SOLACI
SOCIEDAD LATINOAMERICANA DE CARDIOLOGIA INTERVENCIONISTA

XIV Jornadas SOLACI
5º Región Cono Sur

Revascularización de Tronco y MV Vision Intervencionista

HOSPITAL ITALIANO
de Buenos Aires
Instituto de Medicina Cardiovascular

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Jefe de Cardiologia Intervencionista
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Conflicto de intereses

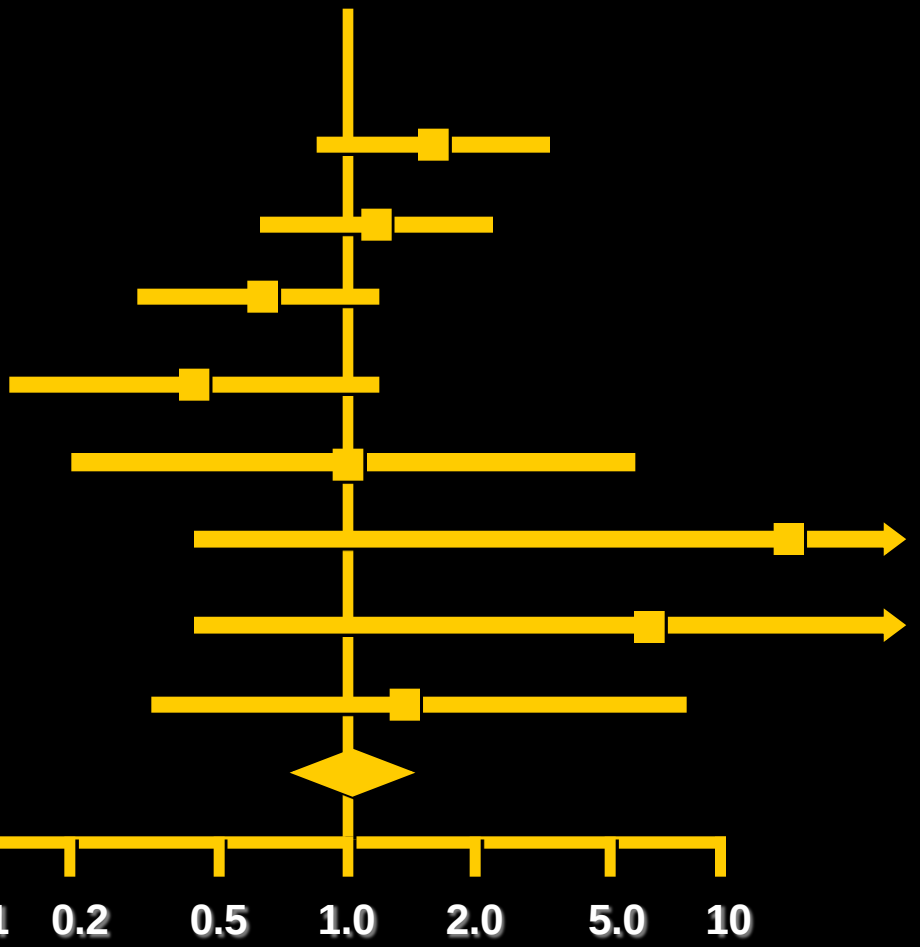
- *Conferencista*
  Boston Scientific, Biosensors, Cordis, Terumo
- *Asesor*
  Cordis
- *Fondos para investigación*
  Cordis, Eurocor
- *Programas de entrenamiento y educación*
  Biosensors, Cordis

