

Congreso de la **SAC24**  
**Sociedad Asturiana**  
de **Cardiología** **17 y 18 de mayo**



**Intervencionismo  
transcateter en la  
profilaxis del ictus**

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*Hospital General Universitario de Alicante*

**#AsturCardio2024**

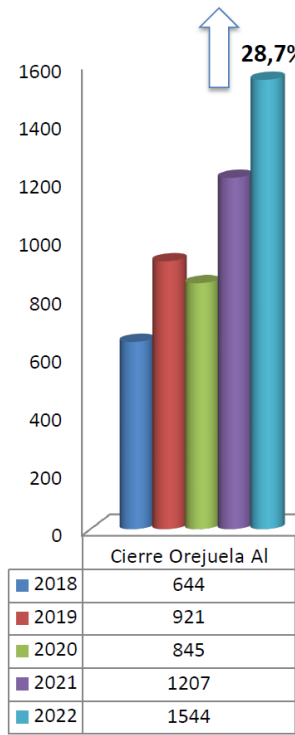
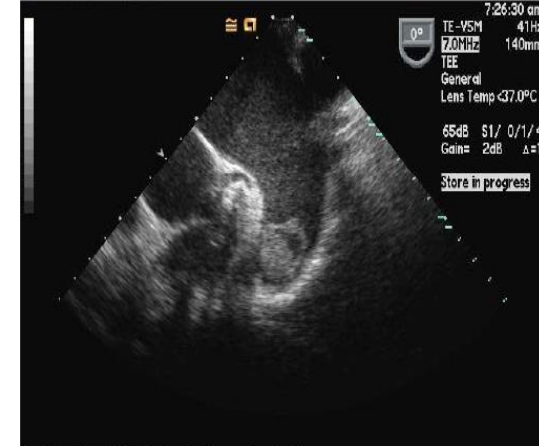
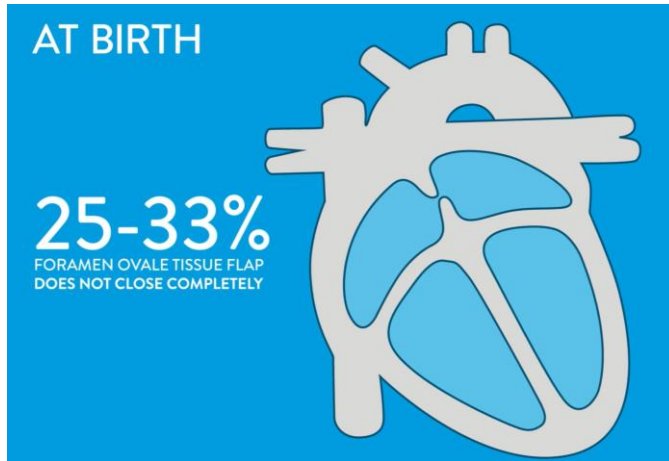
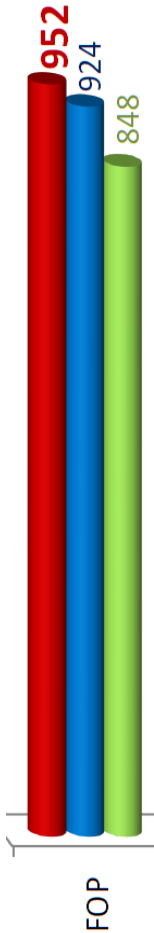


