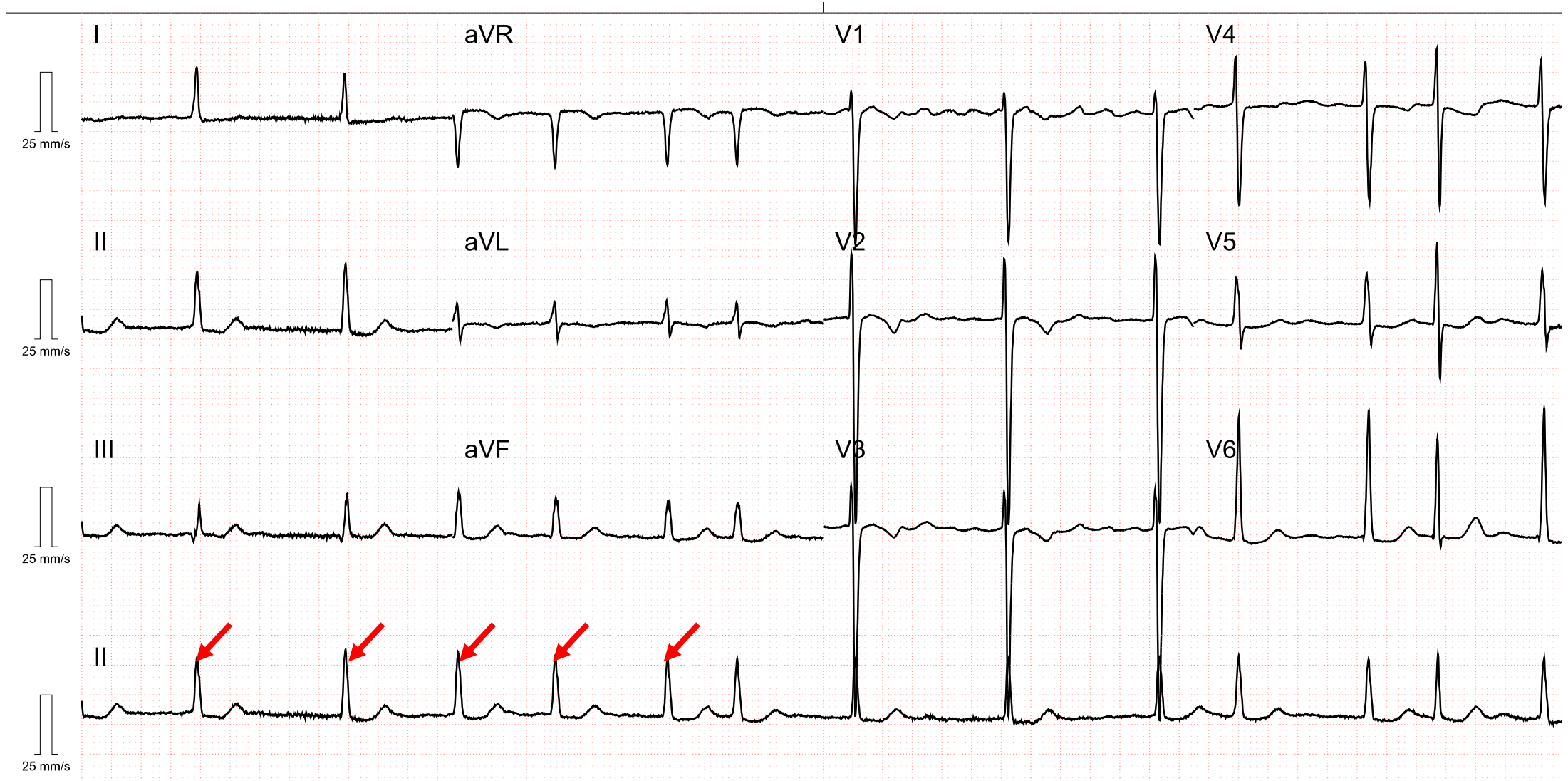
## Diagnosis



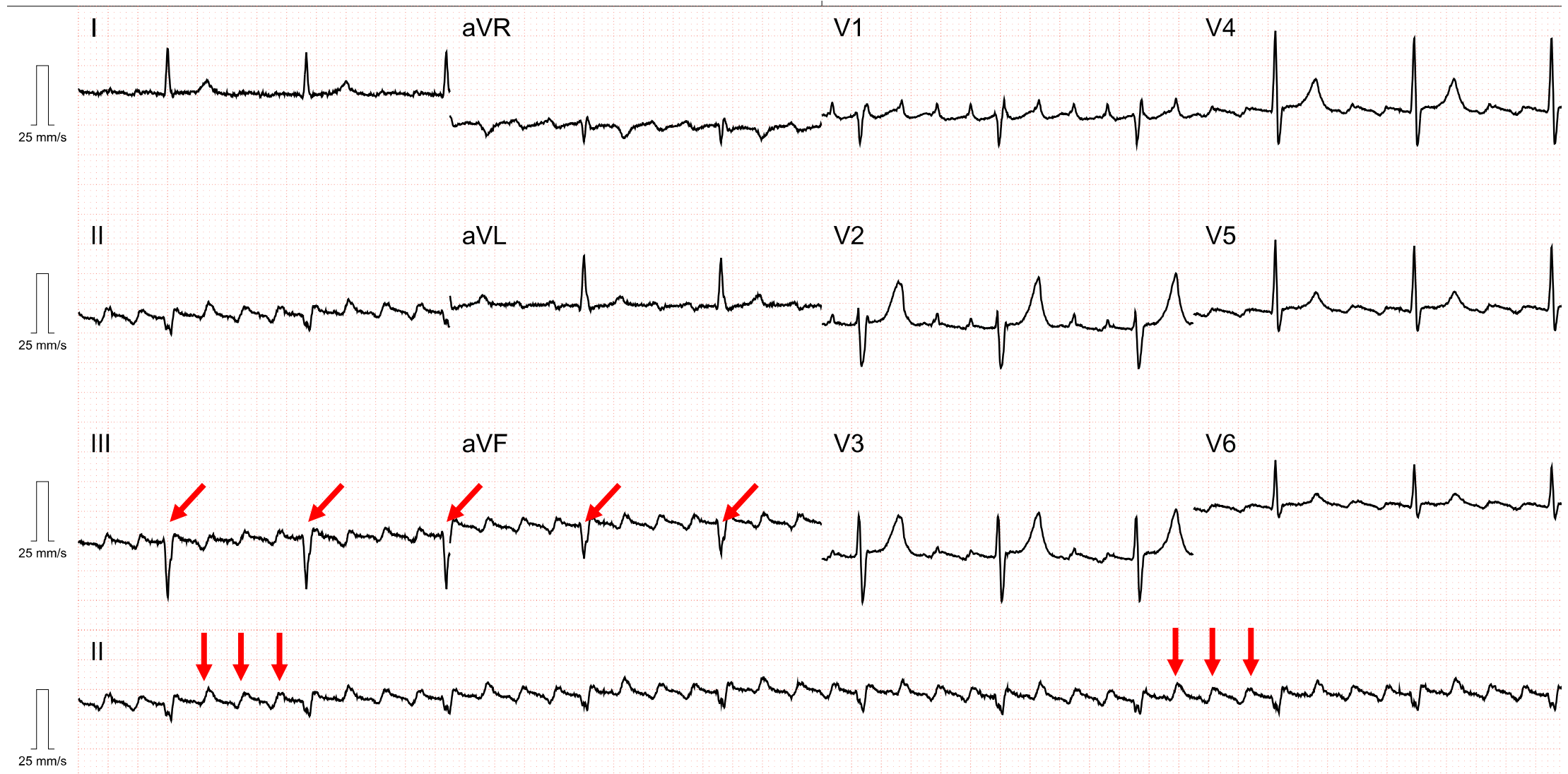
Absence of *any pattern of organized electrical activation* in the atria



