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# LMS stenting in a very high-risk ACS patient

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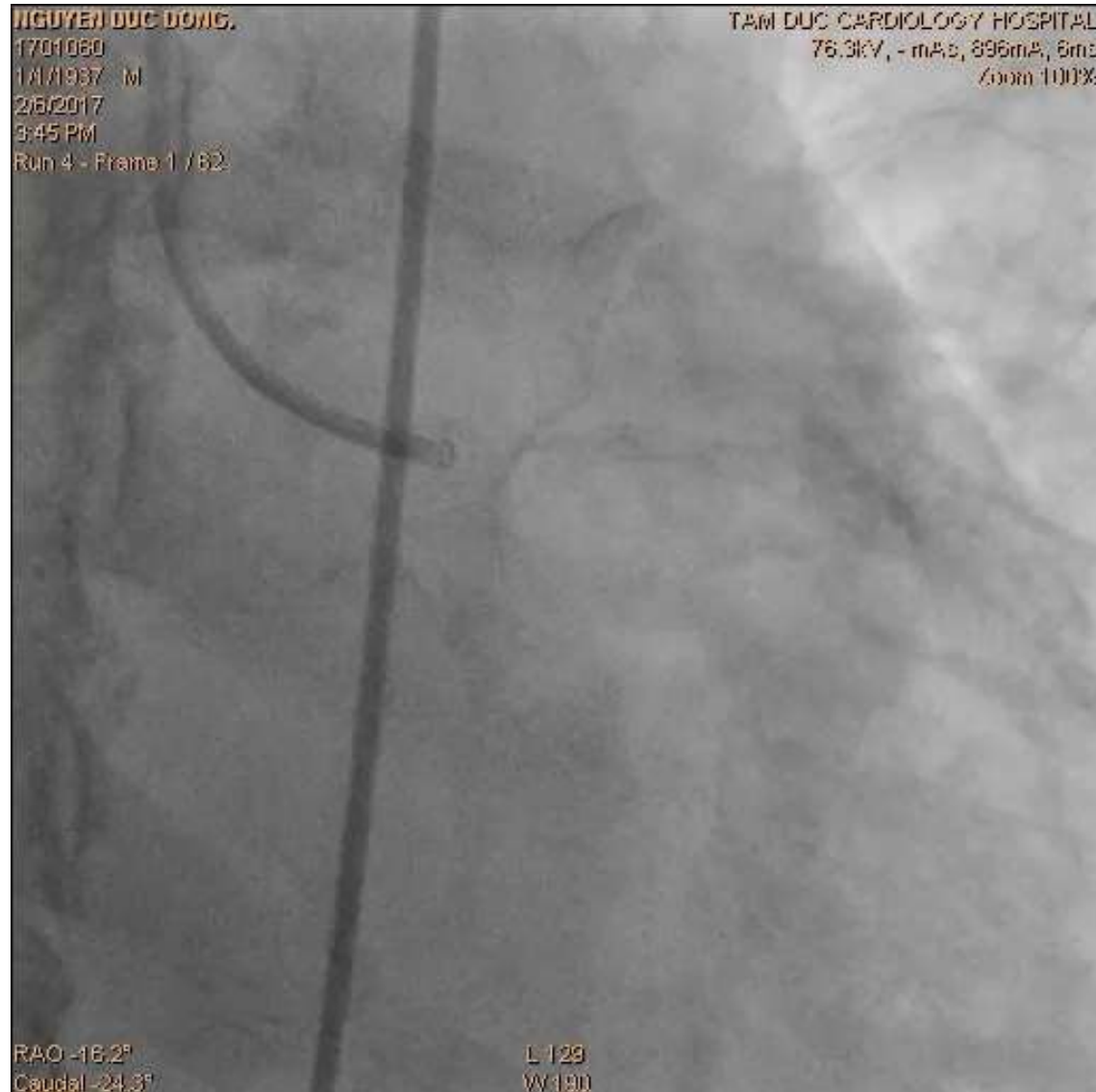
# Case presentation



- 82 years old, BMI 21
- APO/ NSTEMI/HTN/Dyslipidemia/CKD
- eGFR 36 ml/min/1.73m<sup>2</sup>
- Hs TnT 685 pg/mL
- NT- ProBNP 8000 pg/mL
- LVEF 30%; LV 55/46mm, global hypokinesia



# Urgent coronary angiogram (LCA)



# Urgent coronary angiogram (RCA)



## Summary

- Very elderly patient
- Very high-risk ACS
- Very tight LMS disease + 3VD
- Syntax Score 52

## Management

- Medications: Diuretic, Dobutamine, GTN, DAPT, Statin
- Plan for revascularization

