SOCIEDAD VALENCIANA DE Cardiología

CONSORCI HOSPITAL GENERAL UNIVERSITARI VALÈNCIA

Los 10 artículos más relevantes de la Cardiología Clínica Año 2021

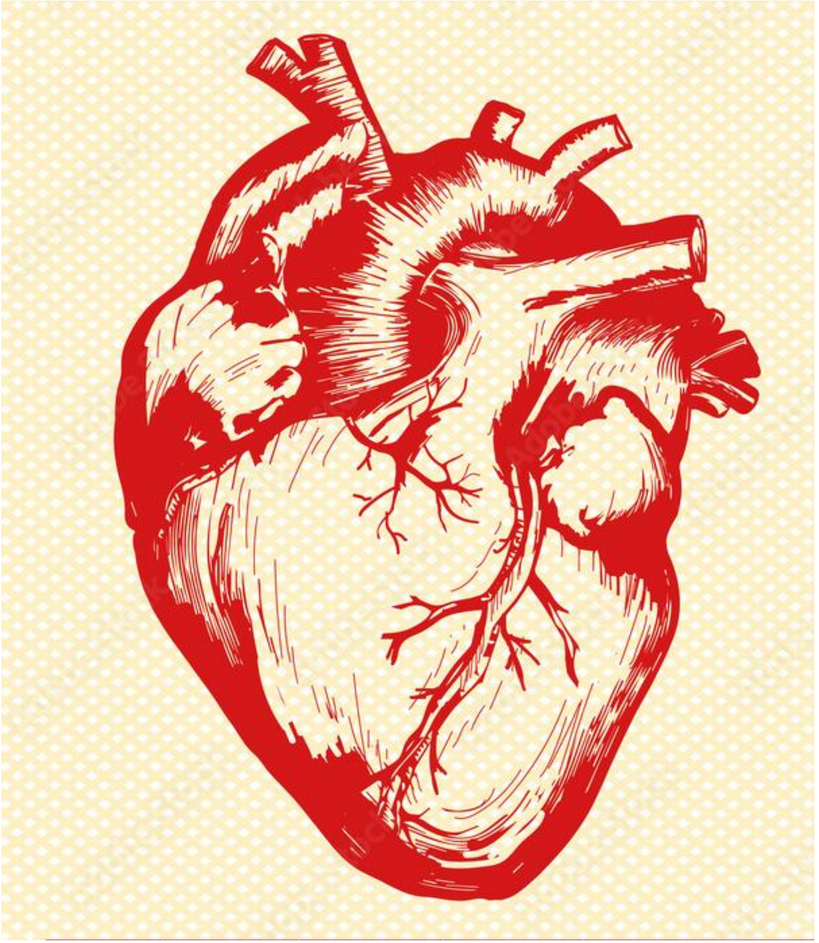
Dr. Josep Melero Ferrer

Servei de Cardiologia. CHGUV

16 de Febrero de 2022

Cardiología 2021

1. Cardiopatía isquémica
2. Fibrilación auricular
3. Insuficiencia cardiaca
4. Valvulopatías
5. Miocardiopatías
6. Riesgo vascular

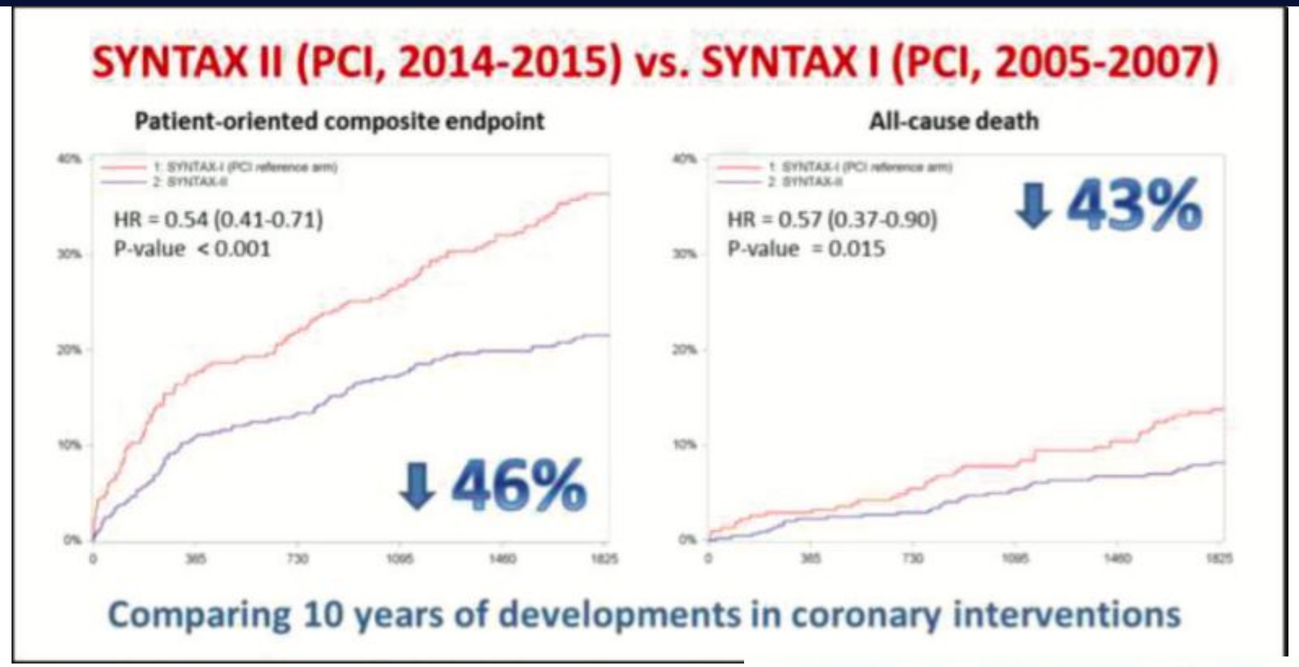


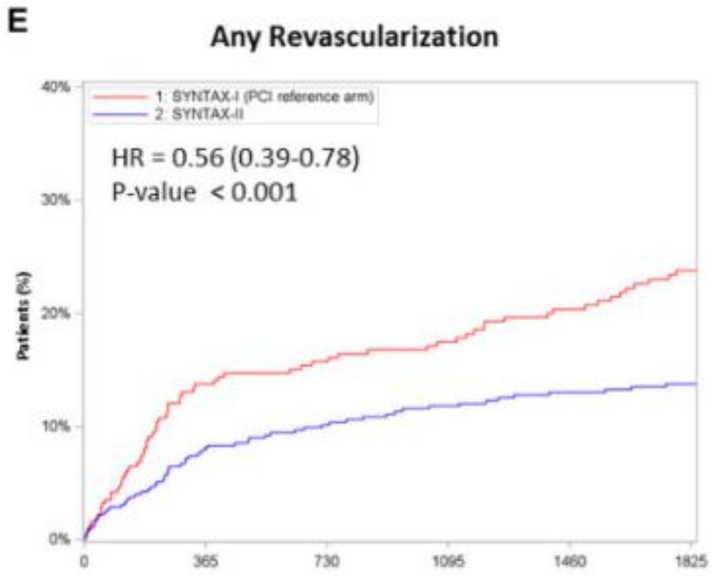
Cardiopatía isquémica

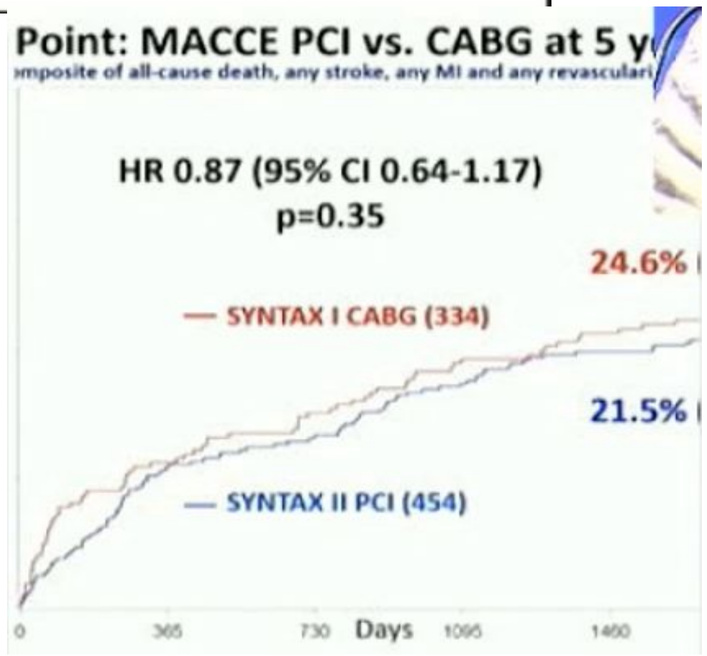
Revascularización coronaria

Banning A. et al. European Heart Journal (2021) 00, 1–10.

