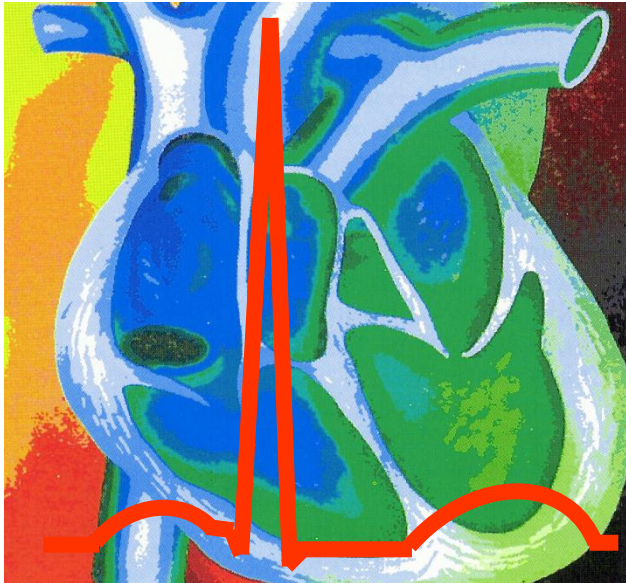


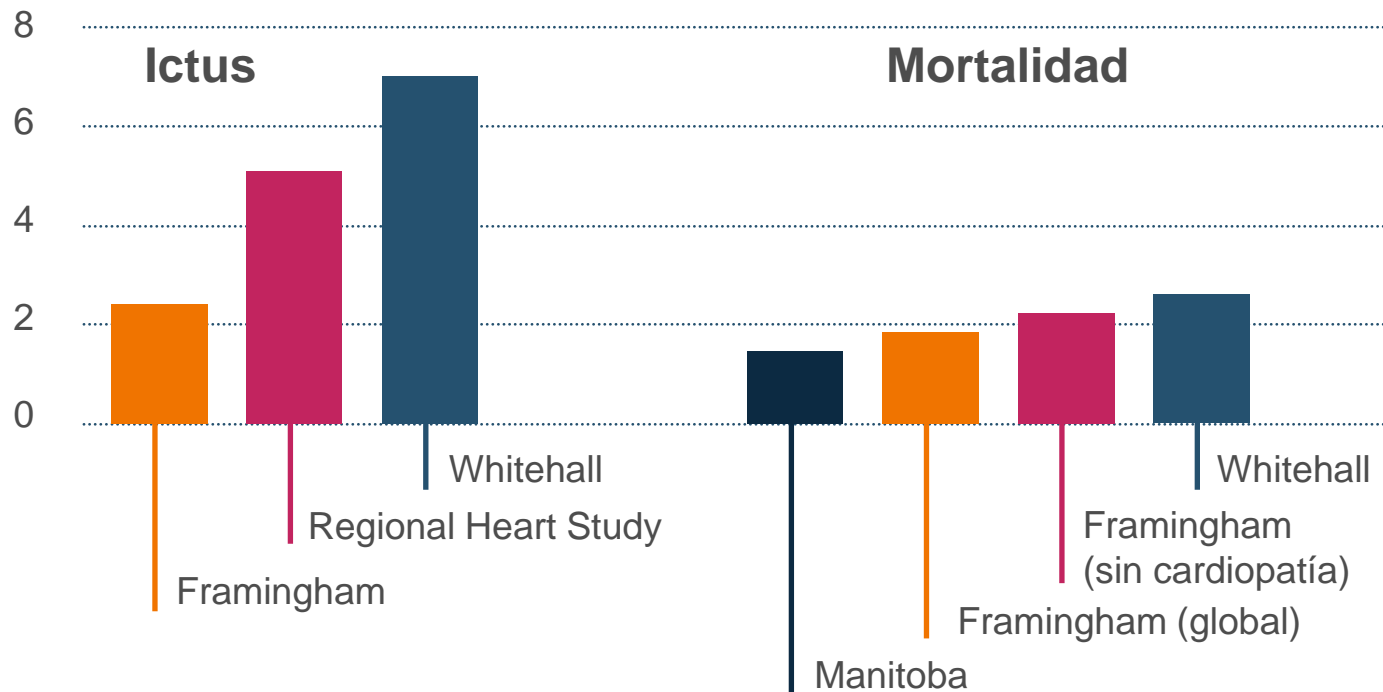
# **El paciente con Fibrilación Auricular del Siglo XXI**



**Antoni Martínez-Rubio**  
**Hosp. Sabadell - Cardiología**  
**Univ. Autònoma de Barcelona**  
**Sabadell (Barcelona)**

# Fibrilación auricular

Riesgo relativo en comparación con los pacientes sin FA

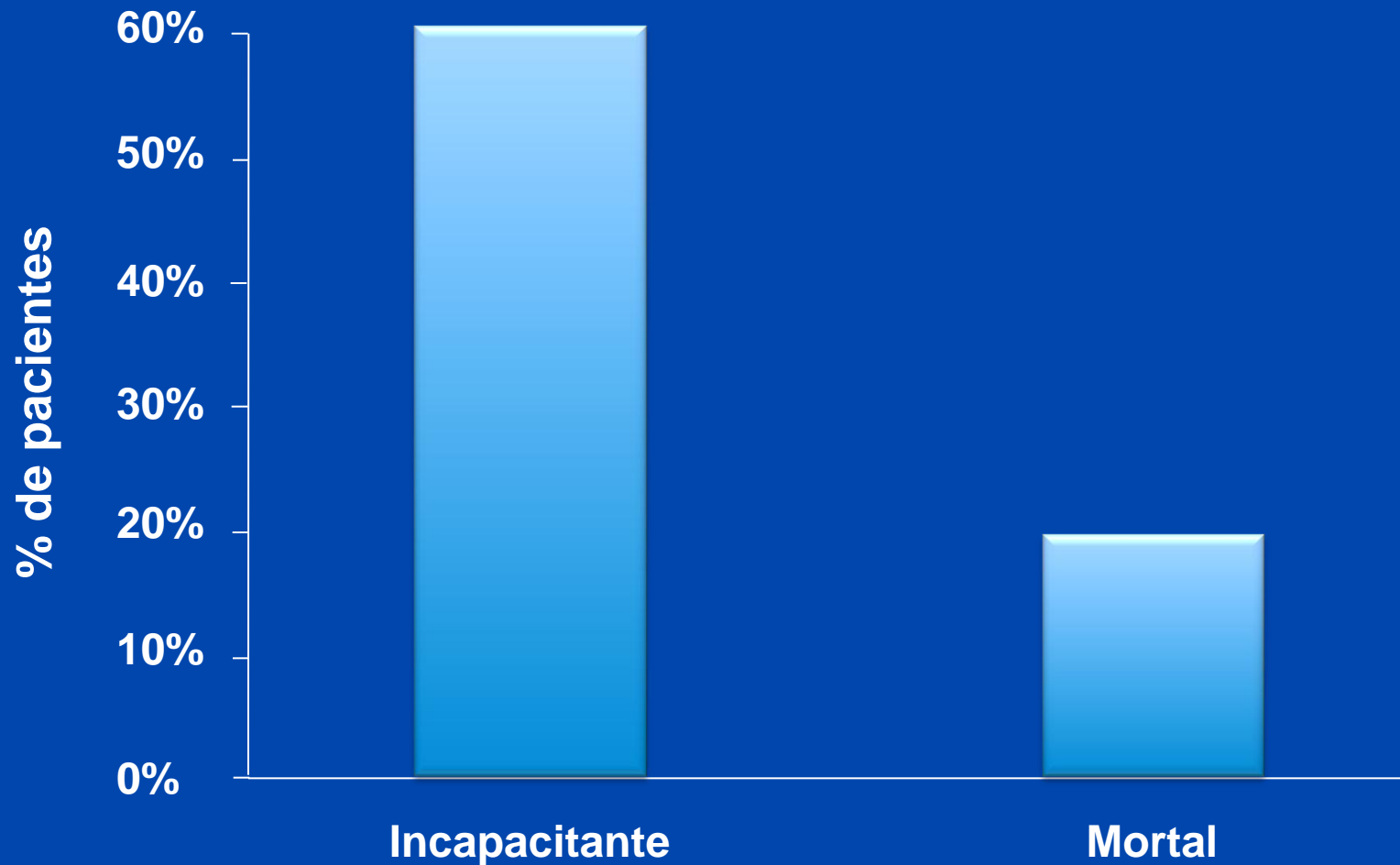


Wolf PA et al. The Framingham Study. Arch Intern Med 1987; 147: 1561-4.  
Regional Heart Study.  
Framingham et al. Framingham Heart Study.

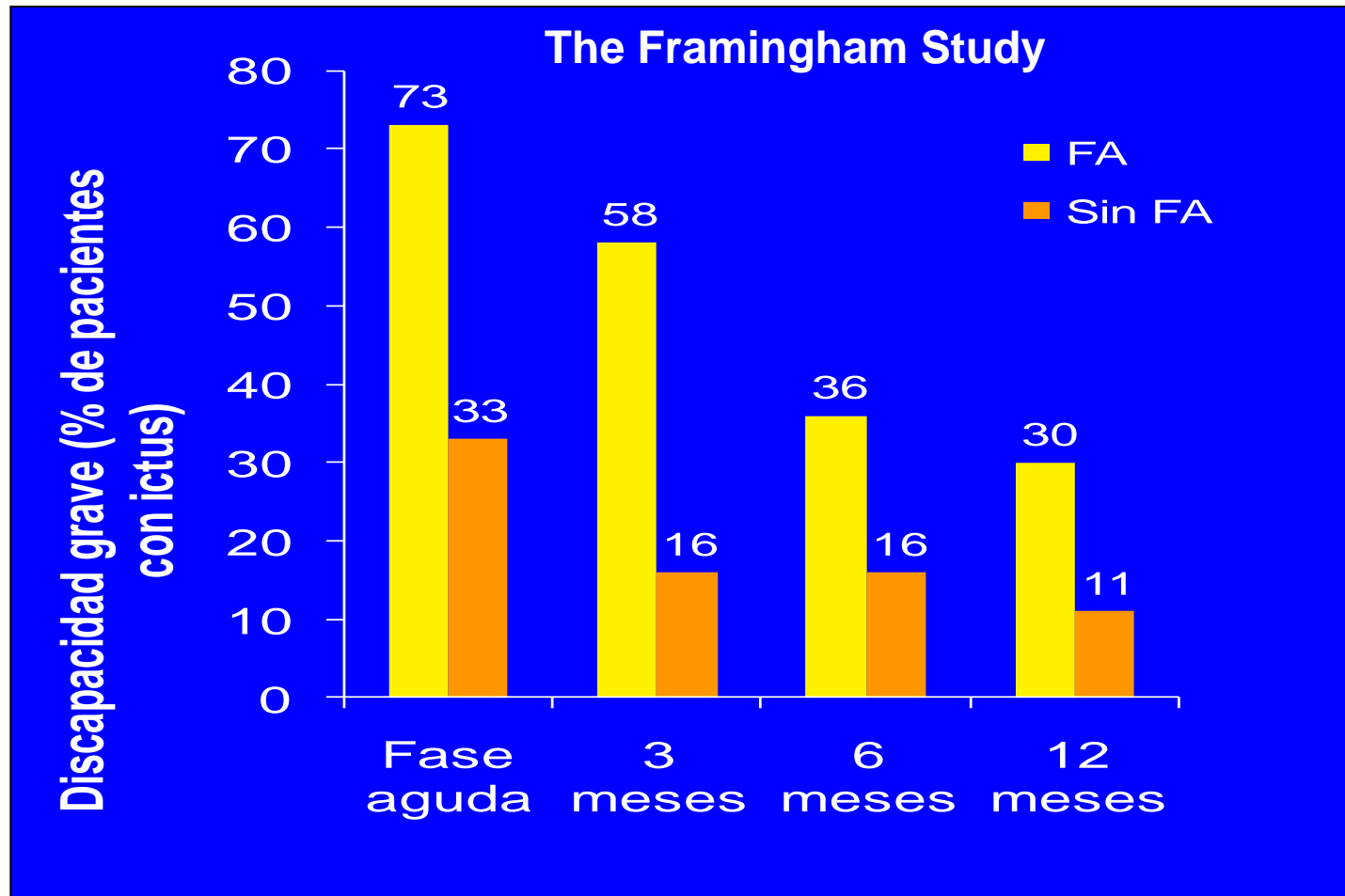
Flegel KM et al. Estudio Whitehall.  
Krahn AD et al. Estudio Manitoba.

