

**PRAMI Trial**  
Preventative” PCI of Non-culprit  
Lesions after Culprit Lesion Primary  
PCI in STEMI  
**A Big Challenge, but Execution  
Doubtful!**

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# DISCLOSURE

Relevant Financial Relationship(s)

None

# The PRAMI Trial

## Procedural Variables

465 pts at 5 UK sites with MVD; after successful primary PCI randomized to NCL PCI of 50-99% stenoses vs. conservative care

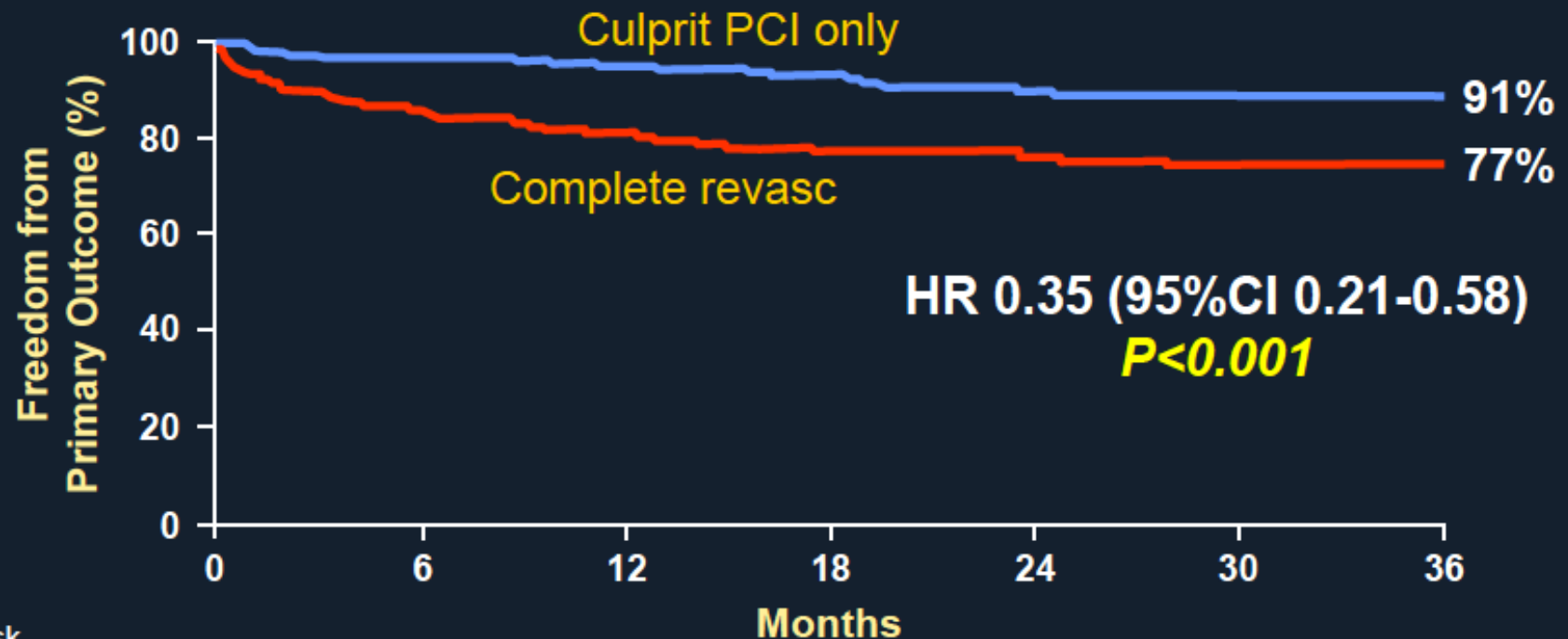
Variable	Complete revasc (N=234)	Culprit PCI only (N=231)	Variable	Complete revasc (N=234)	Culprit PCI only (N=231)
<u>PCI infarct artery</u>			<u>Non-infarct artery</u>		
N stents per artery	1.56±0.75	1.42±0.70	N vessels rx'd per pt	1.36±0.77	-
Stent length, mm	21.8±6.7	21.3±5.6	N stents per artery	1.29±0.53	-
Stent diameter, mm	3.2±0.4	3.2±0.4	Stent length, mm	19.4±5.8	-
Stent type, n (%)			Stent diameter, mm	3.1±0.9	-
Bare metal	86 (37)	96 (42)	Stent type, n (%)		
Drug-eluting	147 (63)	135 (58)	Bare metal	58 (25)	-
No stenting	1 (<1)	0	Drug-eluting	165 (71)	-
			No stenting	11 (5)	-