# CONFLICTO DE INTERESES

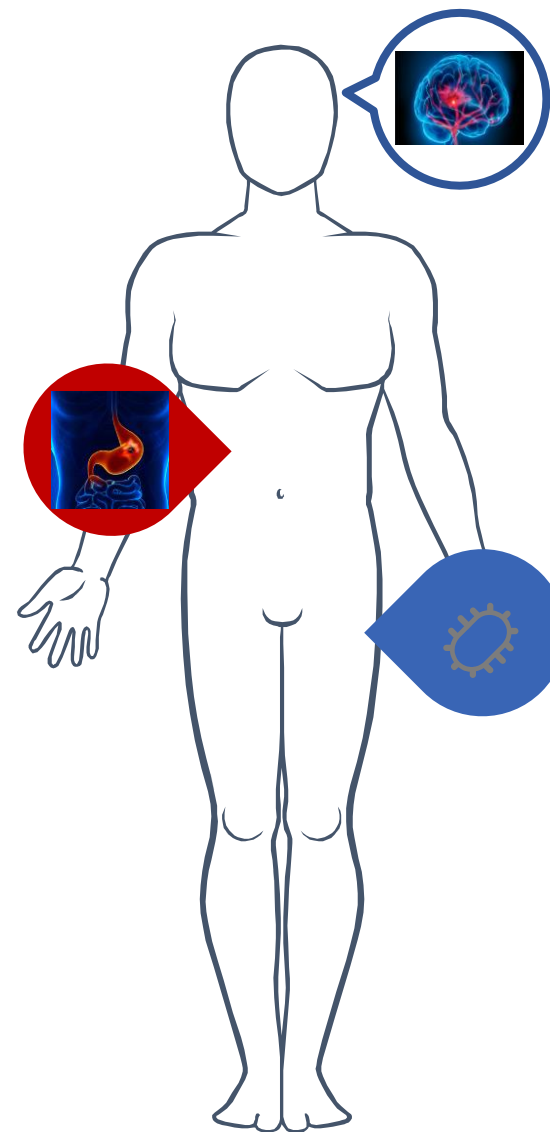


Proctor en estructural de Abbott, Boston Scientific y Medtronic

# ¿Qué aporta el intervencionismo?



# Abordaje local de un problema sistémico

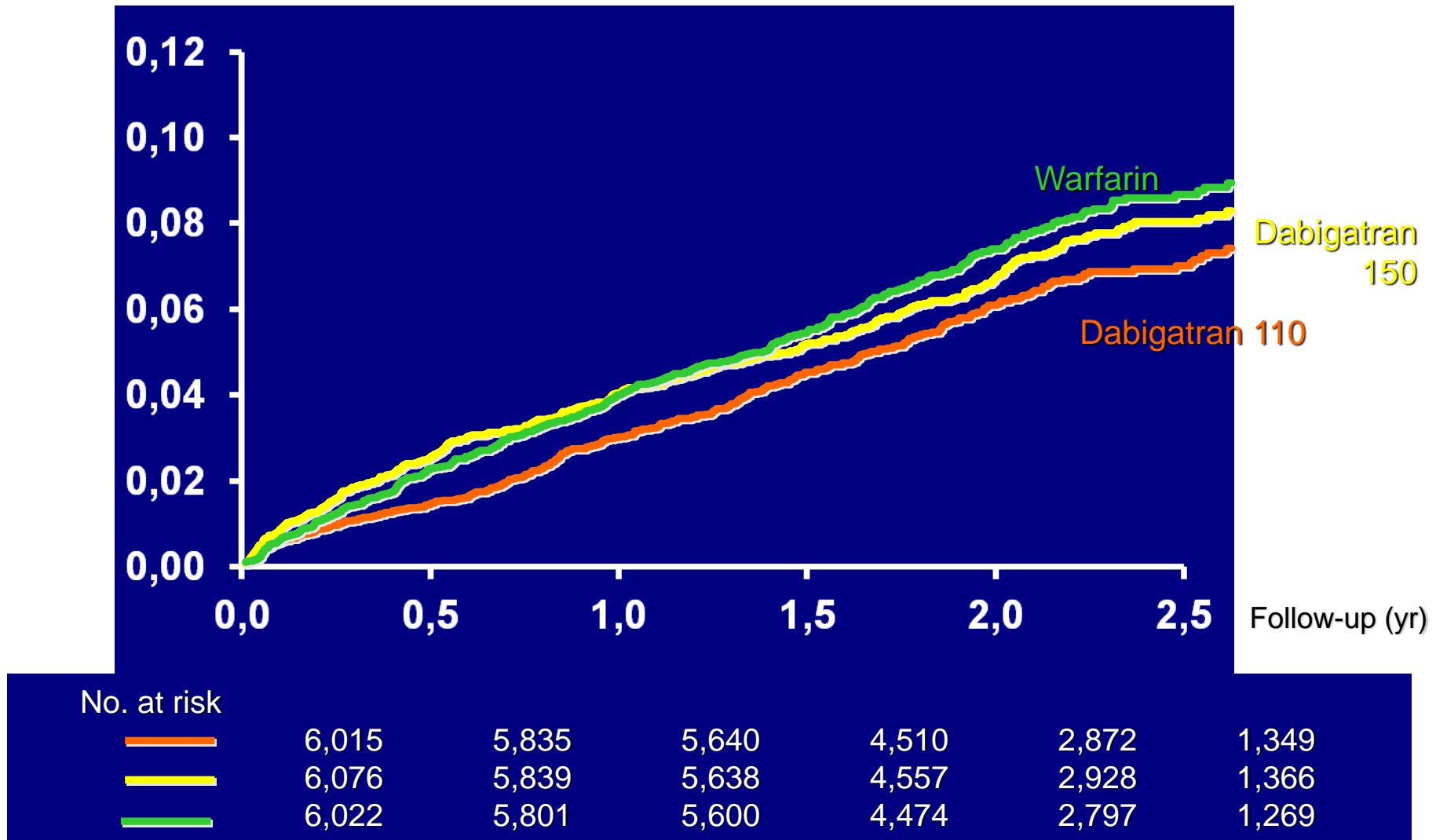


# Anticoagulación crónica: Hemorragias mayores

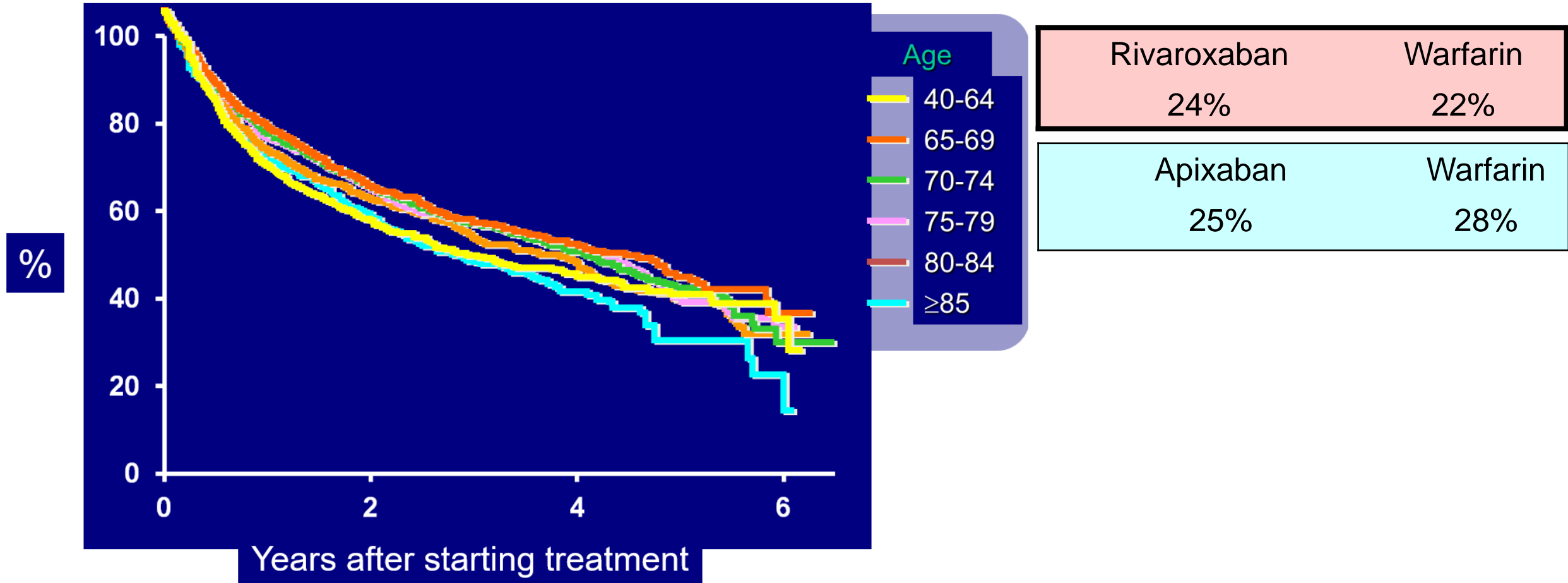
Study	Treatment	Major Bleeding	Hemorrhagic Stroke
RE-LY <sup>1</sup>	Dabigatran (110 mg)	2.71%	0.12%
	Dabigatran (150 mg)	3.11%	0.10%
	Warfarin	3.36%	0.38%
ROCKET-AF <sup>2</sup>	Rivaroxaban	3.6%	0.5%
	Warfarin	3.4%	0.7%
ARISTOTLE <sup>3</sup>	Apixaban	2.13%	0.24%
	Warfarin	3.09%	0.47%

1. Connolly SJ et al, *NEJM* 2009; 361:1139-51
2. Patel MR et al, *NEJM* 2012; 365:883-91
3. Granger, J MD. *NEJM* 2012;365:981-92

