

Challenging case competition with Expert Focus Review

Speaker - 15'

Alaide Chieffo

S. Raffaele Hospital Milan, Italy

International meeting

Disclosure Statement of Financial Interest

I, Alaide Chieffo DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.

February 10-12, 2011
Rome, Italy

International meeting

SYNTAX Trial Design



62 EU Sites

+



3 US Sites

Heart Team (surgeon & interventionalist)

Amenable for both
treatment options

Amenable for only one
treatment approach

Stratification:
LM and Diabetes

Randomized Arms
N=1800

Two Registry Arms
N=1275

CABG
N=897

vs

TAXUS*
N=903

CABG
N=1077

PCI
N=198

DM
28.5%

Non DM
71.5%

DM
28.2%

NonDM
71.8%

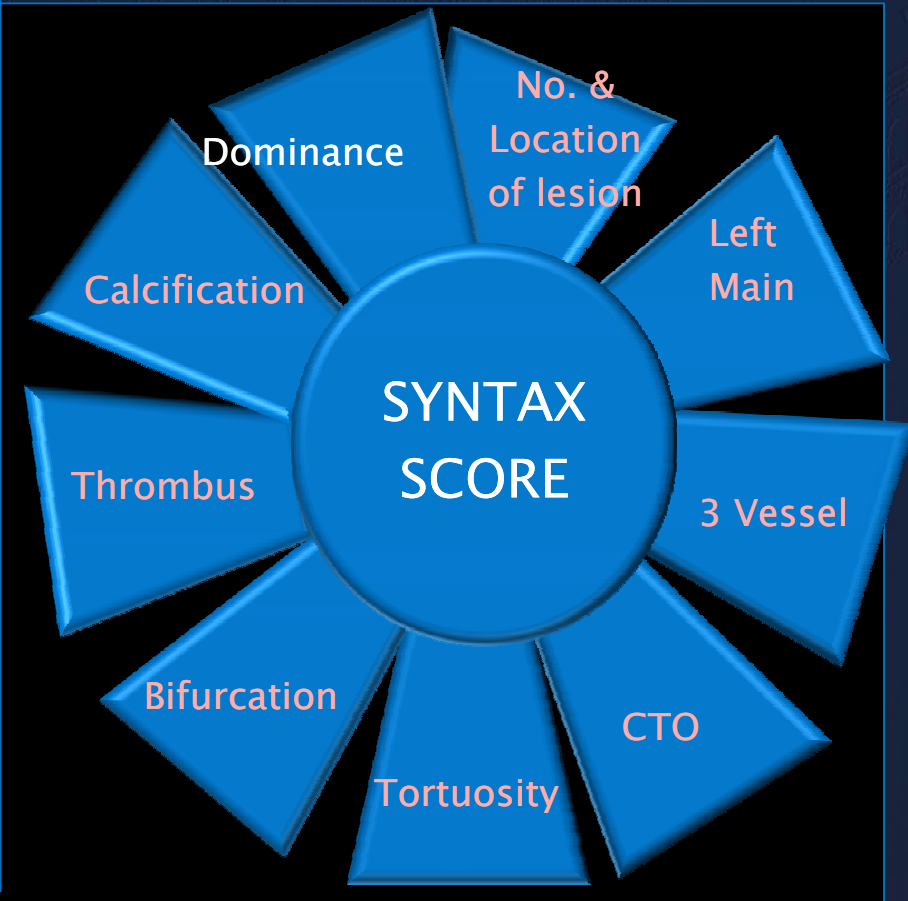
* TAXUS Express

Patient Profiling



Local Heart team (surgeon & interventional cardiologist) assessed each patient in regards to :

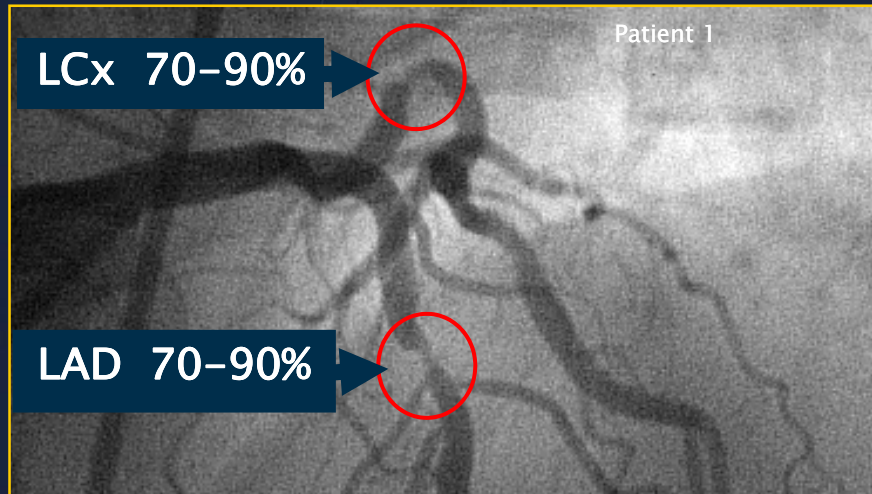
- Patient's operative risk (EuroSCORE & Parsonnet score)
- Coronary lesion complexity (Newly developed SYNTAX score)
- Goal: SYNTAX score to provide guidance on optimal revascularization strategies for patients with high risk lesions



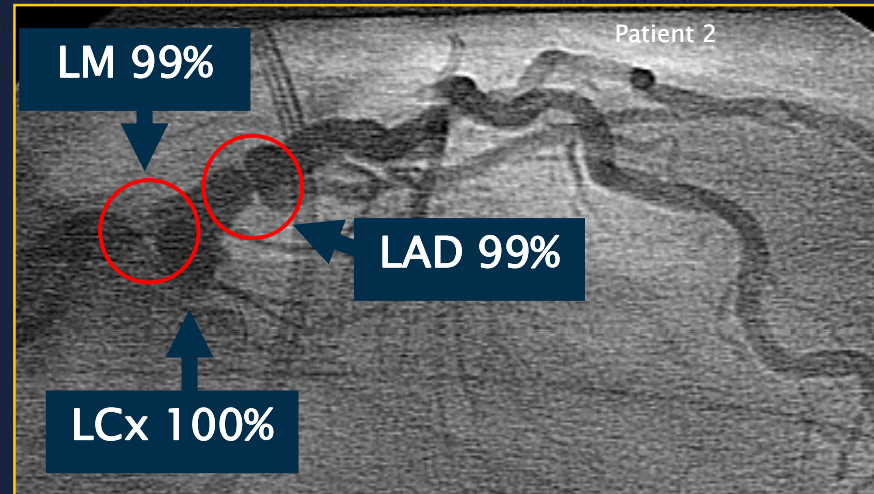
Sianos et al, EuroIntervention 2005;1:219-227
Valgimigli et al, Am J Cardiol 2007;99:1072-1081
Serruys et al, EuroIntervention 2007;3:450-459

BARI classification of coronary segments
Leaman score, Circ 1981;63:285-299
Lesions classification ACC/AHA, Circ 2001;103:3019-3041
Bifurcation classification, CCI 2000;49:274-283
CTO classification, J Am Coll Cardiol 1997;30:649-656

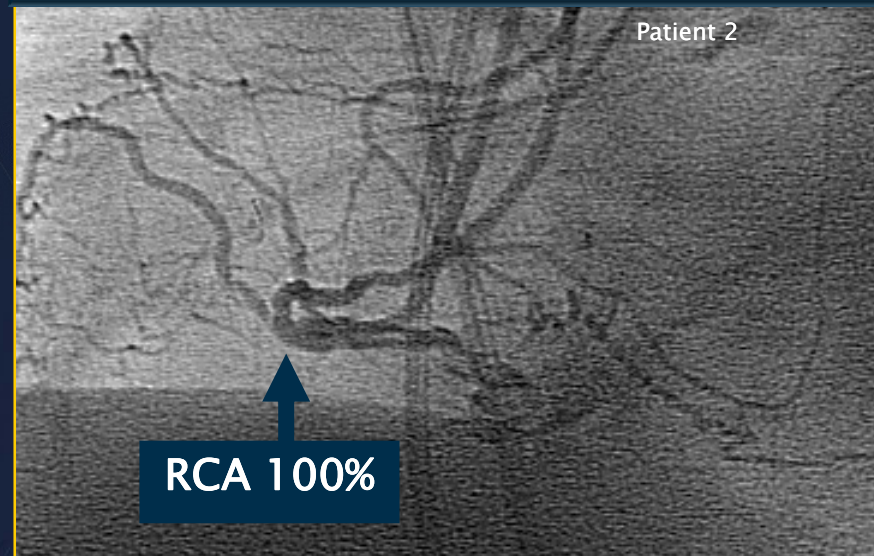
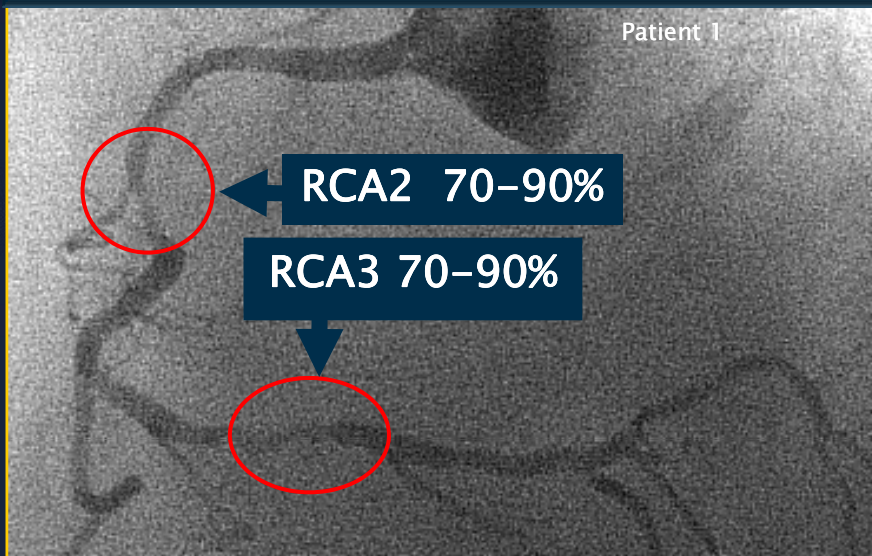
There is '3-vessel disease' and '3-vessel disease'



