31 GIORNATE CARDIOLOGICHE TORINESI

Torino, 24-26 ottobre 2019

Sessione Plenaria

The 2019 legends corner: What do we have still to discuss about PCI on ULM

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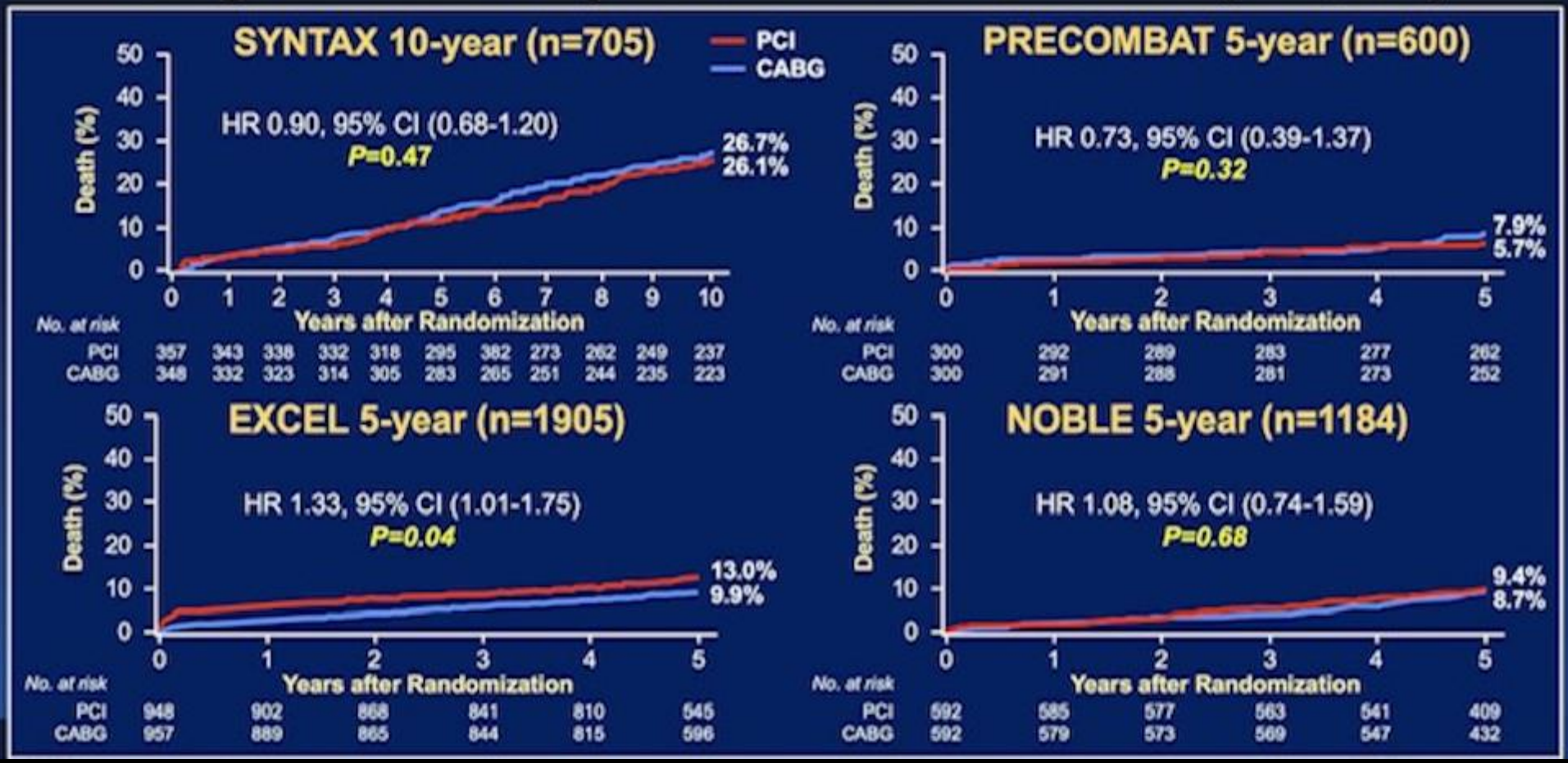
No conflicts to disclose

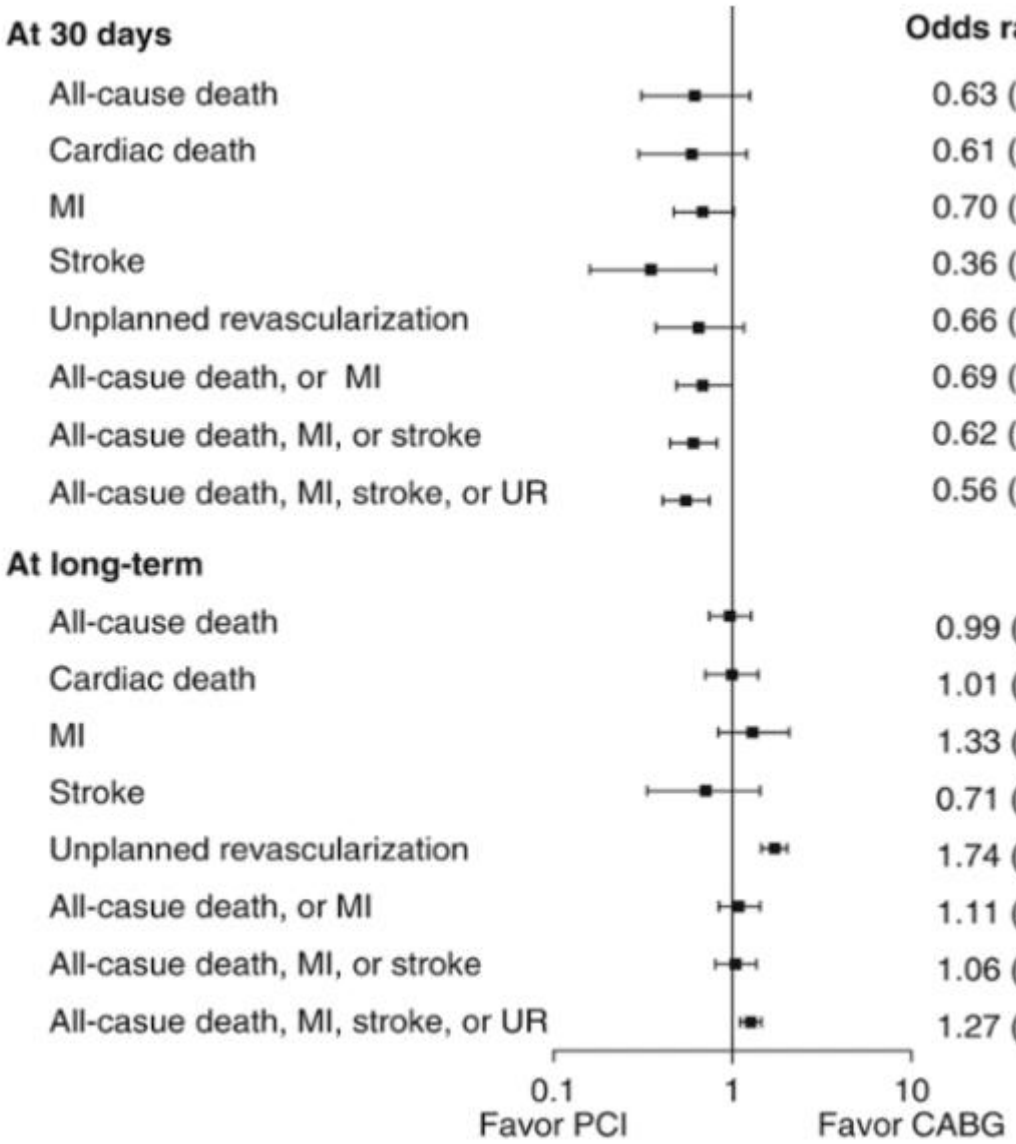
The LMCA supplies, on average, 75% of the left ventricle. Examination of 100 autopsy cases found that the LMCA had an average length of 10.8 mm an average diameter of 4.9 mm.

Jasti and colleagues reported that a minimal luminal area (MLA) of 5.9 mm^2 had the highest sensitivity and specificity (93% and 95%, respectively) for determining a significant LMCA stenosis, compared with FFR as the gold standard.

