

Intervencionismo en Mujeres

TCI y MULTIVASO

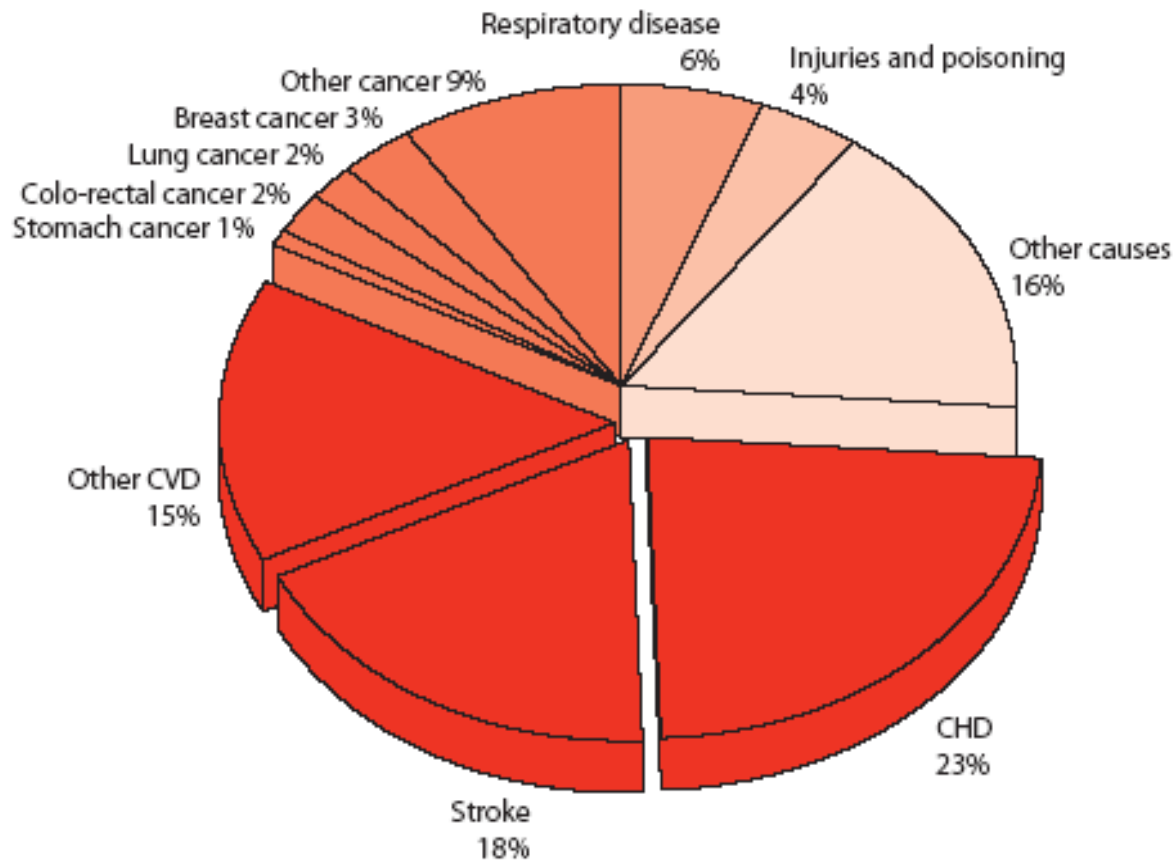
Eulogio Garcia MD
Hospital Clínico San Carlos
Madrid - Spain

AGENDA

- **Particularidades de la enfermedad coronaria en mujeres**
- **Argumentos en apoyo del intervencionismo en enfermedad multivaso**
- **Argumentos en apoyo del intervencionismo en enfermedad del tronco**
- **Elementos diferenciales en el Intervencionismo del tronco en mujeres**

Causas de mortalidad en mujeres

- **55% enfermedades cardiovasculares (43% en hombres)**
- **18 veces mayor mortalidad que en cáncer de mama**



Peor evolución clínica en mujeres

Catheterization and Cardiovascular Interventions 14(7):718-727 (2008)

Basic Science Review

Gender-Based Evaluation of the XIENCE V™ Everolimus-Eluting Coronary Stent System: Clinical and Angiographic Results from the SPIRIT III Randomized Trial

Alexandra J. Lansky,¹ MD, FCCP, Vivian G. Ng,¹ MD, Haili Mutlu,¹ MD, Ecaterina Cristea,¹ MD, Julian Benetato Guirán,² MD, Mark Midei,³ MD, FCCP, William Newman,¹ MD, Mark Sanz,⁴ MD, Poornima Bood,⁵ MD, MHA, Julie Doostbadeh,⁶ MD, Xiaofu Gu,⁴ MD, Roseann White,⁷ MD, Sherry Cao,⁸ MD, Krishnankutty Suchir,⁹ MD, MD, FCCP, and Gregg W. Stone,¹ MD, FCCP

	Total		P Value
	Men	Women	
N ^b	687	314	
Age (Mean in years ± SD)	61.82 ± 10.11	65.86 ± 10.60	<0.0001
BMI (Mean in kg/m ² ± SD)	30.21 ± 5.42	31.27 ± 6.83	0.0172
Hypertension (%)	72.7	81.5	0.0026
Hypercholesterolemia (%)	73.6	72.7	0.8158
All Diabetes mellitus (%)	25.7	36.3	0.0007
Insulin requiring (%)	5.0	11.5	0.0004
Current Smoker (%)	24.0	21.2	0.3711
Prior MI (%)	21.9	13.6	0.0022
Prior Cardiac Intervention (%)	34.1	25.5	0.0066
# Diseased Coronary Vessels (%)			
Single	61.3	74.2	<0.0001
Double	27.1	21.3	0.0598
Triple or More	11.5	4.5	0.0002
Unstable angina (%)	20.1	22.4	0.4450

	Total		P Value
	Men	Women	
N ^b	687	314	
30 days (%) ^c			
MACE	1.3	3.2	0.0766
TVF	1.6	3.5	0.0652
Cardiac death	0.0	0.0	–
Myocardial infarction	1.0	2.9	0.0526
TVR	0.6	1.3	0.2678
TLR	0.3	0.6	0.5938
TVR, remote	0.4	0.6	0.6518
Vascular Complication	0.6	1.0	0.6844
Stent Thrombosis	0.1	0.6	0.2336
1 year (%) ^d			
MACE	5.7	11.1	0.0036
TVF	7.5	13.7	0.0030
Cardiac death	1.0	0.3	0.4470
Myocardial infarction	2.5	4.6	0.1149
TVR	4.6	10.8	0.0007
TLR	2.7	7.2	0.0016
TVR, remote	2.7	5.2	0.0589
Vascular Complication	0.9	1.7	0.3348
Stent Thrombosis	0.3	0.7	0.5936

Por qué tienen peor pronóstico

- **Razones culturales**
- **Razones biológicas**
- **Razones sociales y científicas**

Razones culturales

- **Negación de los síntomas**
- **Ignoran la importancia de los mismos**
- **Diagnóstico tardío**
- **No cuidan los factores de riesgo (... y los hombres ?)**

Razones biológicas

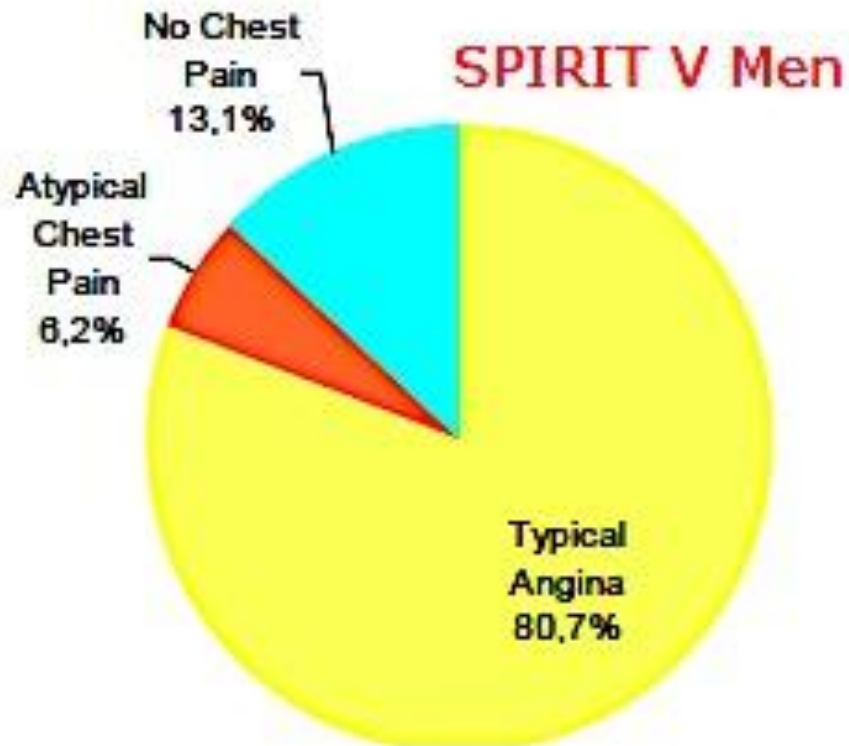
Las mujeres tienen más factores de riesgo cuando desarrollan enfermedad coronaria

SPIRIT WOMEN: BASELINE CHARACTERISTICS and RISK FACTORS

	SPIRIT Women Females N= 1572	SPIRIT V Males N= 2072	P-value
Age (y)	67±11	62±11	<0.001
≥65 y (%)	61	40	
Current smoker (%)	14	26	<0.001
Hypertension (%)	78	62	<0.001
Hypercholesterolemia (%)	64	58	0.006
Diabetes (%)	34	26	<0.001
IDDM (%)	11	6	<0.001
Family history of CAD (%)	36	34	0.486
General obesity (%)*	27	24	0.154
Central obesity (%)**	71	39	<0.001
Post-menopausal state (%)	94	-	-

*Defined as Body Mass Index >30 kg/cm² **Defined as waist circumference >88cm in women and >102 cm in men

Síntomas en Hombres y mujeres



	Women	Men	p
Typical angina	74%	81%	0,009
Atypical Chest Pain	9%	6,2%	0,01
Absence of Pain	16%	13%	0,04

Razones culturales y científicas : Poca representación en ensayos clínicos

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MI, myocardial infarction.

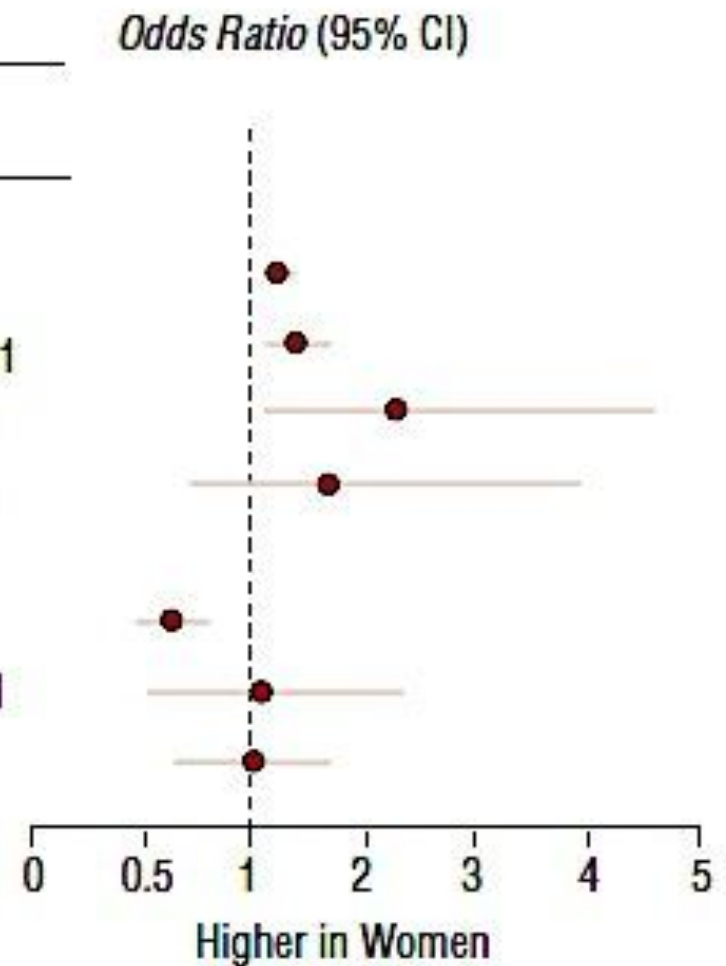
*P-values were from post hoc analysis.

[#]N = Number of patients analyzed.

Angioplastia Primaria

Characteristic	Women (n=317)	Men (n=727)	P
Demographics			
White, %	89.9	89.4	NS
Age, y	65±12	59±12	<0.005
BMI, kg/m ²	27±6	28±5	0.104
Medical history, %			
Current smoking	26	27	NS
Hypertension	59	44	<0.005
Diabetes	19	14	0.036
Stroke	3.5	3.3	NS
Previous PTCA	14	12	NS
Peripheral or cerebrovascular disease	9.5	5.5	0.019
Congestive heart failure	2	1	NS
Dialysis	0.3	1.0	NS
Time to treatment, %			
<6 hr	63	74	0.001
6-23 hr	37	26	0.001

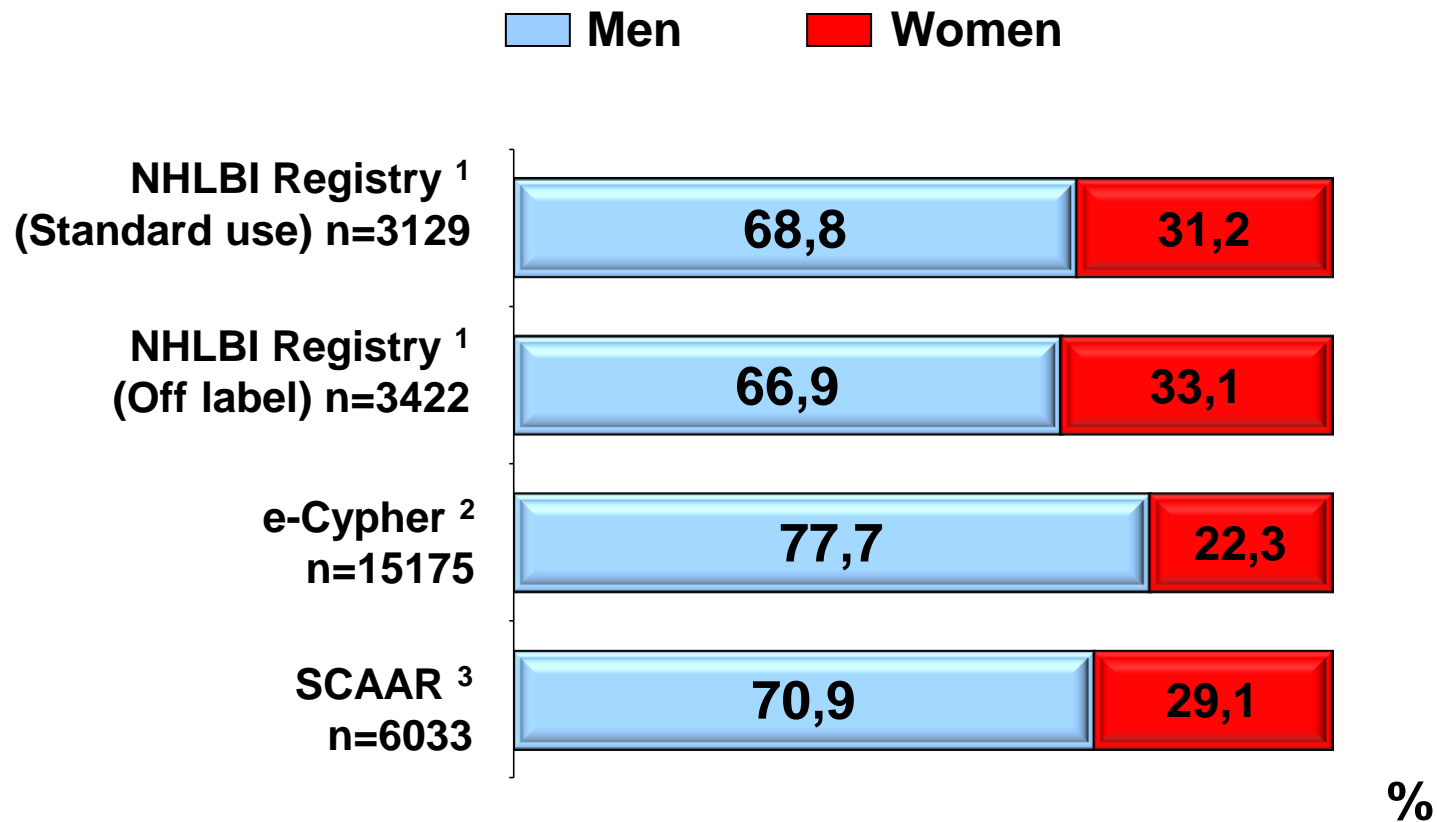
Study	n	Unadjusted Mortality			P
		Women, %	Men, %	Women Versus Men, %	
<i>In-Hospital Mortality</i>					
ACC-NCDR	59 792	32	5.4	3.1	–
Watanabe	36 765	36	4.0	2.0	<.0001
Vakili ⁶⁶	1044	30	7.9	2.3	<.05
CADILLAC ⁶⁶	2082	27	3.4	1.0	.003
<i>Late Mortality</i>					
Mahilli ⁶²	1937	26	13.8	12.9	–
CADILLAC ⁶³	2082	27	7.8	3.0	<.001
Antoniucci ⁶⁵	1019	23	12.0	7.0	.03



Mayor mortalidad precoz y tardía en angioplastia primaria

Lansky

Menor utilización de DES en mujeres



¹ Marroquin OC. *N Engl J Med* 2008;358:342-352.

² Urban P. *Circulation* 2006;113:1343-1441.