# Hemorragias mayores



# Anticoagulación crónica: Discontinuación





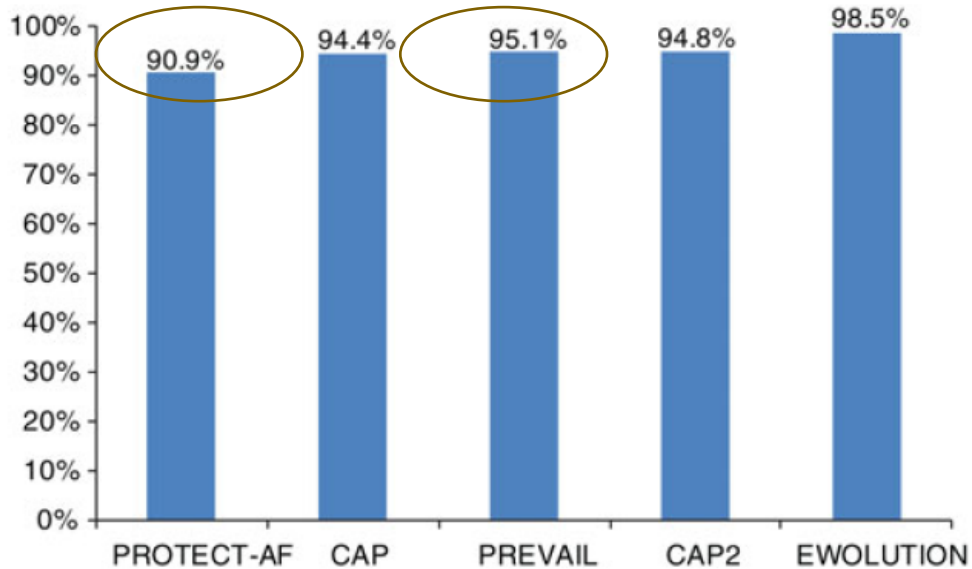




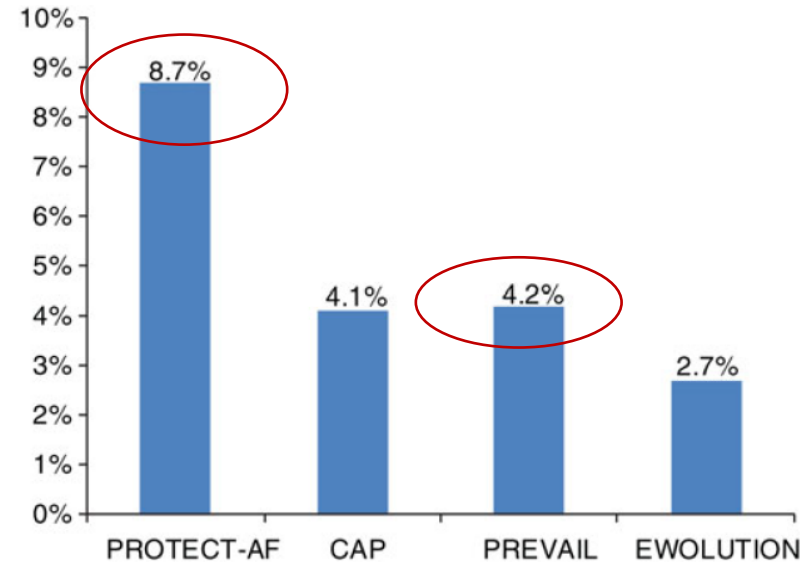
# índice

1. Resultados actuales del LAAC
2. Comparación directa LAAC vs. ACOD
3. Qué pacientes indicar LAAC

# Resultados actuales: éxito del implante



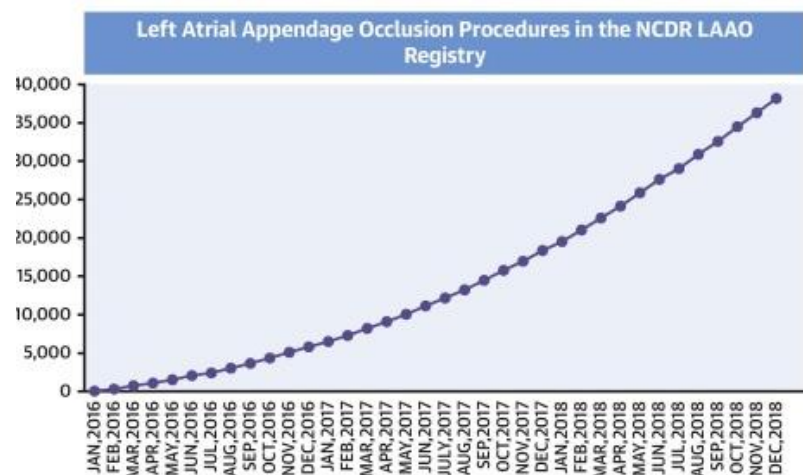
**Figure 1** Implant success in EWOLUTION when compared with prior WATCHMAN studies.



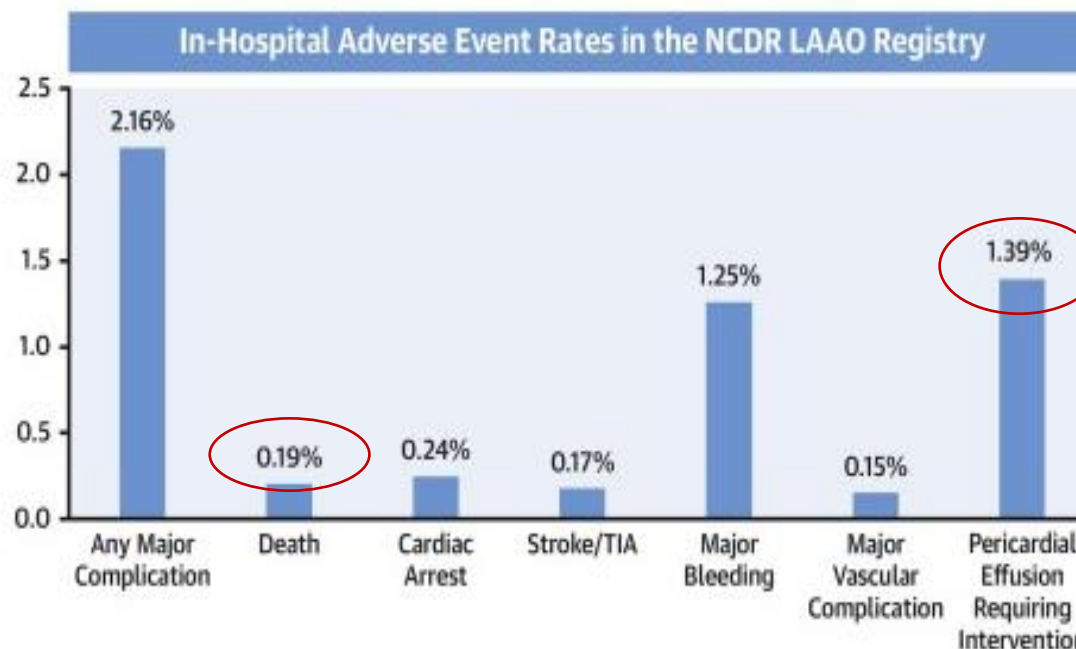
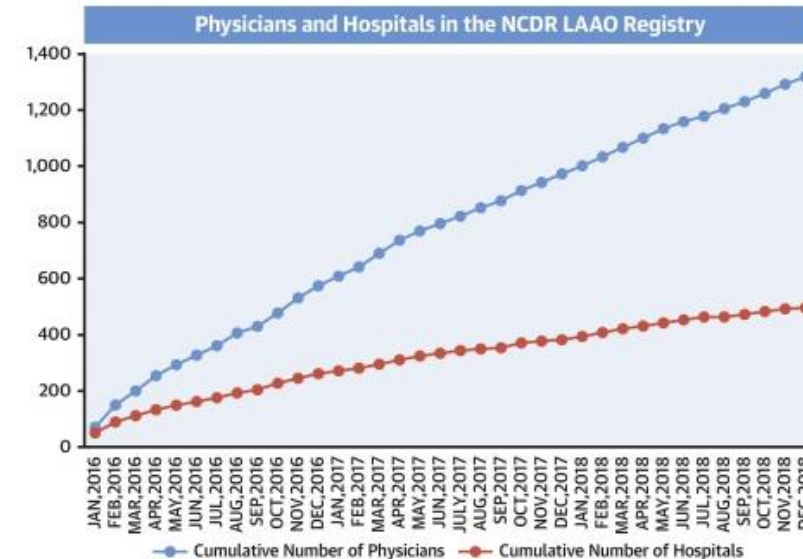
**Figure 2** Serious procedure-/device-related events through 7 days in EWOLUTION when compared with prior WATCHMAN studies.