**CABG?**

**Versus**

**PCI?**

**SYNTAX Score II** **SYNTAX II**

*Decision making -between CABG and PCI- guided by the SYNTAX Score II to be endorsed by the Heart Team.*

**PCI**  
SYNTAX Score II: 83.9  
PCI 4 Year Mortality: 99.9 %

**CABG**  
SYNTAX Score II: 62.6  
CABG 4 Year Mortality: 66.5 %

Treatment recommendation ⓘ: CABG

**PCI Risk Calculator**

**The predicted risk of mortality is : 20.0%**

**The risk of blood transfusion (whole blood or packed cells) is : 25.5%**

**The predicted risk of CIN is : 27.4%**

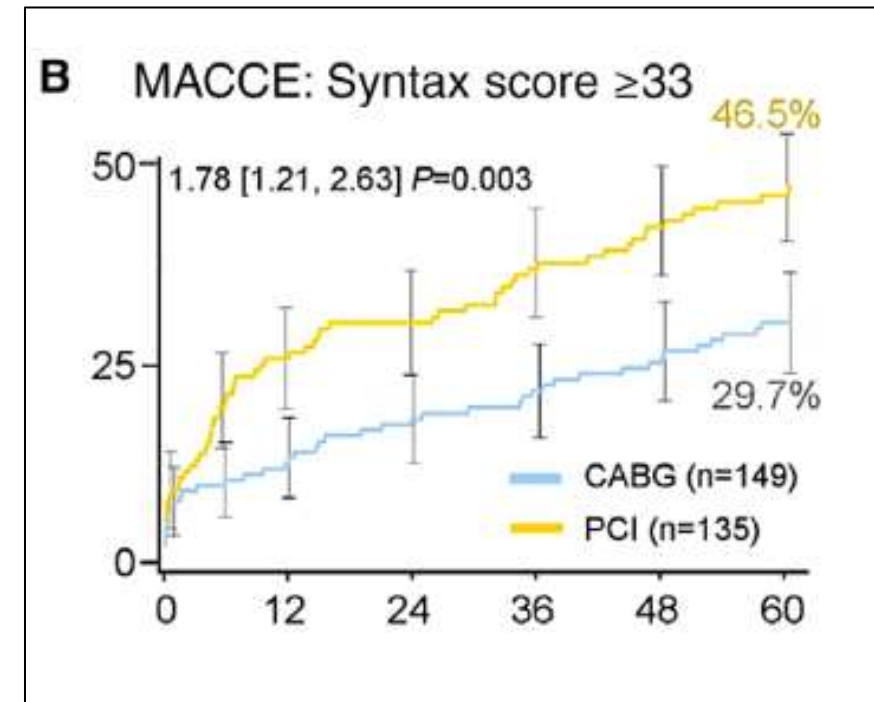
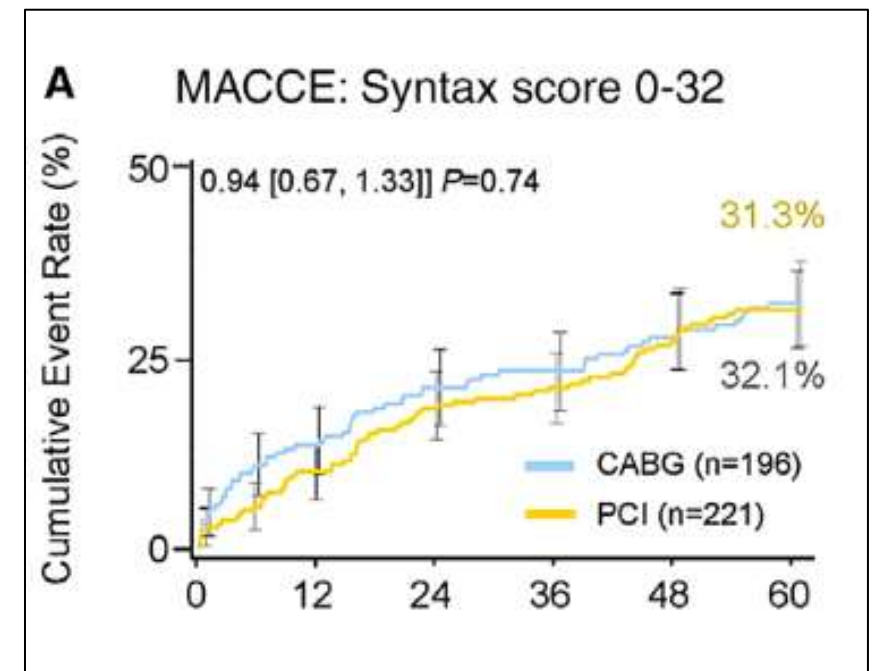
**Euro SCORE II 18.36%**