CABG vs. PCI

Muerte/IM en el primer año

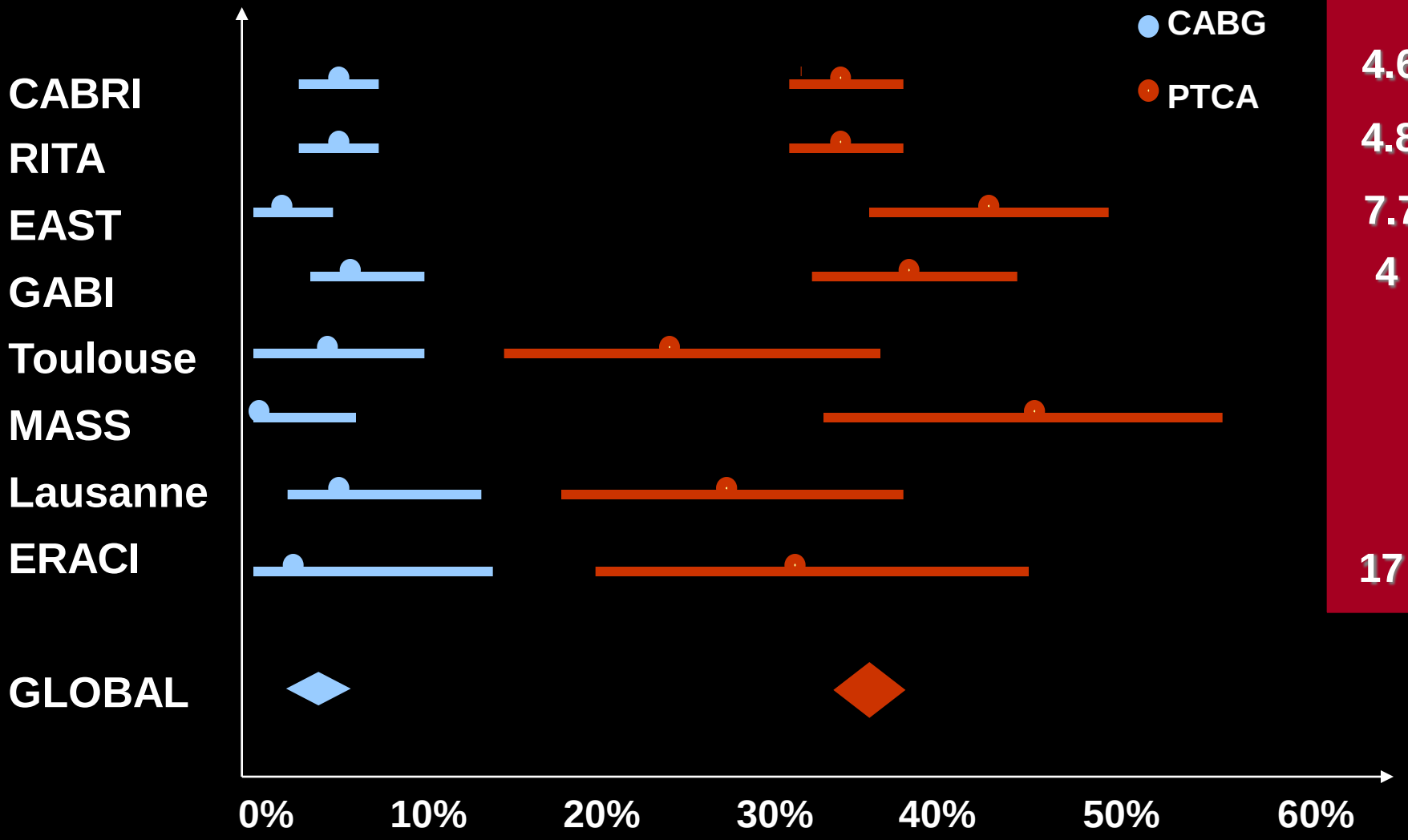
Estudio	CABG n (%)	PCI n (%)
CABRI	29 (5.7)	43 (7.9)
RITA	31 (6.2)	34 (6.7)
EAST	33 (18.4)	24 (13.7)
GABI	18 (10.2)	10 (5.5)
Toulouse	6 (7.9)	6(7.9)
MASS	1 (1.4)	5 (6.9)
Lausanne	2 (3.0)	6 (8.8)
ERACI	7 (10.9)	8 (12.7)
TOTAL	127	135

Odds Ratio & 95% C.I.



