

Summit TCT Asia Pacific 2009

April 22-24, 2009

The Convention Center of Sheraton Grande Walkerhill Hotel, Seoul, Korea



Complex Interventions 1 - April 23 th 11:54 AM -12:06 PM

Very Long-Term Outcomes of Left Main DES

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Ostial Left Main Multicenter Registry



886^e-308 days Clinical Follow-Up

	n = 147
Death, n (%)	5 (3.4)
Cardiac Death	4 (2.7)
TLR, n (%)	1 (0.7)
TVR, n (%)	7 (4.7)
MI, n (%)	0
MACE, n (%)	11 (7.4)

Chieffo et al Circulation 2007;116(2):158-162.



6-Month Angiographic Follow-Up

Angiographic Fup was performed in 106 (73%) of the pts

	n=106
Restenosis, %	1 (1)
Late Loss, mm	-0.01

Chieffo et al Circulation 2007;116(2):158-162.

Ostial Left Main Multicenter Registry



873 \pm 297 days Clinical Follow-Up

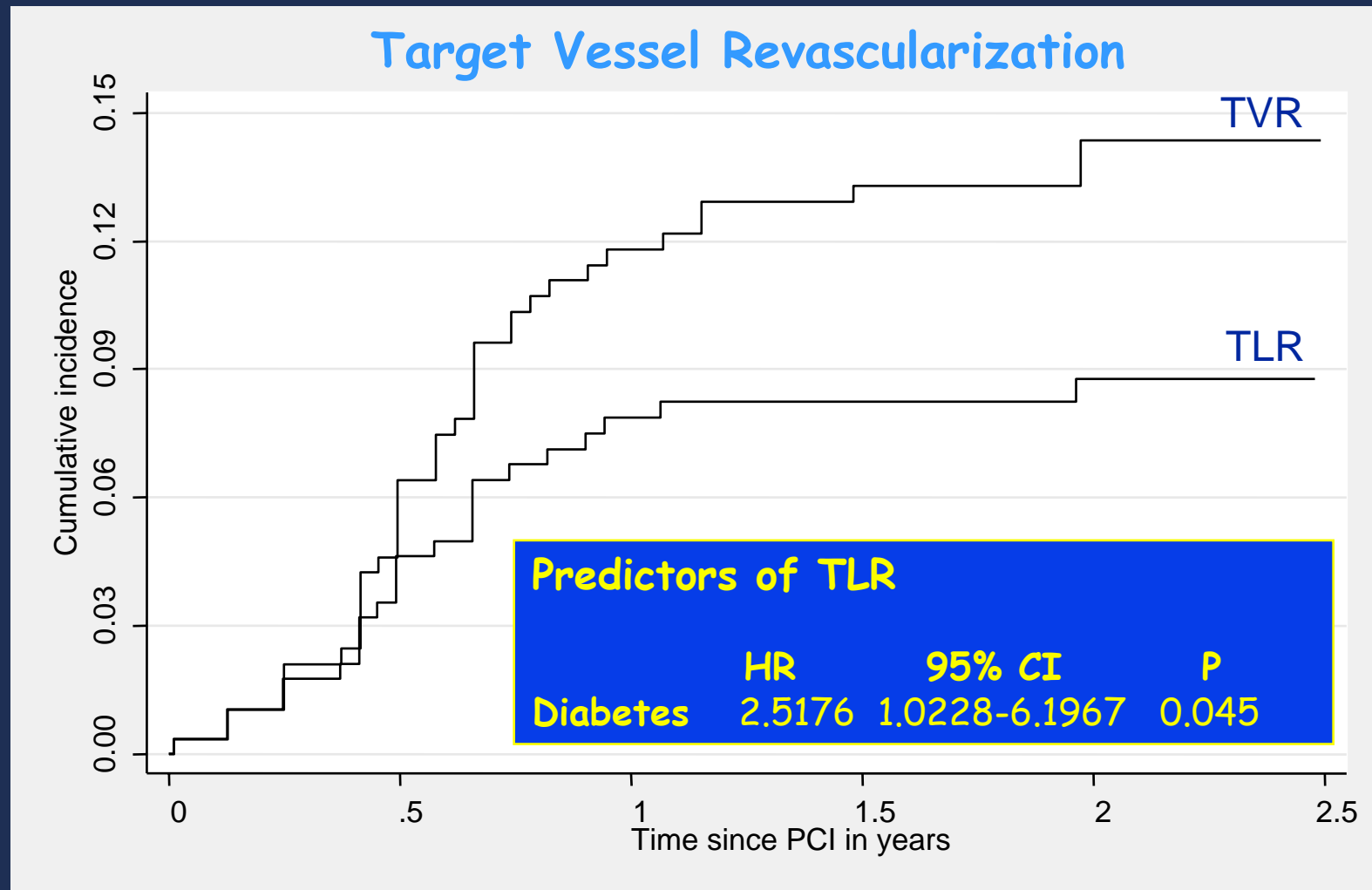
	n = 208
Death, n (%)	10 (4.8)
Cardiac Death	6 (2.9)
TLR, n (%)	4 (1.9)
TVR, n (%)*	18 (8.6)
MI, n (%)	2 (0.9)
MACE, n (%)	24 (11.5)

**16 re-PCIs and 2 CABG*



2 Year Outcome from French Left Main Taxus Pilot Study

N=291

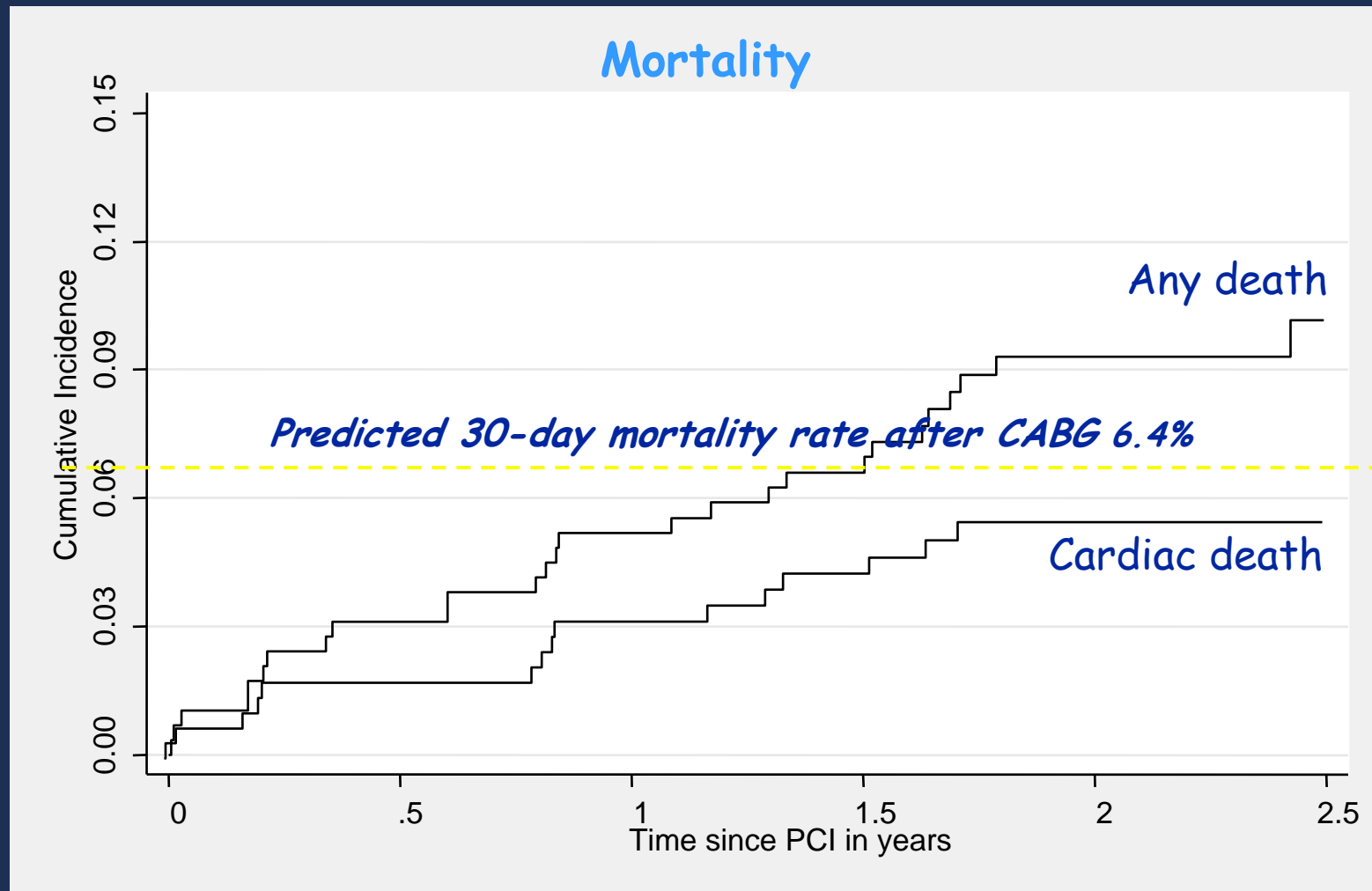


8.8%

Vaquerizo et al Circulation. 2009;119:2349-2356



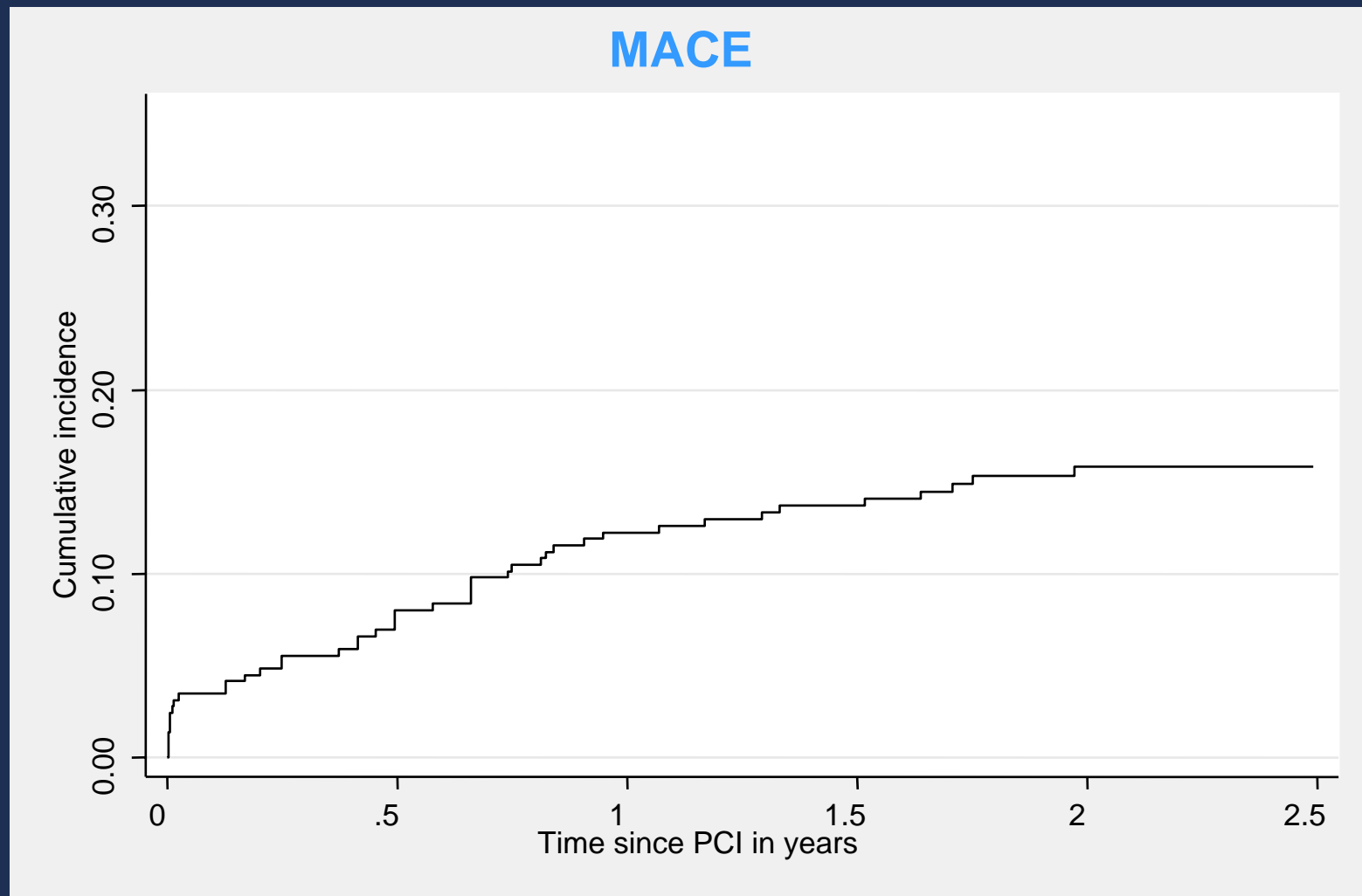
2 Year Outcome from French Left Main Taxus Pilot Study