**STS score 20.61%**

# Recommendations for LM Revascularization

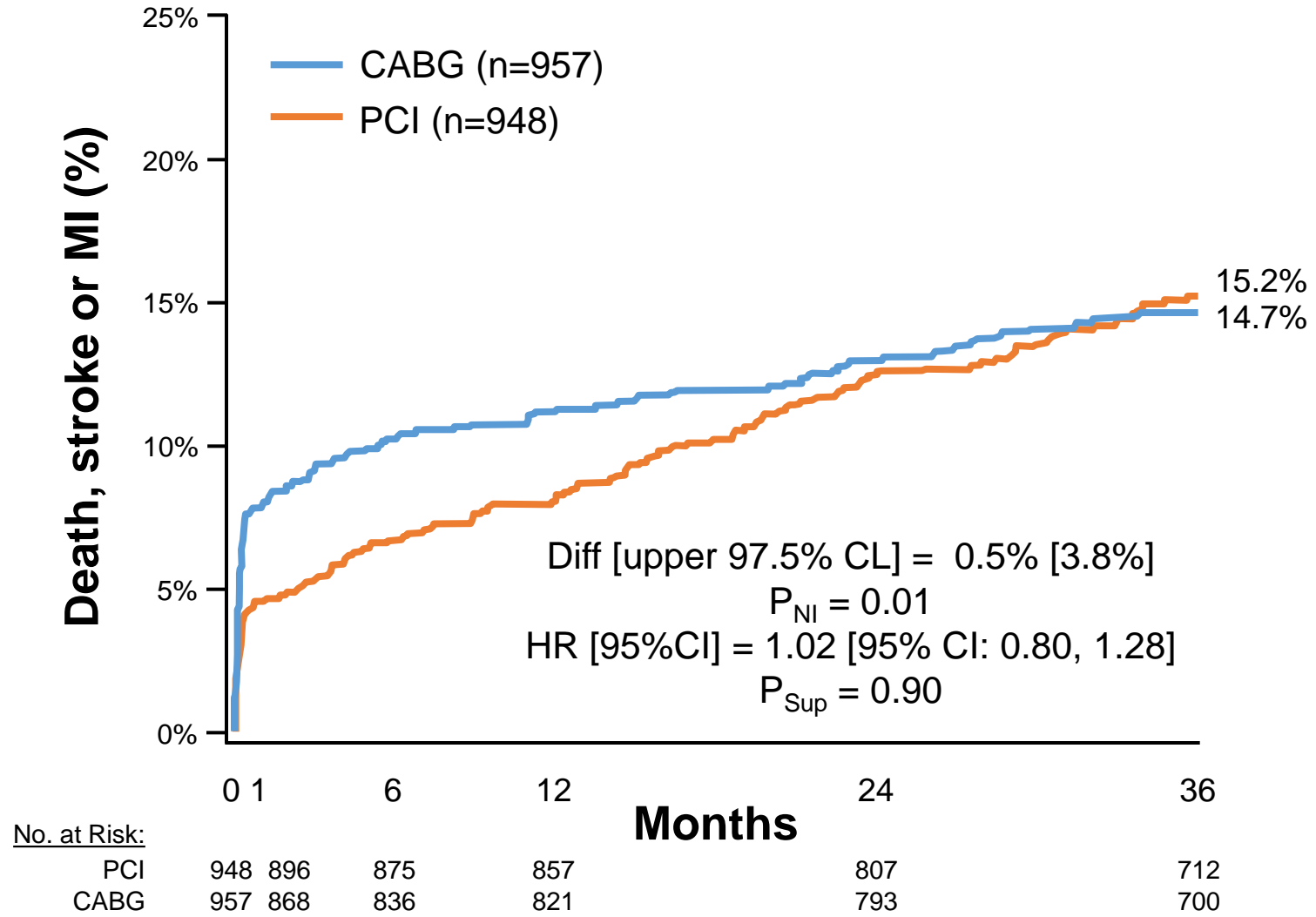
United States		Europe		
	PCI	CABG	PCI	CABG
Low SxScore 0-22	IIa B	I B	I B	I B
Intermediate SxScore 23-32	IIb B	I B	IIa B	I B
High SxScore >32	III B	I B	III B	I B

Levine G, et al. *J Am Coll Cardiol.* 2011;58:44-122  
 Windecker S, et al. *EurHeart J.* 2014;35:2541-619  
 Morice MC et al. *Circulation.* 2014;129:2388-94