# Gravedad del ictus en pacientes con FA

Efecto del primer ictus isquémico en pacientes con FA (n = 597)<sup>1</sup>



# Discapacidad grave post-ictus: Efectos de la FA

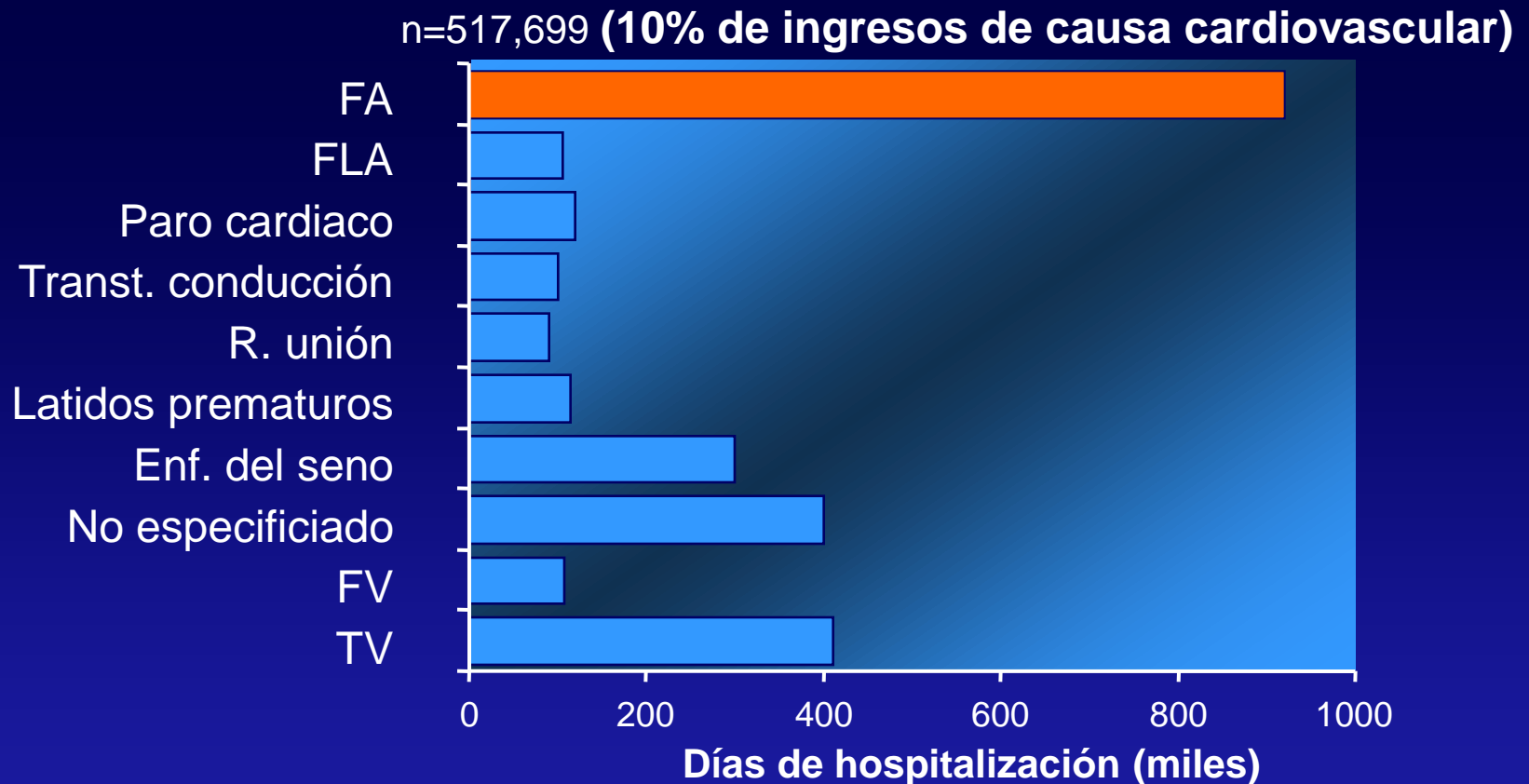


# Mortalidad post-ictus: Efectos de la FA

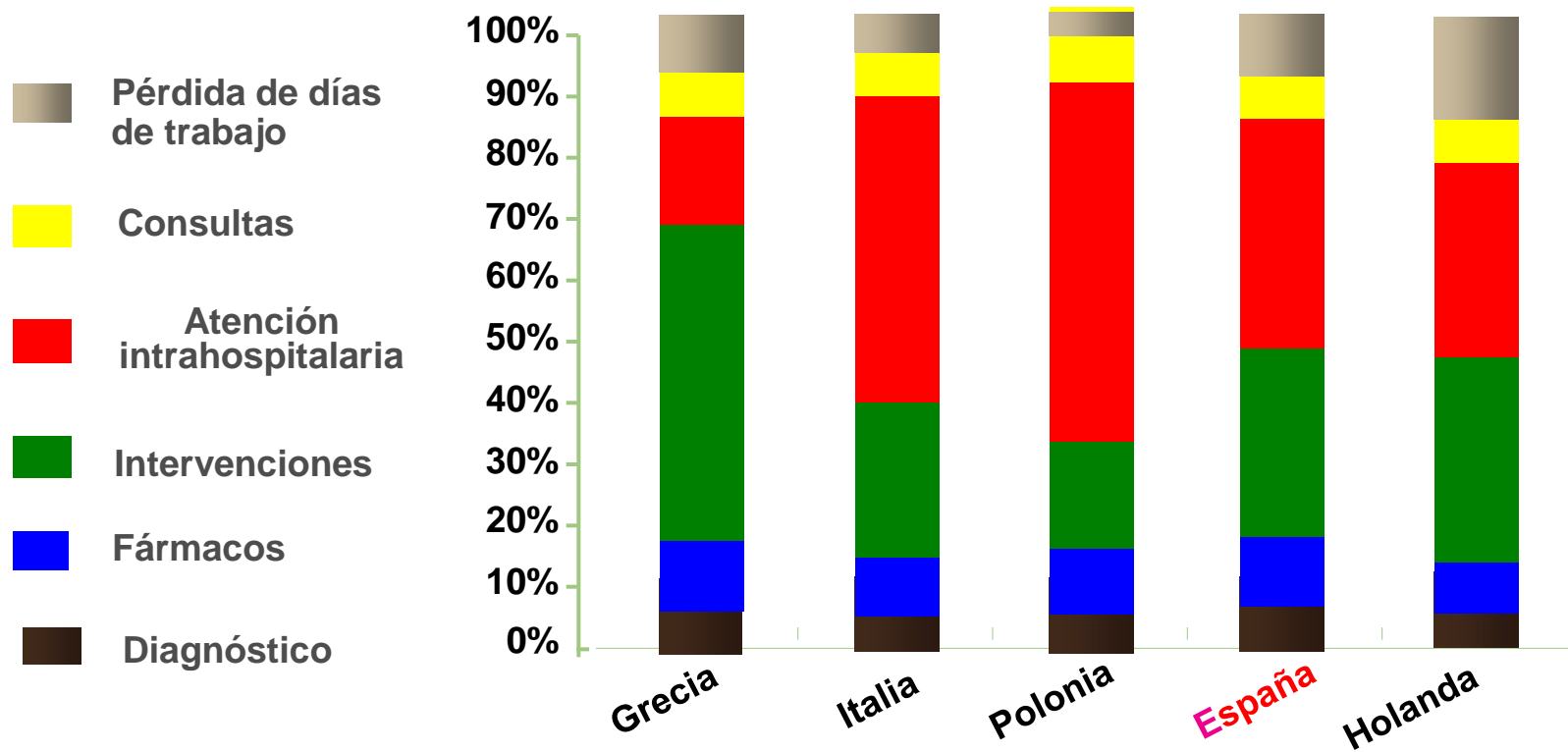
Estudio poblacional: Tasas de mortalidad

Año	SIN AF (N=2661)		CON AF (N=869)	
	Tasa (%)	IC del 95%	Tasa (%)	IC del 95%
1	27,1	25,3–28,8	49,5	46,1–52,8
2	8,2	7,1–9,4	14,1	10,8–17,5
3	6,1	4,9–7,3	13,5	10,0–17,1
4	6,0	4,8–7,2	10,1	6,8–13,5
5	5,5	4,3–6,6	11,3	7,7–14,8
6	3,4	2,4–4,4	3,6	1,3–6,0
7	3,7	2,5–4,9	5,4	2,1–8,7
8	2,5	1,3–3,6	3,8	0,3–7,4

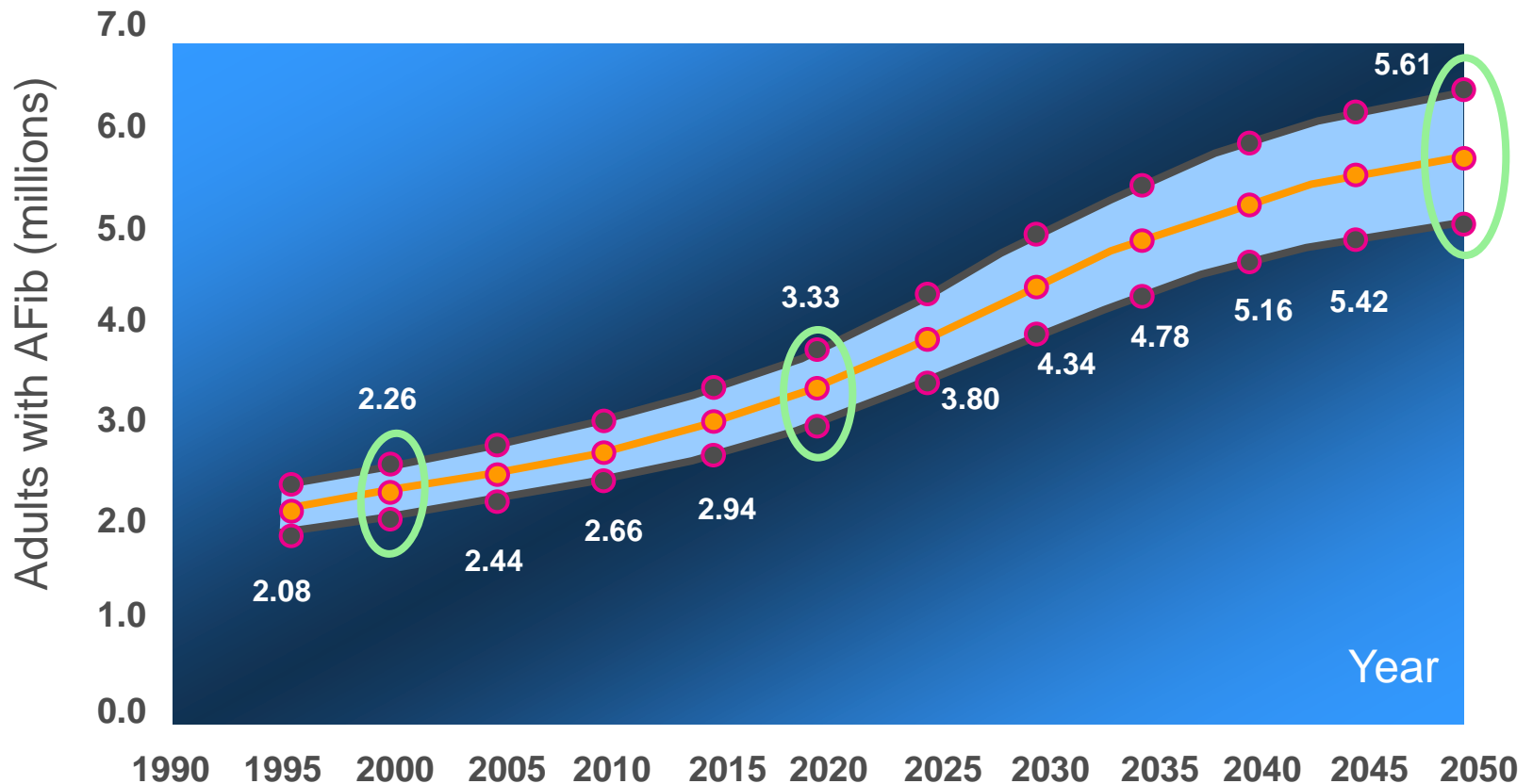
# FA es la arritmia que provoca mayor número de hospitalizaciones