# Atrial fibrillation



# 'Typical' (CTI dependent) atrial flutter



# Organised vs disorganised is not always straightforward



# The best way to capture AF?

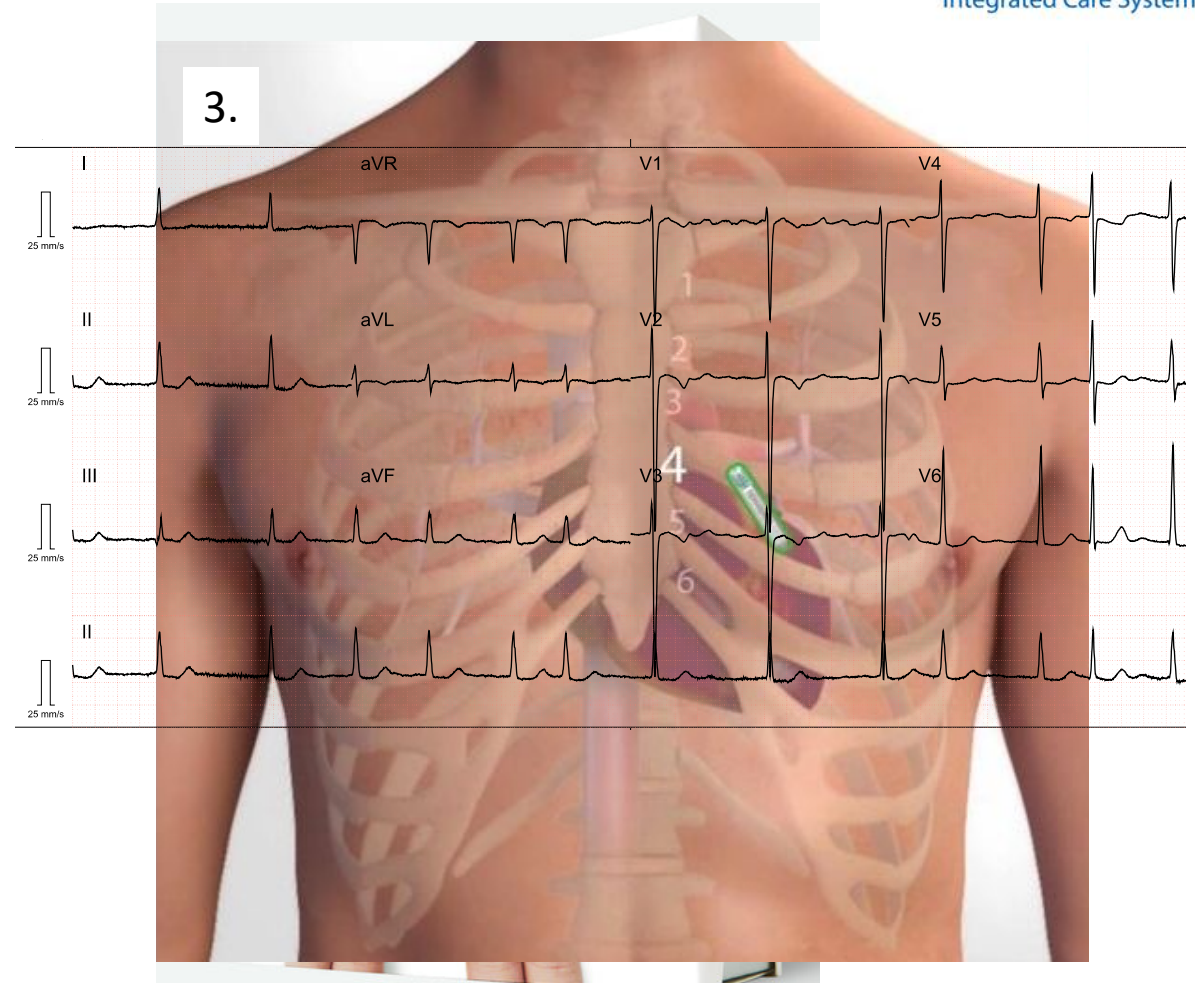
12-lead ECG if persistent arrhythmia

If paroxysmal symptoms of palpitations then *frequency* of symptoms, *duration* of symptoms and *patient preference* and *motivation* key