# EXCEL: Primary Endpoint Death, Stroke or MI at 3 Years

EES PCI (n= 948) vs. CABG (n=957)  
SYNTAX score ≤ 32



# LM PCI with current DES (EES)- Class I indication?

- Mortality: Similar with PCI vs. CABG
- Stroke: Lower with PCI vs. CABG
- MI: Lower with PCI (short-term)  
Higher with PCI (long-term)  
Similar through 5 years
- Short-term morbidity: Less with PCI
- Revascularization: Less with CABG

Individual-patient-data Analysis from 11 PCI vs. CABG Trials  
11,518 randomized pts; 4,478 (38.9%) with LMS

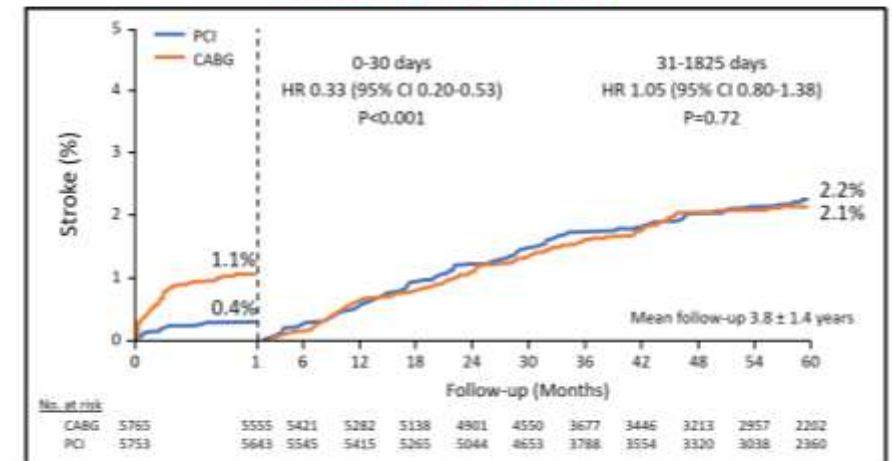
## All-cause Mortality (LM patients)

	PCI (n=2,233)	CABG (n=2,245)	HR (95%CI]	P value	P <sub>int</sub>
Overall mortality	10.7% (174)	10.5% (158)	1.07 [0.87, 1.33]	0.52	
Diabetes	16.5% (71)	13.4% (51)	1.34 [0.93, 1.91]	0.11	0.13
No diabetes	8.8% (104)	9.6% (107)	0.94 [0.72, 1.23]	0.65	
SYNTAX score 0-22	8.1% (45)	8.3% (49)	0.91 [0.60, 1.36]	0.64	
SYNTAX score 23-32	10.8% (67)	12.7% (63)	0.92 [0.65, 1.30]	0.65	0.38
SYNTAX score ≥33	15.0% (56)	12.4% (45)	1.39 [0.94, 2.06]	0.10	

Head SJ et al. 2017. Submitted. Presented at TCT 2017.

Individual-patient-data Analysis from 11 PCI vs. CABG Trials  
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## Stroke (all patients)