# Coste económico de la fibrilación auricular

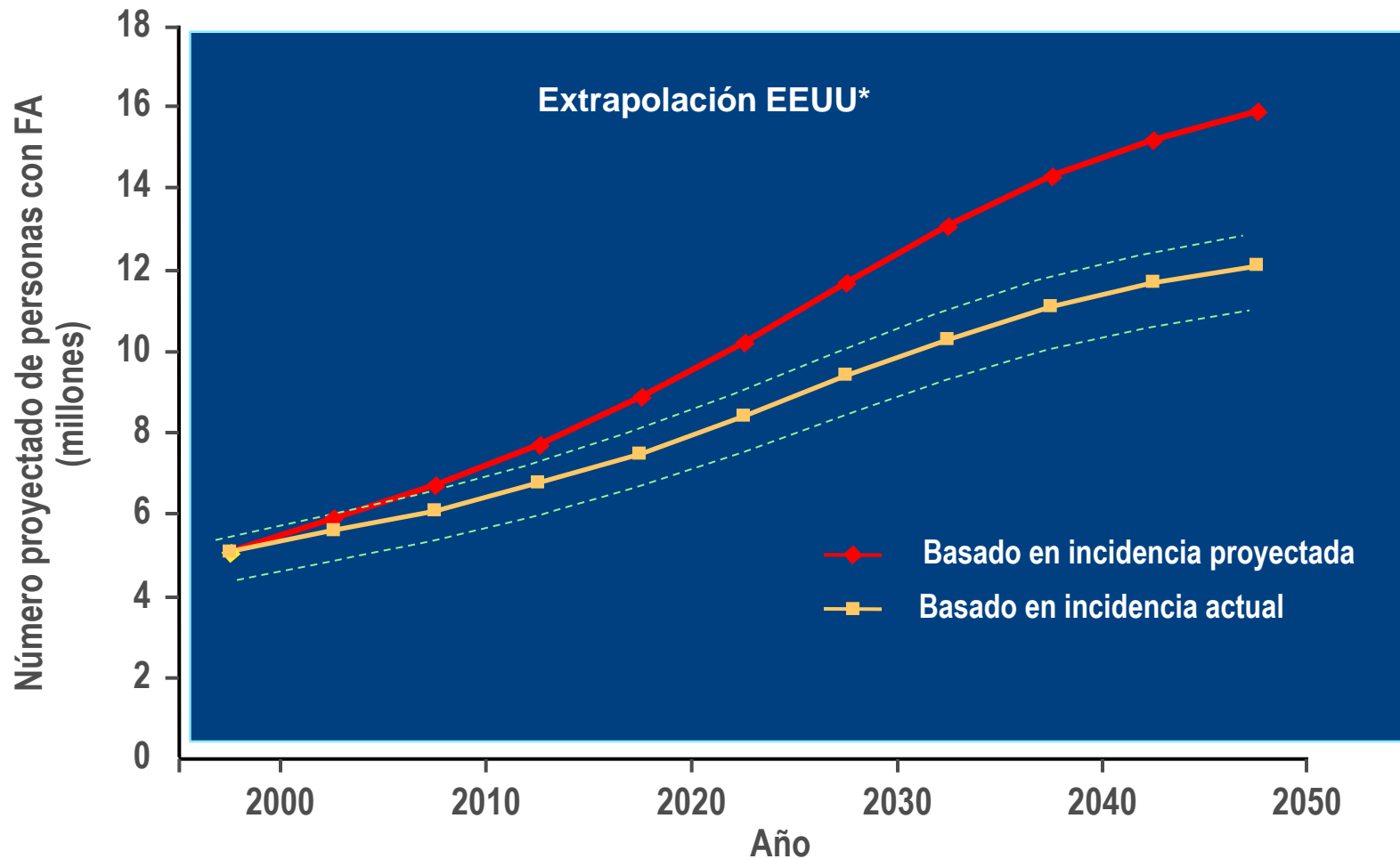


# Previsión de adultos con FA en EEUU (1995 and 2050)



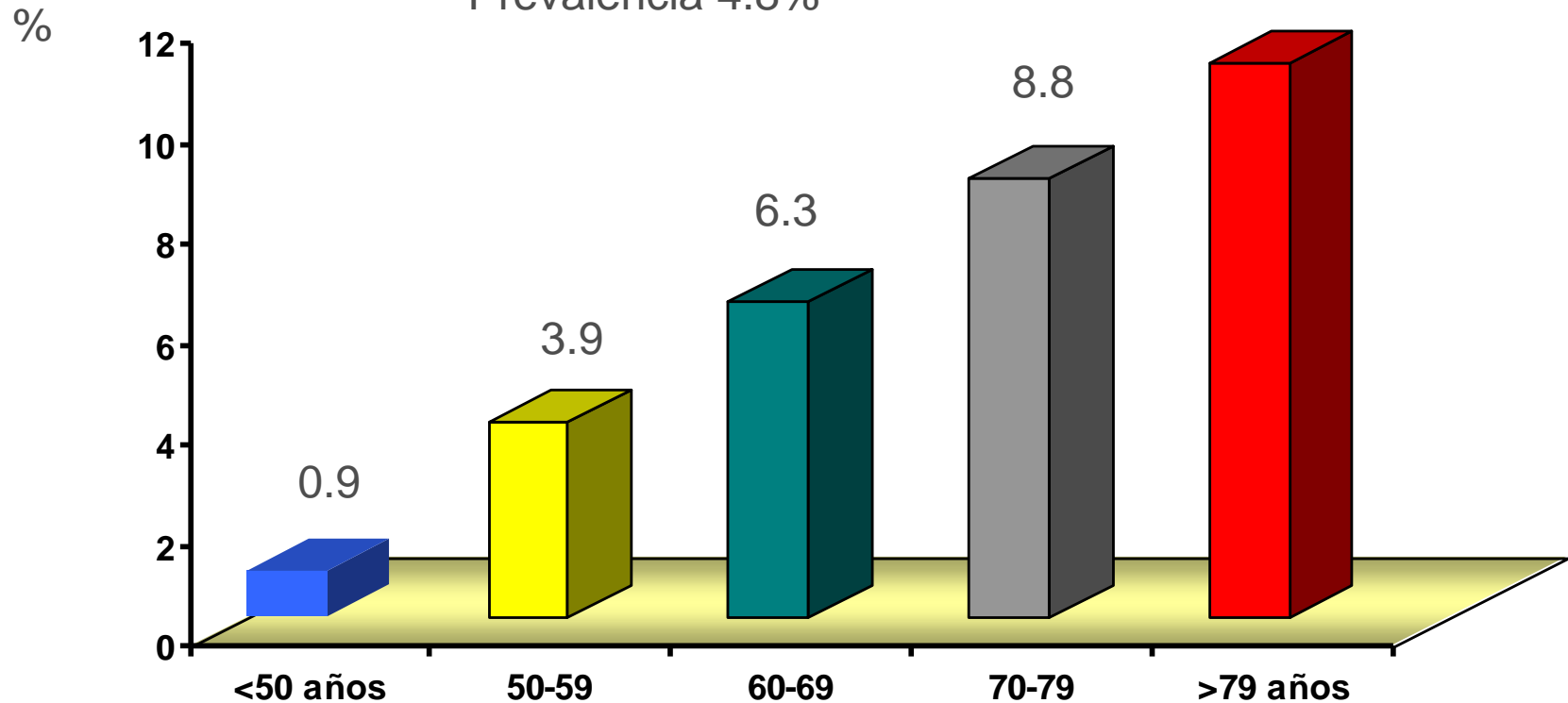


# Previsión de adultos con FA en EEUU (2000 and 2050)

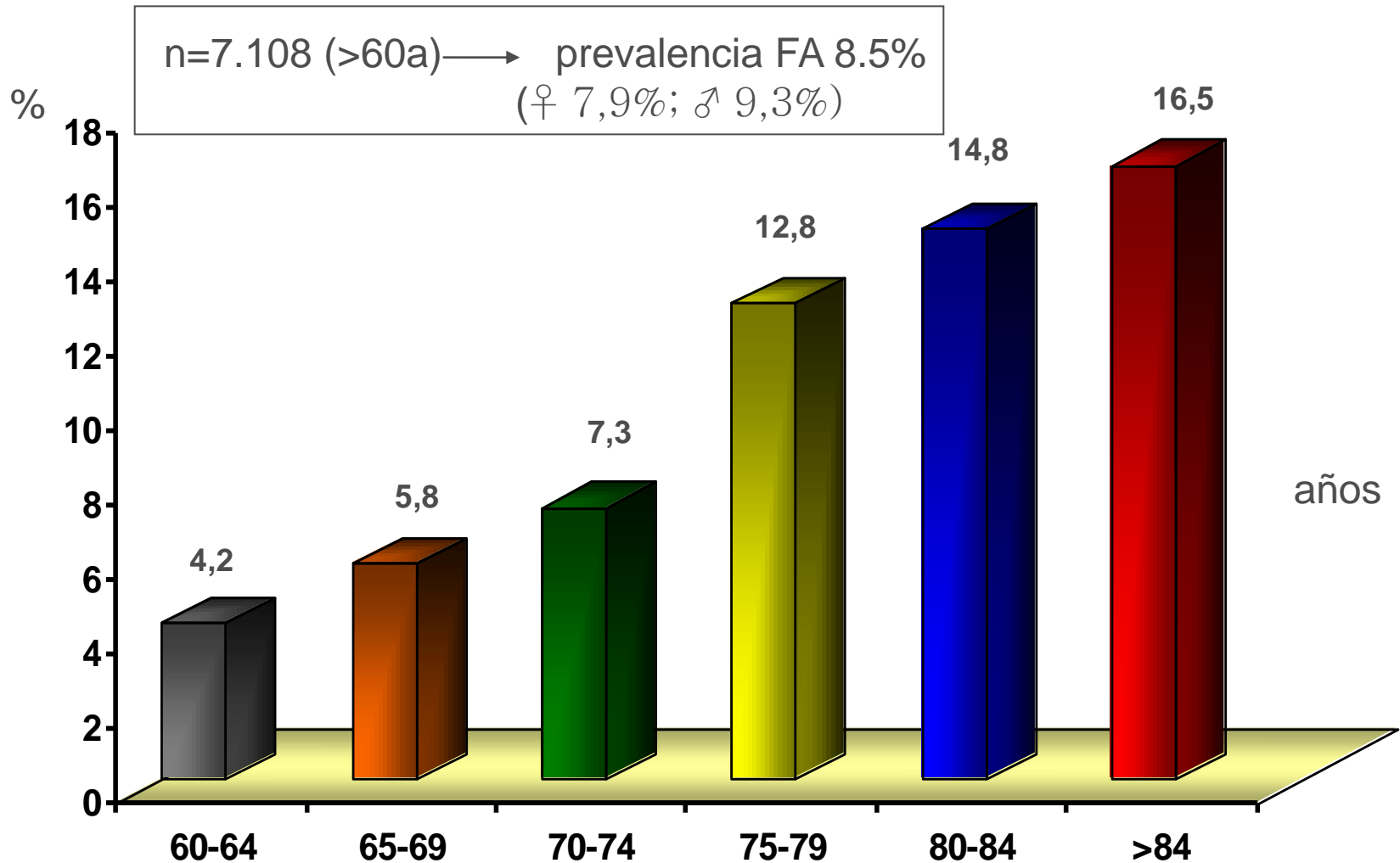


# Prevalencia de fibrilación auricular en población hipertensa española

n=32.051 (AP & CARDIOLOGIA)  
Prevalencia 4.8%



# Prevalencia de FA en población general española



# RealiseAF: participating countries

Enrollment from October 30th, 2009 to May 3rd, 2010



# Patients and AF characteristics

	Total N=10,523
<b>Age ≥ 60 years (%)</b>	73.9
<b>Age mean (SD)</b>	66.6 (12.2)
<b>Males (%)</b>	56.4
<b>Ethnicity(%)</b>	
<i>Caucasian</i>	84.2
<i>Black</i>	0.1
<i>Asian</i>	10.1
<i>Hispanic</i>	3.5
<i>Other</i>	2.1
<b>BMI (kg/m<sup>2</sup>) mean (SD)</b>	28.3 (5.2)
<b>SBP (mm Hg) mean (SD)</b>	132.8 (19.4)
<b>DBP (mm Hg) mean (SD)</b>	79.8 (11.4)

	Total (%)
<b>Lone AF*</b>	5.1
<b>Time since AF diagnosis</b>	
<i>&lt; 3 months</i>	20.6
<i>3 to 6 months</i>	6.3
<i>6 to 12 months</i>	10.2
<i>&gt; 12 months</i>	62.9
<b>Type of AF</b>	
<i>Paroxysmal</i>	24.8
<i>Persistent</i>	22.3
<i>Permanent</i>	46.4
<i>Unable to assign (first episode)</i>	6.4
<i>Paroxysmal+Persistent</i>	<0.1

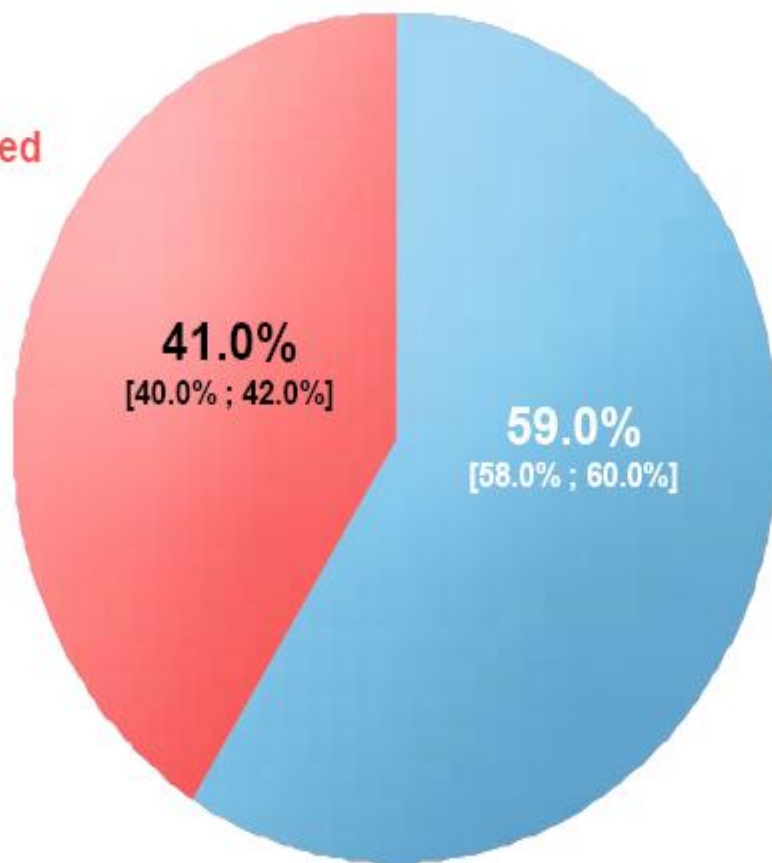
\* Patients aged under 60 years with no Coronary Artery Disease, no Heart Failure, no Valvular heart disease, no Chronic pulmonary disease, no VTE and no Arterial Hypertension

# Primary outcome: control of AF

Sinus rhythm or AF with HR  $\leq$  80 bpm, on the ECG the day of the visit

Patients evaluable for primary criterion (n=9,665)

