FISIOLOGIA EPICÁRDICA PARA REVASCULARIZACIÓN

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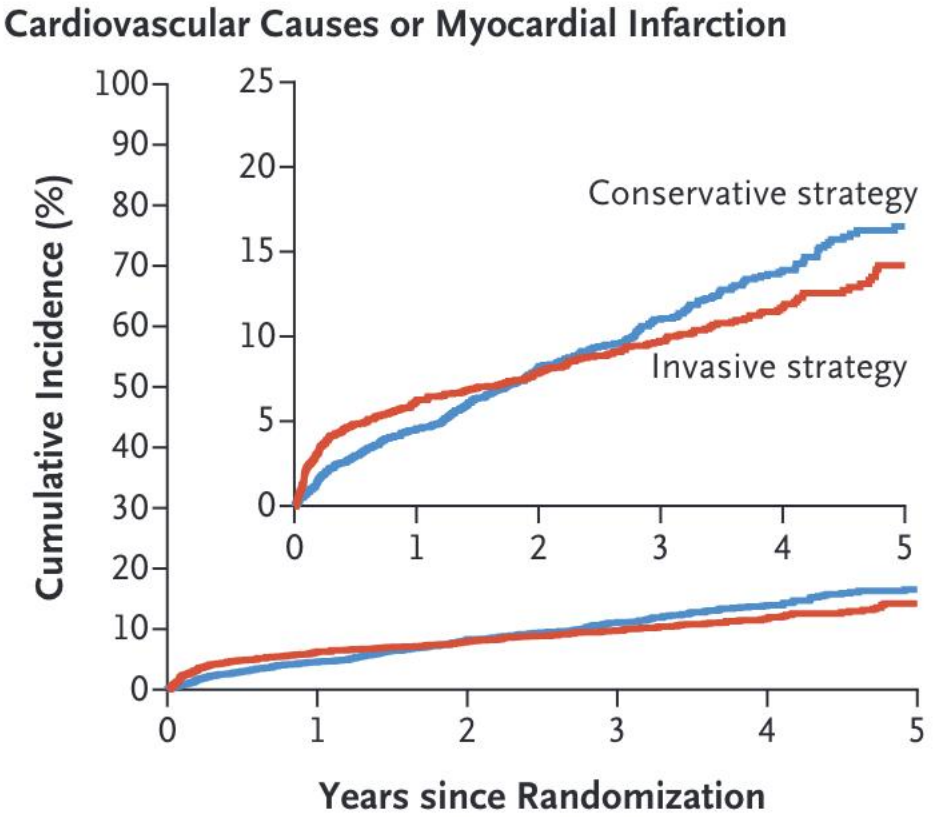
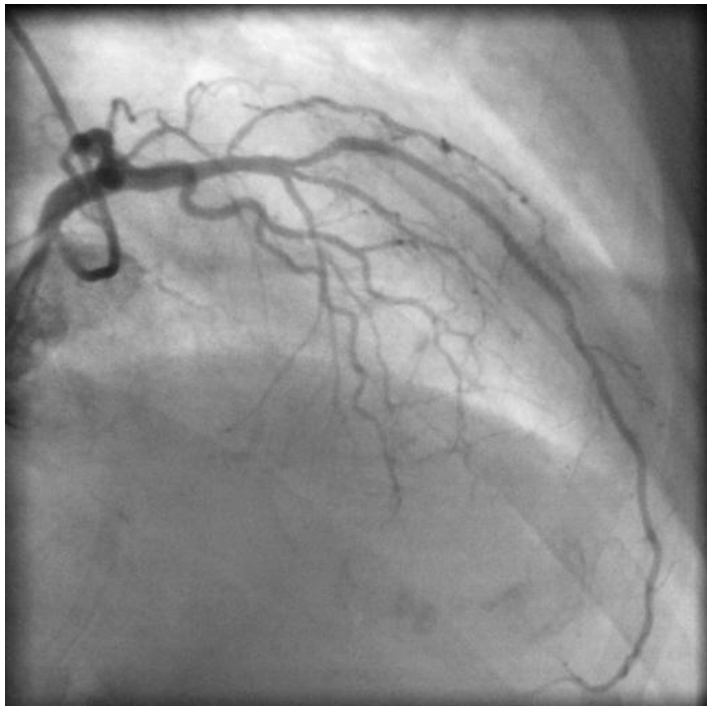
Hospital General Universitario Gregorio Marañón

¿Por qué no poner stents directamente?

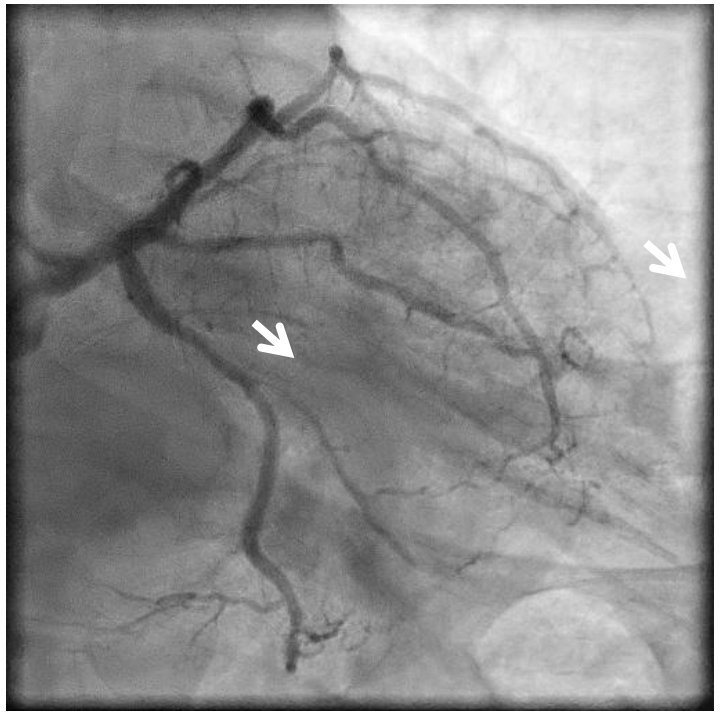


LOS STENTS NO PREVIENEN INFARTOS EN ECC

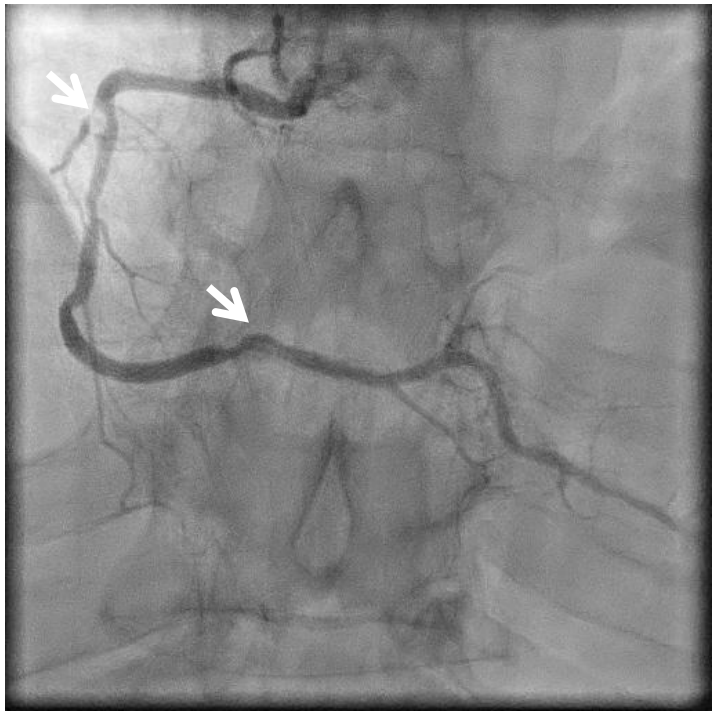
Lesiones de todos los días



Enfermedad intermedia

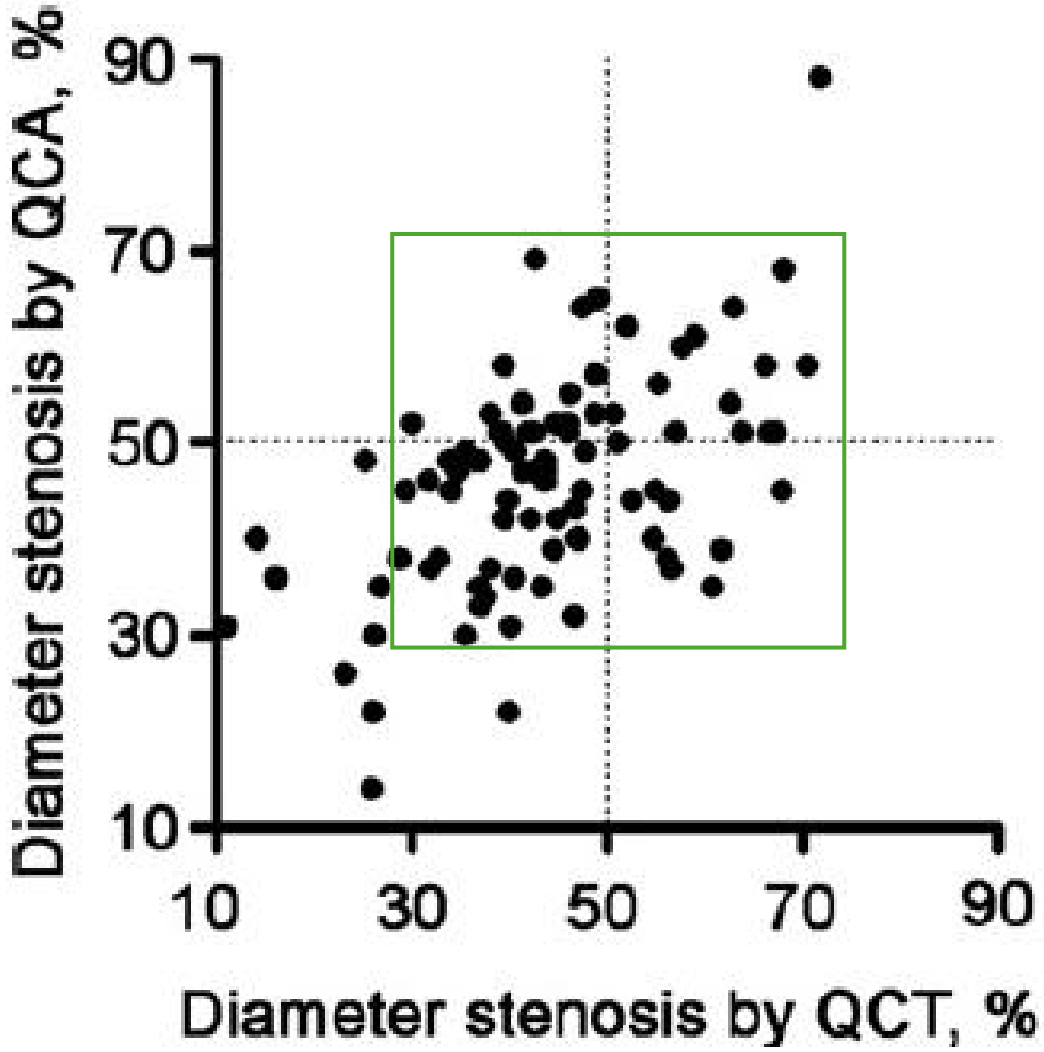


Enfermedad difusa



Varias lesiones. ¿Cuál tratar?