Vaquerizo et al Circulation. 2009;119:2349-2356



2 Year Outcome from French Left Main Taxus Pilot Study



Vaquerizo et al Circulation. 2009;119:2349-2356

Drug Eluting stent for LeFT main (DELFT) Registry



Study population

April 2002



April 2004

358

consecutive patients with
de novo ULMCA disease



SES or PES

Baseline Clinical Characteristics



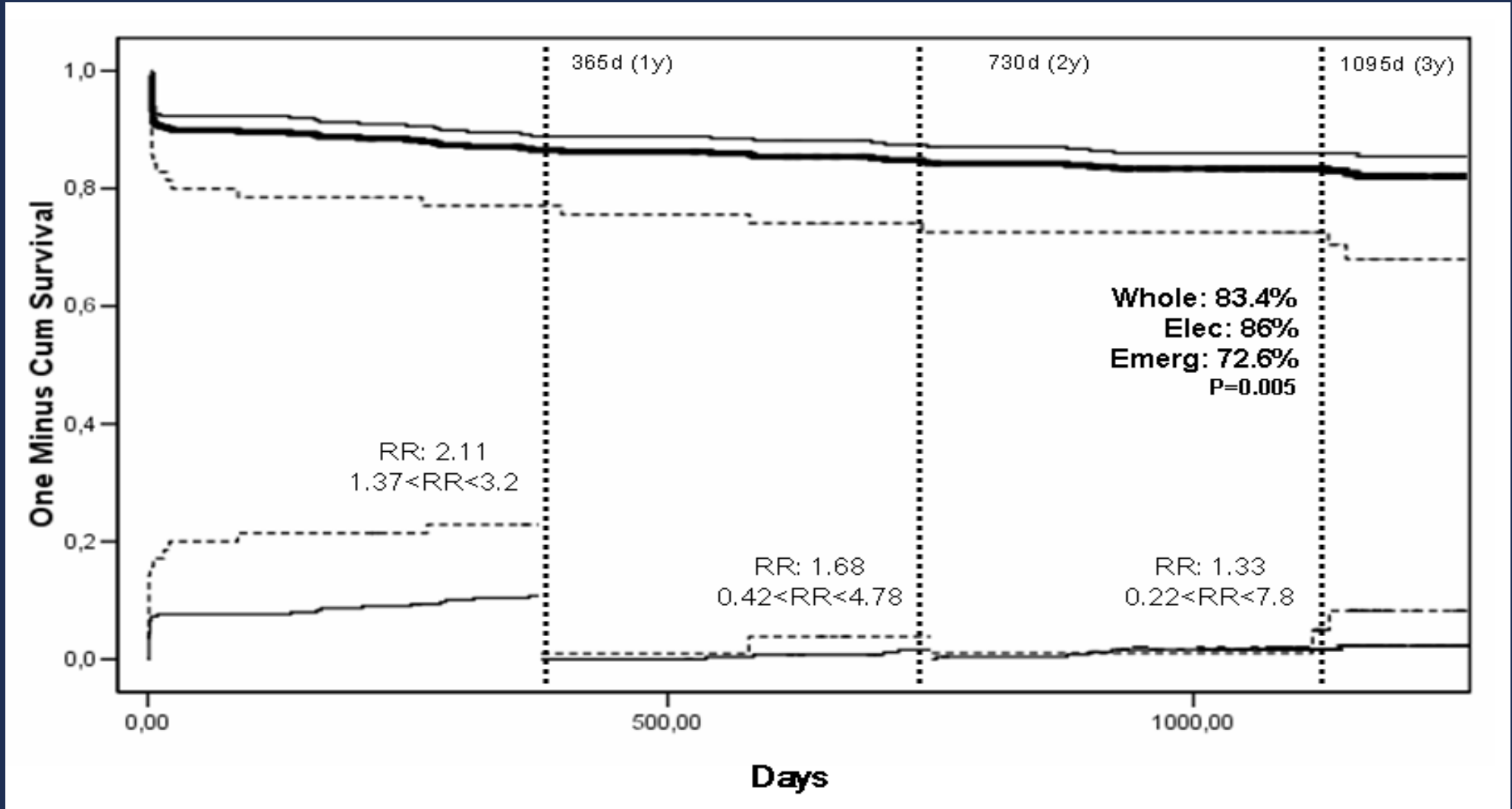
Diagnosis at admission	
Stable Angina	44.1%
Unstable Angina	41.9%
AMI	8.4%
AMI+shock	2.8%
Silent Ischemia	2.8%
LVEF	48.6±12.8
EuroScore	6.4±4.1
>6	20.1%
>9	31.0%
Elective	5.7±3.8
Emergent	9.9±3.5

19.6% Emergent PCI



DELFT

K-M survival analysis - Death + MI





European Heart Journal
doi:10.1093/eurheartj/ehn270

CLINICAL RESEARCH

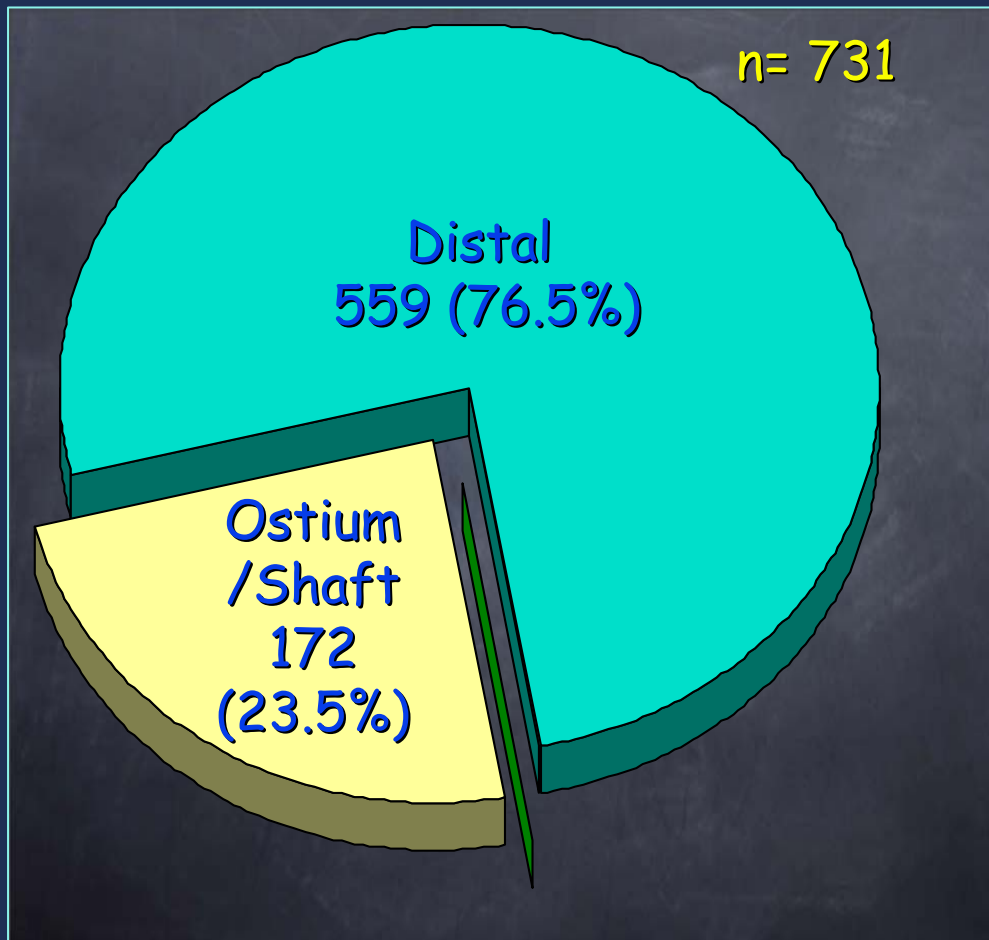
Late and very late stent thrombosis following drug-eluting stent implantation in unprotected left main coronary artery: a multicentre registry

Alaide Chieffo¹, Seung-Jung Park², Emanuele Meliga³, Imad Sheiban⁴, Michael S. Lee⁵, Azeem Latib¹, Young-Hak Kim², Marco Valgimigli³, Dario Sillano⁴, Valeria Magni¹, Giuseppe Biondi Zoccai⁴, Matteo Montorfano¹, Flavio Airoldi^{1,6}, Renata Rogacka¹, Mauro Carlino¹, Iassen Michev^{1,6}, Cheol-Whan Lee², Myeong-Ki Hong², Seong-Wook Park², Claudio Moretti⁴, Erminio Bonizzoni⁷, Giuseppe M. Sangiorgi^{1,6}, Jonathan Tobis⁵, Patrick W. Serruys³, and Antonio Colombo^{1,6*}