**-Éxito: 98,5%**  
**-Complicaciones < 2,7%**

# Más hospitales y más operadores

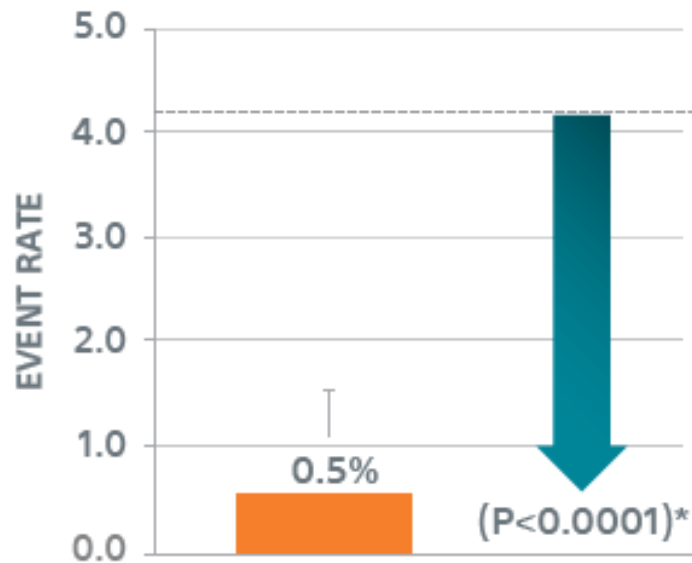


*~70% new operators performed 50% of procedures*





# PINNACLE: Primary Safety Endpoint met with low 0.5% event rate



**0.5%** Ischemic Stroke  
(2/400)

**0%** All-cause Death

**0%** Pericardial Effusions  
Requiring Open Cardiac Surgery

**0%** Device Embolization

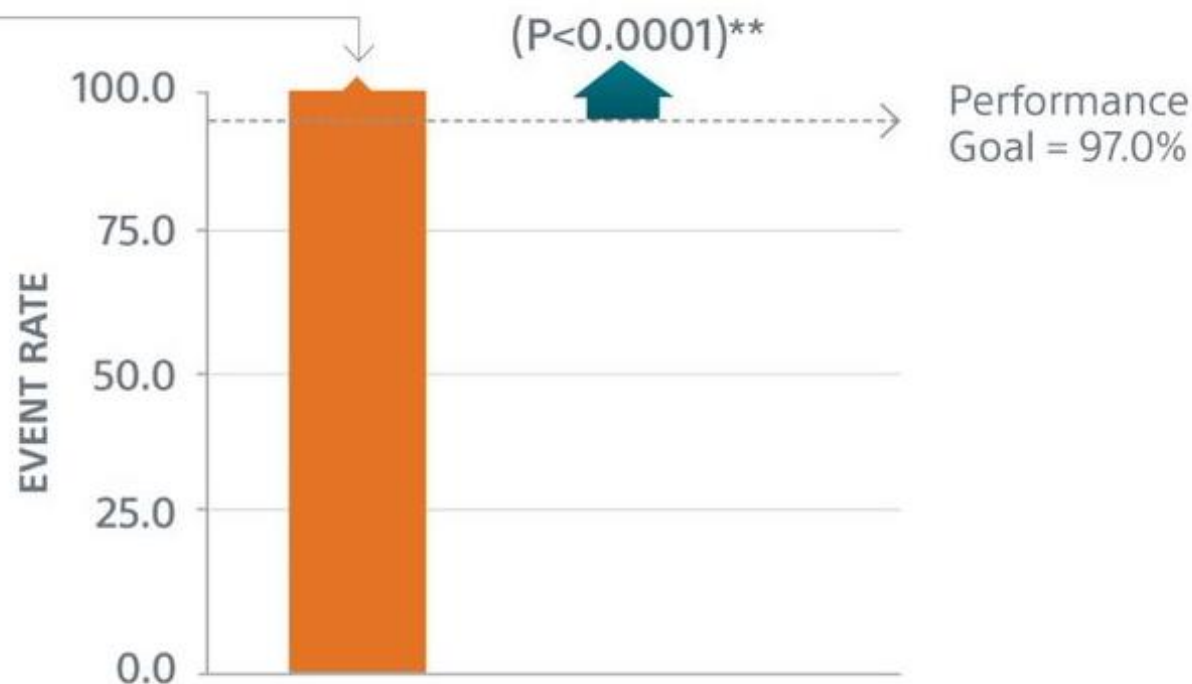
\*Occurrence of one of the following events between the time of implant and within 7 days following the procedure or by hospital discharge, whichever is later: **all-cause death, ischemic stroke, systemic embolism, or device or procedure related events requiring open cardiac surgery or major endovascular intervention**



# PINNACLE: Primary Effectiveness Endpoint

# 100%

of Subjects Demonstrated Effective LAA Closure at 12 Months\*



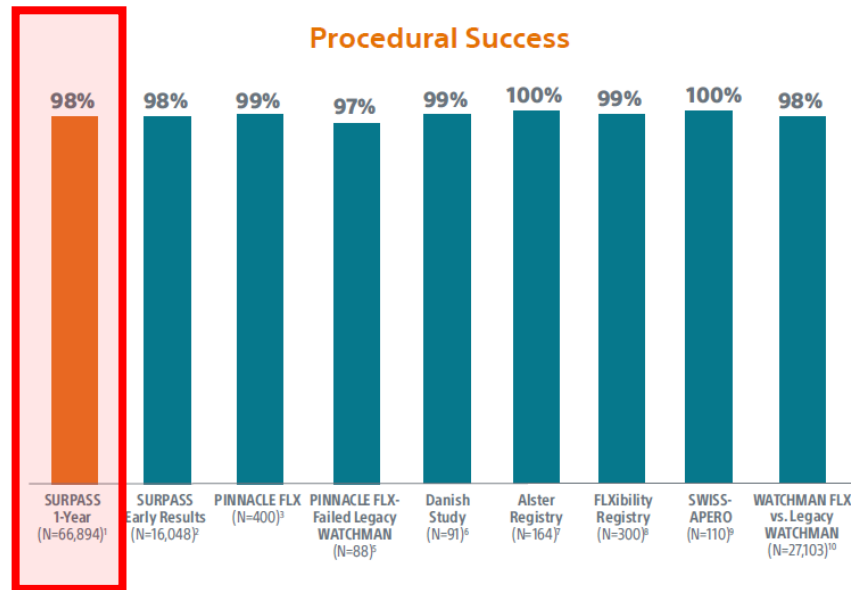
\* LAA closure at 12 months is defined as any peri-device flow with jet size  $\leq$  5mm per core laboratory-assessed TEE

\*\* Performance goal based on the rates observed in PREVAIL(1) and CAP2(2), minus a clinically relevant delta

# SURPASS 1 year

n=66.894 pacientes

Exito



The WATCHMAN FLX Device delivers proven stroke reduction in the largest and highest-risk patient population studied to date across the WATCHMAN platform.