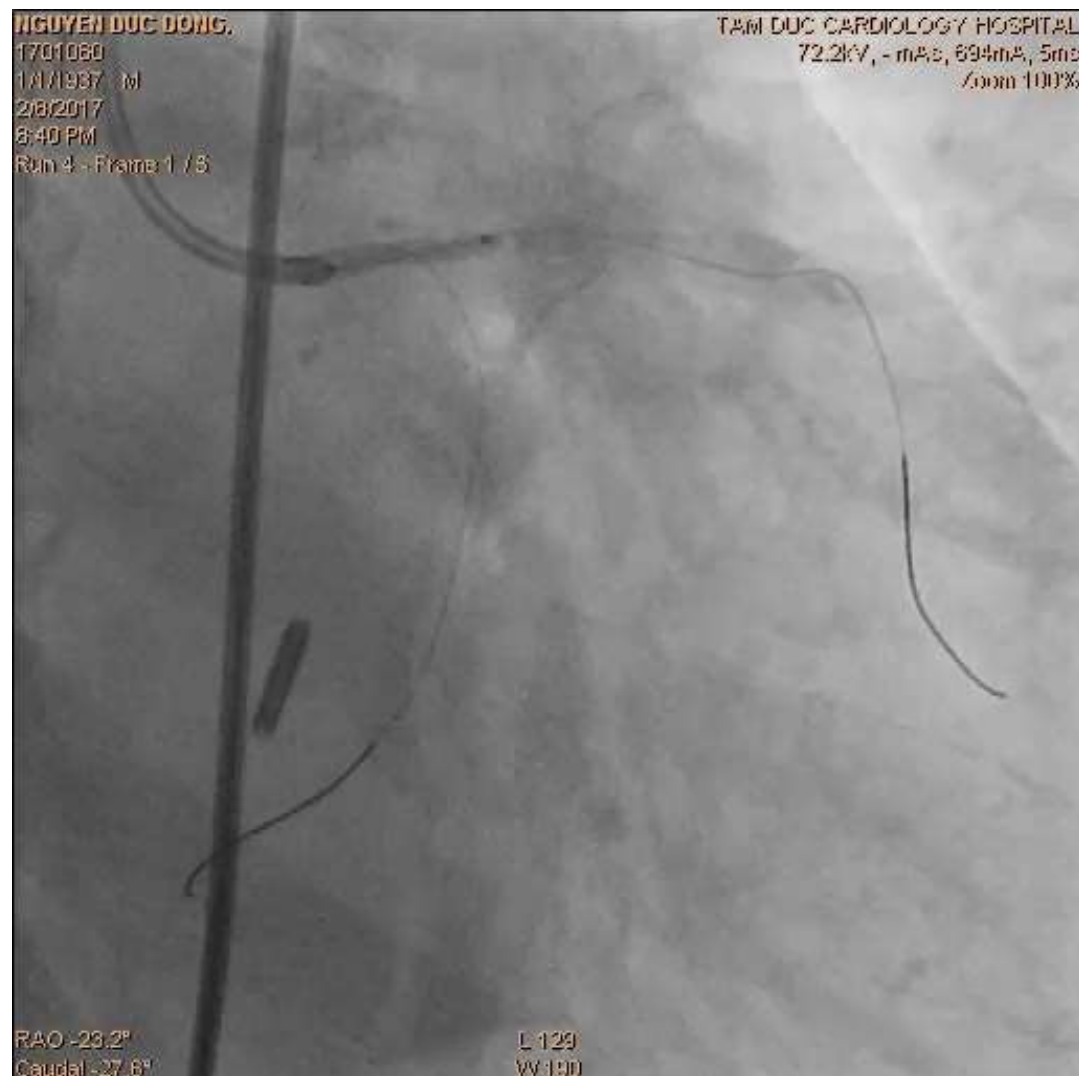
Head SJ et al. 2017. Submitted. Presented at TCT 2017.



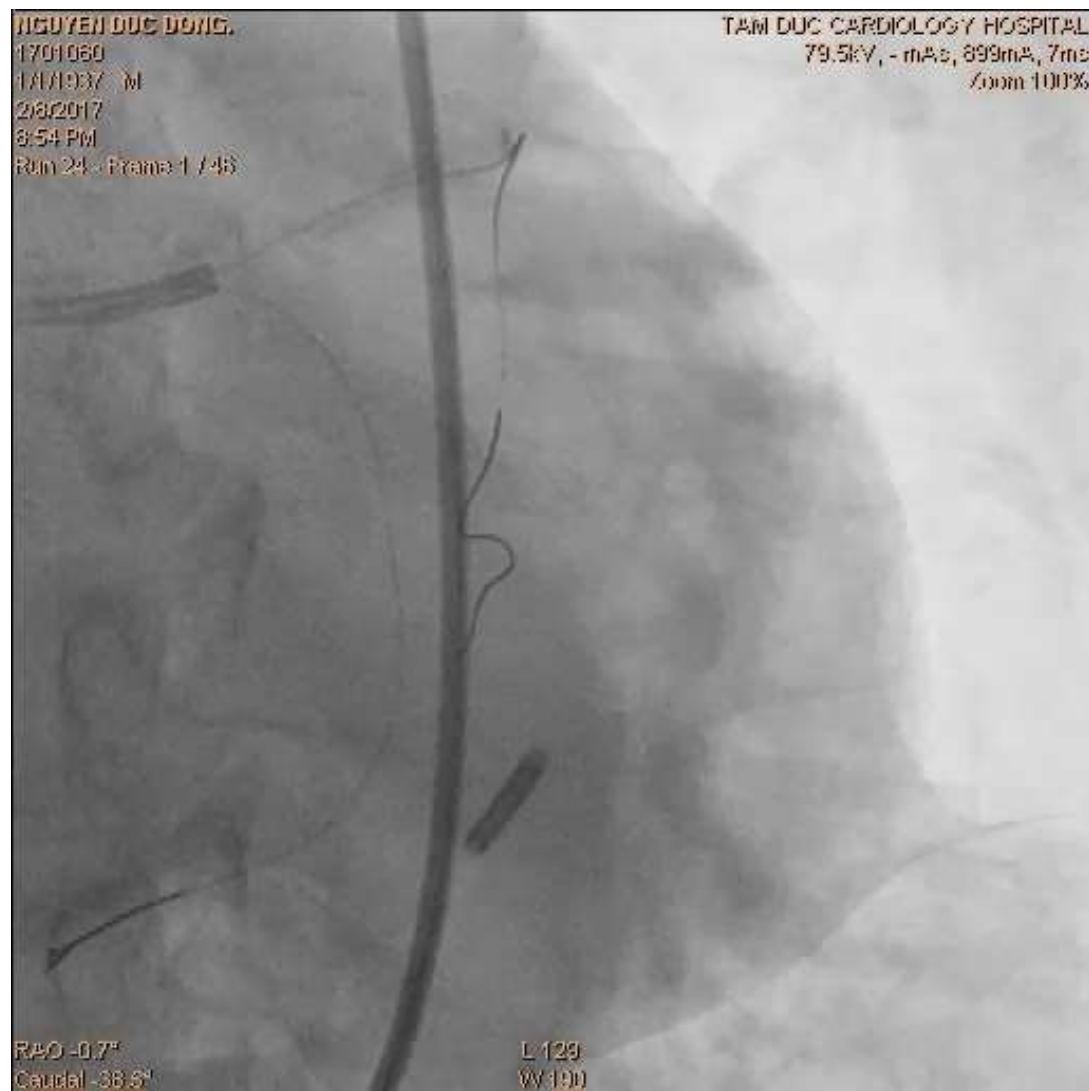
# Our case- PCI as revascularization after Heart Team & Family discussion