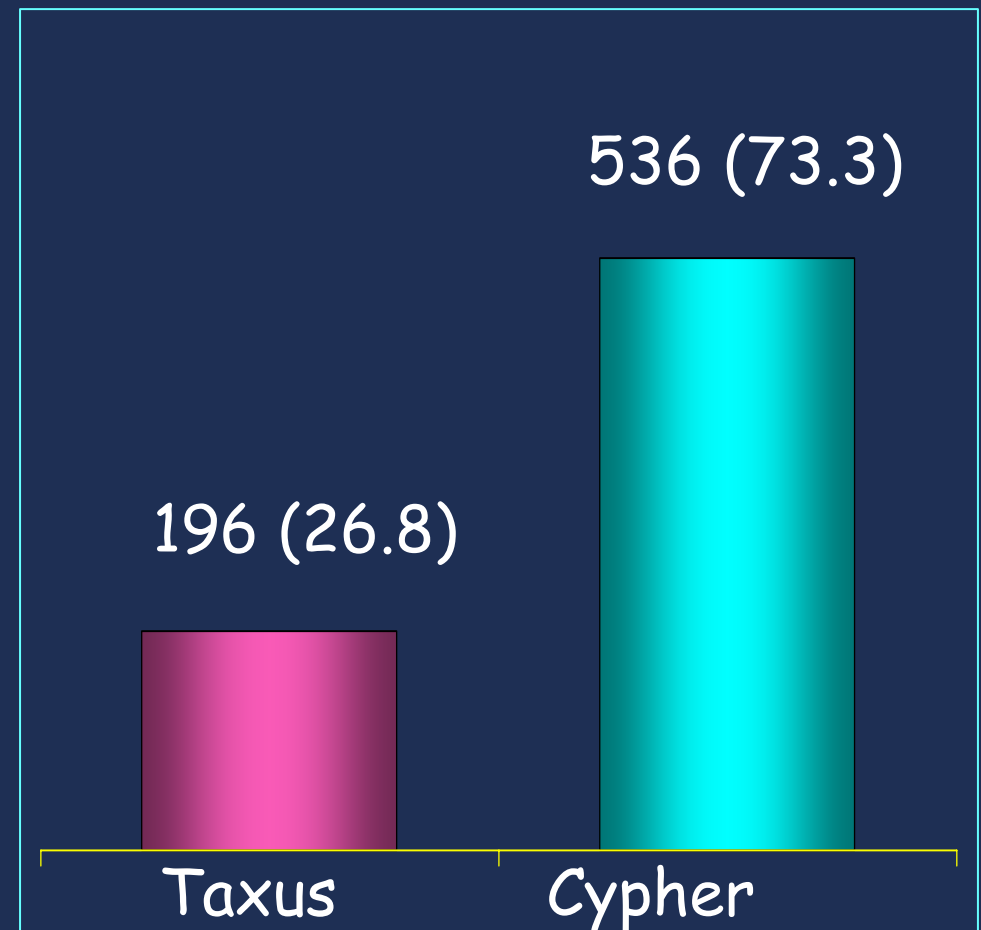


Lesion and Procedural Characteristics

Lesion Location



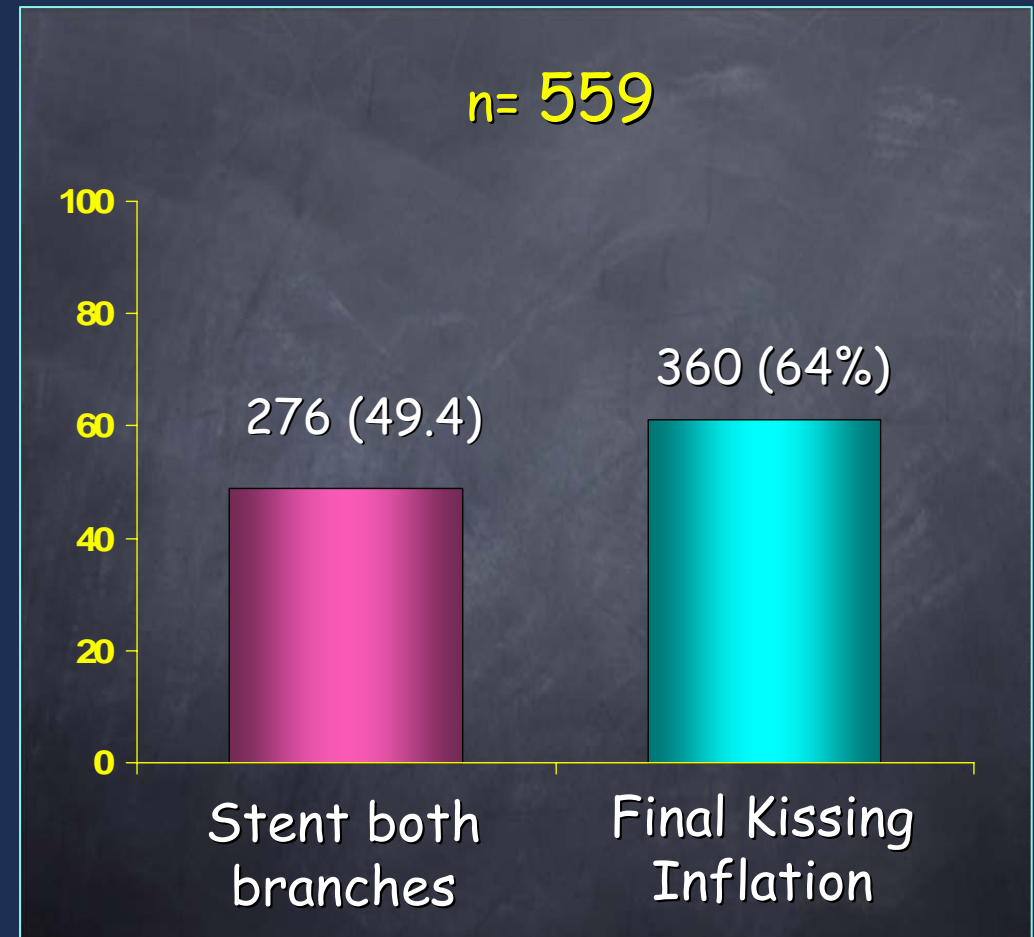
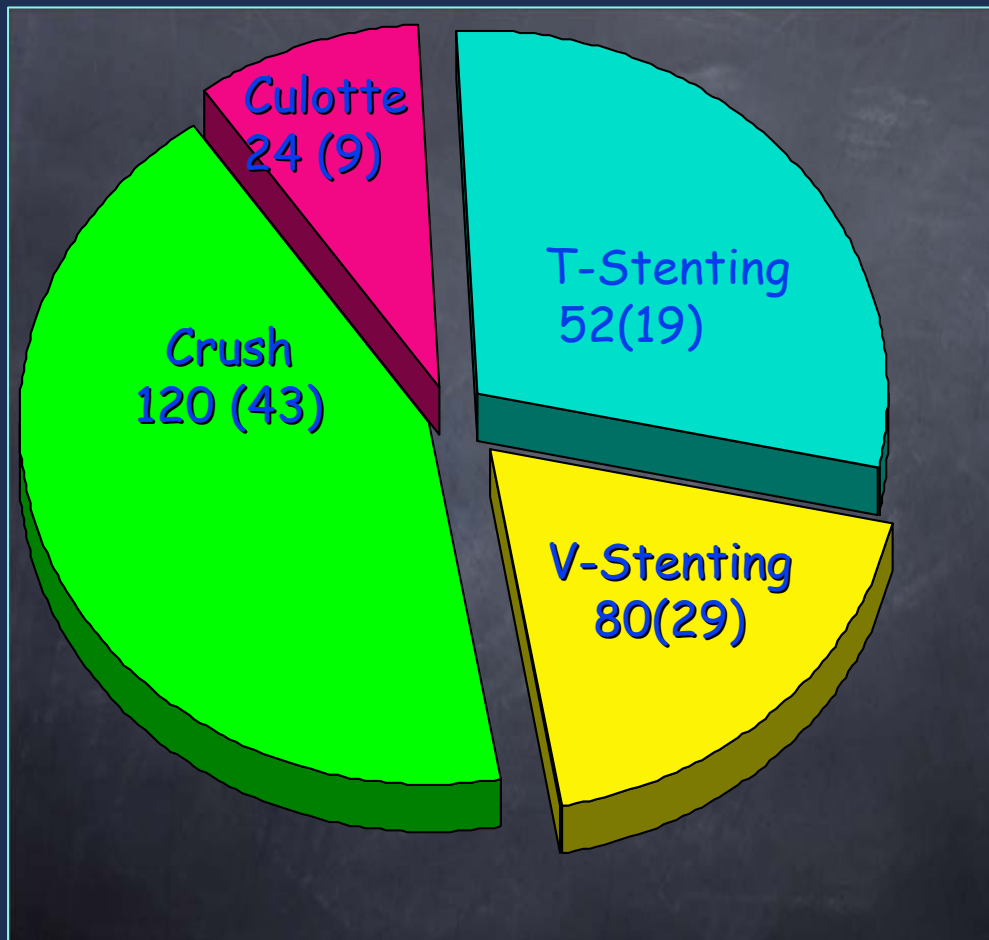
Stent Type





Procedural Characteristics

Stenting Technique





Late and Very Late Stent Thrombosis Multicenter Registry

In-Hospital and Long Term Fup

	In Hospital n=731	Follow-up (29.5-13.7 ms) n= 726
Cardiac Death, n (%)	5 (0.7)	26 (3.6)
Total Death, n (%)	5 (0.7)	40 (5.5)
MI, n (%)	69(9.4)	11 (1.5%)
TLR, n (%)	2 (0.3)	76 (10.5)
TVR, n (%)	2 (0.3)	95 (13.0)
MACE, n (%)	73 (9.9%)	138 (19.0)

Chieffo et al Eur Heart J 2008 Jun 18



Stent Thrombosis

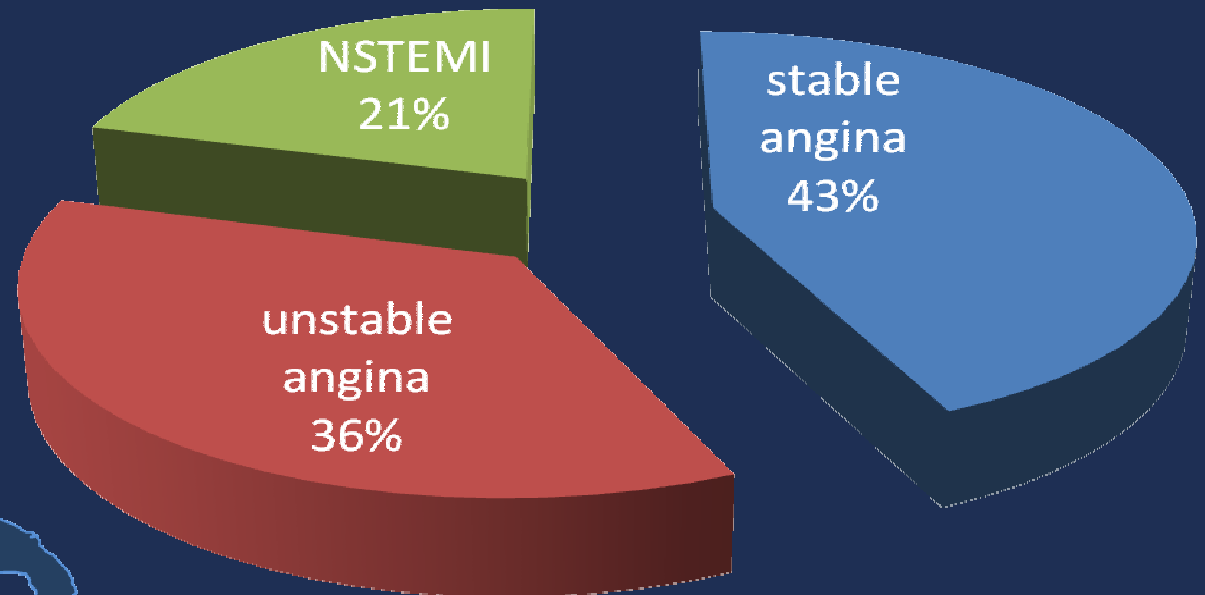
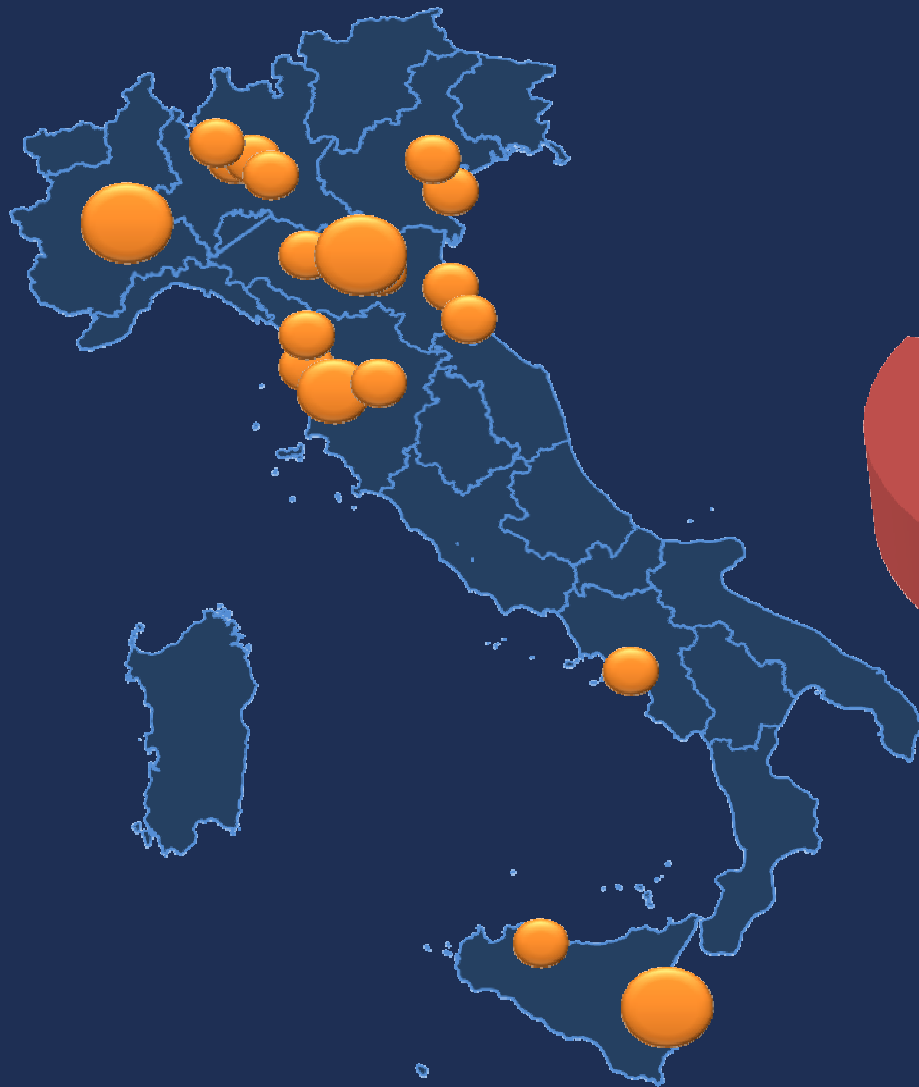
ARC Definitions

n = 731	
Definite Stent Thrombosis	4* (0.54%)
Probable Stent Thrombosis	3 (0.4%)
Possible Stent thrombosis	20 (2.7%)