Ambulatory wearable monitoring

Patient activated monitors

Implantable monitors



1. <https://www.irhythmtech.com/patients/how-it-works>
2. <https://store.alivecor.co.uk/products/kardiamobile>
3. <https://www.medtronic.com/uk-en/index.html>

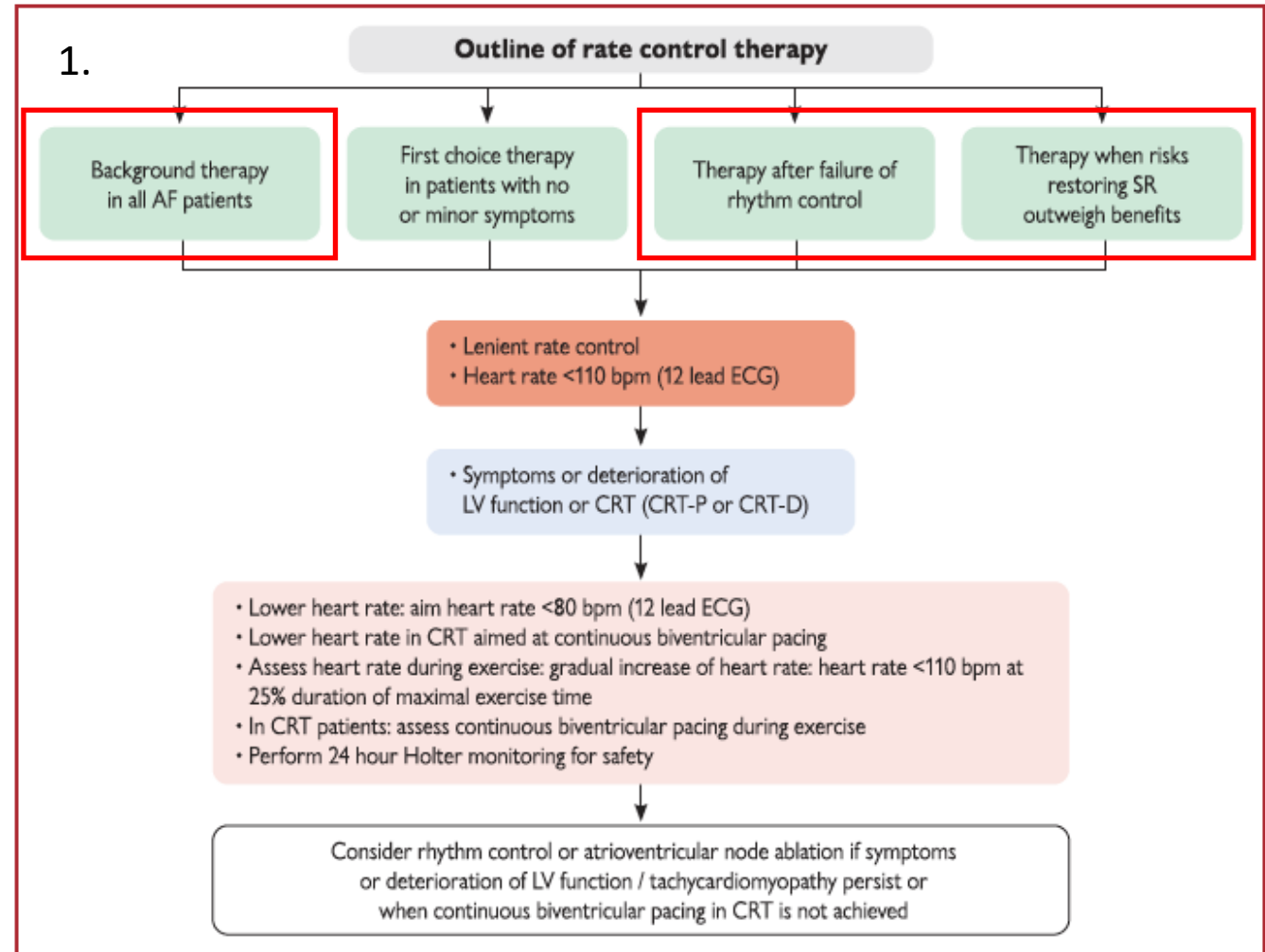
# Rate control

## Beta blockers

## Calcium blockers

## Digoxin

## Pacemaker and atrio-ventricular junction (AVJ) ablation



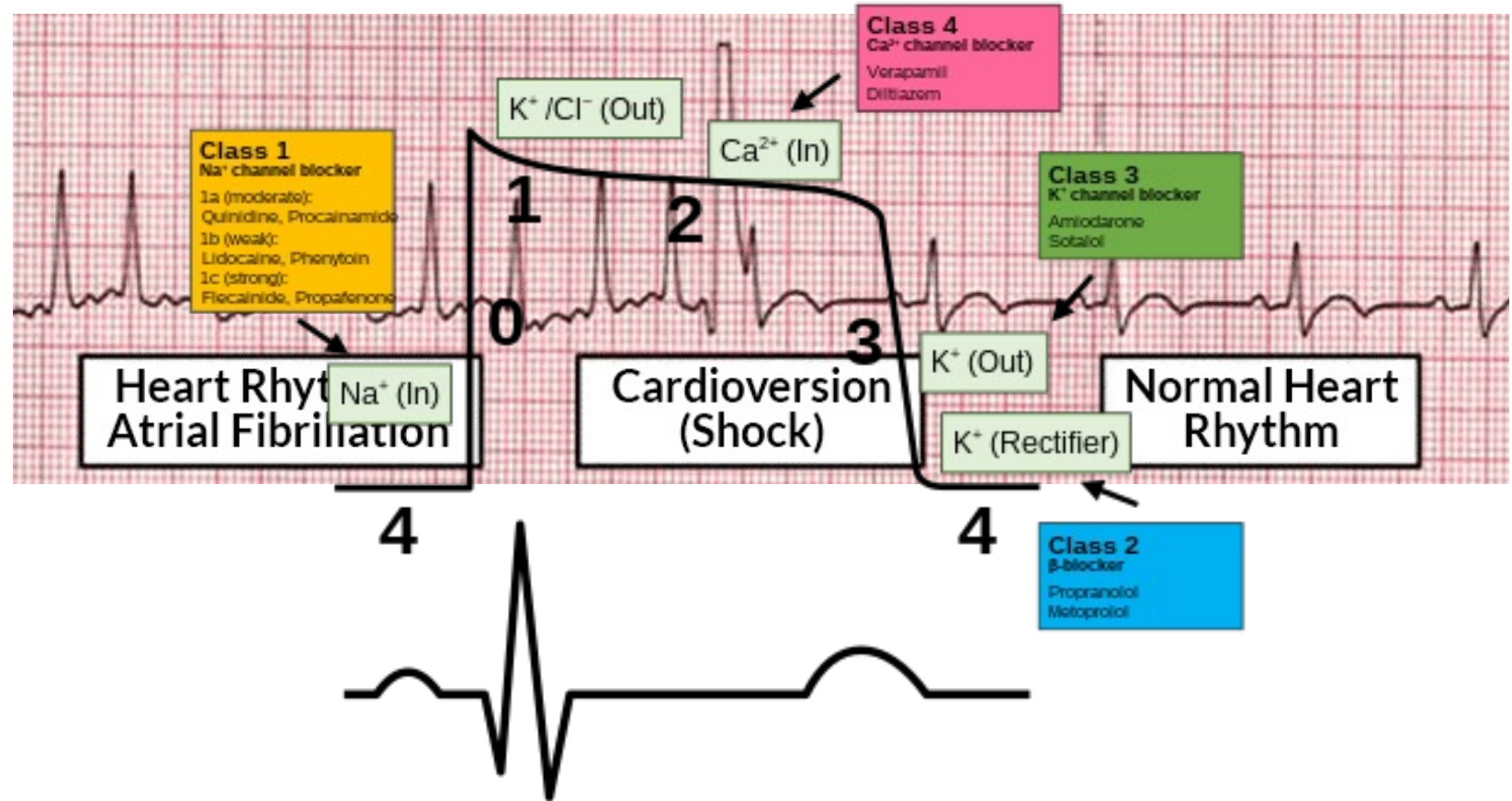
1. Hindricks *and colleagues* EHJ, 2020 (ESC AF guidelines)