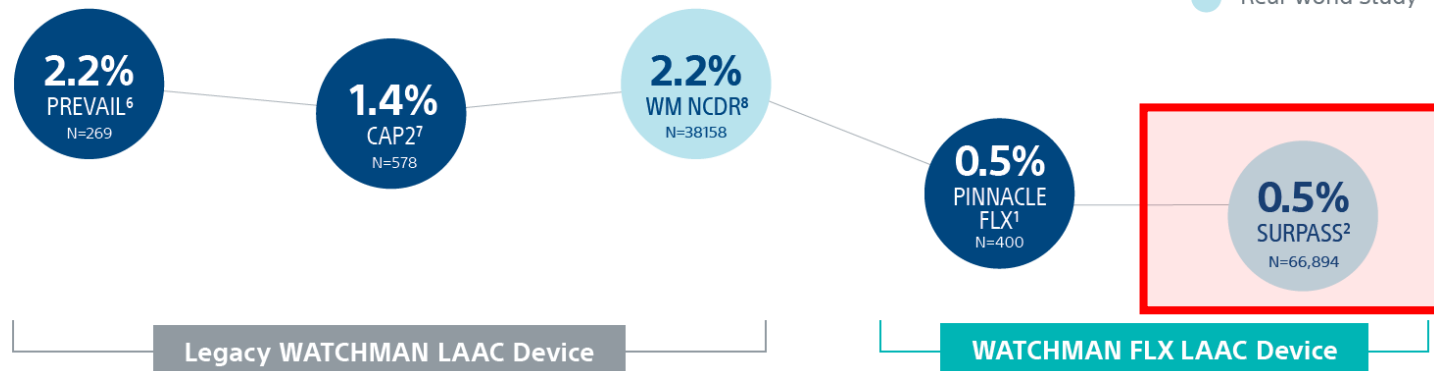
1.6%  
All Stroke



1.2%  
Ischemic Stroke

MAJOR ADVERSE EVENT RATES IN BOTH REAL-WORLD STUDIES AND CLINICAL TRIALS\*\*  
DECREASE WITH WATCHMAN FLX

Compl. Mayores





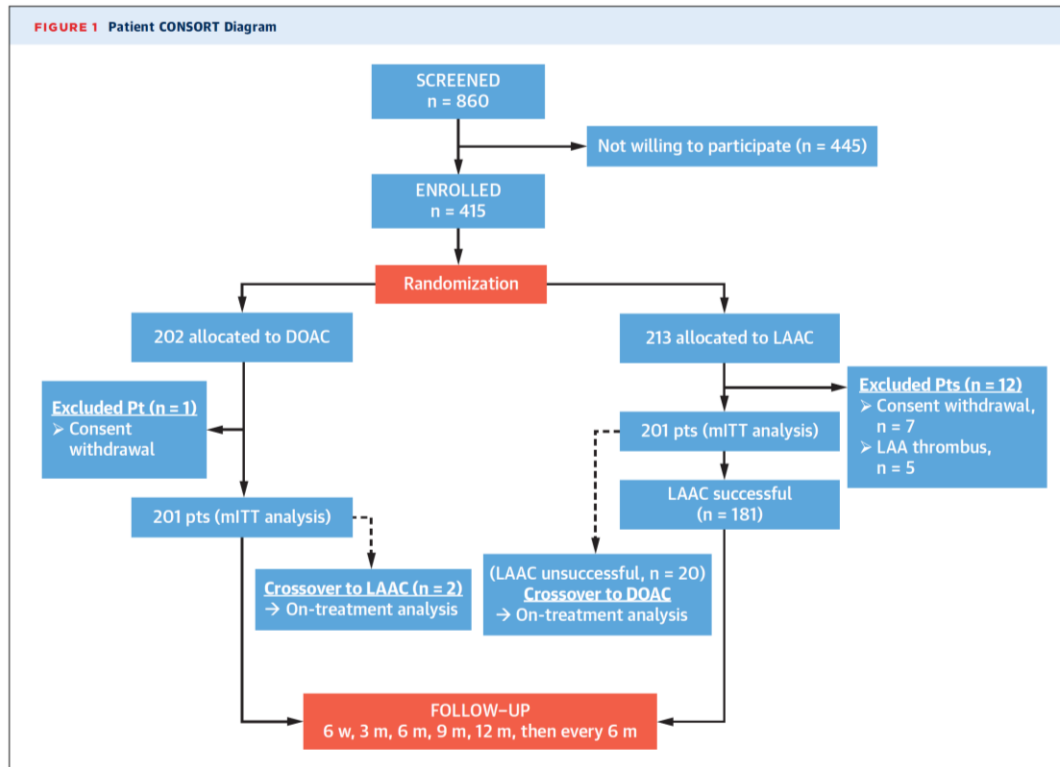
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# The PRAGUE-17: Cierre Orejuela vs. ACOD

## POBLACIÓN:

- eventos hemorrágicos previos
- fallo de la anticoagulación
- combinación de alto riesgo hemorrágico y tromboembólico



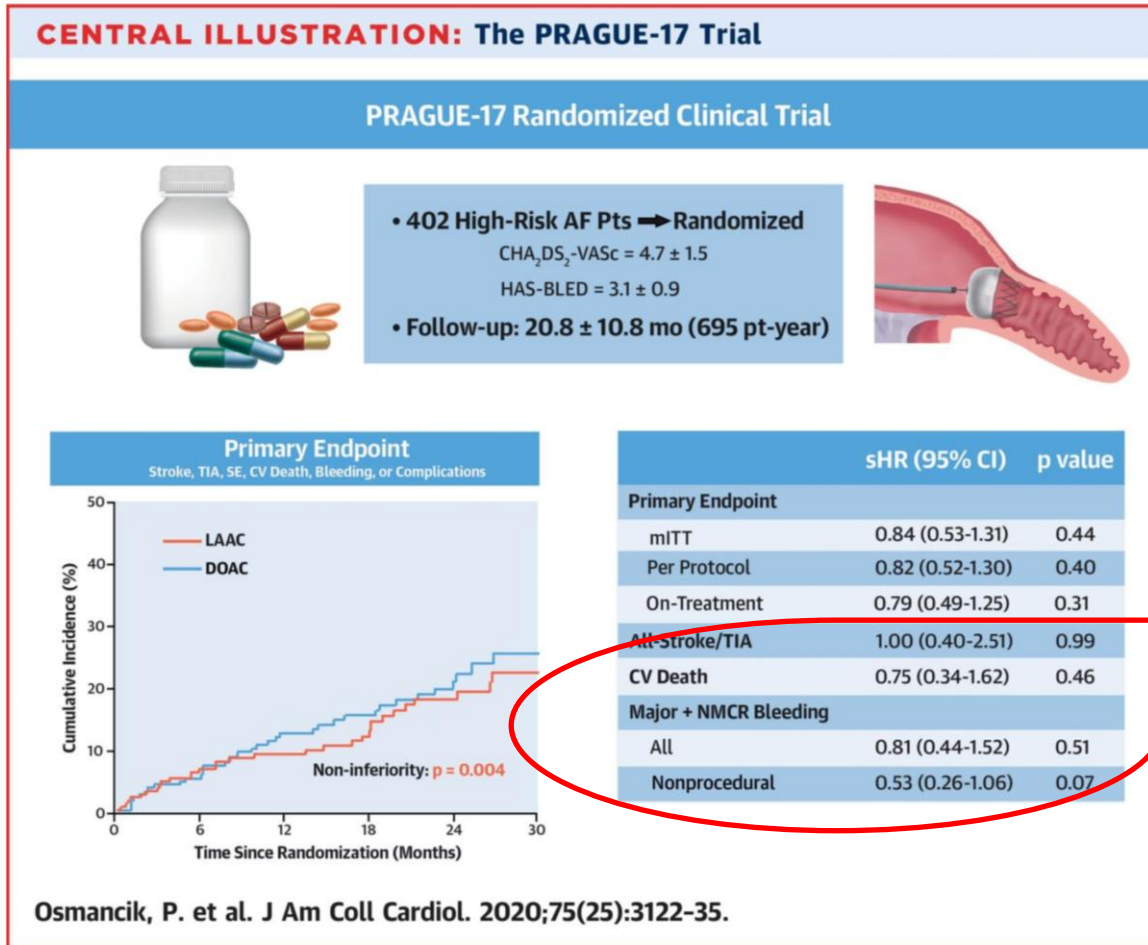
**TABLE 1 Baseline Characteristics and Risk Factors of Participants**