**AF not controlled**

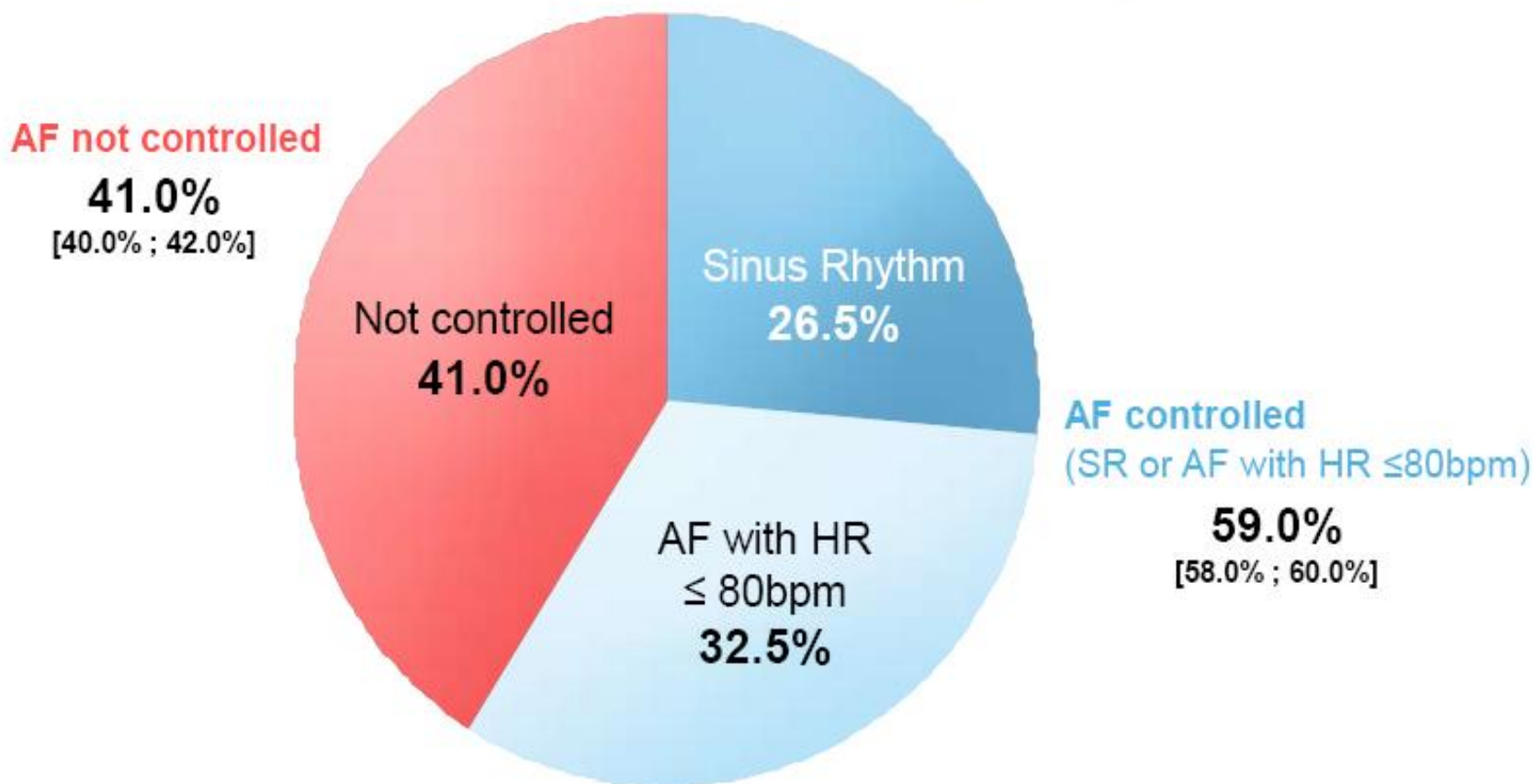


**AF controlled**  
(SR or AF with HR  $\leq$ 80bpm)

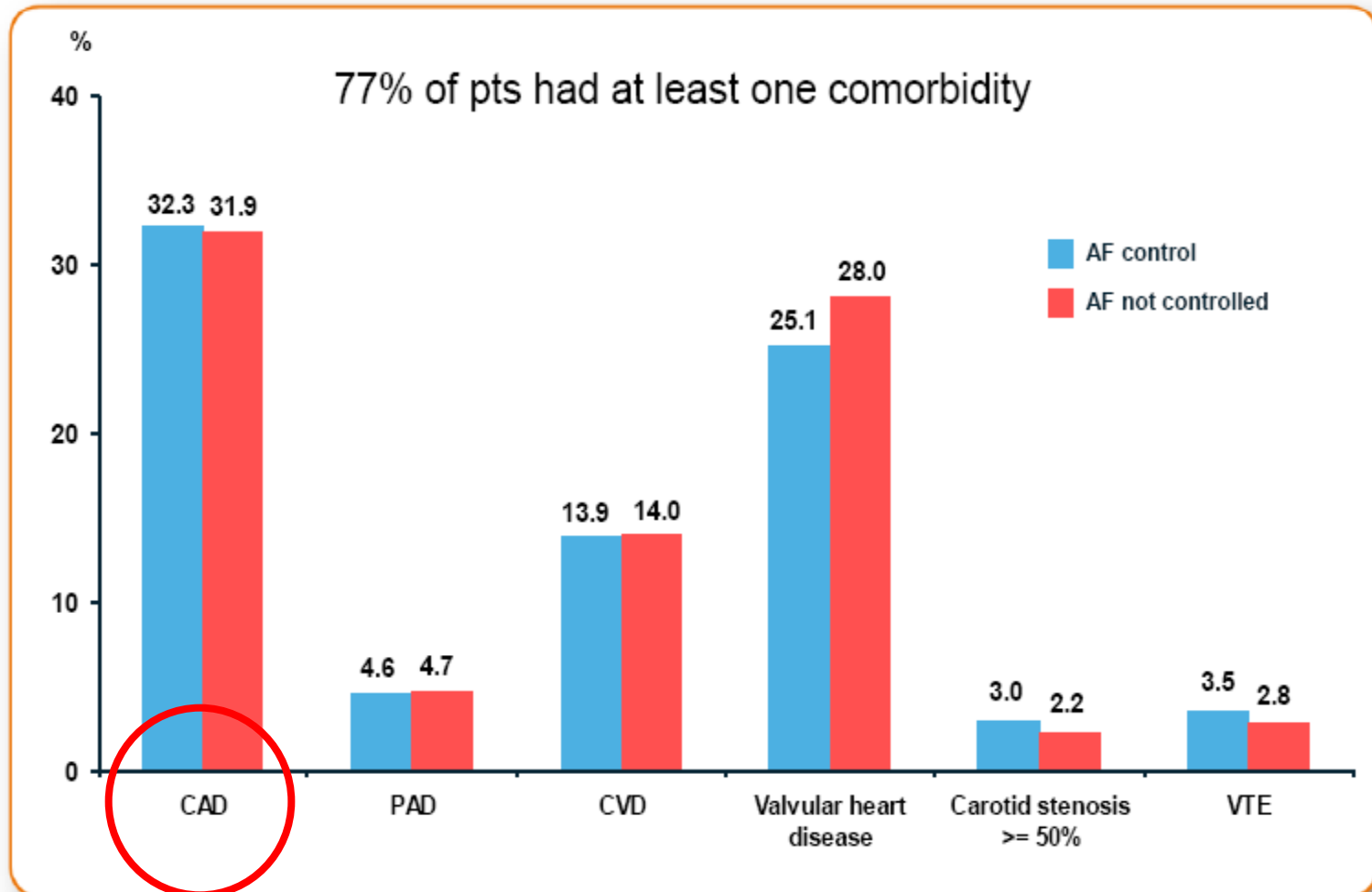
# Primary outcome: control of AF

Sinus rhythm or AF with HR  $\leq$  80 bpm, on the ECG the day of the visit

Patients evaluable for primary criterion (n=9,665)



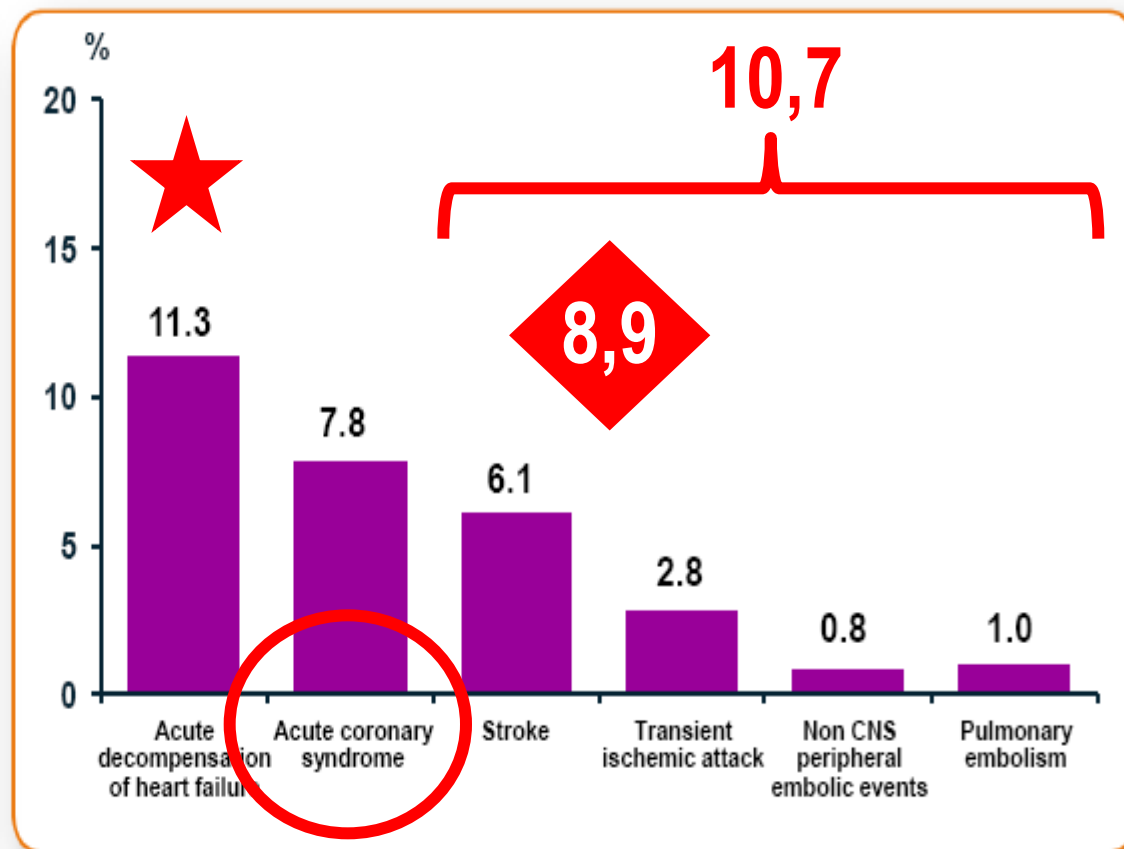
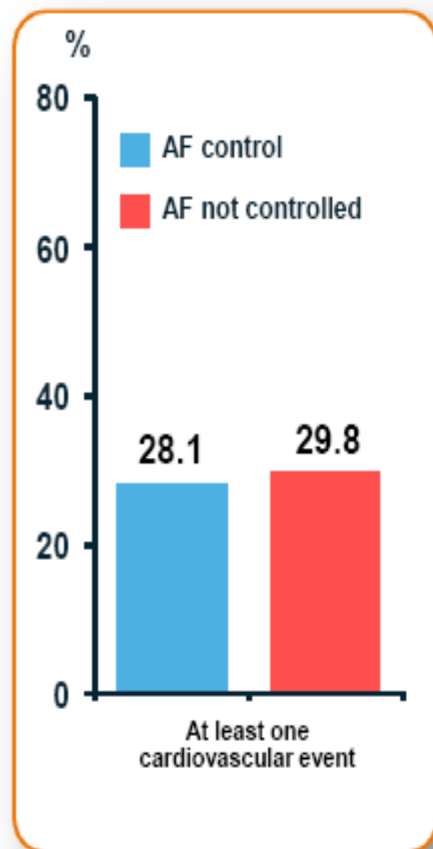
# History of CV disease according to AF control





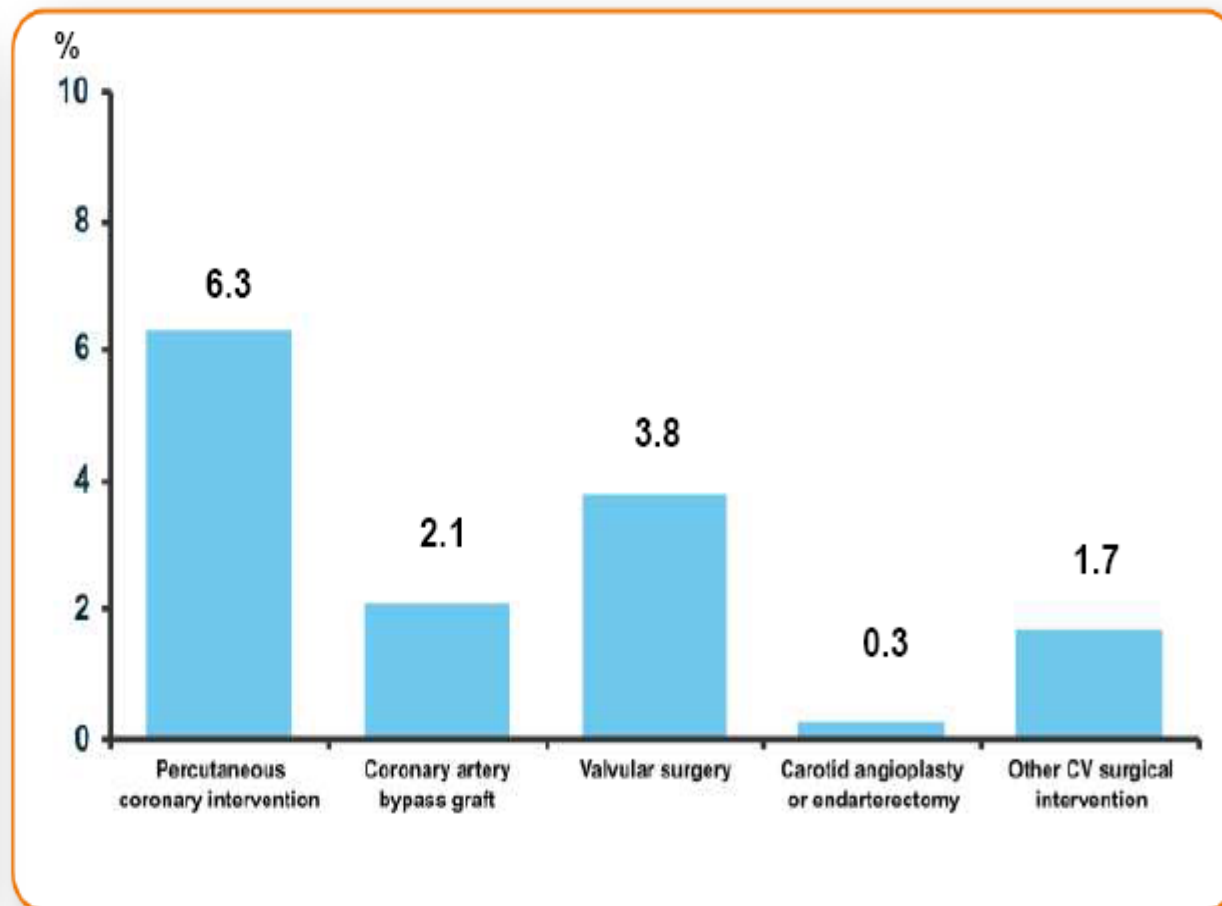
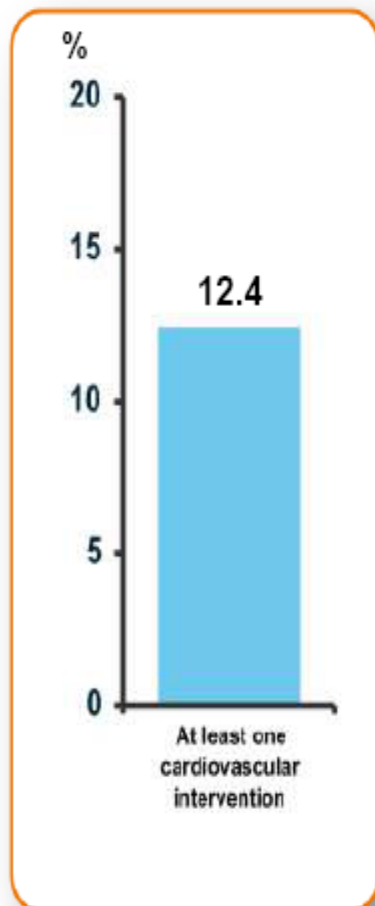
# Frequent and severe CV events leading to unplanned hospitalisation in AF patients