1. Anesthesia and Surgery back-up
2. IABP supported from LFA
3. 7 Fr. SH guide from RFA
4. Holding-balloon (2.0x15 mm) in 0.014" LM-LAD wire
5. 0.014" LCx wire
6. NC balloon/ Double-layer NC balloon for LAD-LM
7. 2-stent technique (DK-Crush)
8. Final kissing balloon

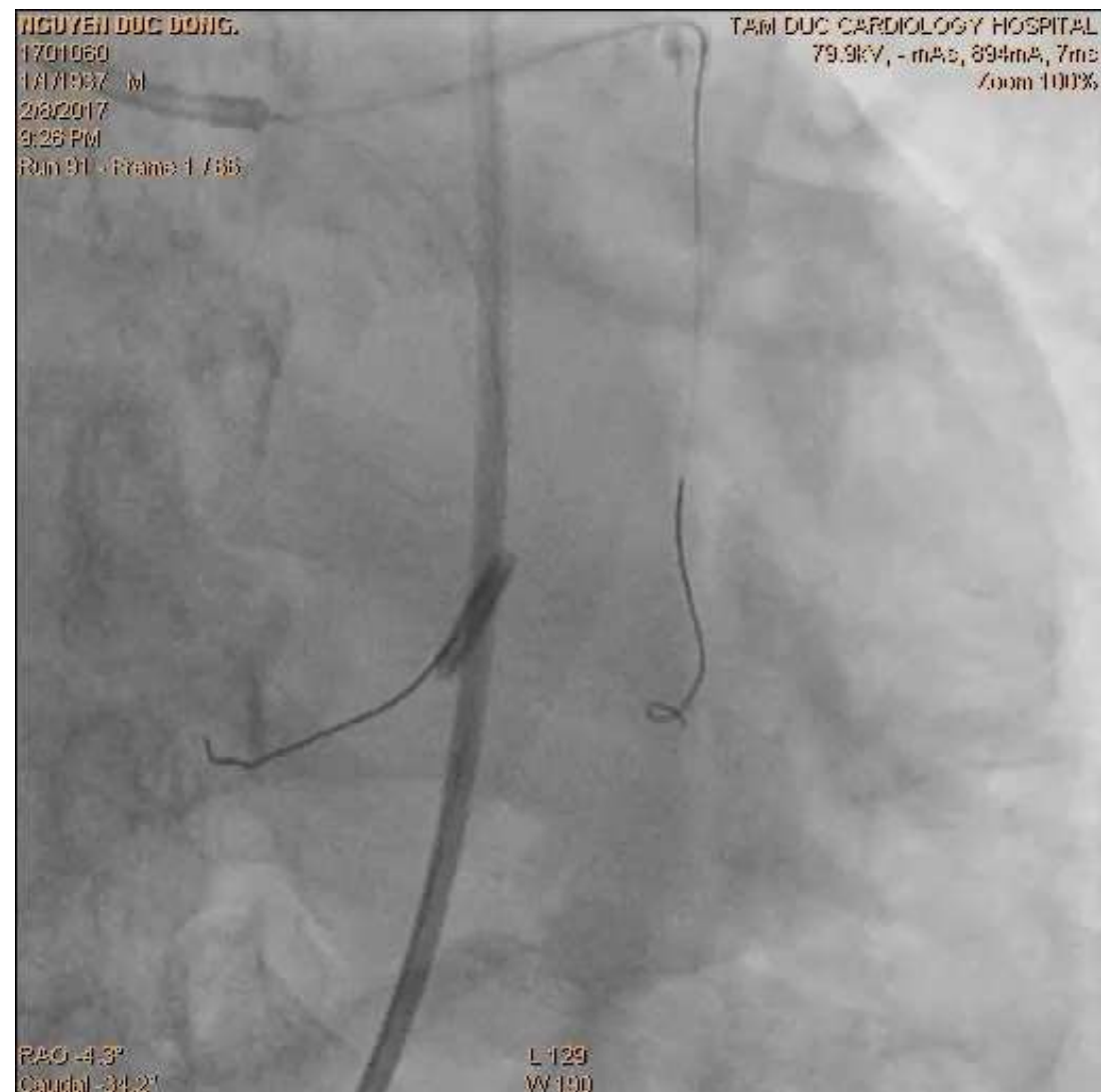
# Procedure (LAD balloons 1.5x15/ 2.5x15 NC/ 3.0x15 @ 24 atm)