	DOAC (n = 201)	LAAC (n = 201)	Missing Values
<b>Demographics</b>			
Age, yrs	73.2 ± 7.2	73.4 ± 6.7	–
<75	122 (60.7)	116 (57.7)	–
>75	79 (39.3)	85 (42.3)	–
Male	130 (64.7)	134 (66.7)	–
Weight, kg	88.1 ± 16.2	86.9 ± 17.6	–
<b>Clinical history</b>			
<b>AF type</b>			
Paroxysmal	67 (33.3)	53 (26.4)	–
Persistent	46 (22.9)	47 (23.4)	–
Long-standing persistent	16 (8.0)	18 (9.0)	–
Permanent	72 (35.8)	82 (41.2)	–
CHA <sub>2</sub> DS <sub>2</sub> -VASC	4.7 ± 1.5	4.7 ± 1.5	–
CHA <sub>2</sub> DS <sub>2</sub> -VASC ≤3	50 (24.9)	48 (23.9)	–
CHA <sub>2</sub> DS <sub>2</sub> -VASC = 4	40 (19.9)	47 (23.4)	–
CHA <sub>2</sub> DS <sub>2</sub> -VASC = 5	57 (28.4)	50 (24.9)	–
CHA <sub>2</sub> DS <sub>2</sub> -VASC ≥6	54 (26.9)	56 (27.9)	–
HAS-BLED	3.0 ± 0.9	3.1 ± 0.9	–
Heart failure	36 (17.9)	38 (19.0)	–
Hypertension	186 (92.5)	186 (92.5)	–
Diabetes mellitus	90 (44.8)	73 (36.3)	–
History of cardioembolic event	69 (34.3)	73 (36.3)	–
Of which stroke	63 (91.3)	66 (90.4)	–
History of MI	39 (19.4)	30 (14.9)	–
Randomized at experienced centers	140 (69.7)	141 (70.1)	–
<b>Prior antithrombotic treatment</b>			
Warfarin	104 (51.7)	85 (42.3)	–
DOACs	55 (27.4)	66 (32.8)	–
If no OAC, new AF appearance	30 (71.4)	38 (76)	–
Aspirin	32 (15.9)	39 (19.4)	–
Clopidogrel	11 (5.5)	17 (8.5)	–
Dual antiplatelet treatment	6 (3.0)	7 (3.5)	–
Other (low-dose LMWH, none)	19 (9.5)	24 (11.9)	–



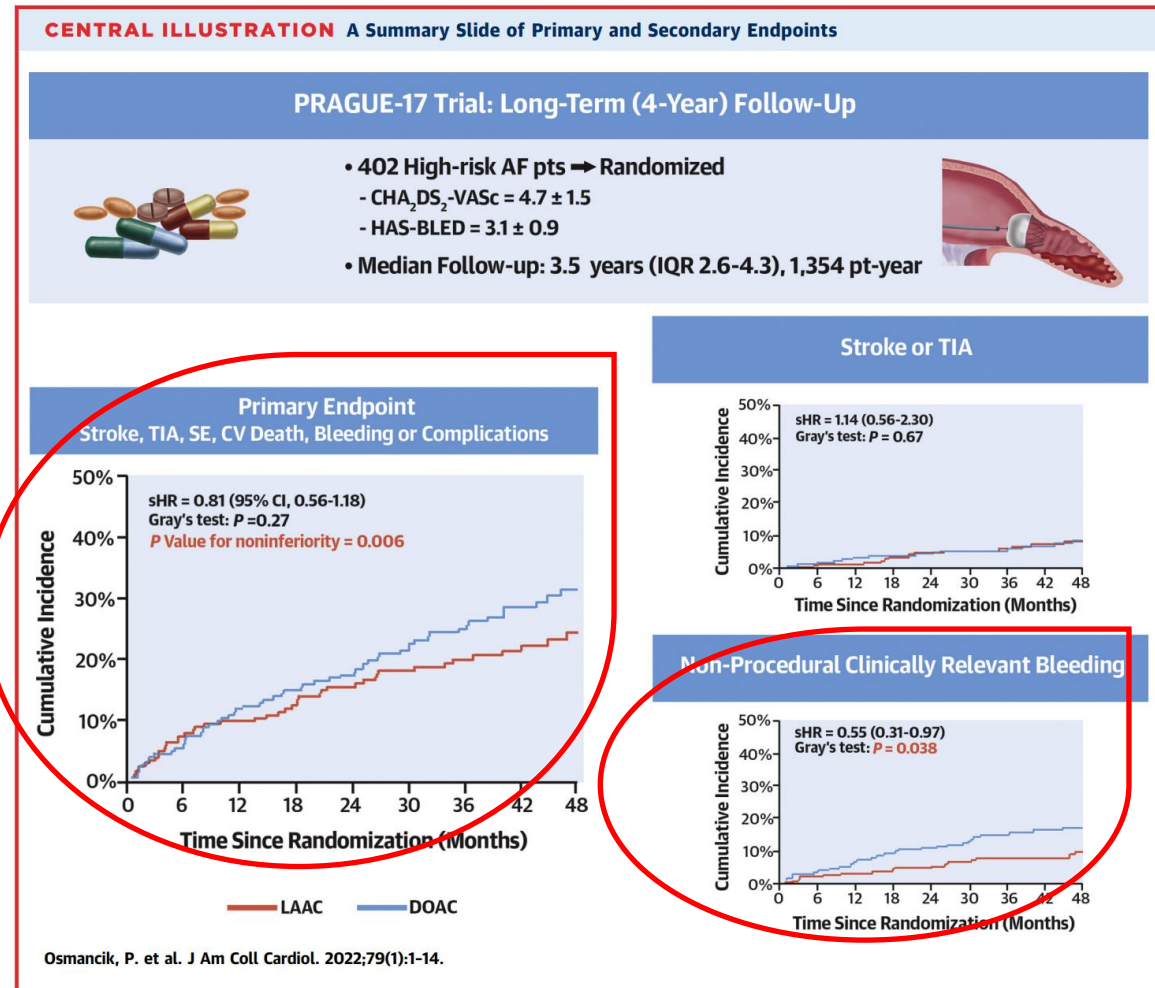
# The PRAGUE-17: Cierre Orejuela vs. ACOD