SYNTAX SCORE 21



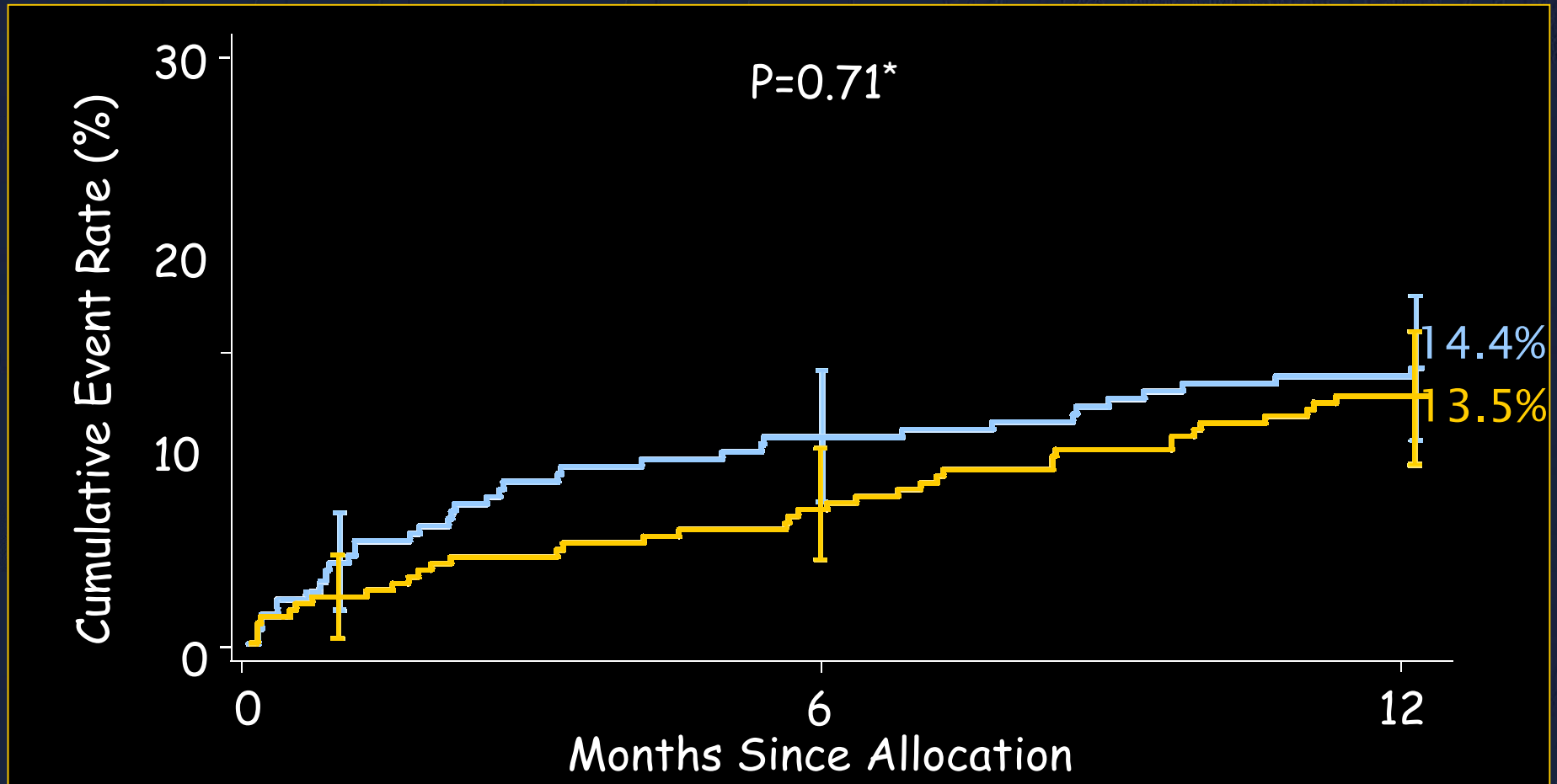
SYNTAX SCORE 52



MACCE to 12 months vs SYNTAX Score: Low scores (0-22)

■ CABG (N=274)

■ TAXUS (N=299)

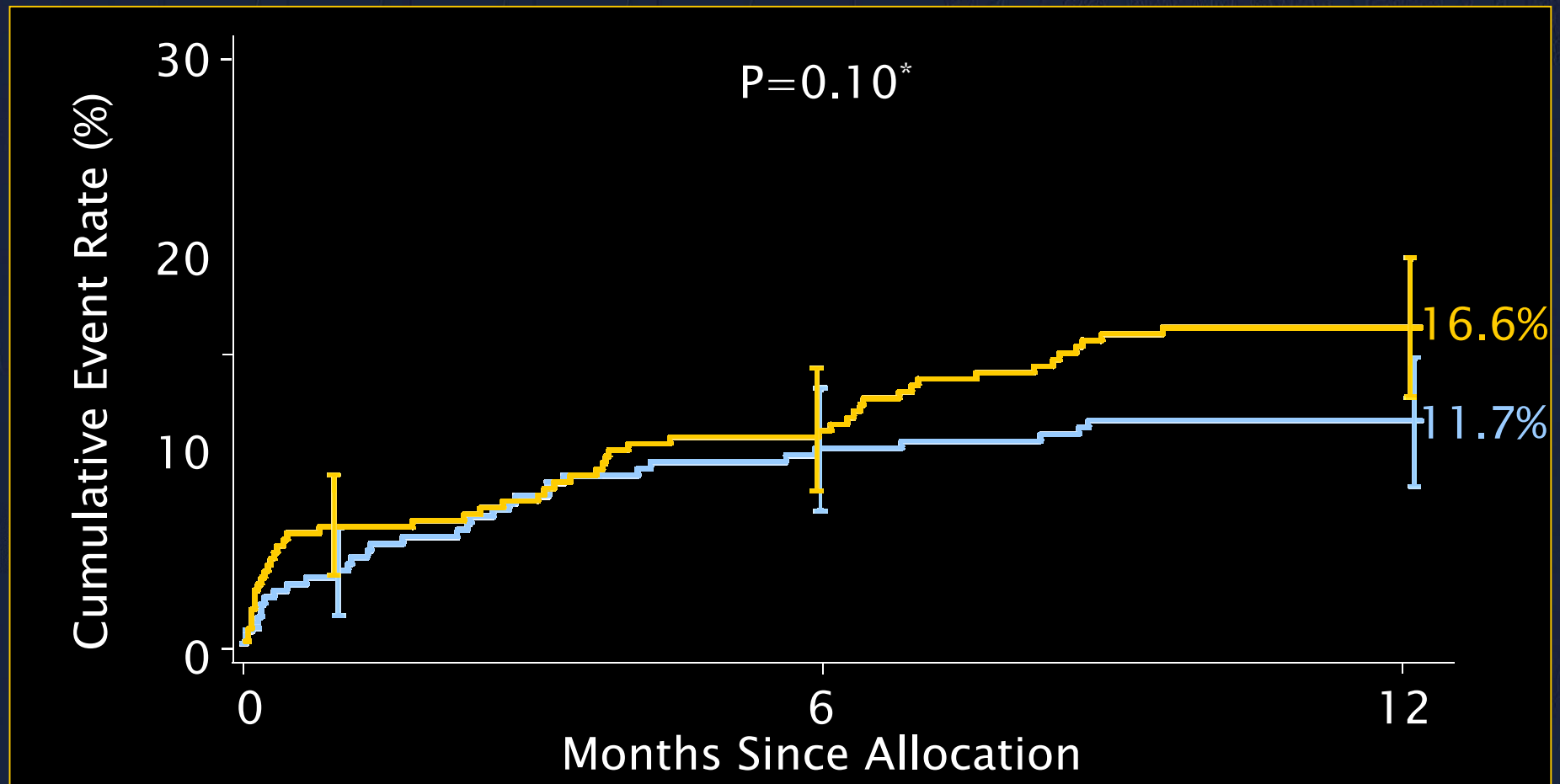


Event Rate \pm 1.5 SE; *chi square test; raw SYNTAX score for illustrative purposes only RCT ITT pts; site-reported data

MACCE to 12 months vs SYNTAX Score: Intermediate scores (23-32)

■ CABG (N=300)

■ TAXUS (N=310)

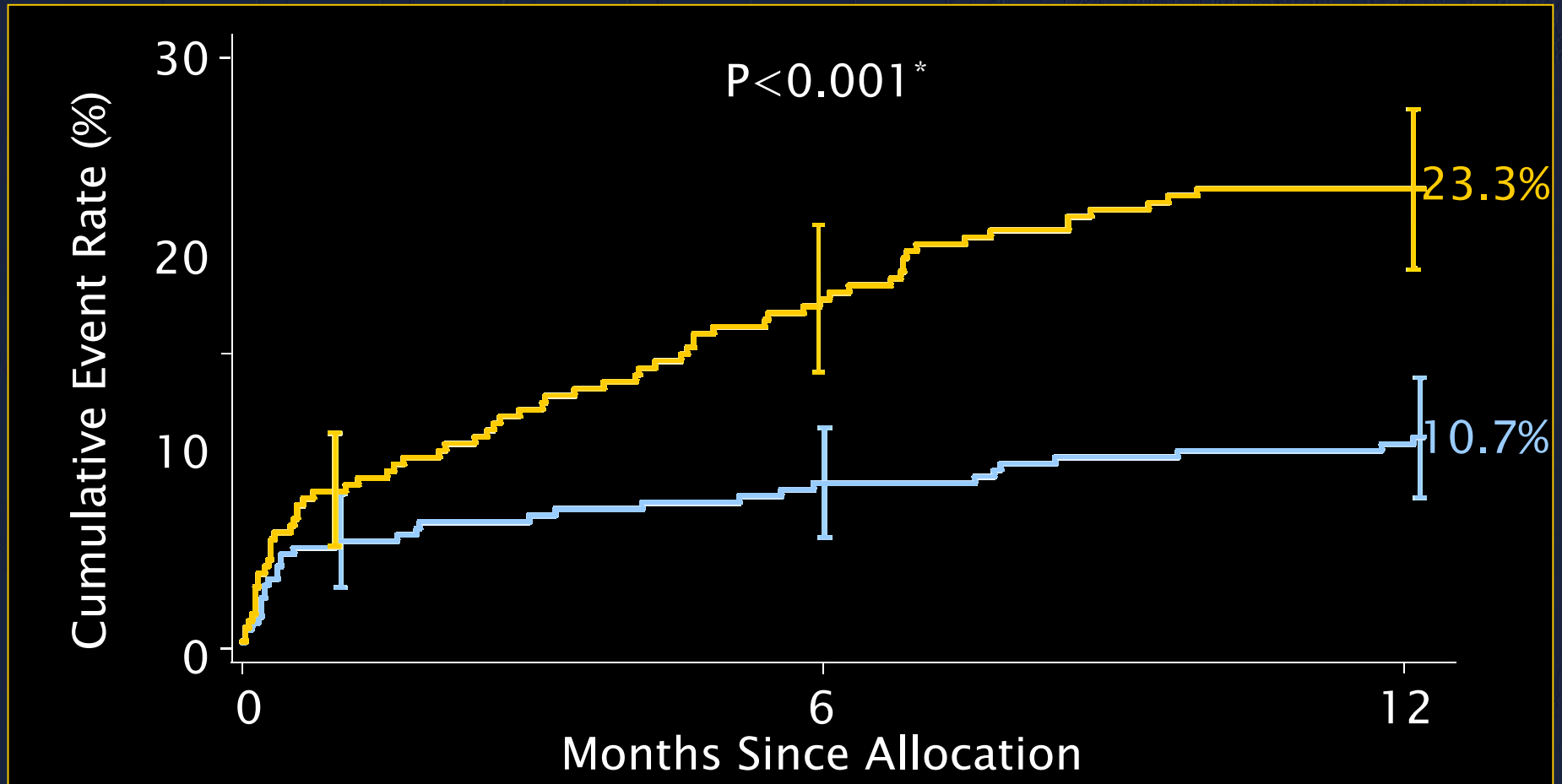


Event Rate \pm 1.5 SE; *chi square test; raw SYNTAX score for illustrative purposes only RCT ITT pts; site-reported data