- Pacientes con enfermedad de 3 vasos (N=454)
- Estrategia Syntax II:
  - Fisiología coronaria (FFR/iFR)
  - Uso de IVUS en la ICP
  - Revascularización completa, incluida OCT
  - Uso stents 3ª generación
- End-points:
  - Muerte por todas las causas
  - IAM, ictus, revascularización







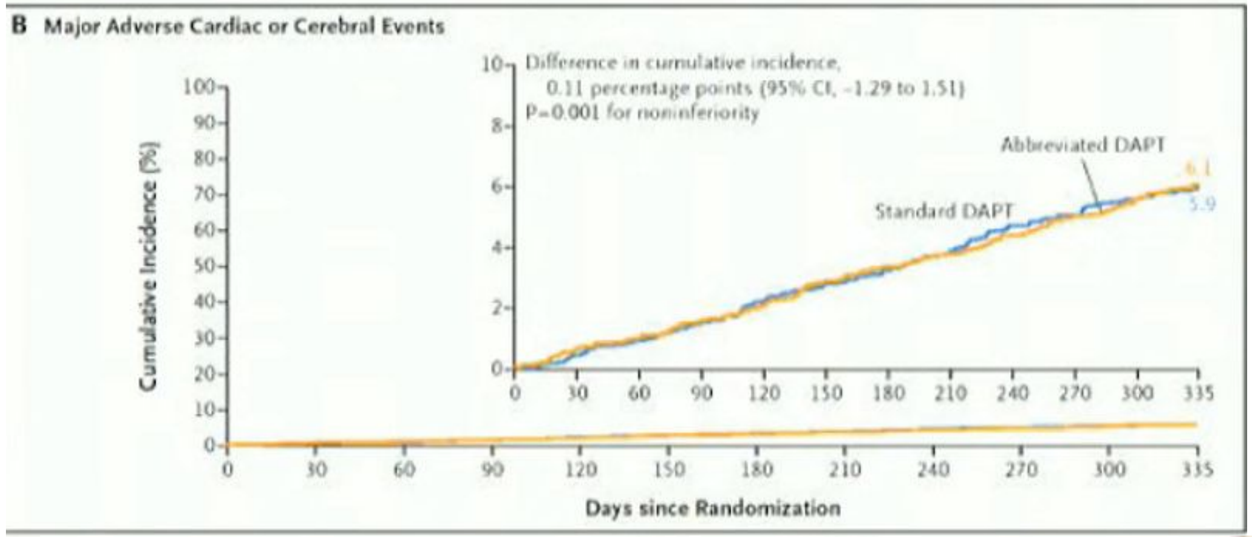
Cardiopatía isquémica

Terapia antiagregante

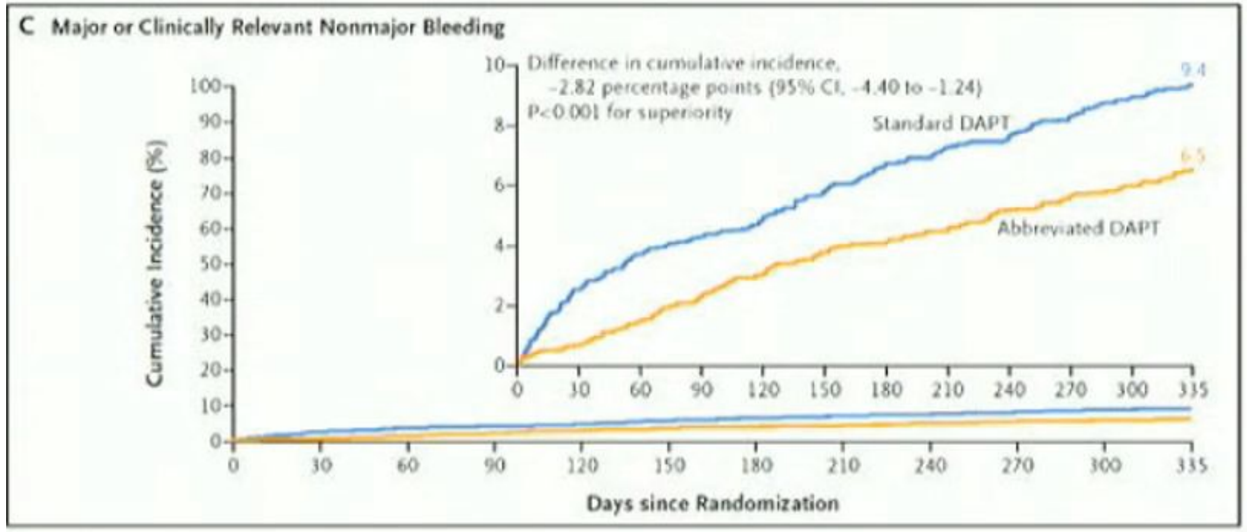
Valgimigli M. N Eng J Med 2021 Oct 28;385(18):1643-1655

- Reclutados 4434 pacienrtes
- Stent DES polímero biodegradable
- Pacientes de alto riesgo hemorrágico:
  - Terapia abreviada 1 mes DAPT
  - Terapia estándar DAPT al menos 3 meses
- End-points:
  - Muerte por todas las causas, IAM, ictus, o sangrado mayor
  - Muerte, IAM, ictus
  - Hemorragia mayor o clínicamente relevante

Eventos isquémicos



Sangrados



Cardiopatía isquémica

Terapia antiagregante

STOPDAPT-2 ACS

1-month dual antiplatelet therapy followed by clopidogrel monotherapy in ACS

Population	Intervention	Control	Outcomes	Time
4136 pts. with ACS	1-month DAPT	12-month DAPT	Bleeding	1 year
• Mean age 67 • 79% male • 30% diabetes • 56% STEMI	1-month DAPT		HR 0.46, CI95% 0.23-0.94 1 1-month DAPT better	Primary analysis at 1 year post ACS
• 85% radial approach • 97% IVUS or OCT	11 months Clopidogrel alone	12-month DAPT	Myocardial infarction HR 1.91, CI95% 1.06-3.44 1 1-month DAPT worse	5-year follow-up planned

Courtesy of Dejan Milasinovic

Criterios de Exclusión:
- **Anticoagulación oral**
- **Hemorragia intracraneal previa**
- **Complicaciones intrahospitalarias (reIAM, ictus, sangrado mayor)**

CoCr-EES stent (Xience)

Watanabe H. Presented at ESC 2021

Cardiopatía isquémica

IC post IAM

PARADISE-MI

AMI (0.5-7 days with LVEF ≤40% and/or pulmonary congestion)

PLUS any

Age ≥70 years	Atrial fibrillation
eGFR <60	LVEF < 30%
Diabetes	Killip class ≥III
Prior MI	STEMI without reperfusion

Major Exclusions:

Prior HF Clinical instability

double-blind active-controlled, no run-in

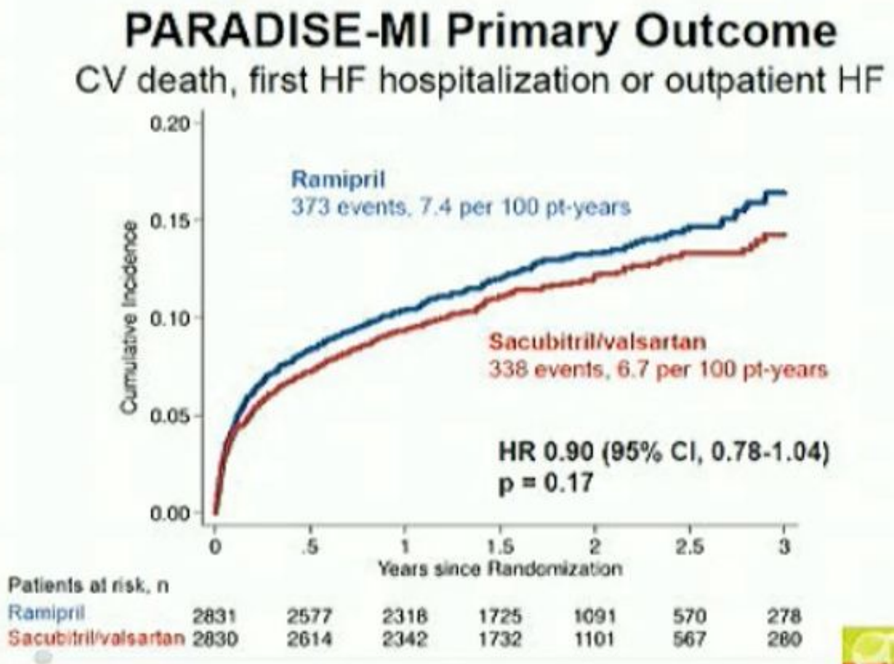
5669 patients

Sacubitril/Valsartan
Target 97/103 mg BID

Ramipril
Target 5 mg BID

Event driven: 708 primary endpoints
Median follow-up: 20 months

Primary Endpoint: CV death, HF hospitalization, outpatient development of HF
Secondary Endpoint: CV death or first HF hospitalization