**"NO  
INFERIORIDAD"**

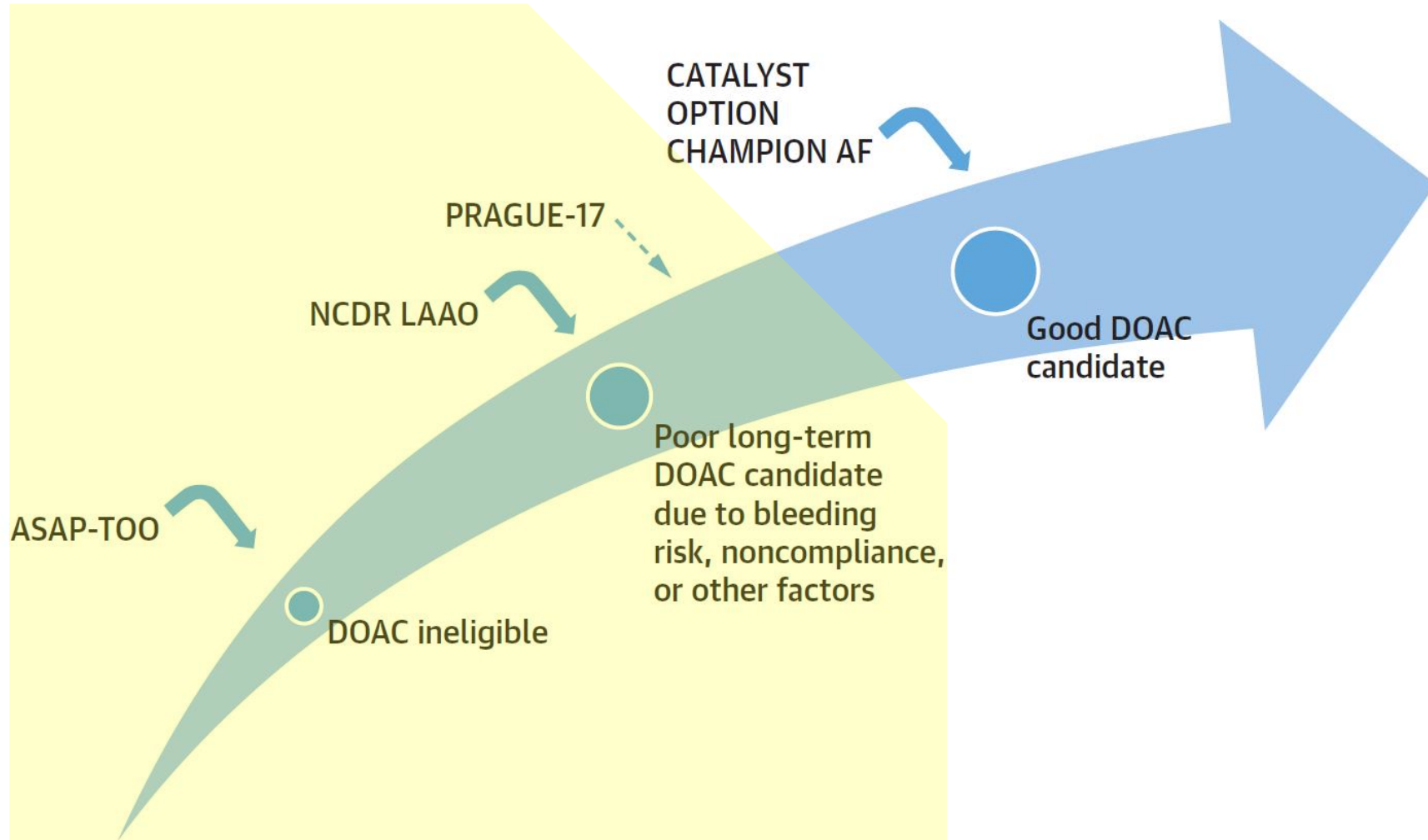


# The PRAGUE-17: Seguimiento a 4 años

**“NO INFERIORIDAD y MENOS SANGRADOS”**



# ¿Dónde estamos y haciendo donde vamos?





# índice

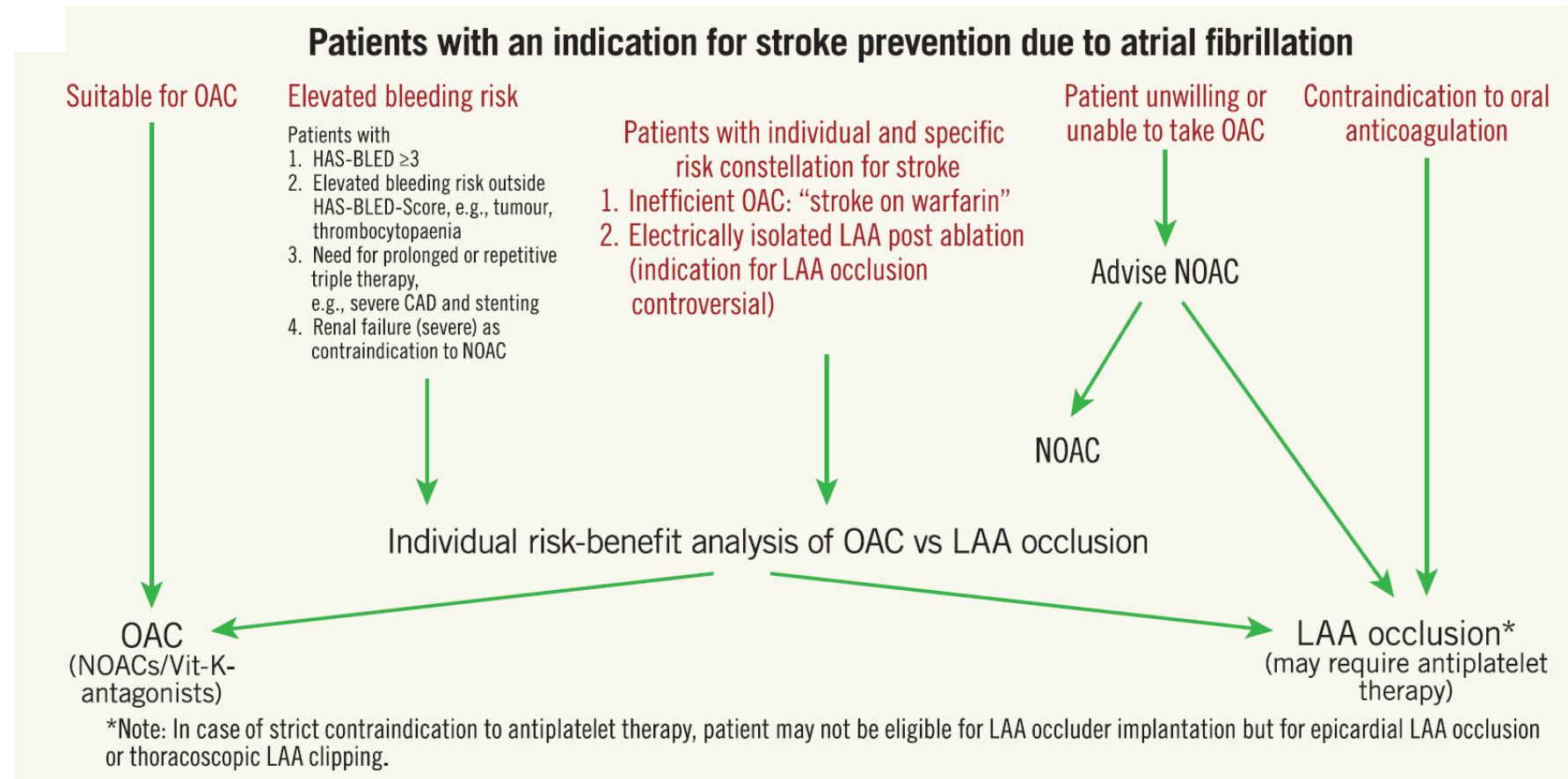
1. Resultados actuales del LAAC
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# Arbol de decisión

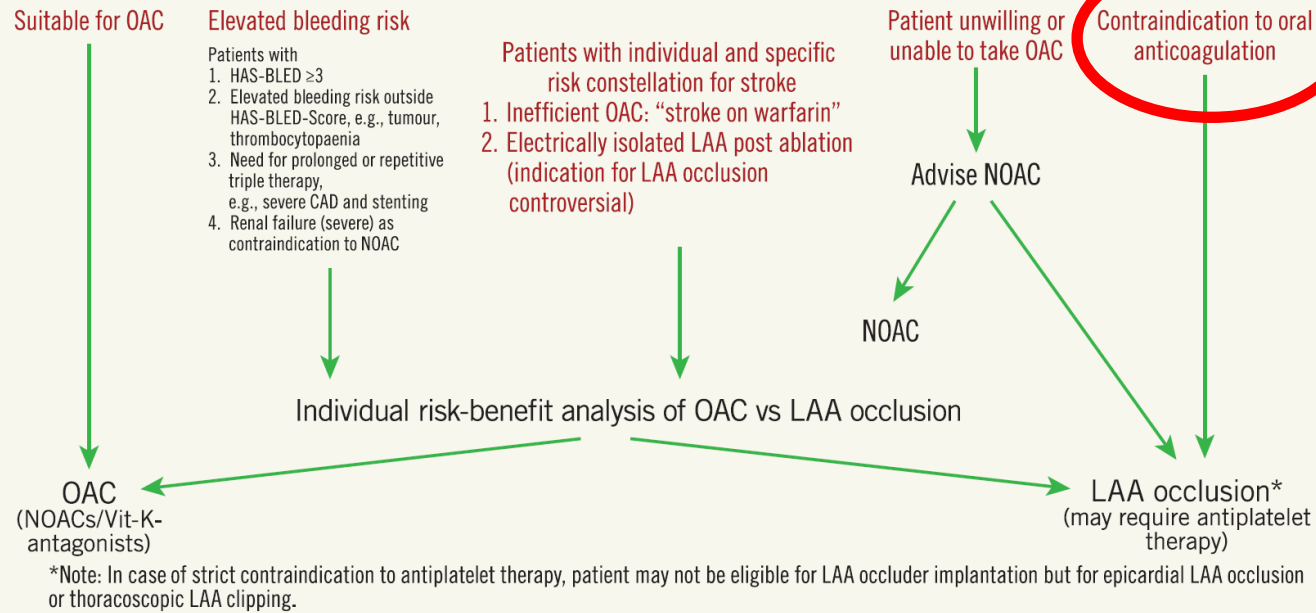
## EHRA/EAPCI expert consensus statement on catheter-based left atrial appendage occlusion – an update