Long-term Mortality after LM DES vs CABG (n=4,392)



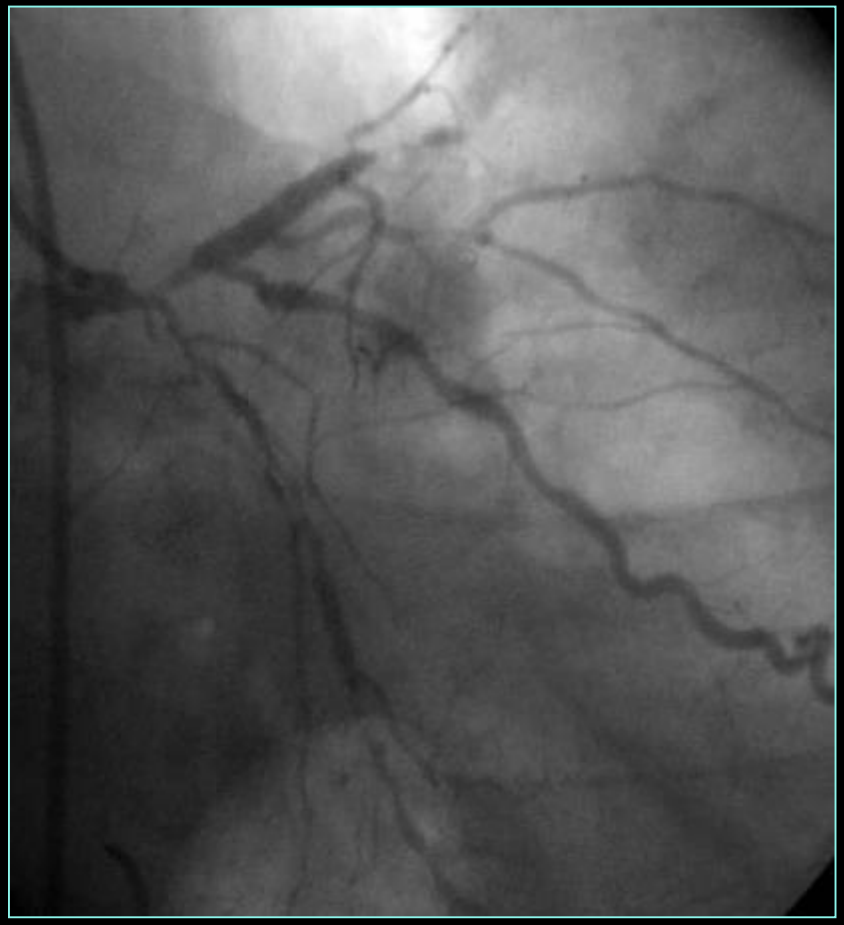
Thuijs DJFM et al. *Lancet.* 2019;Sept 2, on-line; Ahn JM et al. *JACC* 2015;65:2198–206
Stone GW et al. *NEJM* 2019:Sept 28th, on-line; Christiansen E. TCT 2019

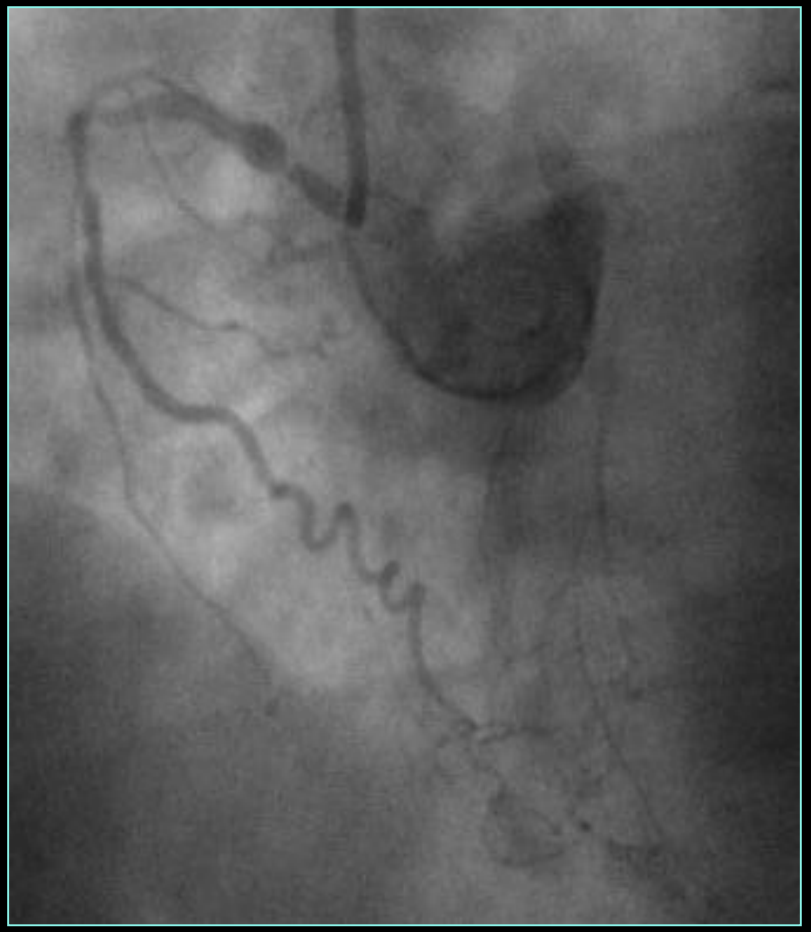


Meta-analysis of six randomized trials. *CABG*, Coronary artery bypass graft;

“There is Left Main Disease and Left Main Disease”

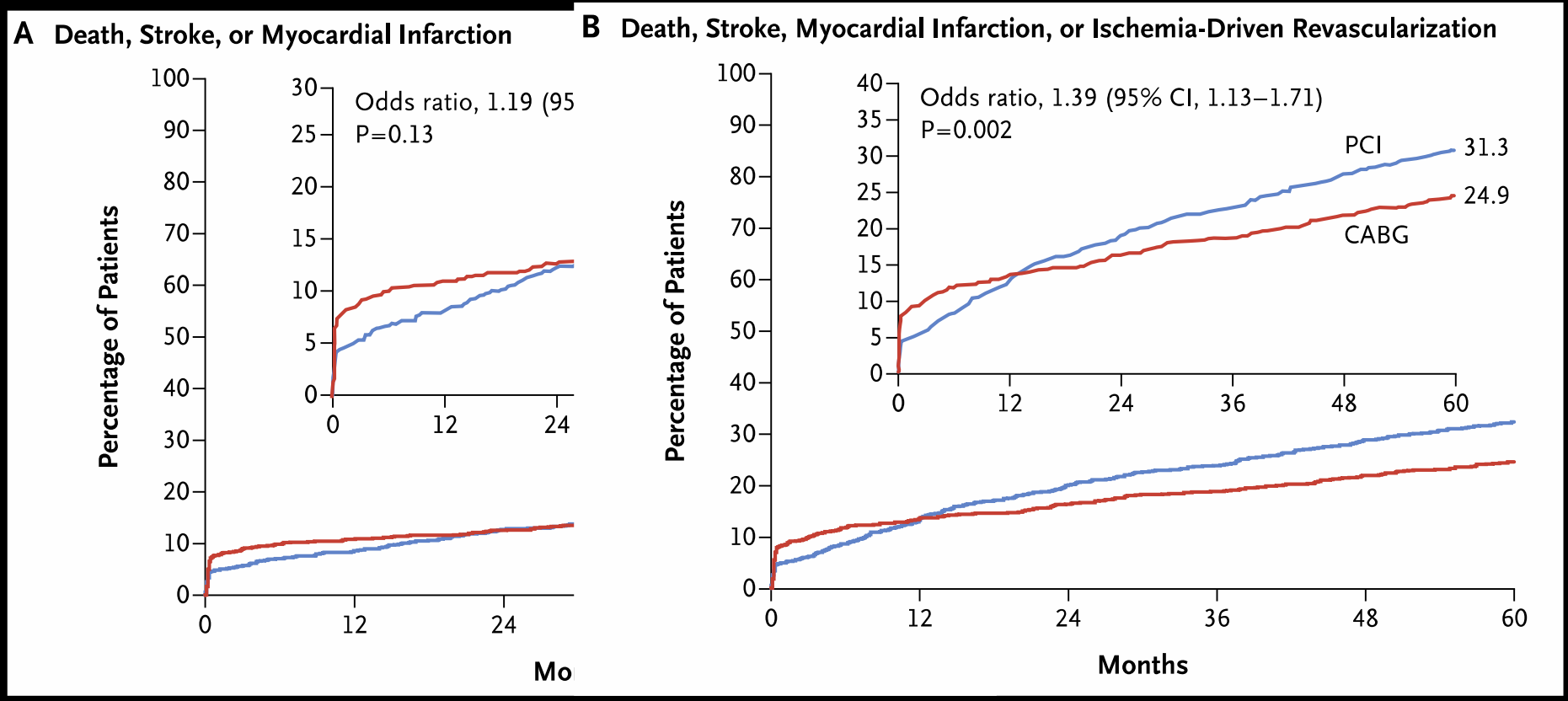
Left Main interventions are frequently more dependent upon lesions outside the left main