0.9%

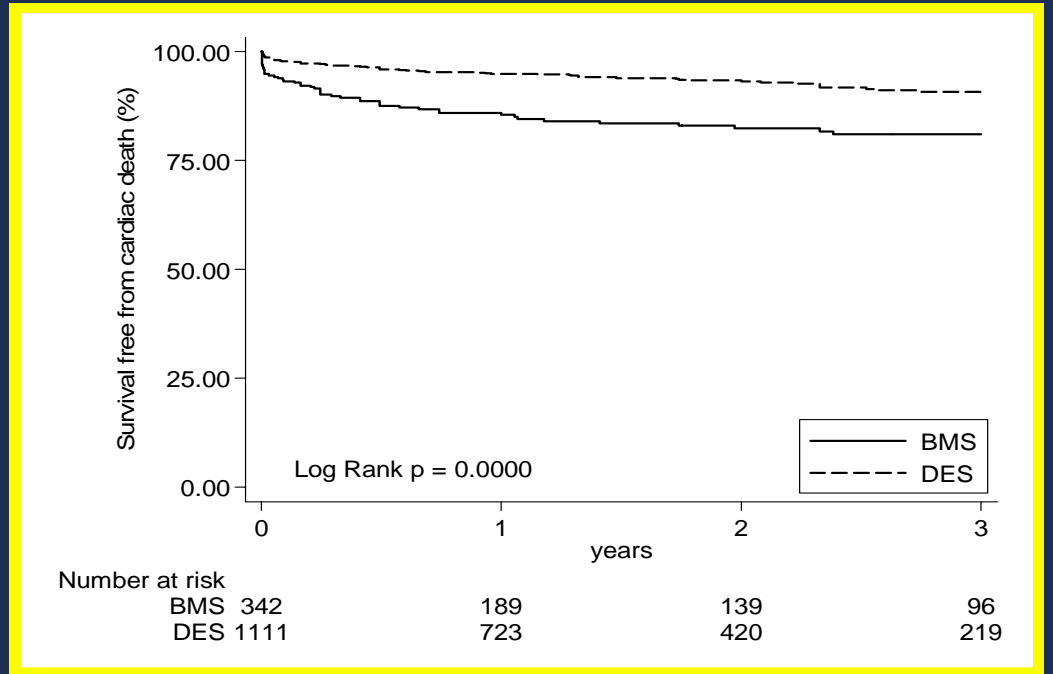
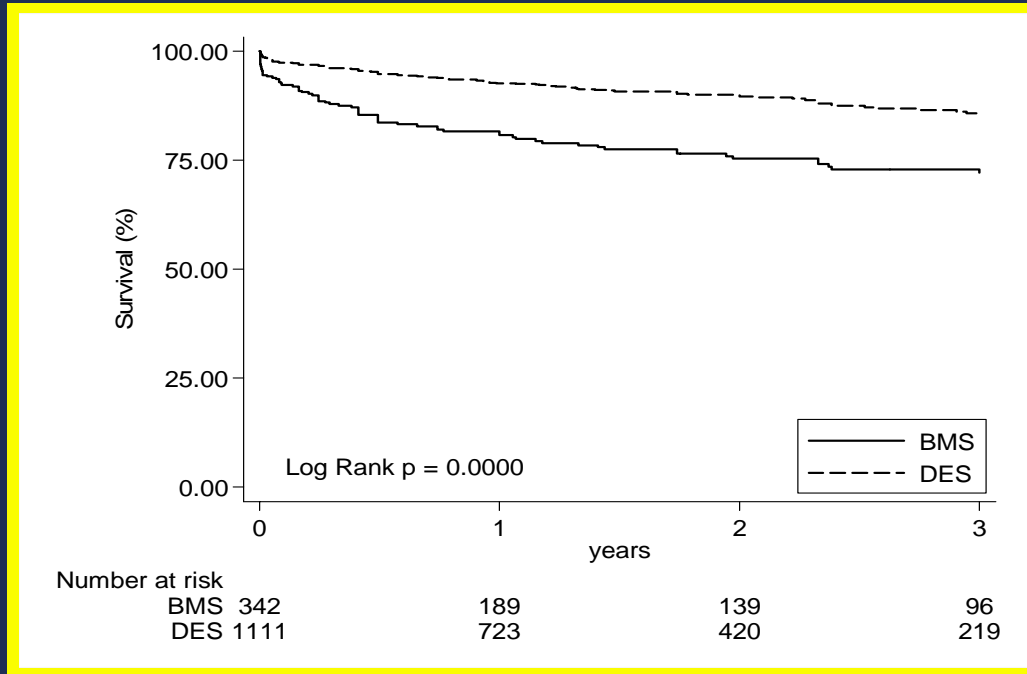
*Late thrombosis in a Taxus stent in LAD at 3 ms

GISE-SICI survey on Left Main Stenting n = 1,453 patients, 19 Italian Centers



Courtesy of Prof Tamburino

GISE Registry DES vs BMS Overall and Cardiac Mortality



Overall mortality: DES 85.8% vs 72.2%

Cardiac mortality: DES 90.8% vs 81.0%

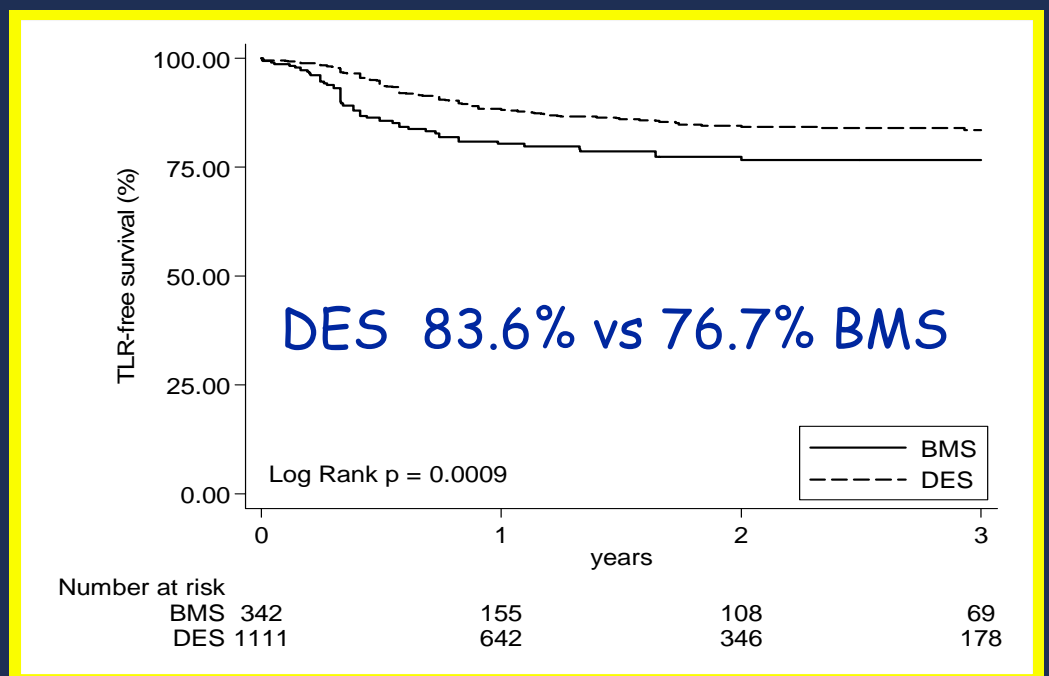
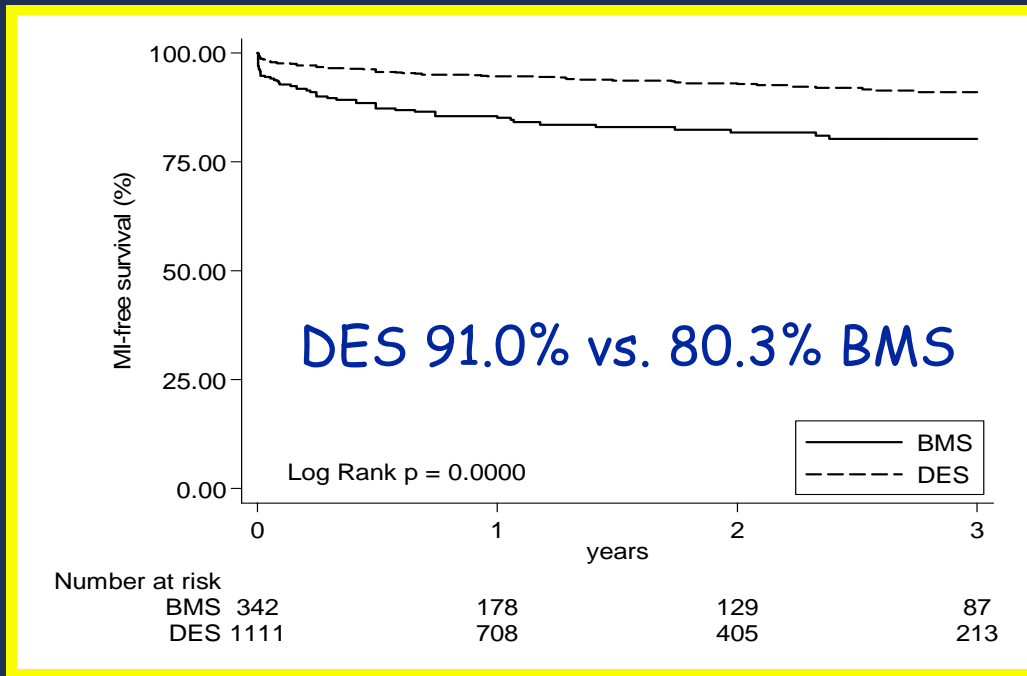
Adjusted HR 0.40 (95% CI 0.25-0.63)

Adjusted HR 0.32 (95% CI 0.19-0.55)