MACCE to 12 months vs SYNTAX Score: High scores (≥ 33)

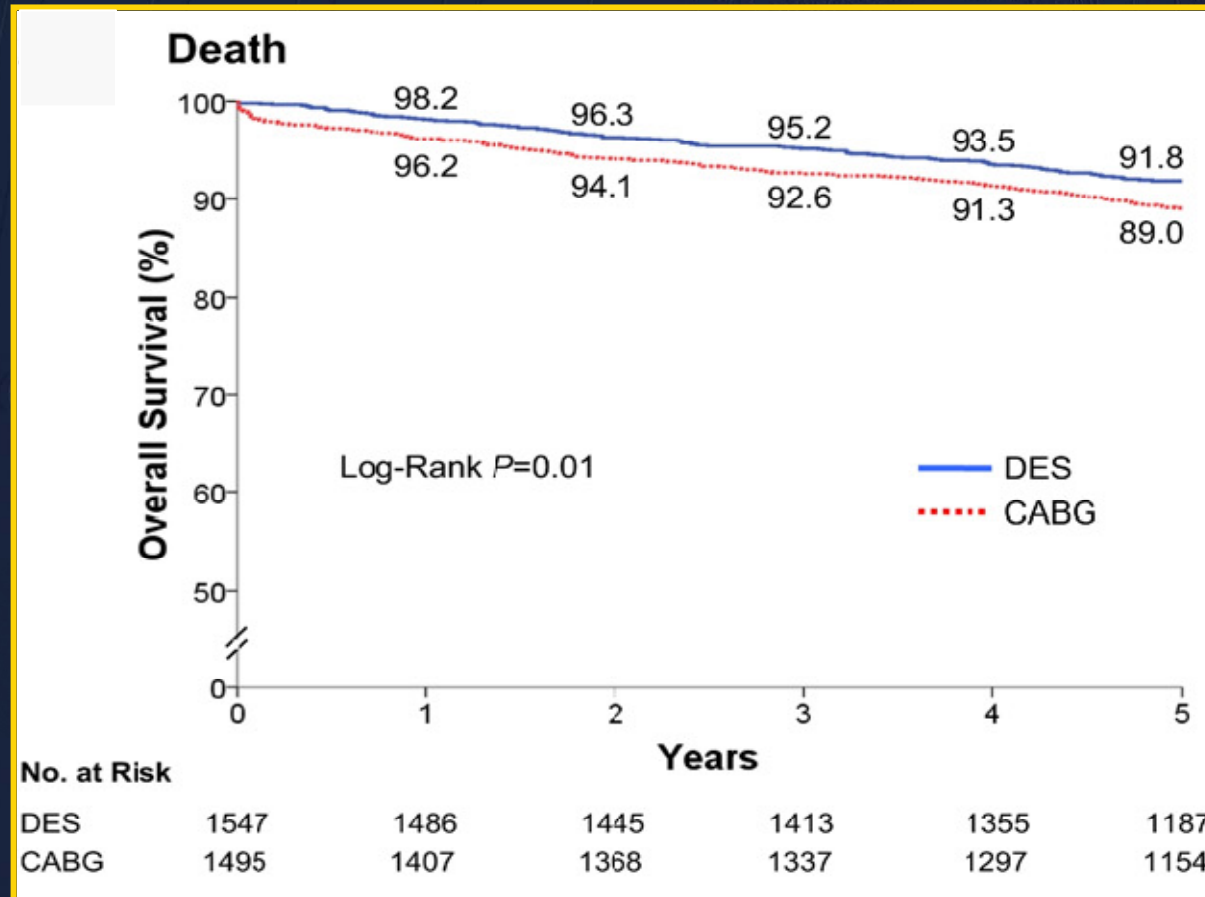
 CABG (N=316)

 TAXUS (N=290)

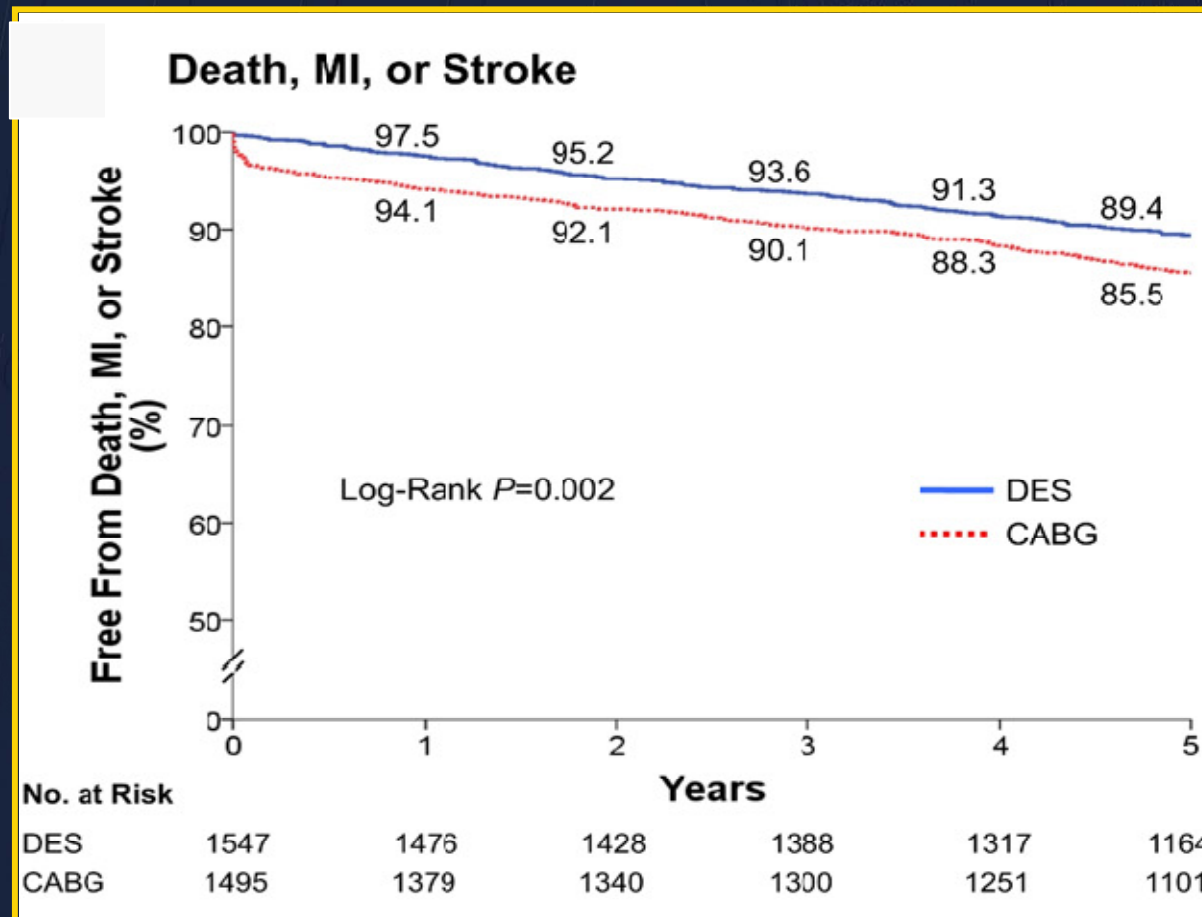


Event Rate \pm 1.5 SE; *chi square test; raw SYNTAX score for illustrative purposes only RCT ITT pts; site-reported data

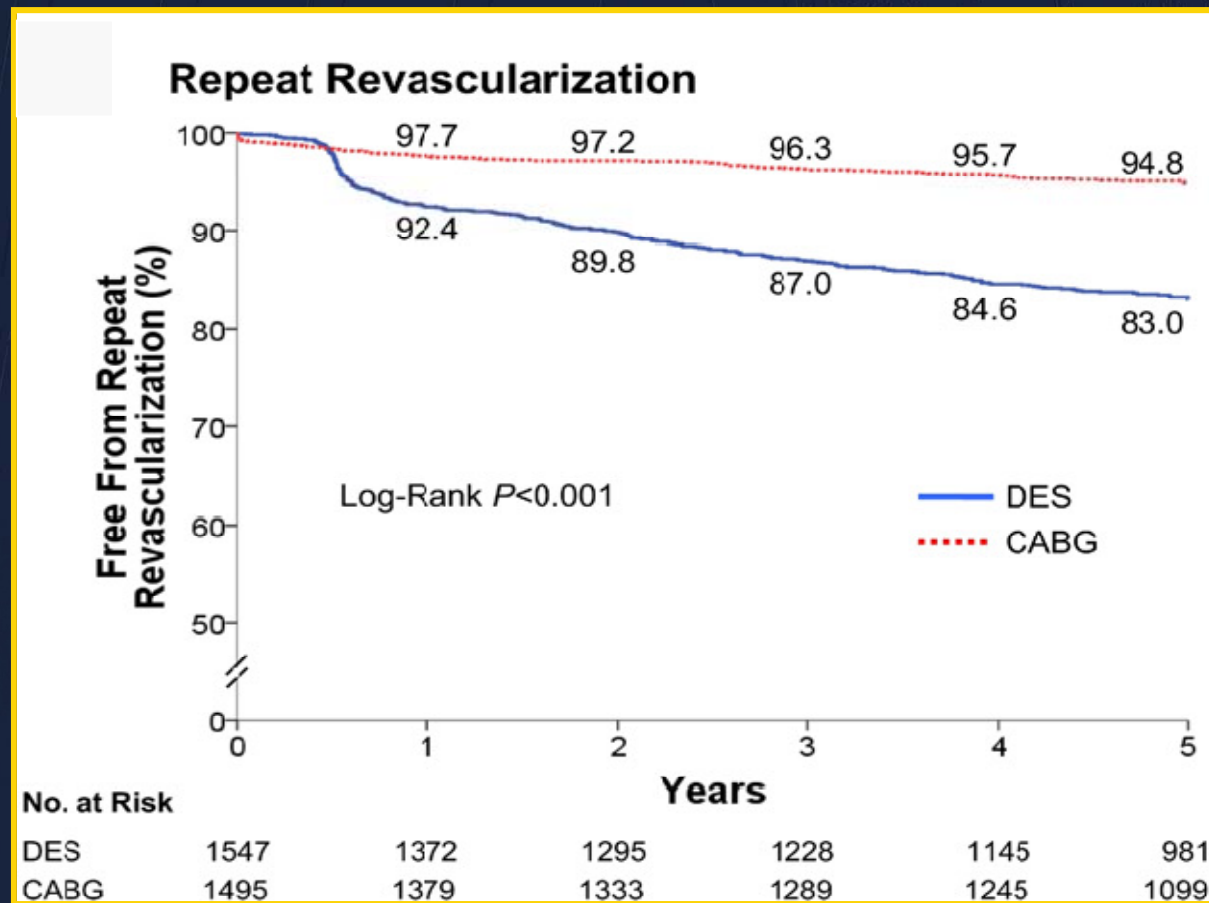
Kaplan-Meier Curves of 5-Year Outcomes for Overall Patients Who Received DES or CABG