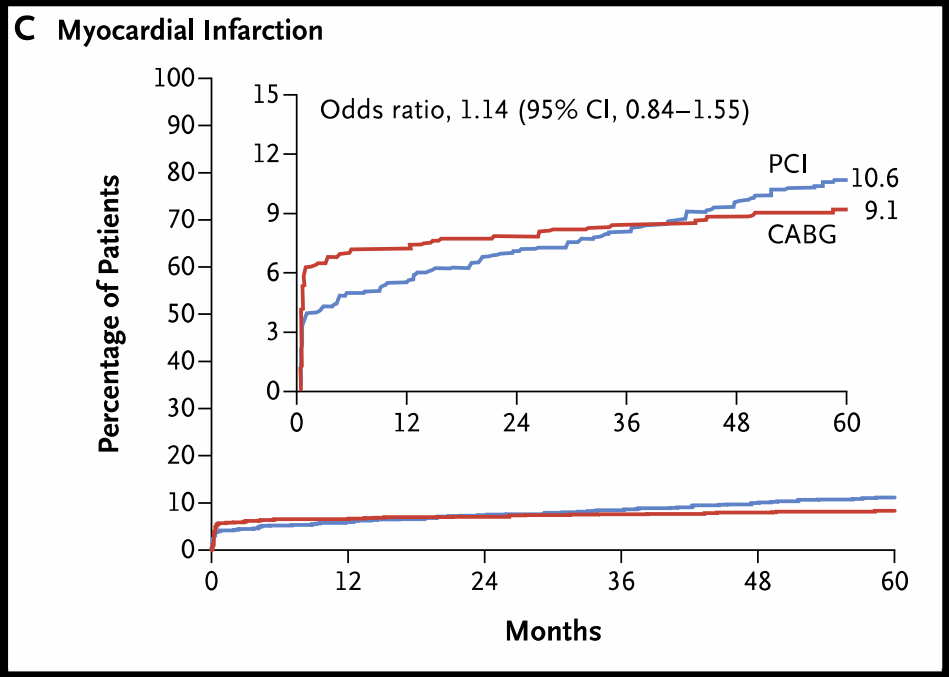
PCI vs. CABG in patients with LM CAD: 5-years outcomes

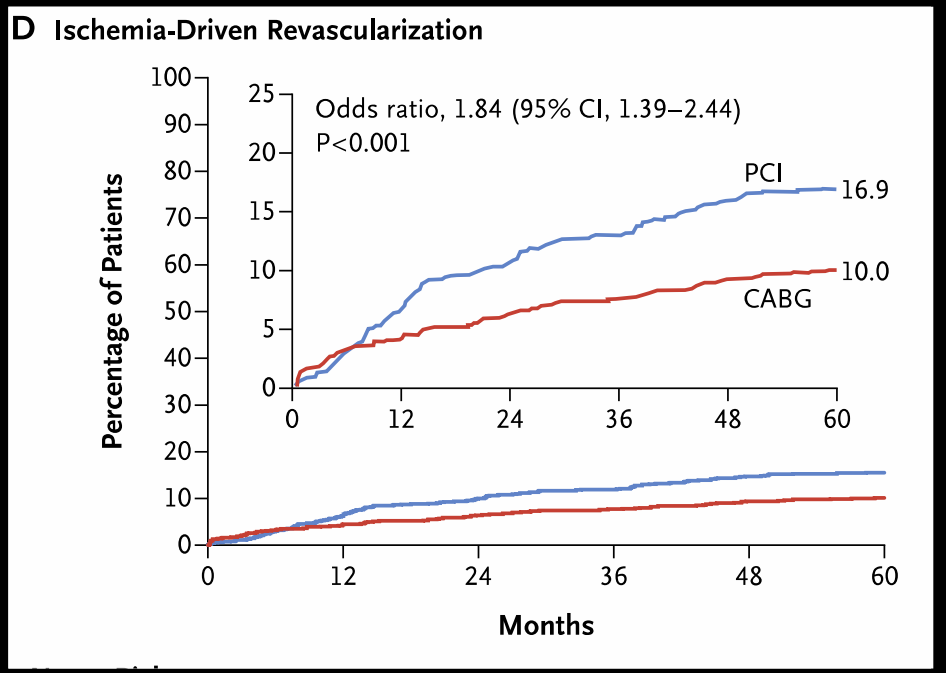
Here is the report of the final 5-year outcomes from EXCEL trial

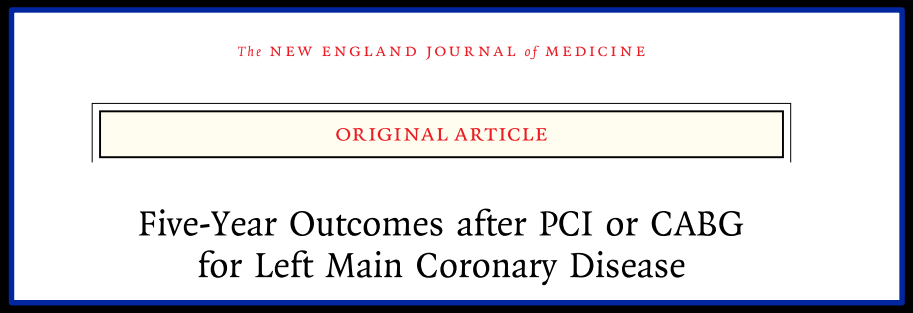


PCI vs. CABG in patients with LM CAD: 5-years outcomes

Results of analyses of the components of the primary and secondary composite outcomes



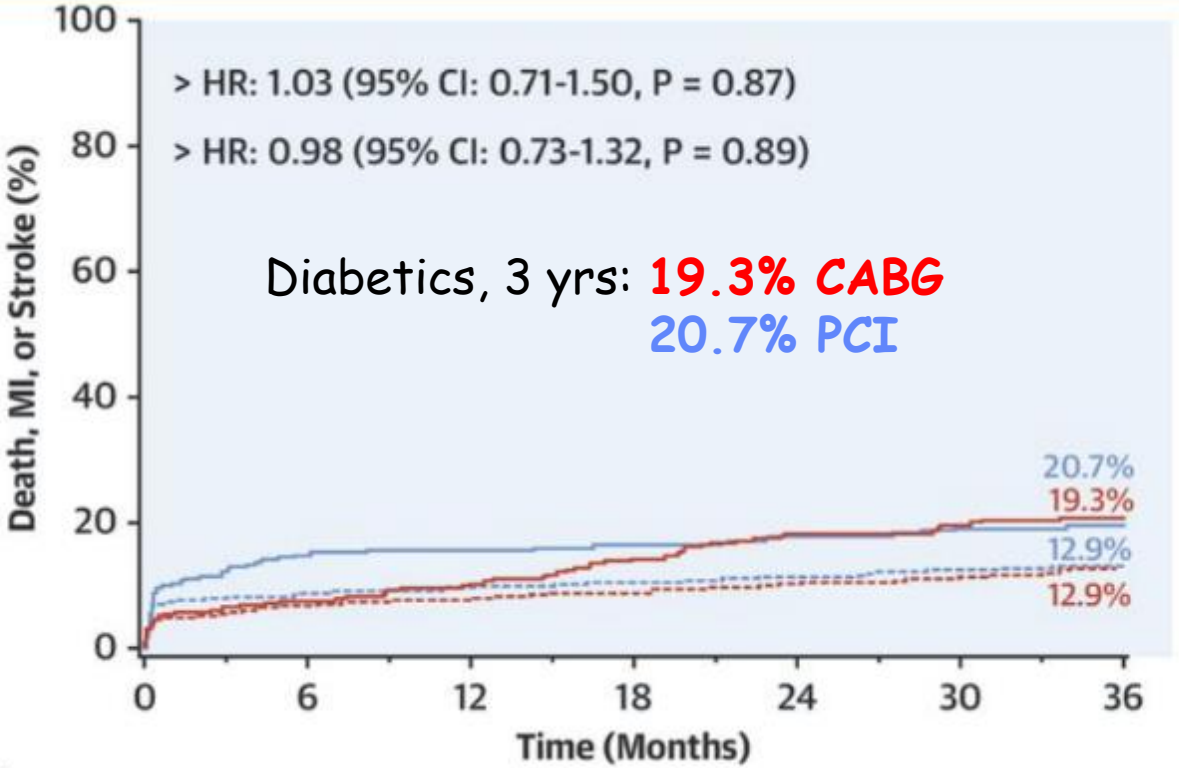



The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Five-Year Outcomes after PCI or CABG for Left Main Coronary Disease

