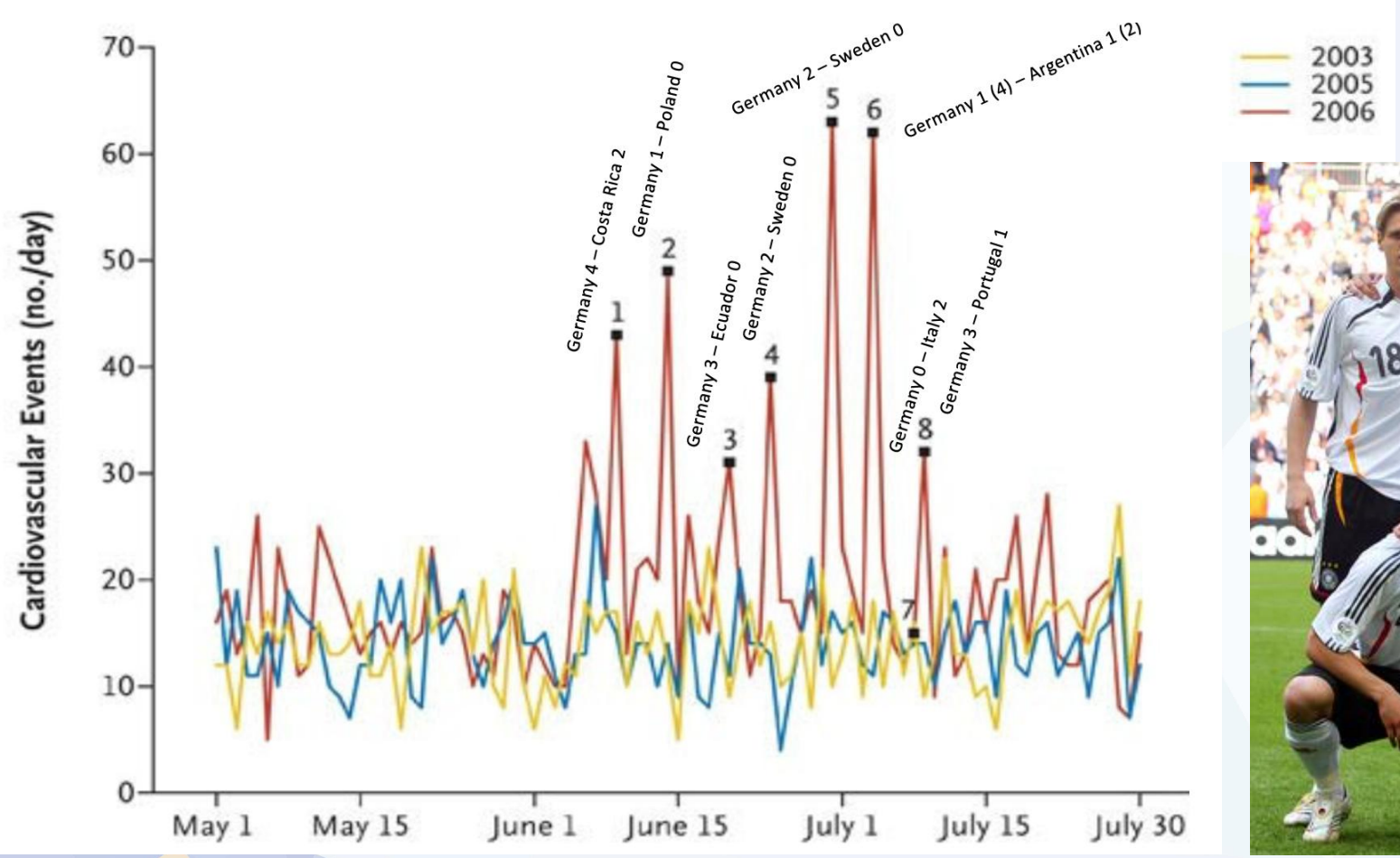
Imagen en placa vulnerable

Josep Gómez Lara
Hospital Universitari de Bellvitge

- Número de hospitalizaciones por eventos CV durante el Mundial del 2006 comparado con los años previos (sin competición deportiva



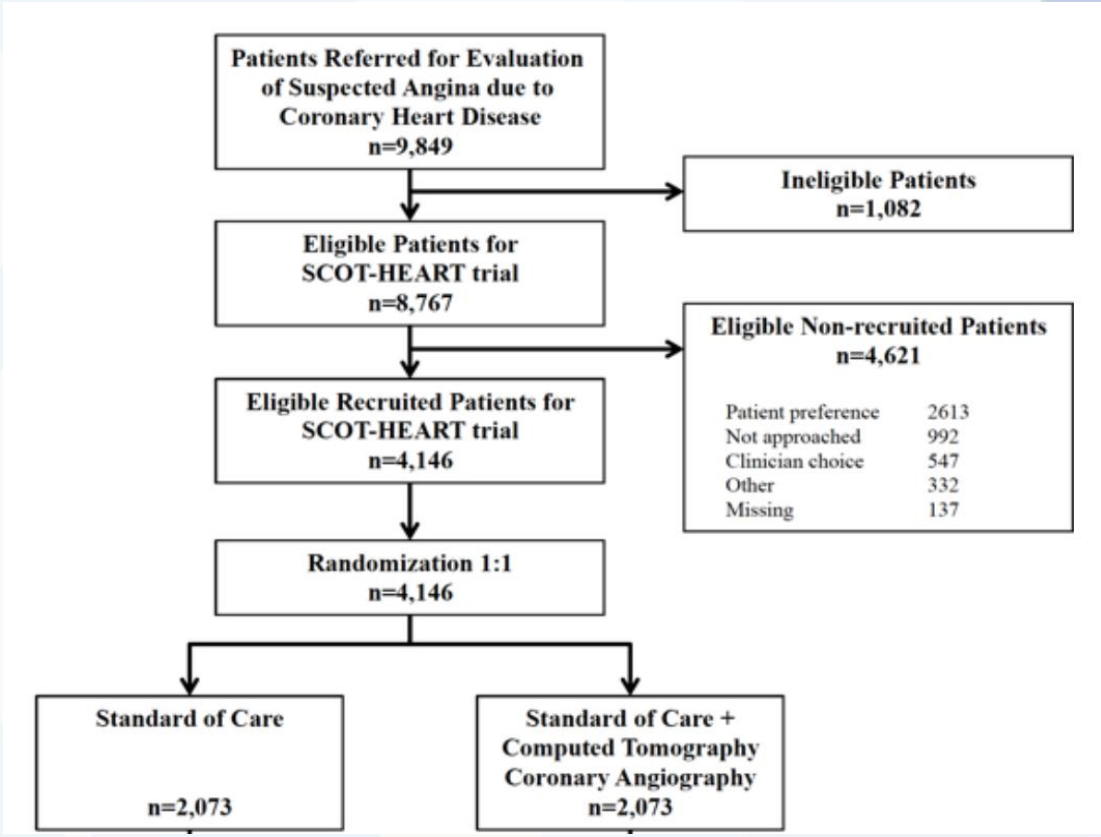
Wilbert-Lampert U et al.; Cardiovascular Events during World Cup Soccer; NEJM 2008


SPORT
45
0 R. MADRID
4 BARÇA
El Barça le endosa una paliza histórica al Madrid de Mbappé y sale del Bernabéu como el claro favorito al título
Lewandowski firmó un doblete y pudo marcar algún tanto más. Lamine Yamal y Raphina completaron la goleada
¡VAYA MENEO!
LALIGA UD Las Palmas, 1-Girona, 0
EL GIRONA CAE EN OTRO PARTIDO CON MUY POCA FORTUNA


MUNDO DEPORTIVO
LALIGA
R. MADRID
0-4
BARÇA
El Barça de Flick goleó en una extraordinaria segunda mitad y tomó el Bernabéu en otra noche para la historia
El líder se exhibió con goles de Lewandowski (2), Lamine y Raphinha para dejar a 6 puntos a un Madrid desquiciado
BAÑO AL MADRID