Kaplan-Meier Curves of 5-Year Outcomes for Overall Patients Who Received DES or CABG



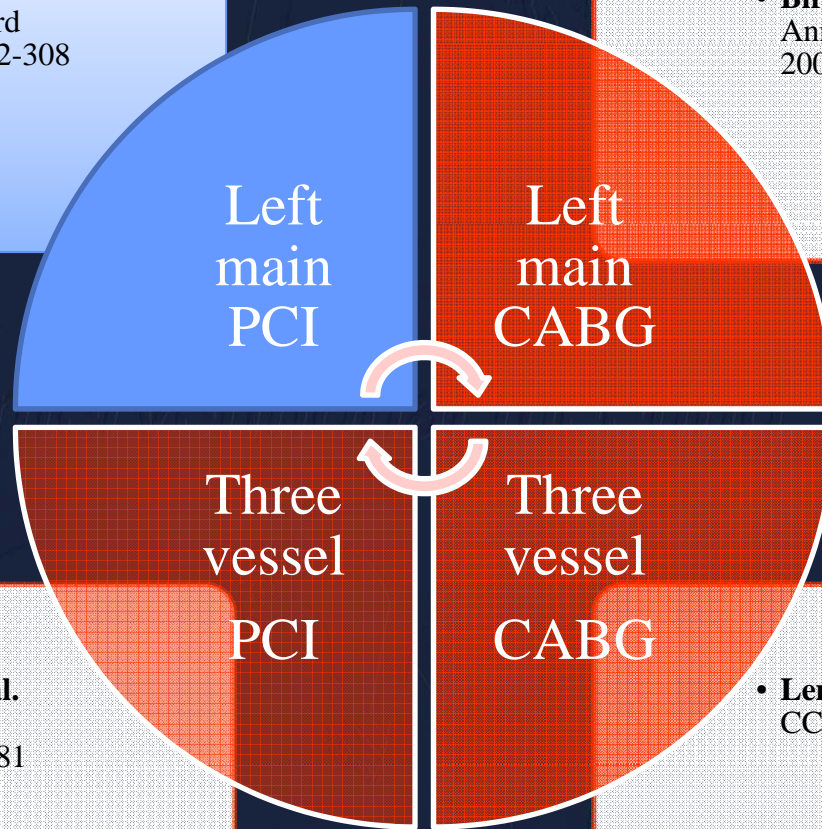
Kaplan-Meier Curves of 5-Year Outcomes for Overall Patients Who Received DES or CABG



Validation of SYNTAX score

• **Capodanno et al.**
Circulation Card
Intv 2009;2:302-308

• **Birim et al.**
Ann Thorac Surg.
2009;87:1097-104



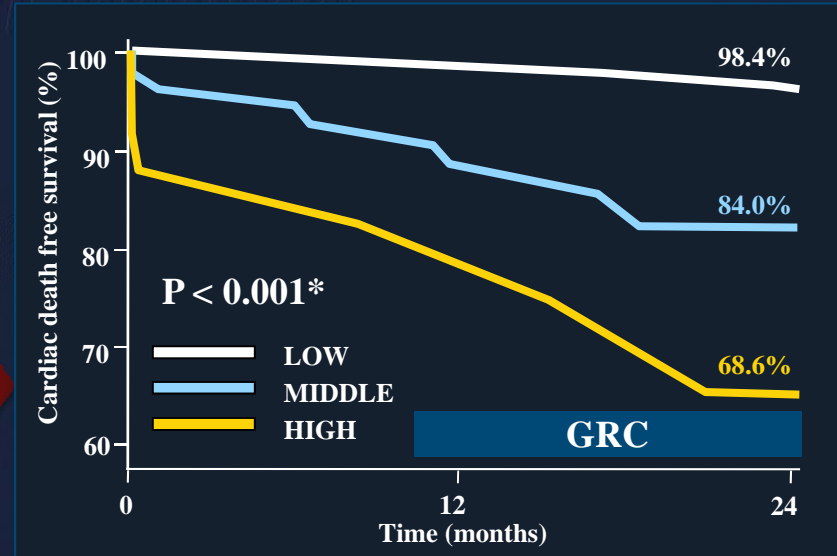
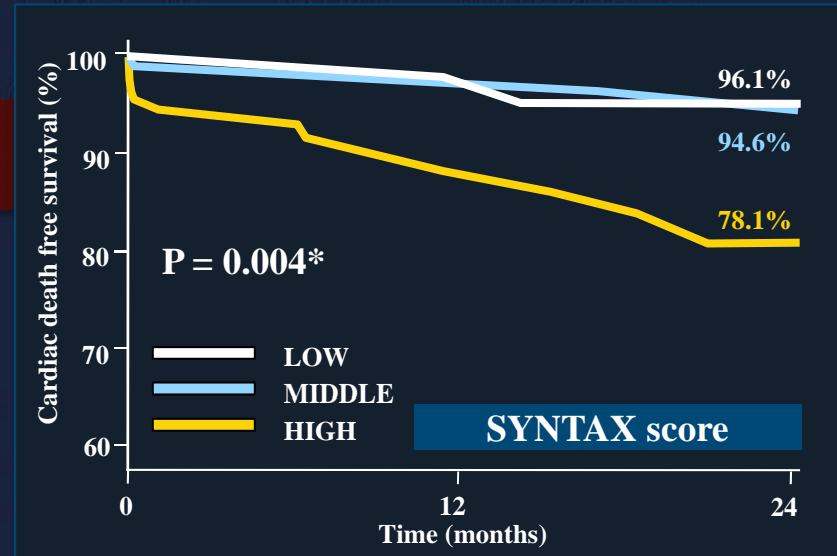
• **Valgimigli et al.**
Am J Cardiol.
2007;99:1072-81

• **Lemesle et al.**
CCI 2009;73:612-7.



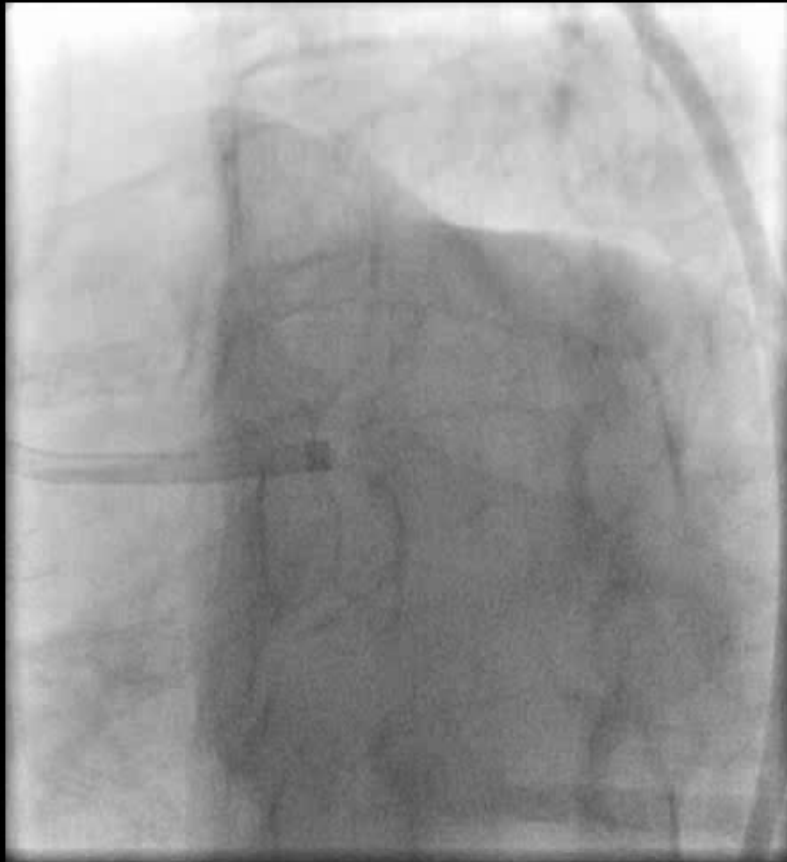
The Global Risk Classification (GRC)