La estenosis más frecuente es la dudosa

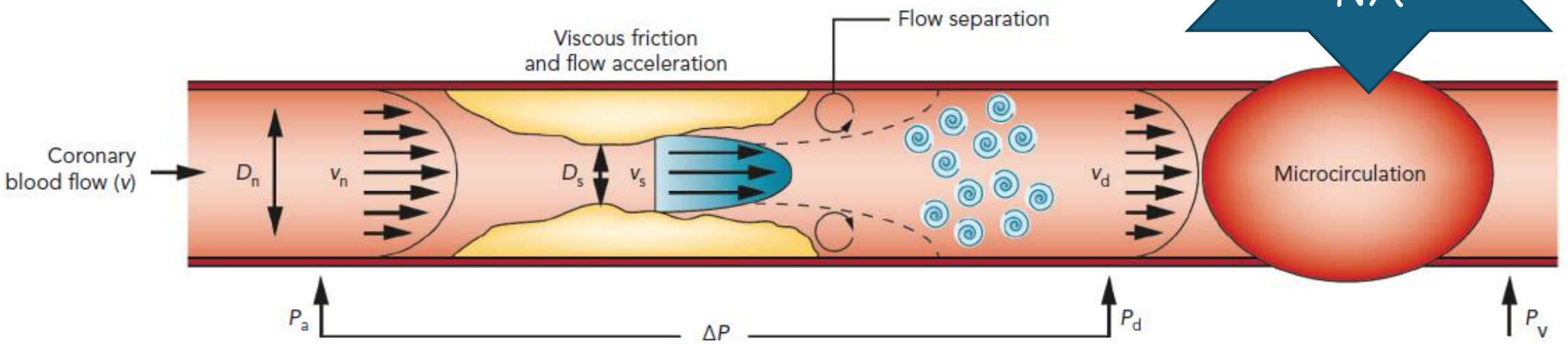


Meijboom WB et al. JACC 2008;52:636–643.

¿Qué es la FFR?

En hiperemia máxima, Q es proporcional a P.

ADENOSINA

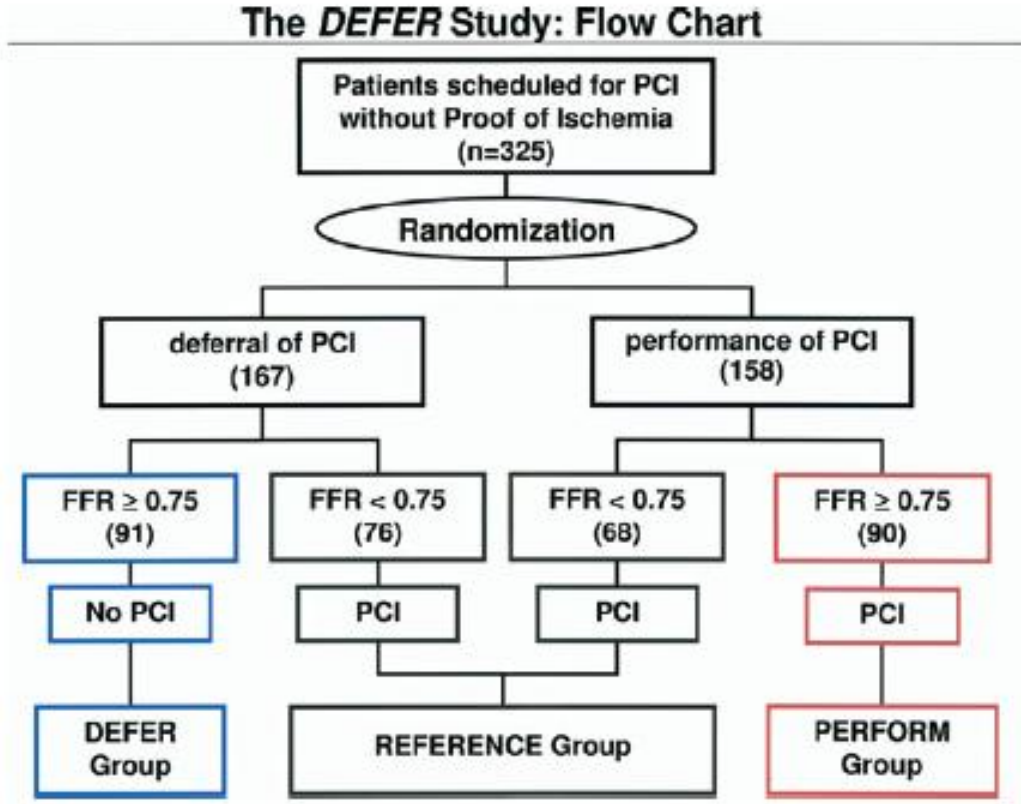


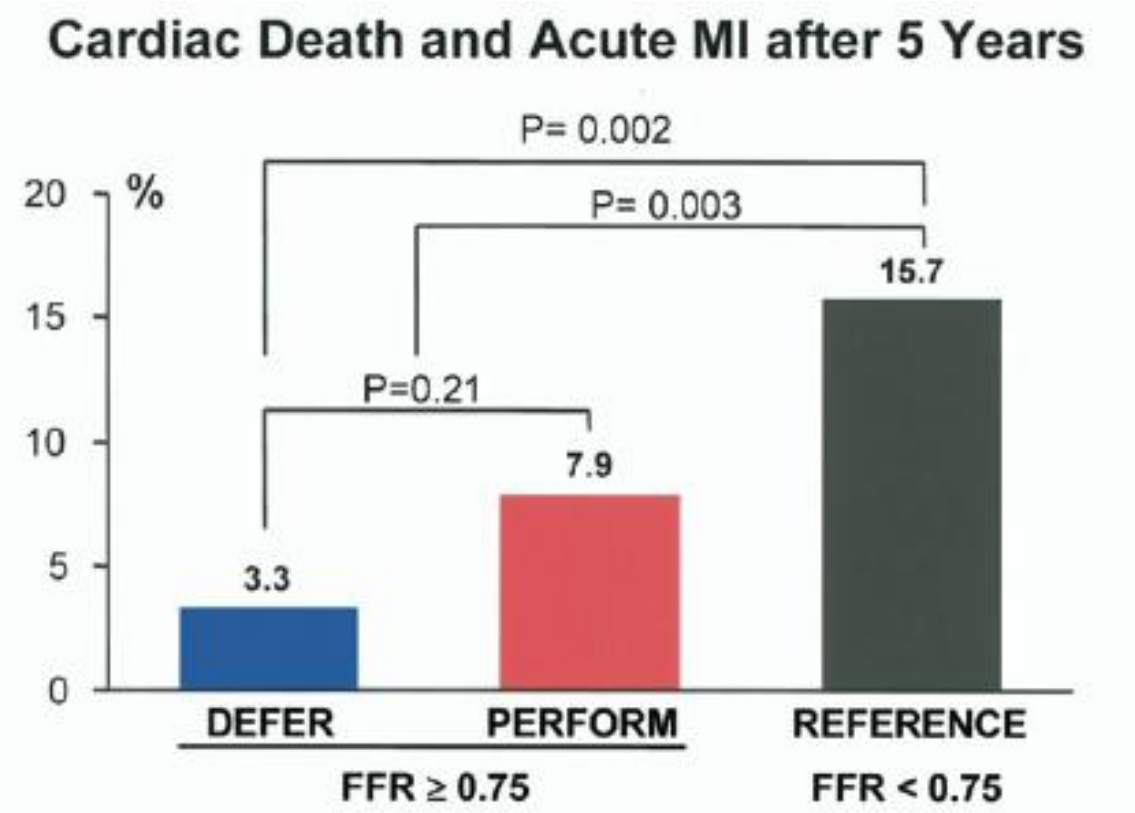
FFR= PD/PA EN MÁXIMA HIPEREMIA

¿Para qué sirve?

PARA NO TRABAJAR INUTILMENTE, O PEOR, NOCIVAMENTE

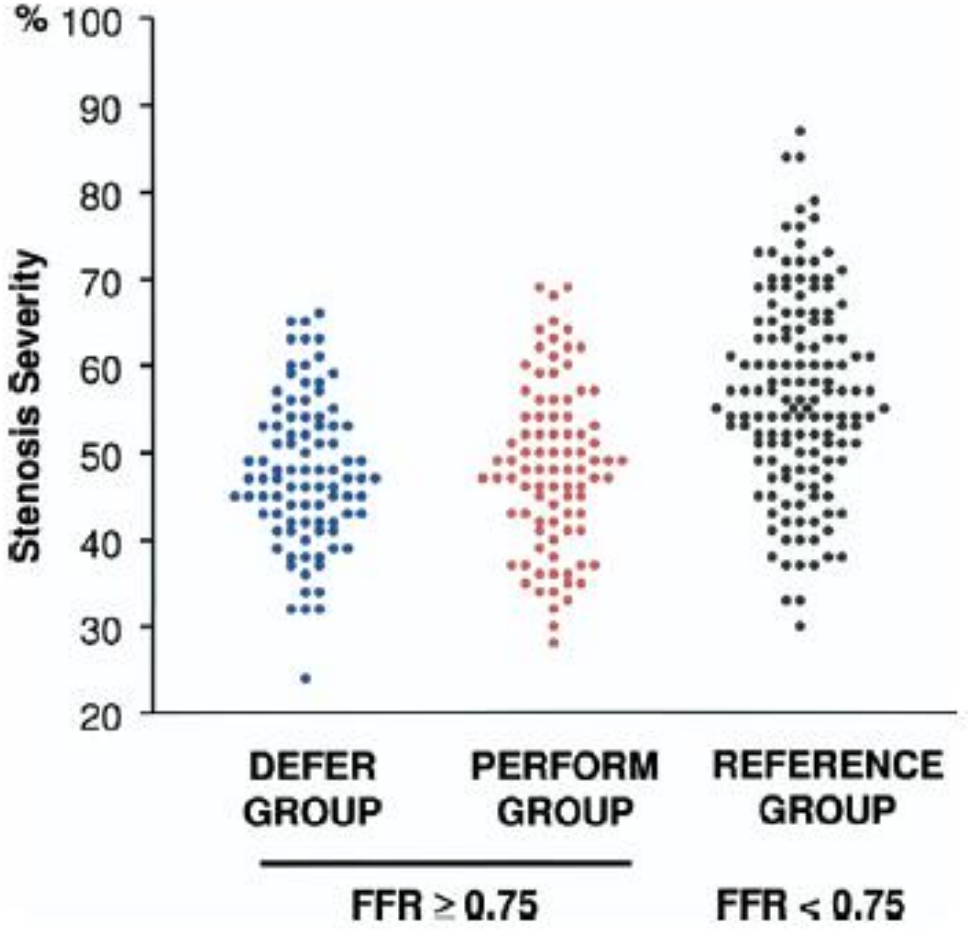
Las lesiones no isquémicas no precisan angioplastia