ACC.21

PARADISE-MI

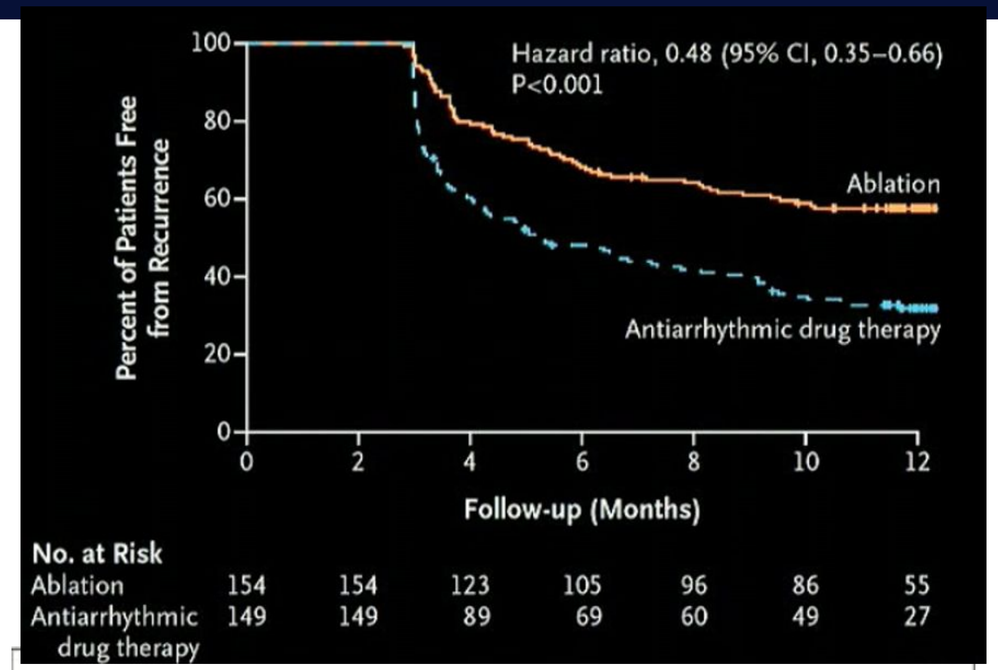
Fibrilación auricular

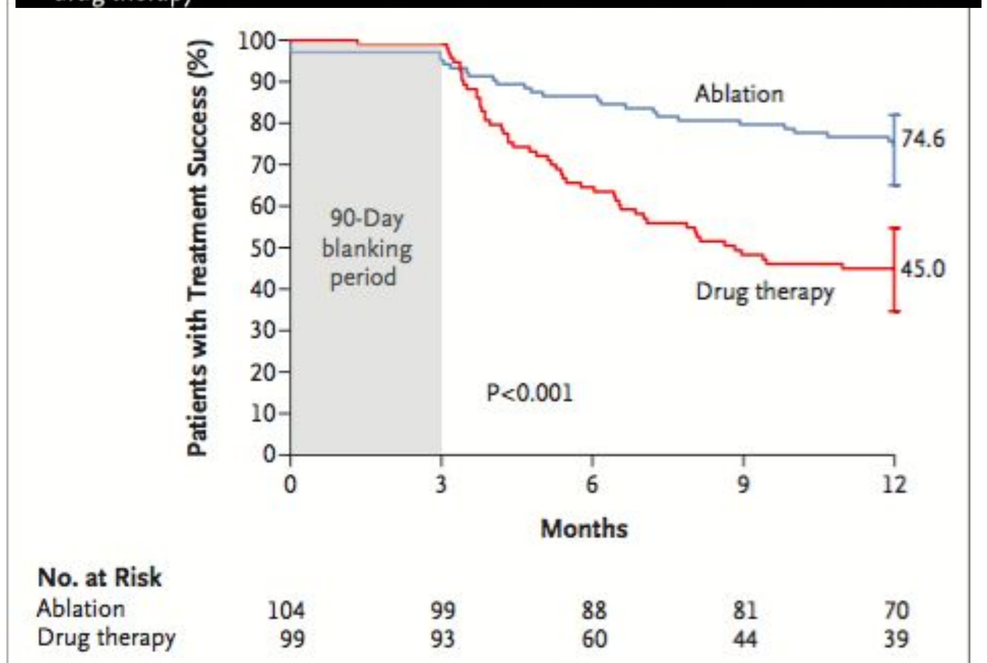
FA paroxística

Andrade JG et al. *N Eng J Med* 2021;384:305-315

Wazni OM et al. N Eng J Med 2021;384:316-324

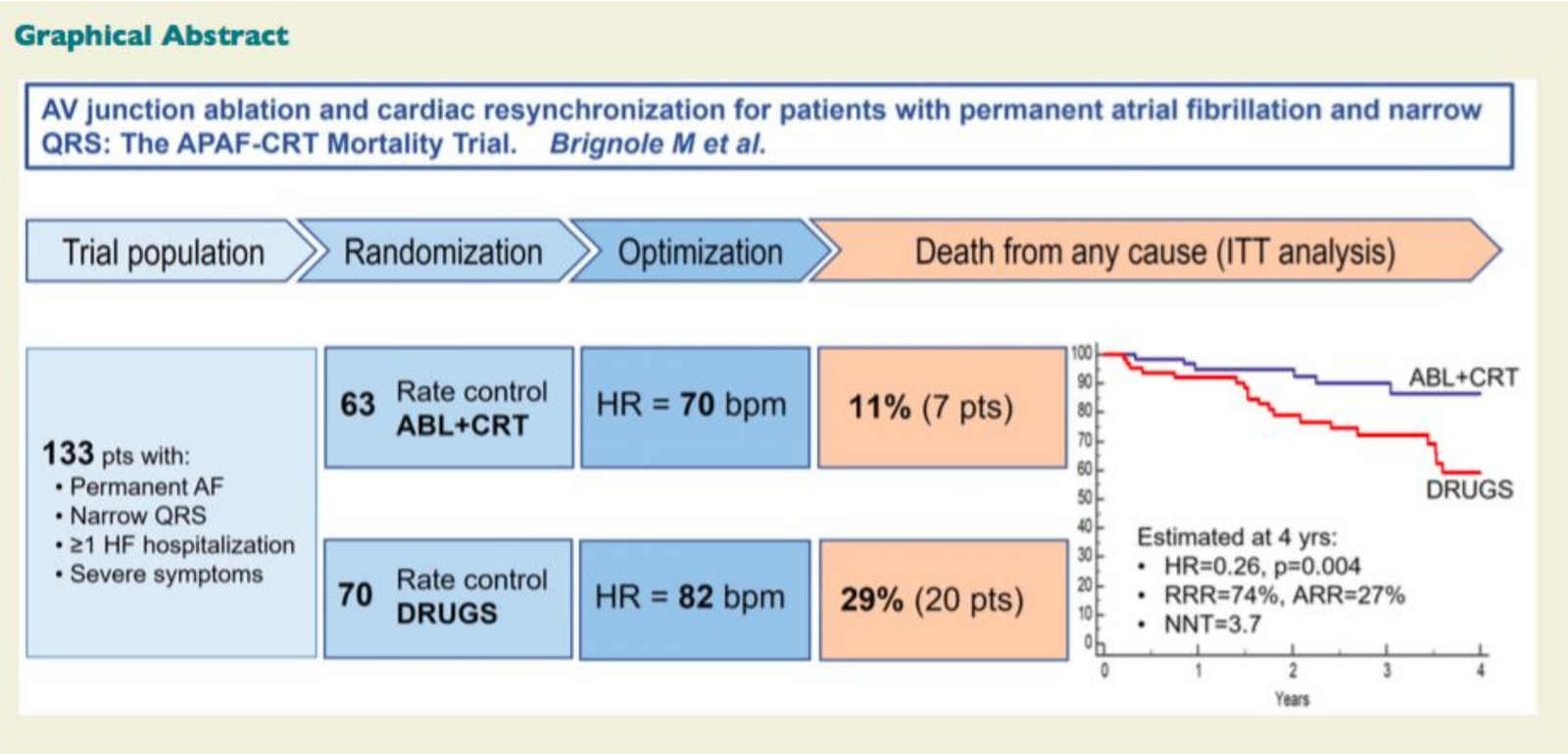
- Dos estudios con un total de 360 pacientes
- Aleatorizados a tratamiento médico estándar (antiarrítmicos) o crioablación con balón.
- Seguimiento a un año con Holter periódico (a) o Holter **subcutáneo** (b).
- **Recidivas clínicas** del 11% y 26% respectivamente (b).
- Sin diferencias en los eventos adversos graves en ninguno de los estudios





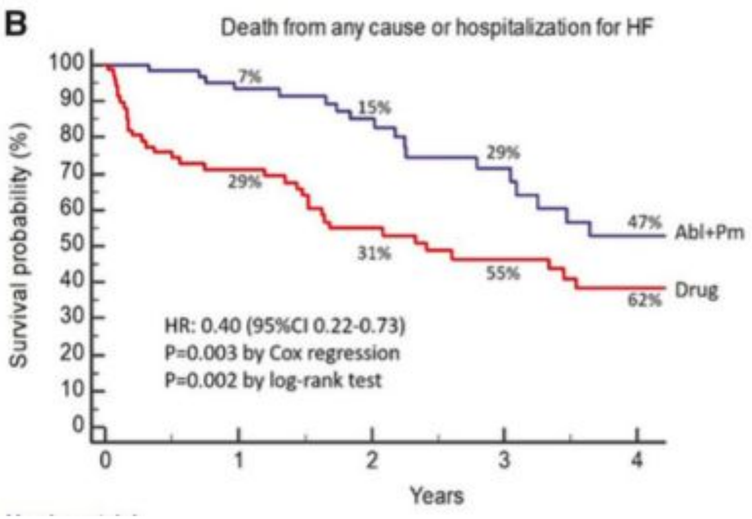
Fibrilación auricular

FA permanente



Brignole M et al. *Eur Heart J* 2021; doi:10.1093/eurheartj/ehab569

- Edad media 73 años
- Beneficio tanto en pacientes con FEVI reducida como FEVI preservada.
- Tasa mortalidad 2 años: 5 vs 21%
- Tasa mortalidad 4 años: 14 vs 41%
- **Endpoint secundario de mortalidad y hospitalización 29% vs 51%**

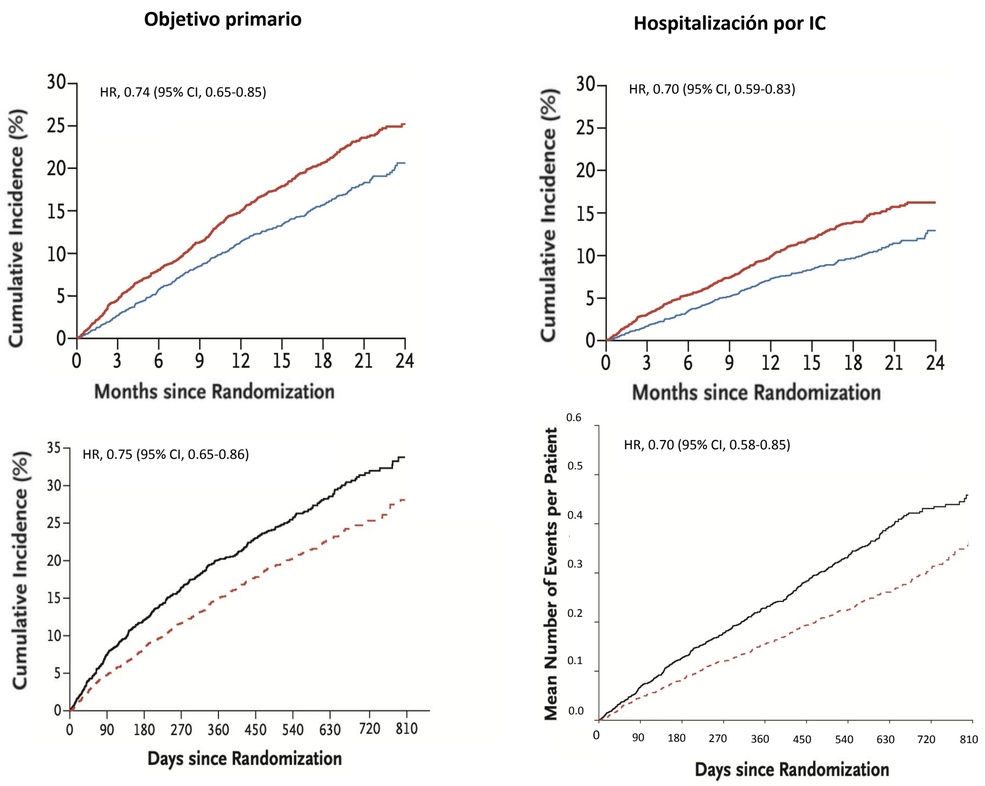


Insuficiencia cardiaca

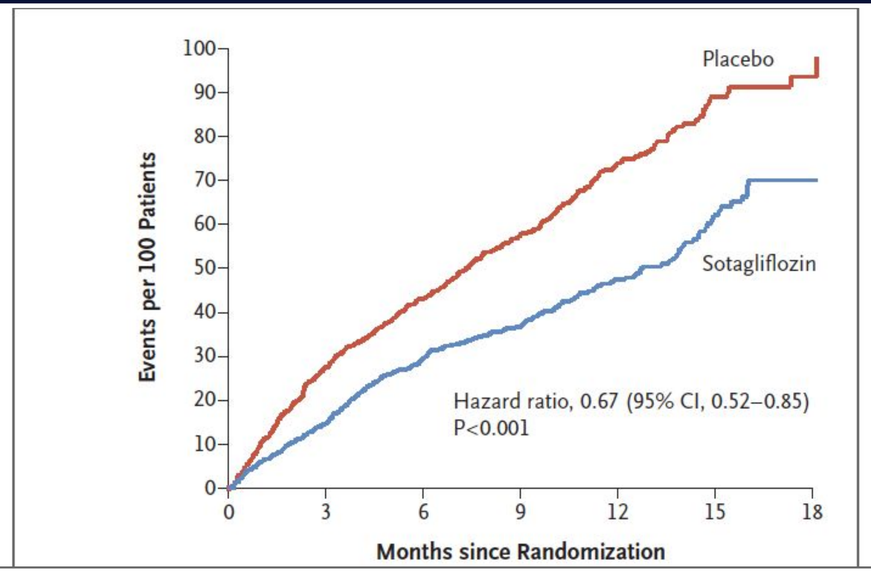
iSGLT2 en ICFEVIr

DAPA-HF[1]