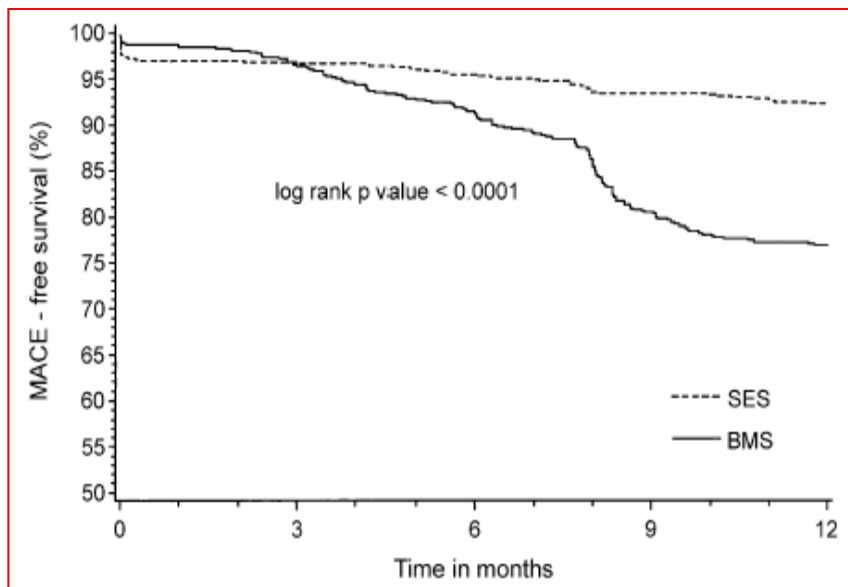
³ Lagerqvist B. *N Engl J med* 2007;356:1009-1019.

Mismo beneficio con DES en hombres y mujeres

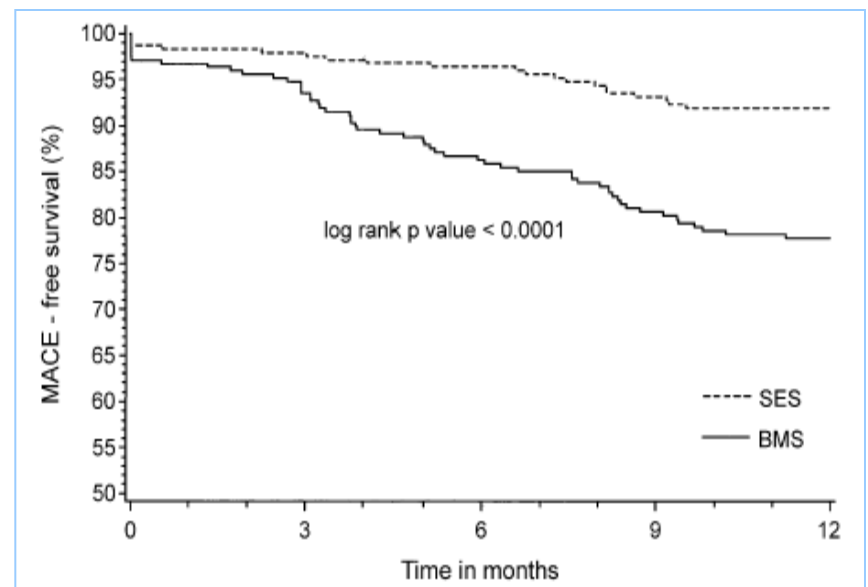
RAVEL, SIRIUS, e-SIRIUS, c-SIRIUS

1 year survival free from MACE

Women
p<0.0001



Men
p<0.0001



Resultados de stents de Paclitaxel en hombres y mujeres. Subestudio del TAXUS IV

WOMEN vs MEN with Taxus	Women (N=187)	Men (N=475)	P Value
Restenosis at 9 months	8.6%	7.6%	0.80
TLR	7.6%	3.2%	0.03
TVR*	10.8%	5.7%	0.03
MACE	13.5%	9.9%	0.24

Conclusion: Los resultados son similares en hombres y mujeres

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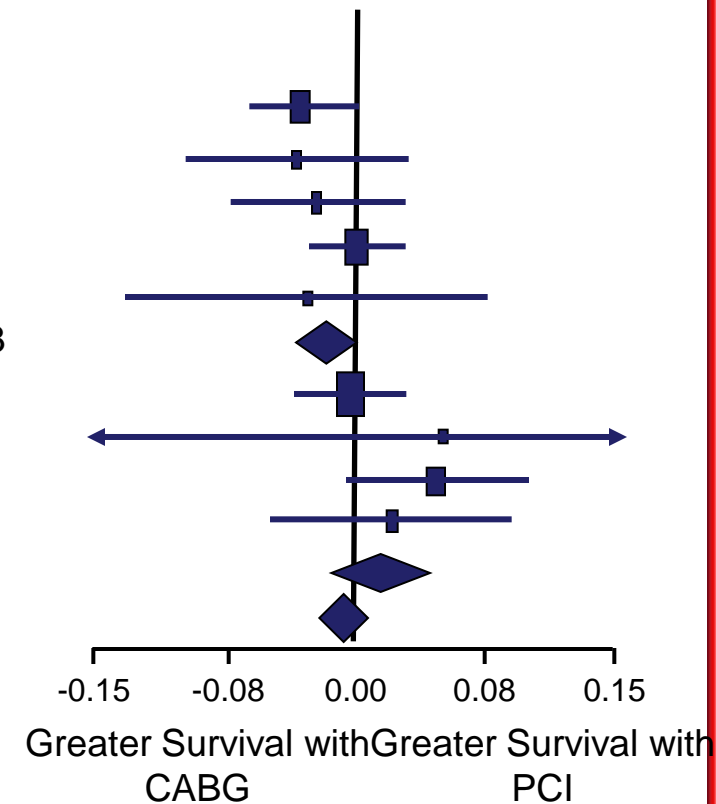
Metanálisis de supervivencia a 5 años en pacientes con enfermedad multivaso tratados con angioplastia o cirugía

Study, Year (Reference)

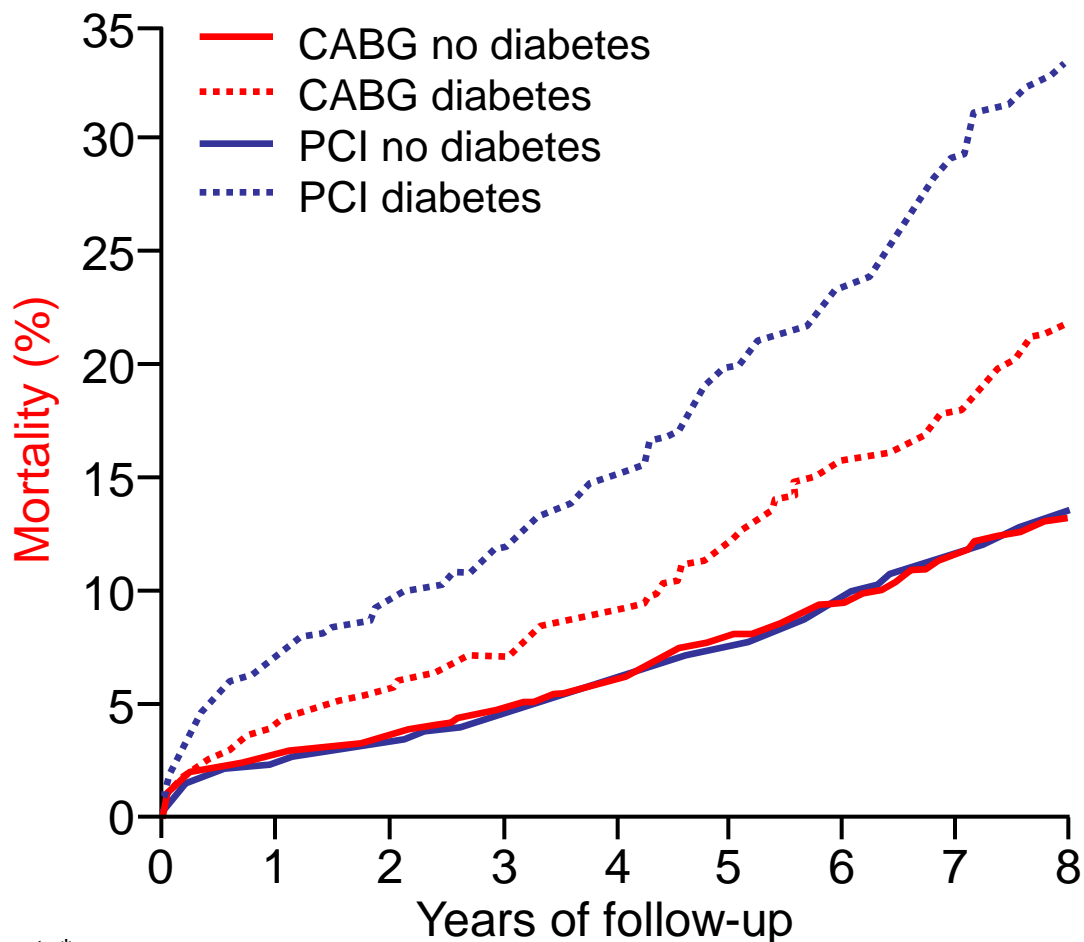
Surviving Patients/All Patients, n/n

Risk Difference (95% CI)

	PCI	CABG
BARI, 1996 (64)	790/915	816/914
EAST, 2000 (80)	153/174	161/177
GABI, 2005 (88)*	164/177	157/165
RITA, 1998 (110)	483/510	474/501
French Monocentric Study, 1997 (126)	66/76	68/76
Balloon overall	1656/1852	1676/1833
ARTS, 2005 (23)	542/590	538/584
AWESOME, 2001 (28)	30/38	19/26
ERACIII, 2005 (86)	209/225	199/225
MASS II, 2006 (103)	177/205	171/203
BMS overall	958/1058	927/1038
MVD overall	2614/2910	2603/2871



CABG vs PCI : Mortalidad en diabéticos

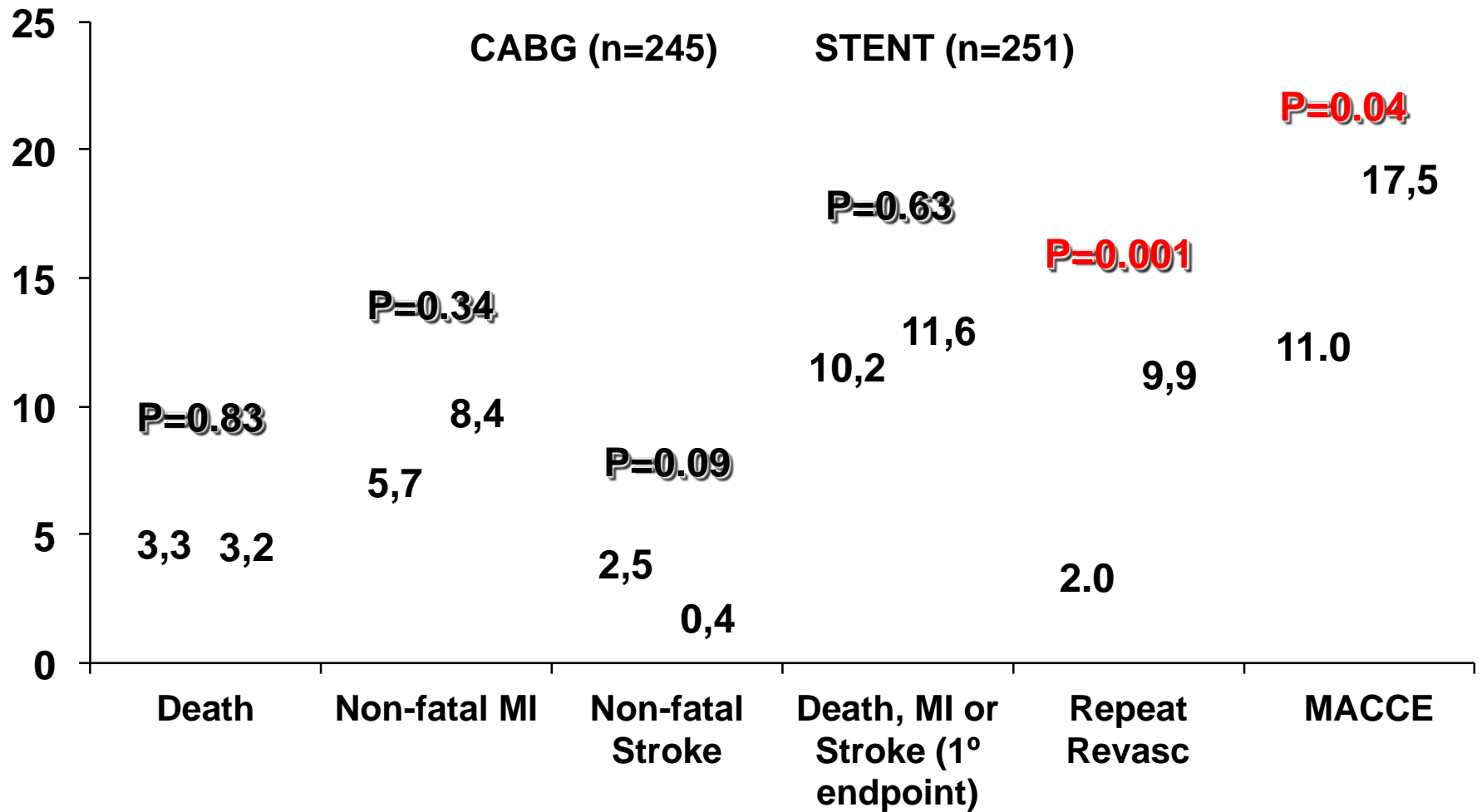


Number of patients*

CABG no diabetes	3263	3169	3089	2877	2677	2267	1592	1380	1274
CABG diabetes	615	587	575	532	498	421	257	225	200
PCI no diabetes	3298	3217	3148	2918	2725	2281	1608	1393	1288
PCI diabetes	618	574	555	508	475	373	218	179	160