# Procedural Safety

	Complete revasc (N=234)	Culprit PCI only (N=231)	<i>P</i> value
<b>Complications</b>			
Stroke	2	0	0.50
Bleed requiring transfusion or surgery	7	6	0.80
CIN requiring dialysis	1	3	0.37
Total	10	9	0.84
Procedure duration (mins, median)	63 (46-80)	45 (32-60)	<0.001
Contrast volume (mL, median)	300 (210-380)	200 (150-260)	<0.001
Fluoroscopy dose (Gycm <sup>2</sup> , median)	90.1 (57.5-135.5)	71.4 (42.4-97.3)	<0.001

# Primary Endpoint: Cardiac death, MI or refractory angina

600 pts planned; DSMB stopped trial early after 465 pts enrolled (2008–2013)



No. at Risk

	0	6	12	18	24	30	36
Preventive PCI	234	196	166	146	118	89	67
No Preventive PCI	231	168	144	122	96	74	50

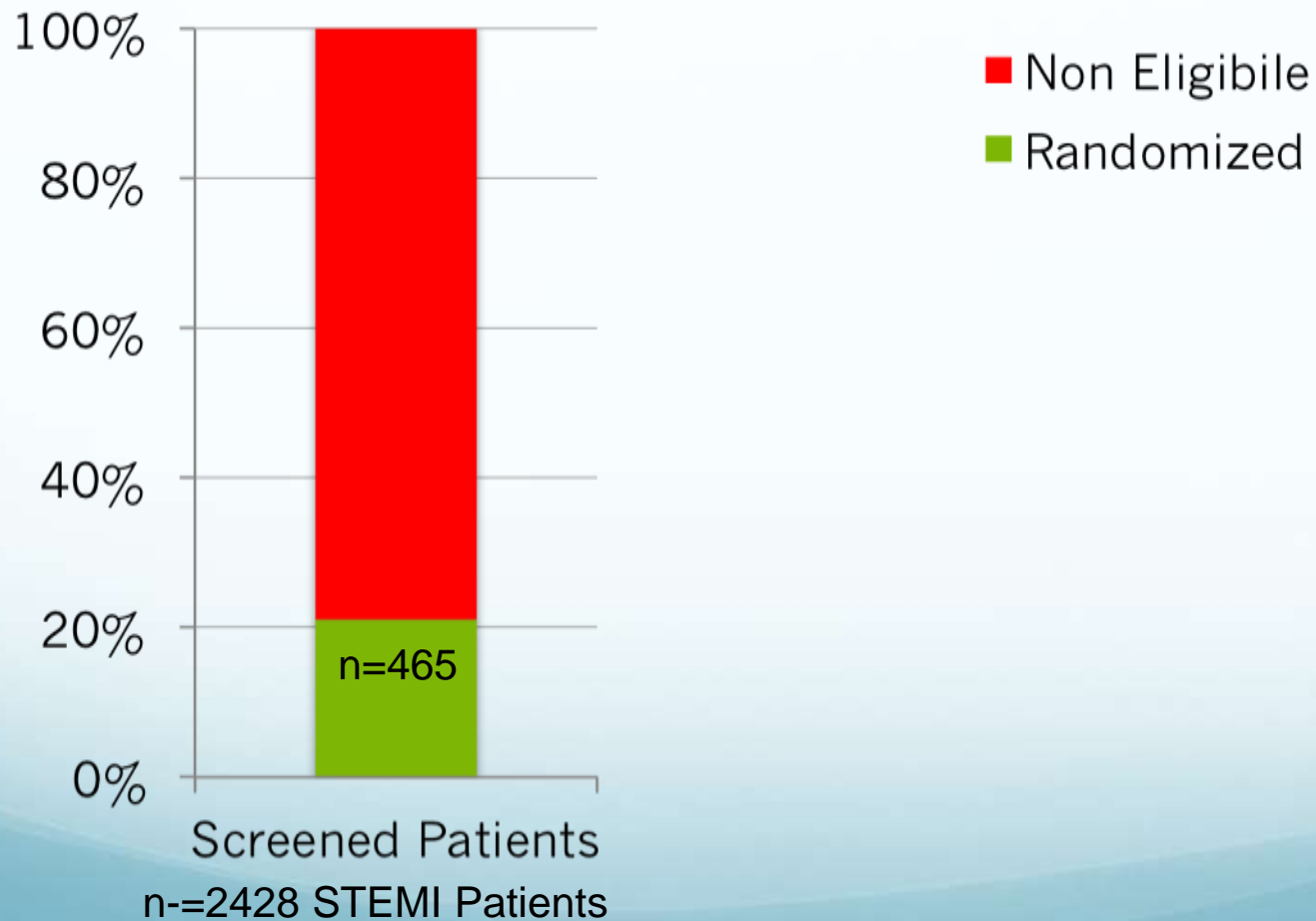
# Intermediate Term Outcome

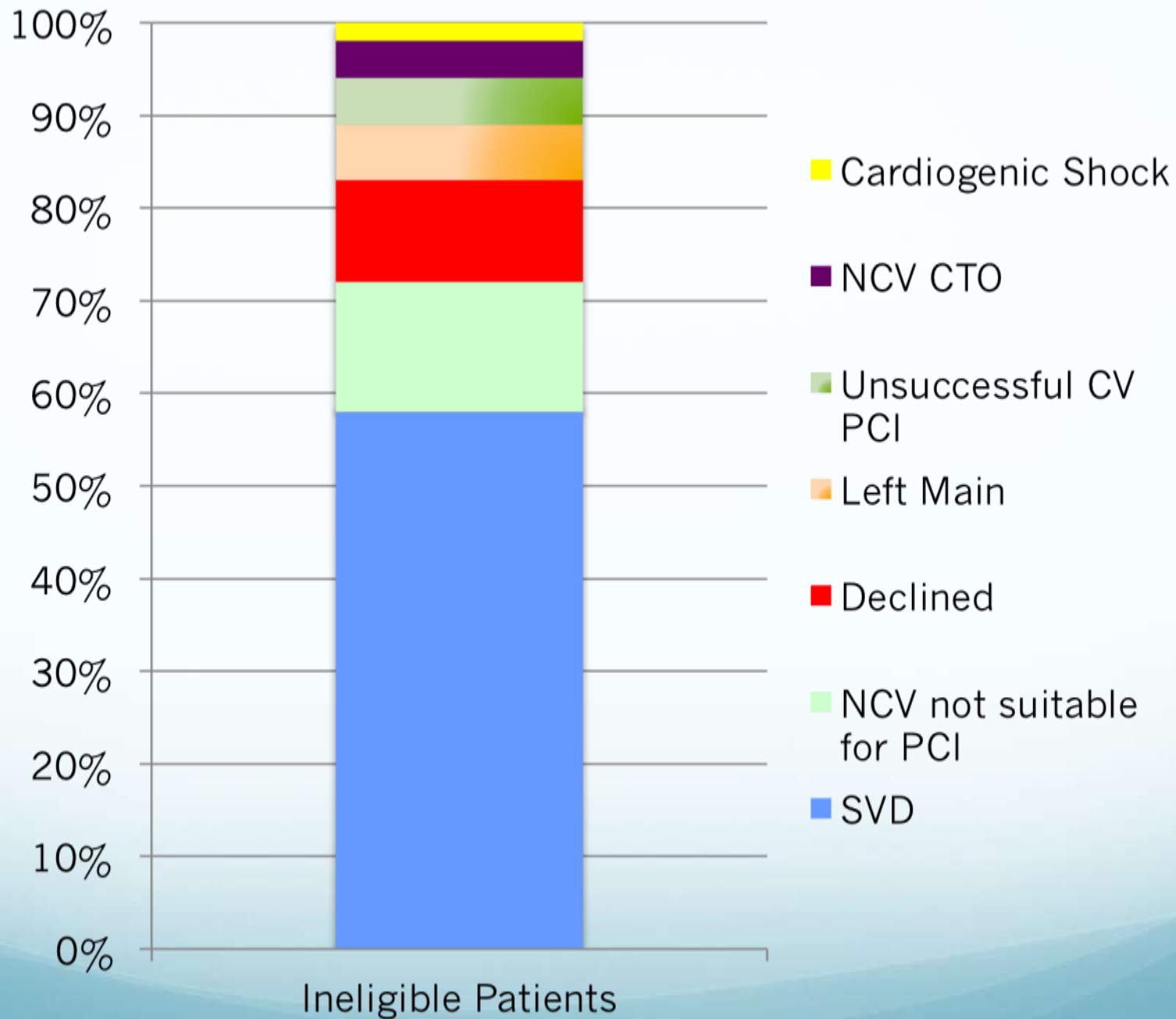
Median FU 2.3 yrs

	Complete revasc (N=234)	Culprit PCI only (N=231)	HR (95%CI)	P value
<b>Pre-specified outcomes</b>				
Cardiac death, MI, or refractory angina	21	53	0.35 (0.21-0.58)	<0.001
Cardiac death or MI	11	27	0.36 (0.18-0.73)	0.004
Cardiac death	4	10	0.34 (0.11-1.08)	0.07
Nonfatal MI	7	20	0.32 (0.13-0.75)	0.009
Refractory angina w/o CD or MI	12	30	0.35 (0.18-0.69)	0.002
<b>Secondary outcomes</b>				
Noncardiac death	8	6	1.10 (0.38-3.18)	0.86
Repeat revascularization	16	46	0.30 (0.17-0.56)	<0.001