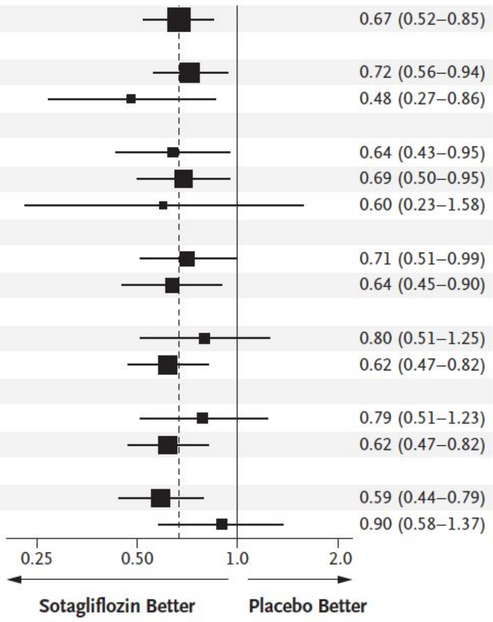
EMPEROR-Reduced[2]



SOLOIST-WHF



Subgroup	No. of Patients	Sotagliflozin	Placebo	Hazard Ratio (95% CI)
		events per 100 patient-yr		
Overall	1222	51.0	76.3	0.67 (0.52–0.85)
LVEF				
<50%	966	56.9	79.9	0.72 (0.56–0.94)
≥50%	256	30.6	64.0	0.48 (0.27–0.86)
Geographic region				
North America or Latin America	346	68.3	103.0	0.64 (0.43–0.95)
Europe	800	44.1	64.7	0.69 (0.50–0.95)
Rest of the world	76	48.4	78.3	0.60 (0.23–1.58)
Timing of first dose				
Before discharge	596	52.1	76.6	0.71 (0.51–0.99)
After discharge	626	50.0	76.1	0.64 (0.45–0.90)
Sex				
Female	412	41.9	52.0	0.80 (0.51–1.25)
Male	810	55.7	89.3	0.62 (0.47–0.82)
Age				
<65 yr	364	57.1	71.1	0.79 (0.51–1.23)
≥65 yr	858	48.0	78.5	0.62 (0.47–0.82)
Estimated GFR				
<60 ml/min/1.73 m²	854	50.1	85.8	0.59 (0.44–0.79)
≥60 ml/min/1.73 m²	368	53.1	58.1	0.90 (0.58–1.37)



1. McMurray JJV et al. N Engl J Med. 2019;381(21):1995-2008. 2. Packer M et al. N Engl J Med. 2020;10.1056/NEJMoa2022190.

Bhatt DL. N Eng J Med. 2021;384:117.128

Insuficiencia cardiaca

iSGLT2 en ICFEVIp

Ankler SB. N Eng J Med. 2021;385(16):1451-1651

Phase III trial* in patients with HFpEF

Aim: To investigate the safety and efficacy of empagliflozin versus placebo in patients with HF with **preserved ejection fraction**

Population: T2D and non-T2D, aged ≥18 years, chronic HF (NYHA class II–IV)

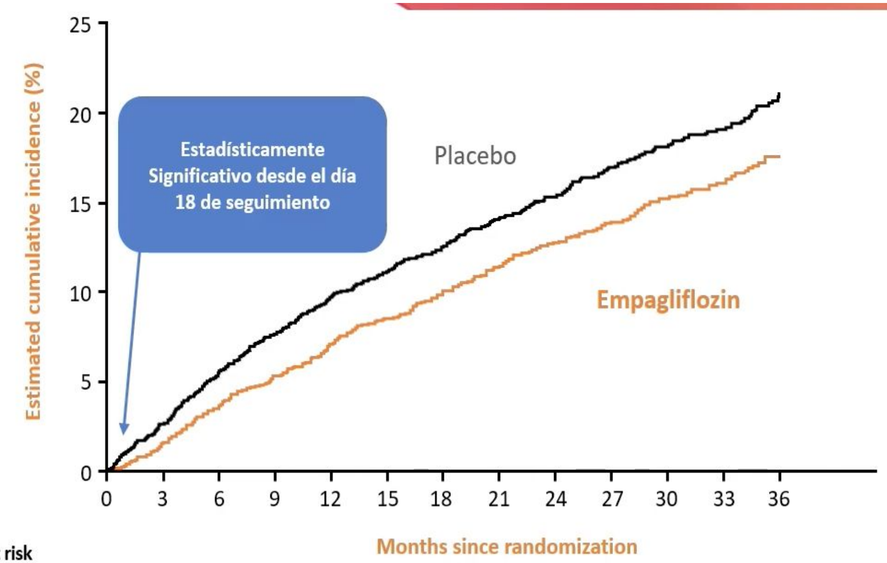
EMPEROR-Preserved
LVEF >40%
5988 patients

- Empagliflozin 10 mg OD
- Placebo

Median follow-up 26.2 months

COMPOSITE PRIMARY ENDPOINT
- Time to first event of adjudicated CV death or adjudicated HHF

CONFIRMATORY KEY SECONDARY ENDPOINTS
- First and recurrent adjudicated HHF
- Slope of change in eGFR (CKD-EPI) from baseline



Patients at risk													
Placebo	2991	2888	2786	2706	2627	2424	2066	1821	1534	1278	961	681	400
Empagliflozin	2997	2928	2843	2780	2708	2491	2134	1858	1578	1332	1005	709	402

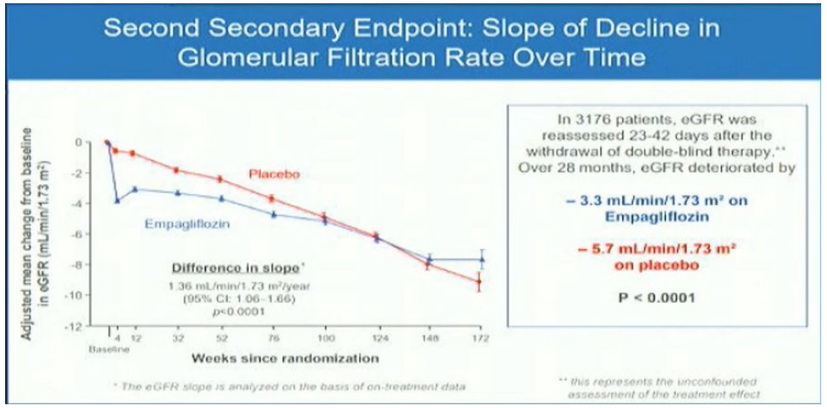
RRR 21%

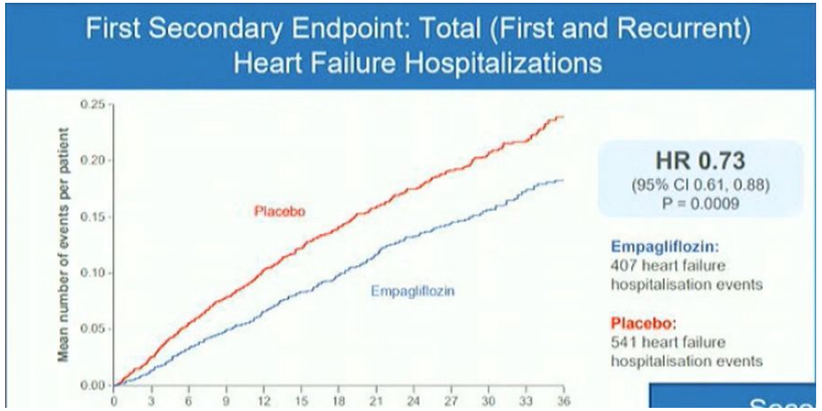
ARR 3.3%

NNT*=31

HR: 0.79
(95% CI: 0.69, 0.90)
p<0.001

Empagliflozin:
415 (13.8%) patients with event. Rate: 6.9/100 patient-years
Placebo:
511 (17.1%) patients with event. Rate: 8.7/100 patient-years