		SYNTAX score		
		< 19	19-27	> 27
EuroSCORE	0-2	L	L	I
	3-6	L	L	I
	> 6	I	I	H



* log rank test; n = 255 LM patients undergoing PCI

LM and Multivessel disease- IVUS and FFR guided



Baseline

Rome, Italy

International Meeting



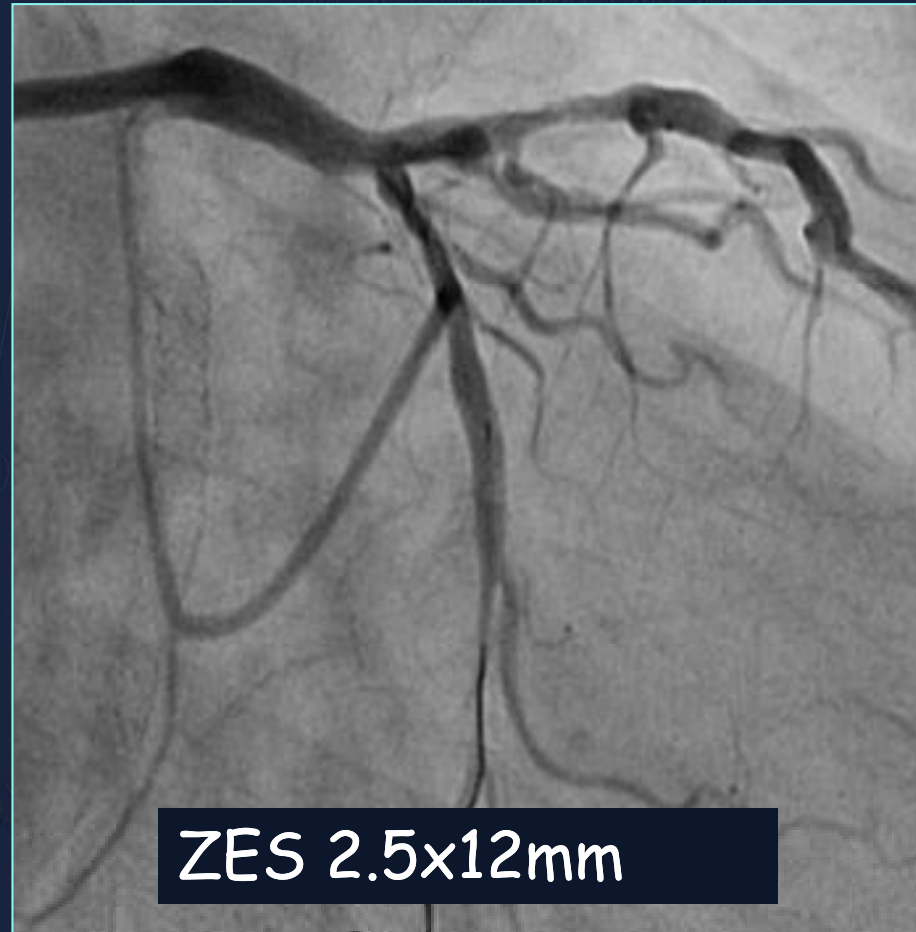
Baseline

February 10-12, 2011
Rome, Italy

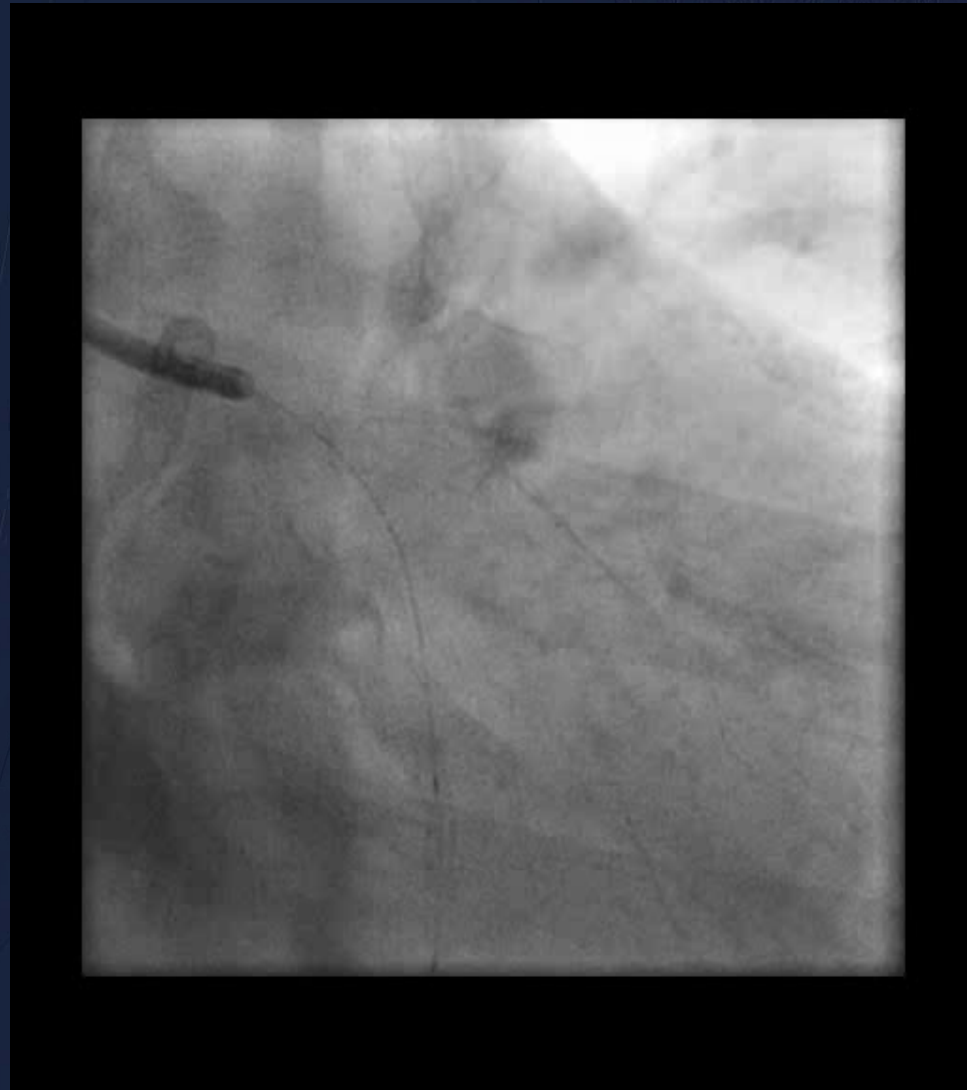
International Meeting



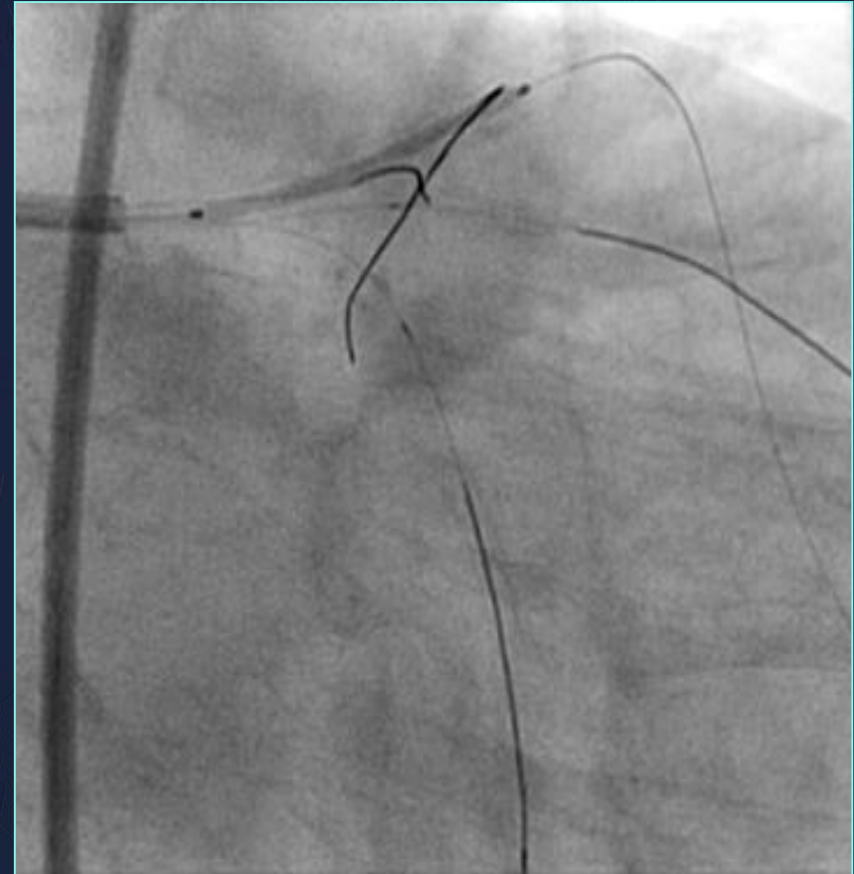
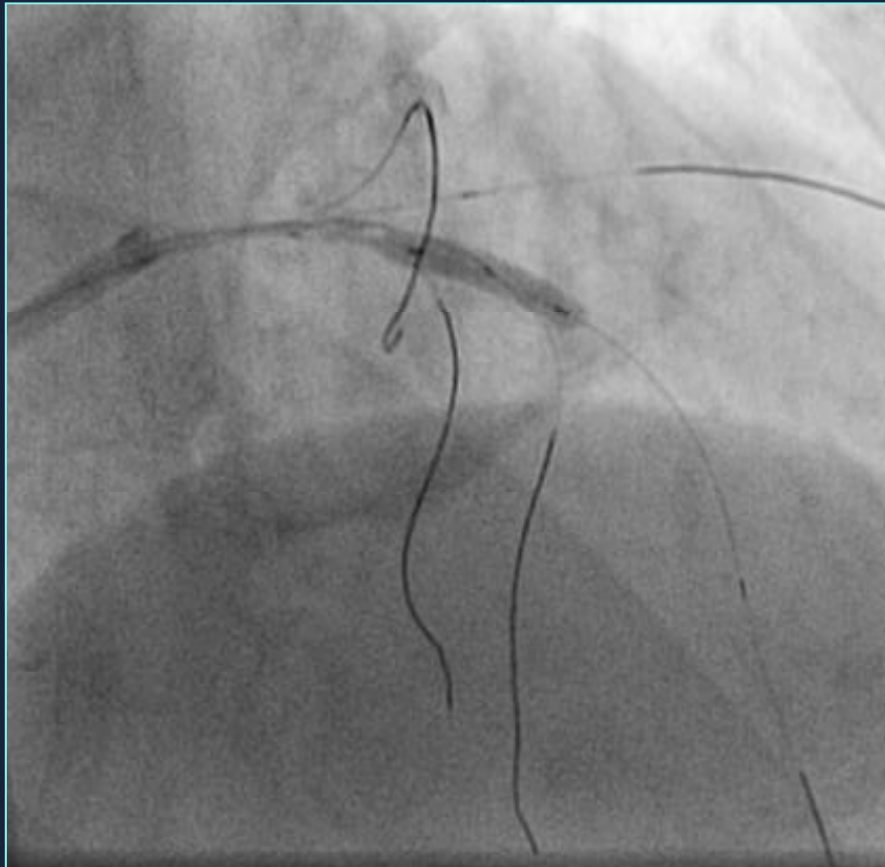
Baseline