Diabetics analysis of PCI vs. CABG in EXCEL



Number at risk:							
PCI: DM	286	262	253	240	226	220	213
CABG: DM	268	225	223	218	214	209	205
PCI: Non-DM	662	612	601	590	580	572	544
CABG: Non-DM	688	606	593	578	572	555	536

PCI: DM PCI: Non-DM CABG: DM CABG: Non-DM

Milojevic, M. et al. J Am Coll Cardiol. 2019;73(13):1616-28.

PCI vs. CABG
SYNTAX Extended Survival study

ESC European Society of Cardiology

The ESC | Congresses & Events | Journals | Guidelines | Education | Research

Bypass surgery and coronary stenting yield comparable 10-year survival

SYNTAX Extended Survival study presented in a Hot Line Session today at ESC Congress 2019 together with WCC

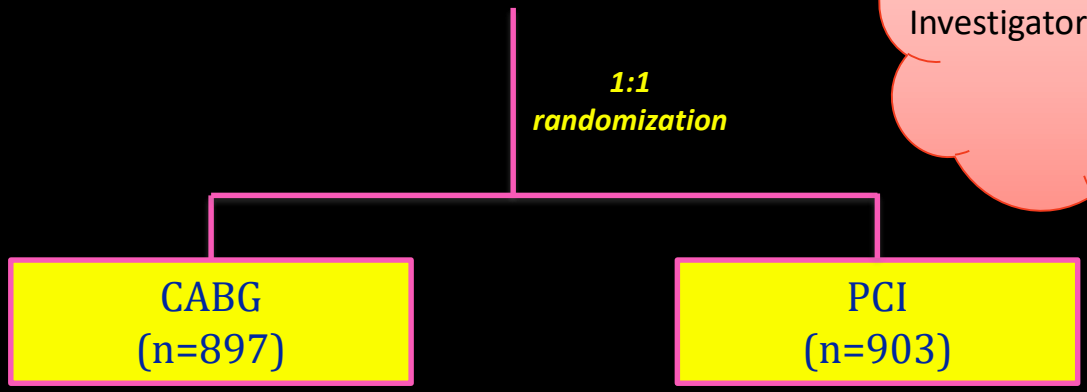
02 Sep 2019

Ten-year survival rates are similar for bypass surgery and coronary stenting with drug-eluting stents in randomised patients with *de novo* three-vessel and left main coronary artery disease, according to late breaking results from the SYNTAX Extended Survival study presented in a Hot Line Session today at ESC Congress 2019

PCI vs. CABG
SYNTAX Extended Survival study

From March, 2005, to April, 2007, 1800 patients

Thuijs D, et al.J; SYNTAX Extended Survival Investigators. Lancet. 2019 Sep 2.



- ***At 10 years, no significant difference existed in all-cause death between PCI using first-generation paclitaxel-eluting stents and CABG.***

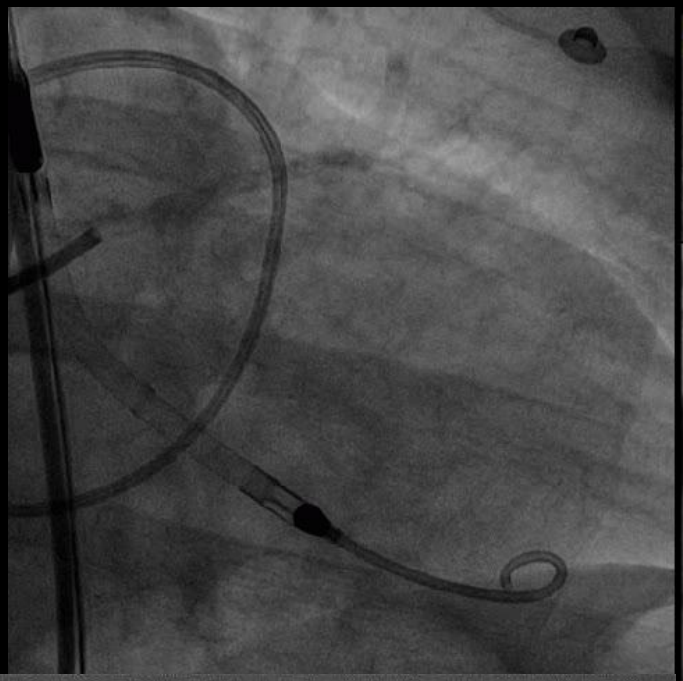
- ***CABG provided a significant survival benefit in patients with three-vessel disease, but not in patients with left main coronary artery disease***

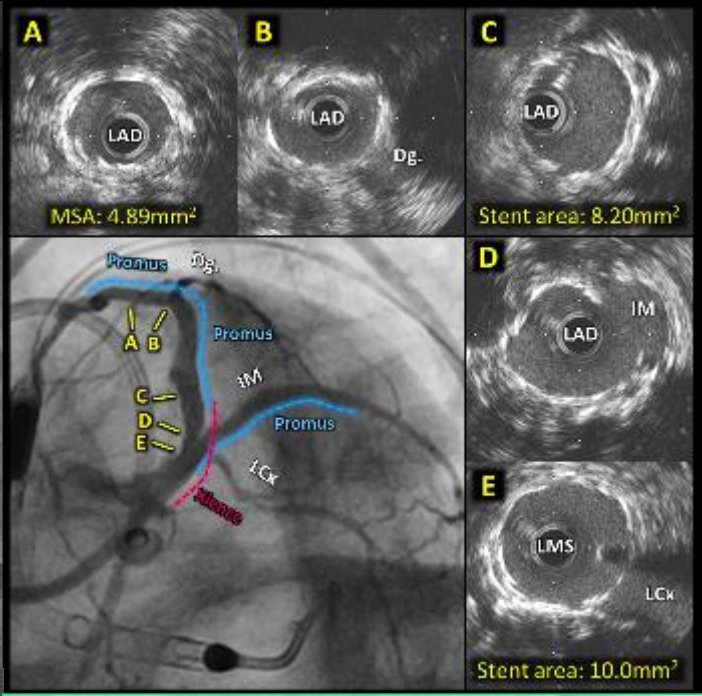
What kind of technique

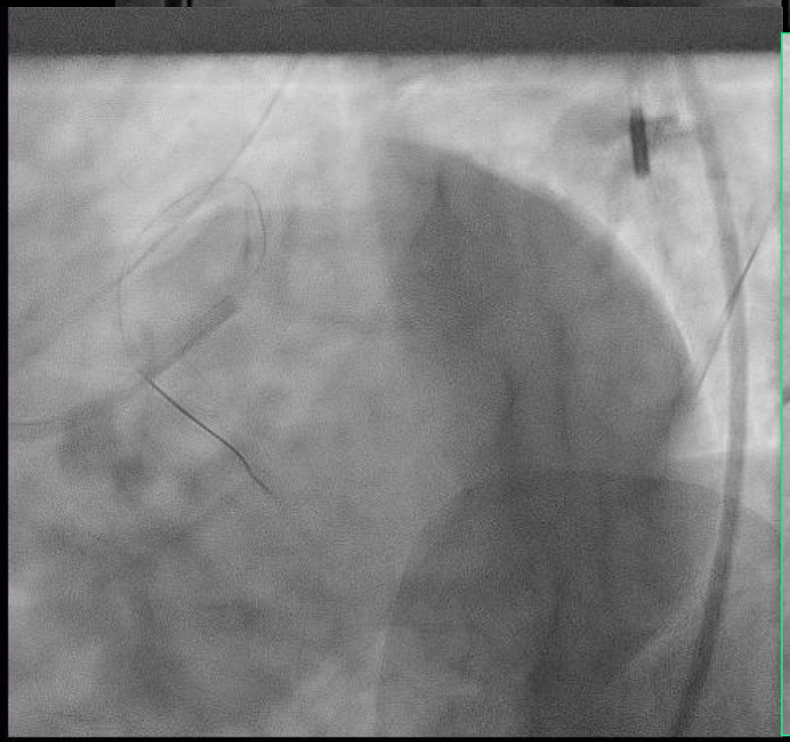
When possible provisional stenting should be preferred, the ostium of the circumflex is a weak point for restenosis