# Rhythm control

DC cardioversion

Anti-arrhythmic drugs

Catheter ablation





# Catheter ablation

**Most effective strategy** for maintaining sinus rhythm

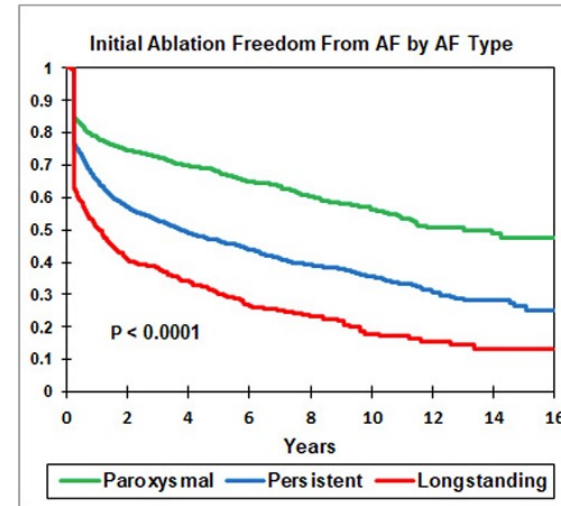
Best outcomes are achieved in **young patients**, with **paroxysmal AF** and **structurally normal hearts**

Also appropriate for other groups in whom an **aggressive attempt to restore and maintain sinus rhythm is justified**

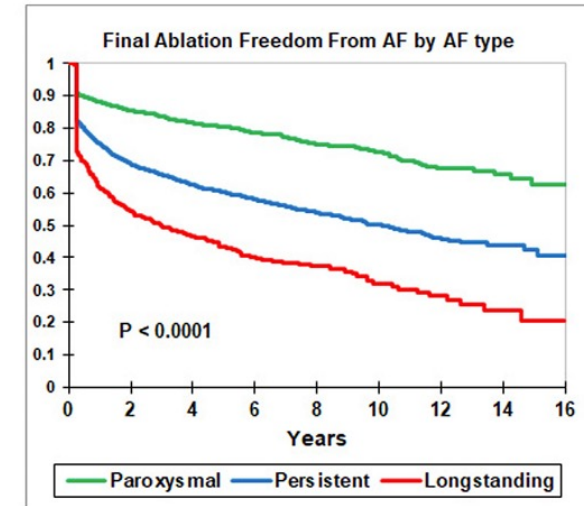
Associated with a risk of complications of the order of 5%, of which the majority are vascular (1) but include life changing complications

At 5-years outcomes in PAF 70 – 80% free from AF

We are **collaborative** • We are **caring** • We are **inclusive** • We are **innovative**



AF type	0 years	1 year	5 years	10 years	15 years
Paroxysmal	1750	1311	677	215	27
Persistent	2934	1839	775	200	18
Longstanding	516	255	93	26	4