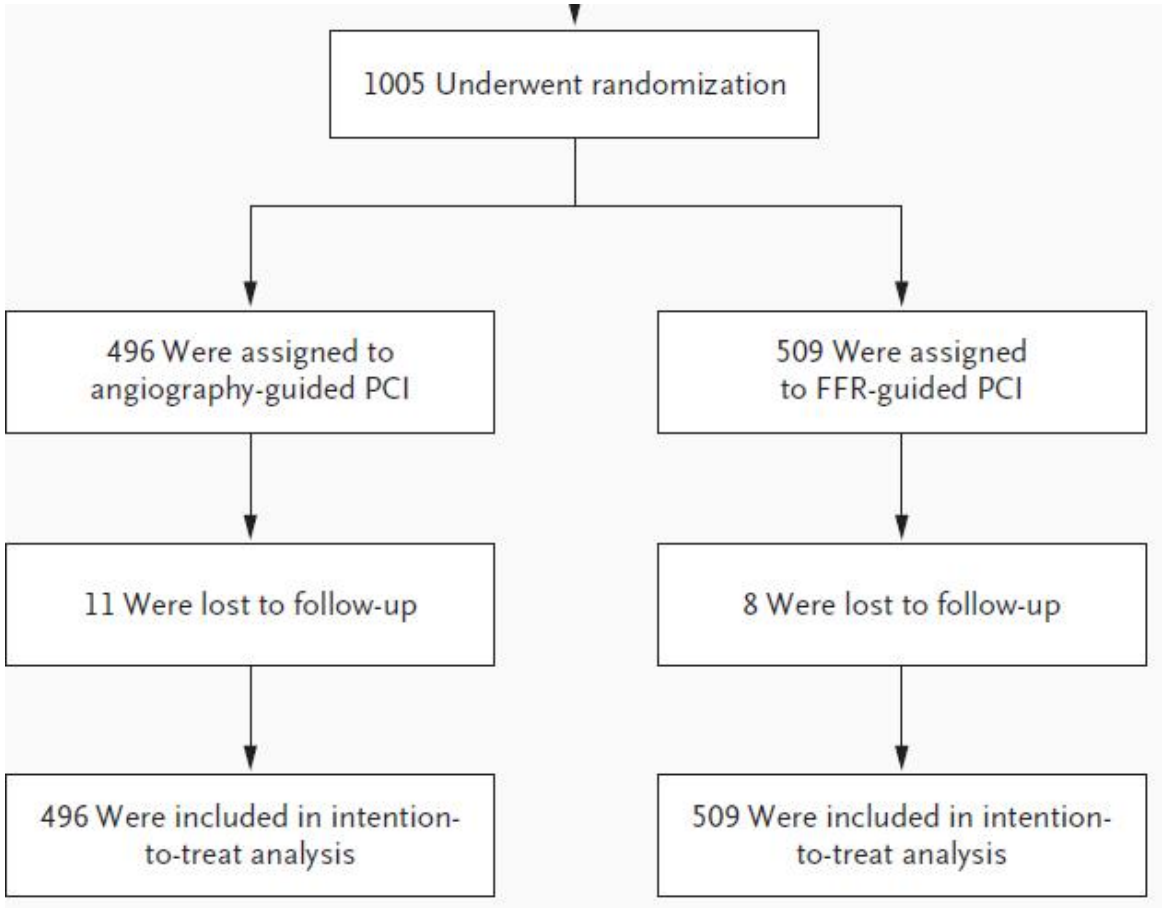
Pijls NH et al. J Am Coll Cardiol. 2007;49:210

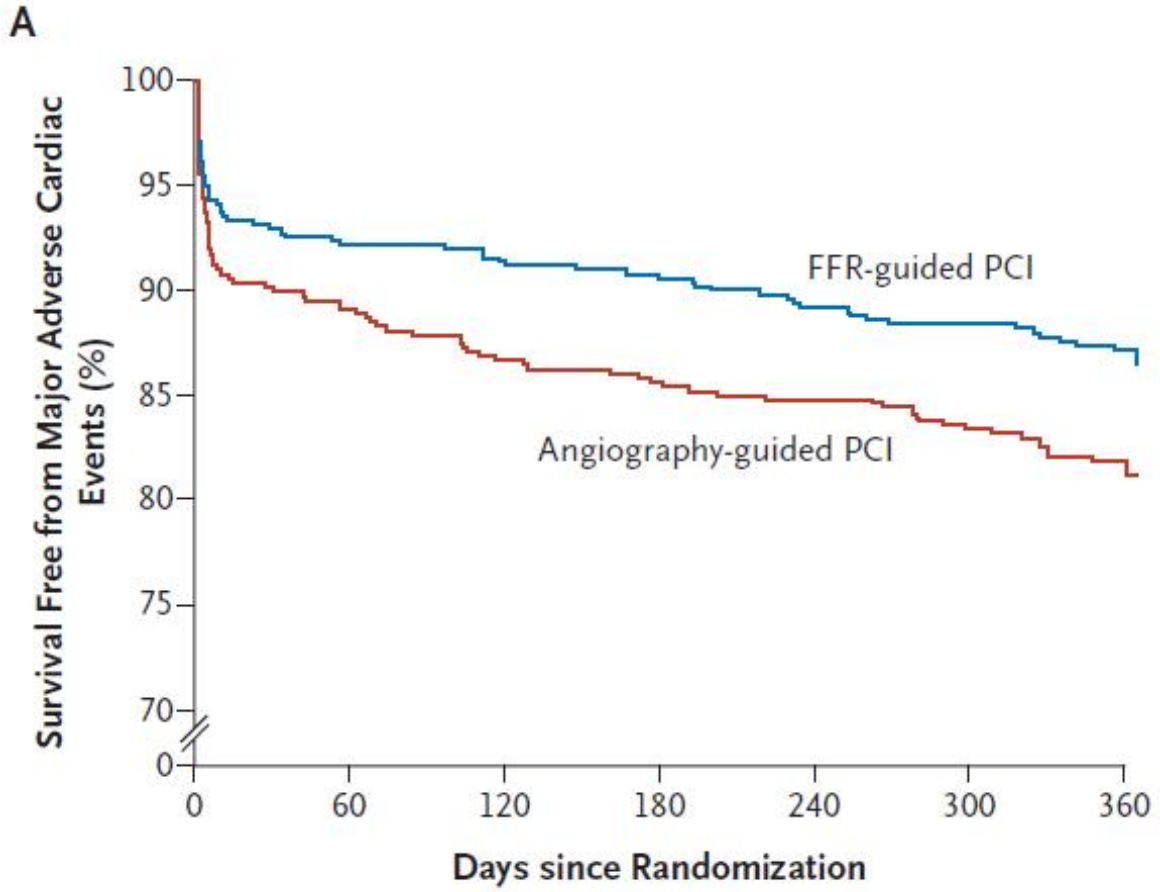
La angiografía tiene mala correlación con isquemia



Pijls NH et al. J Am Coll Cardiol. 2007;49:2105–11

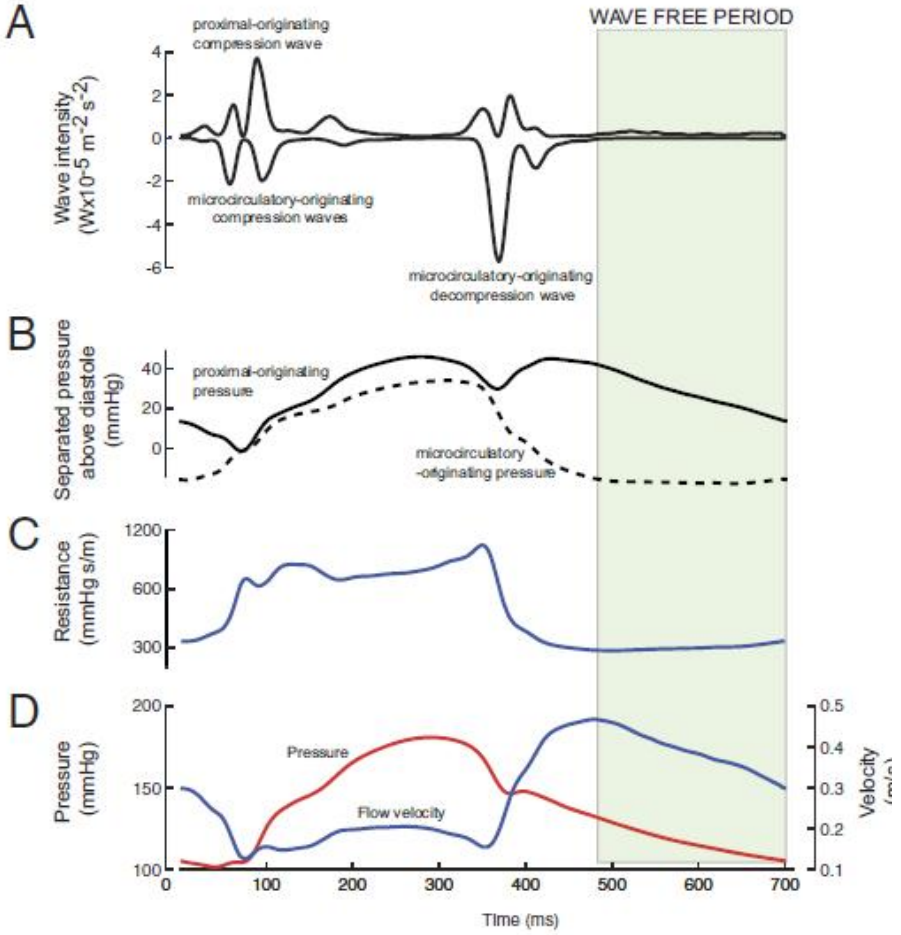
FFR es mejor que angio para revascularización

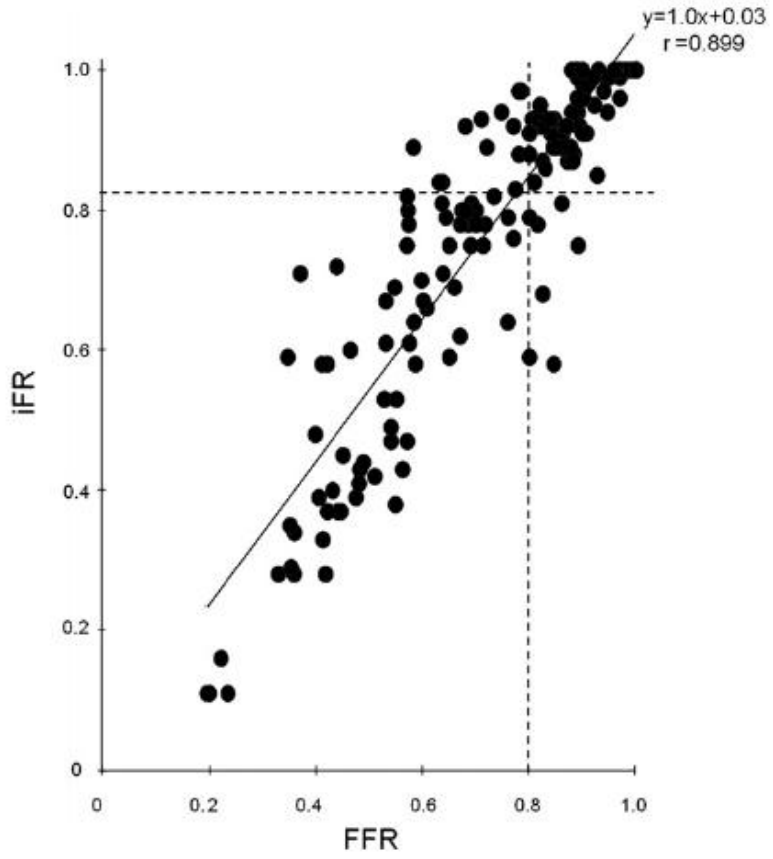


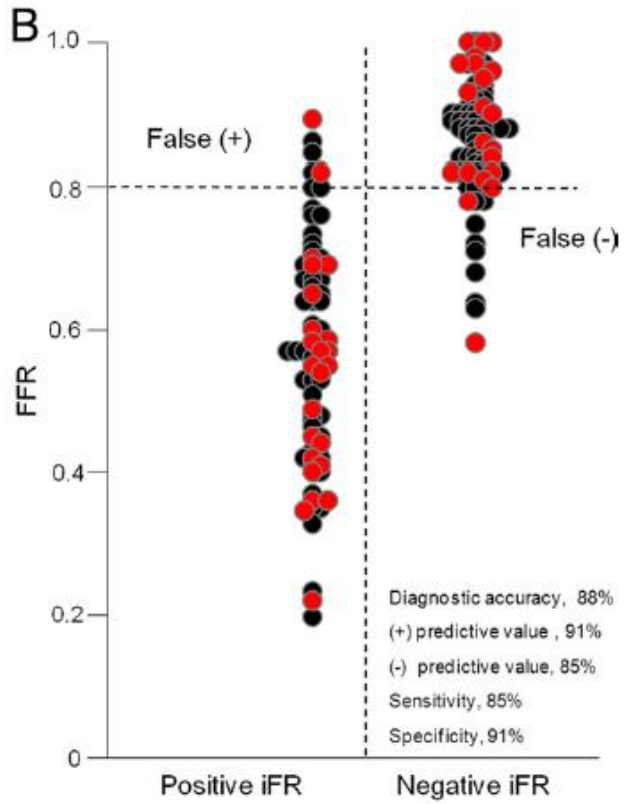


Tonino PA et al. N Engl J Med. 2009;360:21

¿Y los índices no hiperémicos?