# The PRAMI Trial

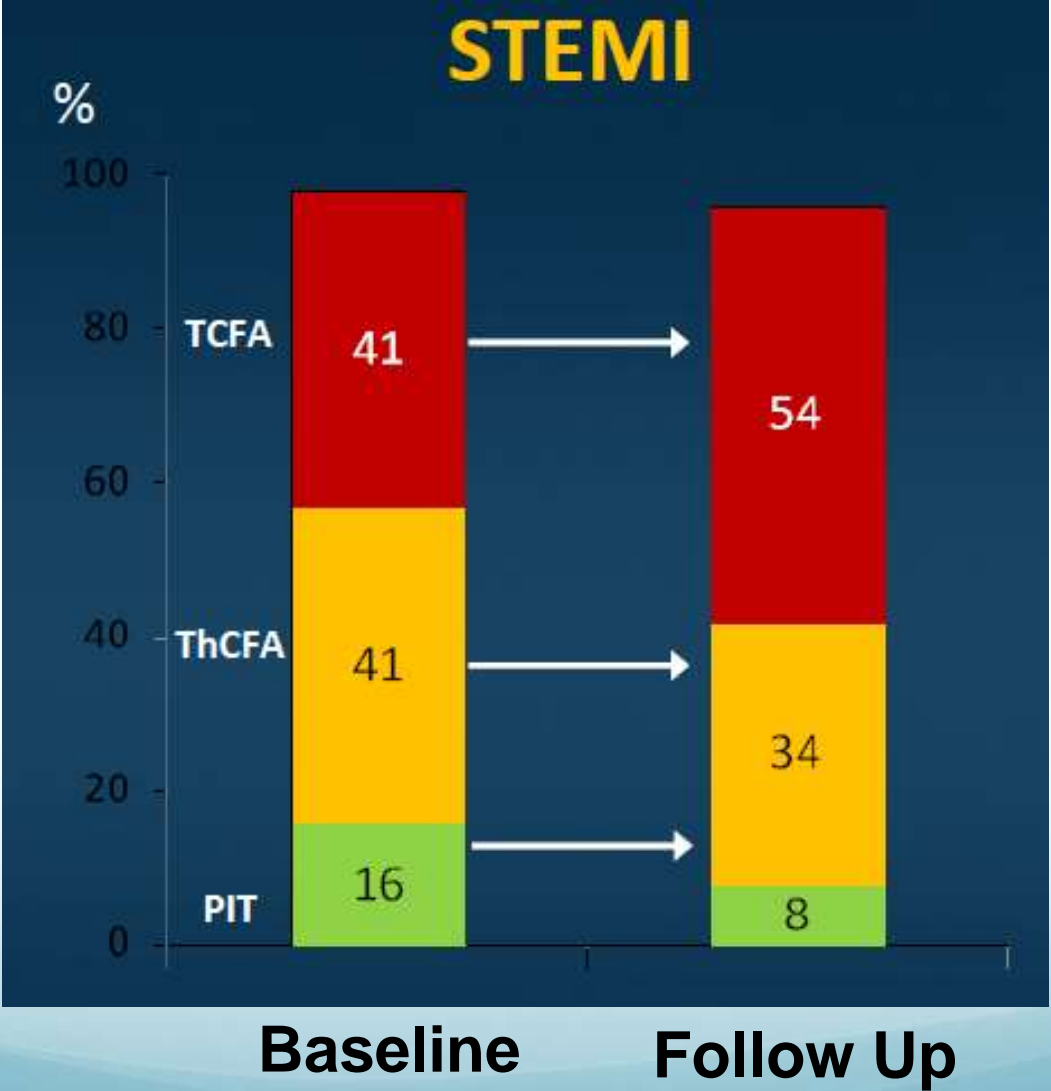
## Patient Population







# Natural History of Non Culprit Lesion Morphology in STEMI



Zhao Z et al, HORIZON-AMI. J