CARDia: Eventos a 1 año

61% 3VD (LM excluded) 31% IDDM



SYNTAX



62 EU Sites

+



23 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%

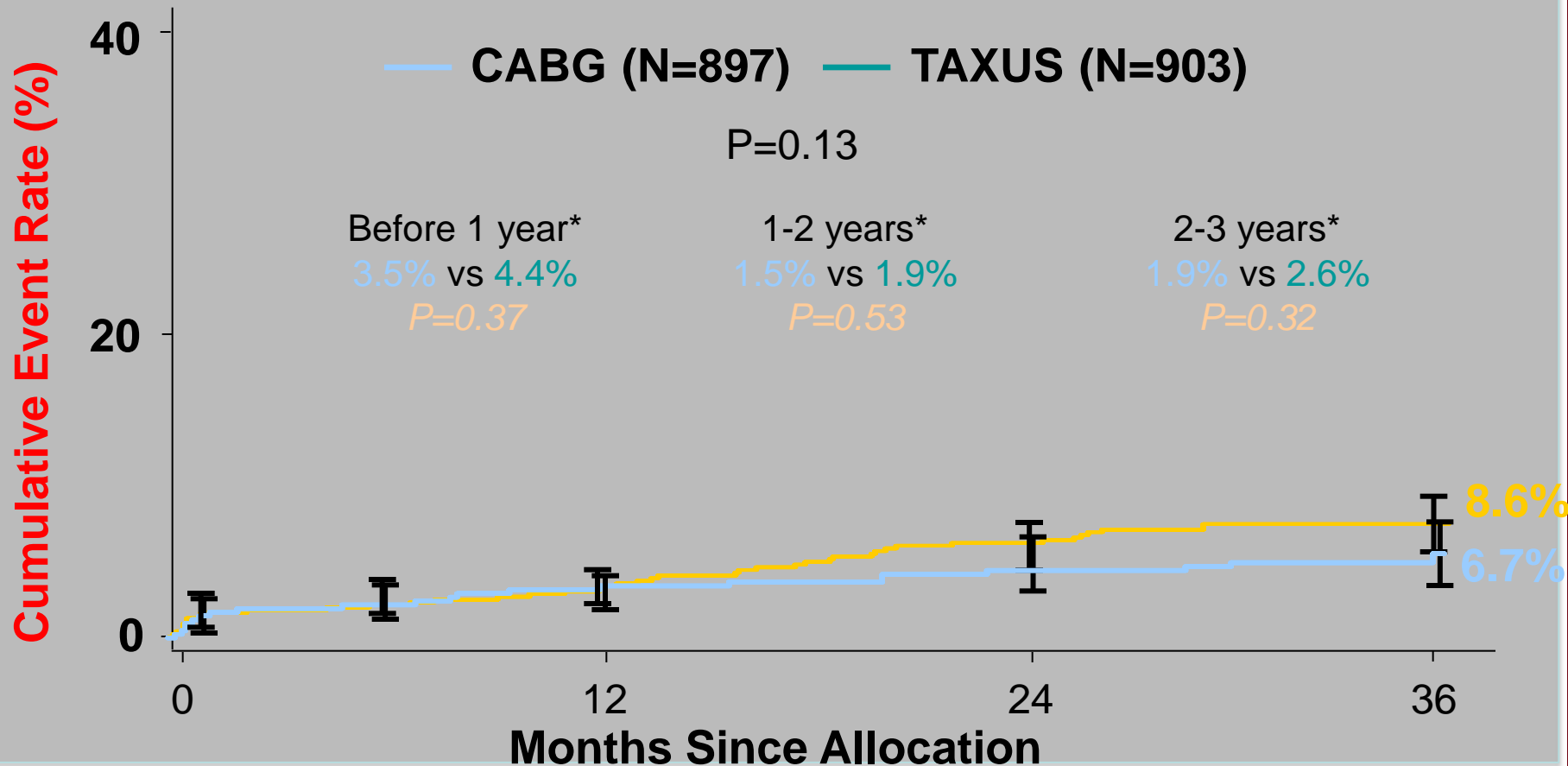
Non DM
71.5%

DM
28.2%

NonDM
71.8%

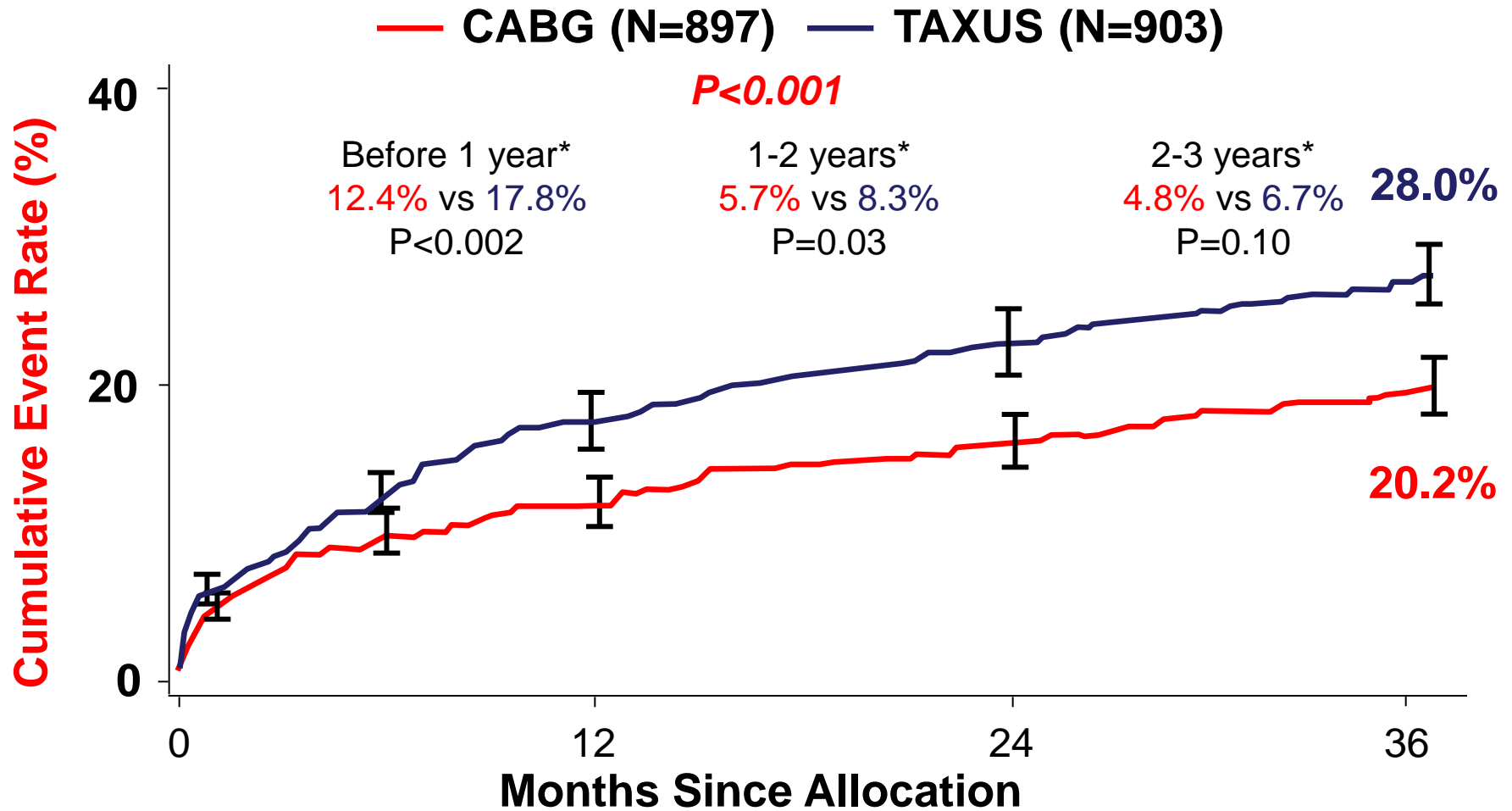
*** TAXUS Express**

SYNTAX: Mortalidad a 3 años



Cumulative KM Event Rate \pm 1.5 SE; log-rank *P* value; *Binary rates
Event Rate \pm 1.5 SE. * Fisher's Exact Test

SYNTAX: Eventos adversos a 3 años

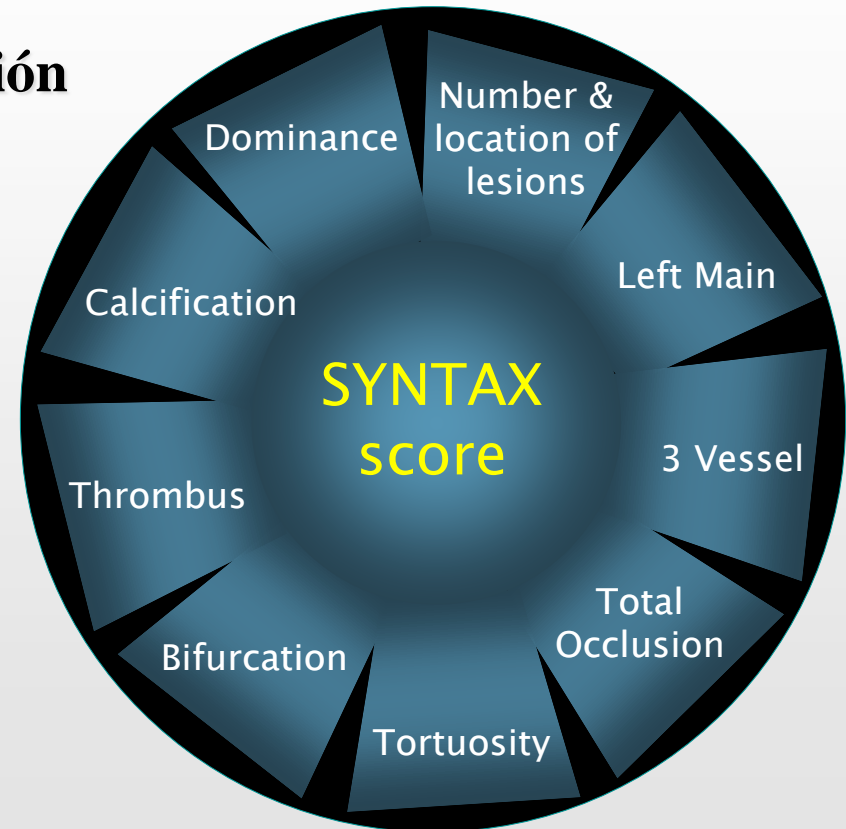


Cumulative KM Event Rate \pm 1.5 SE; log-rank *P* value; *Binary rates
Event Rate \pm 1.5 SE. * Fisher's Exact Test

ITT population

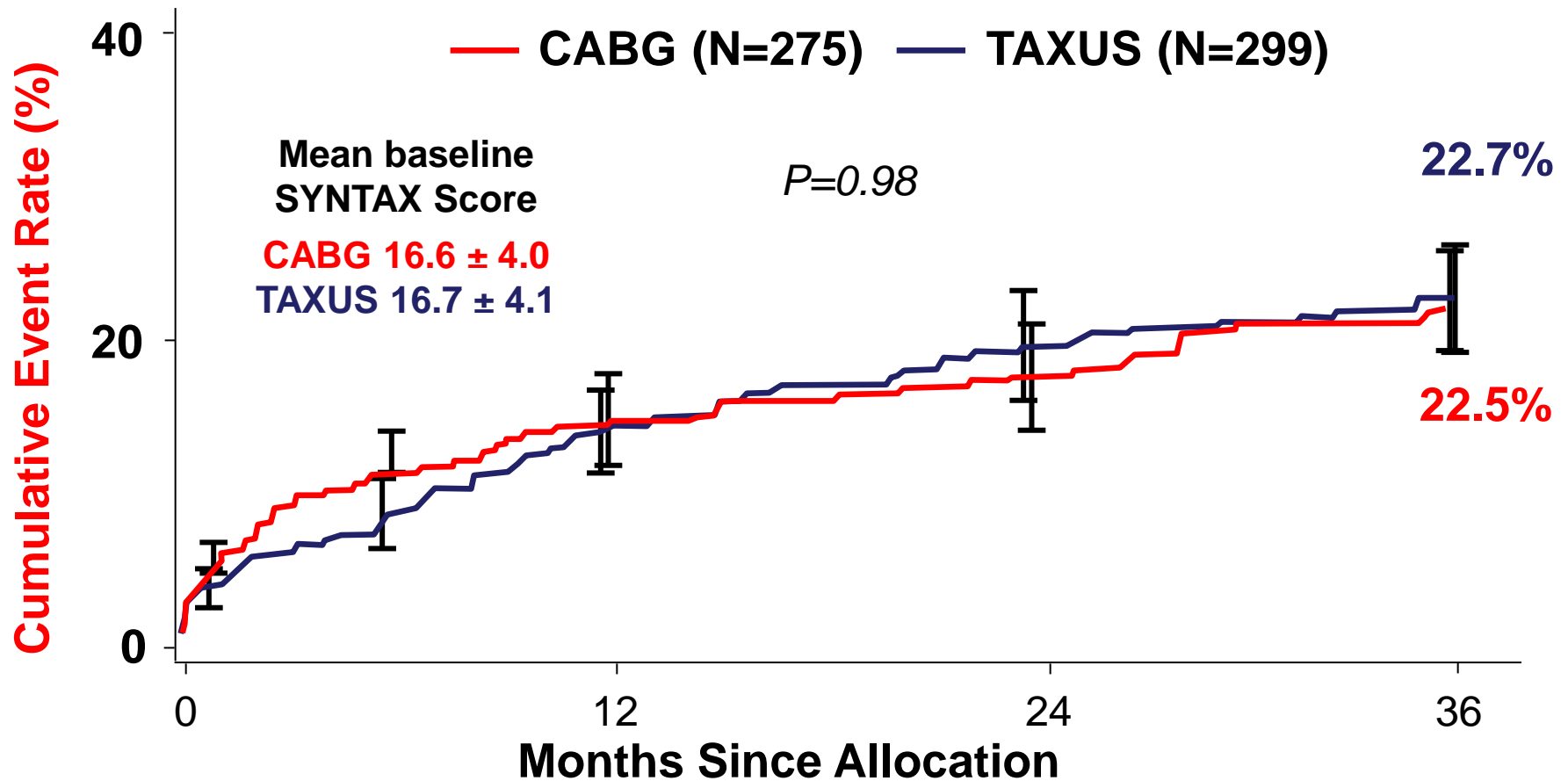
SYNTAX Score

- ❑ Un instrumento angiográfico prospectivo para graduar la complejidad de la enfermedad disease
- ❑ Objetivo: Obtener evidencia para seleccionar el mejor método de revascularización (Cirugía o Angioplastia)



Gran peso de las oclusiones totales

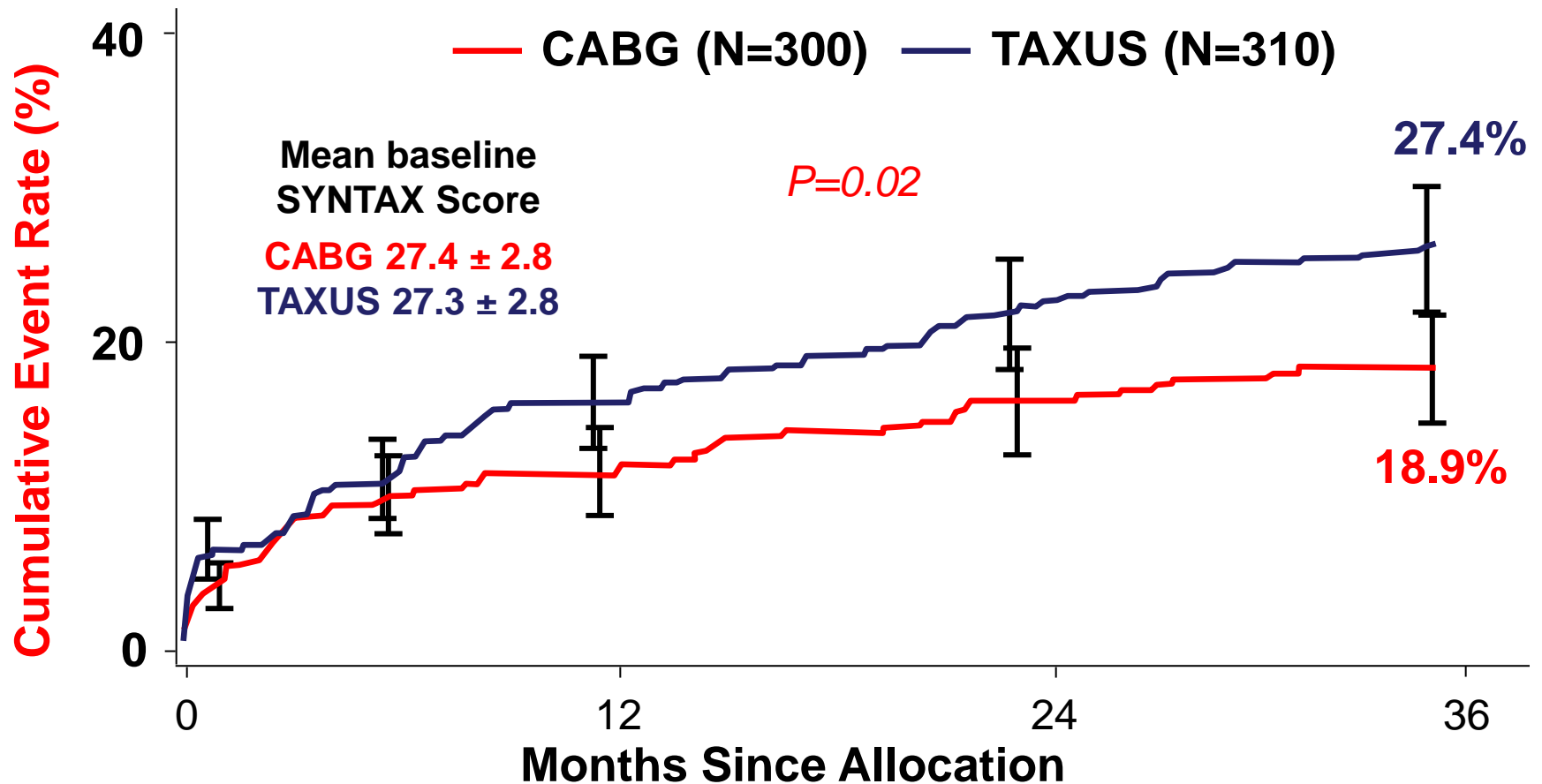
Eventos adversos en el grupo con Syntax score bajo (0-22)



Calculated by core laboratory;
ITT population

Cumulative KM Event Rate \pm 1.5 SE; log-rank P value; *Binary rates
Event Rate \pm 1.5 SE. * Fisher's Exact Test

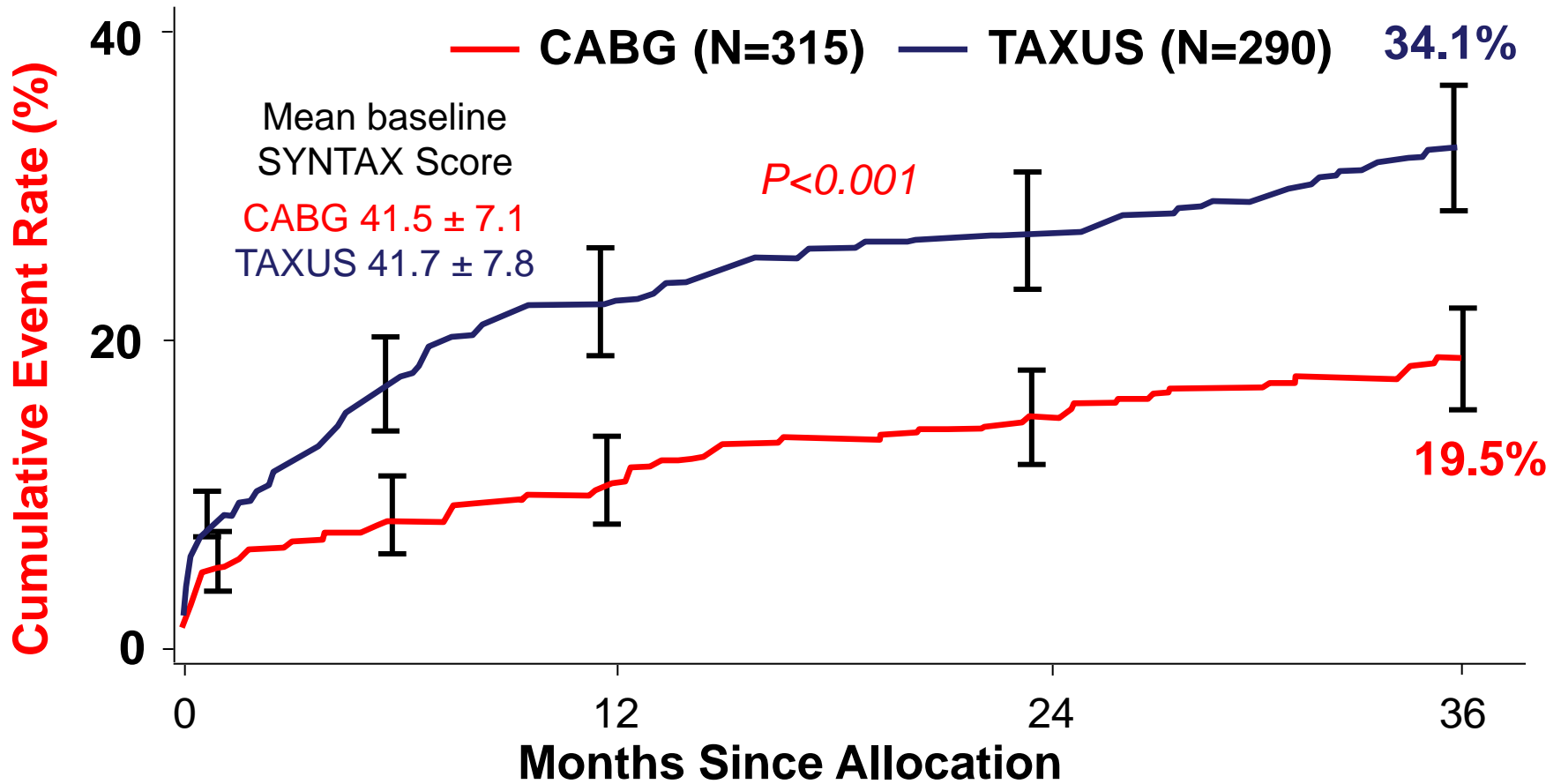
Eventos adversos en el grupo con Syntax score medio (23-32)