SCOT-HEART trial

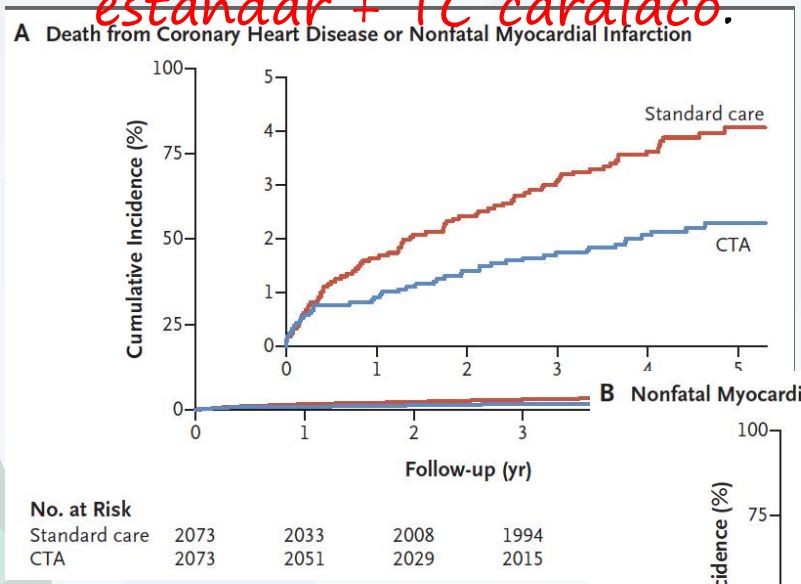
- Un total de 4000 pacientes con síndrome coronario crónico fueron aleatorizados a manejo estándar **vs.** manejo estándar + TC cardíaco.

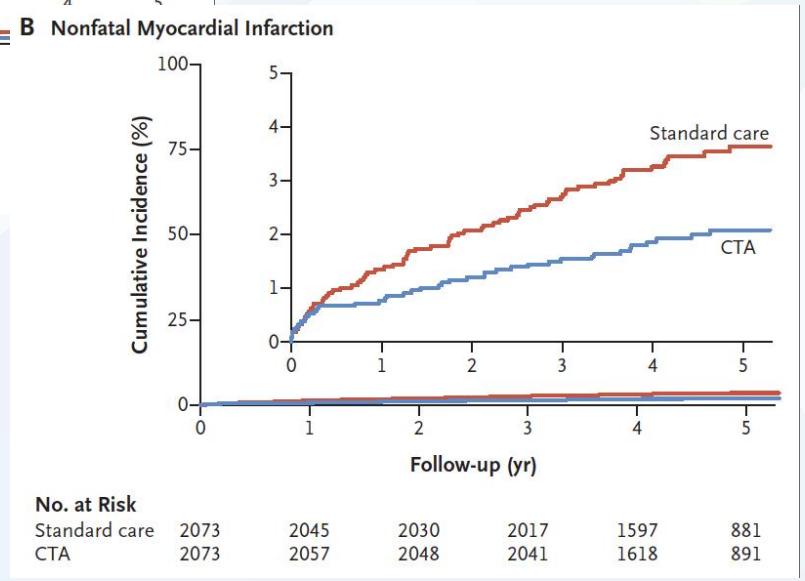


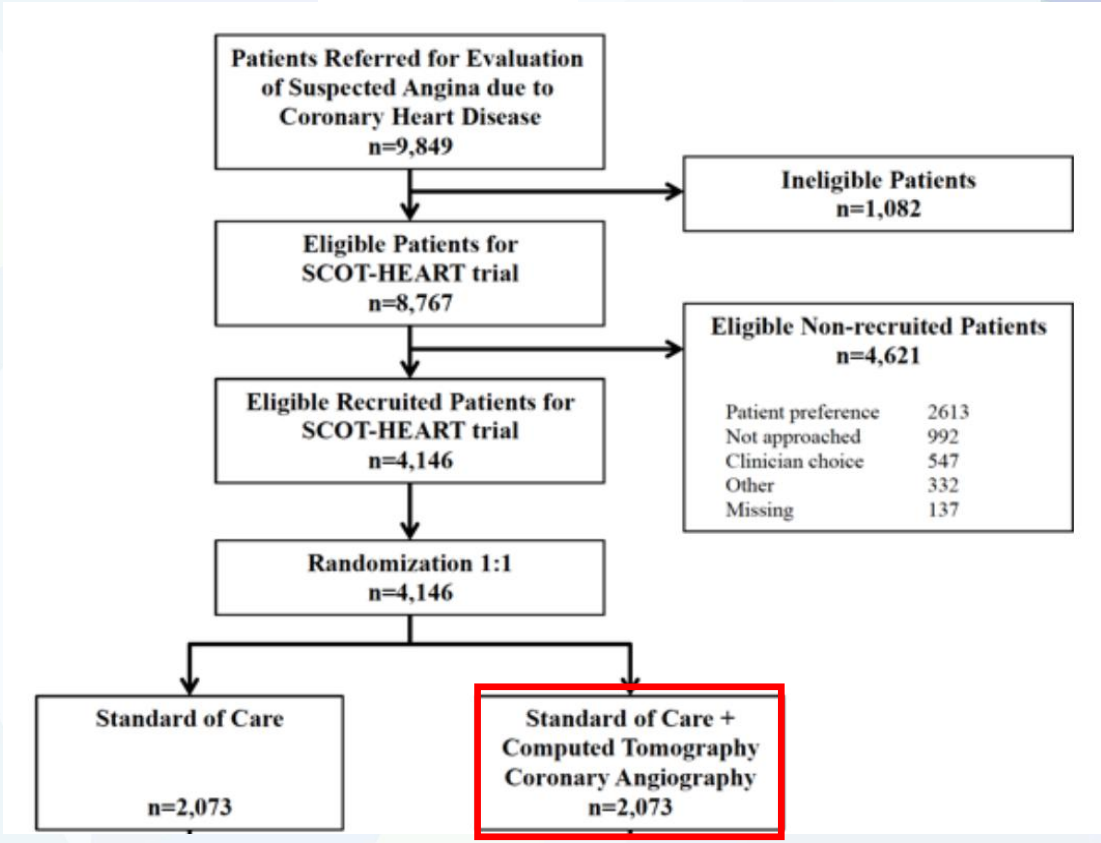
SCOT-HEART investigators; Coronary CT Angiography and 5-Year Risk of Myocardial Infarction; N Engl J Med 2018;379:924-933

SCOT-HEART trial

- Un total de 4000 pacientes con síndrome coronario crónico fueron aleatorizados a manejo estándar vs. manejo estándar + TC cardíaco.