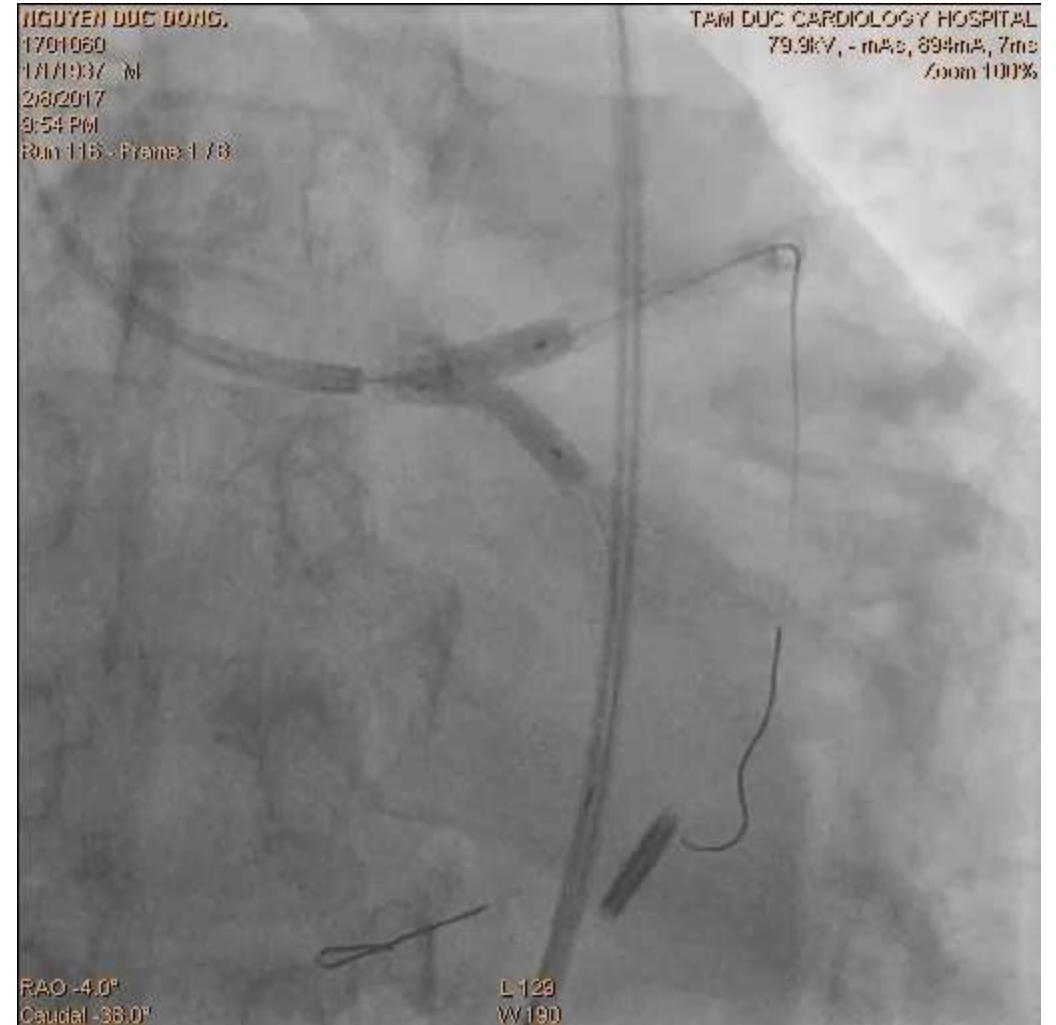
# Procedure (LAD- LM balloons 3.0x15/ 3.5x15 mm OPN NC @ 28 atm)