In the last 12 months



# CV interventions in AF patients

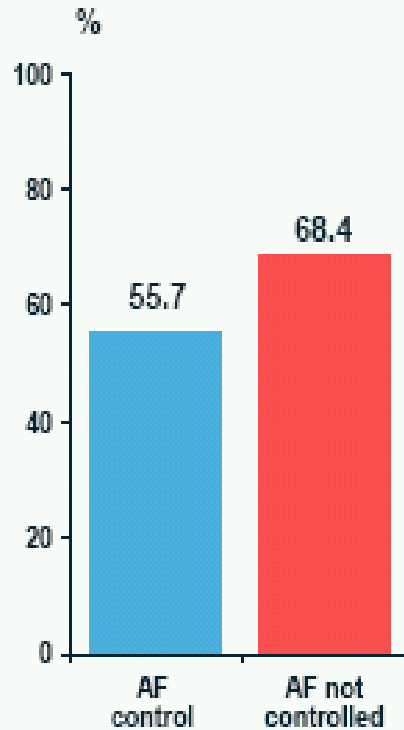
In the last 12 months



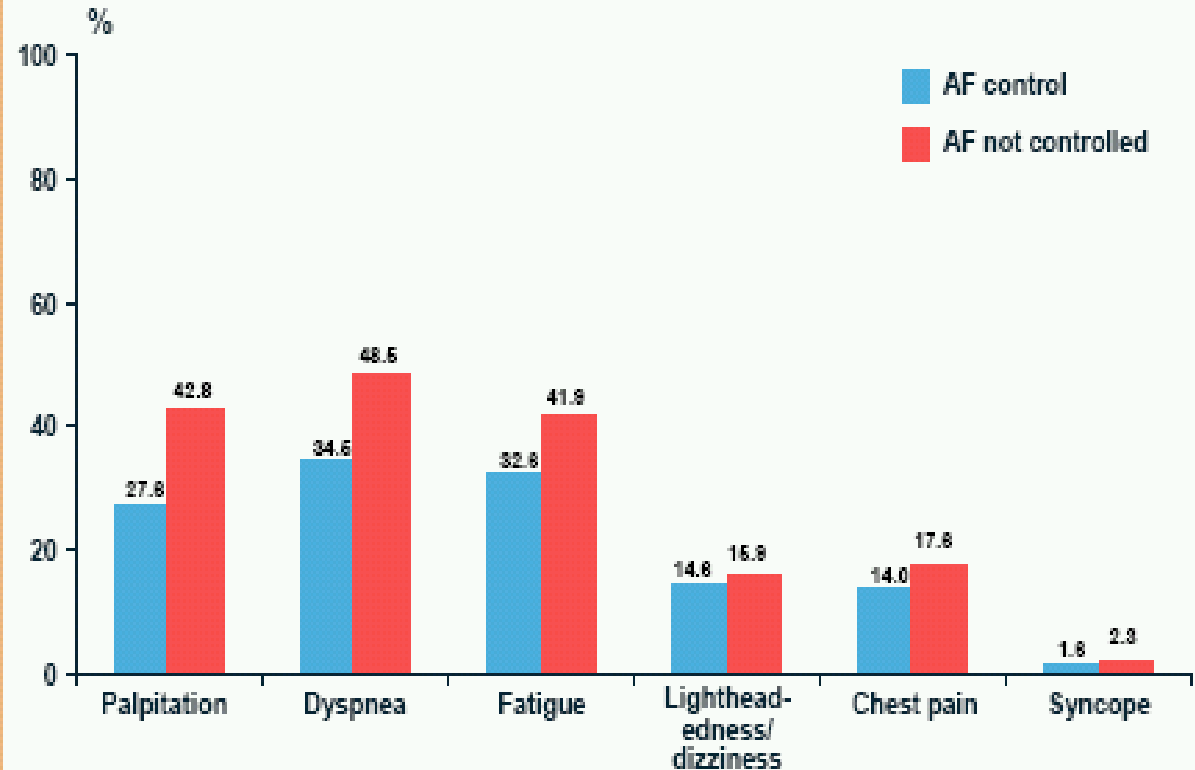
# AF control was not indicative of symptom control

Fibrilación auricular

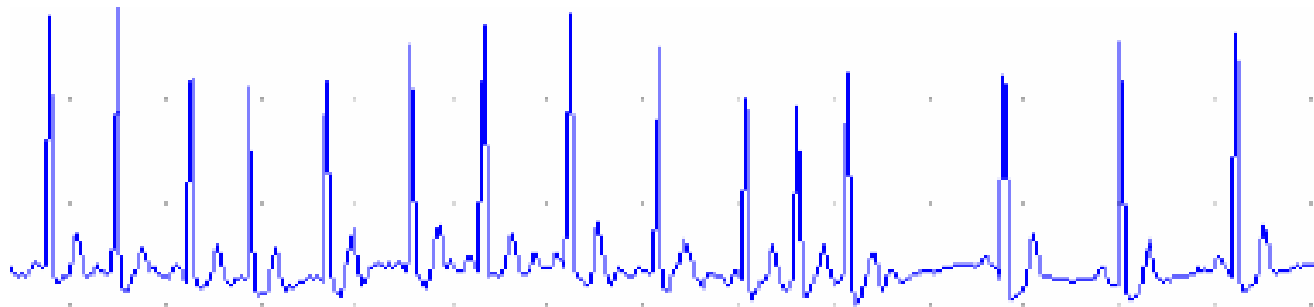
At least one symptom\*



Symptom\*



# Asymptomatic AF detected by transtelephonic monitoring (TTM)



**PAFAC** (788 pts, persistent AF after CV, 12mo FU)

**73%** of all TTM-recorded AF recurrences were **not** associated with symptoms

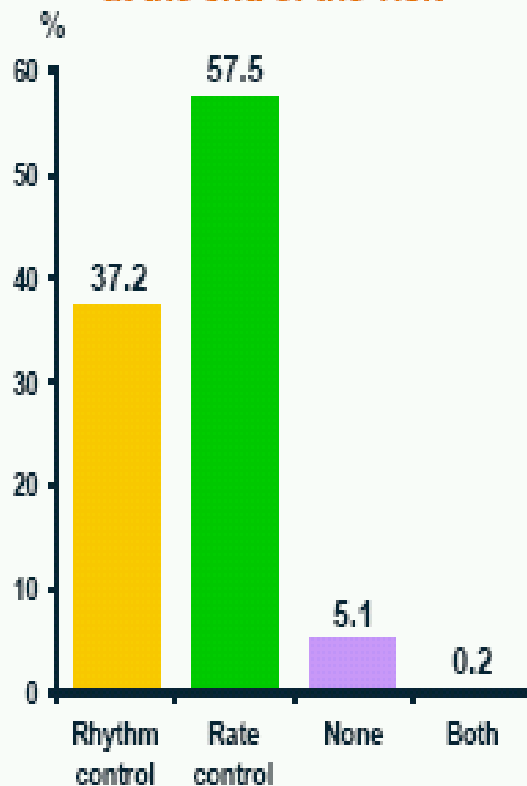
**SOPAT** (1052 pts, paroxysmal AF, 12mo FU)

**56%** of all TTM-recorded AF recurrences were **not** associated with symptoms

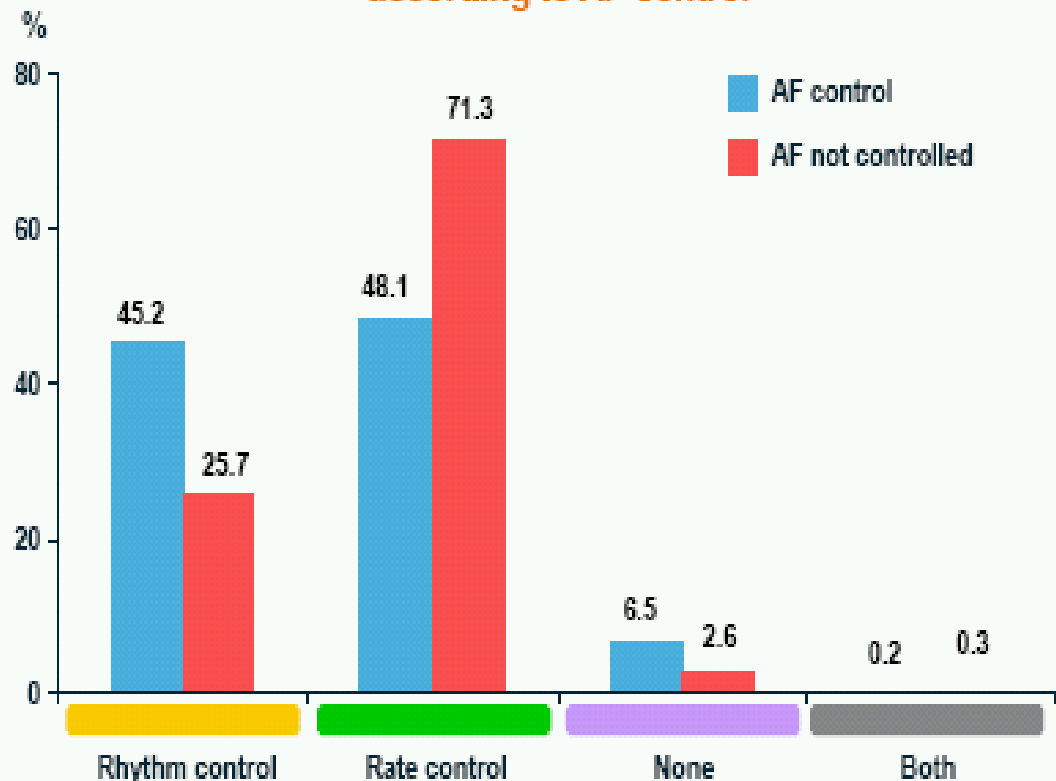
# Rate control was the strategy most frequently chosen