After stent



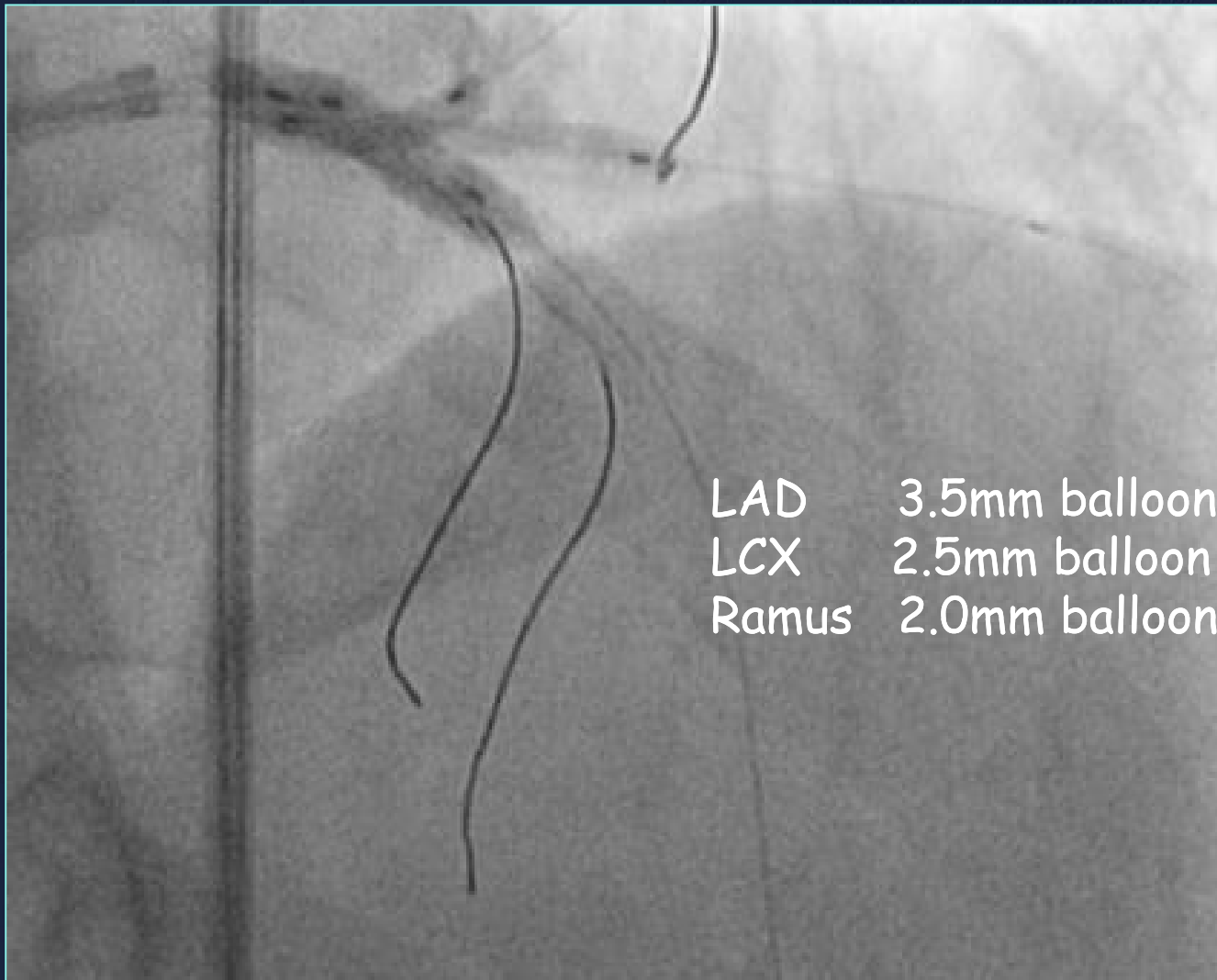
After stent



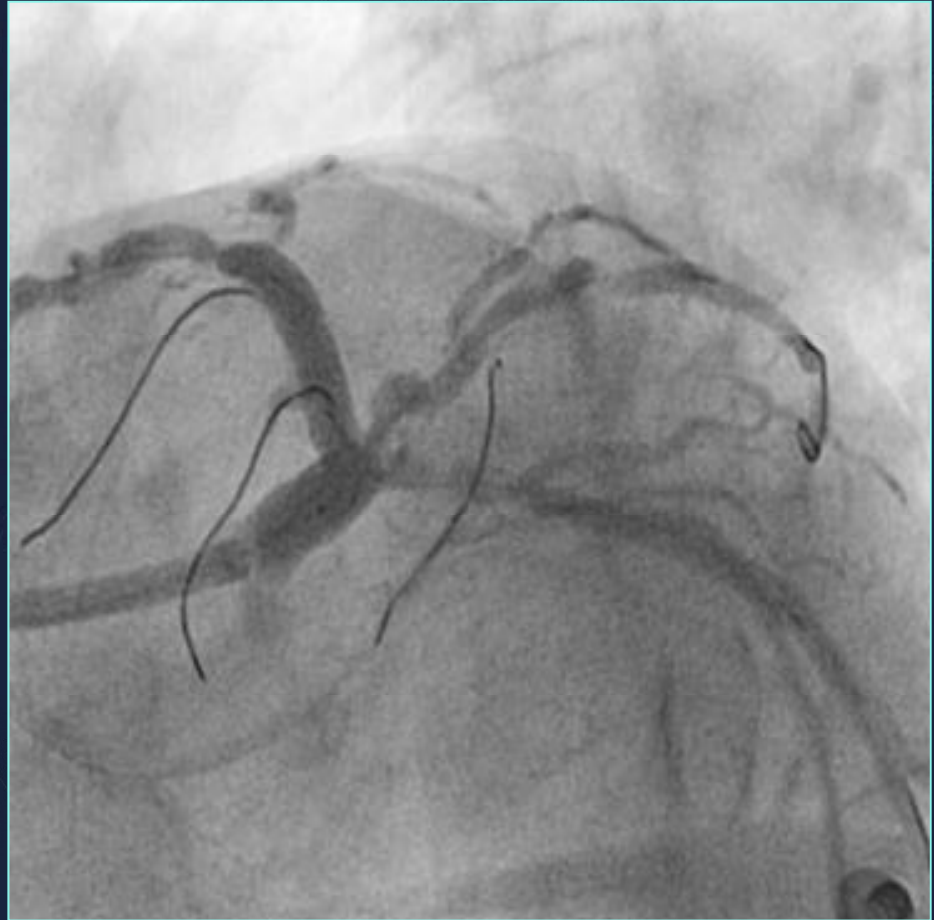
**Predilation of LAD with wire protection of 2
Septals, Intermediate and Circumflex**



ZES 3.5x30mm

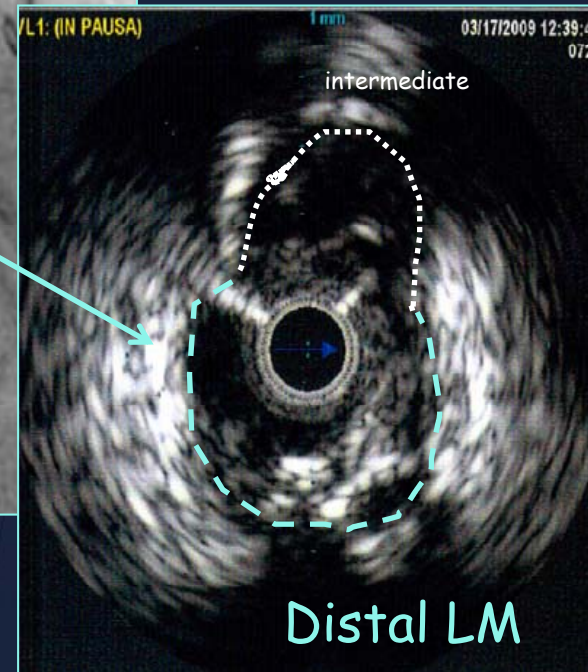
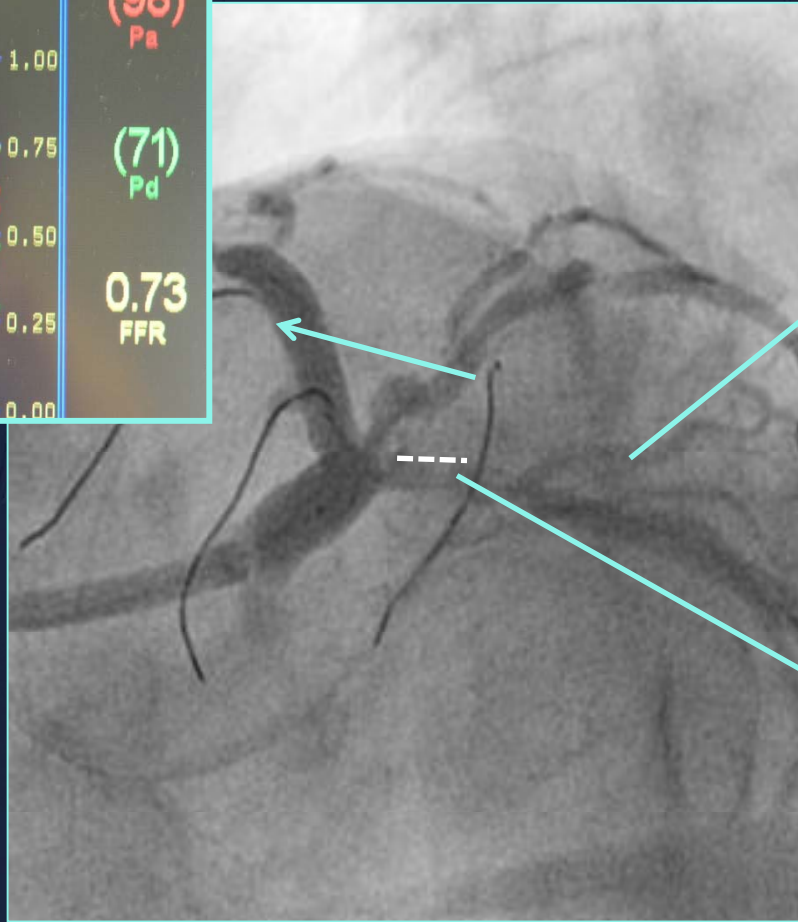
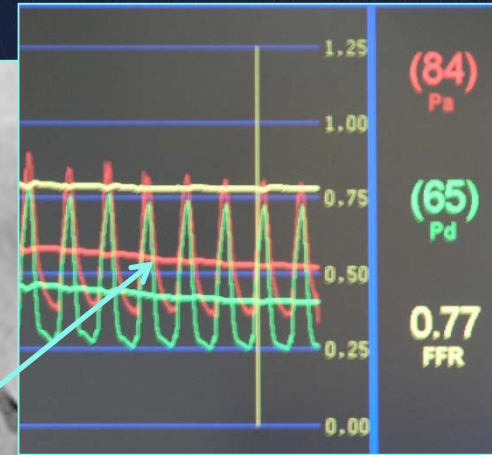