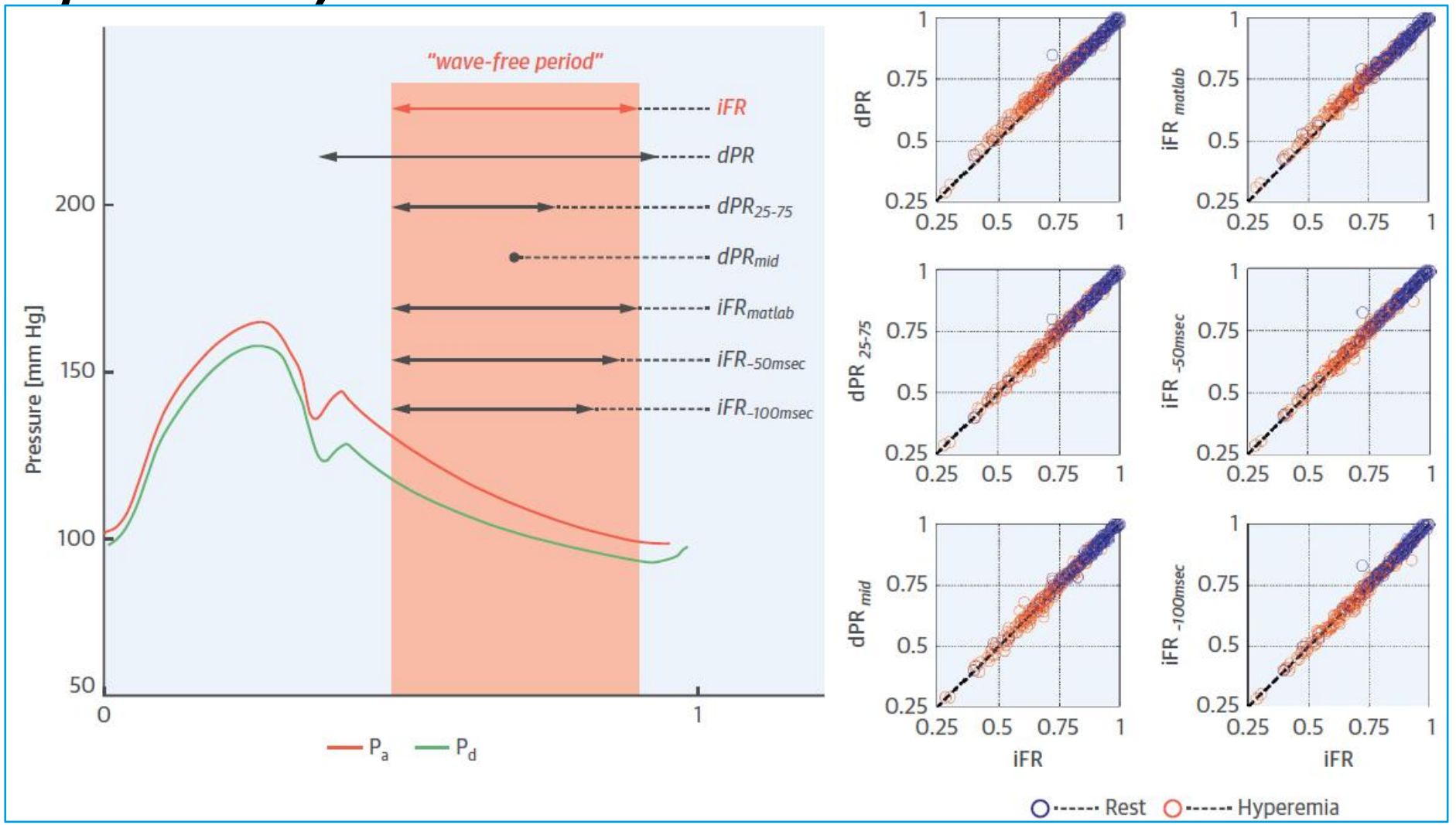






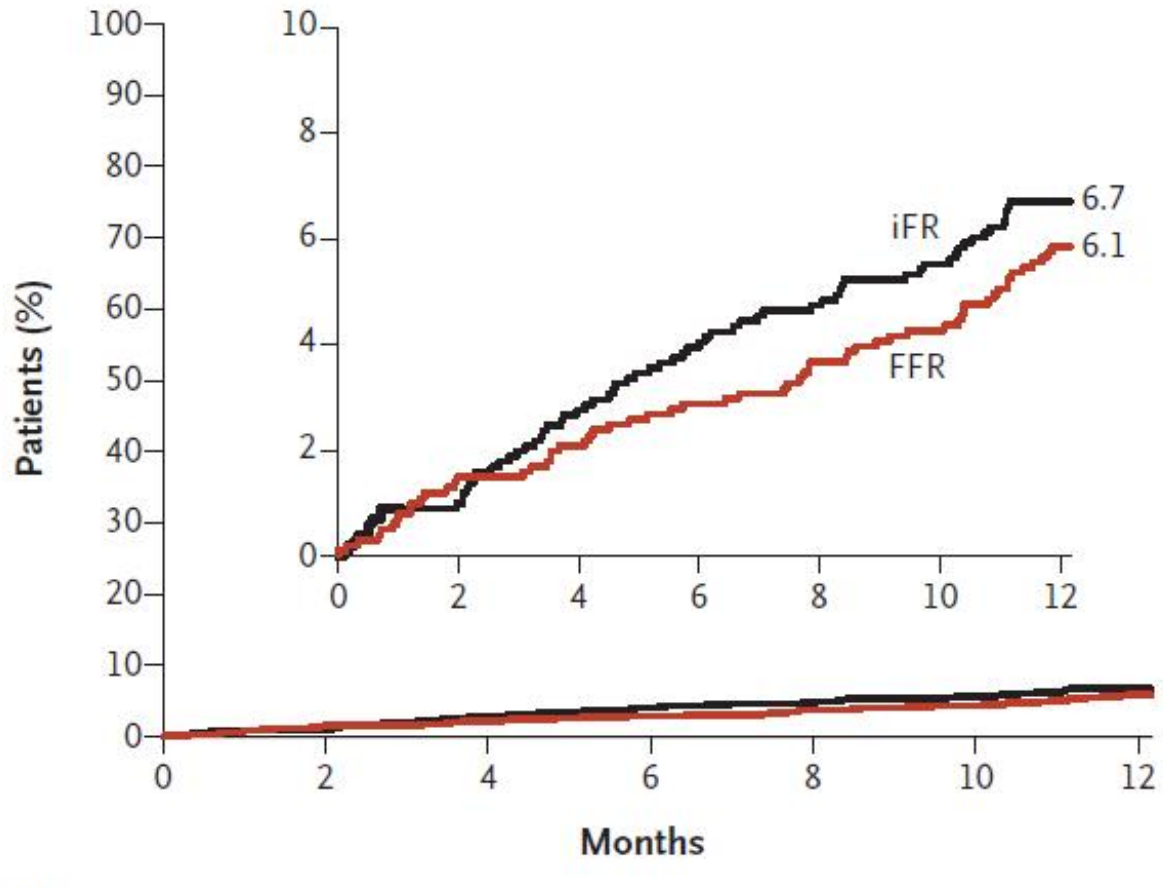
Sen S et al. *J Am Coll Cardiol*. 2012;59:1392–402.

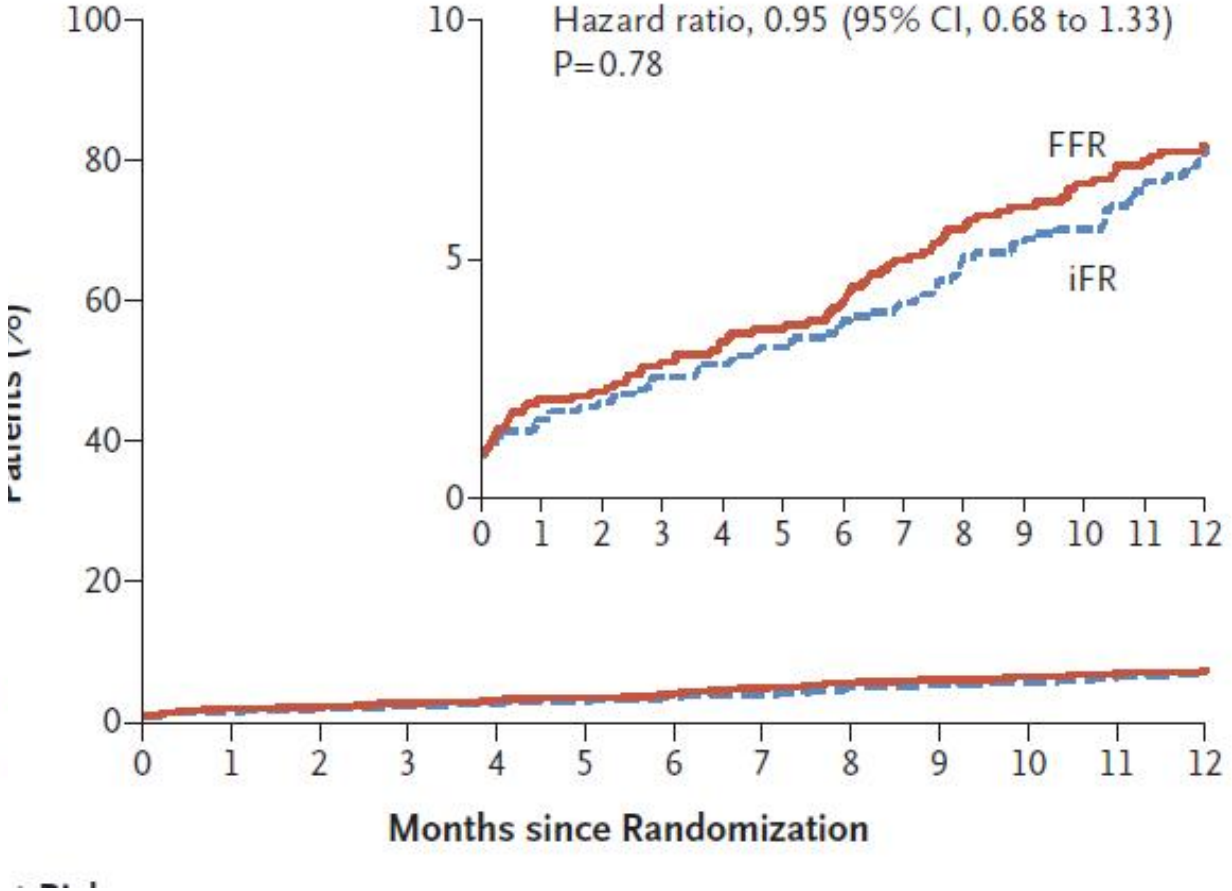
Otros índices no hiperémicos (y aún hay más)