Am Coll Cardiol Img 2013;6:86-95

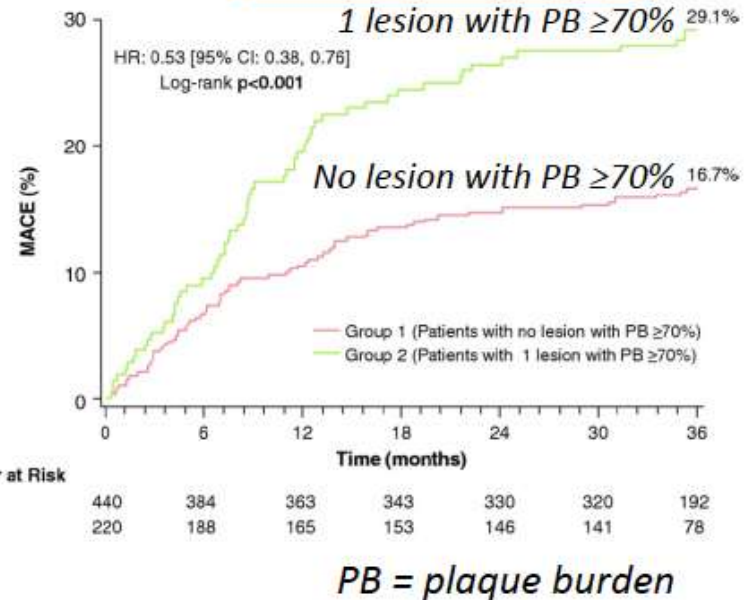
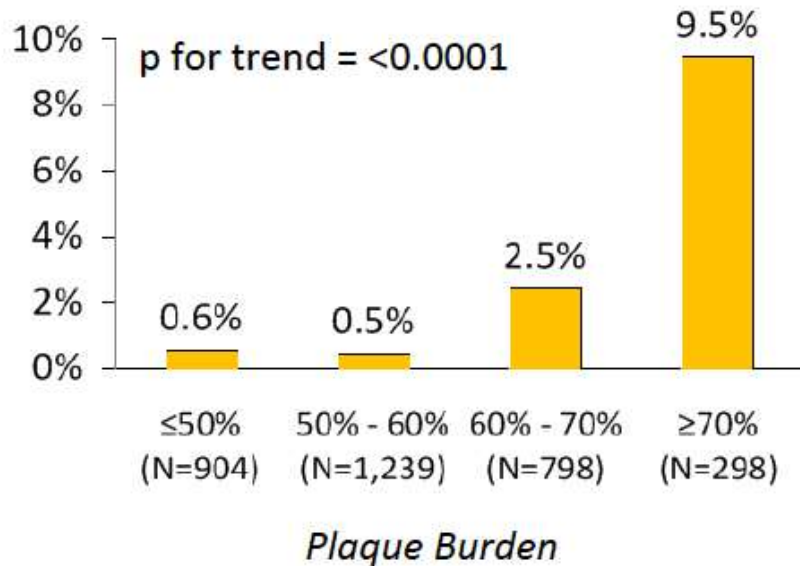
# Impact of Lesion Severity on Long-Term Outcome in ACS