GISE Registry DES vs BMS MI and TLR

MI

TLR



Long term follow - up: DES vs BMS

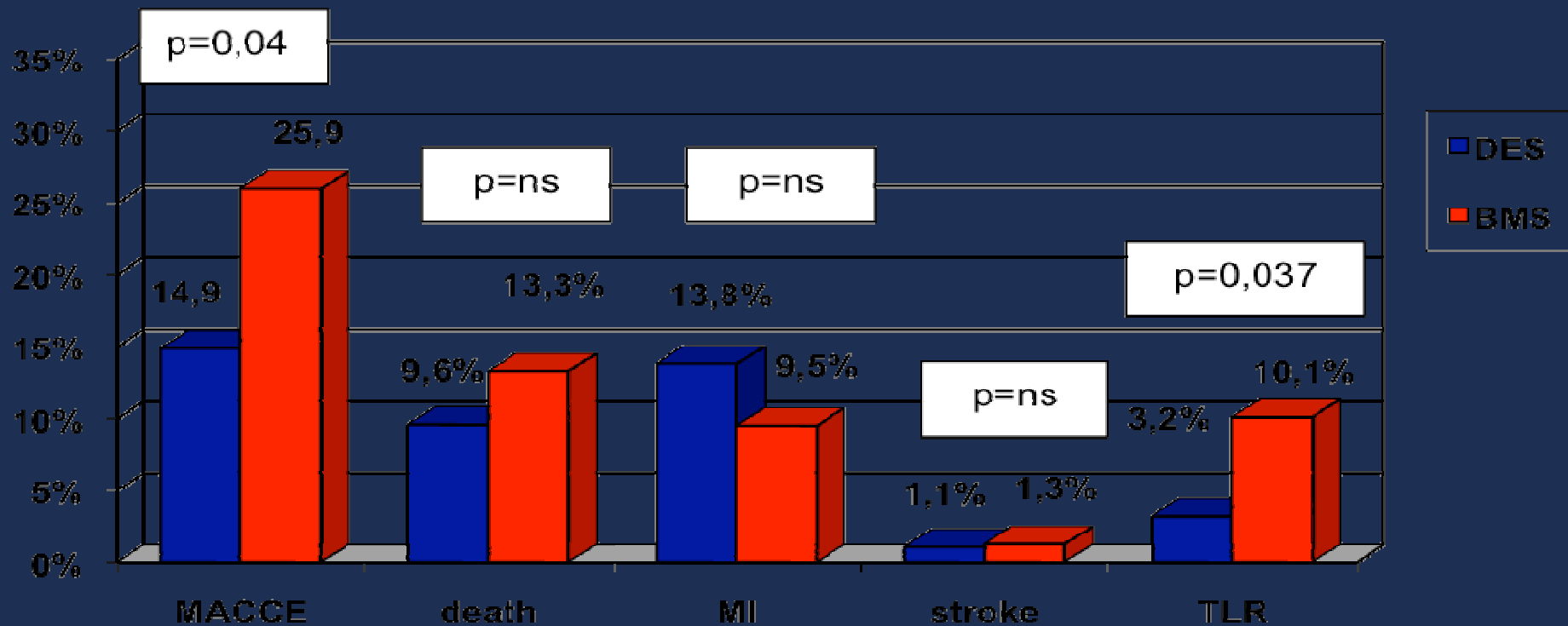


	DES n=94	BMS n=158	p
Sex (M)	59 (61,4%)	114 (72,6%)	0,09
Age	62,03 ± 10,3	64,9 ± 10,7	0,03
DM	29 (30,5%)	32 (20,9%)	0,05
HA	74 (77,9%)	119 (75,8%)	ns
Hch	56 (58,9%)	89 (56,7%)	ns
Tobacco	40 (42%)	65 (41,4%)	ns
EuroScore	6,82 ± 3,8	5,52 ± 3,8	0,009
NSTE-ACS	65 (69,1%)	86 (54,4%)	0,04
LVEF	49,2% ± 12,9%	48,27 ± 13,3	ns
Lm dyst	68 (72,3%)	81 (51,6%)	0,004
No.of dis. vessels	2,1 ± 0,84	2,02 ± 0,8	ns
Stent diameter	3,36 ± 0,44	3,92 ± 0,8	ns

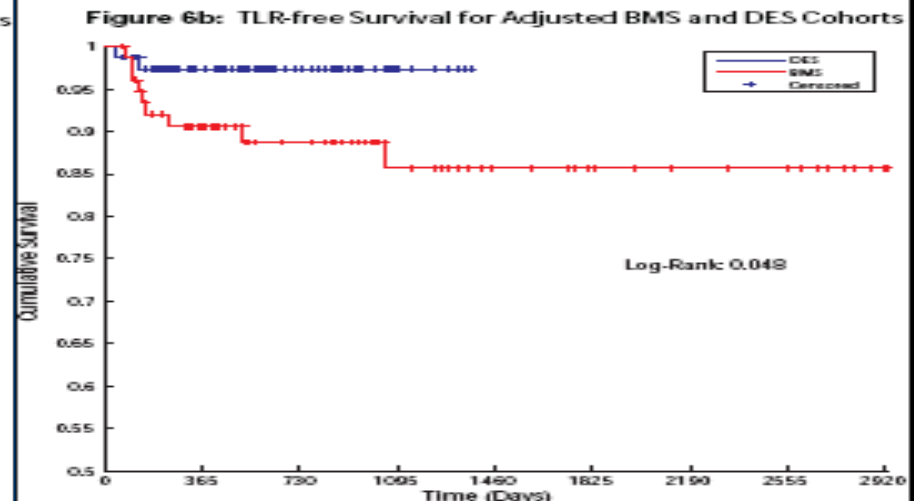
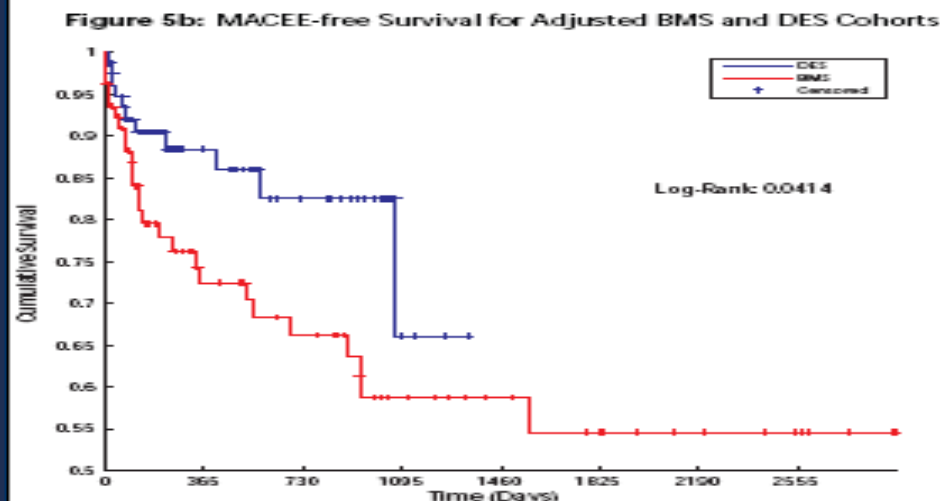
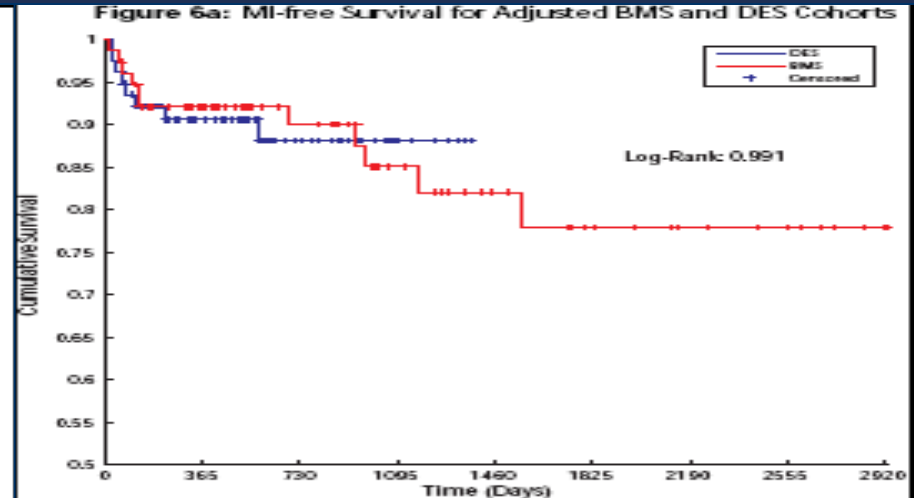
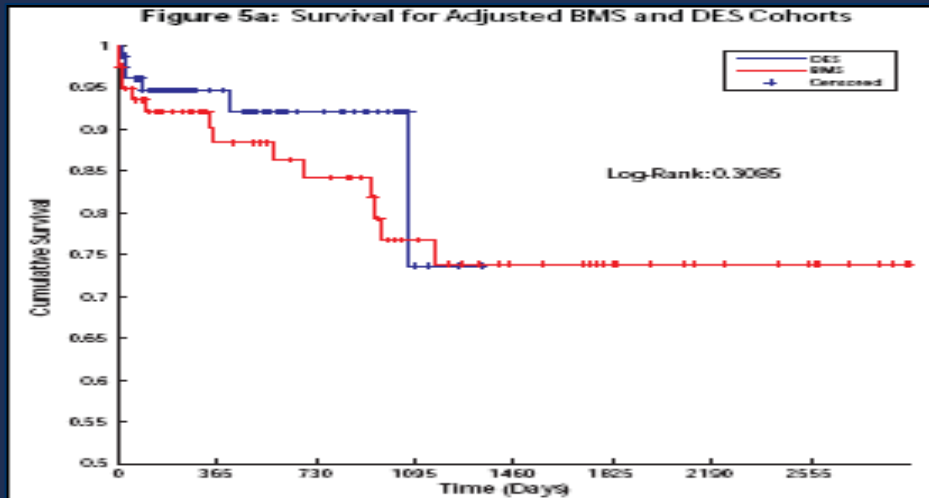


Long term follow - up: DES vs BMS

Mortality and MACCE



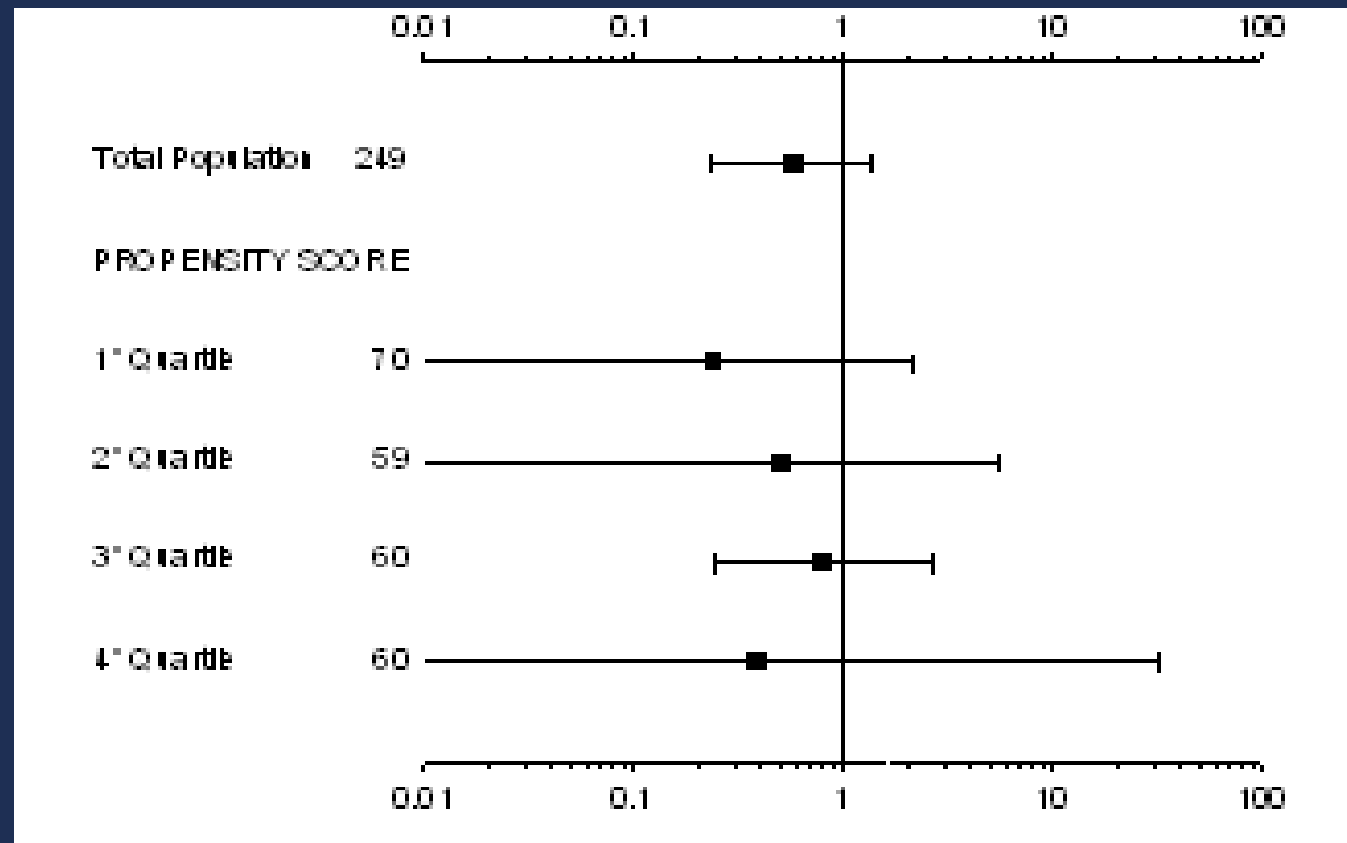
Survival and MACCE free curves (adjusted): DES vs BMS