Calculated by core laboratory;
ITT population

Cumulative KM Event Rate ± 1.5 SE; log-rank *P* value; *Binary rates
Event Rate ± 1.5 SE. * Fisher's Exact Test

Eventos adversos en el grupo con Syntax score alto (≥ 33)



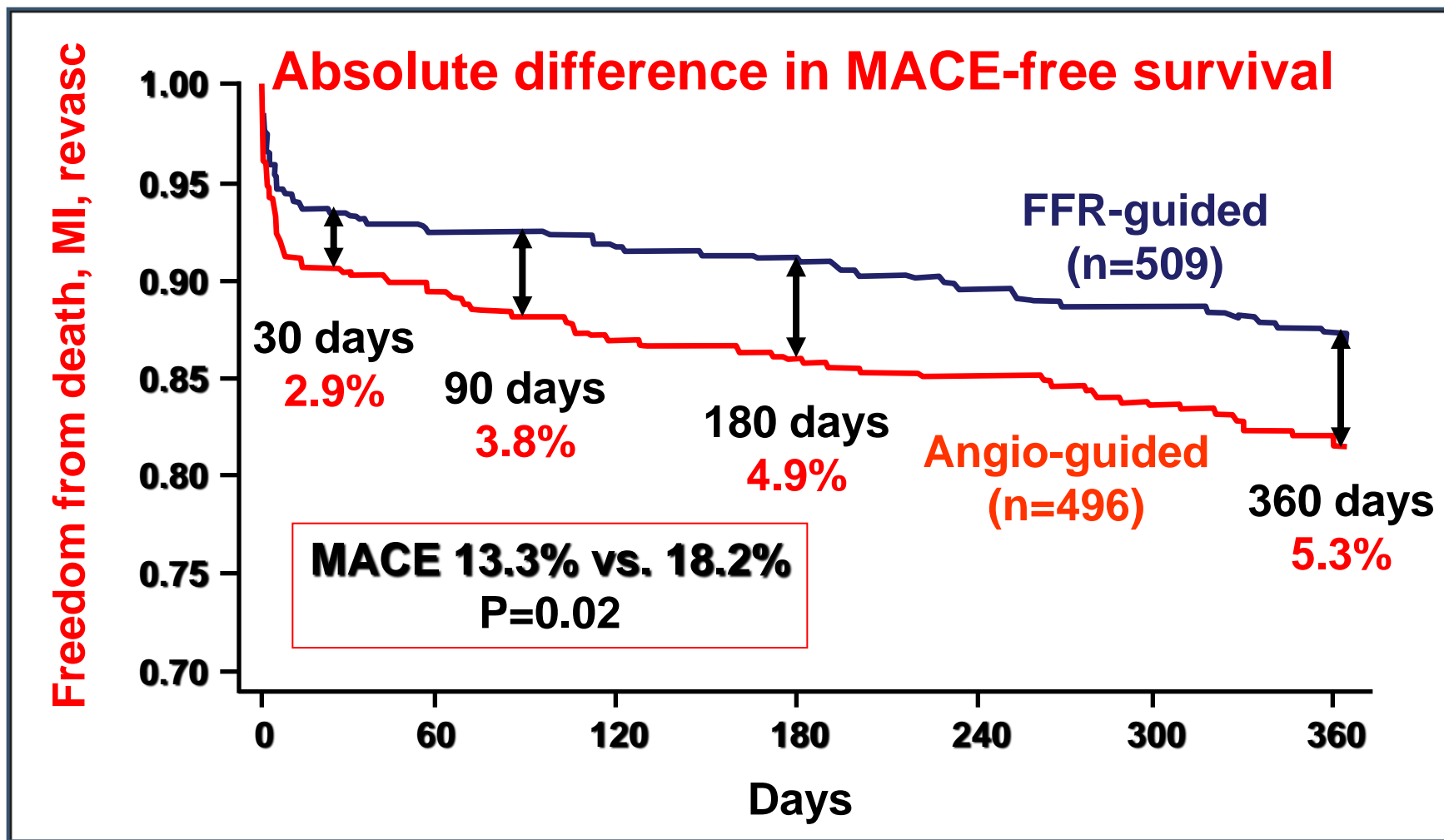
Calculated by core laboratory;
ITT population

Cumulative KM Event Rate ± 1.5 SE; log-rank P value; *Binary rates
Event Rate ± 1.5 SE. * Fisher's Exact Test

FAME: Optimización de la Revasc Completa



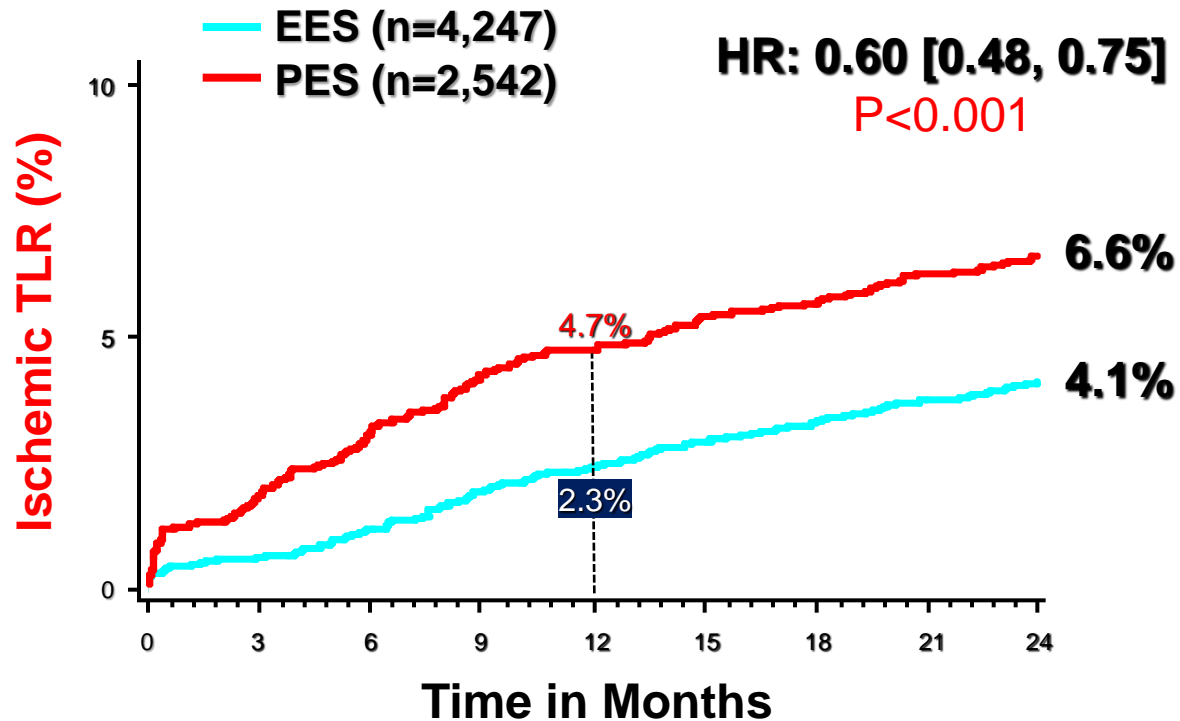
1005 pts con enf. multivaso MVD tratados con DES fueron randomizados a intervención guiada por FFR (isquemia) o angiografía-



SPIRIT II, III, IV y COMPARE

Análisis de datos acumulados (n=6,789)

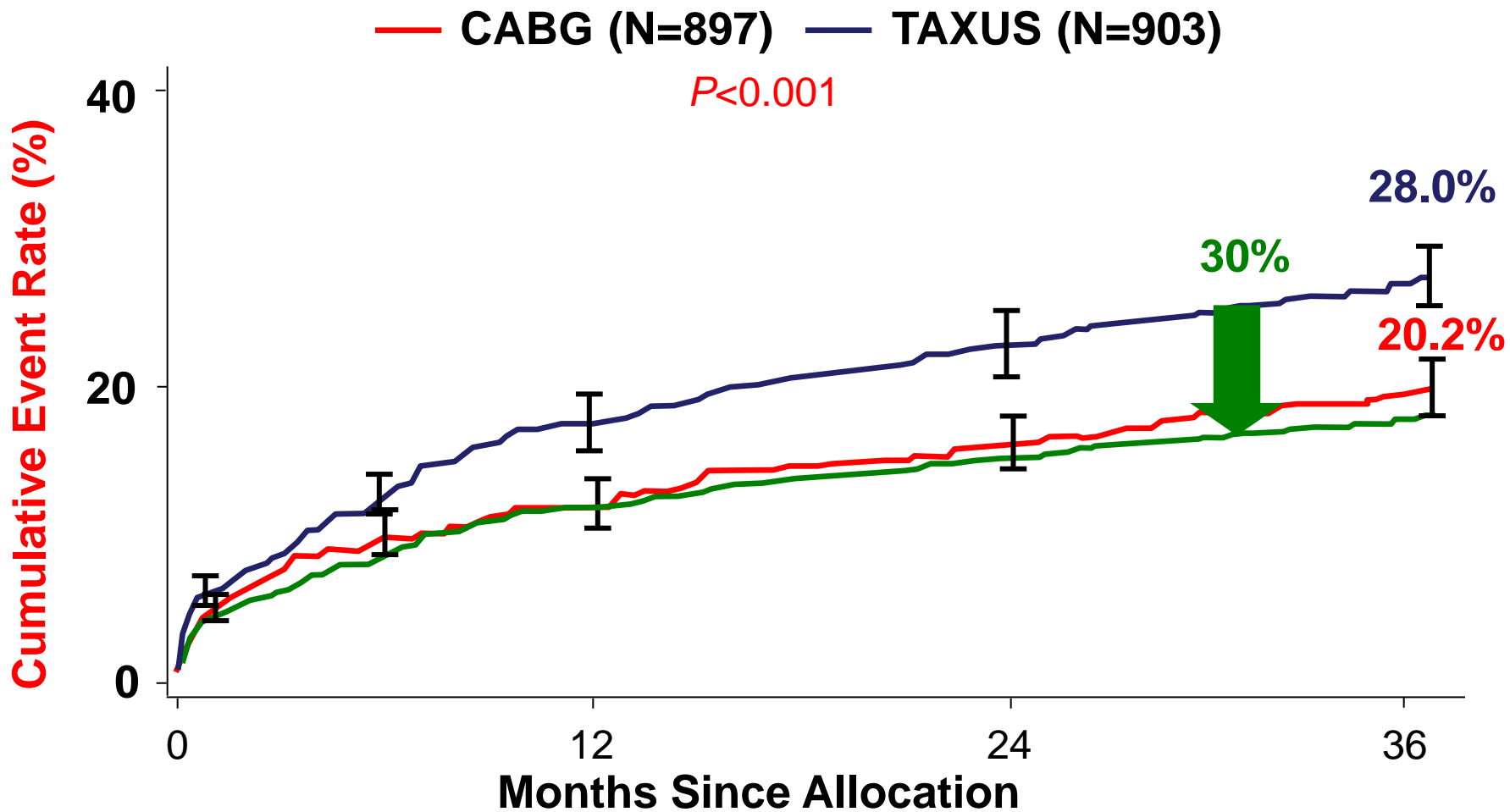
Revascularización de la lesión tratada



Number at risk

XIENCE	4247	4143	4004	3891	3363
TAXUS	2542	2416	2328	2260	2018

Eventos potenciales con DES de segunda generación



Cumulative KM Event Rate \pm 1.5 SE; log-rank P value; * Binary rates
Event Rate \pm 1.5 SE. * Fisher's Exact Test

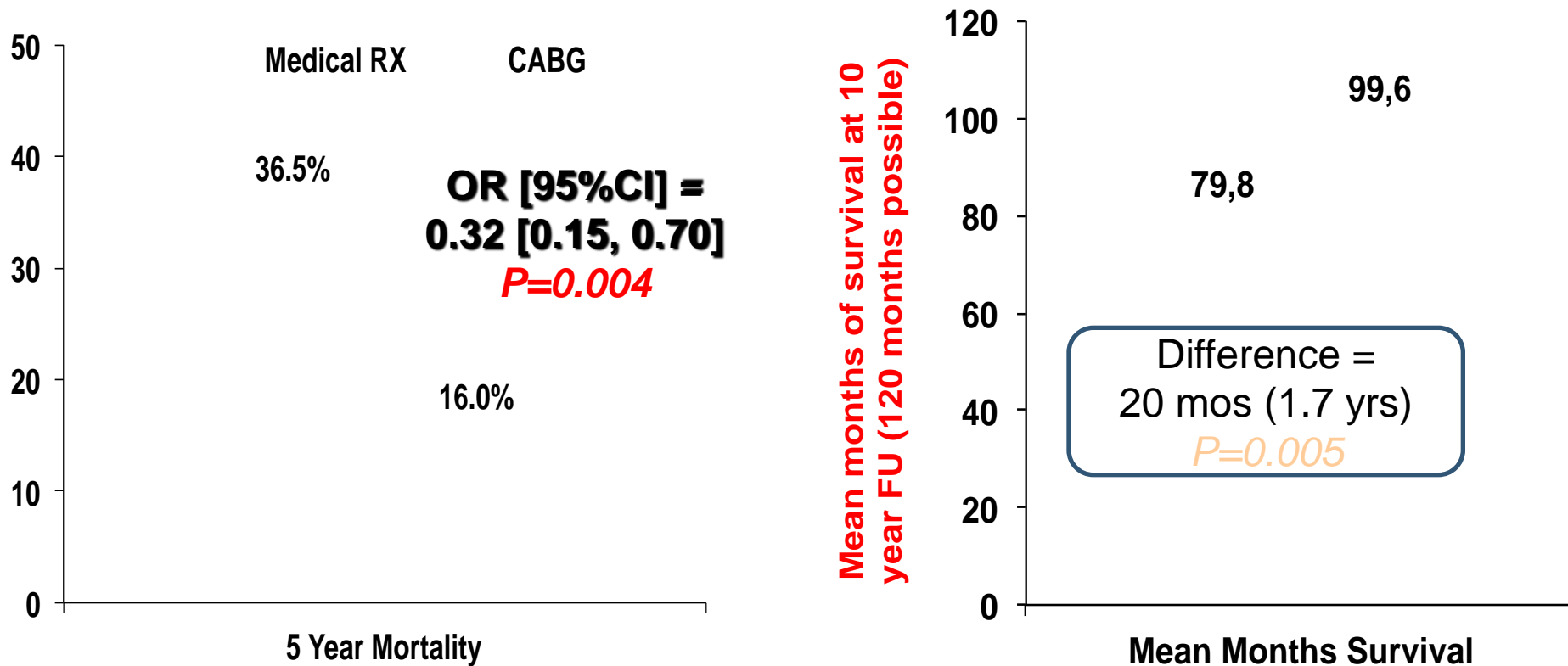
ITT population

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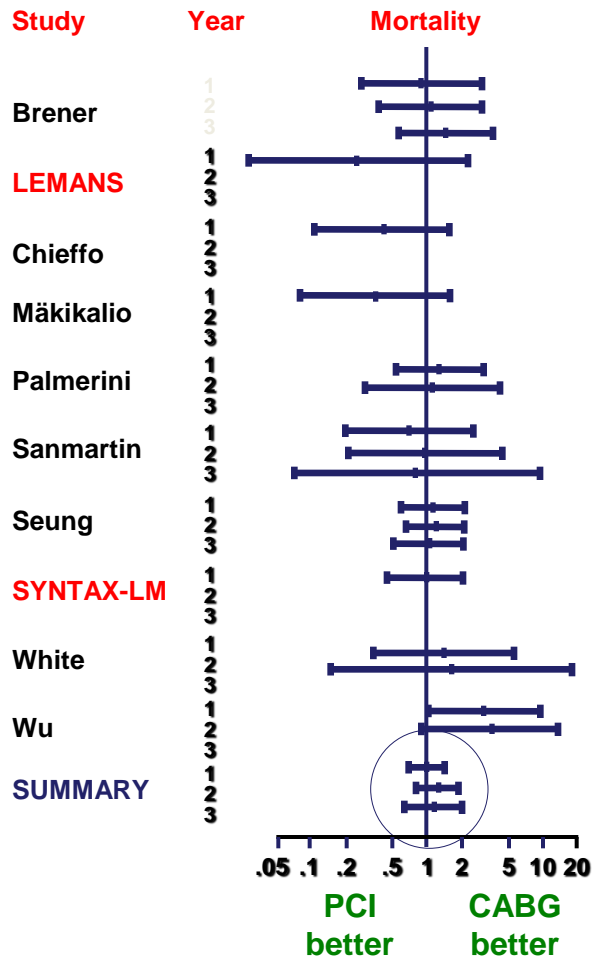
Cirugía vs. Tto médico en Tronco

150 pts con enf. Tronco randomizados a cirugía o tto médico en 2 estudios



Meta-analysis of PCI vs. Cirugía en Tronco .