Pocock Lancet, 1995

Necesidad de nuevas intervenciones (ATC y/o CRM) durante el primer año

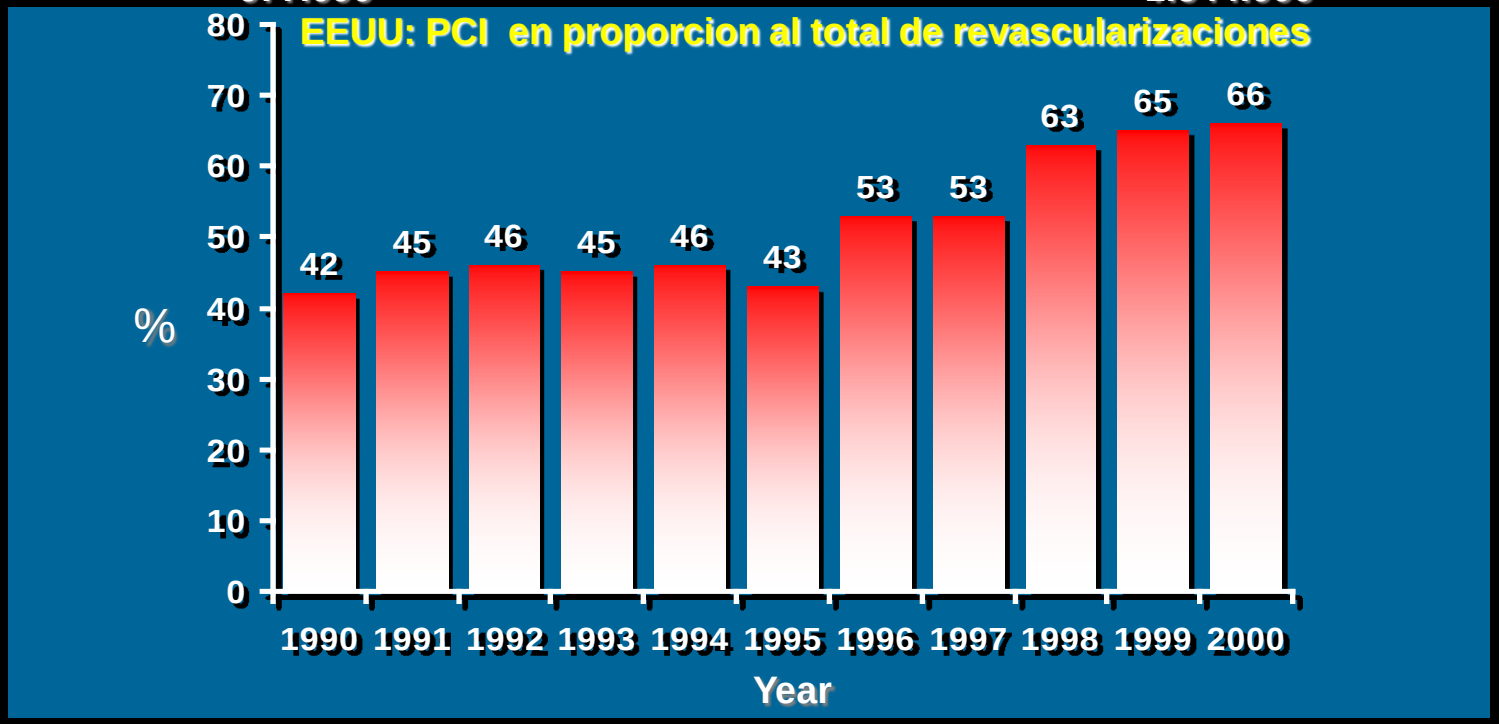


Encuesta Nacional de Altas Hospitalarias

Procedimientos totales

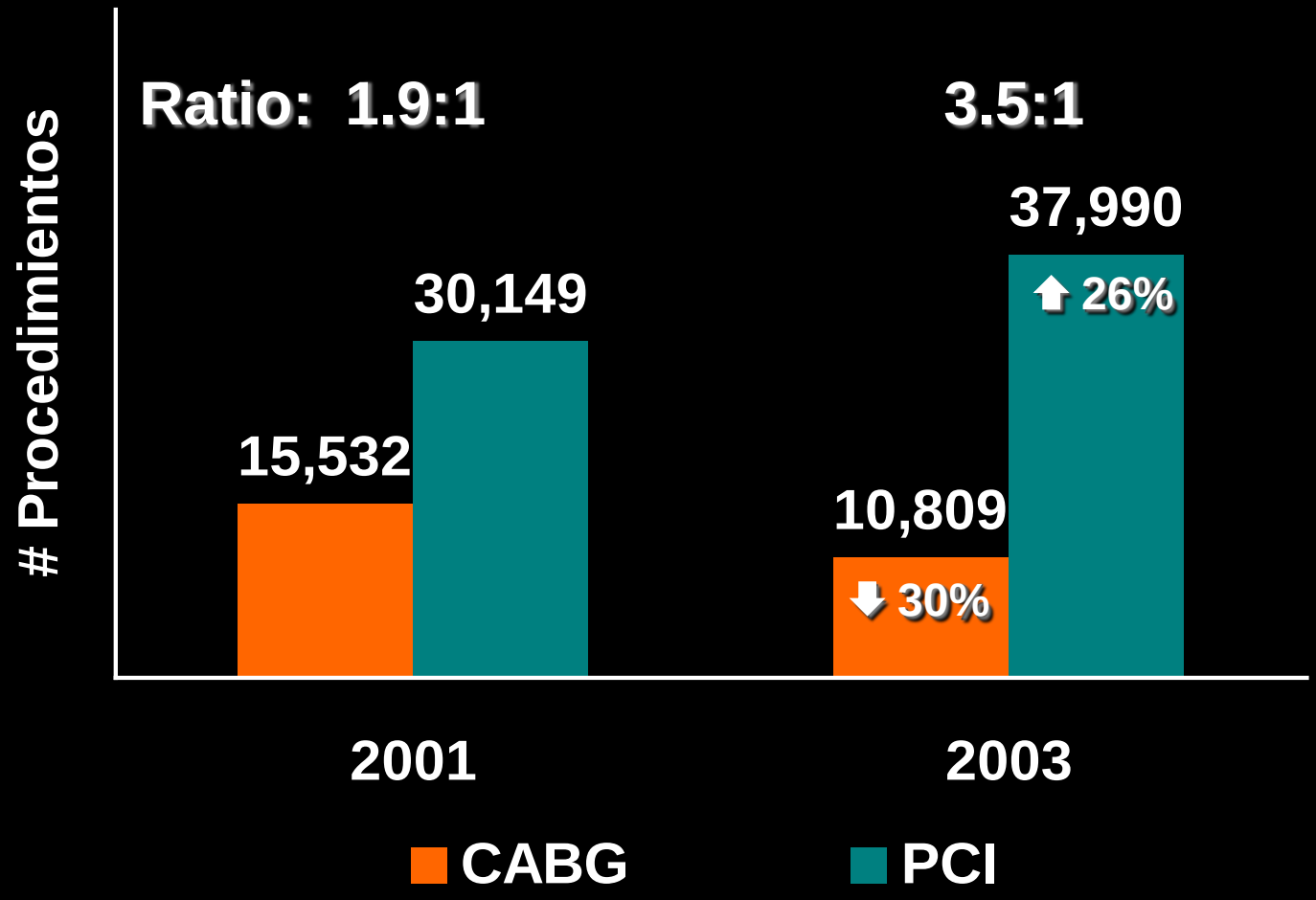
1990