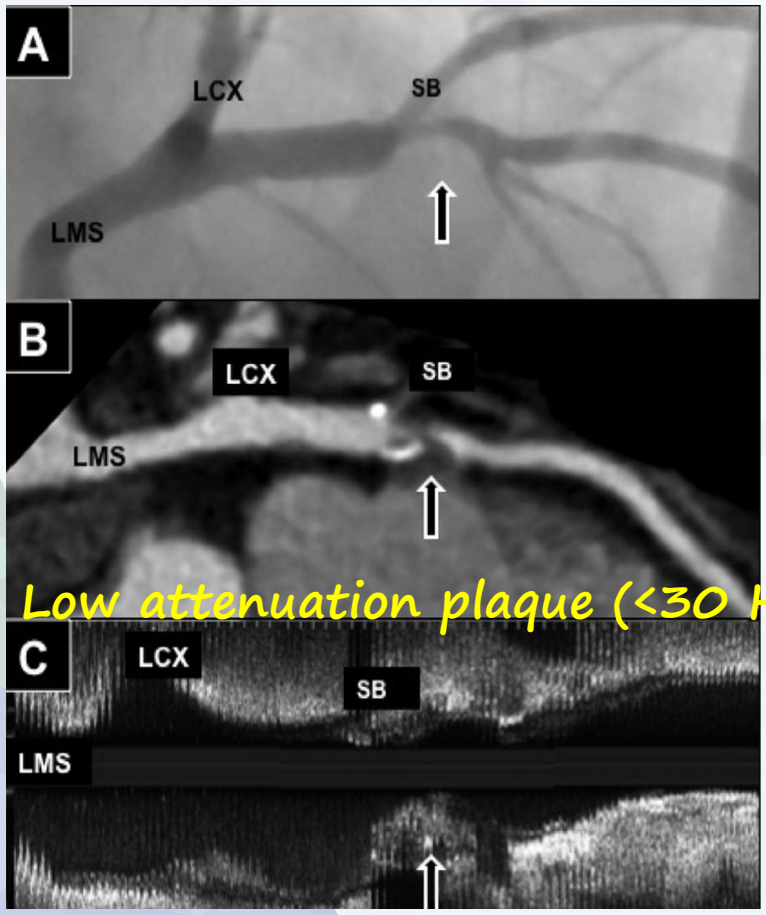




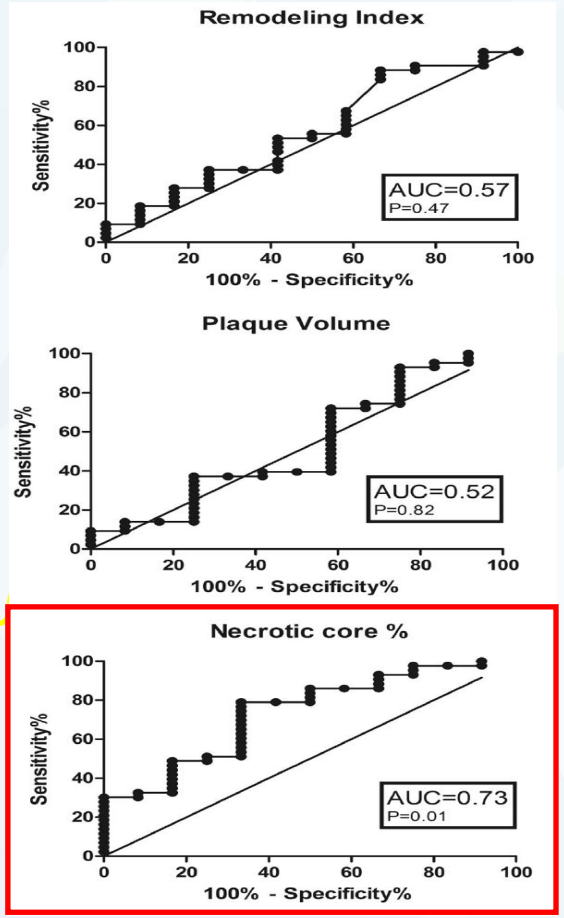
SCOT-HEART investigators; Coronary CT Angiography and 5-Year Risk of Myocardial Infarction; N Engl J Med 2018;379:924-933

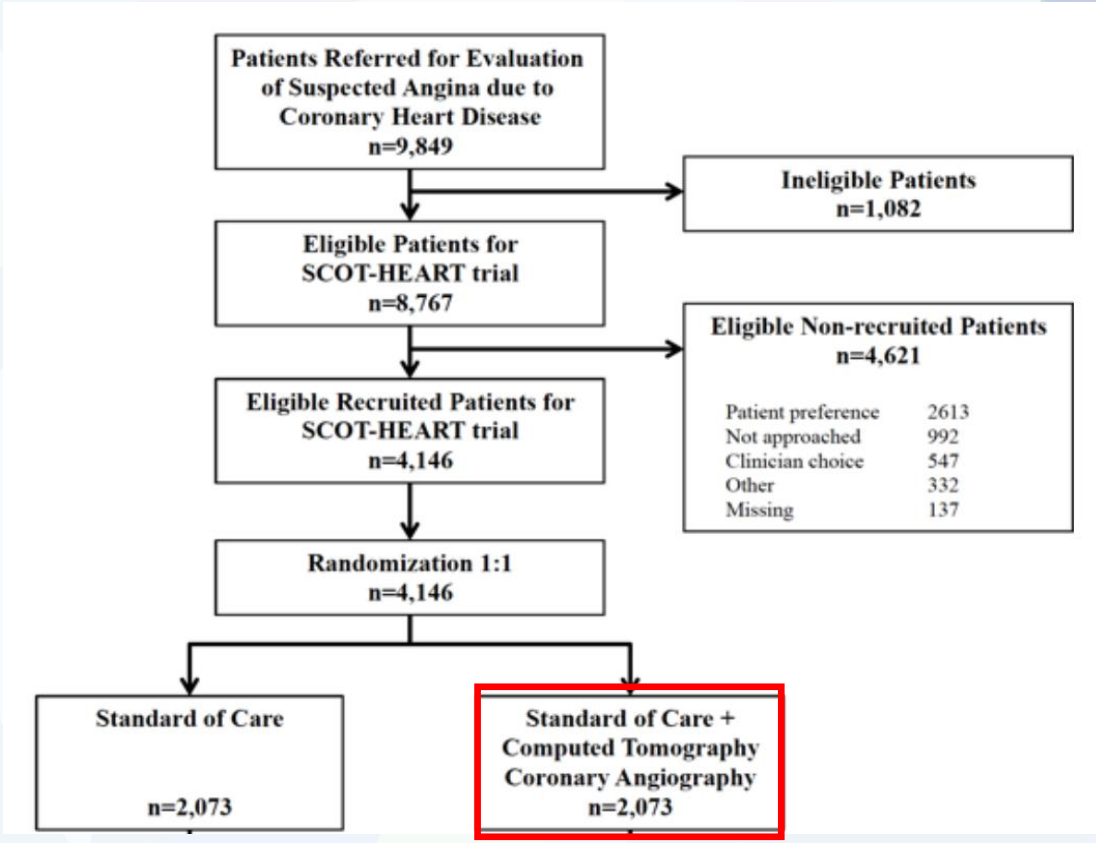
SCOT-HEART trial

- **Sub-estudio** con los pacientes del SCOT-HEART aleatorizados a TC cardíaco.