When 2 stents are needed we prefer Crush/DK Crush (JACC published positive 3 yrs. results)

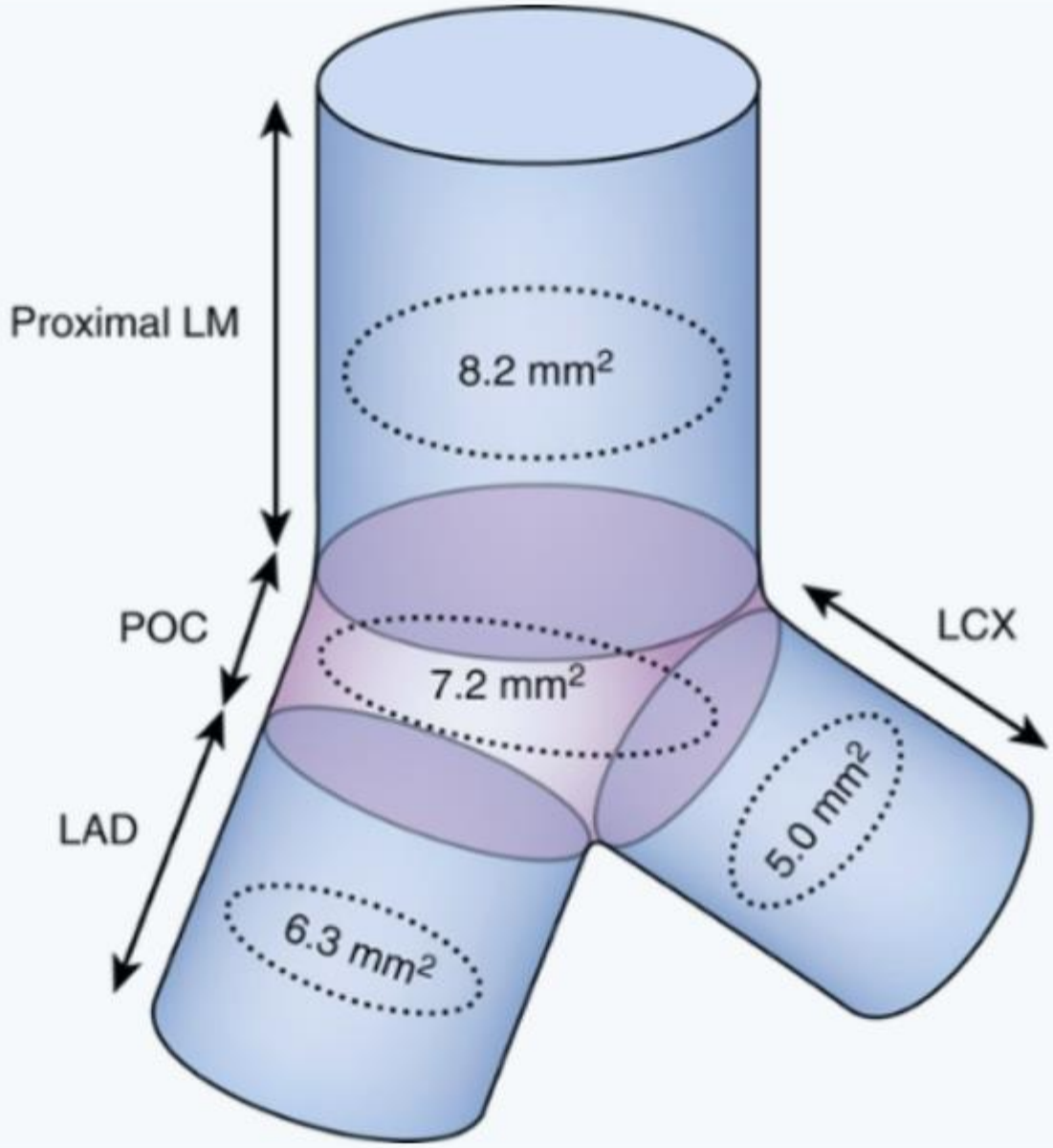
Whatever technique you use the final result is the most important aspects




A
LAD
MSA: 4.89mm²
B
LAD
Dg.
C
LAD
Stent area: 8.20mm²
Promus
Dg.
A
B
Promus
IM
C
D
E
Promus
LCx
Stent
D
IM
LAD
E
LMS
LCx
Stent area: 10.0mm²