CABG vs. DES Milan Experience



Cumulative MACCE at 1 Year



*OR and
Exact 95% CI*

PCI better
n=107

CABG better
n=142

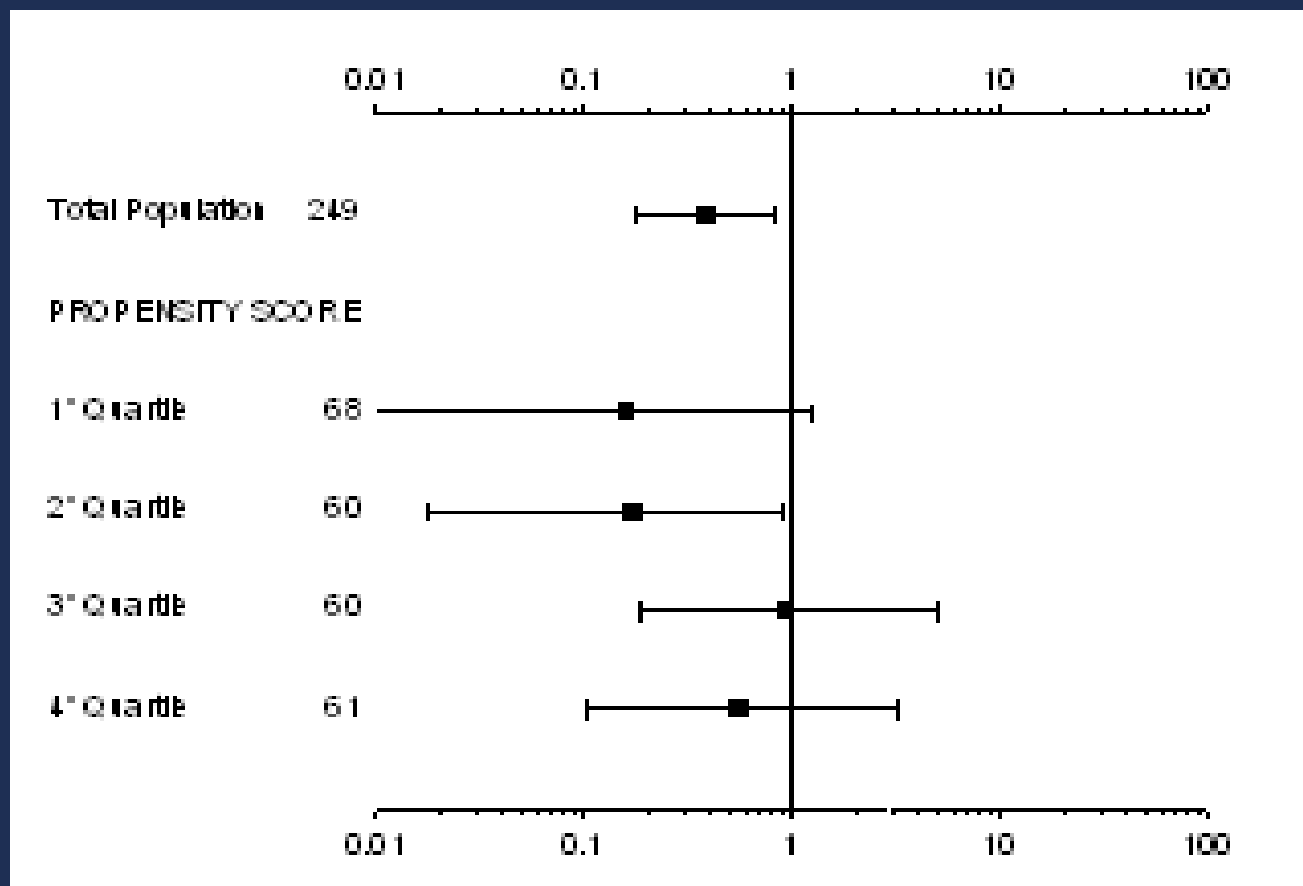
Chieffo et al Circulation 2007;116(2):158-62



CABG vs. DES Milan Experience

CVE+MI+Death at 1 Year

*OR and
Exact 95% CI*

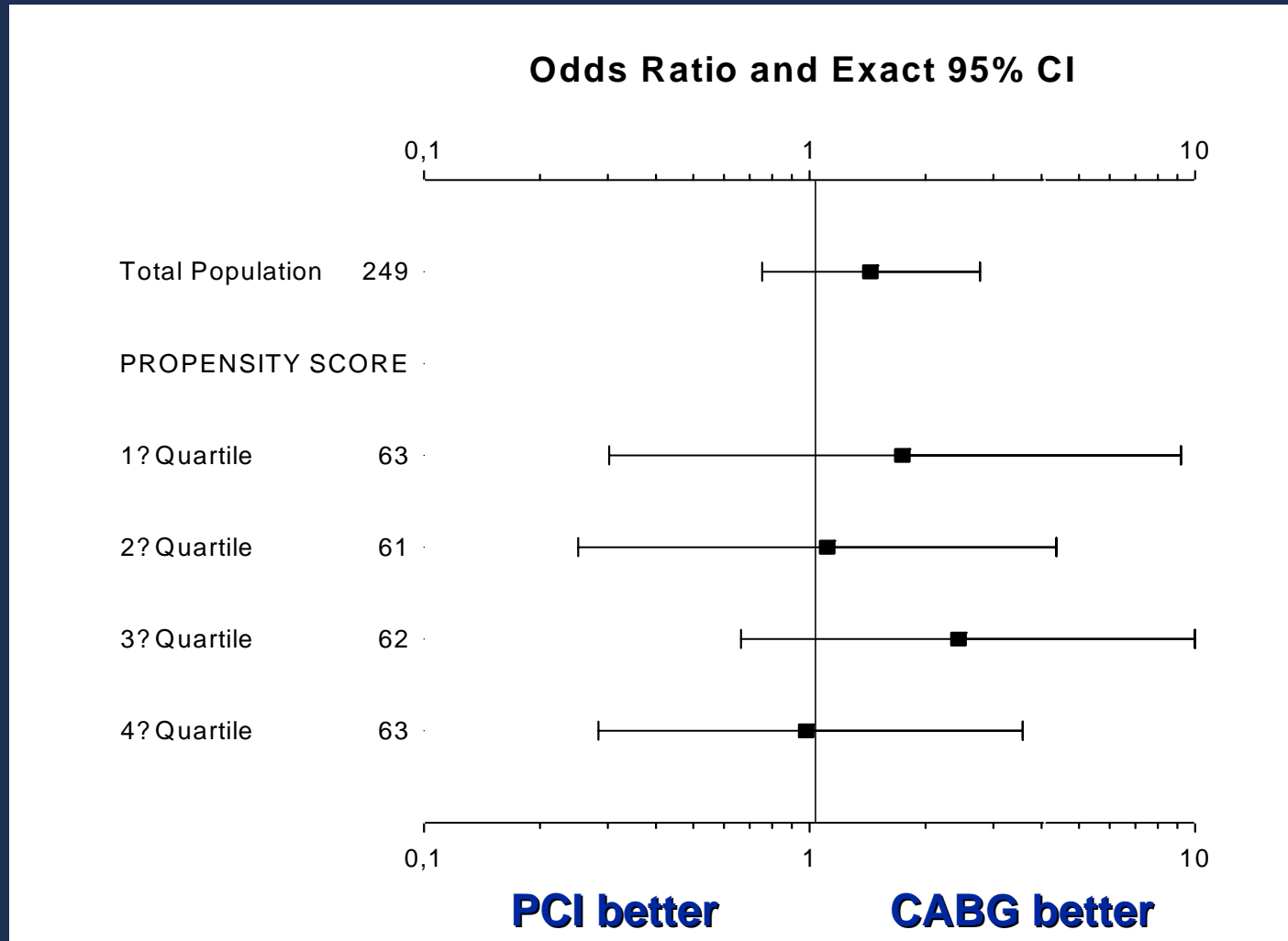


PCI better
n=107

CABG better
n=142

CABG vs. DES Milan Experience

MACCE at 4 years (including repeated revascularization)

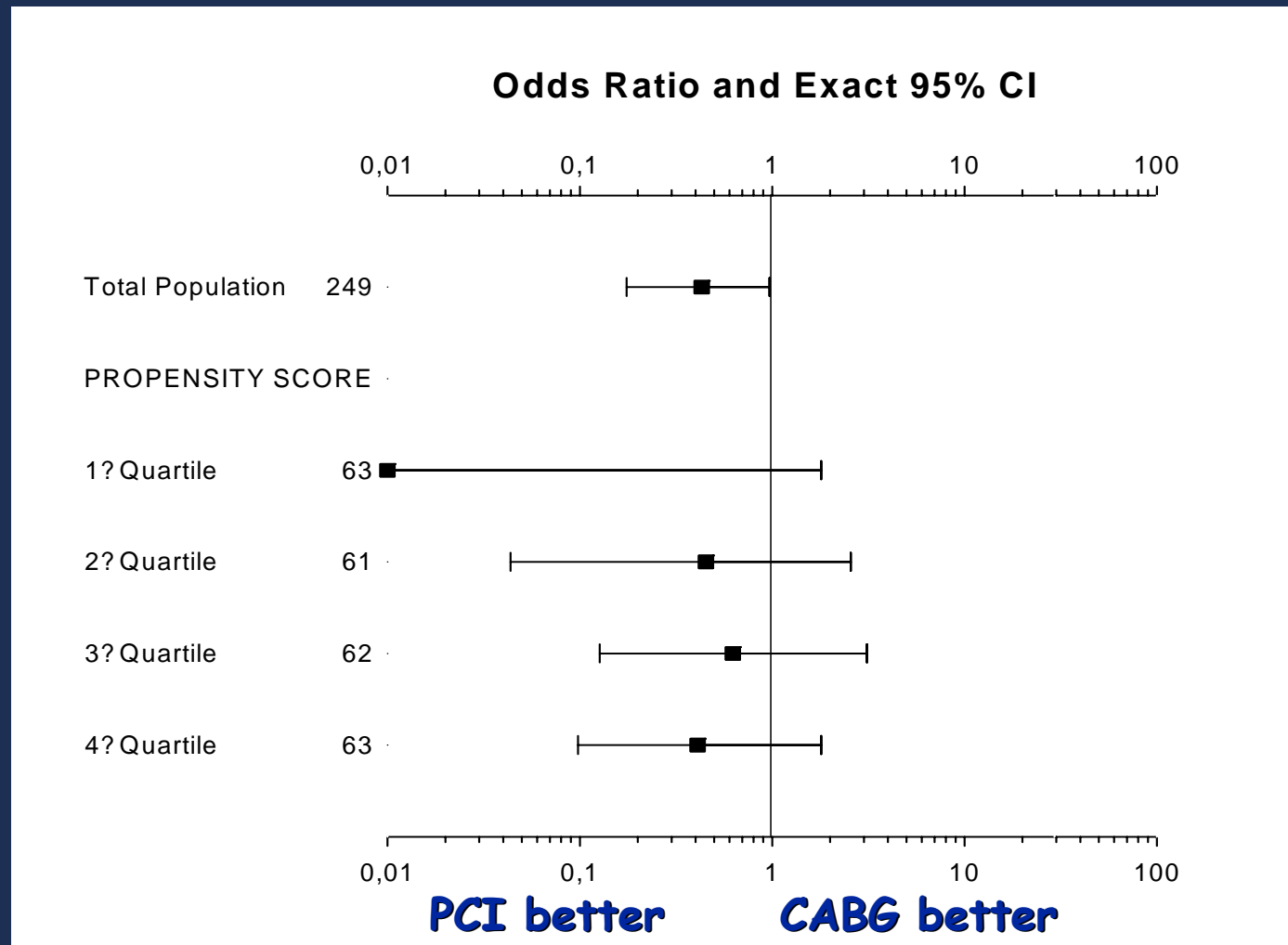


36% in DES vs 28% in CABG
Adjusted OR 1.44 (95% CI 0.75 - 2.77; P=0.30)