**PROSPECT Study**

**Median 3.4 years follow-up**

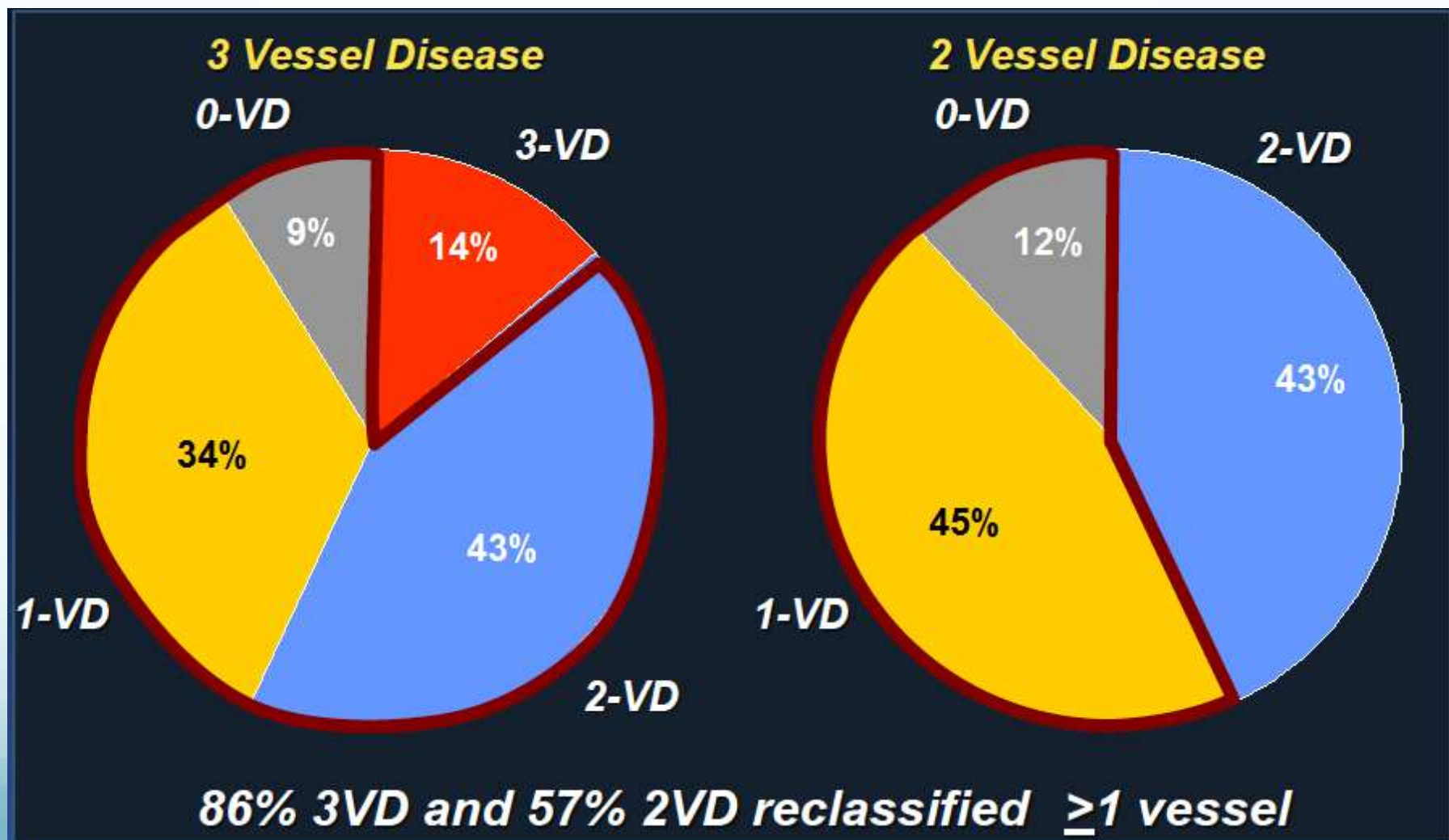
**\*MACE per lesion**

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\*MACE = Cardiac death, cardiac arrest, MI or unstable or progressive angina requiring rehospitalization.

# FAME: FFR & Defining MVD



# Conclusions

- Contrary to existing guidelines, this study suggests that patients with MVD who present with STEMI and undergo successful primary PCI fare better (lower rate of cardiac death, MI and refractory angina) if they also undergo PCI of non culprit stenoses rather than not!
- Although complete revascularization led to longer procedure time and higher contrast dose safety was not compromised
- Questions that remain unanswered:
  - Did the early discontinuation of the trial reduce confidence in its findings?
  - Does the location (LAD vs. non-LAD; proximal vs. non proximal;) and severity (anatomic vs. physiologic) of non culprit stenoses impact results?
  - Does timing of non culprit stenoses PCI (simultaneous vs. staged) impact results?