Kissing Inflation after stenting of LAD/LM

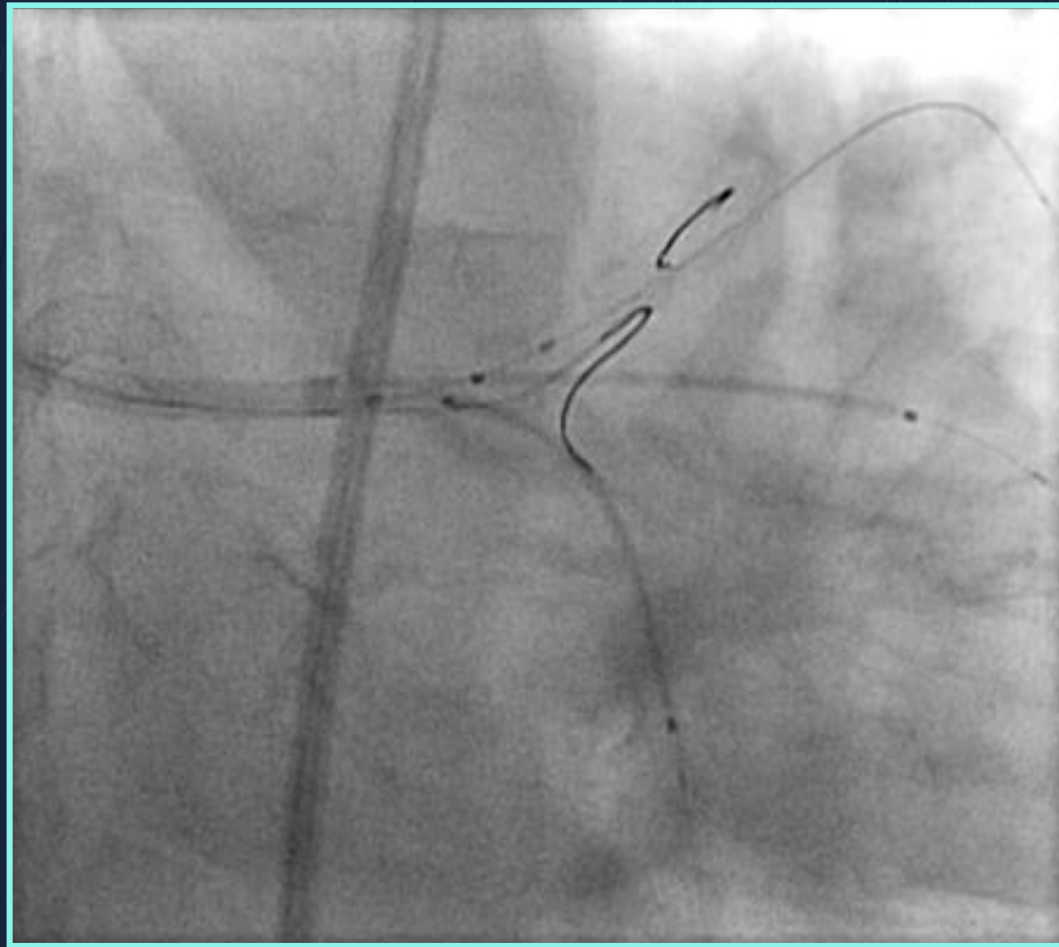


February 10-12, 2011
Rome, Italy

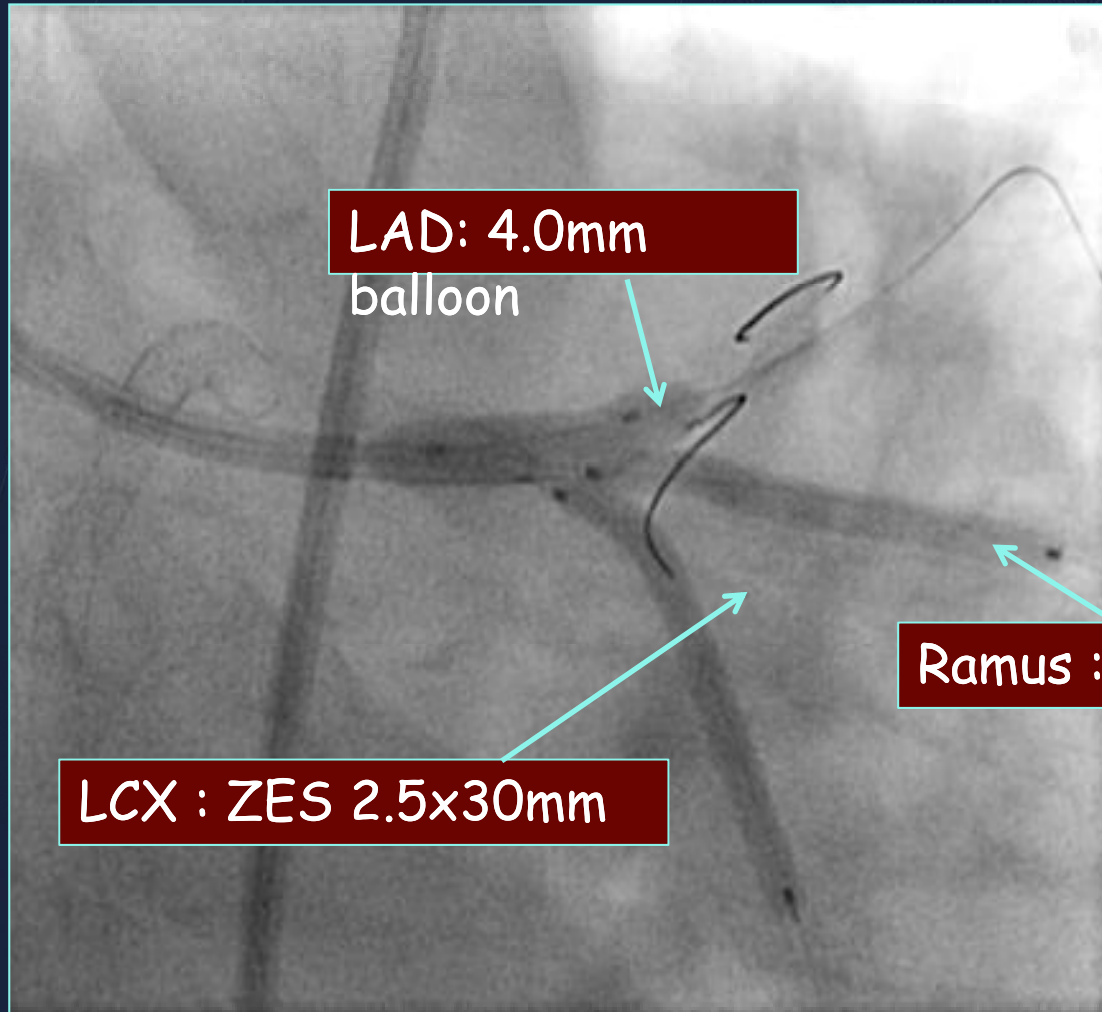
**After Kissing Inflation and LAD
stenting**