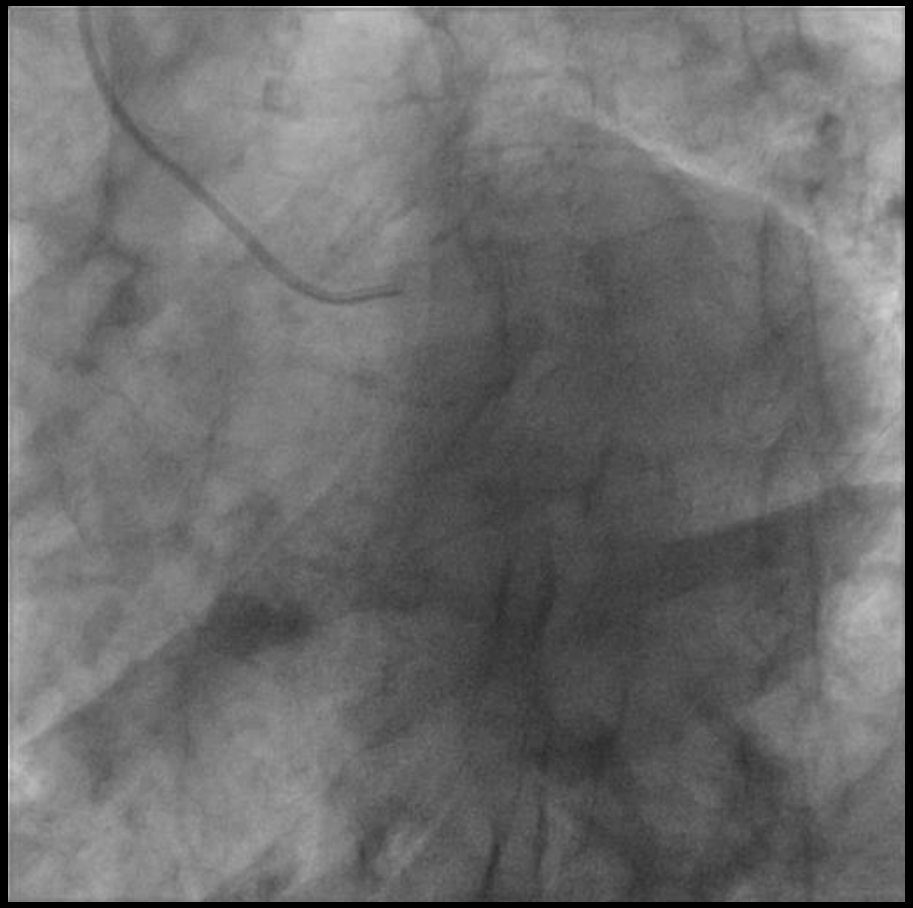


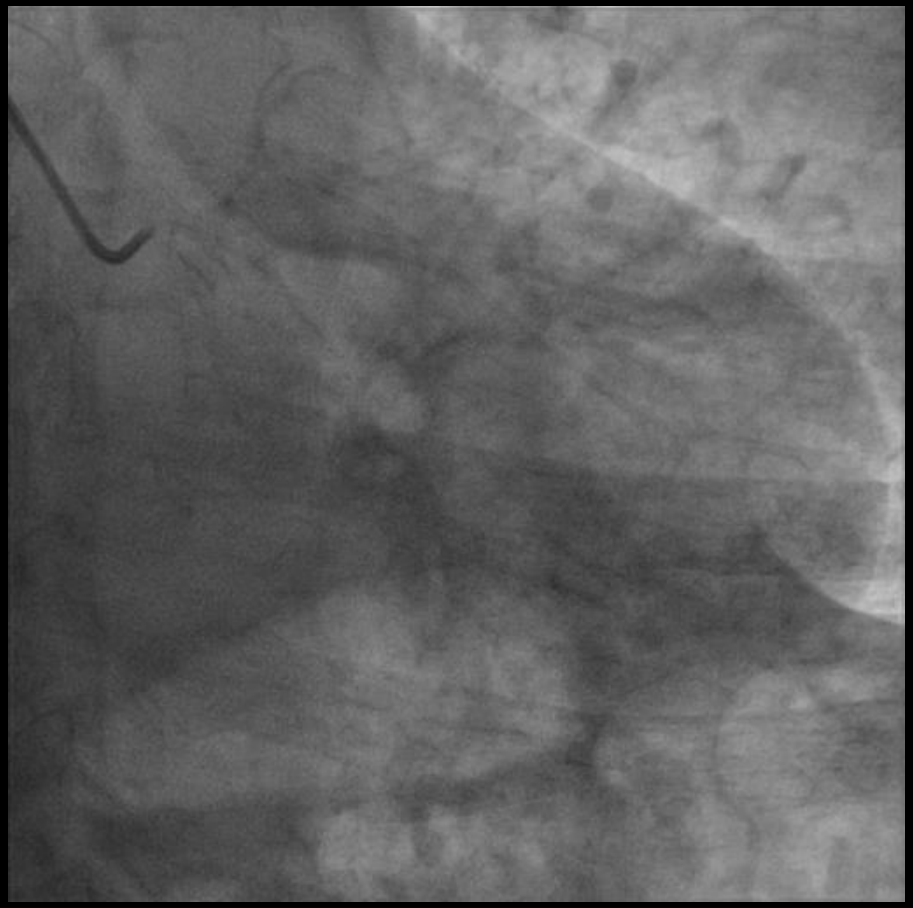
Results we should obtain



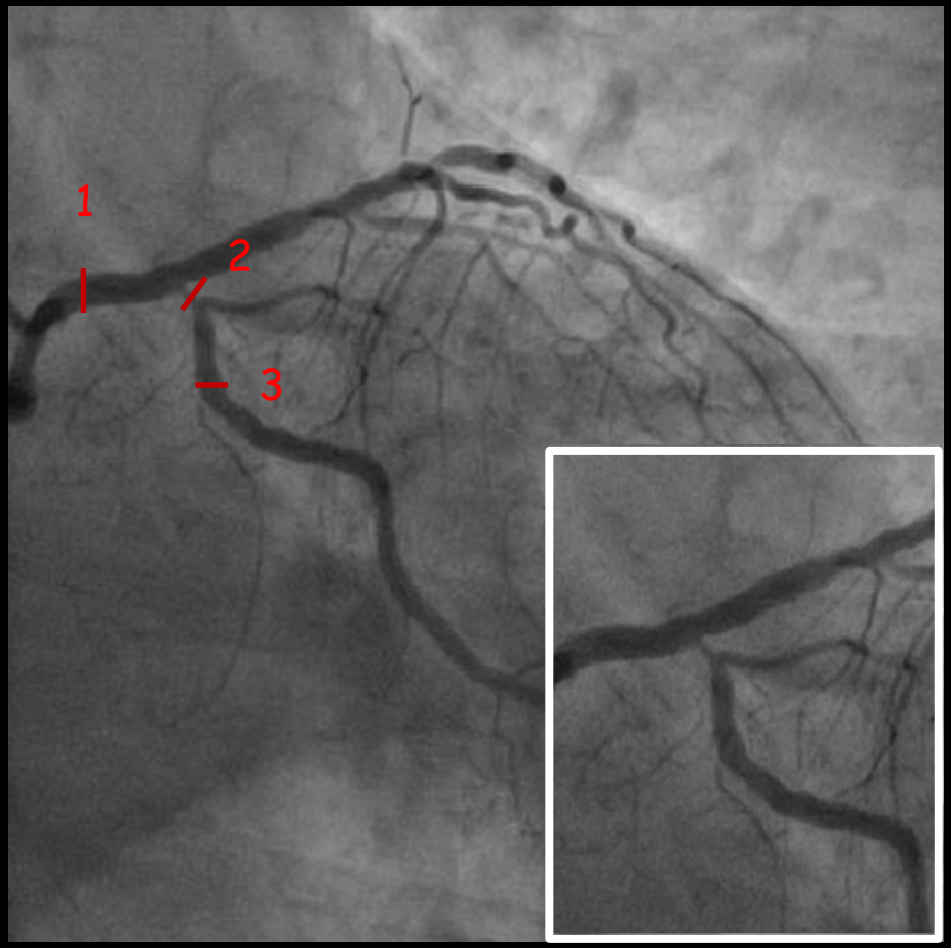
Let us not make LM an iatrogenic disease

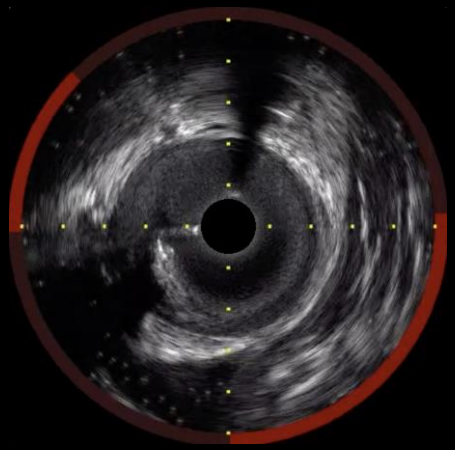
Isolated, stenosis at the ostium of the Cx