Low attenuation plaque (<30 HU

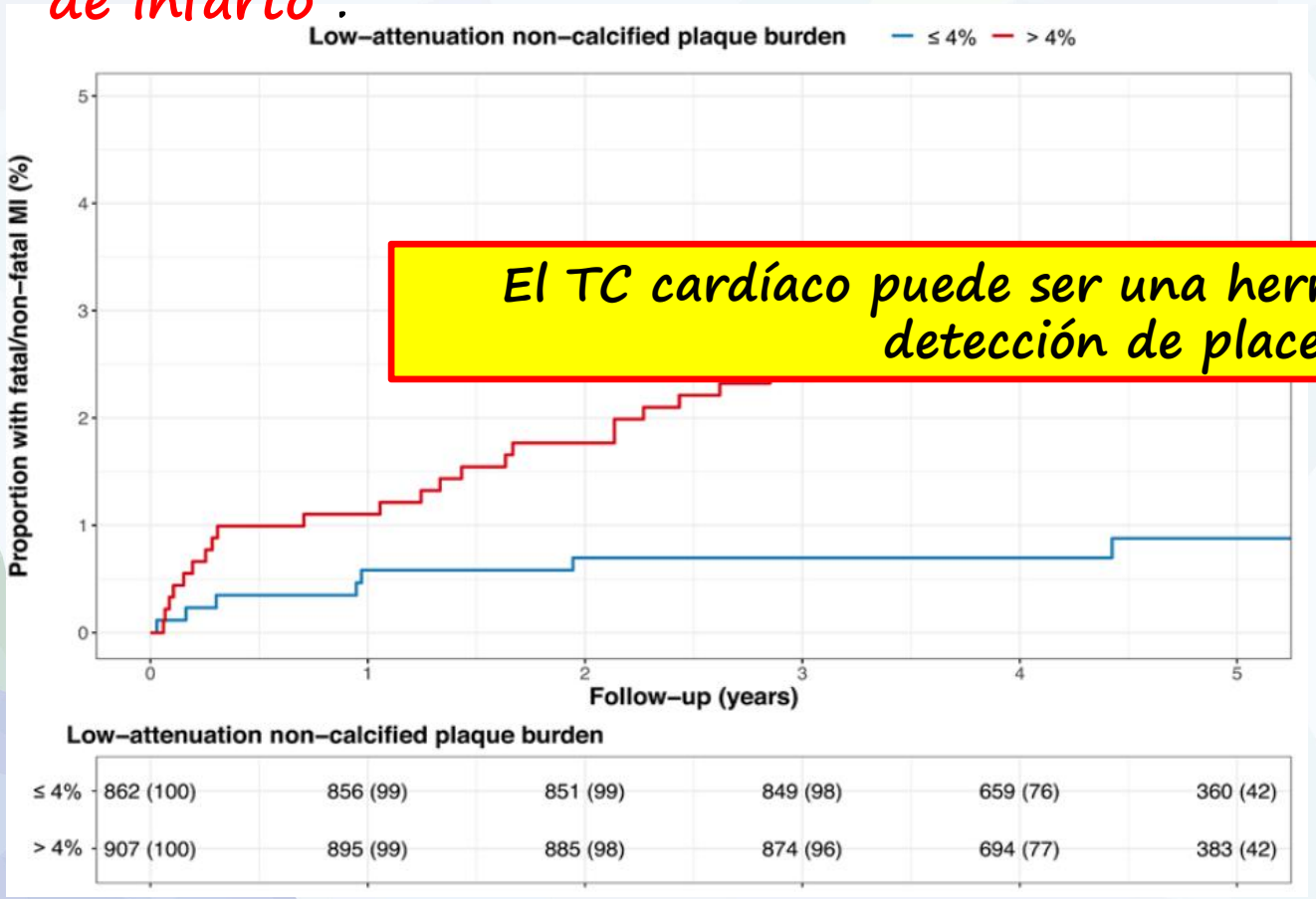




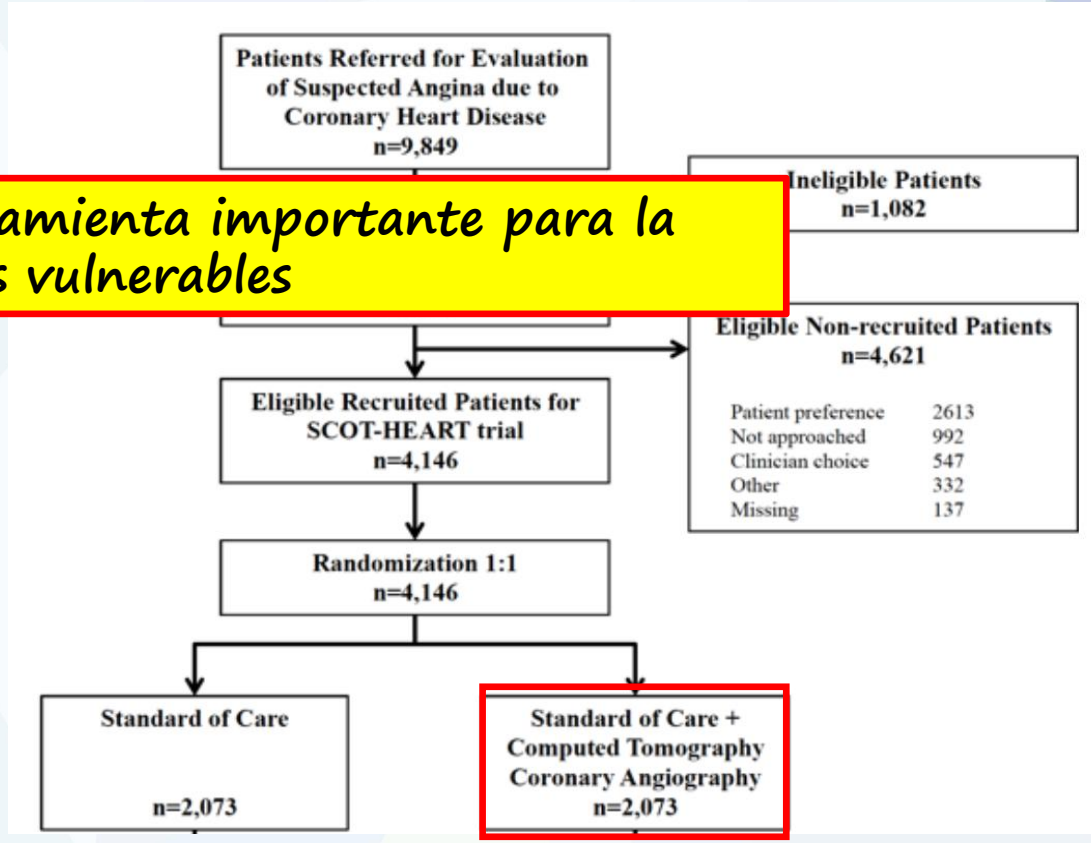
Williams MC; Low-Attenuation Noncalcified Plaque on Coronary CT Angiography Predicts Myocardial Infarction; Circulation 2020
Obaid DR, et al; Coronary CT angiography features of ruptured & high-risk atherosclerotic plaques: Correlation with IVUS; Journal of CV Computed Tomography 2017

SCOT-HEART trial

- En **pacientes con SCC**, la presencia de "**low attenuation plaques**" por TC cardíaco fue el **predictor más importante de infarto** .



El TC cardíaco puede ser una herramienta importante para la detección de places vulnerables

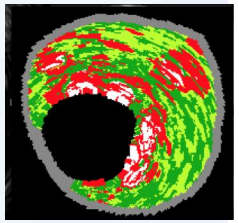


Williams MC; Low-Attenuation Noncalcified Plaque on Coronary CT Angiography Predicts Myocardial Infarction; Circulation 2020

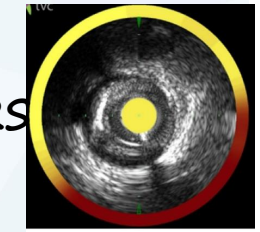
PREVENT

- En **pacientes con SCC** que se les realiza cateterismo y presentan lesiones intermedias por angiografía.

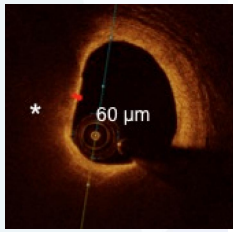
IVUS-VH
71%



IVUS-NIRS
42%



OCT
5%



63%

45%

5627 patients
with intermediate stenosis (DS >50%)

from Sep 23, 2015,
through Sep 29, 2021

2065 with revascularization with positive FFR (≤0.80)

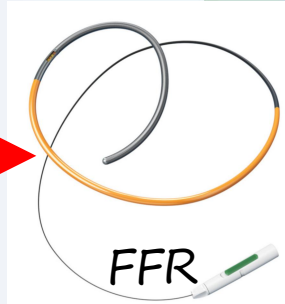
3562 with lesions with DS >50% and negative FFR (>0·80)

1954 not meeting imaging criteria of vulnerable plaque excluded

1608 randomly assigned
Imaging criteria of vulnerable plaque

Preventive PCI plus OMT (803)