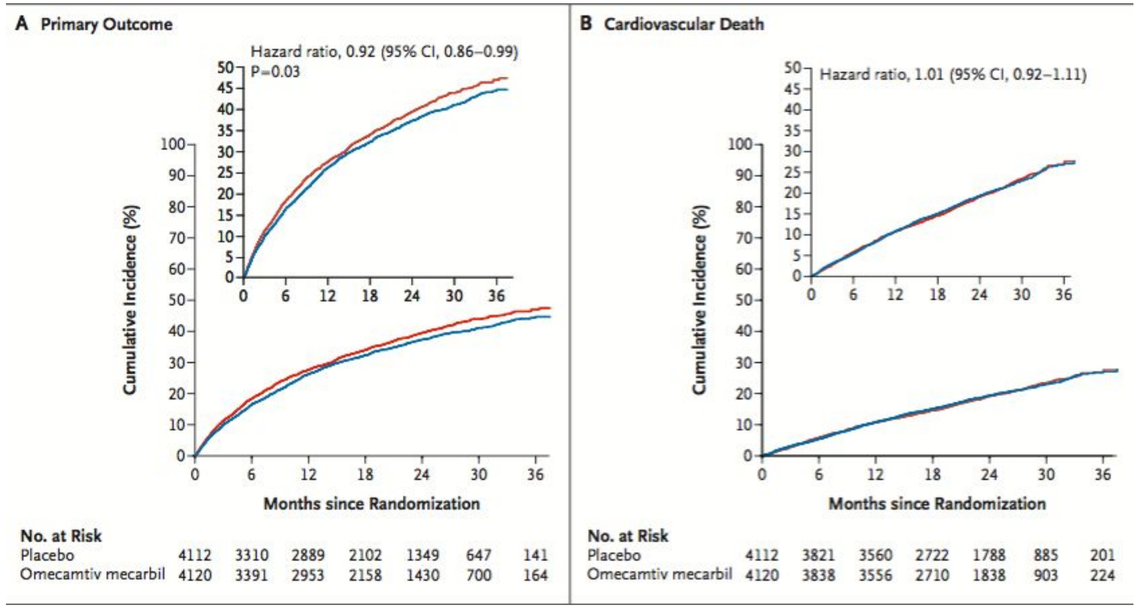
*During a median trial period of 26 months. ARR, absolute risk reduction; CI, confidence interval; HR, hazard ratio; NNT, number needed to treat; RRR, relative risk reduction. Anker S *et al. N Engl J Med.* 2021 Aug 27. doi: 10.1056/NEJMoa2107038. Empagliflozina no está indicada para el tratamiento de la insuficiencia cardíaca con fracción de eyección preservada ni moderadamente reducida.

Insuficiencia cardiaca

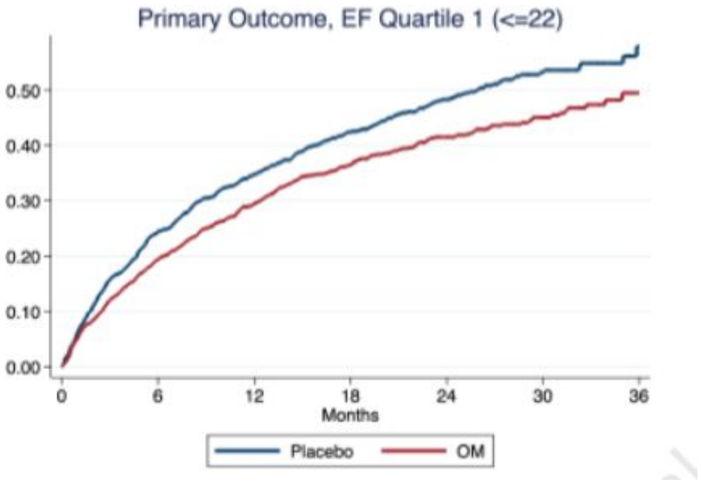
Omecantiv mecarbil

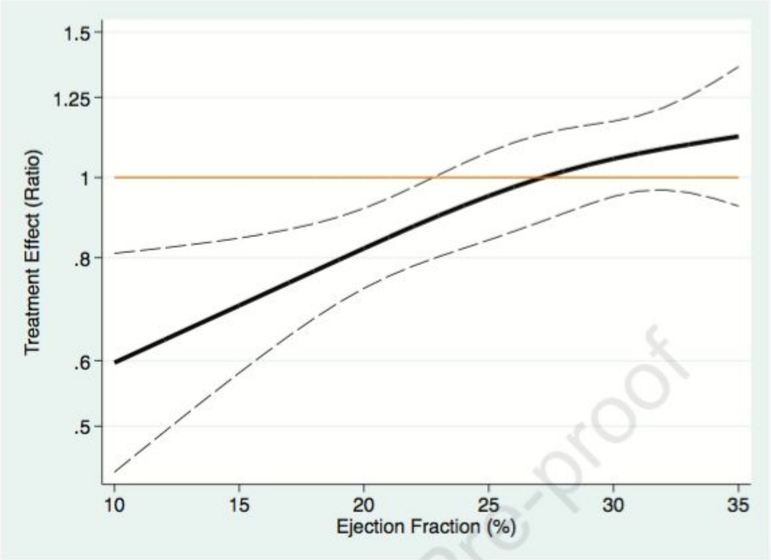
Teerlink JR. N Eng J Med. 2021; Teerlink JR. J Am Coll Cardiol. 2021

- GALACTIC- HF
- Pacientes IC FEVI>35% (N=8256)
- End-points:
  - Compuesto de muerte cardiovascular y primer evento de IC (hospitalización o visita urgente)



En un estudio posterior los autores compararon OM frente a placebo para cada subgrupo de FE