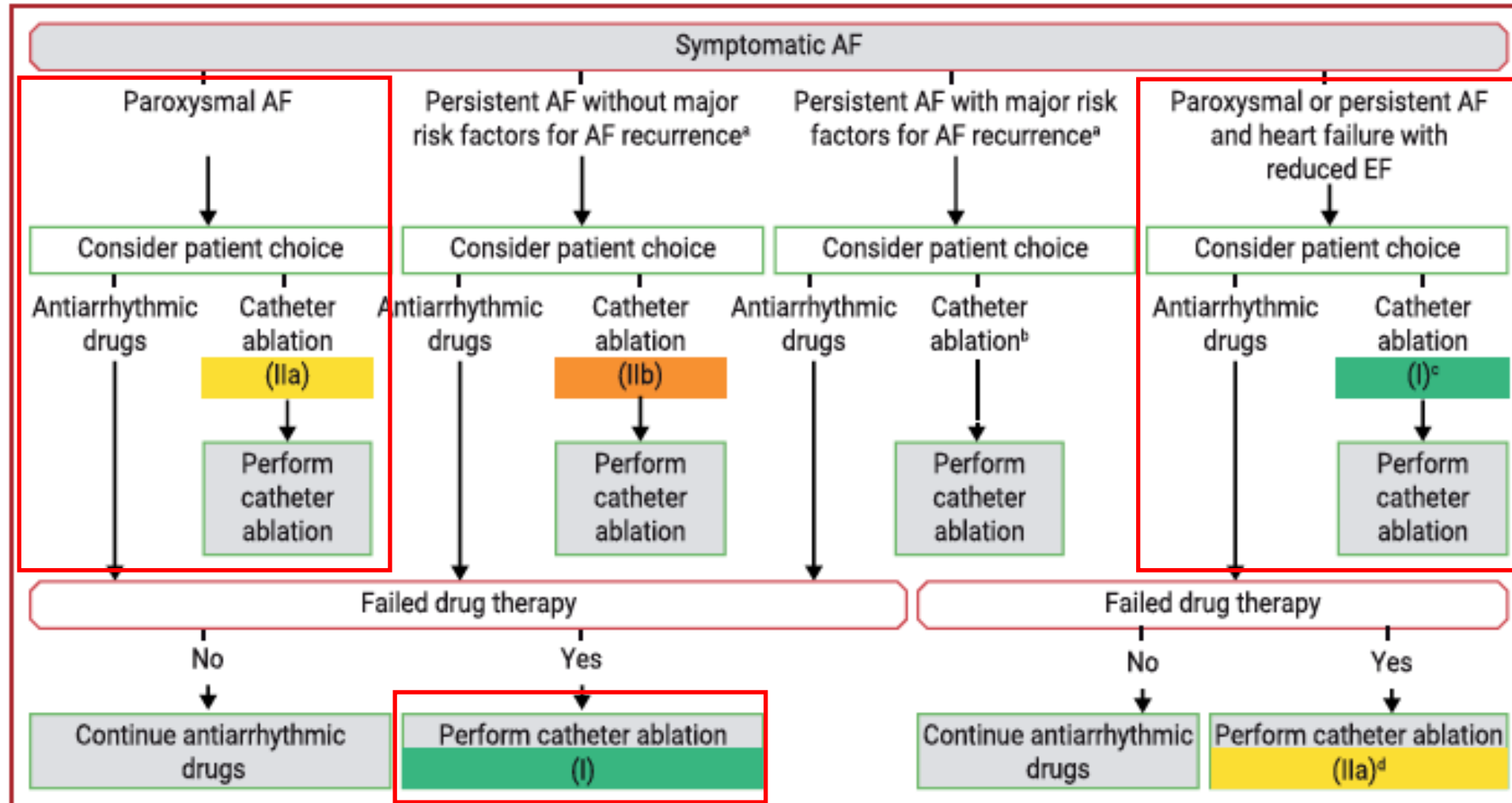


AF type	0 years	1 year	5 years	10 years	15 years
Paroxysmal	1750	1459	783	263	31
Persistent	2934	2084	935	256	26
Longstanding	516	302	122	41	5