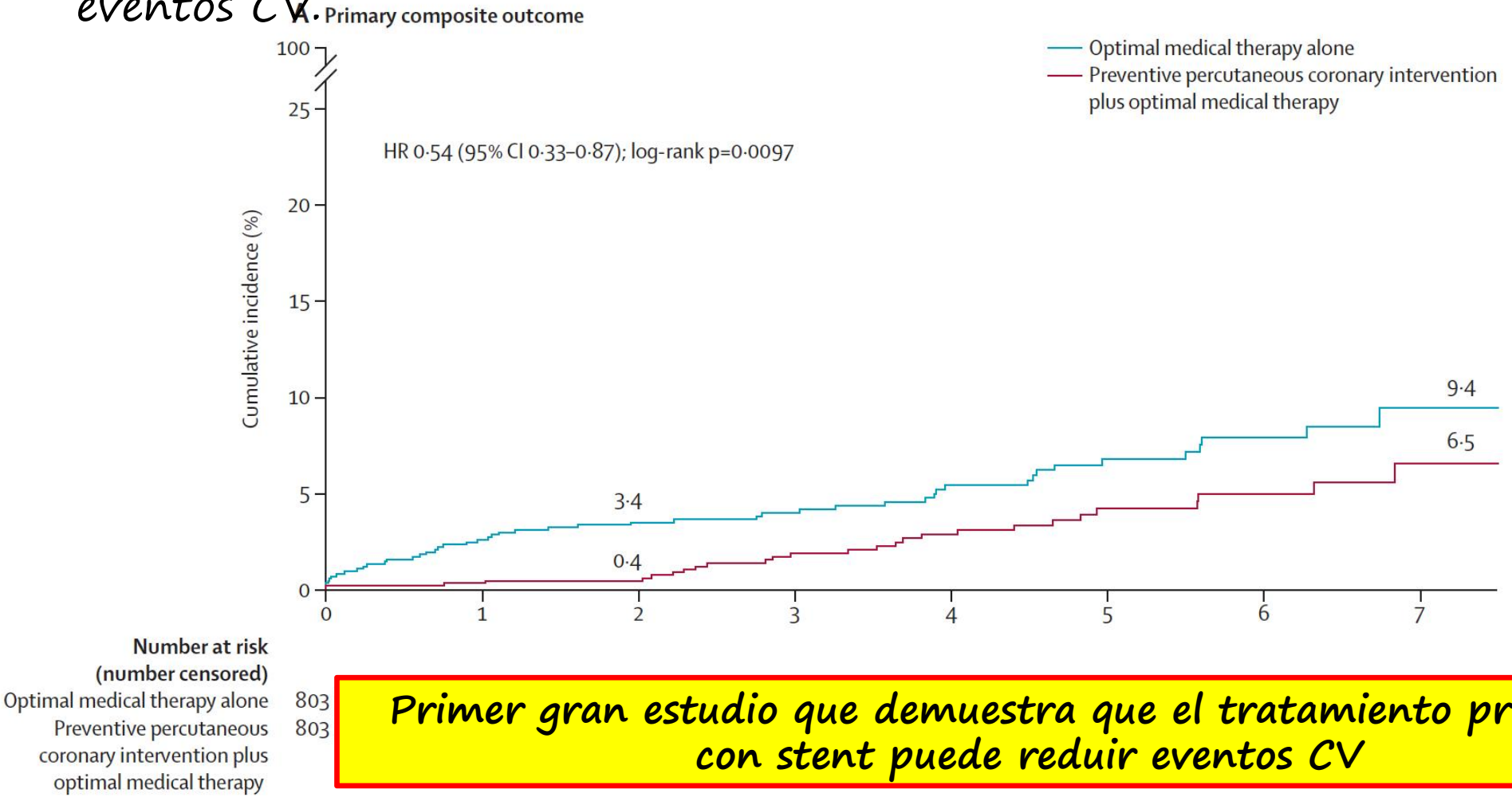
OMT alone (803)



Park SJ, et at.; Preventive PCI versus OMT alone for the treatment of vulnerable atherosclerotic coronary plaques (PREVENT): a multicentre, open-label, randomised

PREVENT

- Los pacientes con placas vulnerables presentaron menos eventos CV



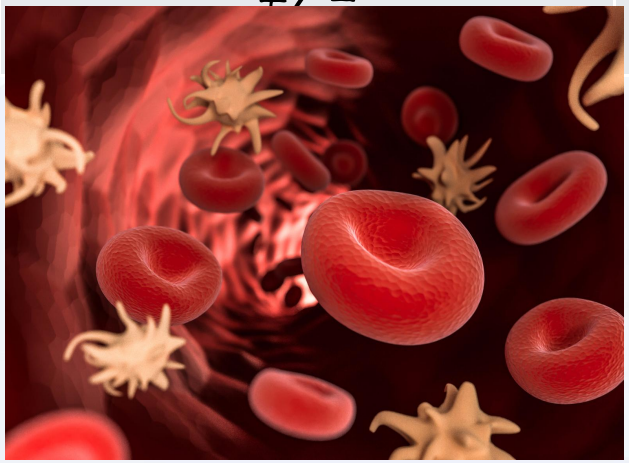
Primary end-point:
- Cardiac death
- TV Non-fatal MI
- Ischemic-driven TV revasc.
- Hospitalization unstable angi

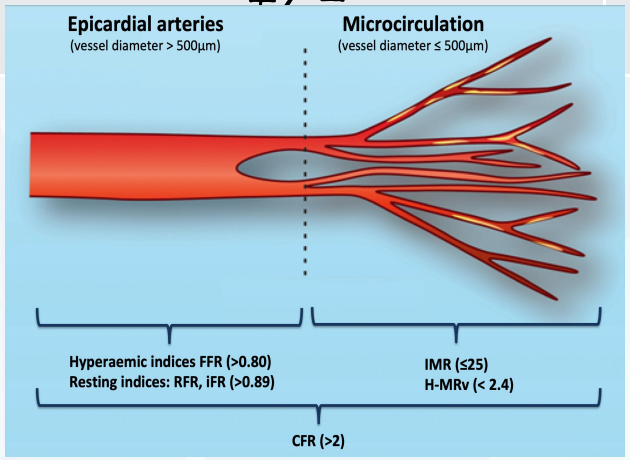
Primer gran estudio que demuestra que el tratamiento preventivo con stent puede reduir eventos CV

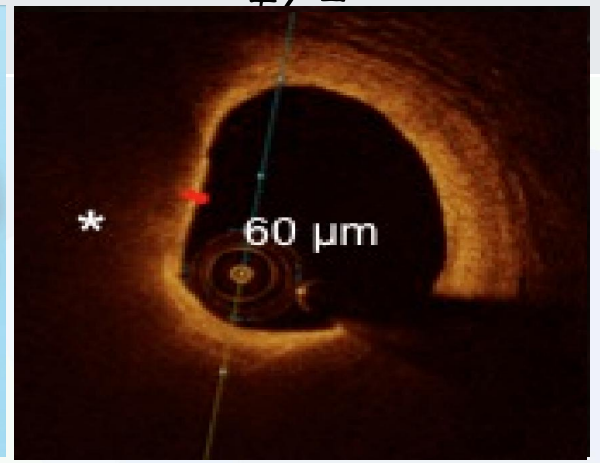
Park SJ, et at.; Preventive PCI versus OMT alone for the treatment of vulnerable atherosclerotic coronary plaques (PREVENT): a multicentre, open-label, randomised

Paciente con SCA = Paciente Vulnerable

Pacient con:	Sangre vulnerable (Pro-trombosis)	Miocardio vulnerable (Mala microcirculación)	Arterias vulnerables (Placas vulnerables)
Síndrome coronario agudo	+++	+++	+++
Síndrome coronario crónico	+/−	+/−	+/−