10 studies (2 RCTs, 8 observational [7 matched or adjusted])
N=3,773 pts (2,114 CABG and 1,659 PCI [78.7% DES])



OR [95%CI] for mortalidad

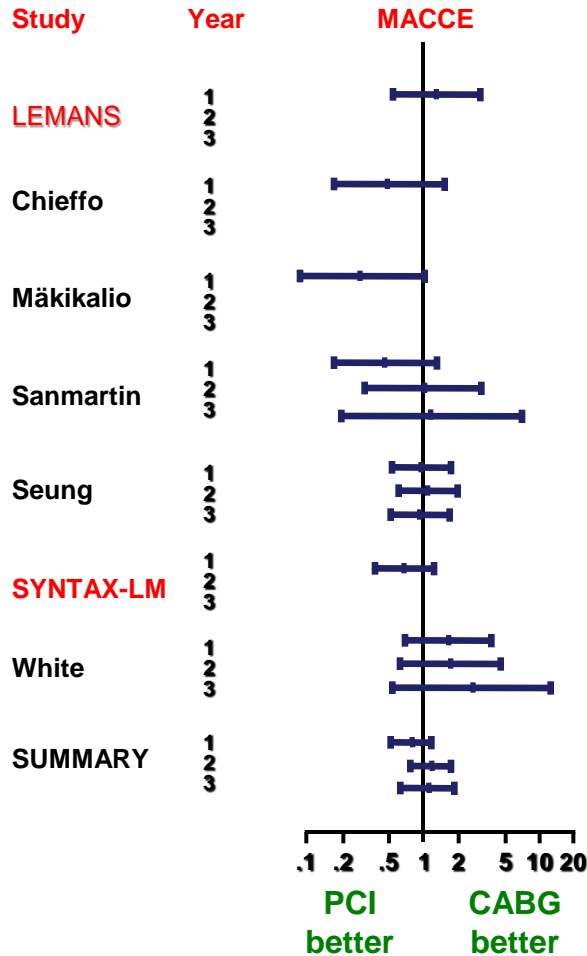
	Year 1	Year 2	Year 3
Random effects	1.00 [0.70-1.41]	1.27 [0.83-1.94]	1.11 [0.66-1.86]
Fixed effects	0.97 [0.71-1.33]	1.28 [0.84-1.94]	1.11 [0.66-1.85]
Heterogeneity	P=0.38	P=0.77	P=0.81

Year 1: 1,393 PCI pts and 1,932 CABG pts;
 Year 2: 528 PCI pts and 890 CABG pts;
 Year 3: 263 PCI pts and 578 CABG pts.

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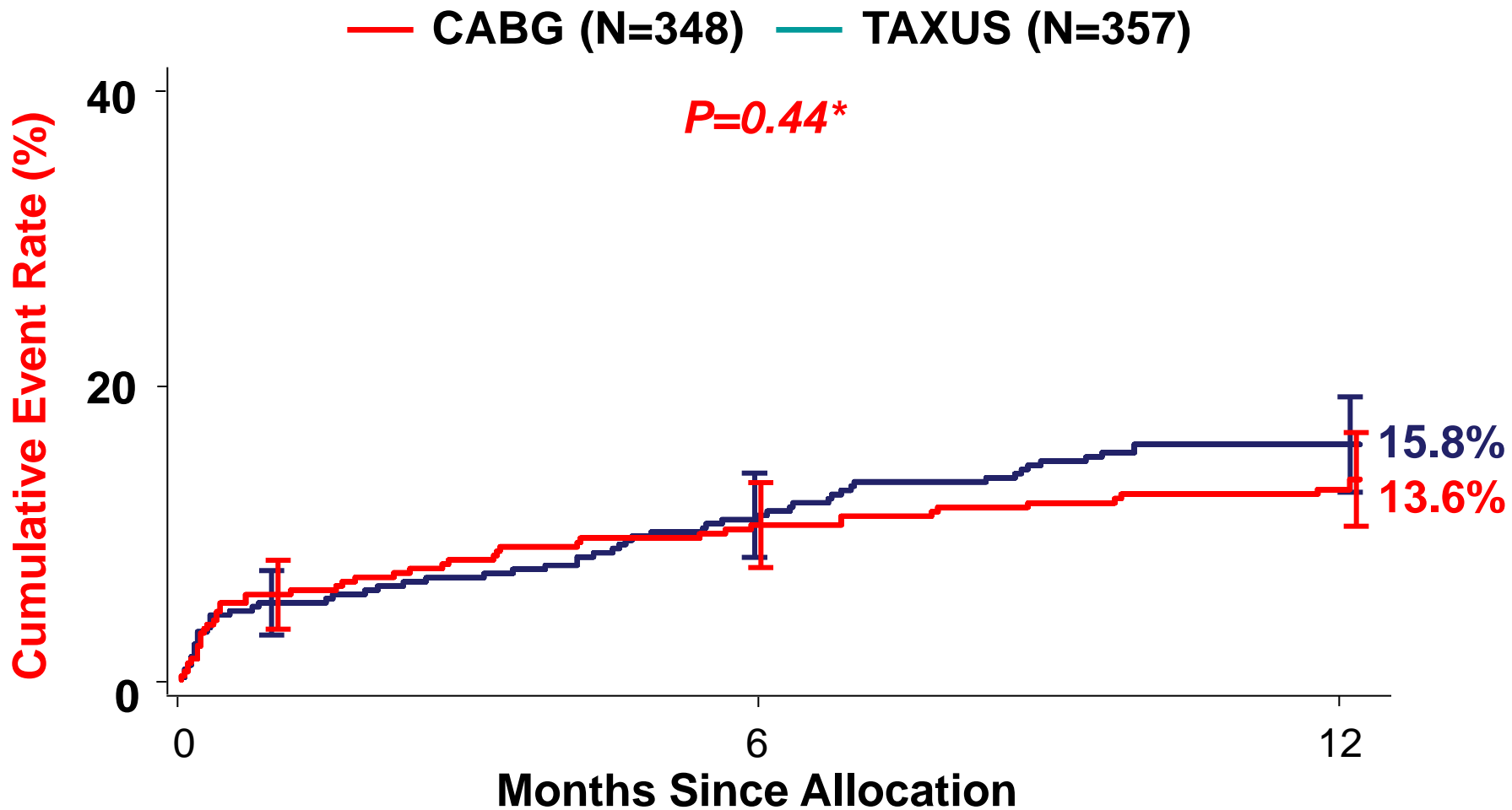


OR [95%CI] for M/MIAM/ ACV

	Year 1	Year 2	Year 3
Random effects	0.84 [0.57-1.22]	1.25 [0.81-1.94]	1.16 [0.68-1.98]
Fixed effects	0.82 [0.62-1.09]	1.25 [0.81-1.94]	1.16 [0.68-1.96]
Heterogeneity	P=0.18	P=0.70	P=0.48

Year 1: 1,239 PCI pts and 1,614 CABG pts;
 Year 2: 432 PCI pts and 652 CABG pts;
 Year 3: 236 PCI pts and 451 CABG pts.

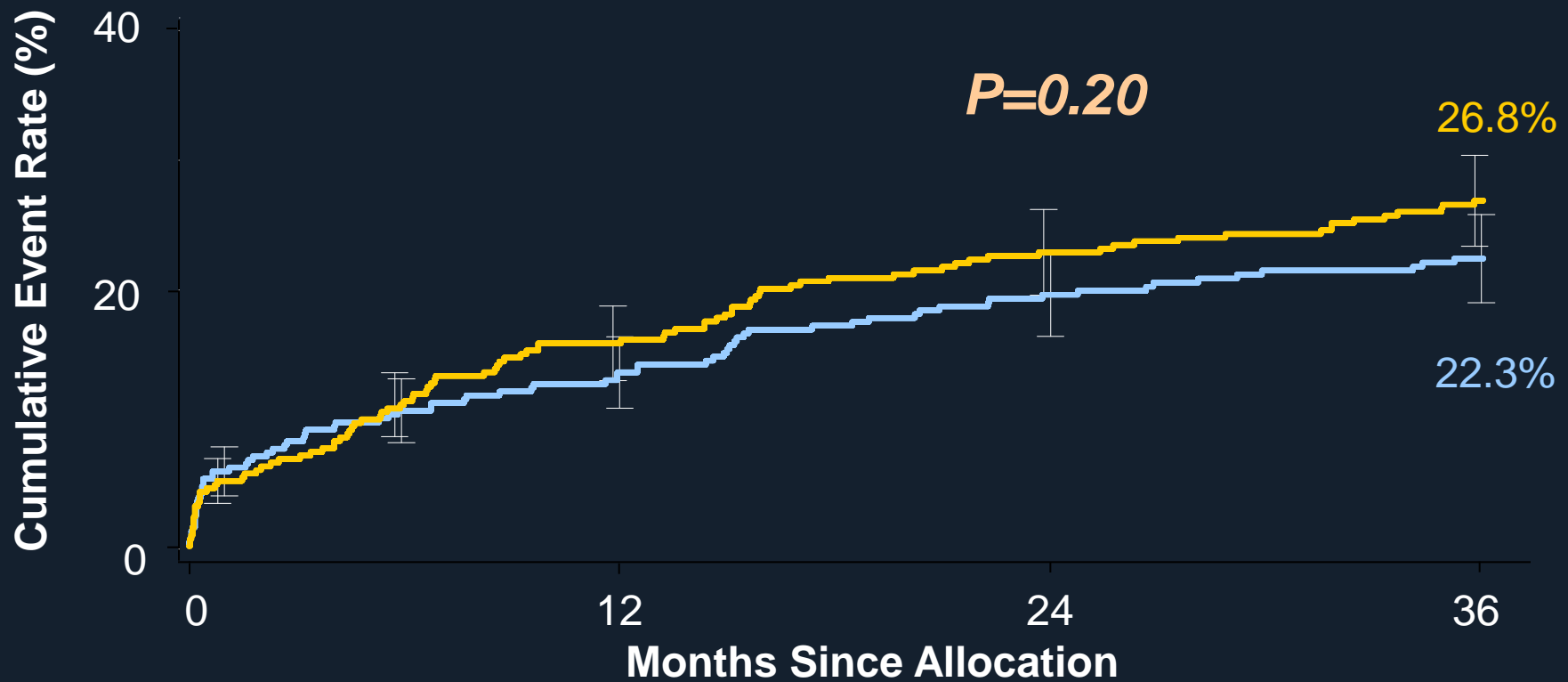
SYNTAX :Eventos a 1 año Subgrupo de Tronco



Eventos a 3 años

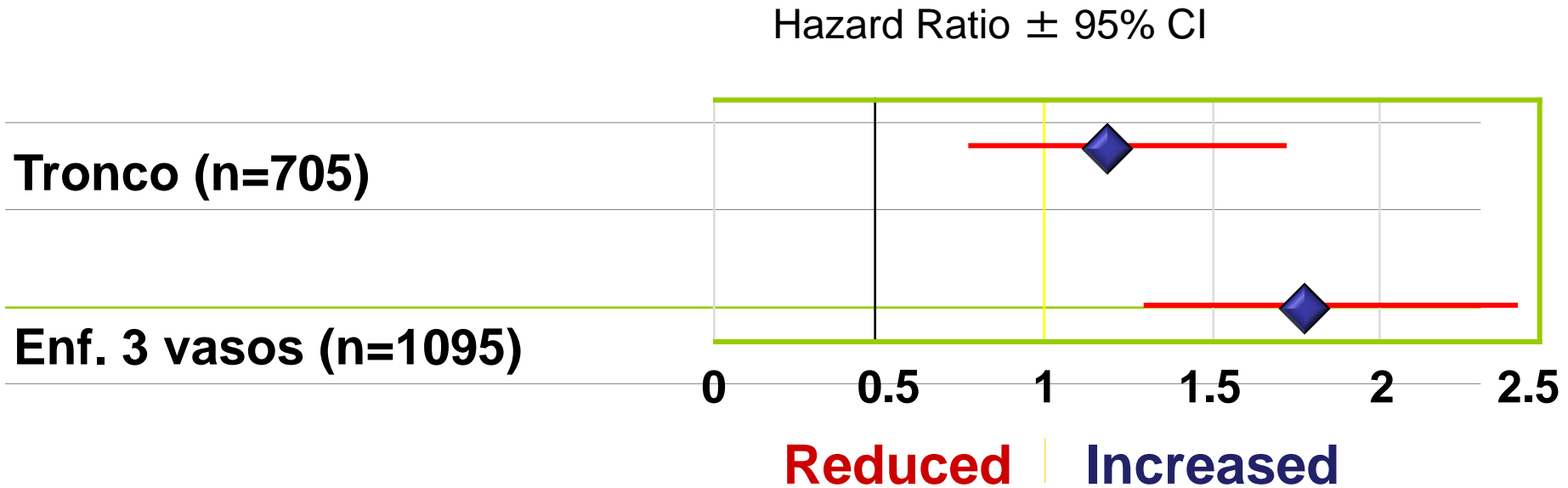
Subgrupo de Tronco

— CABG (N=348) — TAXUS (N=357)



Test de interacción para Tronco

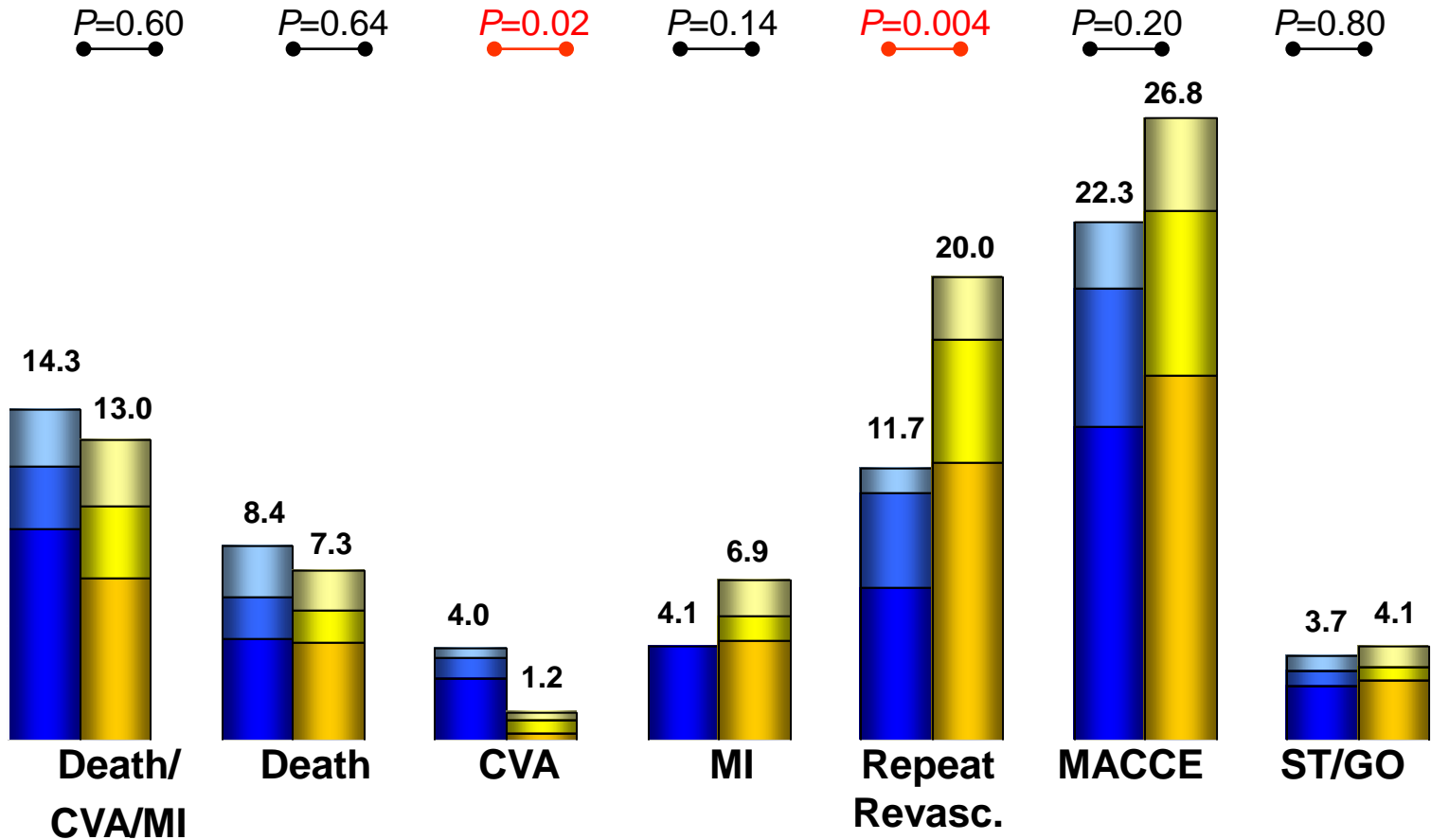
Tronco Vs. No Tronco; Eventos a 1 año



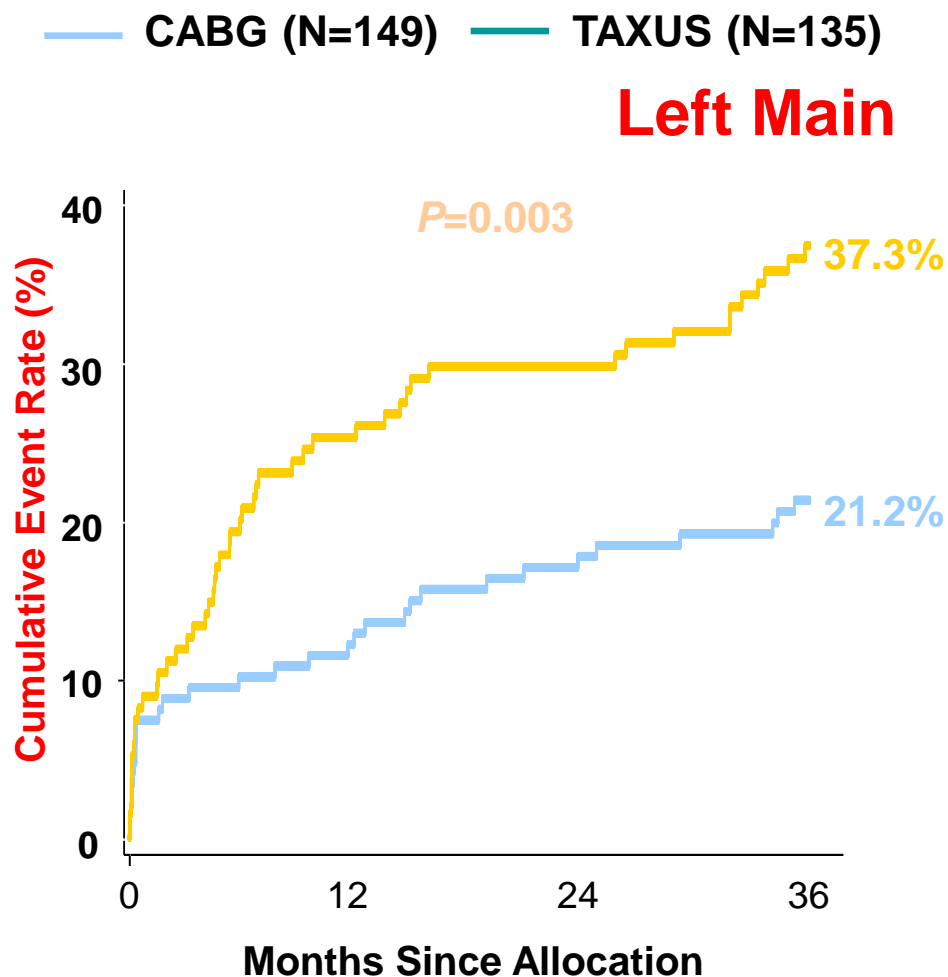
P value for interaction= 0.11

Resultados a 1,2 y 3 años: **Subgrupo del Tronco**

- CABG 2-3 years
- PCI 2-3 years
- CABG 1-2 years
- PCI 1-2 years
- CABG 0-1 years
- PCI 0-1 years