Michael Glikson<sup>1\*</sup>, Rafael Wolff<sup>4</sup>, Gerhard Hindricks<sup>2</sup>, John Mandrolas<sup>3</sup>, A. John Camm<sup>4</sup>,  
Gregory Y.H. Lip<sup>5,6</sup>, Laurent Fauchier<sup>7</sup>, Tim R. Betts<sup>8</sup>, Thorsten Lewalter<sup>9,10</sup>,  
Jacqueline Saw<sup>11</sup>, Apostolos Tzikas<sup>12</sup>, Leonid Sternik<sup>13</sup>, Fabian Nietlispach<sup>14</sup>,  
Sergio Berti<sup>15</sup>, Horst Sievert<sup>16,17,18,19</sup>, Stefan Bertog<sup>16</sup>, and Bernhard Meier<sup>20</sup>



# Contraindicación a la anticoagulación

## Patients with an indication for stroke prevention due to atrial fibrillation



**Table 15** Atrial fibrillation patients who are not eligible ("contraindicated") for long-term oral anticoagulation and require prevention of stroke and embolism

**Clinical situation and therapeutic concept**

**Consensus statement**

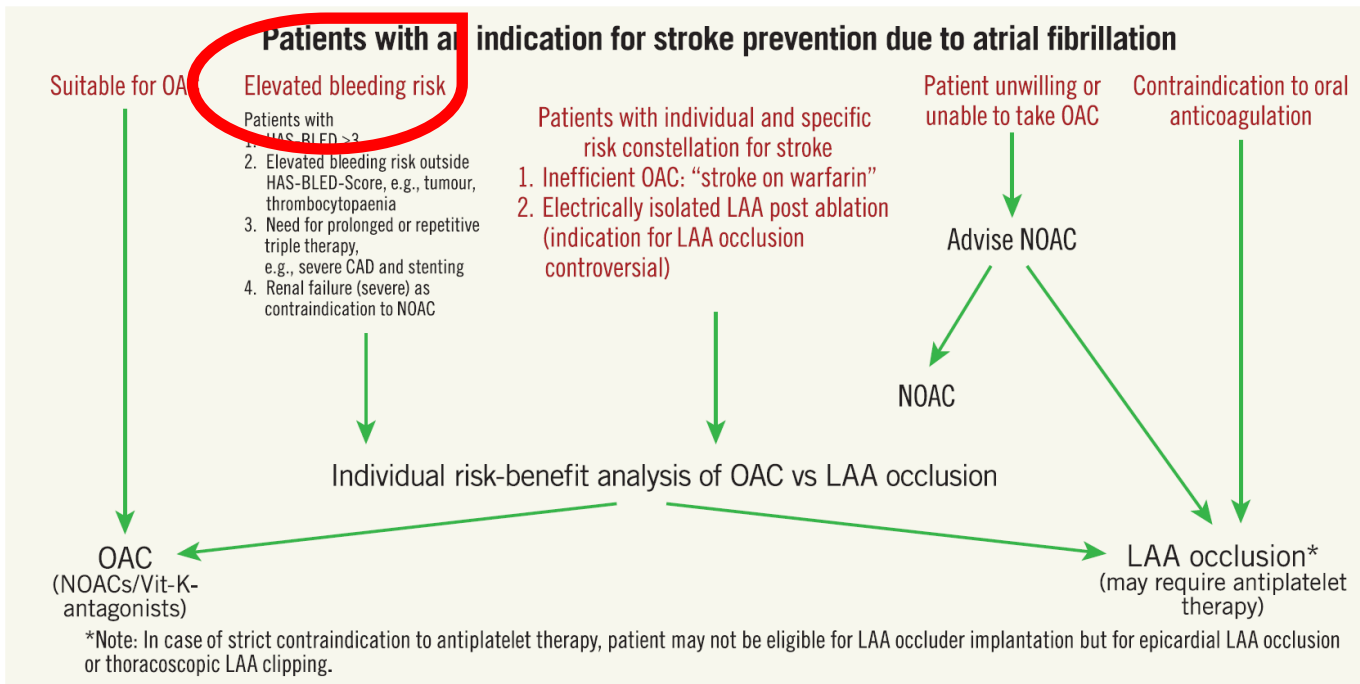
**Icon**

AF patients with CHA<sub>2</sub>DS<sub>2</sub>-VASc score  $\geq 2$  (3 in females) who have absolute contraindications for long-term OAC may be considered for LAAO if a minimum period (2-4 weeks) of a single antiaggregant can be given



"Should do this"



# Alto riesgo hemorrágico



**Table 16** Patients with an elevated bleeding risk during long-term oral anticoagulation

Clinical situation and therapeutic concept	Consensus statement	Icon
In patients with an elevated bleeding risk during long-term oral anticoagulation (e.g., post intracranial bleeding) an individual risk-benefit assessment needs to be carried out between oral anticoagulation and LAA occlusion	"Should do this"	
In patients with an elevated bleeding risk during long-term OAC, LAA occlusion may be considered	"May do this"	

# Realidad en España

**1,5-2 millones**

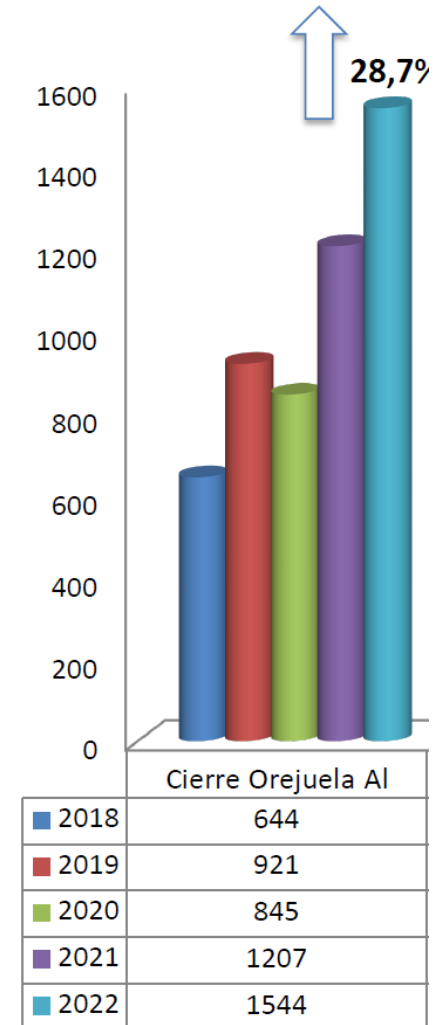
Pacientes con FA en España

**200,000**

No anticoagulados

**1,544**

Cierre de orejuela en España en 2022





# Conclusiones

1. El **cierre percutáneo de la orejuela** aporta una **eficacia similar** en reducción de eventos tromboembólicos a la anticoagulación en el paciente de alto riesgo hemorrágico.
2. El procedimiento es **seguro y reduce las complicaciones hemorrágicas** en el medio plazo.
3. Debemos plantear el cierre de orejuela a **todos** los pacientes con contraindicación a la ACO y a **muchos** con elevado riesgo de sangrado



Gracias