## Fibrilación auricular

Therapeutic strategy chosen at the end of the visit

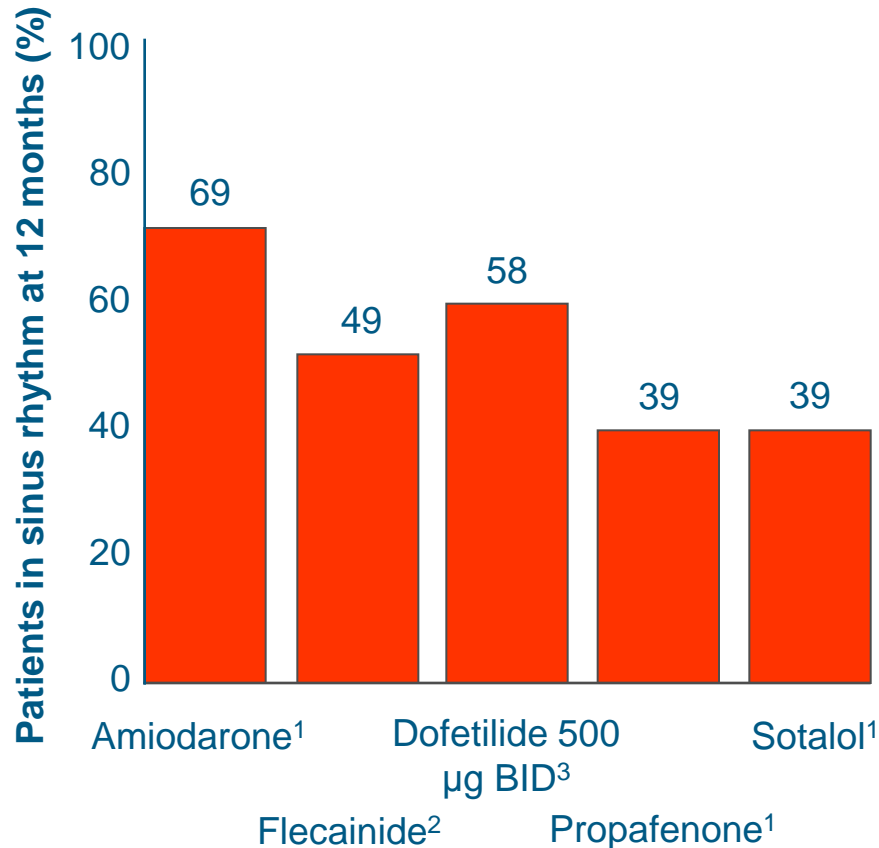


Therapeutic strategy chosen at the end of the visit - according to AF control

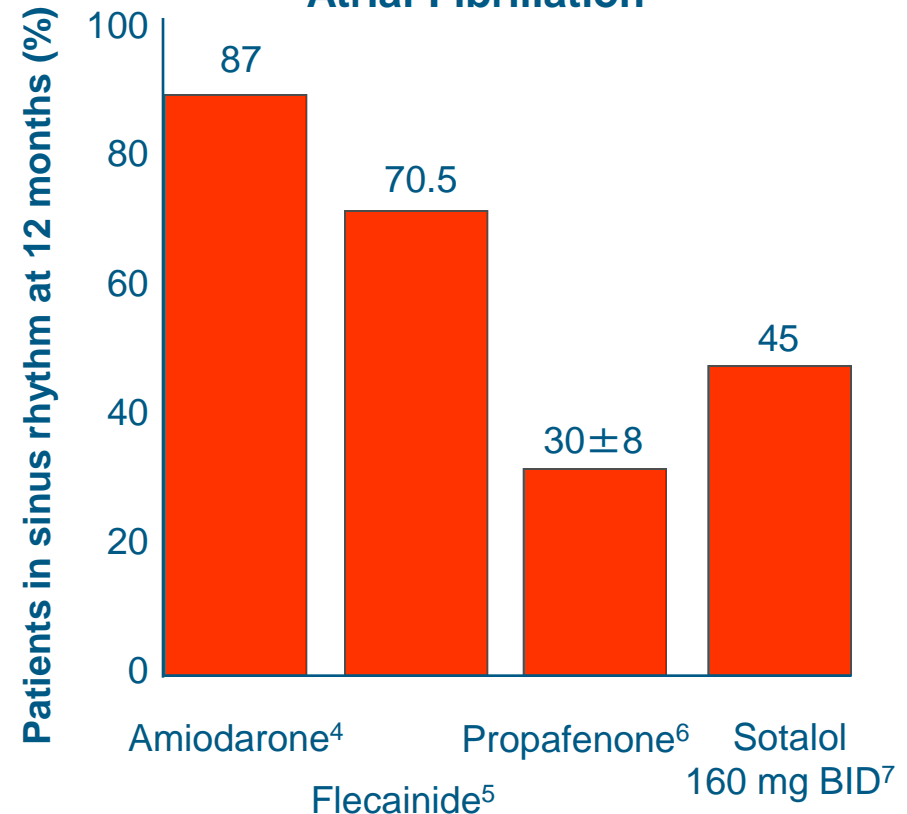


# SR Maintenance at 12 Months with AADs

## Patients with Persistent Atrial Fibrillation

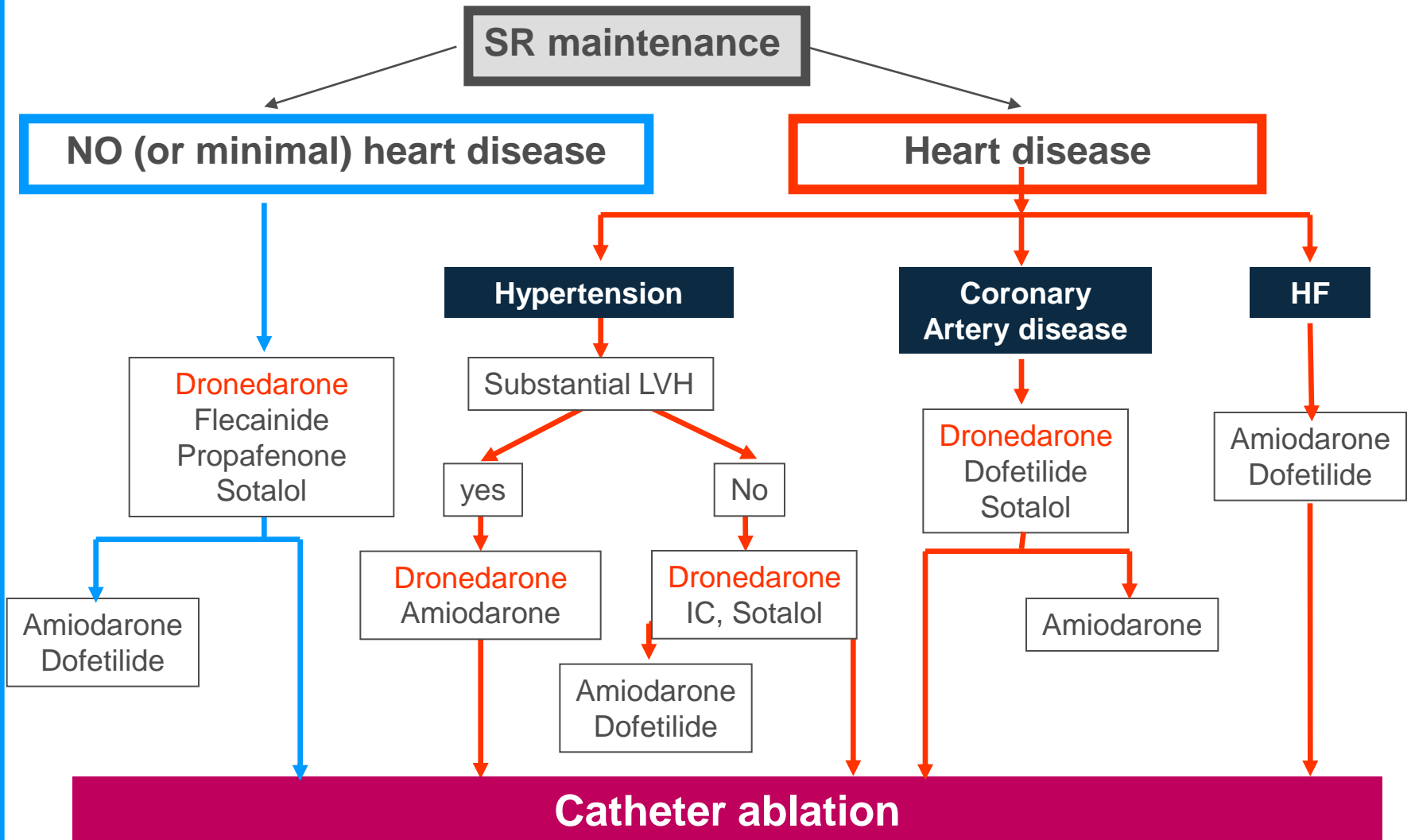


## Patients with Persistent or Paroxysmal Atrial Fibrillation

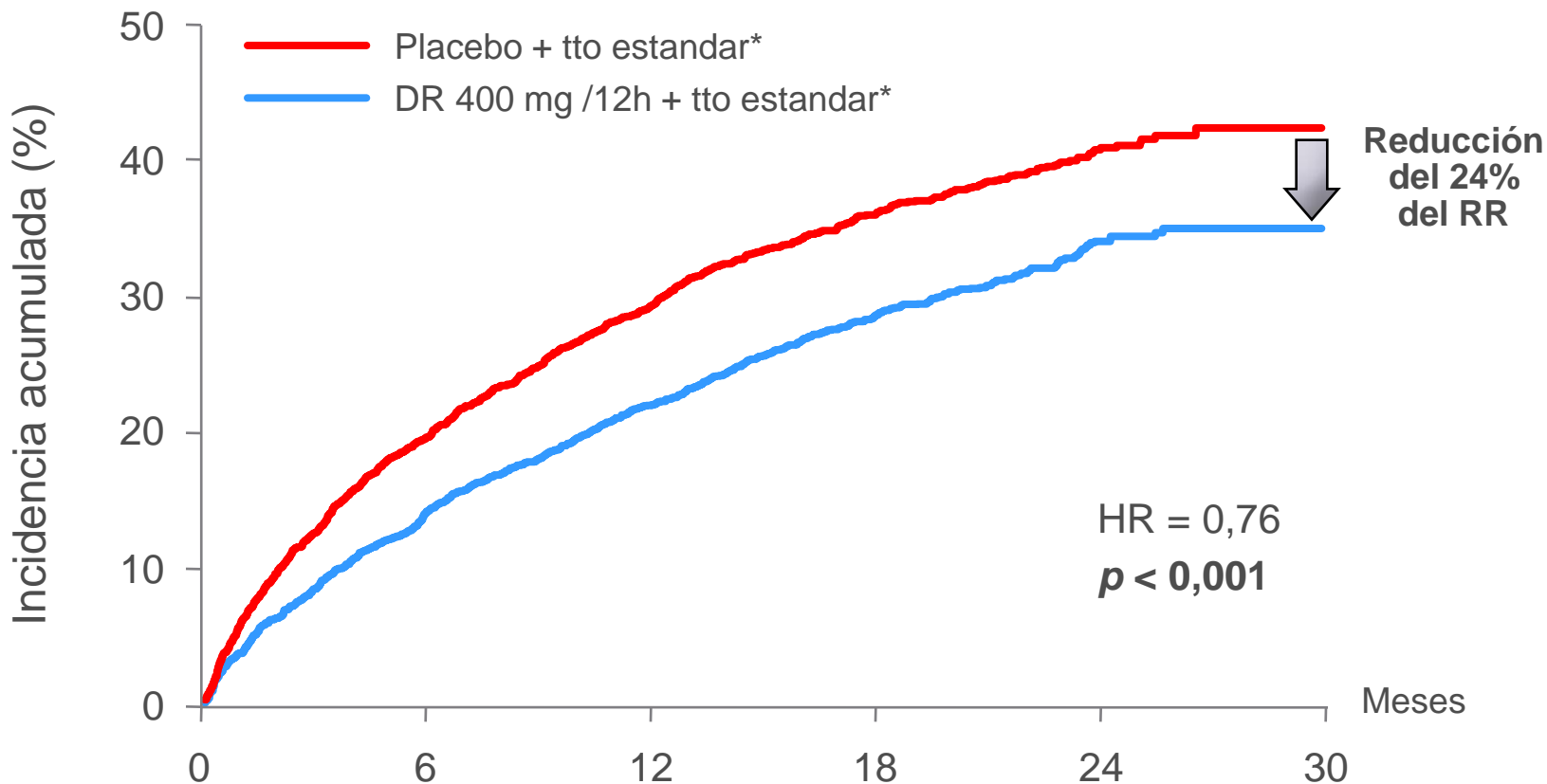


1. Roy D, et al. *N Engl J Med* 2000;**342**:913–920. 2. Van Gelder IC, et al. *Am J Cardiol* 1989;**64**:1317–1321. 3. Capucci, et al. *Int J Cardiol* 1999;**68**(2):187–196. 4. Chun Sh, et al. *Am J Cardiol* 1995;**76**:47–50. 5. Naccarelli GV, et al. *Am J Cardiol* 1996;**77**:53A–59A. 6. Reimold SC, et al. *Am J Cardiol* 1993;**71**:558–563. 7. Benditt DG, et al. *Am J Cardiol* 1999;**84**:270–277

# Atrial fibrillation: management



# Efecto de la Dronedarona en la mortalidad y hospitalización CV



Pacientes en riesgo:

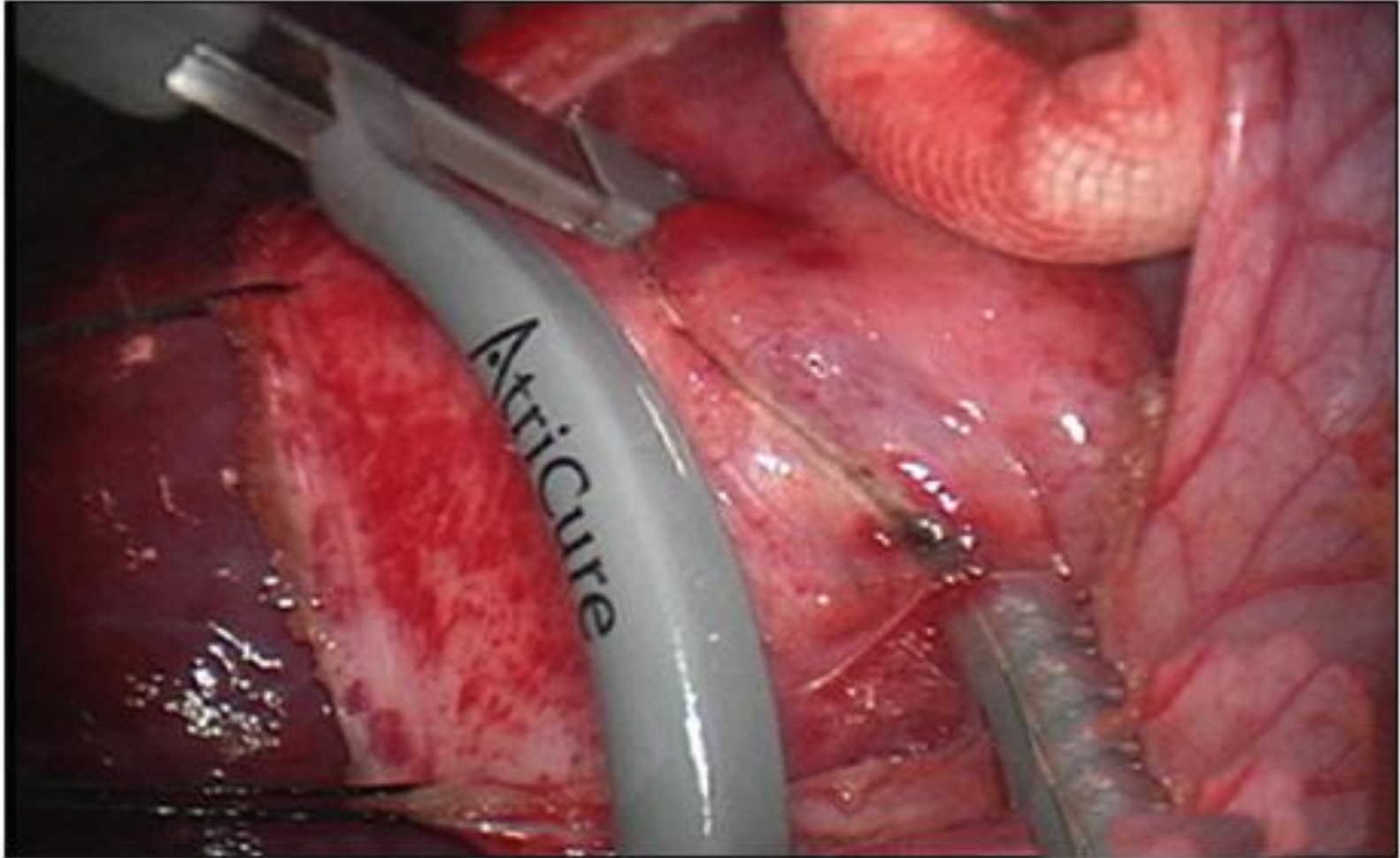
Placebo	<b>2327</b>	<b>1858</b>	<b>1625</b>	<b>1072</b>	<b>385</b>	<b>3</b>
DR 400 mg /12h	<b>2301</b>	<b>1963</b>	<b>1776</b>	<b>1177</b>	<b>403</b>	<b>2</b>