After Kissing
Inflation



T stenting towards Cx and
Intermediate with 4 mm Balloon
inflated in LAD

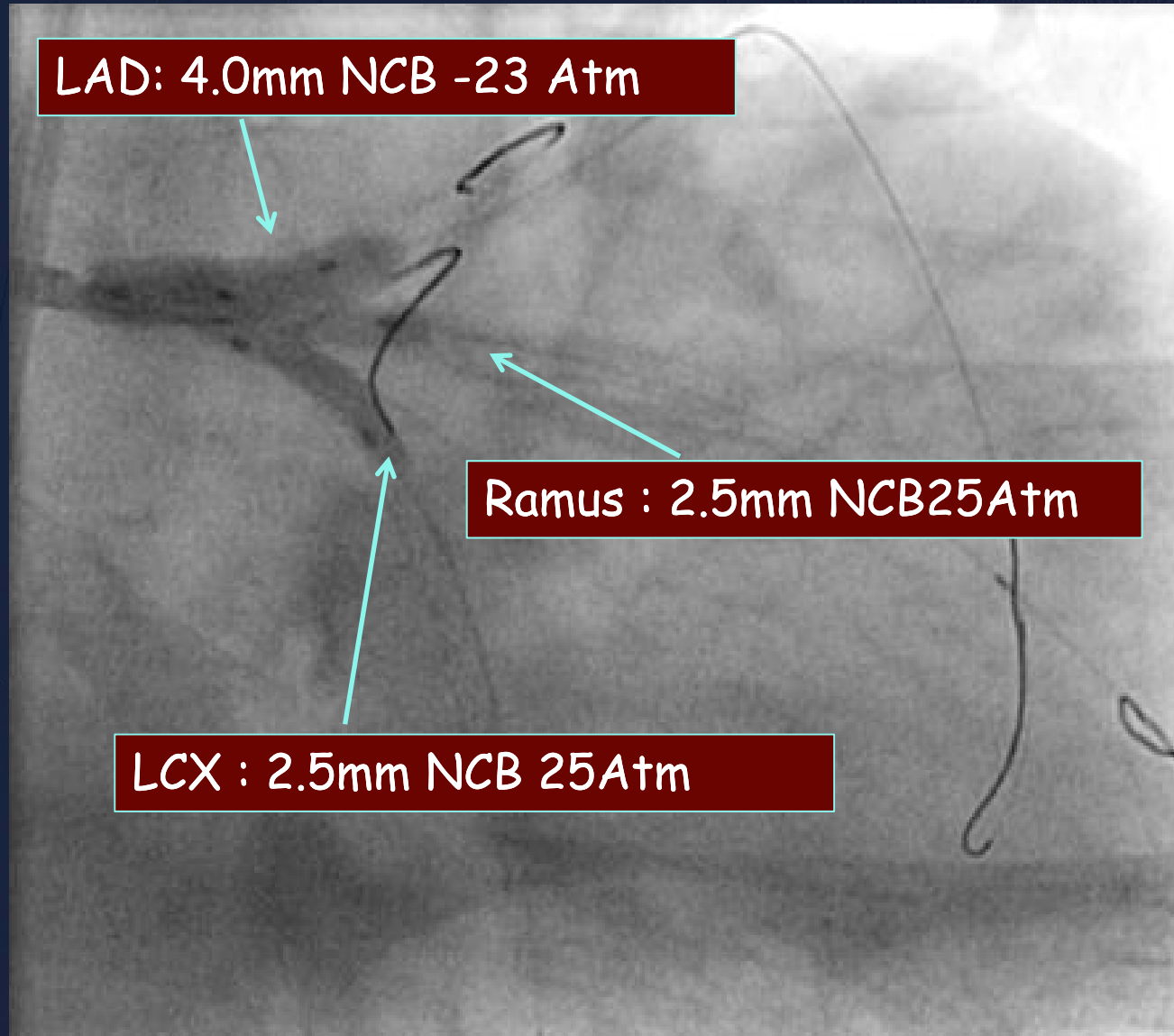


LAD: 4.0mm

balloon

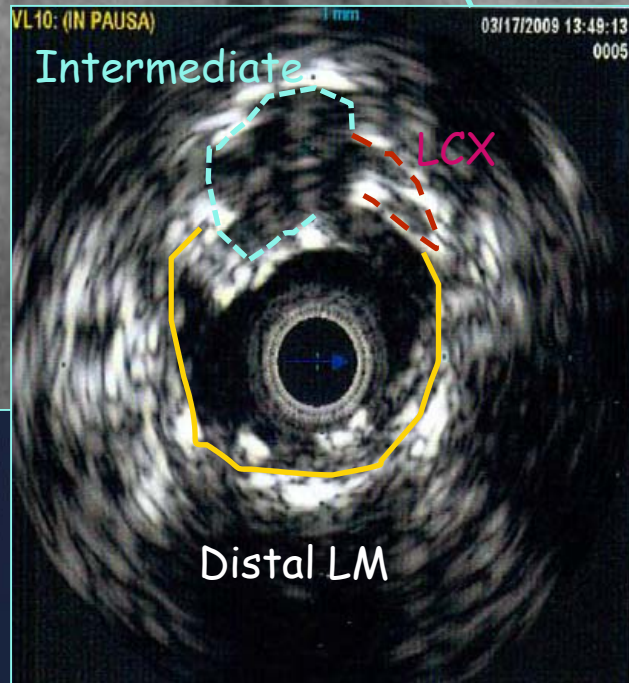
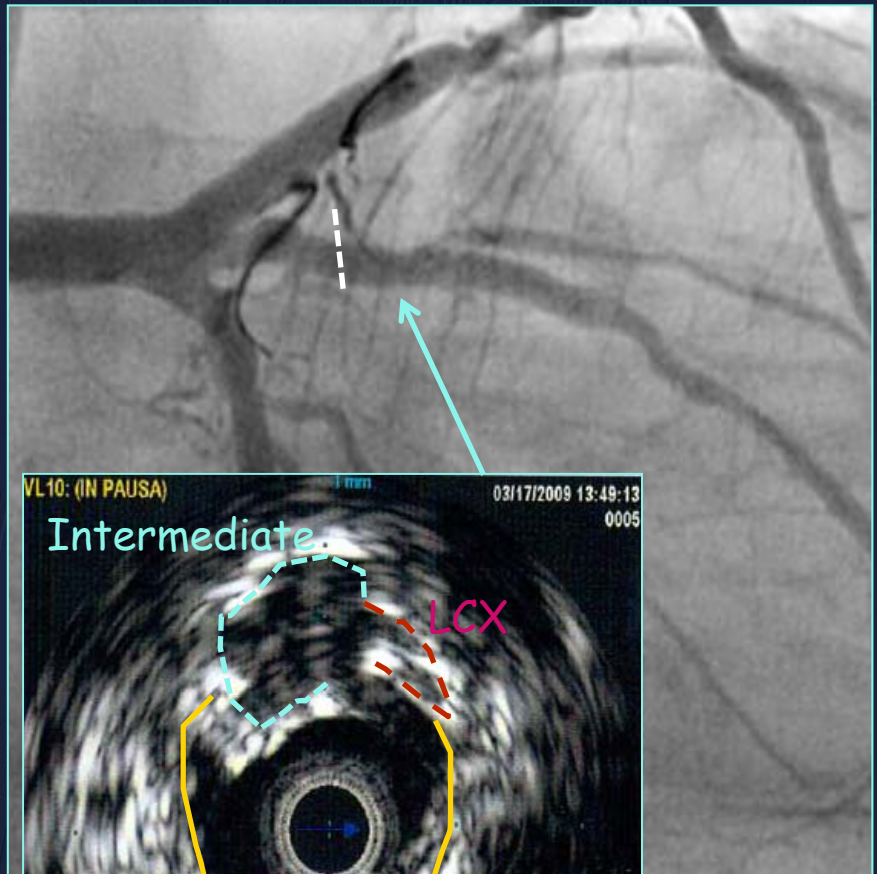
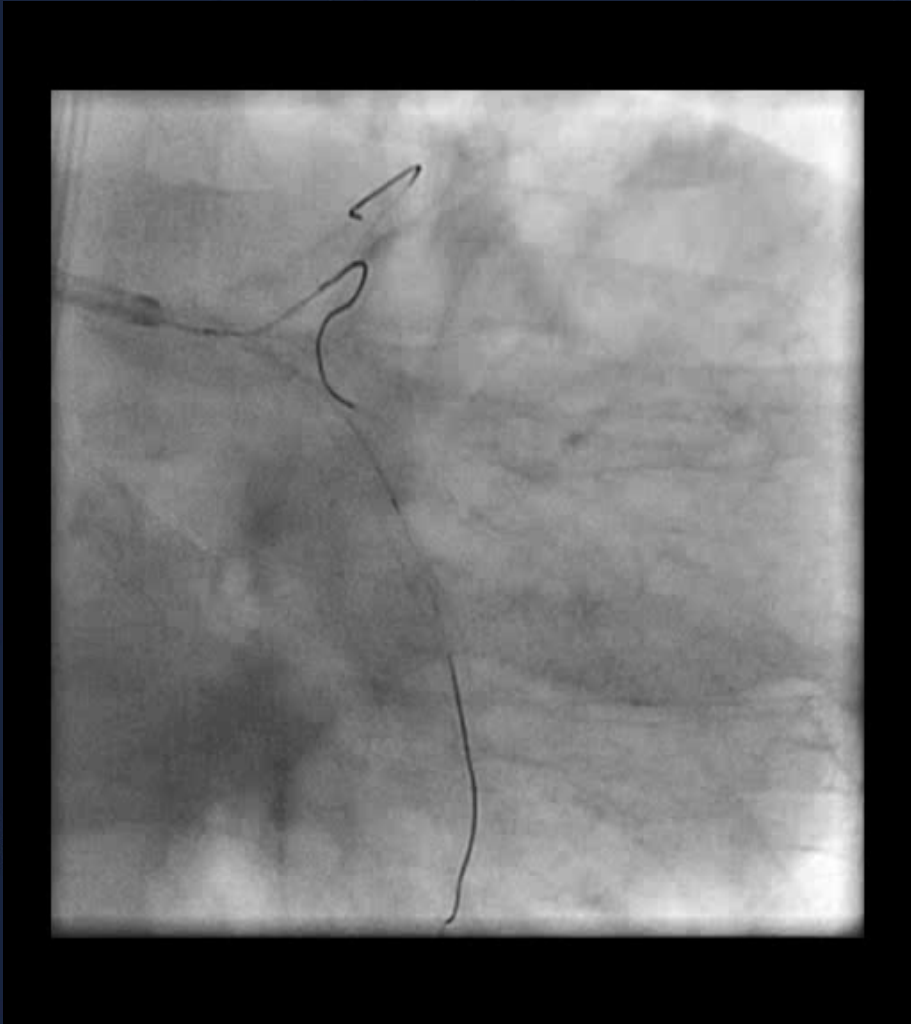
Ramus : ZES 2.5x30mm

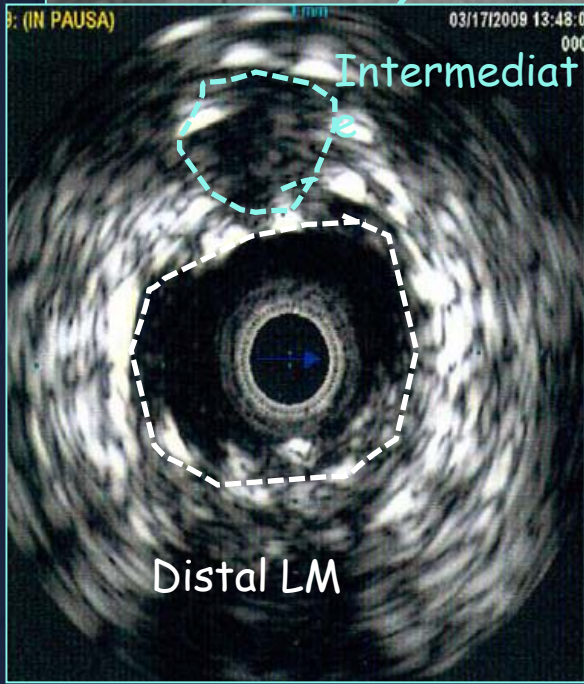
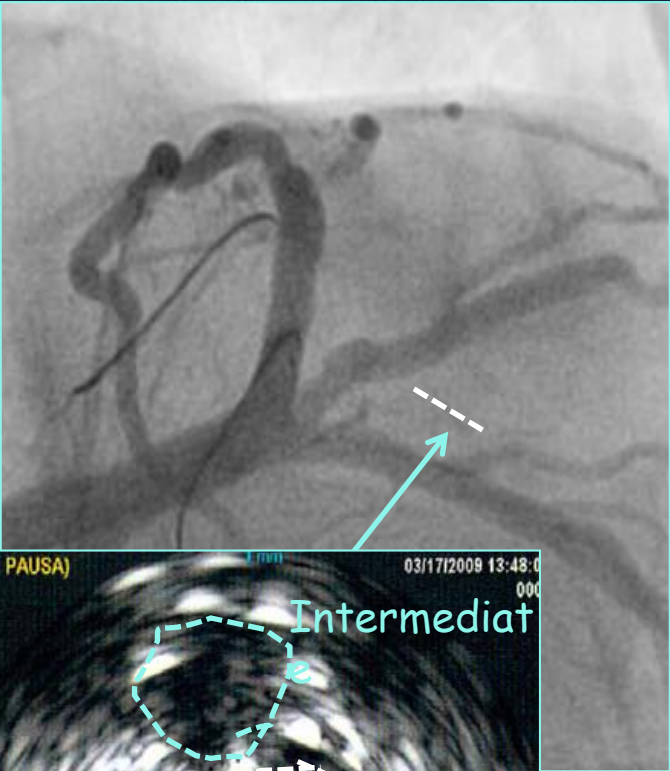
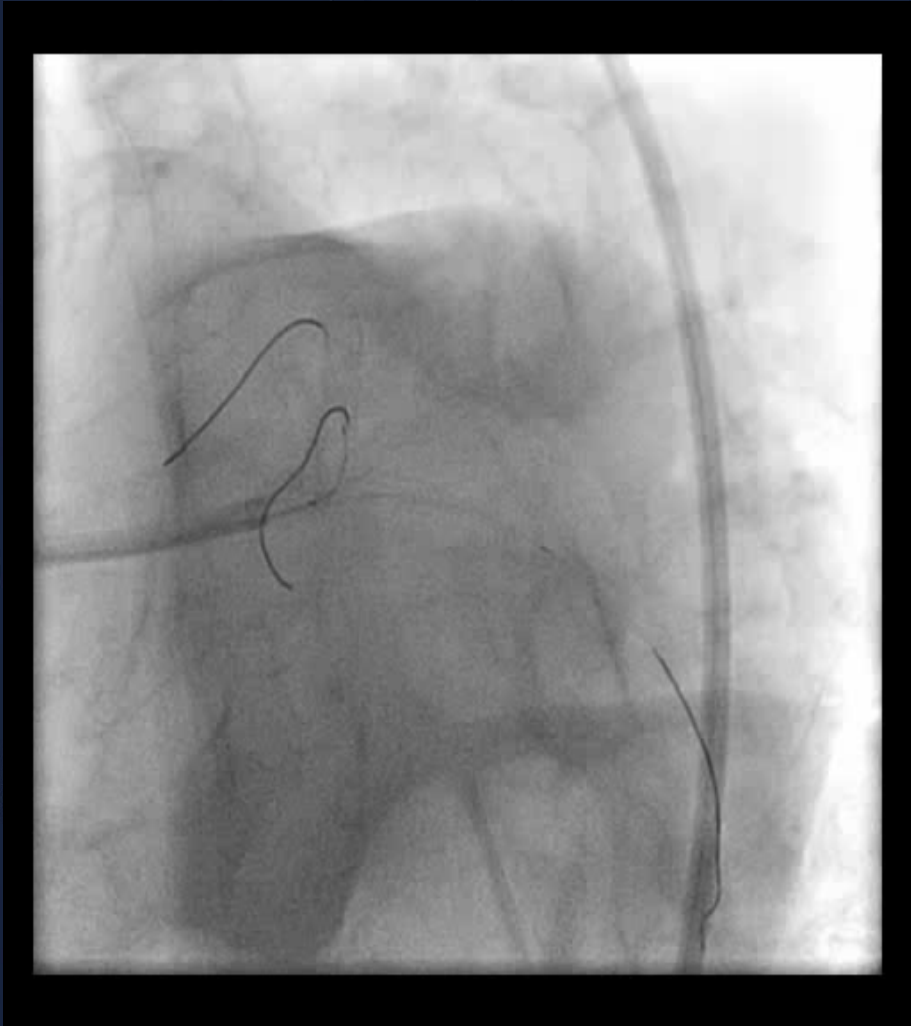
LCX : ZES 2.5x30mm



High pressure NCB

10-12-2011







Final Result

27287/09CC



Final Result



Final Result

Conclusions I

- In case of complex coronary cases (3 VD with or wo ULMCA) risk stratification is crucial in order to decide the best therapeutical approach to use (PCI vs CABG)
- MV disease with or wo LM with a Syntax score >33 is still a CABG indication.

February 10-12, 2011
Rome, Italy

International meeting

Conclusions II

- There are also characteristics not included in Scores (porcelain aorta, etc) to be considered
- IVUS and/or FFR guidance is advisable in complex lesions
- Good lesion preparation and postdilatation with NCB is recommended.

February 10-12, 2011
Rome, Italy

International meeting