van't Veer M, et al. J Am Coll Cardiol. 2017;70:3088-96

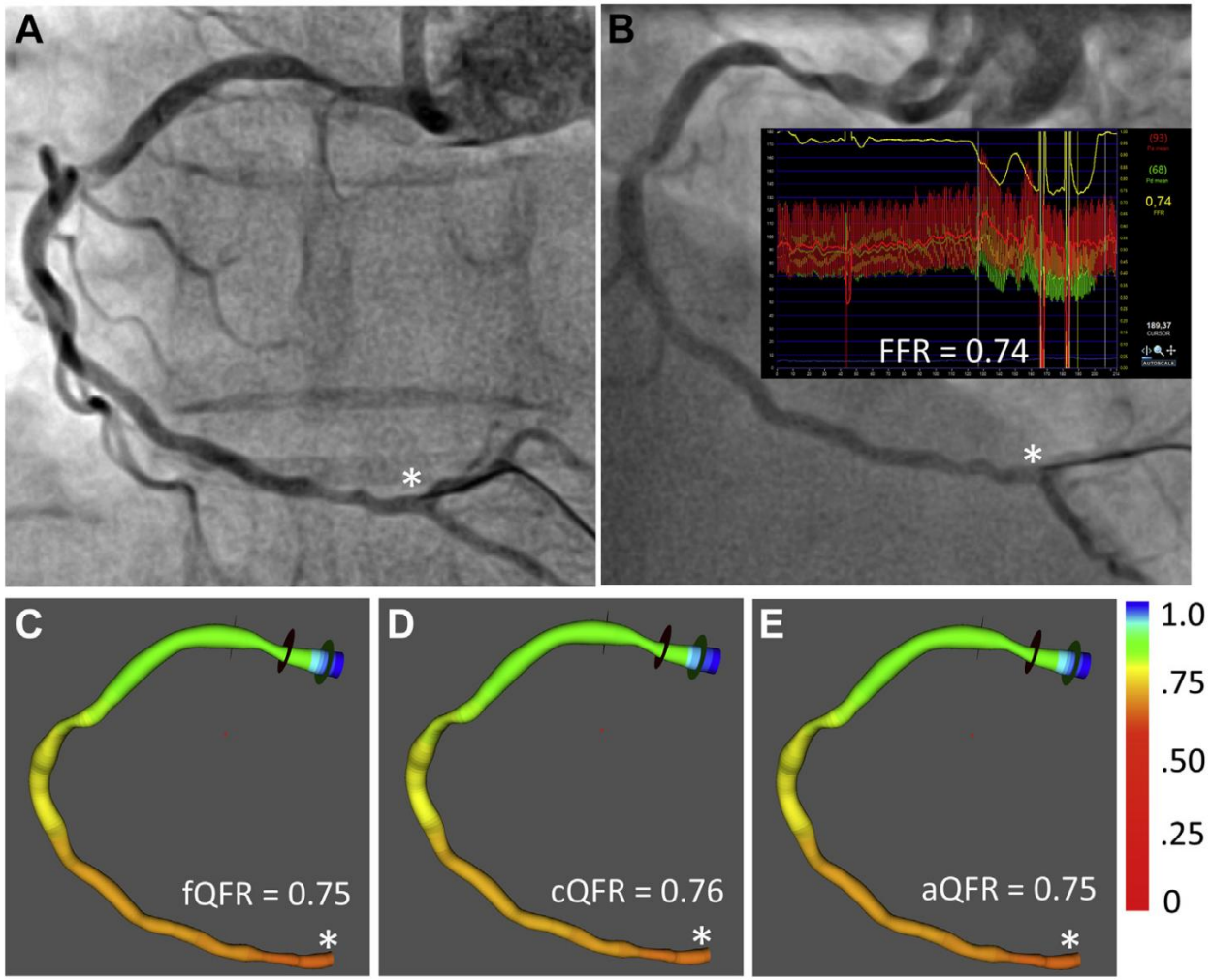
¿Qué es mejor?





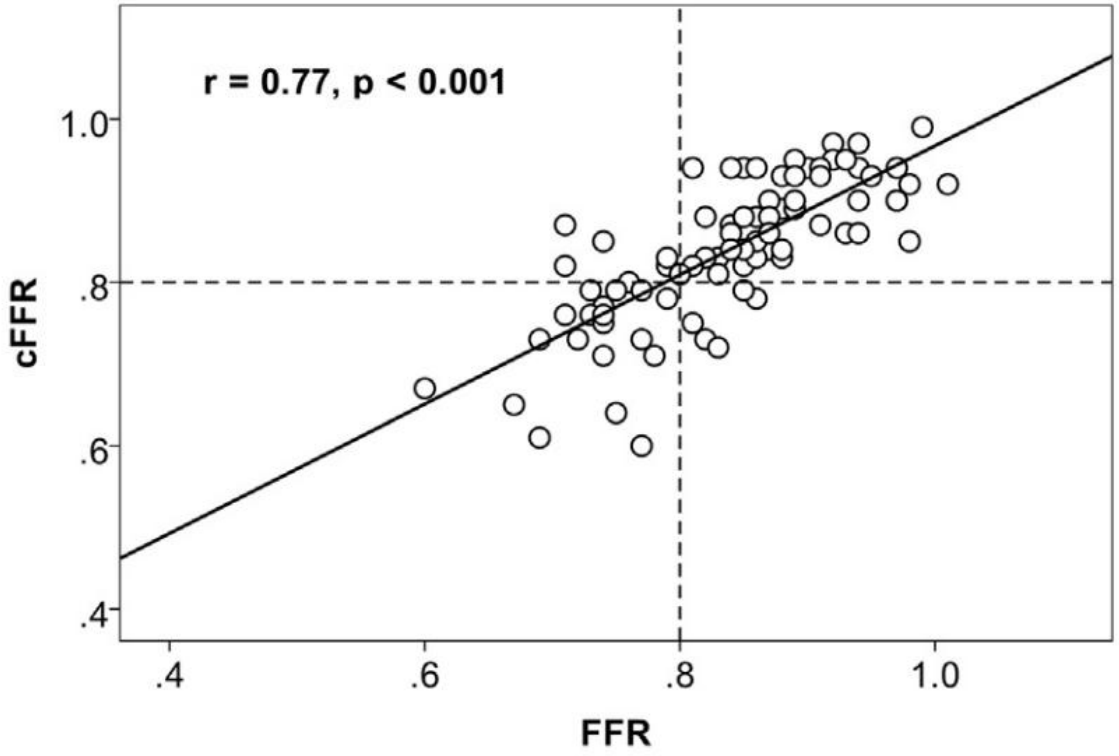
Davies JE et al. New England Journal of Medicine. 2017;376:1824–1834.

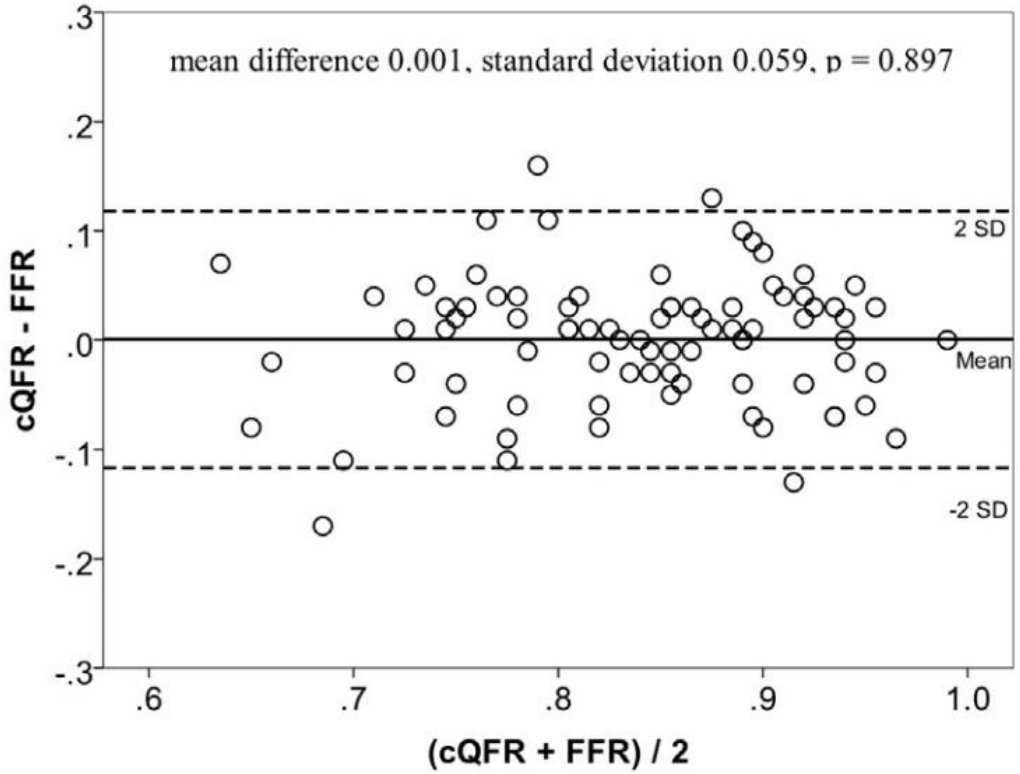
Aproximaciones matemáticas: QFR



Tu S et al. JACC Cardiovasc Interv.