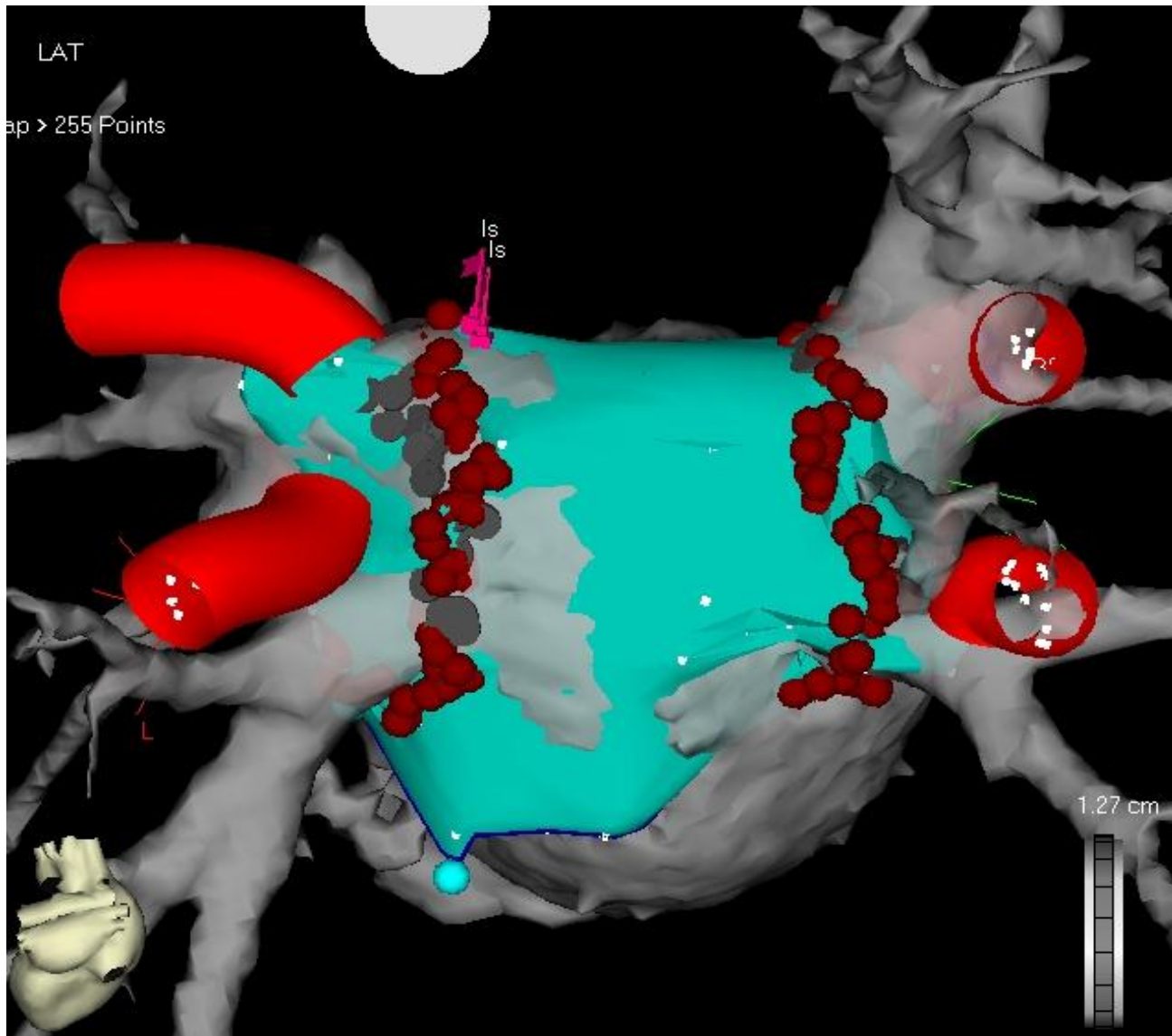
Mortalidad	Placebo n = 2327	Dronedaron n = 2301	HR	IC del 95%	p
Total	139	116	0.84	0.66; 1.08	0.18
Mort. NO CV	49	53	1.10	0.74; 1.62	0.65
Mort. CV	90	63	0.71	0.51; 0.98	0.03
Mort. cardiaca NO arrítmica	18	17	0.95	0.49; 1.85	0.89
Mort. cardiaca arrítmica	48	26	0.55	0.34; 0.88	0.01
Mort vasc. NO cardiaca	24	20	0.84	0.47; 1.52	0.57

Motivo de la 1ª hospitalización por causas CV	Placebo n = 2327	Dronedarona n = 2301	HR	IC del 95%	p
Cualquier motivo	859	675	0.74	0.67; 0.82	<0.001
Fibrilación auricular	510	335	0.63	0.55; 0.72	<0.001
ICC	132	112	0.86	0.67; 1.10	0.22
SCA	89	62	0.70	0.51; 0.97	0.03
Síncope	32	27	0.85	0.51; 1.42	0.54
Arritmia ventricular o PCR	12	13	1.09	0.50; 2.39	0.83

# Atrial fibrillation: surgery

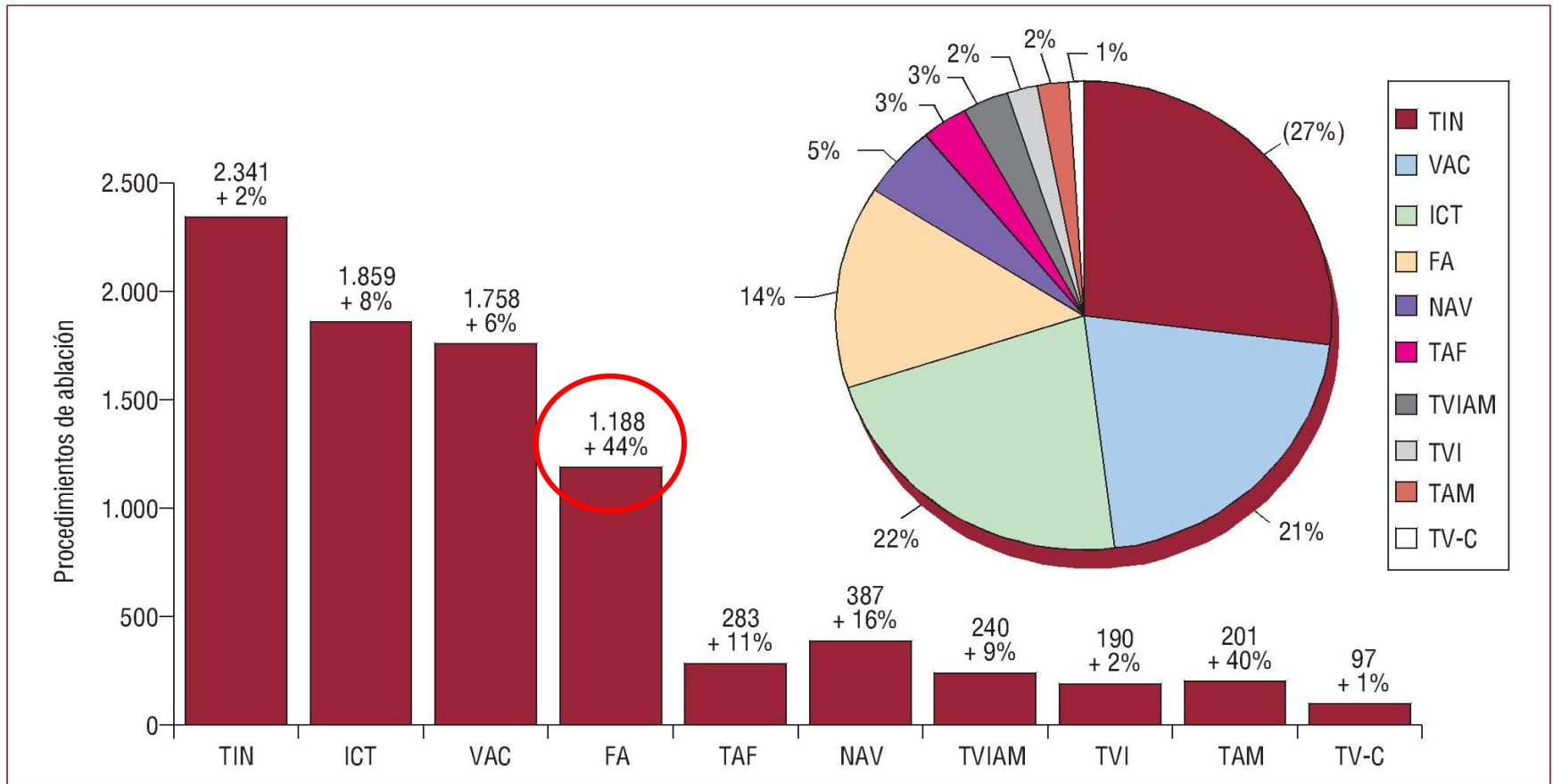


# Image fusion-guided AF ablation



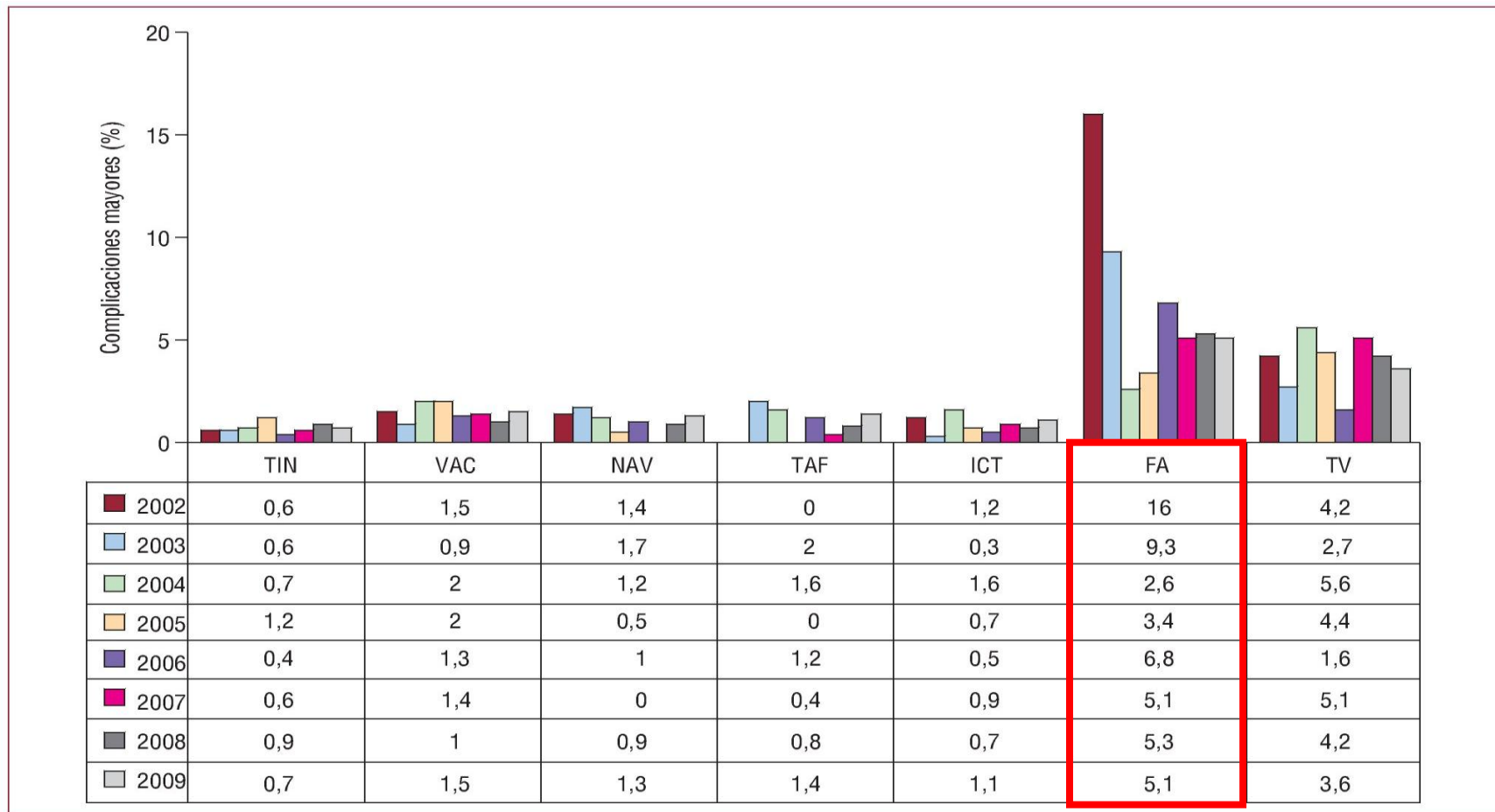
# Registro Español de ablación transcatéter