CABG vs. DES Milan Experience

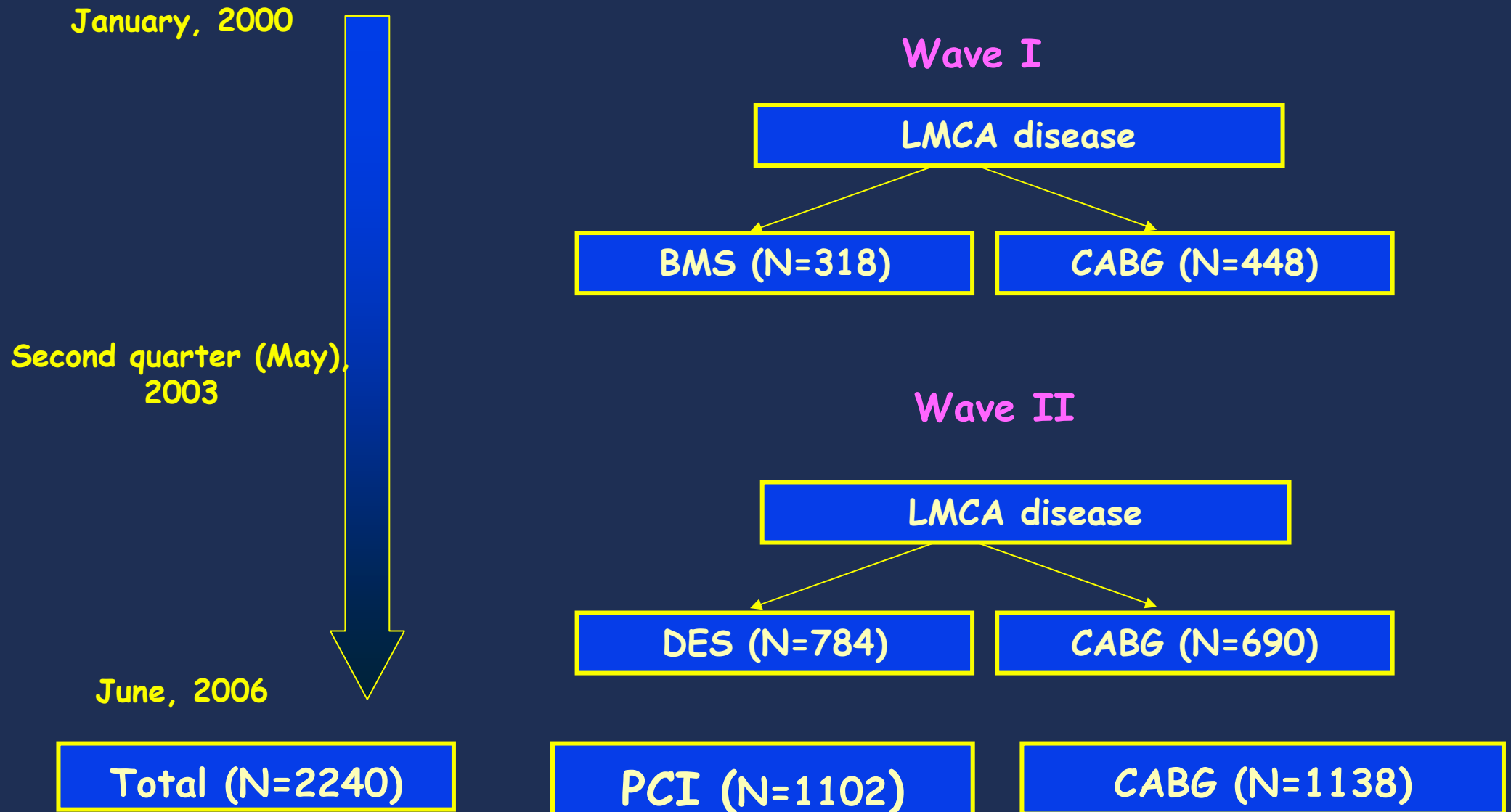
CVE+Death+MI at 4 years



14% in DES vs 22% in CABG
Adjusted OR= 0.43 (0.17- 0.97;P=0.04)

MAIN-COMPARE Study

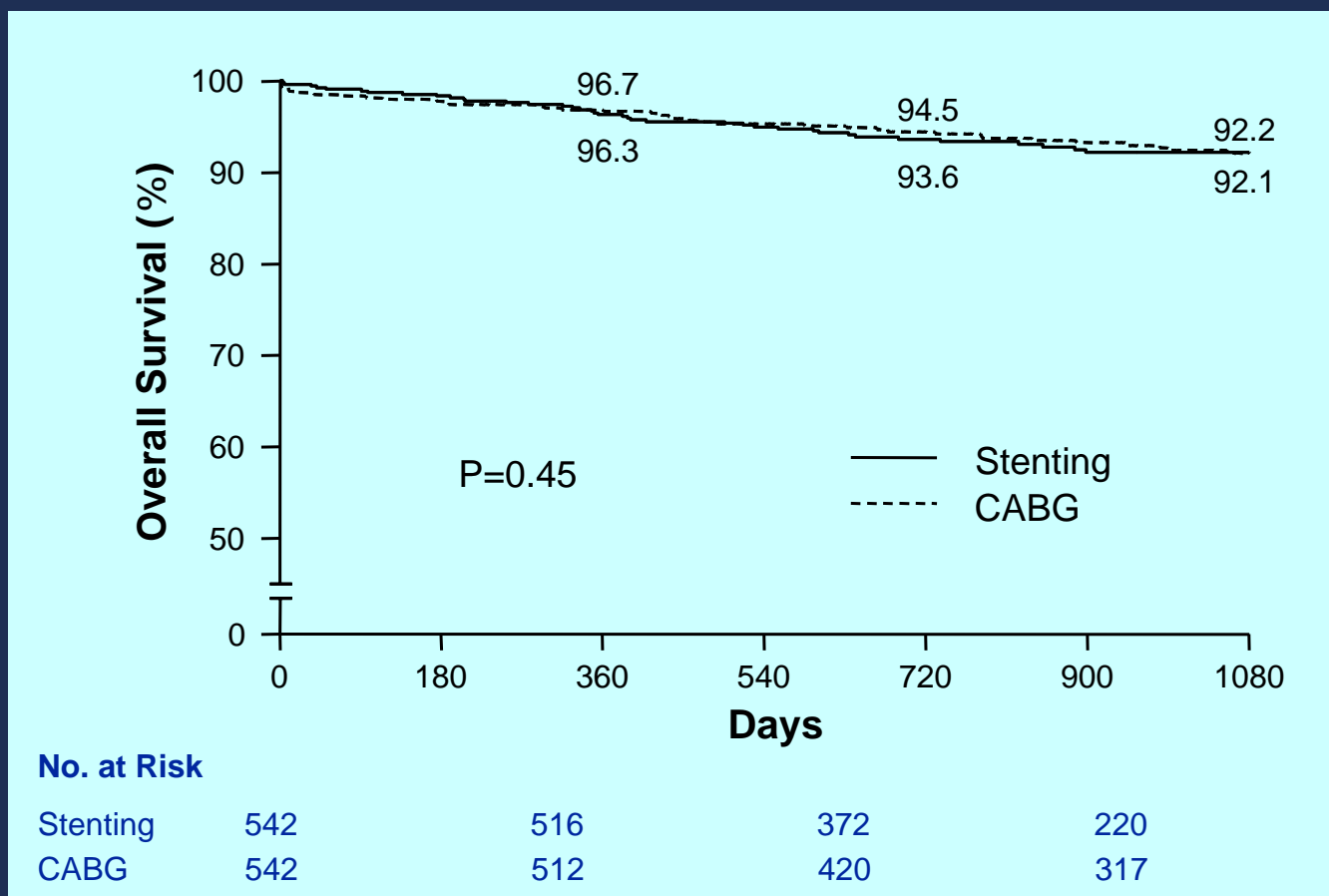
Stenting (BMS or DES) vs. CABG





Death

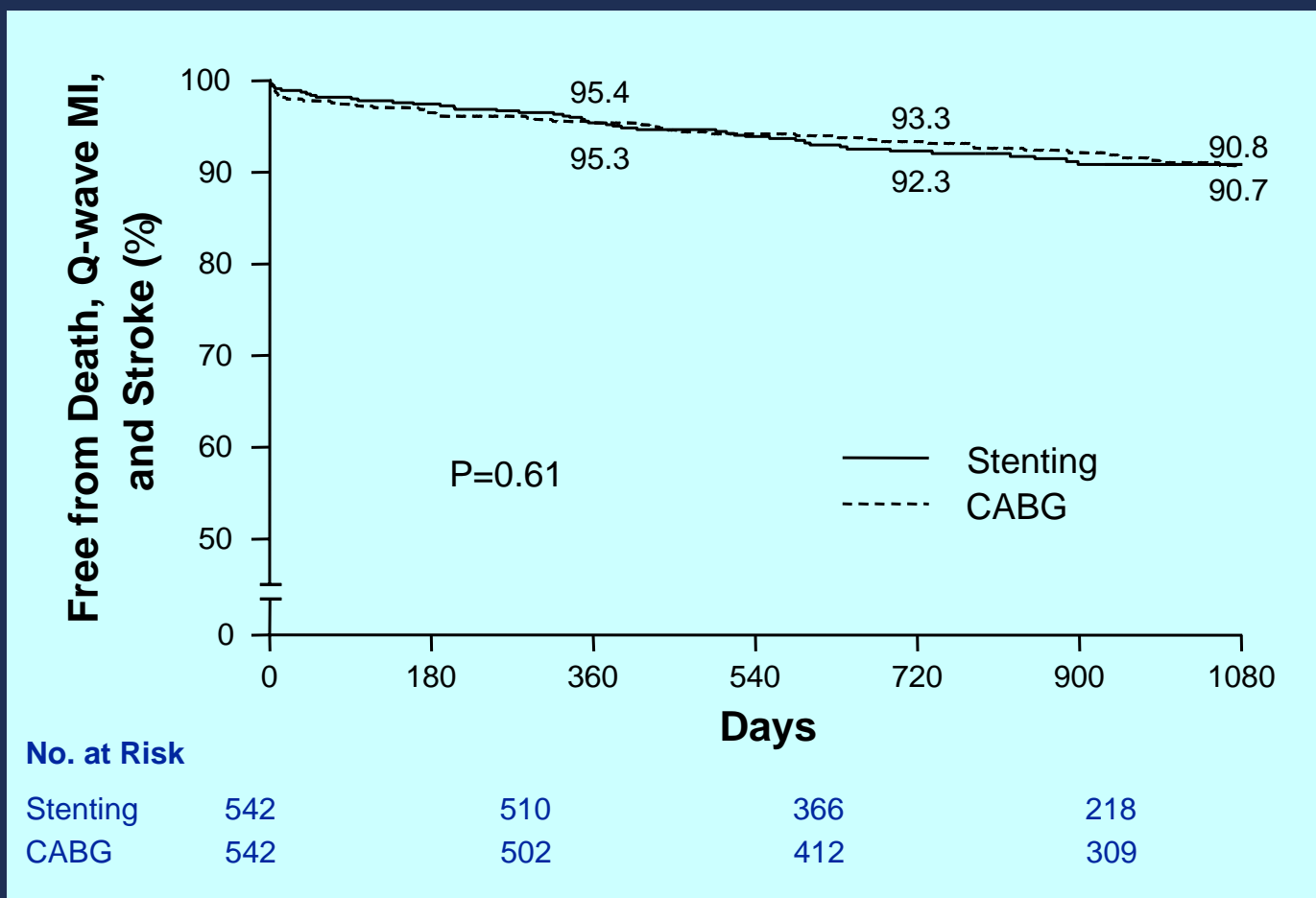
(Overall PCI and CABG matched cohort: 542 pairs)