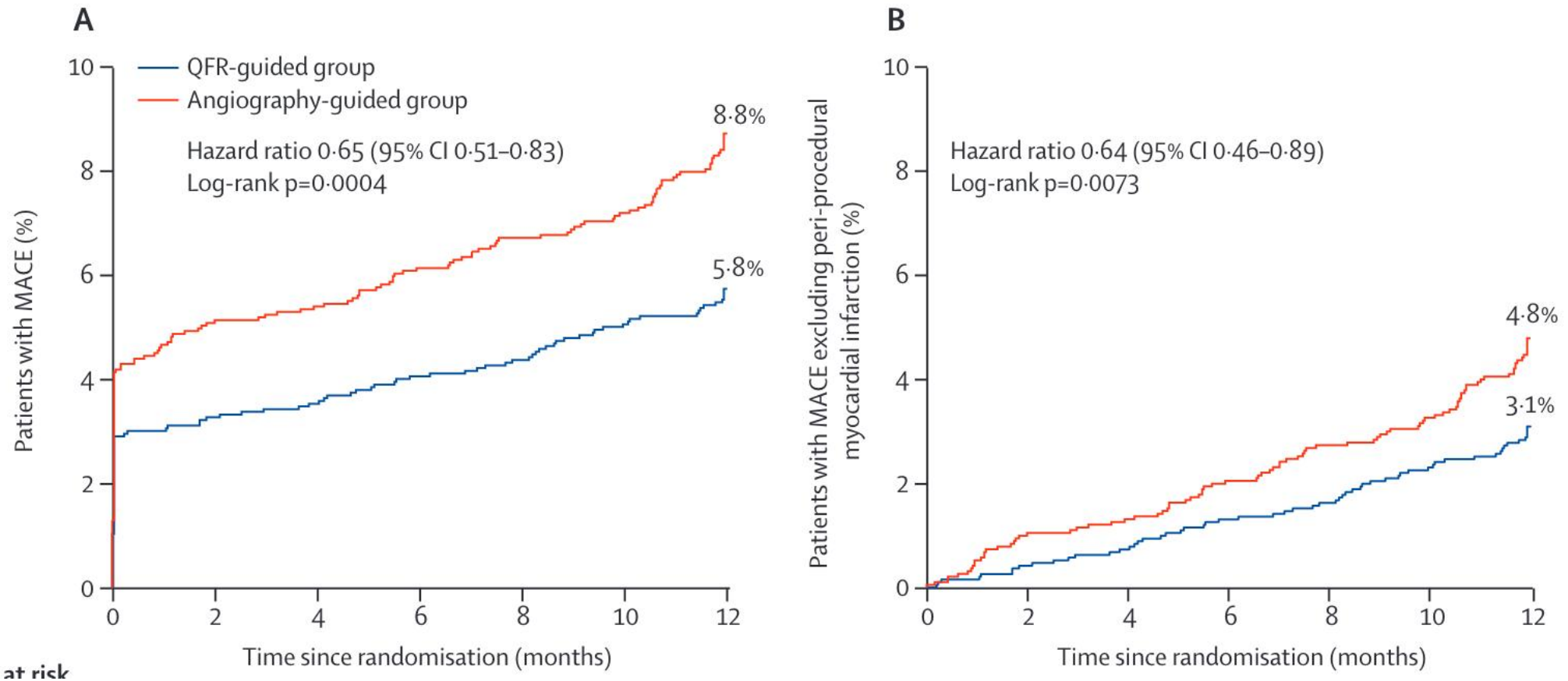
QFR VALIDACION FRENTE A FFR





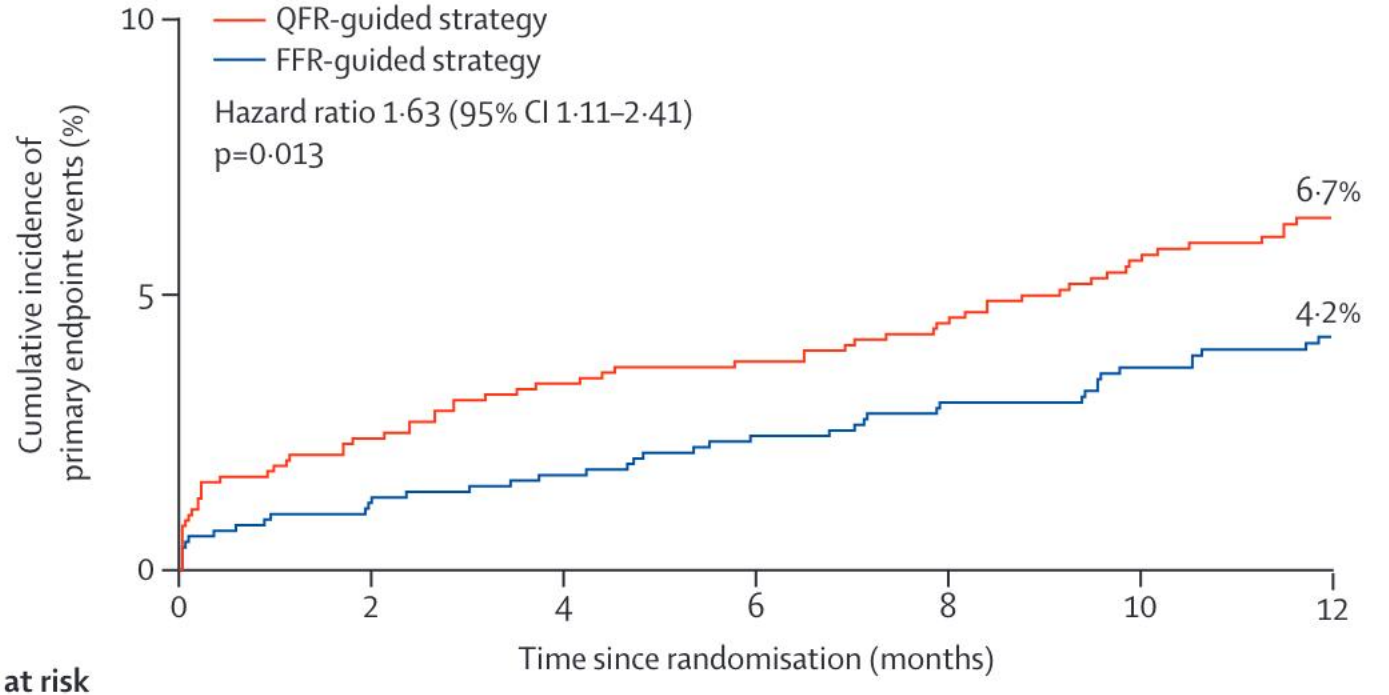
Tu S et al. JACC Cardiovasc Interv. 2016;9:2024–2035.

CHINA FAVOR III. QFR SUPERIOR A ANGIO

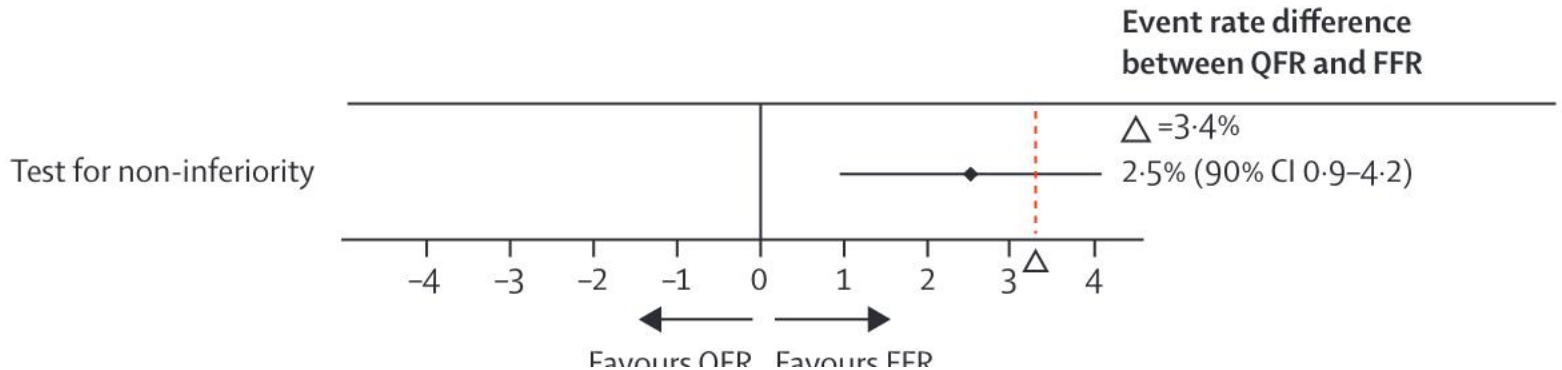


Xu B et al. The Lancet. 2021;398:2149–2159.

EUROPE FAVOR III: NO-INFERIORIDAD FFR



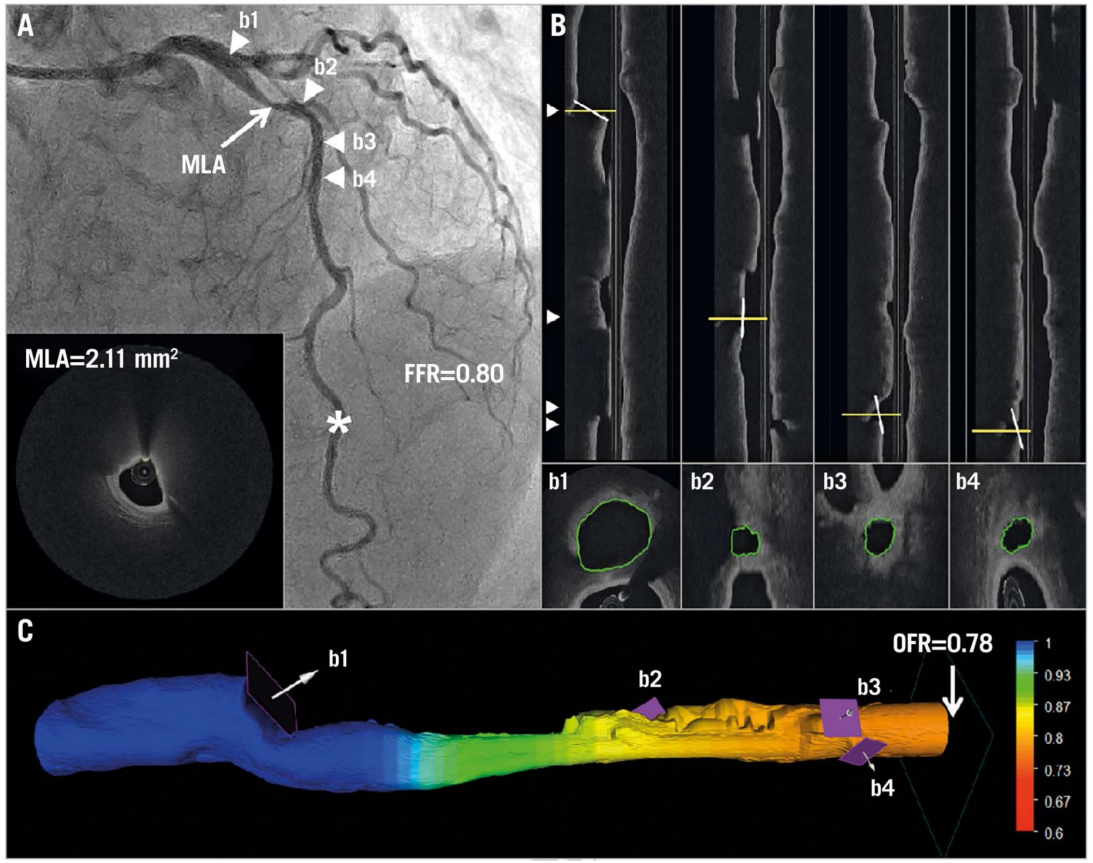
Number at risk (number censored)							
QFR-guided strategy	1008 (0)	974 (9)	962 (1)	958 (0)	949 (1)	937 (1)	857 (72)
FFR-guided strategy	992 (0)	970 (10)	963 (2)	956 (0)	950 (0)	944 (0)	875 (64)