## Procedimientos de ablación



# Registro Español de ablación transcatéter

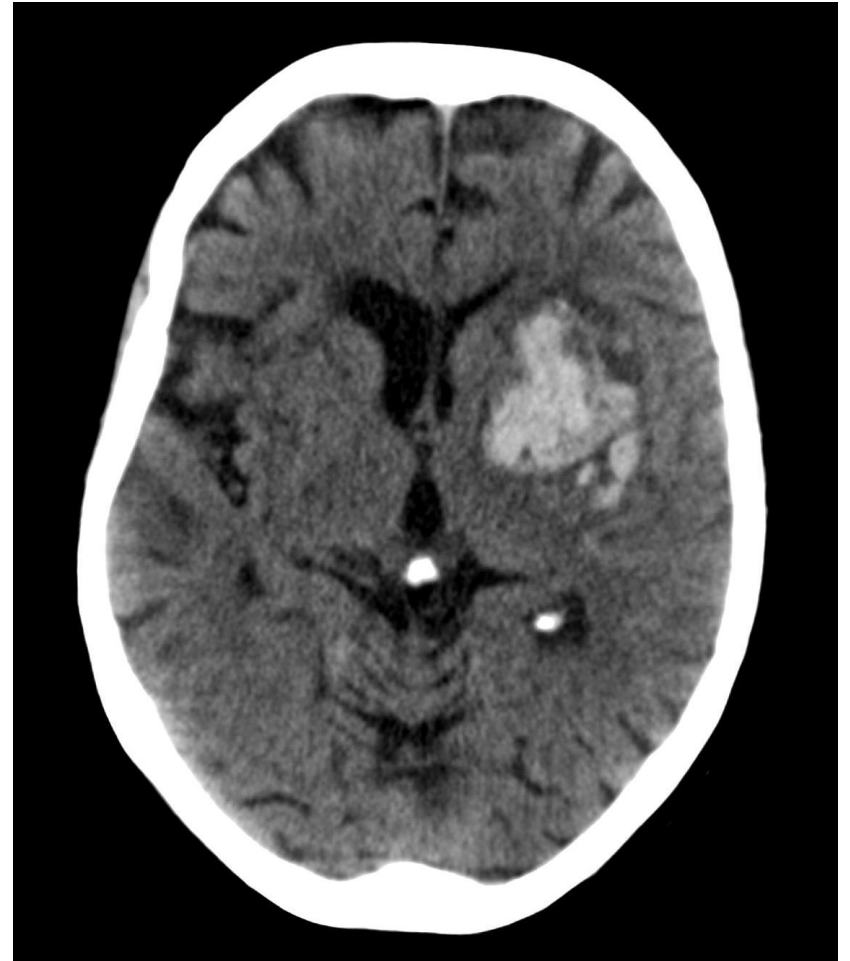
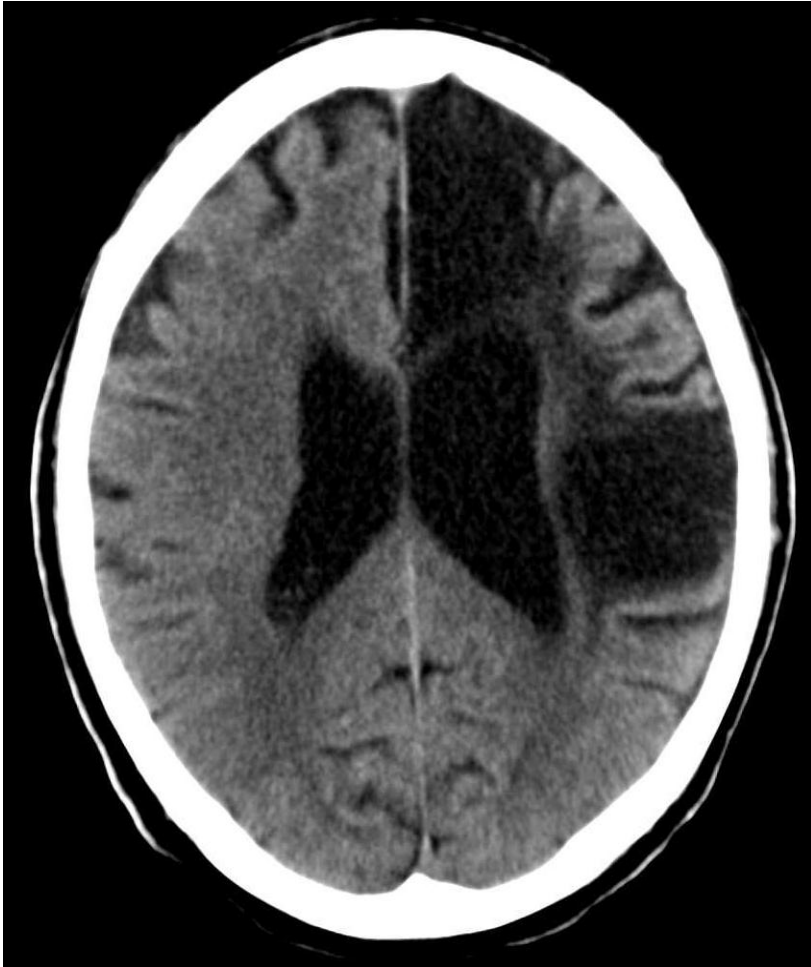
## Complicaciones mayores (%)



## HRS/EHRA/ECAS Expert Consensus Statement on Catheter and Surgical Ablation of Atrial Fibrillation

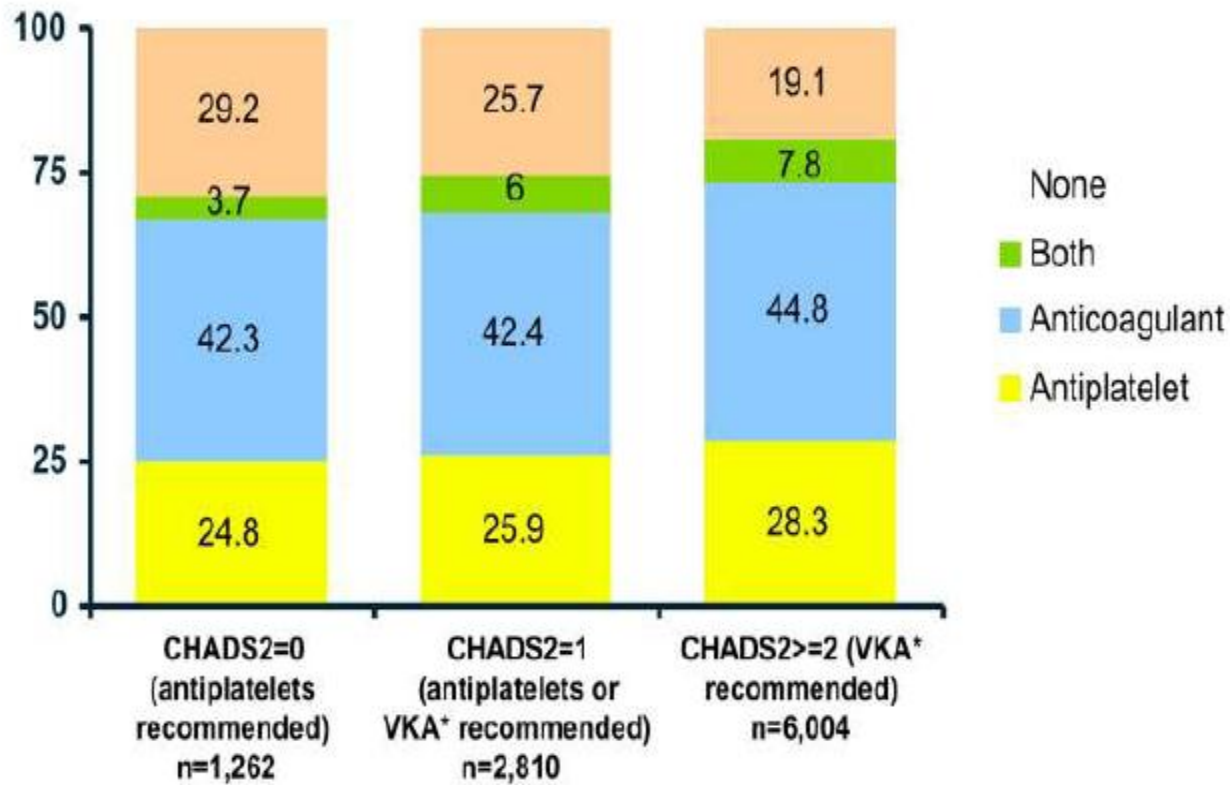
**“ Posteriormente a una ablación,  
NO puede recomendarse discon-  
tinuar el tratamiento con warfarina  
en aquellos pacientes con un  
índice de CHADs  $\geq 2$  ”**

# Complicaciones mayores de la FA: trombos & hemorragias





## Management of AF in a real life setting deviates from guidelines\*

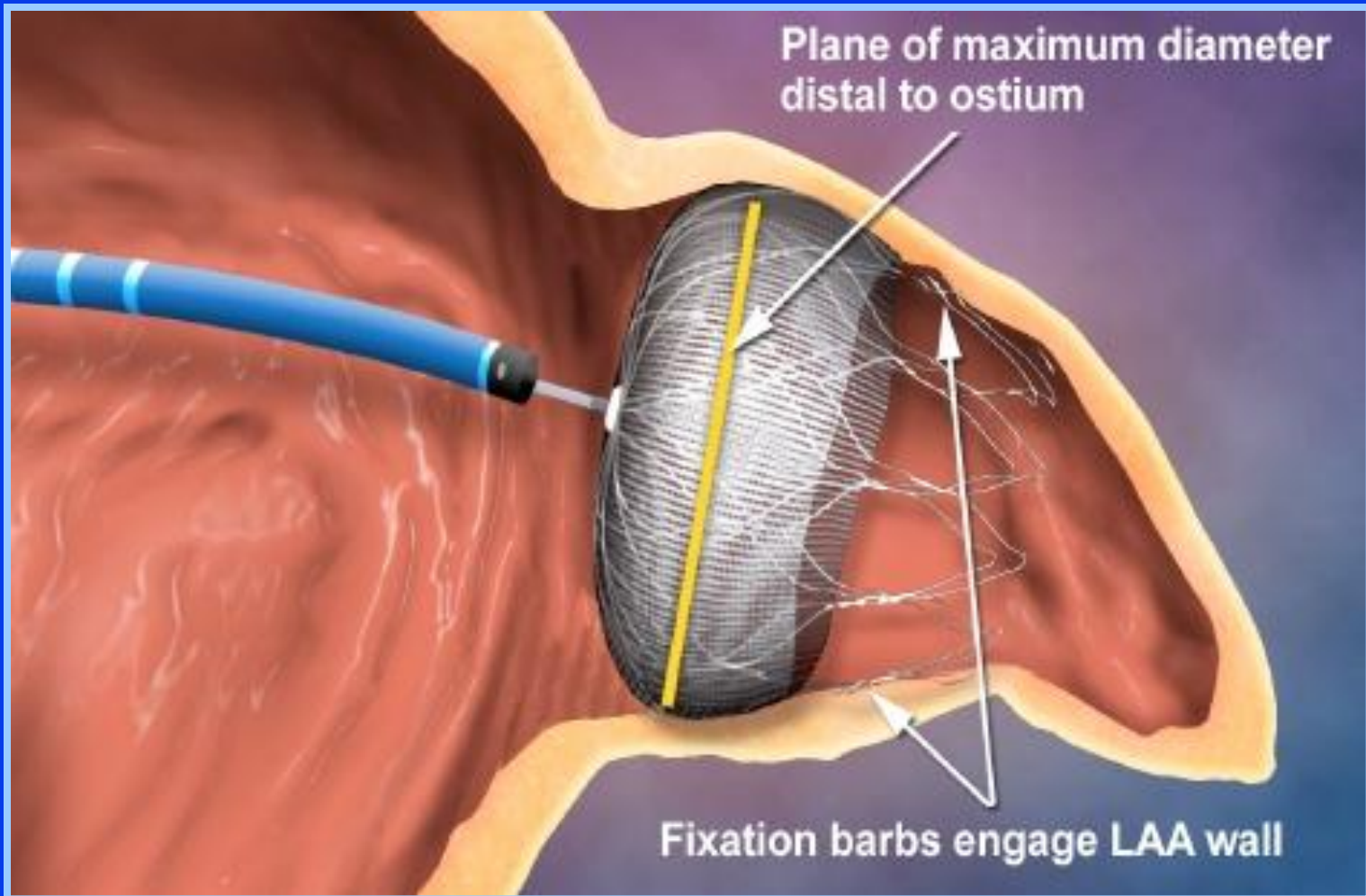


# ACO en España (centros de excelencia)

## Resumen

- **ACO en 1,3% de la población**  
**FA en 0.8% de la población (1ª causa de ACO)**
- **20.347 pacientes** → **211.987 controles**
  - ✓ **Tiempo en rango terapéutico 72,1%**
  - ✓ **Hemorragias 2.369 (graves 8%)**  
**(0,1 muertes/100 paciente/año)**
  - ✓ **Tromboembolismo 299**  
**(0,05 muertes/100 pacientes/año)**
  - ✓ **Máximo riesgo prótesis valvulares**

# WATCHMAN LAA Closure Device in situ



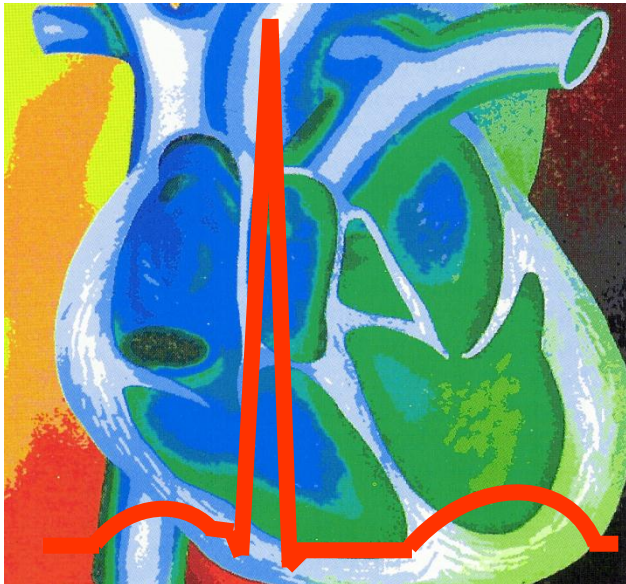
# Conclusiones

**FA es una creciente enfermedad CV que:**

- **↑ morbilidad y mortalidad, ↓ calidad de vida y ↑ costes individuales y sociales.**
- **Opciones terapéuticas farmacológicas actuales dirigidas a mejoría de síntomas y lo logran deficitariamente.**
- **Procedimientos invasivos curativos en expansión y pueden variar el escenario, pero cobertura universal improbable en próximos años y aún muestra riesgo de complicaciones.**
- **La gran mayoría de pacientes necesitarán anticoagulación crónica. Los dicumarínicos muestran frecuentes complicaciones (incluso en centros de excelencia). Estas son potencialmente letales (hemorragia >>tromboembolismo). Los nuevos ACO son una relevante innovación terapéutica.**

**El paciente con fibrilación  
auricular del Siglo del XXI  
tiene aún múltiples retos**

**MUCHAS GRACIAS**



**Antoni Martínez-Rubio**  
**Hosp. Sabadell - Cardiología**  
**Univ. Autònoma de Barcelona**  
**Sabadell (Barcelona)**