1. Joglar *and colleagues*, Circ, 2023

2. Winkle *and colleagues*, HR, 2023

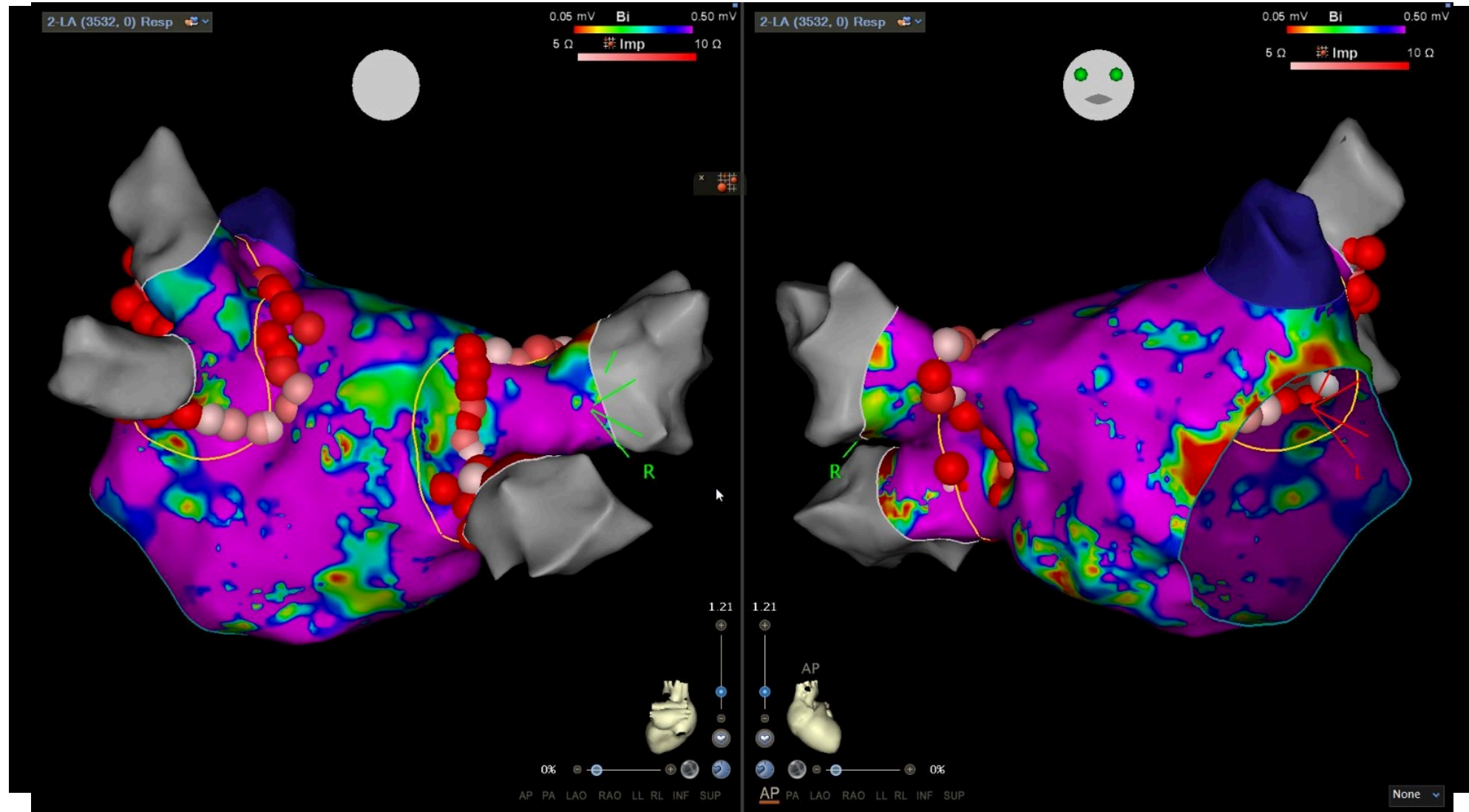
# Indications for catheter ablation of AF



©ESC 2020

1. Hindricks and colleagues EHJ, 2020 (ESC AF guidelines)

# Catheter ablation



We are collaborative • We are caring • We are inclusive • We are innovative

## Summary

Critical to ***document*** the arrhythmia

**Rhythm control** should be considered when a new diagnosis of AF is made

Sinus rhythm is **most effectively achieved through catheter ablation**

Catheter ablation most effective **early in the natural history of AF**

Consider **aggressive attempt to restore sinus rhythm** in patients with ***heart failure***

# Thank you for your attention