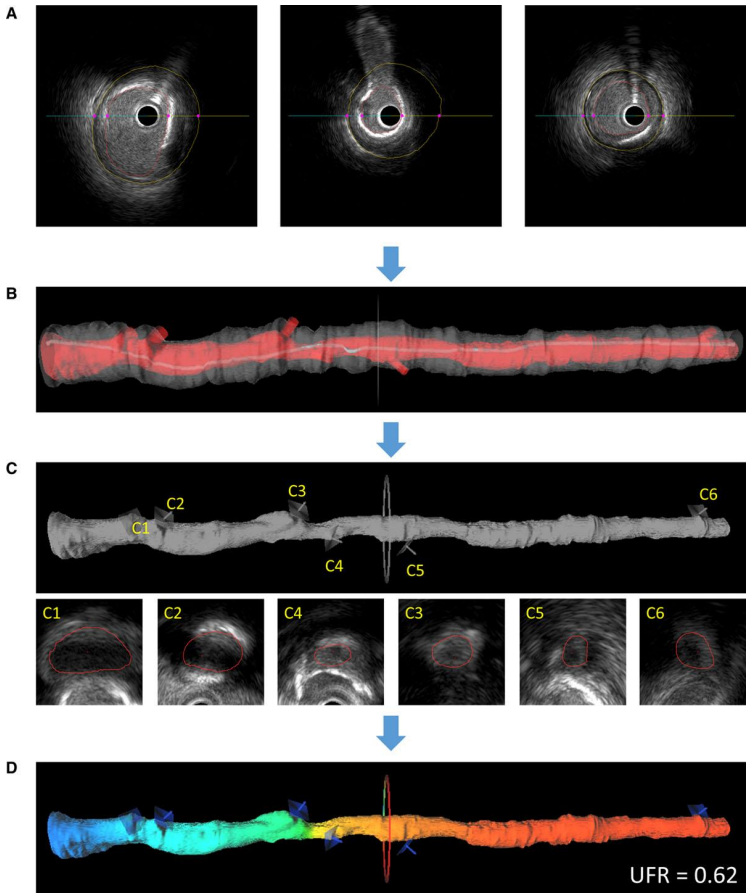
Andersen BK et al. *The Lancet*

Otras aproximaciones angiográficas

FISIOLOGÍA CON IVUS Y OCT

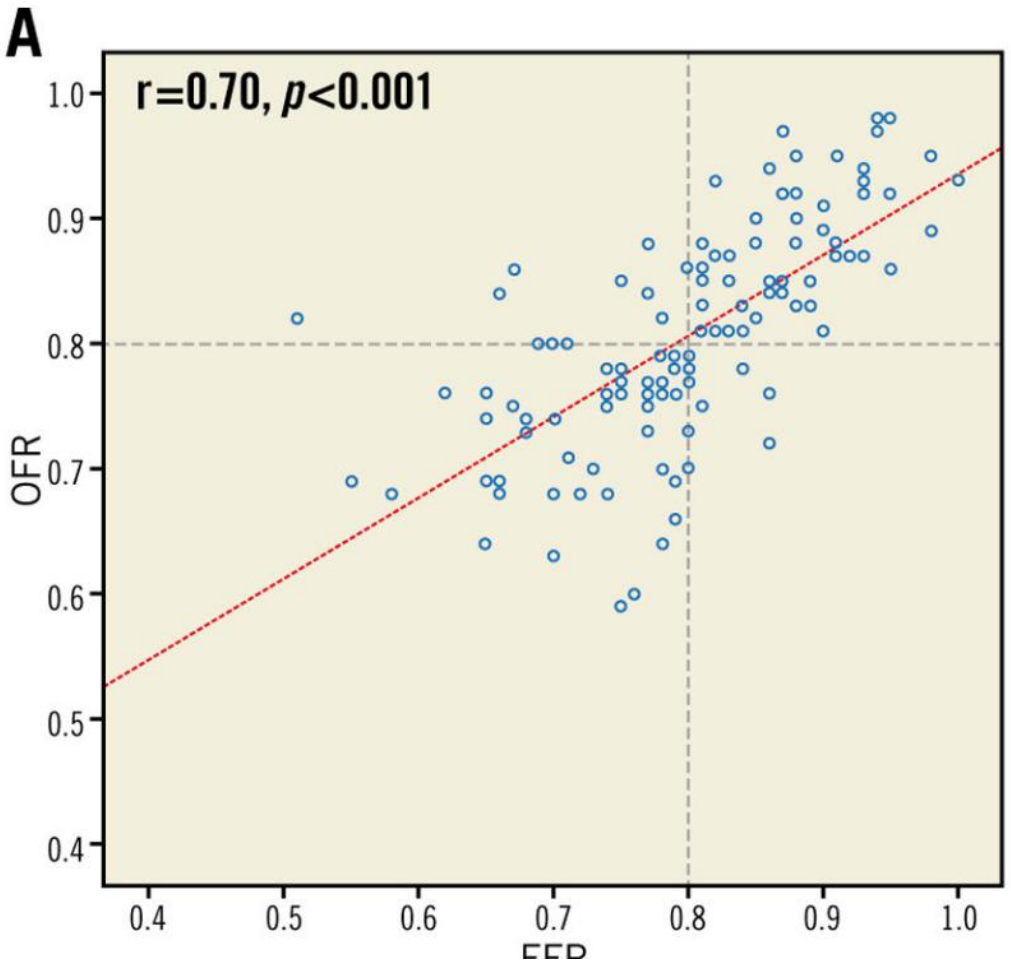


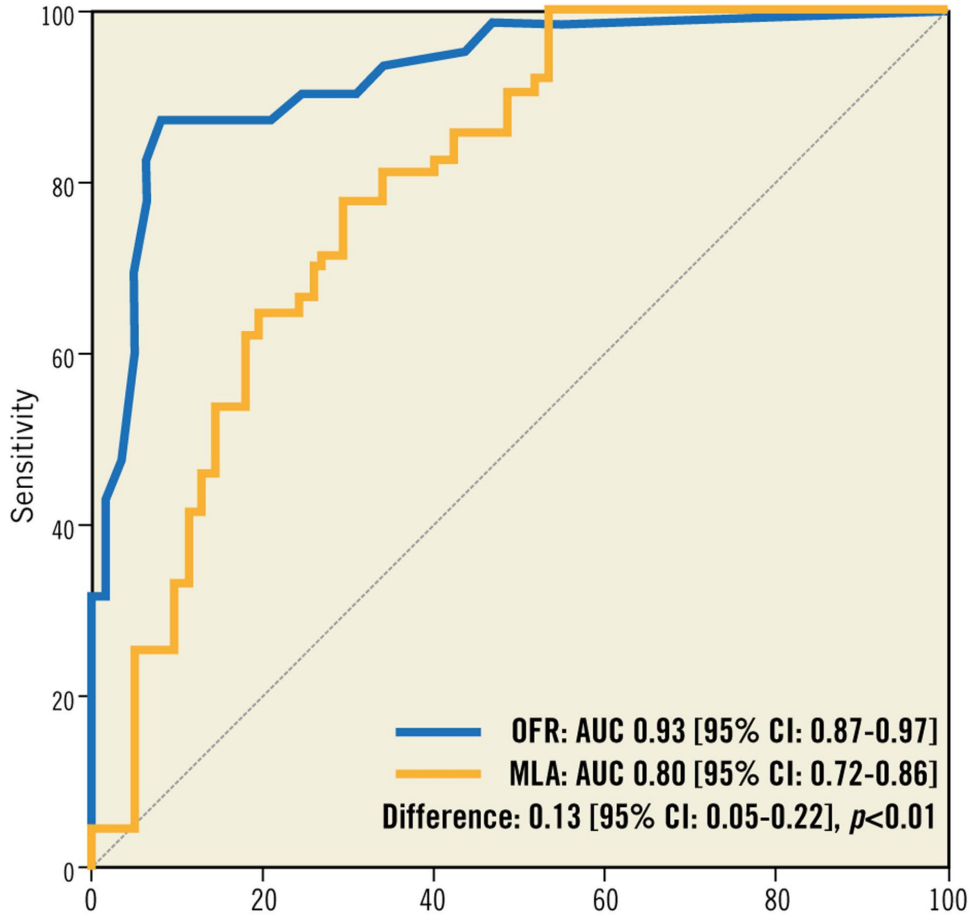
OFR: OCT BASED PHYSIOLOGY



UFR: IVUS BASED PHYSIOLOGY

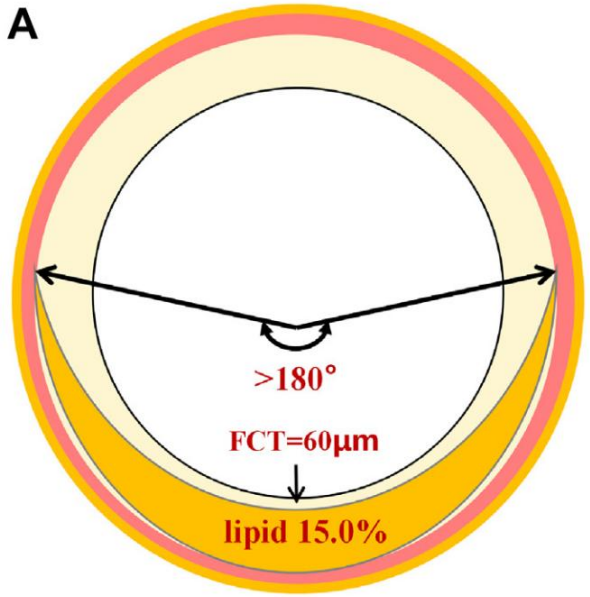
VALIDACIÓN OFR





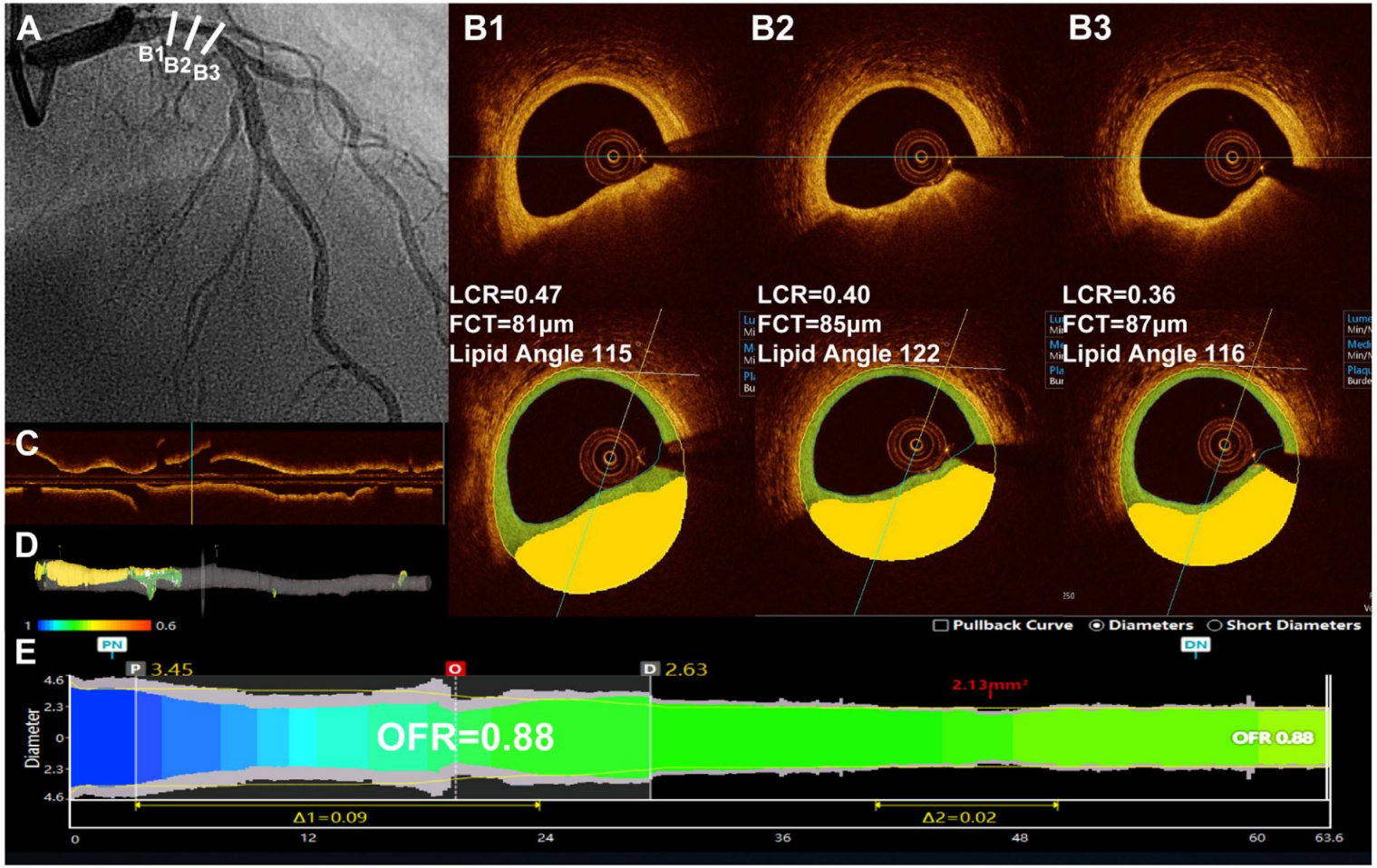
Yu W et al. *EuroIntervention*

COMBINACIÓN DE FISIOLOGIA Y VULNERABILIDAD



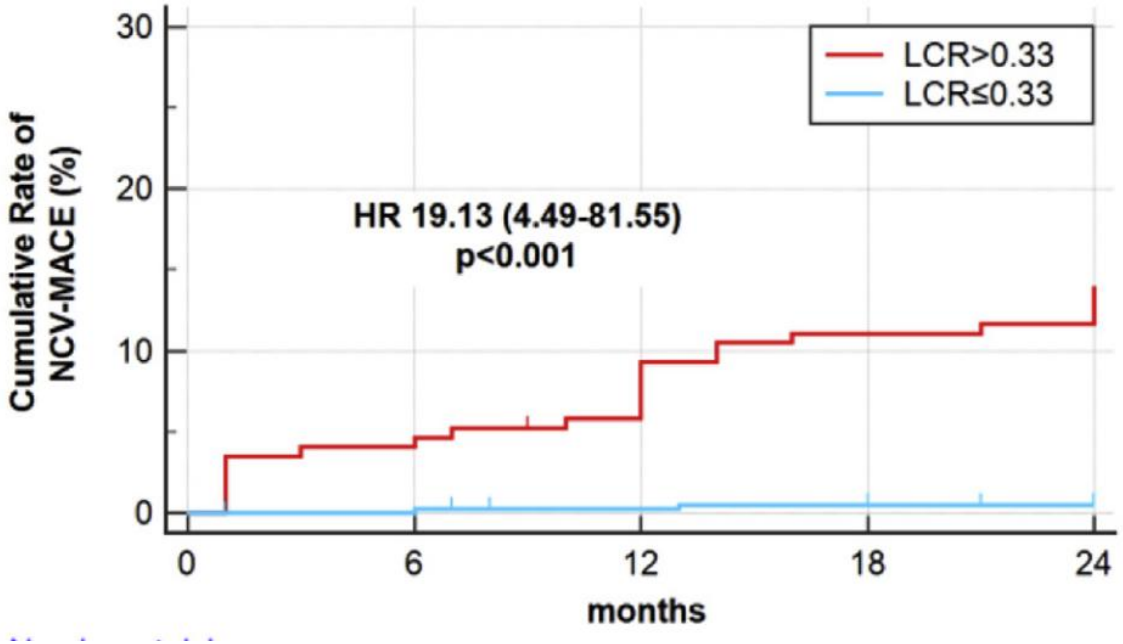
TCFA(+)

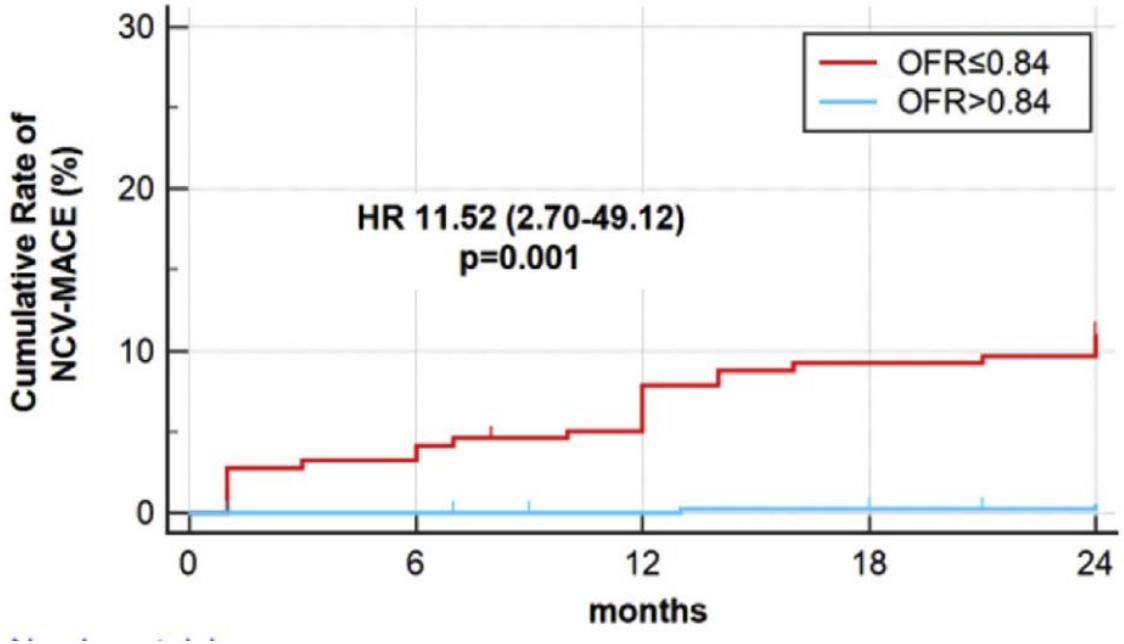
$$LCR=\frac{15\%}{60\mu m}\cdot 100=0.25$$



Hong H et al. JACC Asia.

LCR+OFR Y PREDICCION DE EVENTOS





Hong H et al. JACC Asia.

¿ Y la
mentira ?

LA ICP PUEDE PREVENIR INFARTOS. NOTION 3

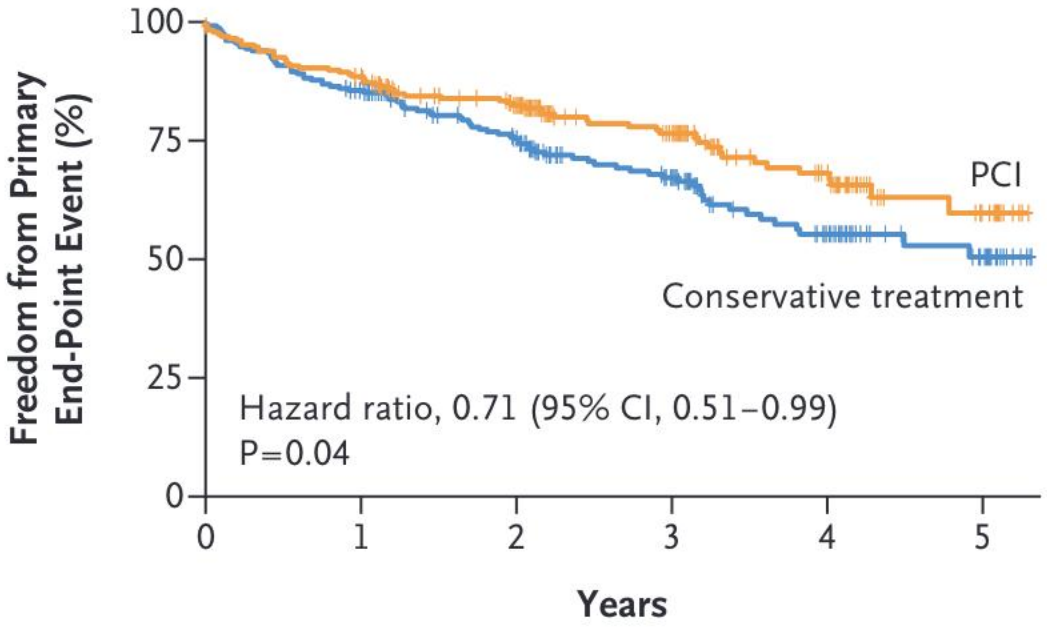
Table 2. Angiographic Findings and Characteristics of the PCI and TAVI Procedures.*

Variable	PCI (N = 227)	Conservative Treatment (N = 228)
Angiographic findings		
Median no. of physiologically significant lesions per patient (IQR)†	1 (1–2)	1 (1–2)
No. of lesions with fractional flow reserve ≤0.80	167	155