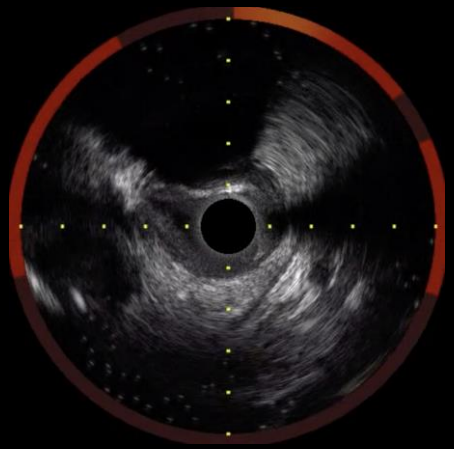


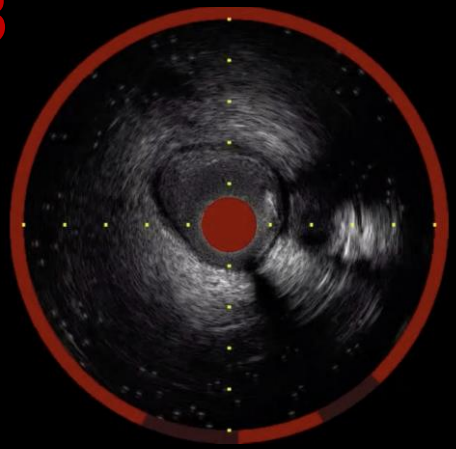


LCX diameter 3.60 mm

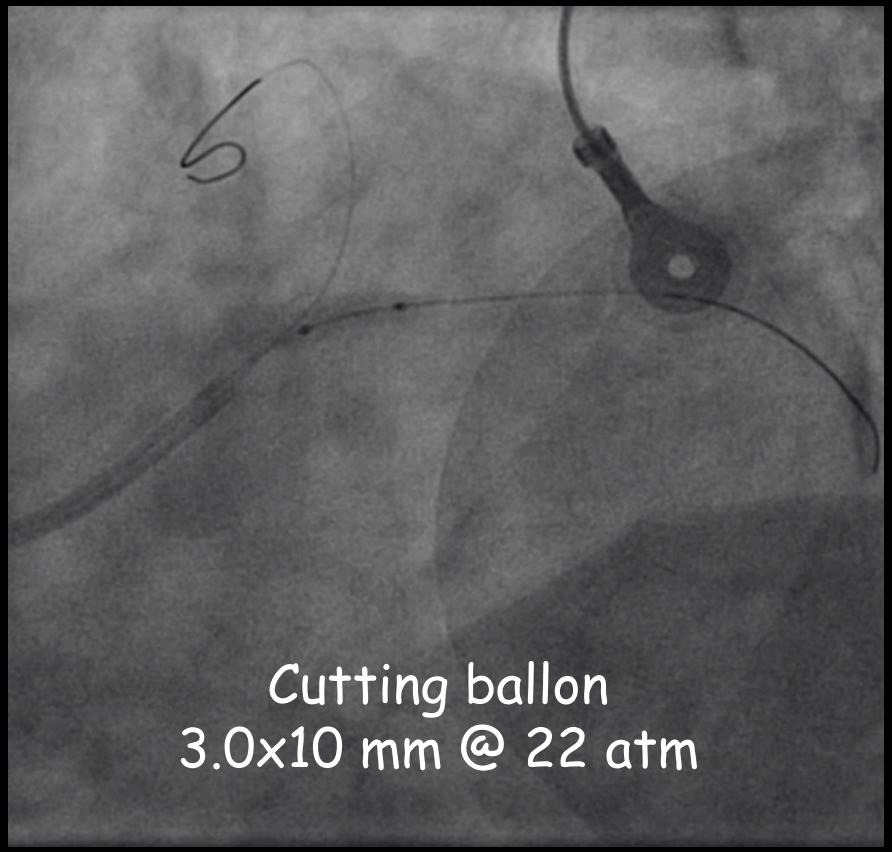


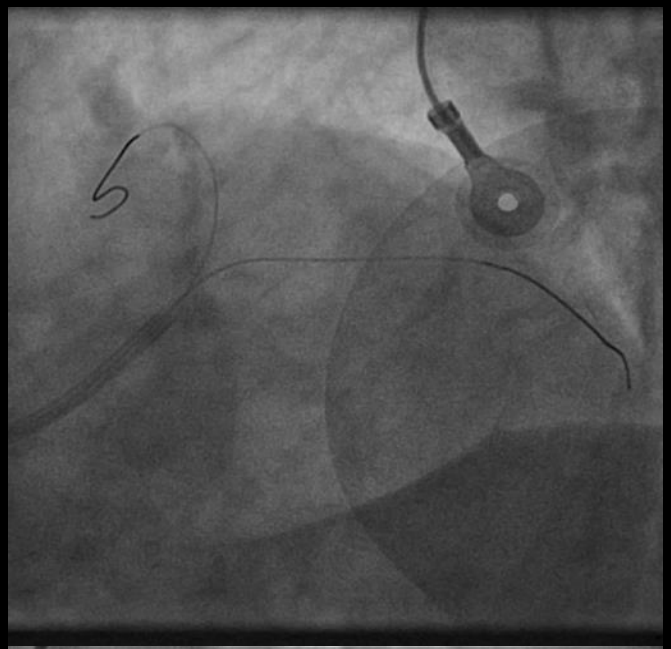


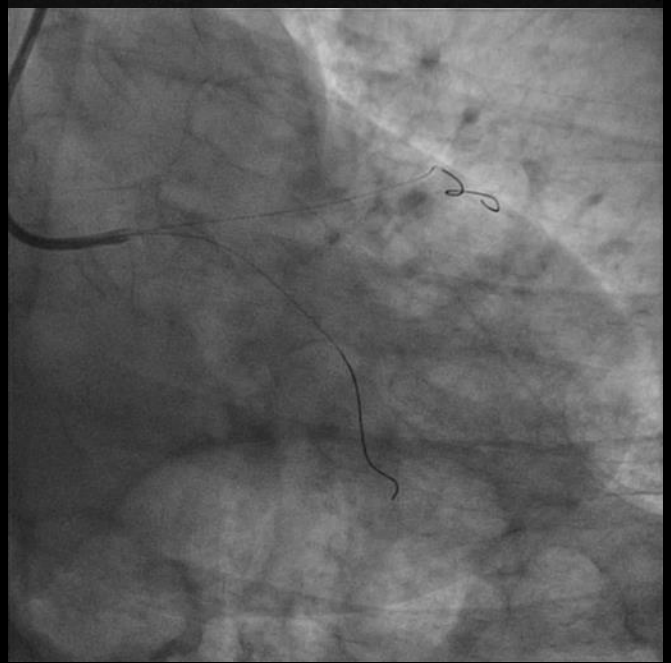




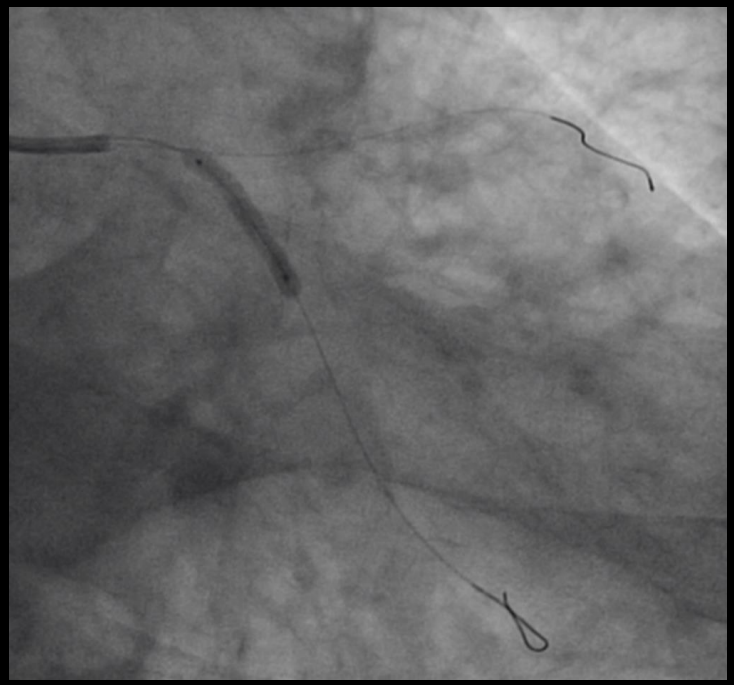
Lesion preparation

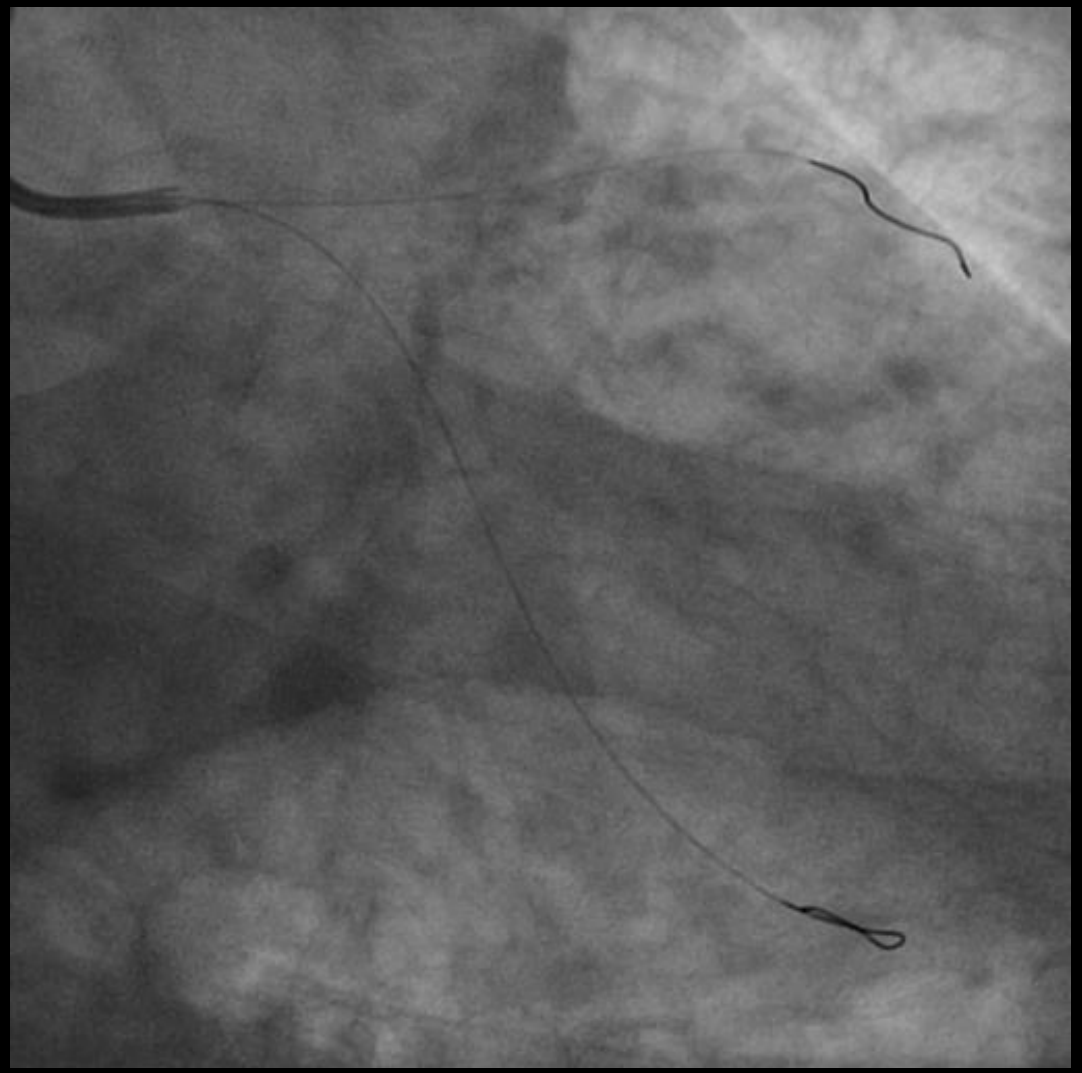






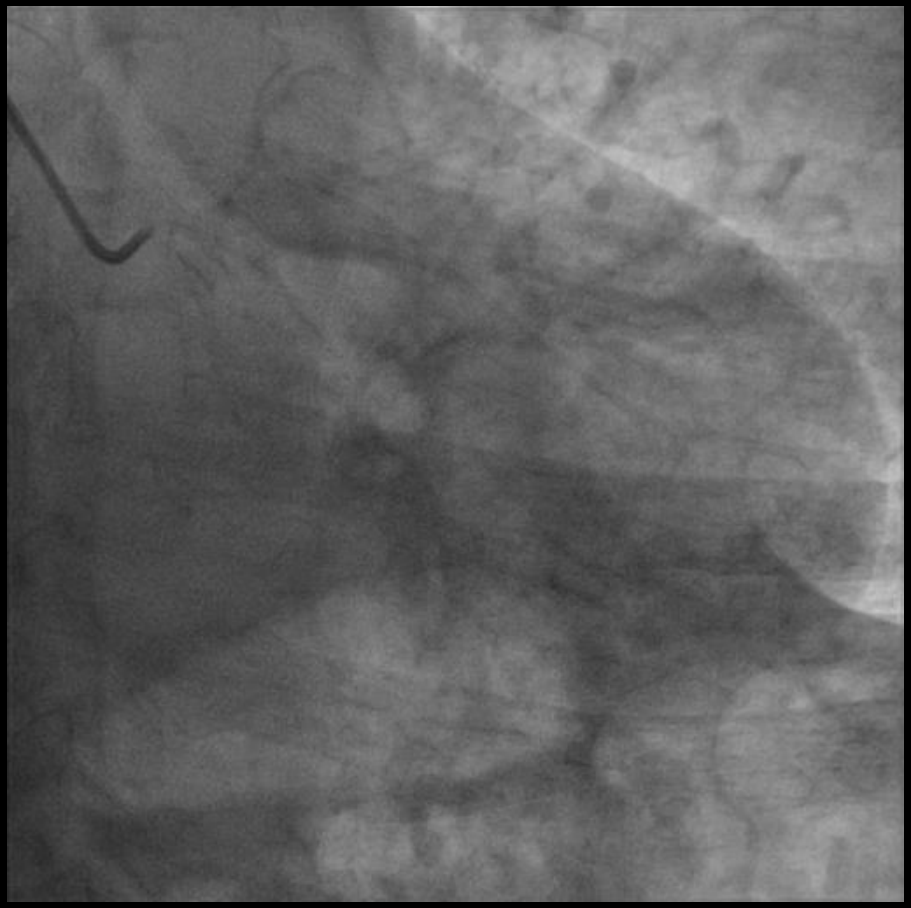
Drug-coated balloon
MagicTouch 3.5 x 20 mm



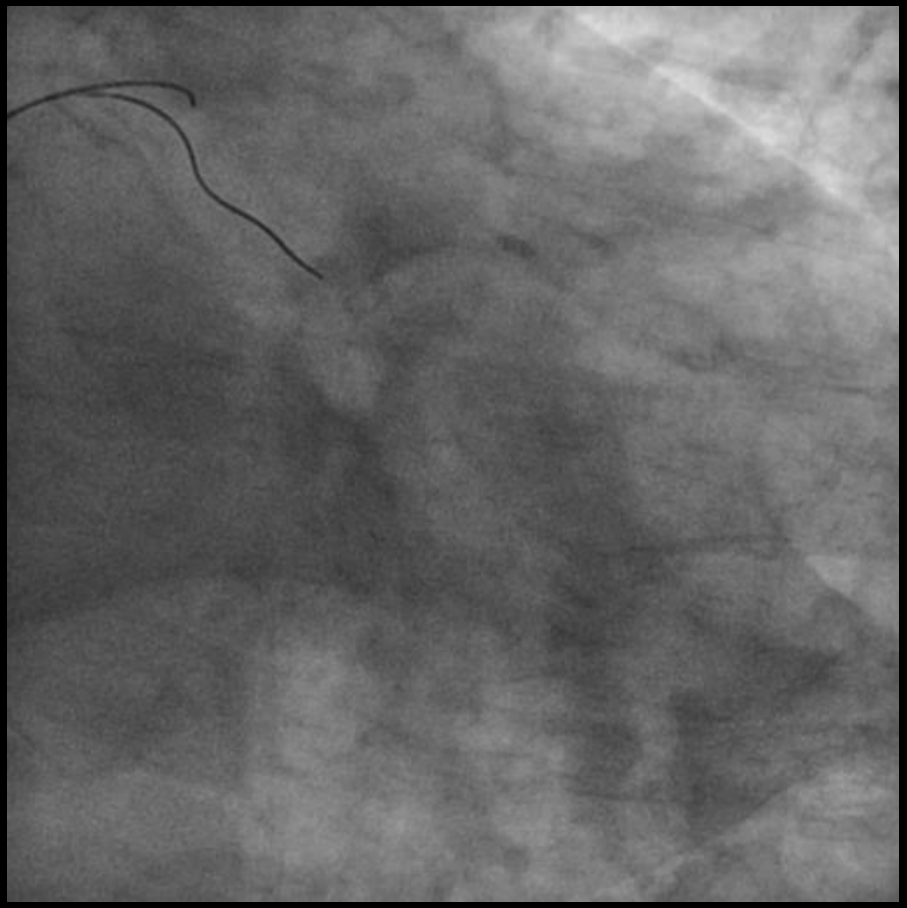


Final angiography

Baseline



Post



PCI

-Less invasive and early recovery
- Eally safety advantage (less MI, less stroke, or less major periprocedural adverse events)
- Similar mortality

Heart Team Approach

CABG

- Long-term durability
- Less revasculaization
- Lass spontanaous MI
- Similar mortally

	Favor for PCI		Favor for CABG
	Recommendation		
Clinical Factors	- **Urgent revascularization** - **Serious comorbidity and high surgical risk** (ie., chronic lung disease, advanced age, disability from prior stroke, prior bypass surgery, or poor general performance)	- Clinical equipose	- Low ejection fraction - Longstanding diabetes - Need for any concomitant cardiac surgery - High-bleeding risk unable to comply with DAPT
Anatomical Factors	- Ostial or trunk LM disease - Isolate LM disease (non-bifurcational or bifurcational) - LM plus additional one-vessel disease	- LM plus additional two-vessel disease	- **LM plus additional three-vessel disease** - **Combined complex anatomy not suitable for PCI** (i.e., severe calcification or tortuosity, CTO, multiple/diffuse long lesions, or complex in-stent restenosis)

Each patient's individual circumstances and preferences