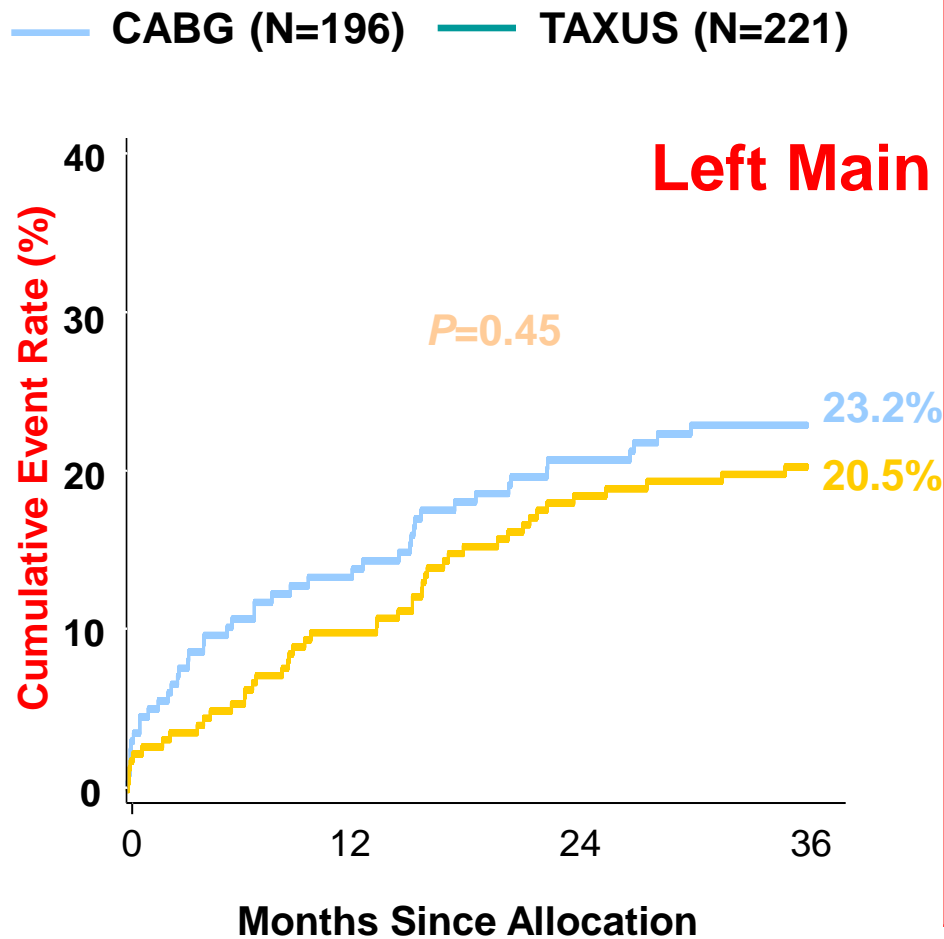


Eventos a 3 años : *Tronco con SYNTAX Score ≥ 33*



	CABG	PCI	P value
Death	7.6%	13.4%	0.10
CVA	4.9%	1.6%	0.13
MI	6.1%	10.9%	0.18
Death, CVA or MI	15.7%	20.1%	0.34
Revasc	9.2%	27.7%	<0.001

Eventos a 3 años : *Tronco con SYNTAX Score (0-32)*



	CABG	PCI	P value
Death	9.0%	3.7%	0.02
CVA	3.3%	0.9%	0.09
MI	2.6%	4.6%	0.33
Death, CVA or MI	13.2%	8.7%	0.12
Revasc.	13.7%	15.7%	0.61

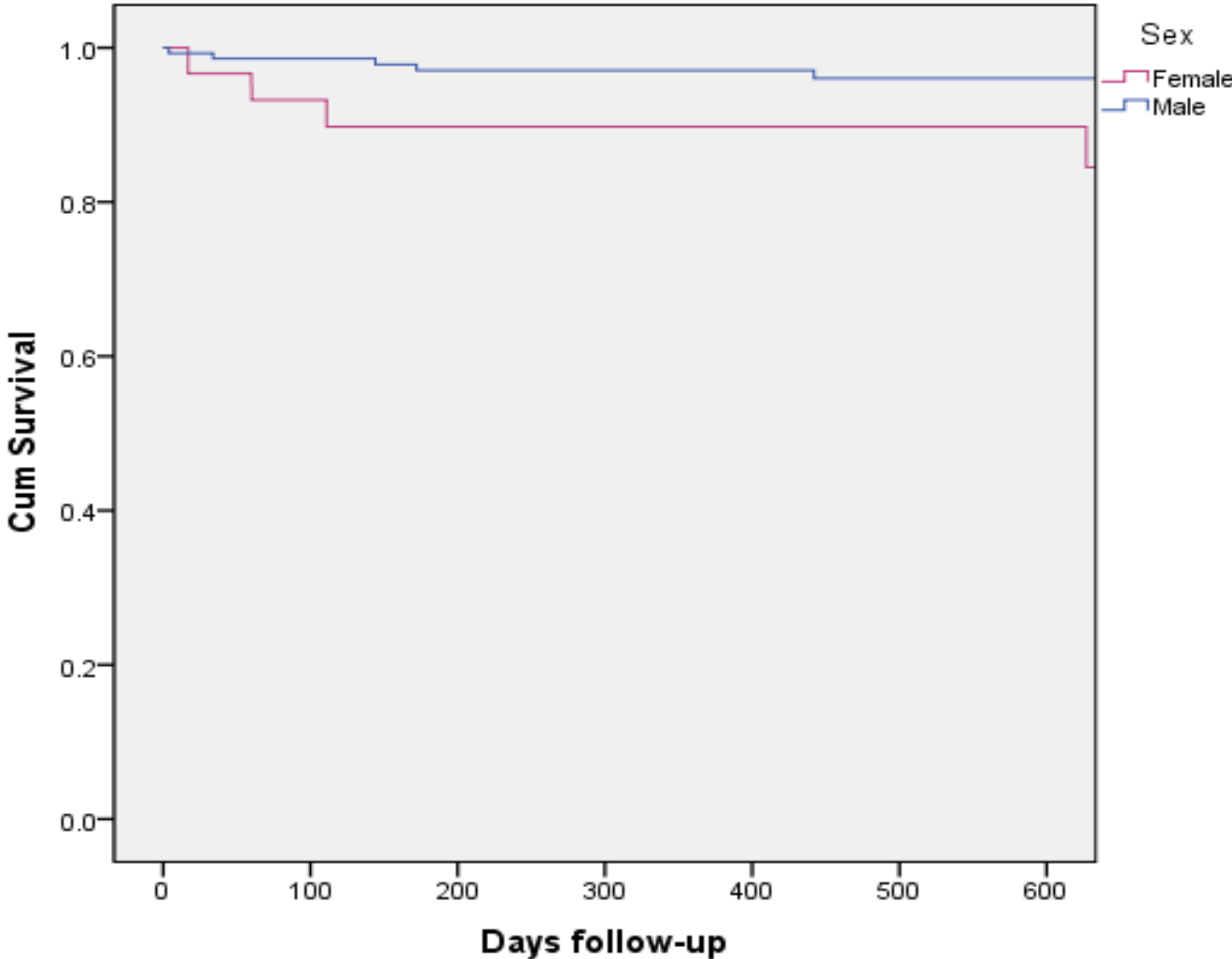
**Resultados en
hombres y mujeres en
el Tto percutáneo del
Tronco**

Experiencia de Milán

Resultados

- **173 pacientes, 17.9% mujeres.**
- **Edad 66.3 ± 13.0 años.**
- **FE $54.4 \pm 8.5\%$.**
- **No diferencia en características basales excepto en el EuroSCORE (mujeres $4.6 \pm 2.6\%$ vs. hombres $3.0 \pm 2.1\%$; $p=0.001$).**

Kaplan-Meier curves to show survival at follow-up



	Overall N=173	Female N=31	Male N=142	P Value
ULMCA + 1VD	30 (17.3)	7 (22.6)	23 (16.2)	0.395
ULMCA + 2VD	55 (31.8)	4 (12.9)	51 (35.9)	0.013
ULMCA + 3VD	79 (45.7)	15 (48.4)	64 (45.1)	0.737
Distal location	138 (79.8)	19 (61.3)	119 (83.8)	0.005
SYNTAX score	21.5 ± 23.9	19.8 ± 9.5	21.9 ± 26.2	0.561
2 Stent Technique	79 (45.9)	8 (25.8)	71 (50.4)	0.013
FKBI	132 (83.0)	18 (75.0)	114 (84.4)	0.256
IVUS	84 (48.6)	12 (38.7)	72 (50.7)	0.226
IABP	34 (19.7)	6 (19.4)	28 (19.7)	0.963
Rotational Atherectomy	4 (2.3)	3 (9.7)	1 (0.7)	0.003
PES	52 (30.1)	3 (9.7)	49 (34.5)	0.006
SES	59 (34.1)	13 (41.9)	46 (32.4)	0.310
2nd Generation DES	64 (37.0)	15 (48.4)	49 (34.5)	0.147
Number of stents	1.47 ± 0.5	1.29 ± .46	1.51 ± 0.50	0.024
Mean diameter of stent	3.52 ± 0.33	3.45 ± 0.33	3.55 ± 0.33	0.153

	Overall N=173	Female N=31	Male N=142	P Value
All-cause death	10 (5.8)	4 (12.9)	6 (4.2)	0.061
MI	3 (1.7)	1 (3.2)	2 (1.4)	0.483
MACE	33 (19.1)	9 (29.0)	24 (16.9)	0.119
TVR	27 (15.6)	7 (22.6)	20 (14.1)	0.238
TLR	11 (6.4)	2 (6.5)	9 (6.3)	0.981
Definite and probable ST	4 (2.3)	1 (3.2)	3 (2.1)	0.709

Resumen

- **Minoría mujeres**
- **Probablemente mayor referencia a cirugía por anatomía coronaria más compleja o tratamiento con stents metálicos.**
- **El tratamiento con DES es eficaz en ambos sexos**
- **Tendencia a mayor mortalidad en mujeres probablemente por Euroscore más alto (a pesar de mayor localización distal en hombres)**

Sex-related differences in patients undergoing percutaneous unprotected left main stenting

Imad Sheiban¹, MD; Carlo La Spina¹, MD; Erika Cavallero¹, MD; Giuseppe Biondi-Zoccai^{1*}, MD; Francesco Colombo¹, MD; Tullio Palmerini², MD; Antonio Marzocchi², MD; Corrado Tamburino³, MD; Massimo Margheri⁴, MD; Giuseppe Vecchi⁵, MD; Giuseppe Sangiorgi⁶, MD; Andrea Santarelli⁷, MD; Antonio L. Bartorelli⁸, MD; Carlo Briguori⁹, MD, PhD; Luigi Vignali¹⁰, MD; Francesco di Pede¹¹, MD; Angelo Ramondo¹², MD; Cecilia Fantoni¹³, MD; Marco de Carlo¹⁴, MD; Giovanni Falsini¹⁵, MD; Alberto Benassi¹⁶, MD; Cataldo Palmieri¹⁷, MD; Vincenzo Filippone¹⁸, MD; Diego Sangiorgi², MD, MSc; Stefano de Servi¹⁹, MD

Table 1. Baseline clinical features.

Feature	Women (N=404)	Men (N=1048)	P value
Age, years	73.9 ±11.0	69.9 ±11.0	<0.001
Hypertension	288 (71%)	673 (64%)	0.011
Dyslipidaemia	240 (59%)	596 (57%)	0.381
Current smoking status	67 (17%)	409 (39%)	<0.001
Family history of coronary artery disease	101 (25%)	233 (22%)	0.262
Diabetes mellitus	139 (34%)	259 (25%)	<0.001
Chronic renal failure	45 (11%)	136 (13%)	0.342
Chronic obstructive pulmonary disease	31 (8%)	82 (8%)	0.923
Peripheral artery disease	64 (16%)	171 (16%)	0.826
Admission diagnosis			<0.001
Acute coronary syndrome	269 (67%)	580 (55%)	
Stable angina or silent myocardial ischaemia	135 (33%)	468 (45%)	
Left ventricular ejection fraction (%)	51.4±12.7	51.3±12.8	0.999
EuroSCORE	6.6±3.2	4.8±3.2	<0.001

Table 2. Procedural characteristics.

Feature	Women (N=404)	Men (N=1048)	P value
Disease location			0.003
Ostium only	104 (26%)	200 (19%)	
Shaft only	35 (9%)	140 (13%)	
Bifurcation disease	265 (65%)	708 (67%)	
Multivessel disease	216 (53%)	560 (53%)	0.991
Multivessel treatment	102 (25%)	261 (25%)	0.892
Drug-eluting stent usage	288 (71%)	822 (78%)	0.004
Bifurcation stenting technique			0.393
Cross-over	170 (42%)	426 (41%)	
T	50 (12%)	122 (11%)	
V	14 (3%)	55 (5%)	
Crush	30 (7%)	99 (9%)	
Culottes	1 (0.2%)	6 (0.5%)	
Final kissing balloon inflation	132 (33%)	396 (38%)	0.069

Table 3. Clinical events at follow-up.

Outcomes	Women (N=404)	Men (N=1048)	P value
Thirty-day outcomes			
Death	25 (6%)	26 (3%)	0.001
Myocardial infarction	7 (2%)	16 (2%)	0.778
Target lesion revascularisation	3 (0.7%)	6 (0.6%)	0.711
Major adverse cardiac events	33 (8%)	43 (4%)	0.002
Long-term outcomes			
Death	65 (16%)	126 (12%)	0.040
Cardiac death	45 (11%)	80 (8%)	0.033
Myocardial infarction	21 (5%)	48 (5%)	0.620
Target lesion revascularisation	46 (11%)	147 (14%)	0.184
Death or myocardial infarction	80 (20%)	151 (14%)	0.012
Major adverse cardiac events	113 (28%)	277 (26%)	0.553