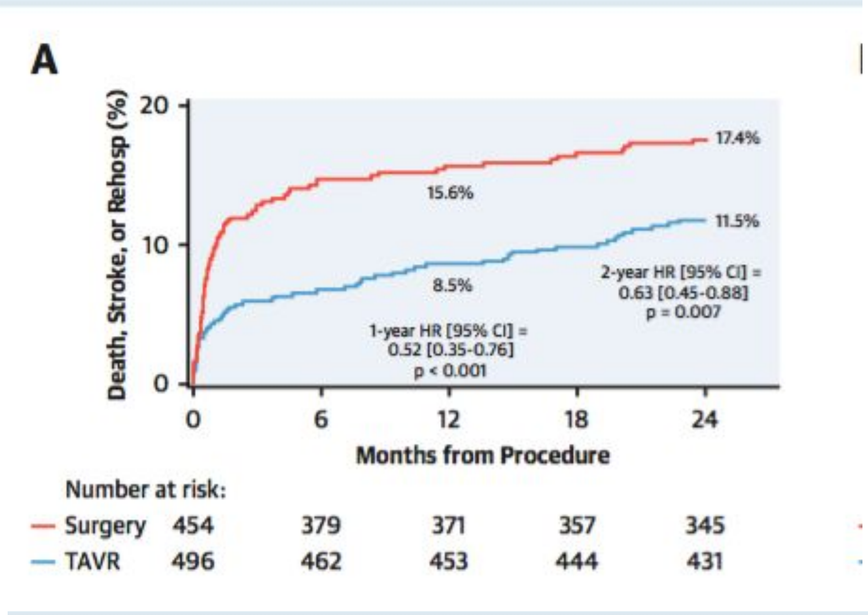


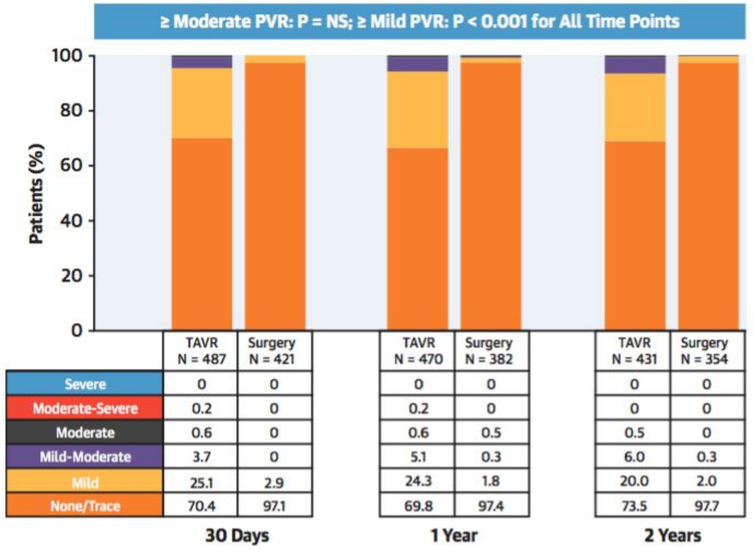
Valvulopatías

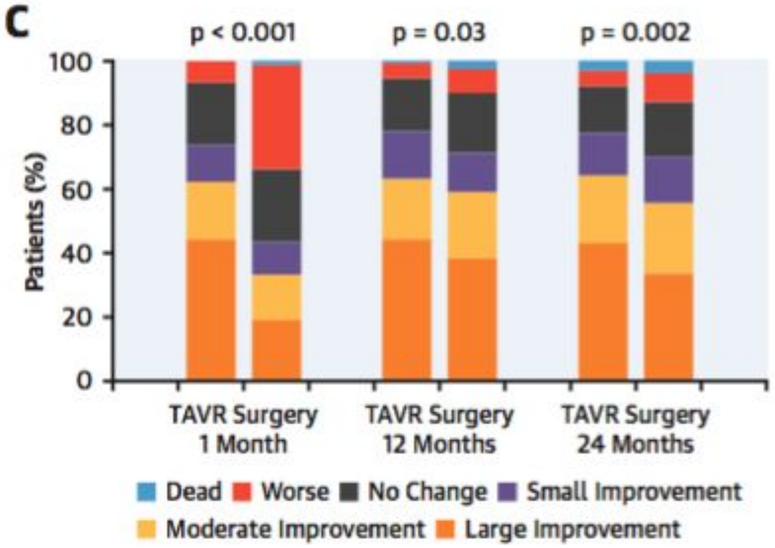
TAVI en pacientes riesgo bajo

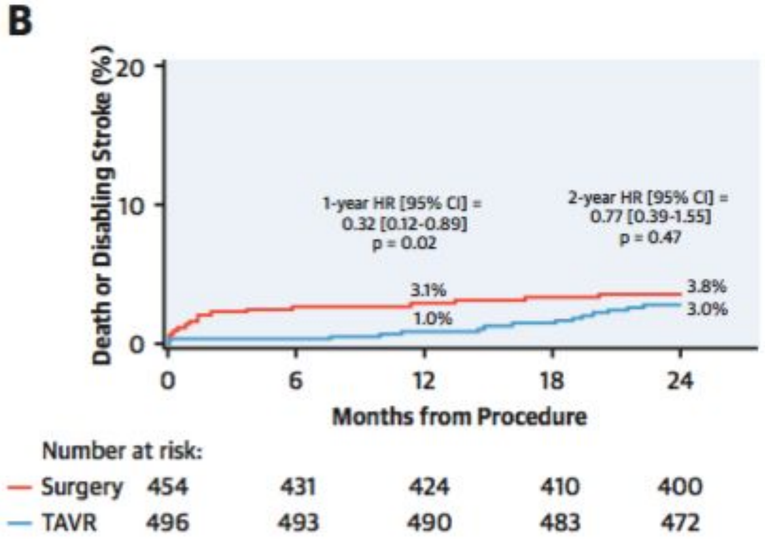
Leon MB et al. J Am Coll Cardiol. 2021;77(9):1149-61

- Resultados a dos años de TAVI vs cirugía en pacientes de bajo riesgo
- 1000 pacientes aleatorizados 1:1
- Combinado de muerte, ictus, rehospitalización
- A los dos años la diferencia entre grupos se mantiene a expensas de rehospitalización.
- TAVI mejor calidad de vida, pero más trombosis e IAo no clínicamente