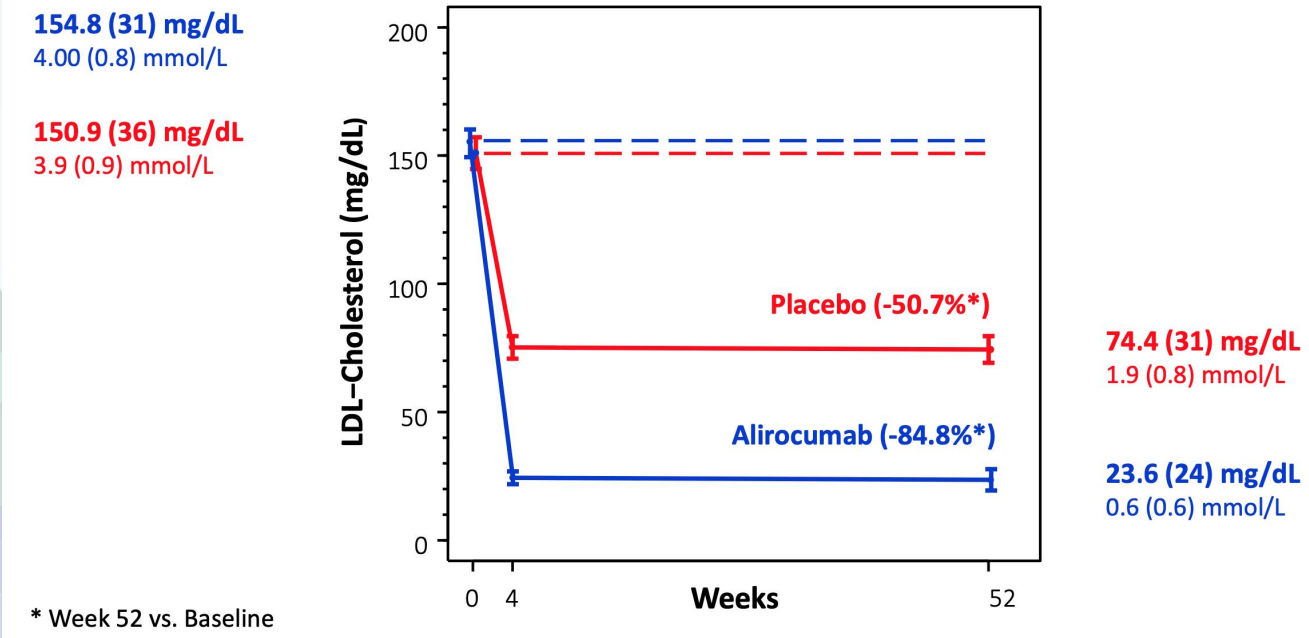




- Un total de 300 pacientes con SCA estudiados con IVUS, NIRS y OCT en el KT inicial y aleatorizados a alirocumab vs. placebo. Se repite estudio a 1 año.

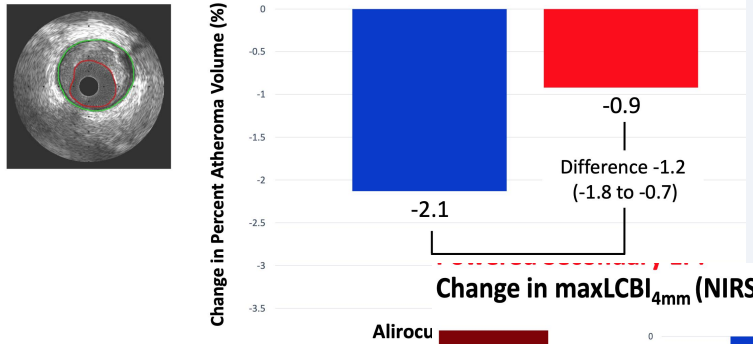
Alirocumab PACMAN AMI

Change in LDL-C, mean (SD)

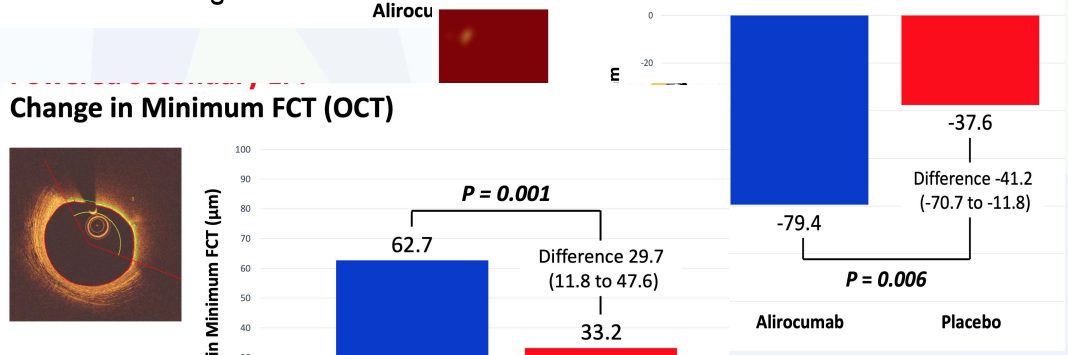


* Week 52 vs. Baseline

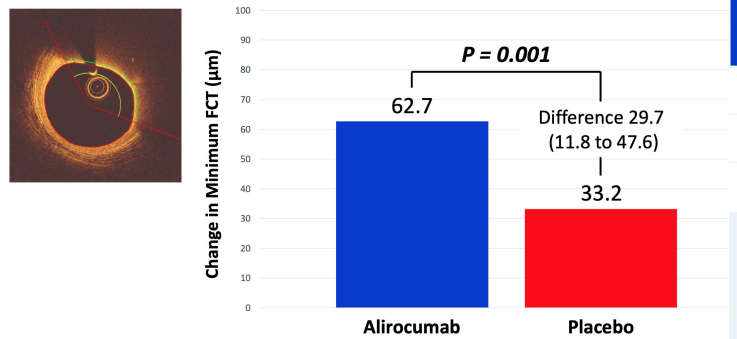
Change in Percent Atheroma Volume (IVUS)



Change in maxLCBI$_{4mm}$ (NIRS)



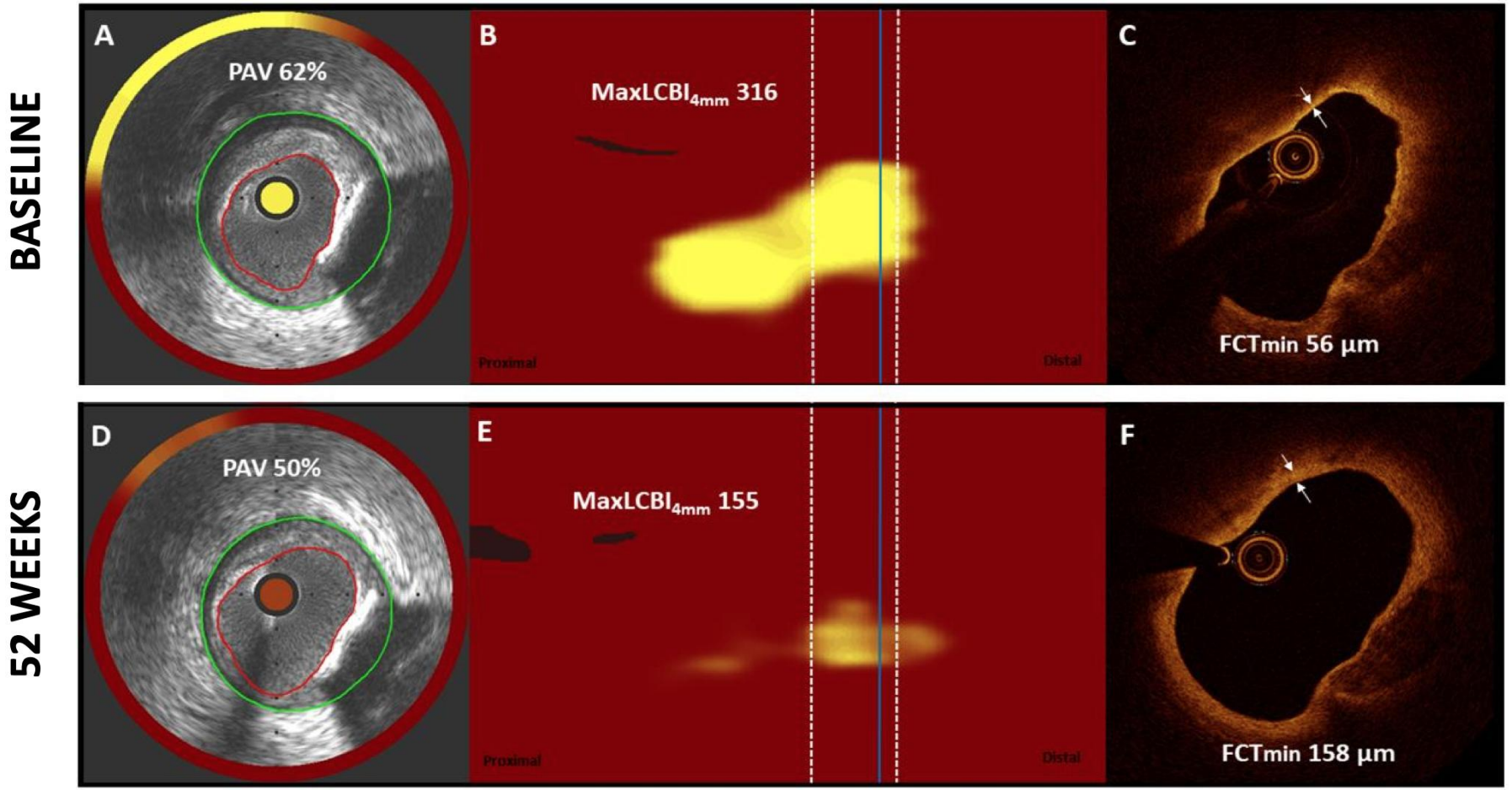
Change in Minimum FCT (OCT)