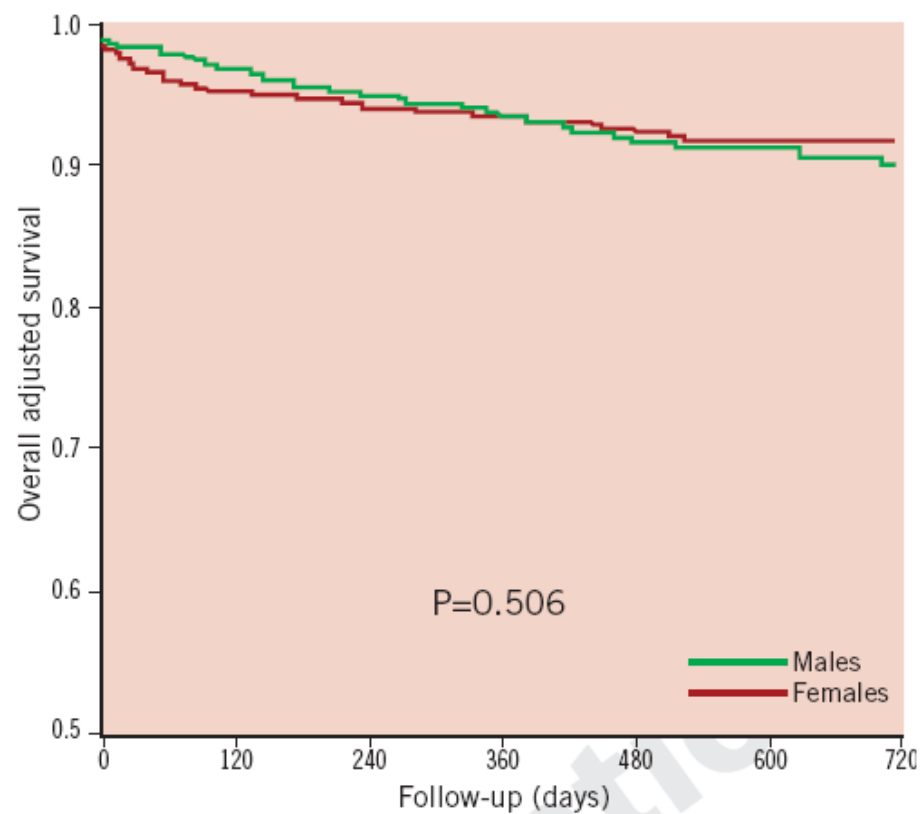
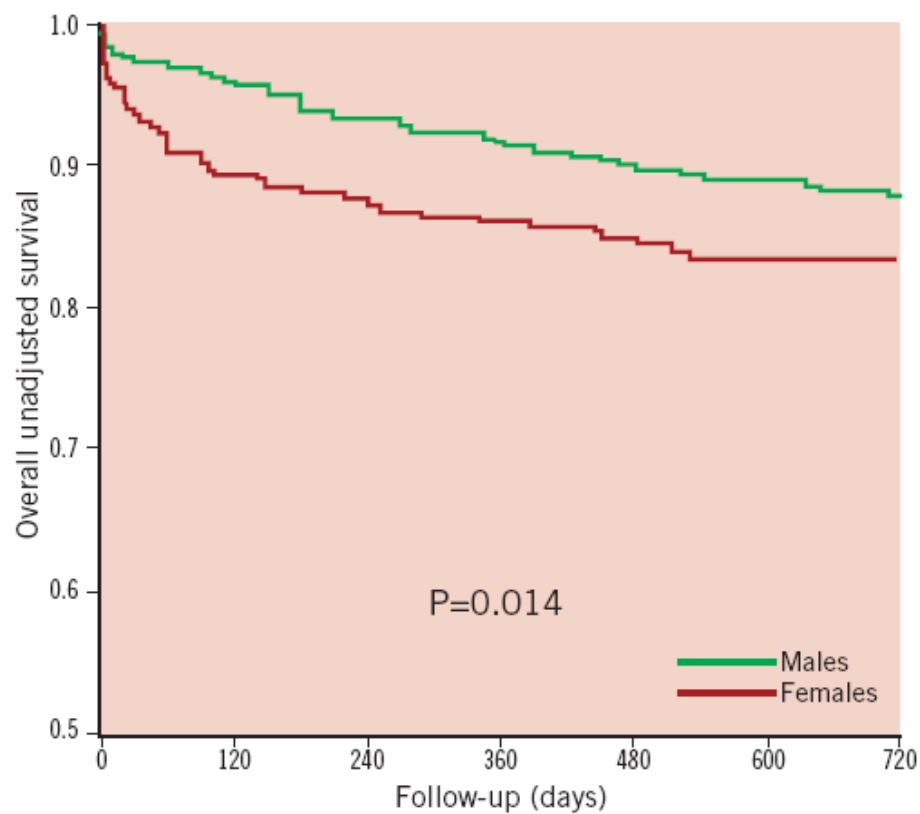


Figure 1. Overall survival according to gender at unadjusted (left panel) and multivariable adjusted (right panel) Cox proportional hazard analysis.

Resumen

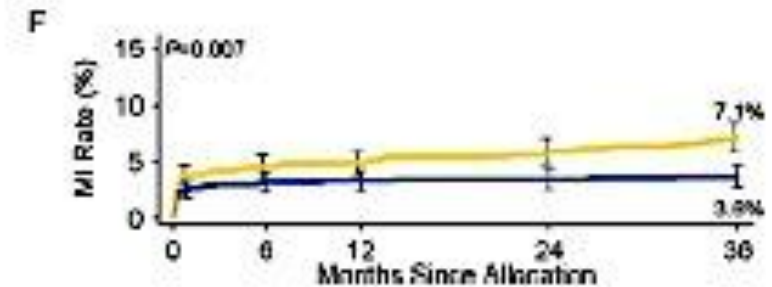
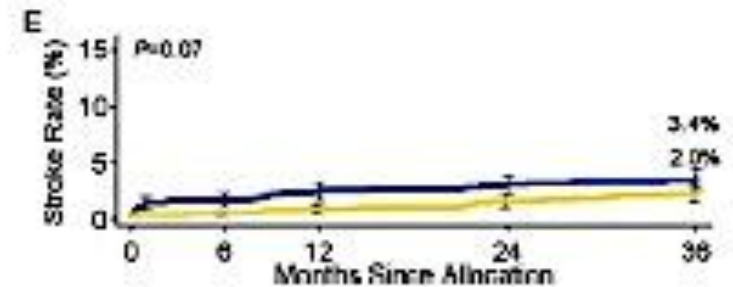
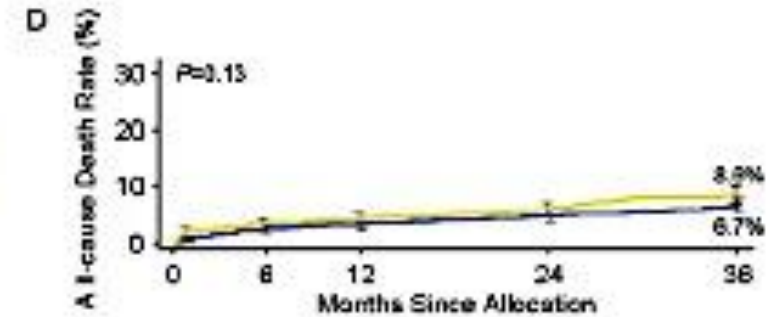
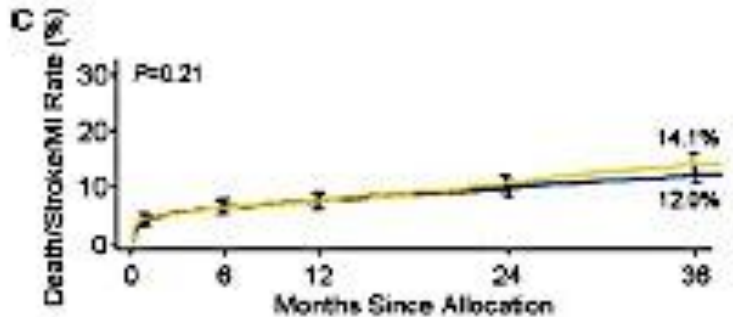
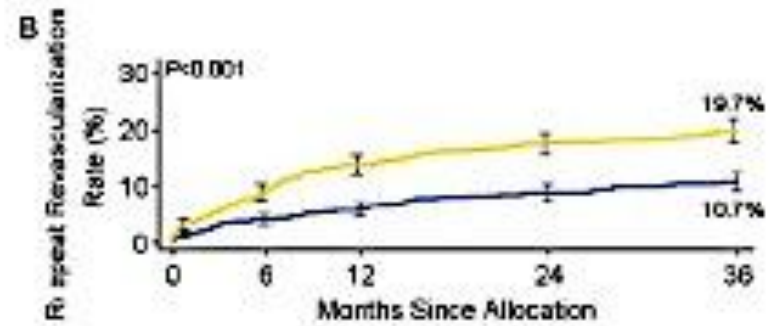
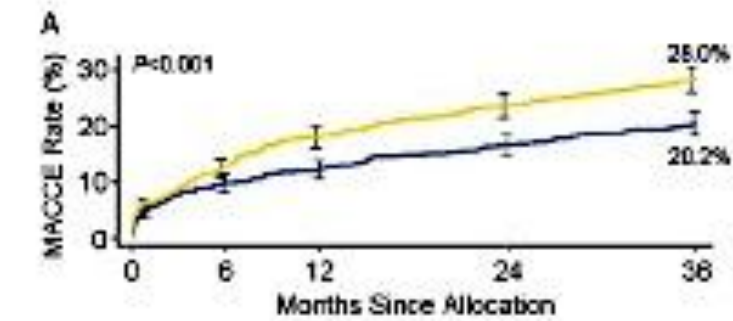
- **Las mujeres con enf. Del Tronco tienen una presentación clínica más frecuente como SCA (mayor tolerancia a la isquemia)**
- **Más frecuente localización ostial**
- **Menor utilización de DES**
- **Mayor tasa de complicaciones. Diferencia desaparece cuando se ajusta por riesgo**
- **Tto percutáneo del tronco ofrece similares beneficios en ambos (mujeres y hombres)**

CONCLUSIONES

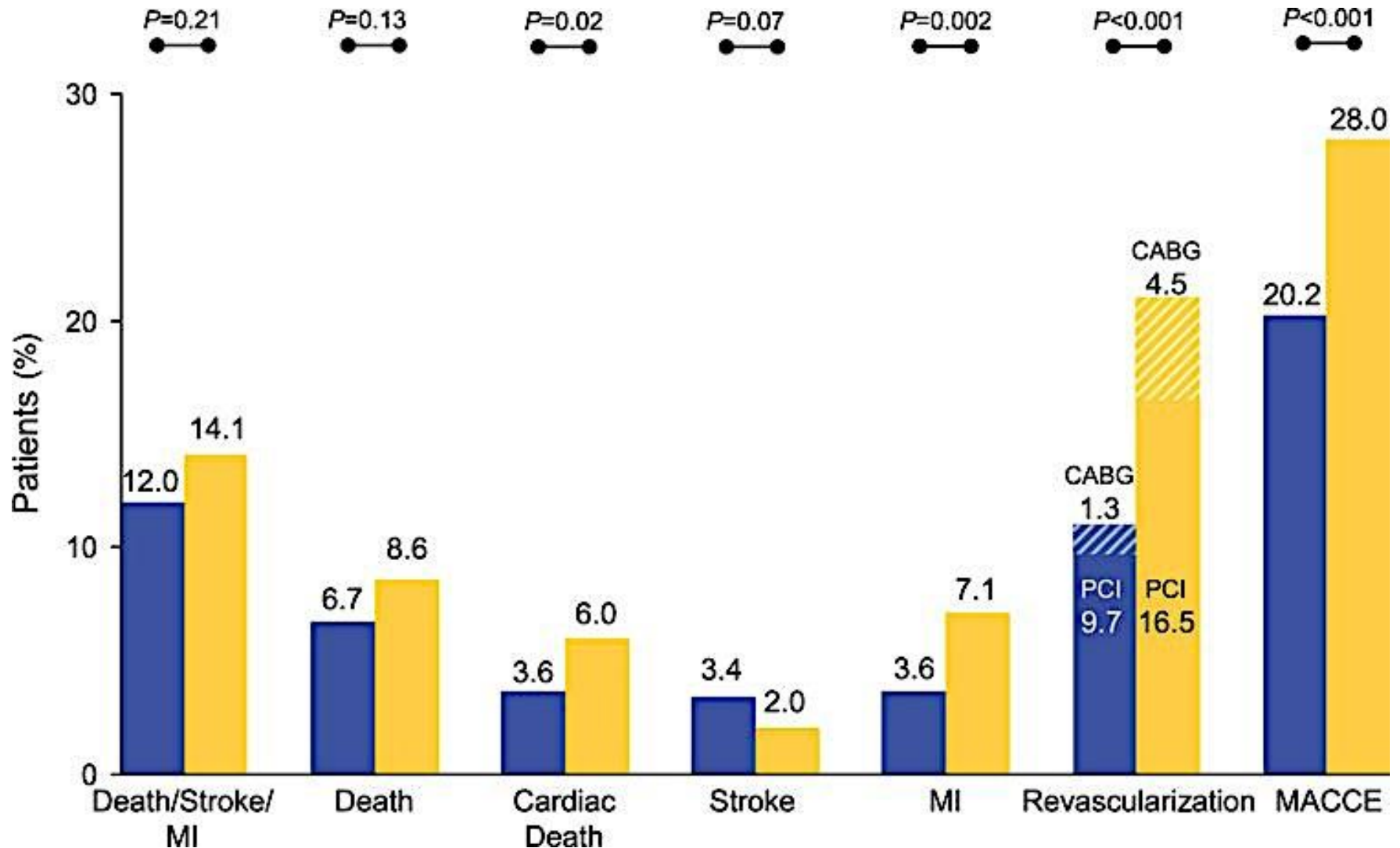
- **Las mujeres tienen características diferenciales en la aparición, la concepción y cultura de tratamiento de la enfermedad coronaria**
- **El tratamiento de las mujeres con enfermedad multivaso debe individualizarse con vistas al mejor método de revascularización funcional**
- **Los nuevos DES sin duda mejoran los resultados en ambos (mujeres y hombres)**
- **La elección de tratamiento de enfermedad del tronco dependerá de la extensión de la enfermedad coronaria. Las mujeres presentan algunas peculiaridades , pero el resultado no es diferente cuando se ajusta el riesgo**

BACK UP SLIDES

- **SYNTAX EVENTOS INDIVIDUALES**
- **SYNTAX 3V, TRONCO Y DIABETES**
- **RESULTADOS SEGUN SYNTAX SCORE**
- **MAIN COMPARE (TOTAL, METALICOS, DES)**

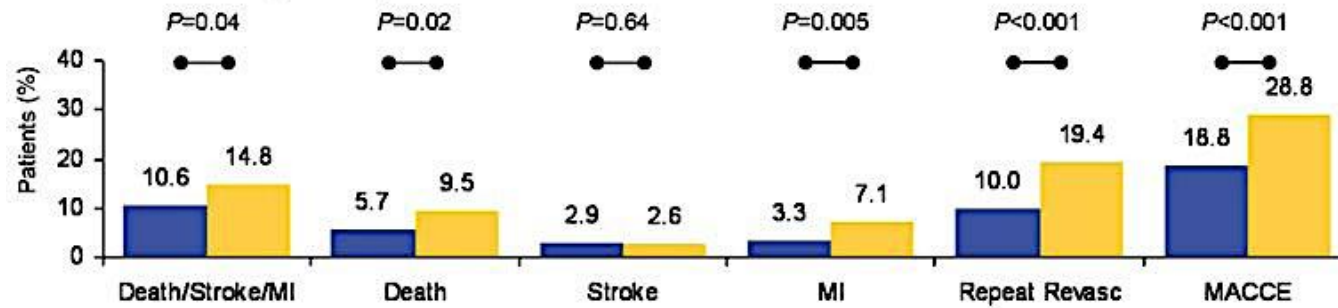


Rates of clinical outcomes among randomized treatment groups. Time-to-event curves in patients treated with coronary artery bypass grafting (blue line) or percutaneous coronary intervention (yellow line) for the composite of major adverse cardiac and cerebrovascular events (A), repeat revascularization (B), death/stroke/myocardial infarction (C), all-cause death (D), stroke (E), and myocardial infarction (F) to 3 years. P-values from log-rank test

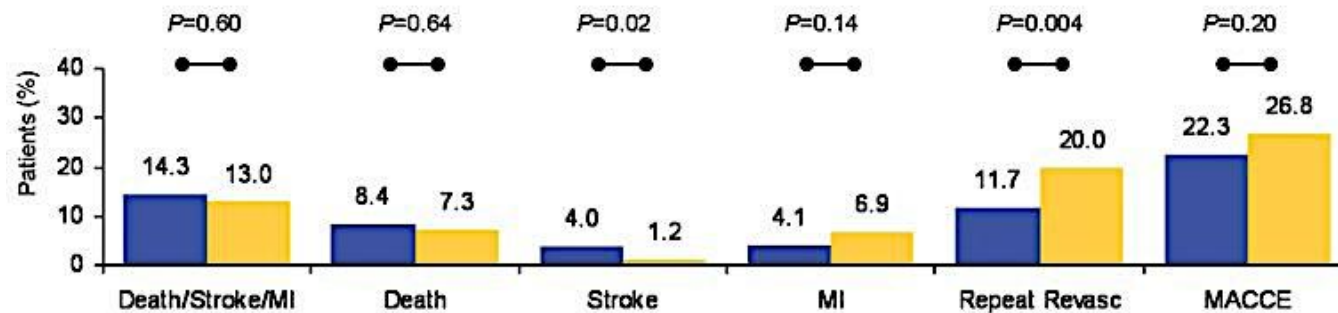


Rates of clinical outcomes among randomized treatment groups. Three-year clinical outcomes in coronary artery bypass grafting (blue bars) or percutaneous coronary intervention (yellow bars). Repeat revascularization is broken down into repeat percutaneous coronary intervention (yellow or blue bars) and repeat coronary artery bypass grafting (striped yellow or blue bars). The Kaplan–Meier event rates, P-value from log-rank test.