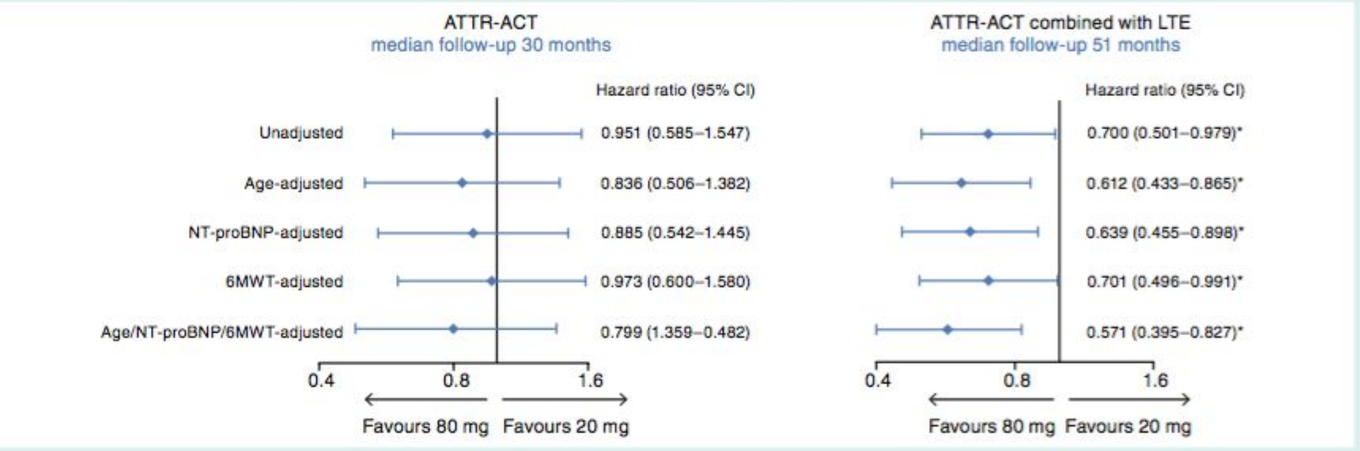


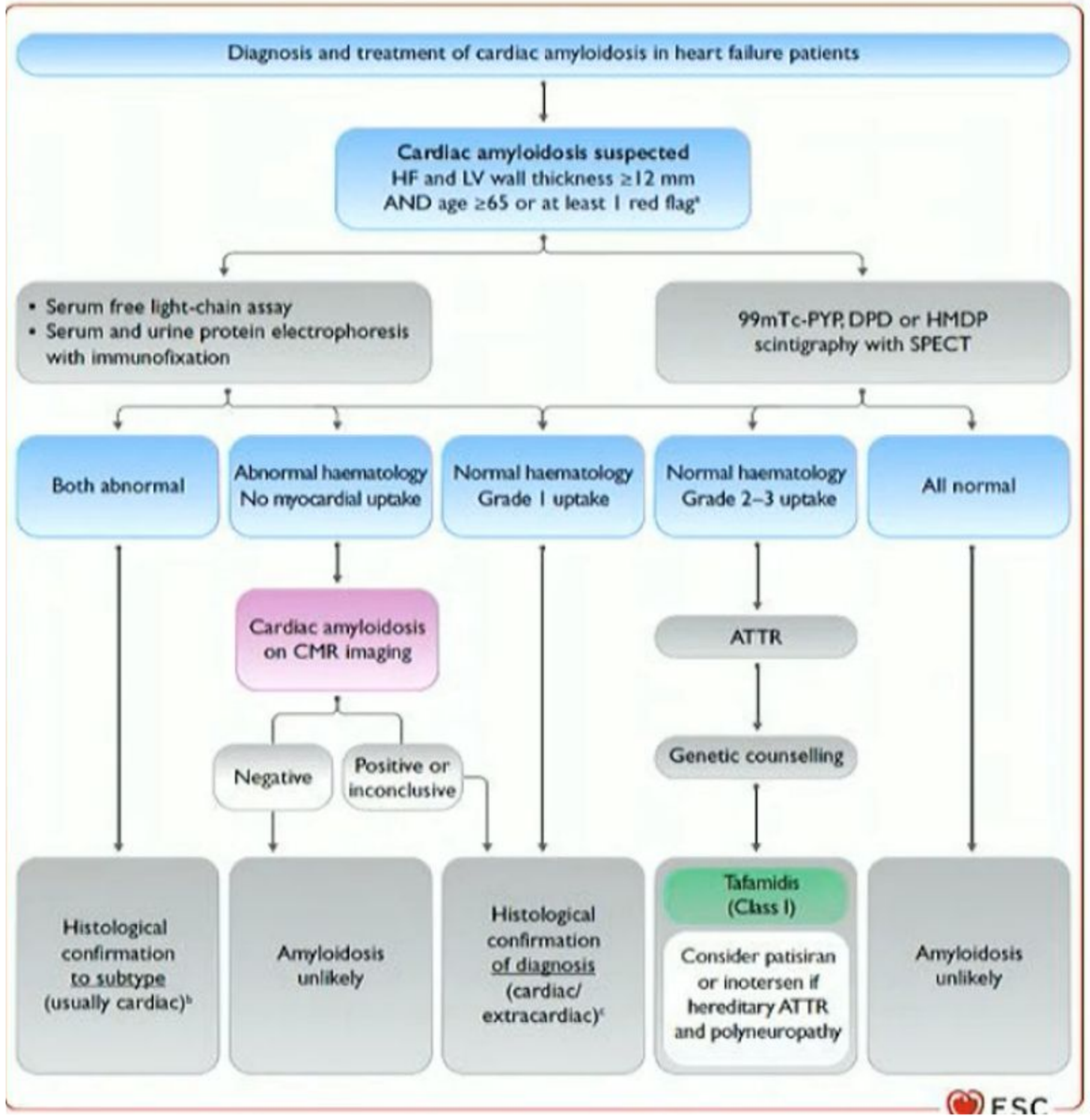
Miocardiopatías

Amiloidosis ATTR

Recommendations for treatment of patients with HF and amyloidosis	
Tafamidis is recommended in patients with genetic testing proven hTTR-CA and NYHA class I or II symptoms to reduce symptoms, CV hospitalization and mortality.	I
Tafamidis is recommended in patients with wtTTR-CA and NYHA class I or II symptoms to reduce symptoms, CV hospitalization and mortality.	I

Garcia-Pavia P. Eur J Hear Fail. 2021; 23(2):277-85





Riesgo vascular

Terapia hipolipemiante

ESC European Society of Cardiology

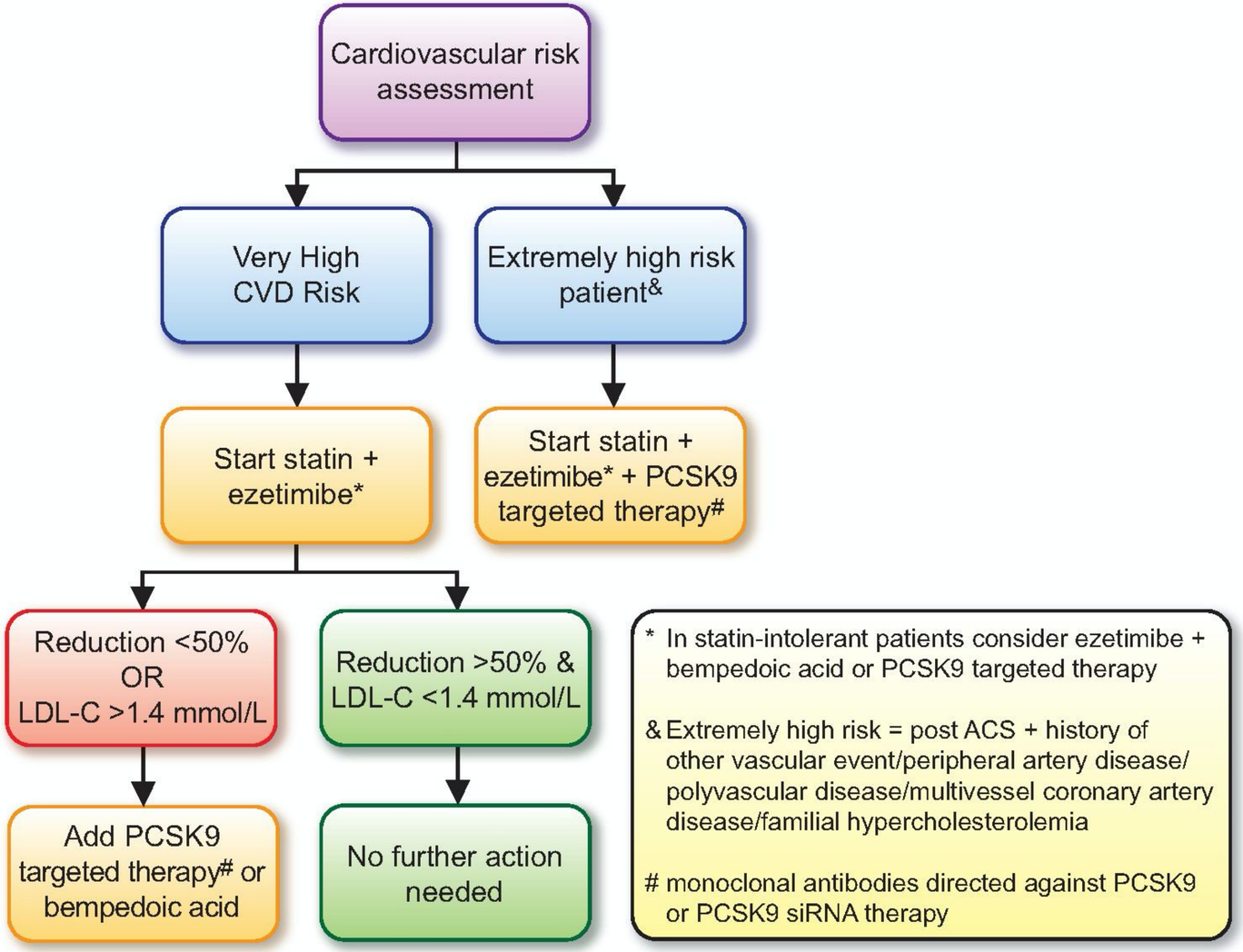
European Heart Journal (2021) 00, 1–4
doi:10.1093/eurheartj/ehab718

VIEWPOINT
Epidemiology and prevention

Combination lipid-lowering therapy as first-line strategy in very high-risk patients

Kausik K. Ray[1*], Laurens F. Reeskamp[2], Ulrich Laufs[3], Maciej Banach[4], François Mach[5], Lale S. Tokgözoglu[6], Derek L. Connolly[7], Anja J. Gerrits[8], Erik S. G. Stroes[2], Luis Masana[9], and John J. P. Kastelein[2]

Combination lipid-lowering therapy as first line strategy in very high-risk patients



Gracias por su atención

Dr. Josep Melero Ferrer

Unidad de IC. CHGUV