# Stent (LAD 2.75x30/ 3.0x26 mm BP SES & LCx 3.0x22 mm BP SES)



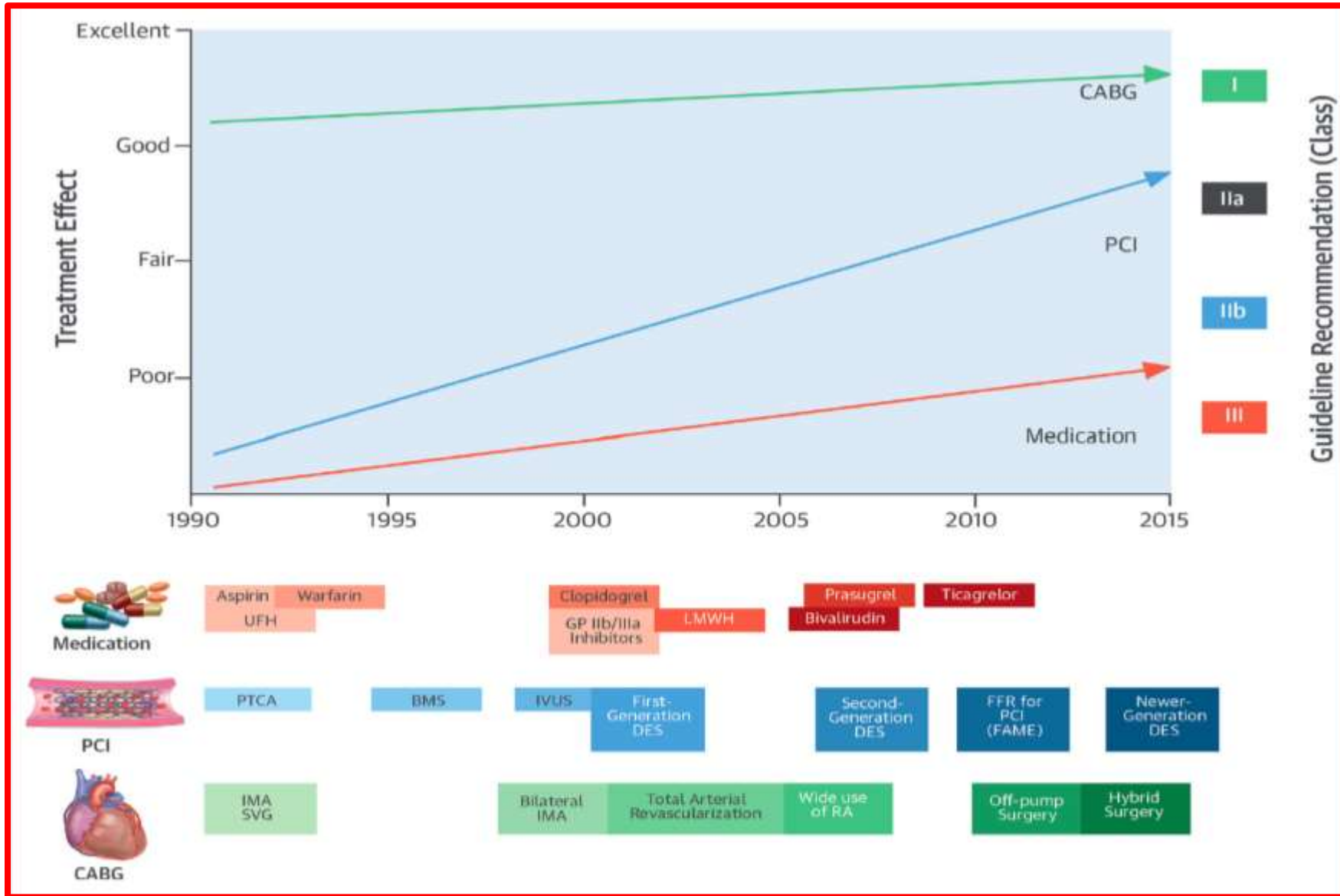
# LM-LAD 3.5x 15 mm BP SES & LCx 3.0x15 mm SES POT (4.0x9 mm @ 12 atm) & FKB



# Final shots



# Bridging the Gap between CABG and PCI for Unprotected LM disease



*Thank you  
for your attention!*

Welcome to Vietnam!



**E**ndovascular  
**C**ardiac  
**C**omplications

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**The 1st Asian International Congress  
on Complications during PCI:  
Prevention & Management**  
[www.ecc-conference.com](http://www.ecc-conference.com)