Raber L, et at.; Effect of Alirocumab Added to High-Intensity Statin Therapy on Coronary Atherosclerosis in Patients With AMI; The PACMAN-AMI Ra

Case Example Alirocumab & Statin Group

Alirocumab
PACMAN-AMI



Raber L, et at.; Effect of Alirocumab Added to High-Intensity Statin Therapy on Coronary Atherosclerosis in Patients With AMI; The PACMAN-AMI Ra

VULNERABLE TRIAL

This is a controlled, multicenter, single blinded & randomized trial investigating the role of imaging and physiology in non-culpritSTEMI lesions.

Vulnerable Trial
Epic 28

> 45 Institutions

Grupo de trabajo de diagnóstico intracoronario de la ACI-SEC

VULNERABLE TRIAL

Multivessel STEMI patients successfully treated with PCI

↓

Staged procedure
(>24h and < 60 days after primary PCI)

Expected 2000 patients

Vulnerable Trial
Epic 28

Grupo de trabajo de diagnóstico intracoronario de la ACI-SEC

VULNERABLE TRIAL

Multivessel STEMI patients successfully treated with PCI

Expected 2000 patients

↓

Staged procedure
(>24h and < 60 days after primary PCI)

↓

FFR assessment of non-culprit lesion/s

↓

At least 1 lesion with FFR>0.80

↓

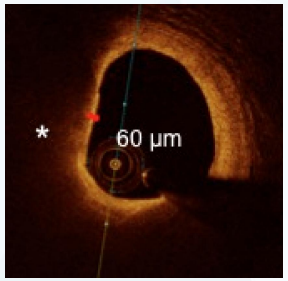
OCT imaging

Expected 500 patients

All lesions with FFR ≤ 0.80

↓

PCI (screening failure)



Vulnerable Trial
Epic 28

Grupo de trabajo de diagnóstico intracoronario de la ACI-SEC

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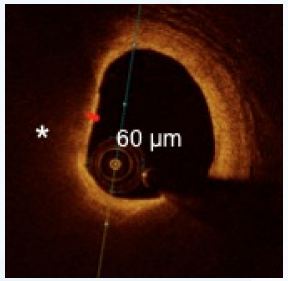


n = 600 patients

TCFA

No TFCA

randomization

Stent implantation
n = 300

OMT
n = 300

OMT registry

Expected 900 patients

Vulnerable Trial
Epic 28

Grupo de trabajo de diagnóstico intracoronario de la ACI-SEC

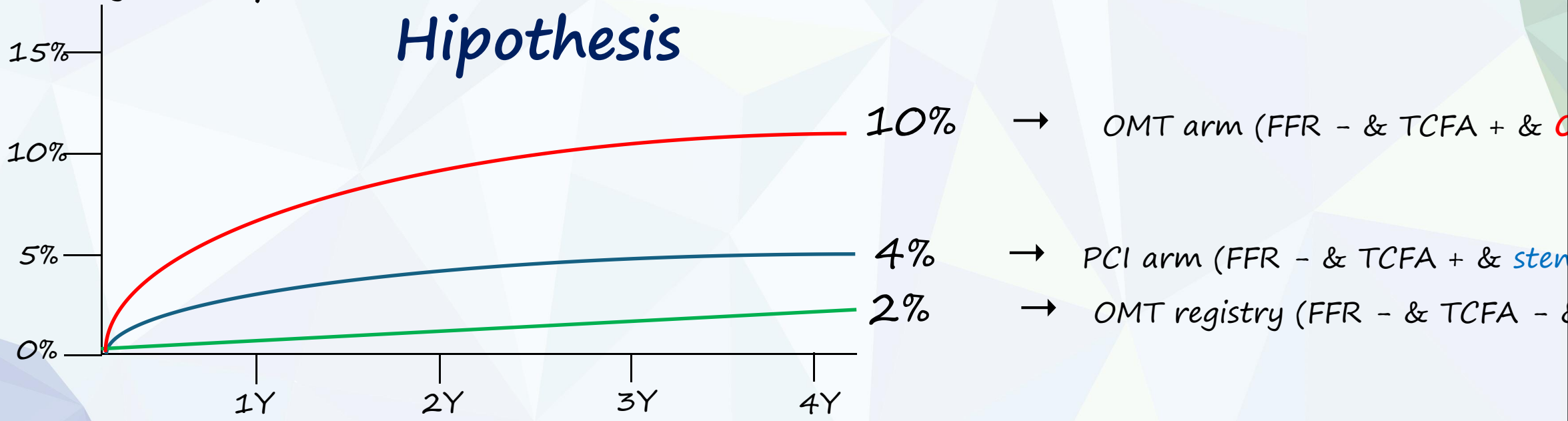
VULNERABLE TRIAL

VULNERABLE TRIAL

Vulnerable Trial
Epic 28

- **Primary end-point (Target Vessel Failure):**
  CV death + TV-MI + Ischemic-driven TV revascularization
- Clinical follow-up of 4 years.
- Sample size calculation for superiority with a difference of 6% in the primary end-point.

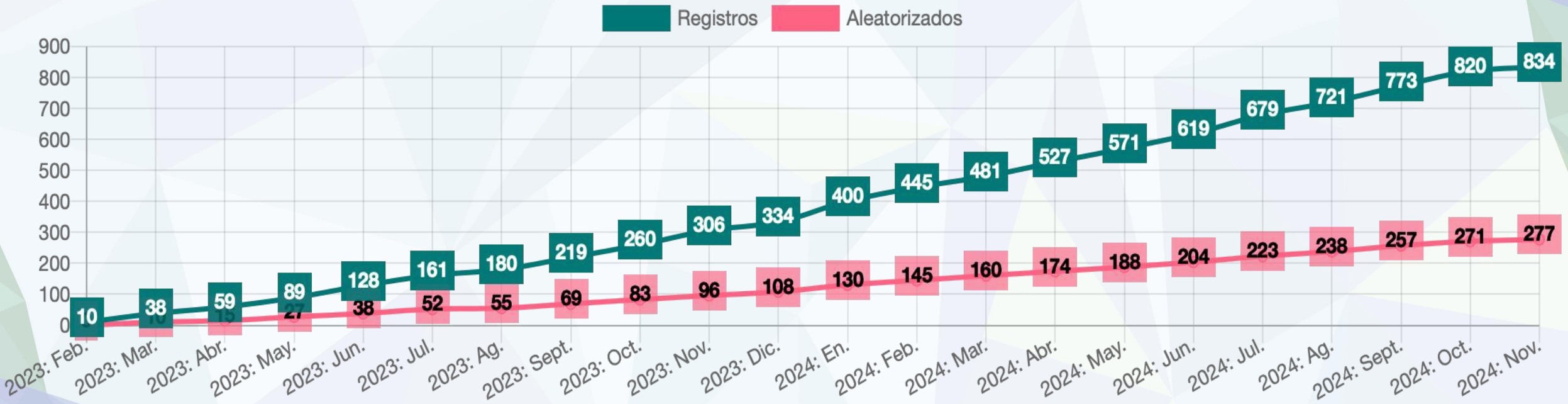
Hipothesis



VULNERABLE TRIAL

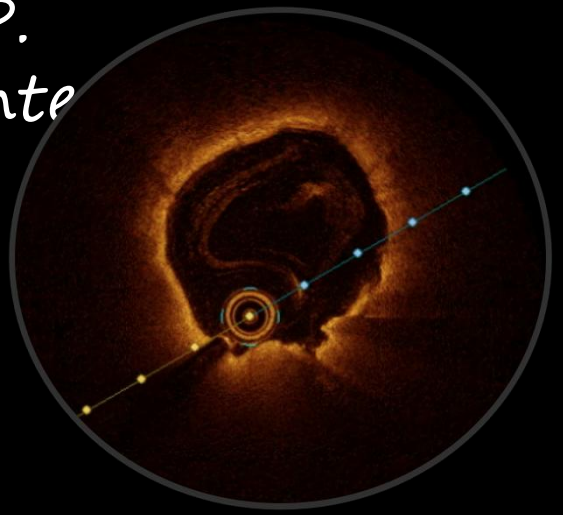
Vulnerable Trial
Epic 28

Estado del reclutamiento:

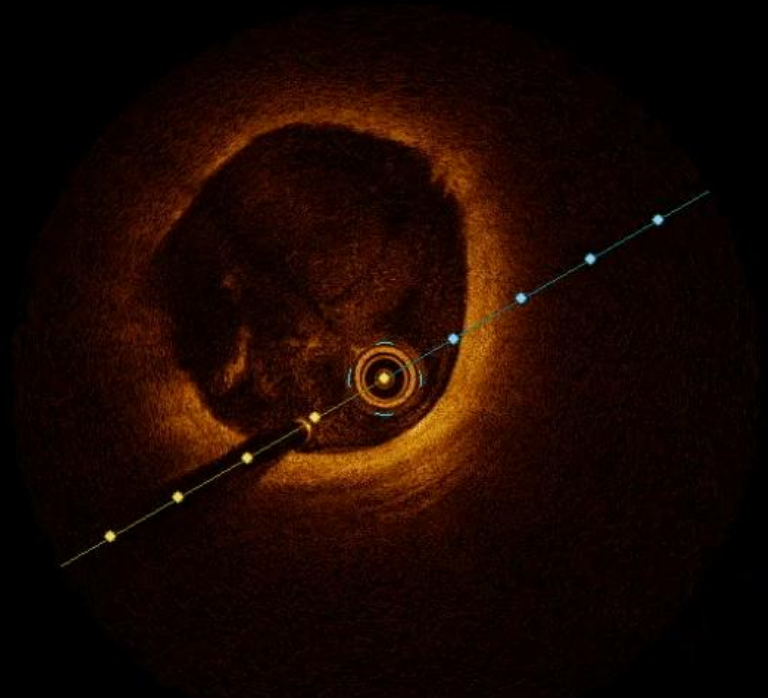


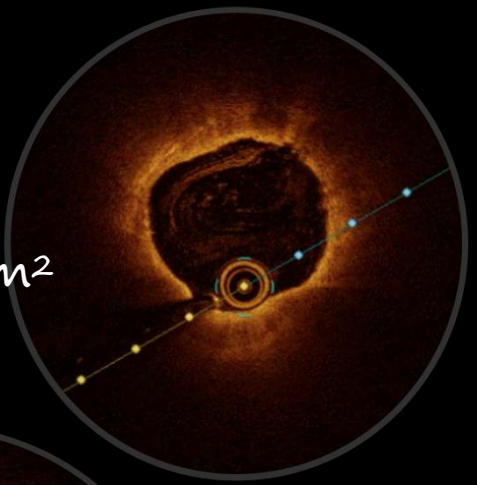
Ejemplo:

Hombre 51 años HTA y DLP.
En enero 2024 SCACEST ante
Se valora CD para el estudio

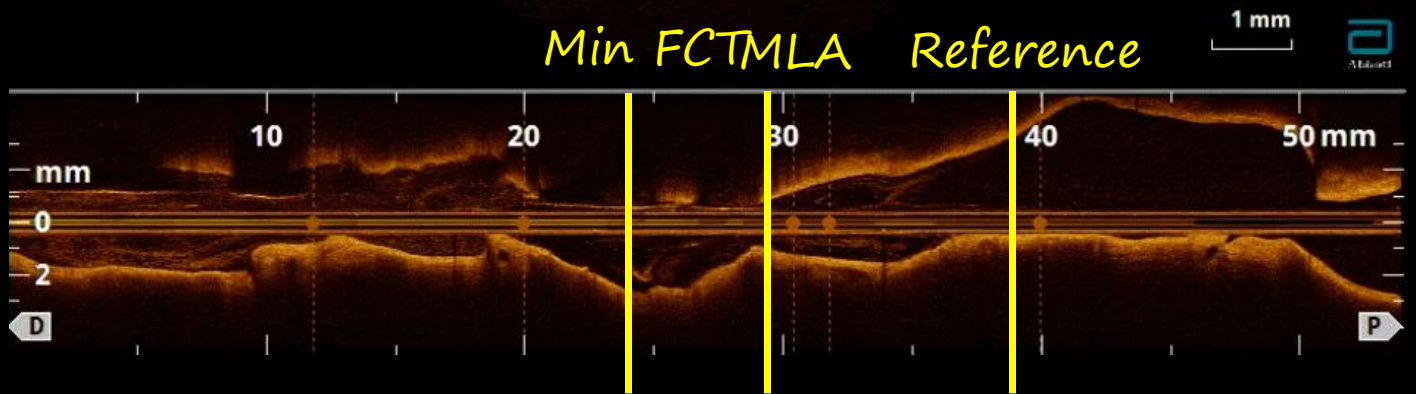


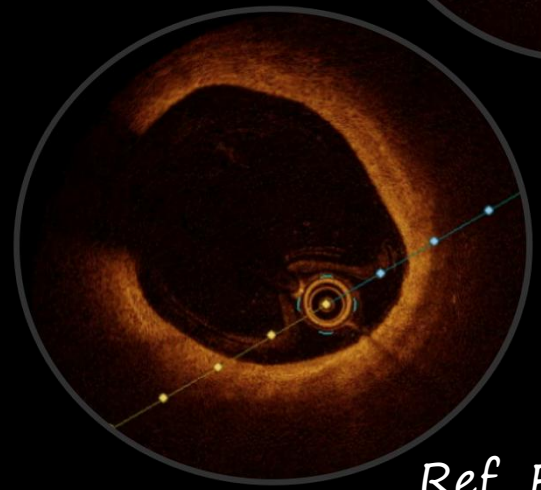
Min FCT = 0 µm





MLA = 3.05 mm²





PB = 79%

Ref. EEM = 14.52

Conclusiones:

1. El tratamiento preventivo con stent de lesiones NO isquémicas (FFR > 0.80) con características de placa vulnerable está aún por demostrar.
2. Tampoco tenemos datos sobre si un tratamiento médico intensivo permite "pasivar" estás placas.

3. Ni sobre los criterios anatómicos para catalogar una placa vulnerable, que técnica de imagen es mejor ni que grupo de pacientes puede beneficiarse más.

CSC 2024
CORONARY AND STRUCTURAL COURSE
CURSO CORONARIO Y ESTRUCTURAL
MADRID

10º ANIVERSARIO
6, 7 y 8 NOVIEMBRE
HOTEL RIU PLAZA DE ESPAÑA

Os invitamos al primer curso sobre intervencionismo en placa vulnerable:

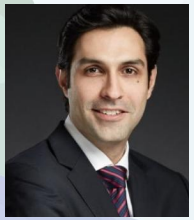
Vulnerable Plaque Interventions meeting

Héctor M. García-García
Medstar Medical Center, Washington, U

Fernando Alfonso
Hospital La Princesa, Madrid, España

Lorenz Raber
Bern University Hospital, Switzerland

Nieves Gonzalo
Hospital San Carlos, Madrid, España



Carlos Collet
Aalst Medical Center, Belgium

Inés García Lunar
CNIC, Madrid, España

Francesco Prati
San Giovanni Hospital, Rome, Italy

Richard Rapoza
VP Abbott, California, US

... y muchos más...

Hotel AC Atocha
C/ Delicias, 42 - Madrid

Save the date:
23 / 01 / 2025

Bit.ly/VPI25

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