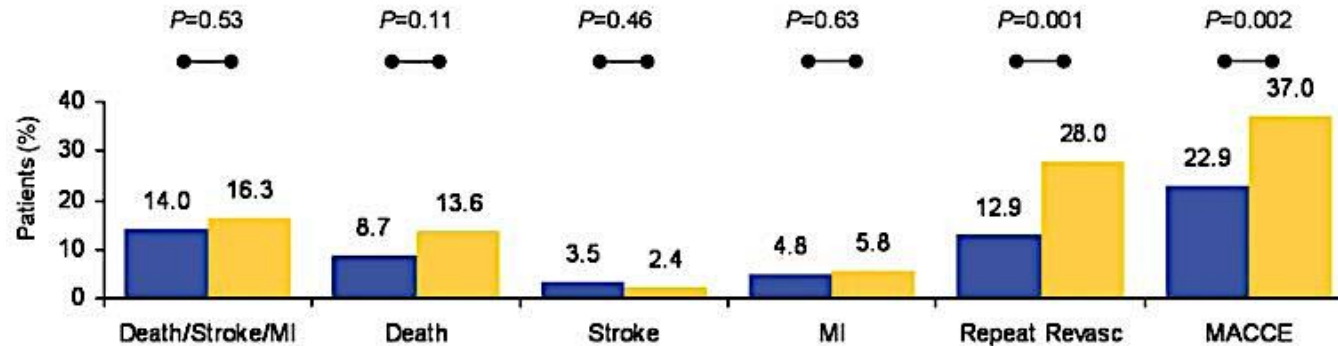
A 3-vessel Disease (n=1095)



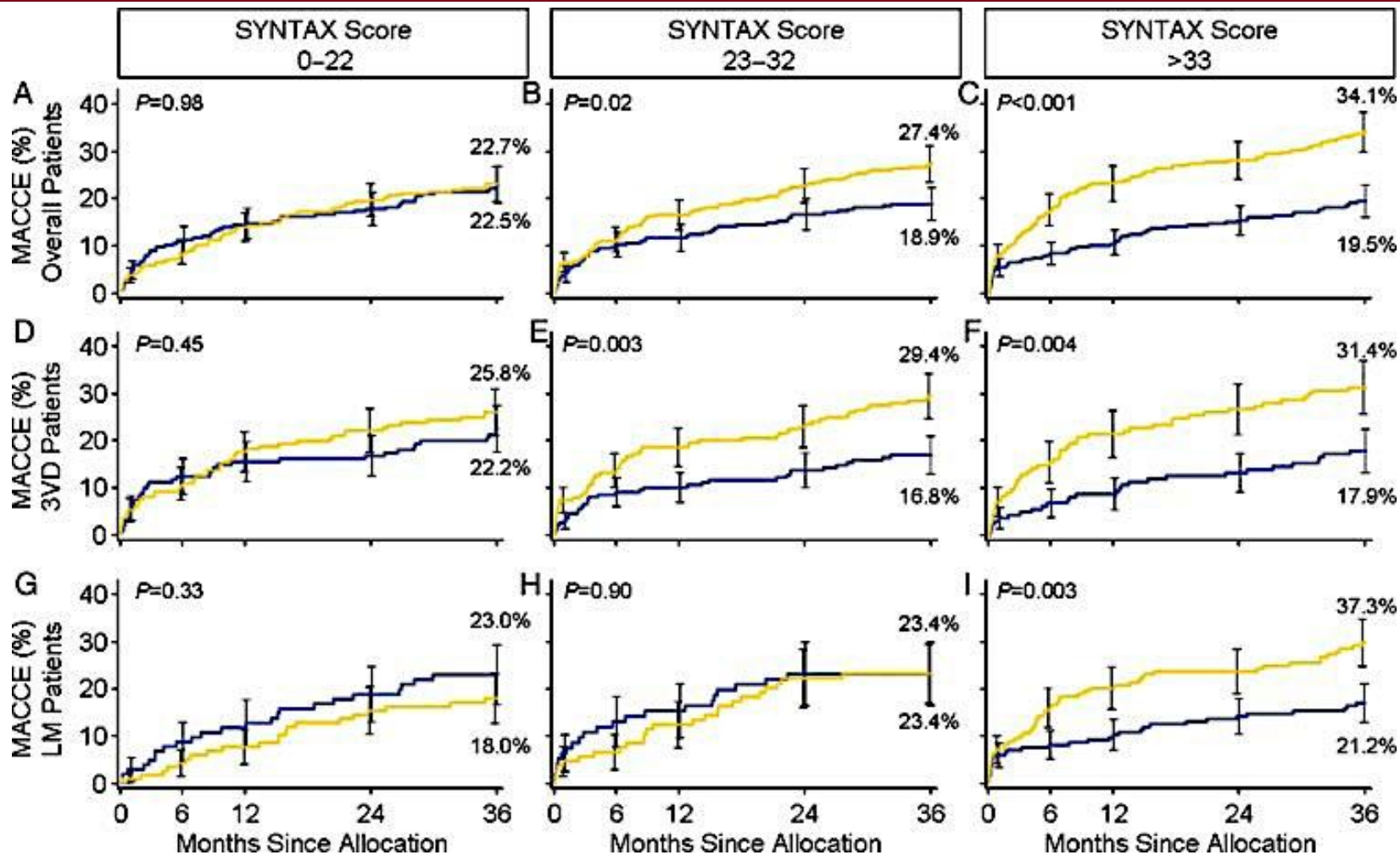
B Left Main Disease (n=705)



C Diabetes (n=452)



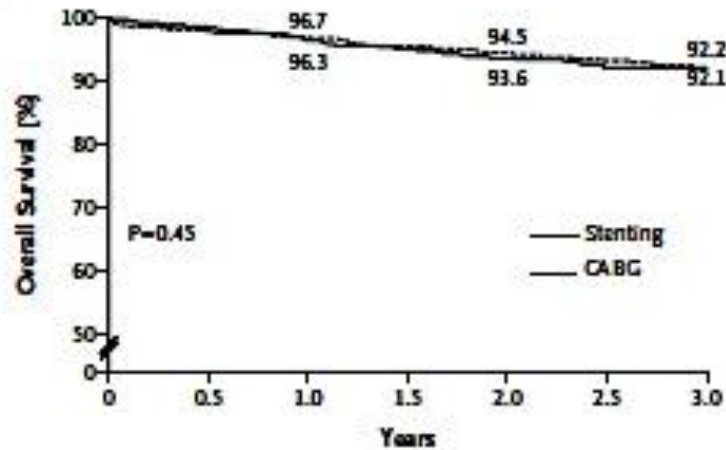
Three-year clinical outcomes according to the treatment group in patients with three-vessel disease, left main disease, or diabetes— death/stroke/myocardial infarction, all-cause death, stroke, myocardial infarction, repeat revascularization (repeat revasc), and major adverse cardiac and cerebrovascular event rates at 3 years in coronary artery bypass grafting (blue bars) or percutaneous coronary intervention-treated (yellow bars) patients with three-vessel (A) or left main (B) disease or diabetes (C). P-value from log-rank test.



Major adverse cardiac and cerebrovascular event rates according to the subset, treatment group, and SYNTAX score category.

Time-to-event curves in the coronary artery bypass grafting (blue line) or percutaneous coronary intervention (yellow line) overall cohorts to 3 years according to the low (0–22, A), intermediate (23–32, B), or high (≥ 33 , C) SYNTAX scores. (D–F) Major adverse cardiac and cerebrovascular events in three-vessel disease patients with low, intermediate, or high SYNTAX scores, respectively. (G–I) Major adverse cardiac and cerebrovascular events in patients with left main disease with low, intermediate, or high SYNTAX scores. P-value from log-rank test.

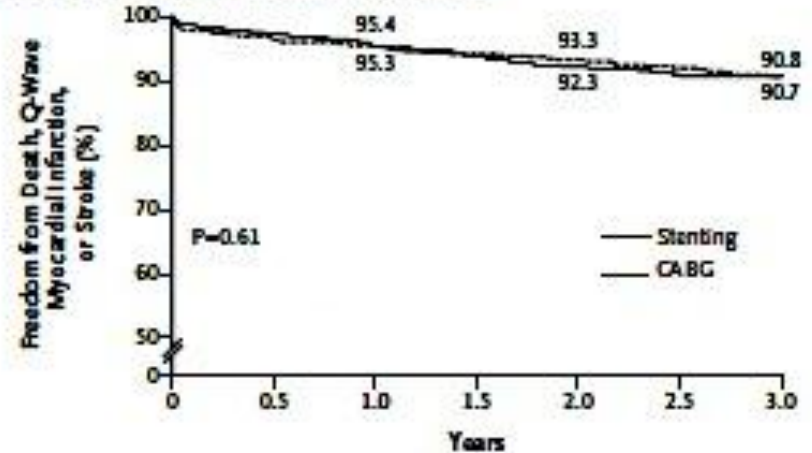
A Death



No. at Risk

Stenting	542	516	372	220
CABG	542	512	420	317

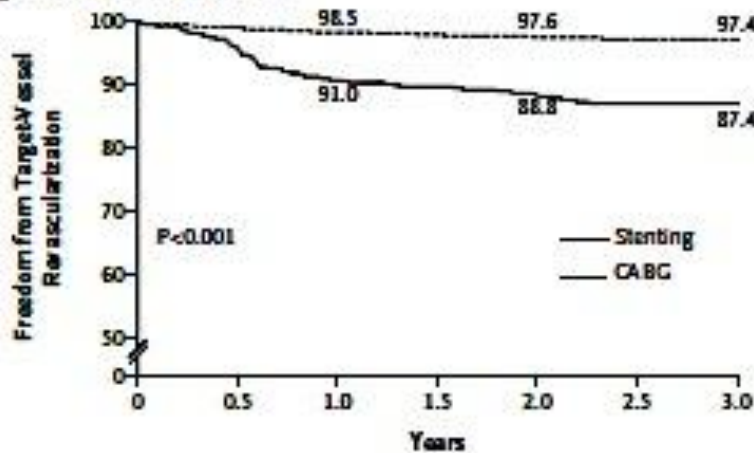
B Death, Q-Wave Myocardial Infarction, or Stroke



No. at Risk

Stenting	542	510	366	218
CABG	542	502	412	309

C Target-Vessel Revascularization



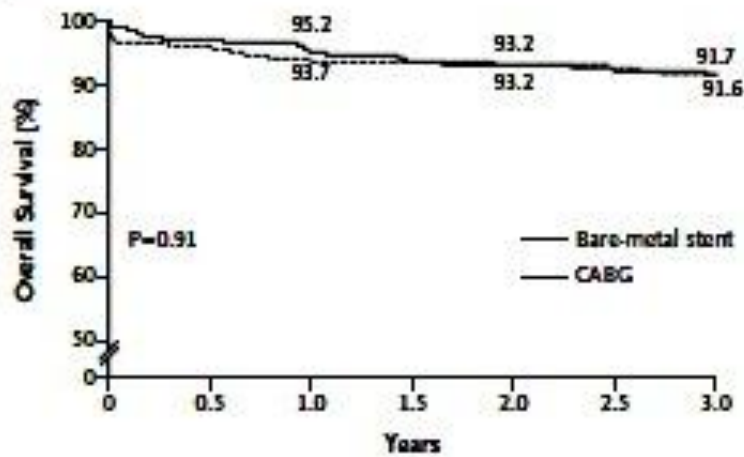
No. at Risk

Stenting	542	471	331	193
CABG	542	503	408	305

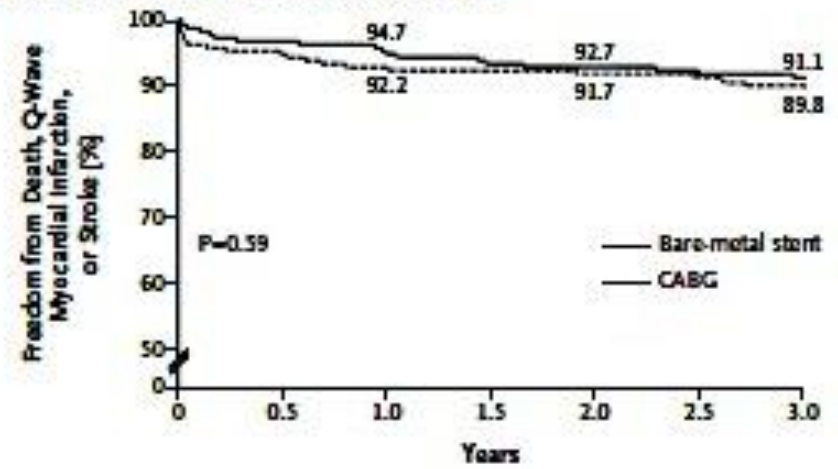
Kaplan-Meier Curves for Outcomes in a Cohort of Patients Matched for Propensity Scores Who Underwent Stent Implantation or Bypass Surgery

Hazard Ratios for Clinical Outcomes after Stenting as Compared with after CABG among Propensity-Matched Patients.

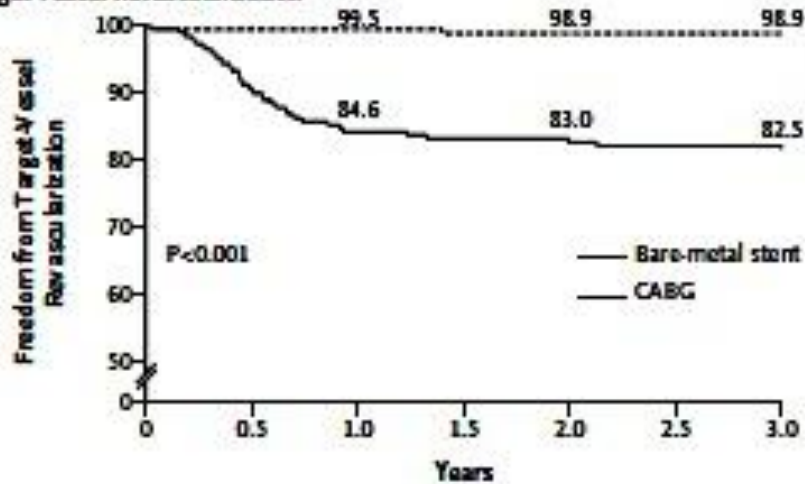
Outcome	Overall Cohort (N=542 pairs)		Wave 1 (N=207 pairs)		Wave 2 (N=396 pairs)	
	Hazard Ratio (95% CI)	P Value	Hazard Ratio (95% CI)	P Value	Hazard Ratio (95% CI)	P Value
Death	1.18 (0.77–1.80)	0.45	1.04 (0.59–1.83)	0.90	1.36 (0.80–2.30)	0.26
Composite outcome of death, Q-wave myocardial infarction, or stroke	1.10 (0.75–1.62)	0.61	0.86 (0.50–1.49)	0.59	1.40 (0.88–2.22)	0.15
Target-vessel revascularization	4.76 (2.80–8.11)	<0.001	10.70 (3.80–29.90)	<0.001	5.96 (2.51–14.10)	<0.001

A Death

No. at Risk				
Bare-metal stent	207	197	183	168
CABG	207	194	192	189

B Death, Q-Wave Myocardial Infarction, or Stroke

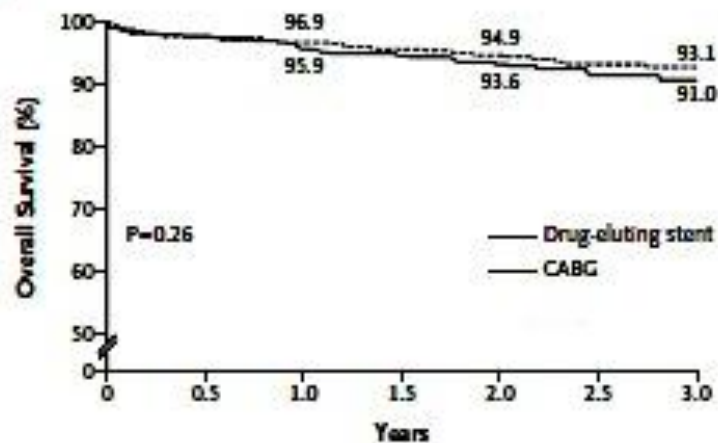
No. at Risk				
Bare-metal stent	207	196	182	167
CABG	207	192	189	185

C Target-Vessel Revascularization

No. at Risk				
Bare-metal stent	207	167	154	141
CABG	207	194	190	187

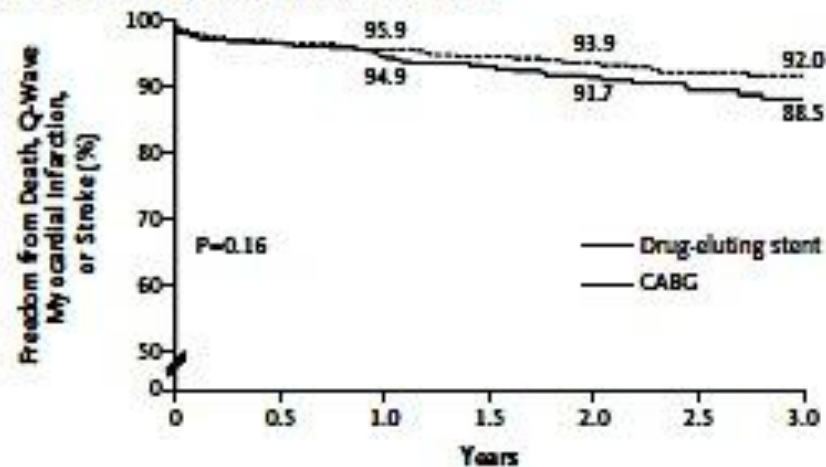
Kaplan–Meier Curves for Outcomes in a Cohort of Patients Matched for Propensity Scores Who Received Bare-Metal Stents or Underwent Bypass Surgery.

A Death



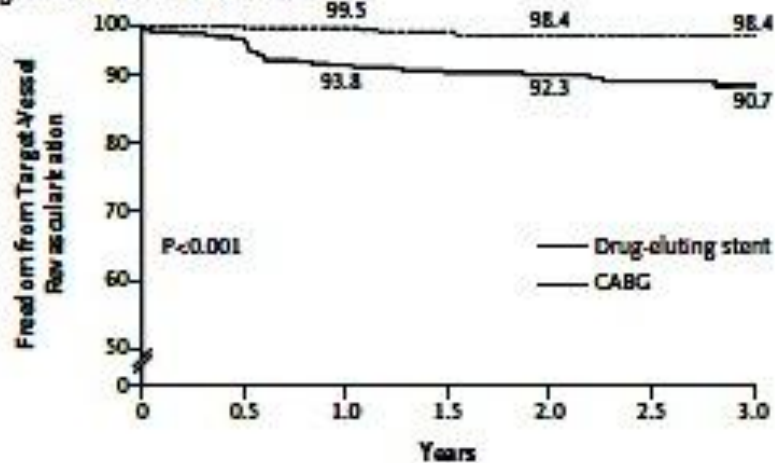
No. at Risk	0	1.0	2.0	3.0
Drug-eluting stent	396	376	247	108
CABG	396	373	291	179

B Death, Q-Wave Myocardial Infarction, or Stroke



No. at Risk	0	1.0	2.0	3.0
Drug-eluting stent	396	371	241	105
CABG	396	368	286	174

C Target-Vessel Revascularization



No. at Risk	0	1.0	2.0	3.0
Drug-eluting stent	396	355	233	105
CABG	396	371	288	176

Kaplan–Meier Curves for Outcomes in a Cohort of Patients Matched for Propensity Scores Who Received Drug-Eluting Stents or Underwent Bypass Surgery.