Park et al N Engl J Med. 2008 Apr 24;358(17):1781-92

Death, Q-MI, or Stroke

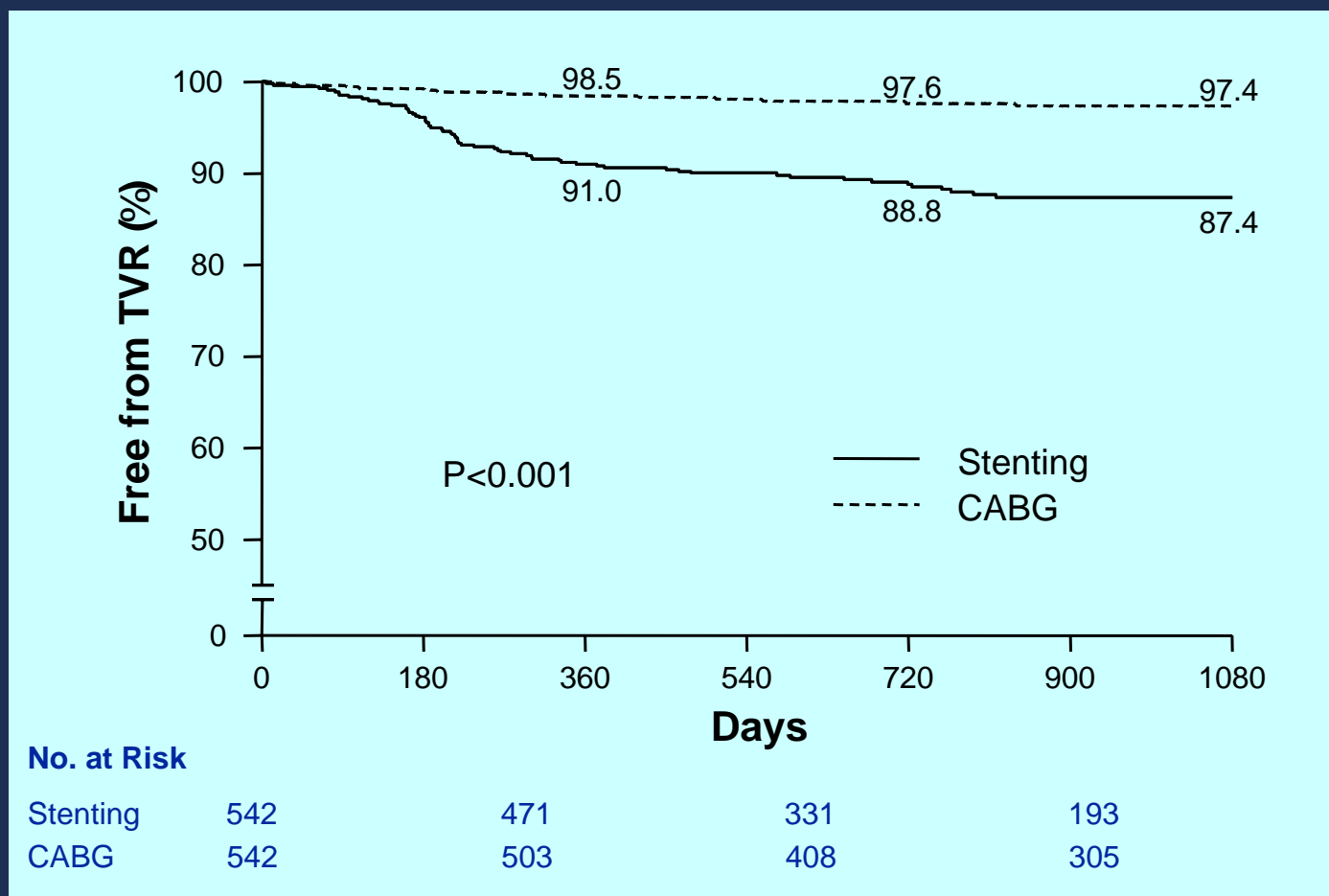
(Overall PCI and CABG matched cohort: 542 pairs)





Target-vessel revascularization

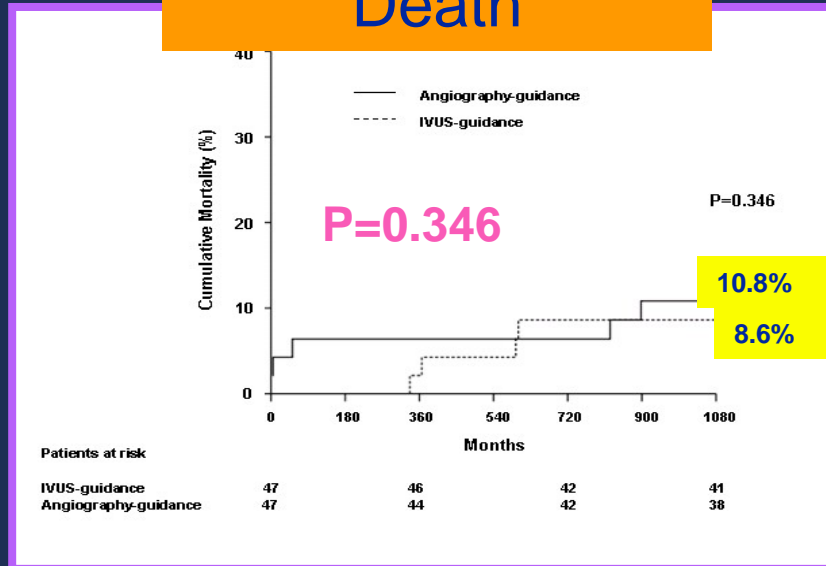
(Overall PCI and CABG matched cohort: 542 pairs)



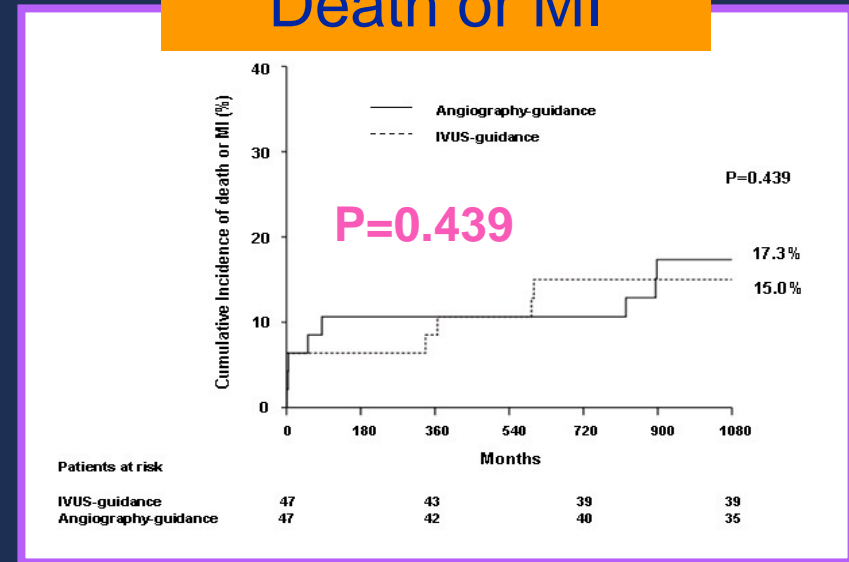
Park et al N Engl J Med. 2008 Apr 24;358(17):1781-92

Clinical Outcomes at 3 year F/U IVUS vs Angio Guidance

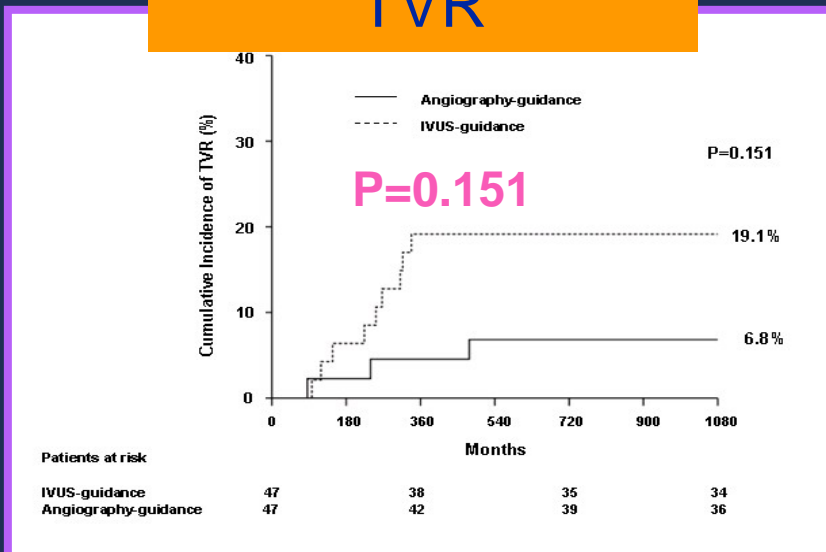
Death



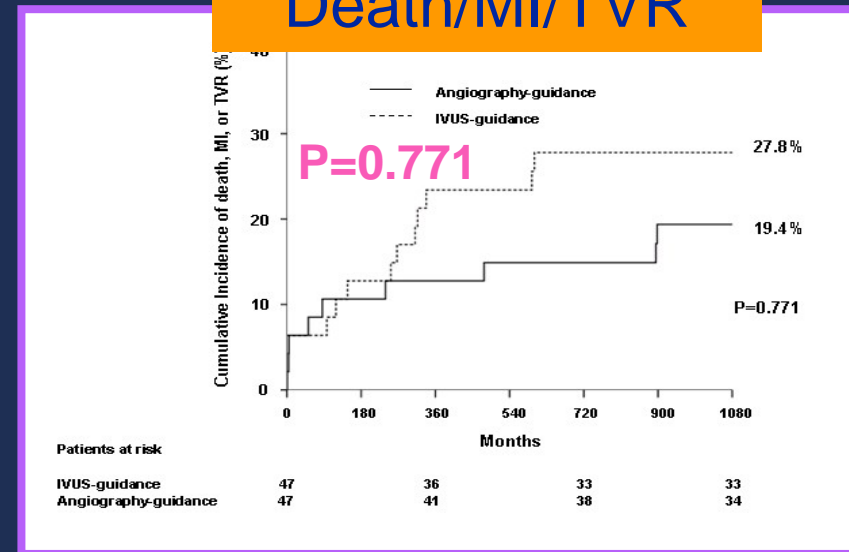
Death or MI



TVR



Death/MI/TVR



IVUS guidance in 756(77.5%) patients vs. 219 patients (22.5%)

Conclusions I



- Encouraging mid-term were observed in observational multicenter registries evaluating DES in unprotected LMCA lesions.
- Distal bifurcation LMCA lesions are still limited by the need to repeated revascularization. Careful lesion preparation, optimization stenting techniques and IVUS guided postdilatation could be useful in order to lower these events.



Conclusions II

- Encouraging results come from retrospective registries evaluating DES vs CABG and from the LM subgroup in the SYNTAX trial.
- Conclusive information about the optimal treatment of LMCA will come only from prospective, adequately powered randomized trial comparing CABG vs PCI with extended follow-up at least until 5 years