No. of lesions with diameter stenosis ≥90%	184	162
Median largest diameter stenosis (IQR) — %	90 (80–90)	90 (71–90)
Median SYNTAX score (IQR)‡	9 (6–14)	9 (5–14)
PCI procedure†		
Median no. of days from randomization to PCI (IQR)	9 (1–26)	—
Timing of PCI — no./total no. (%)		
Before TAVI	163/219 (74)	—
Concomitant with TAVI	37/219 (17)	—
After TAVI	19/219 (9)	—
Complete revascularization achieved — no./total no. (%)§	194/219 (89)	—

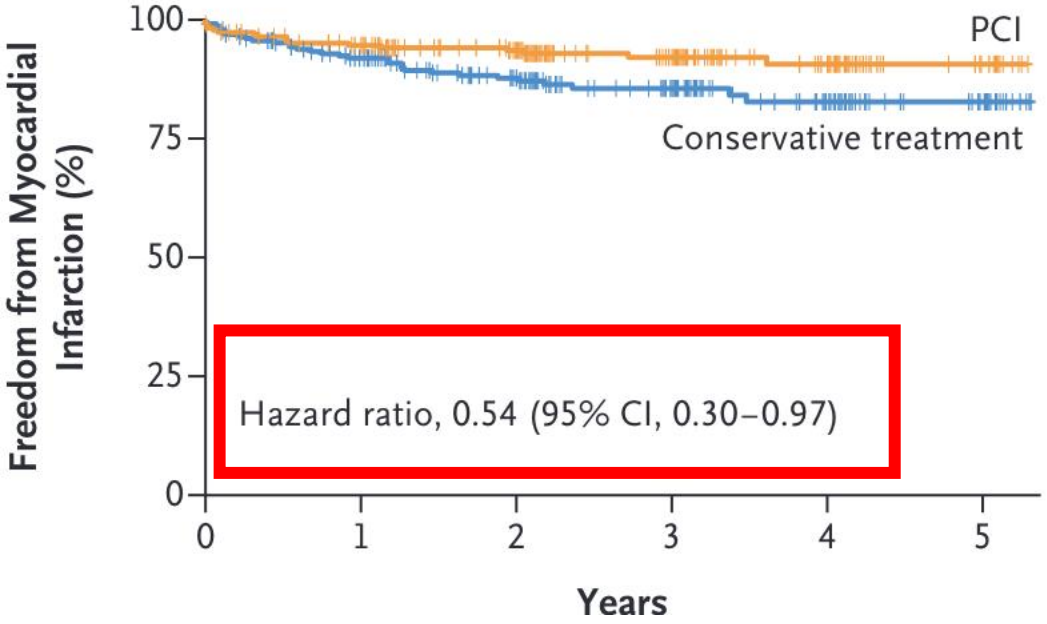
Lønborg J et al. *New England Journal of*

NOTION 3. BENEFICIO ICP EN TAVI

A Death from Any Cause, Myocardial Infarction, or Urgent Revascularization (primary end point)



C Myocardial Infarction



Lønborg J et al. *New England Journal of*

CONCLUSIONES (ALERTA: OPINIÓN!!)

- Usa la guía de presión para poner menos stents, y a poder ser los indicados
- Si no vas a usar la guía de presión, la angiografía funcional es mejor que la angiografía sola
- Probablemente el futuro es la combinación de imagen intravascular con fisiología derivada
- La revascularización puede prevenir infartos. El tema es en quién