677.000

2000
1.544.000

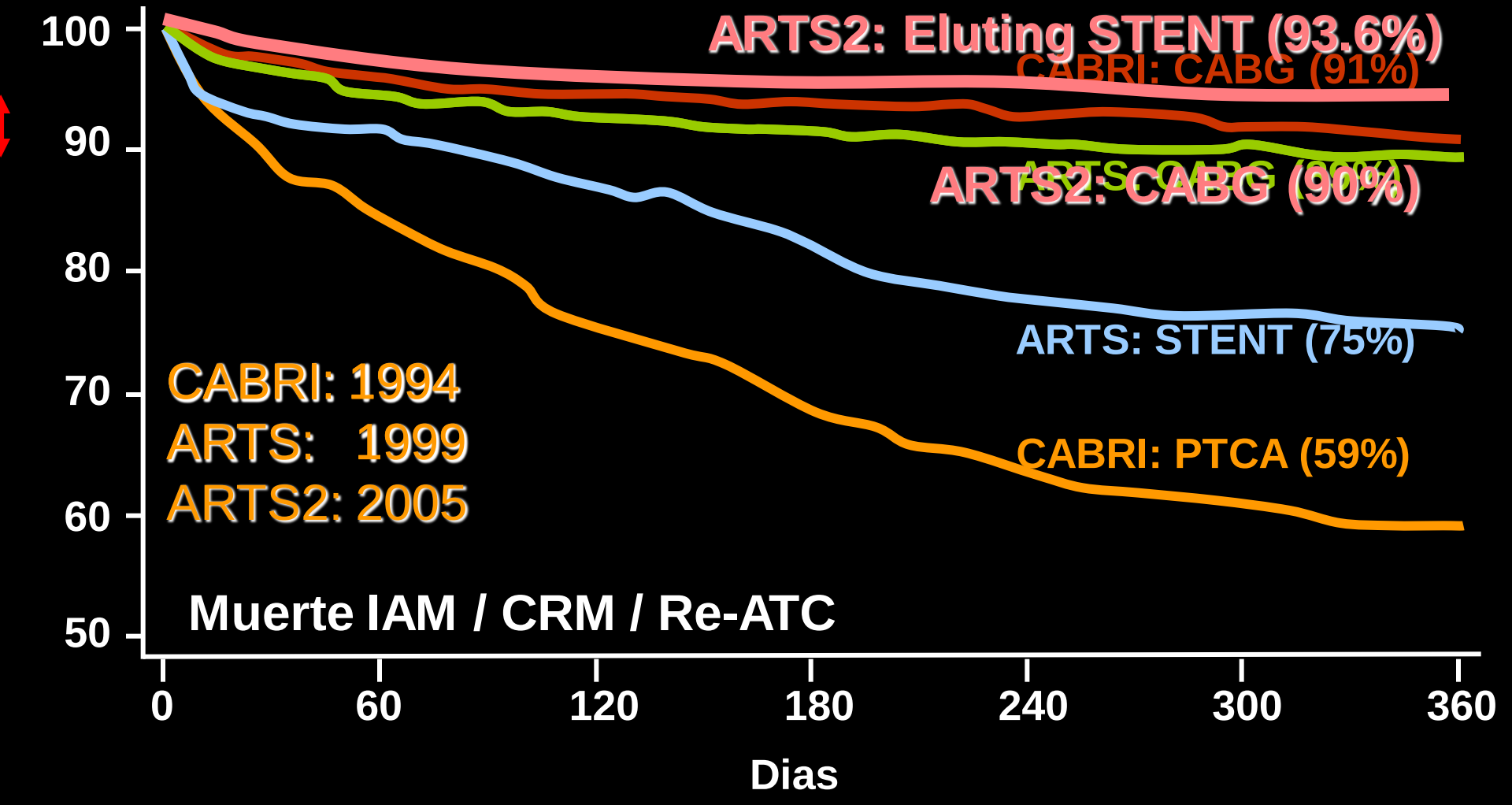


Schofield. Heart 2003

Base de Datos de New York
CABG vs. PCI



Comparación en el tiempo de los resultados entre PCI y CRM en Pacientes Multiarteriales



Adapted from Patrick W Serruys

- ✓ NECESIDAD DE NUEVA REVASCULARIZACION
- ✓ DIABETICOS
- ✓ TRONCO
- ✓ TROMBOSIS DEL STENT
- ✓ COMPLICACIONES NEUROLOGICAS
- ✓ SEGUIMIENTO MAS ALEJADO
- ✓ PACIENTES DE MUY ALTO RIESGO

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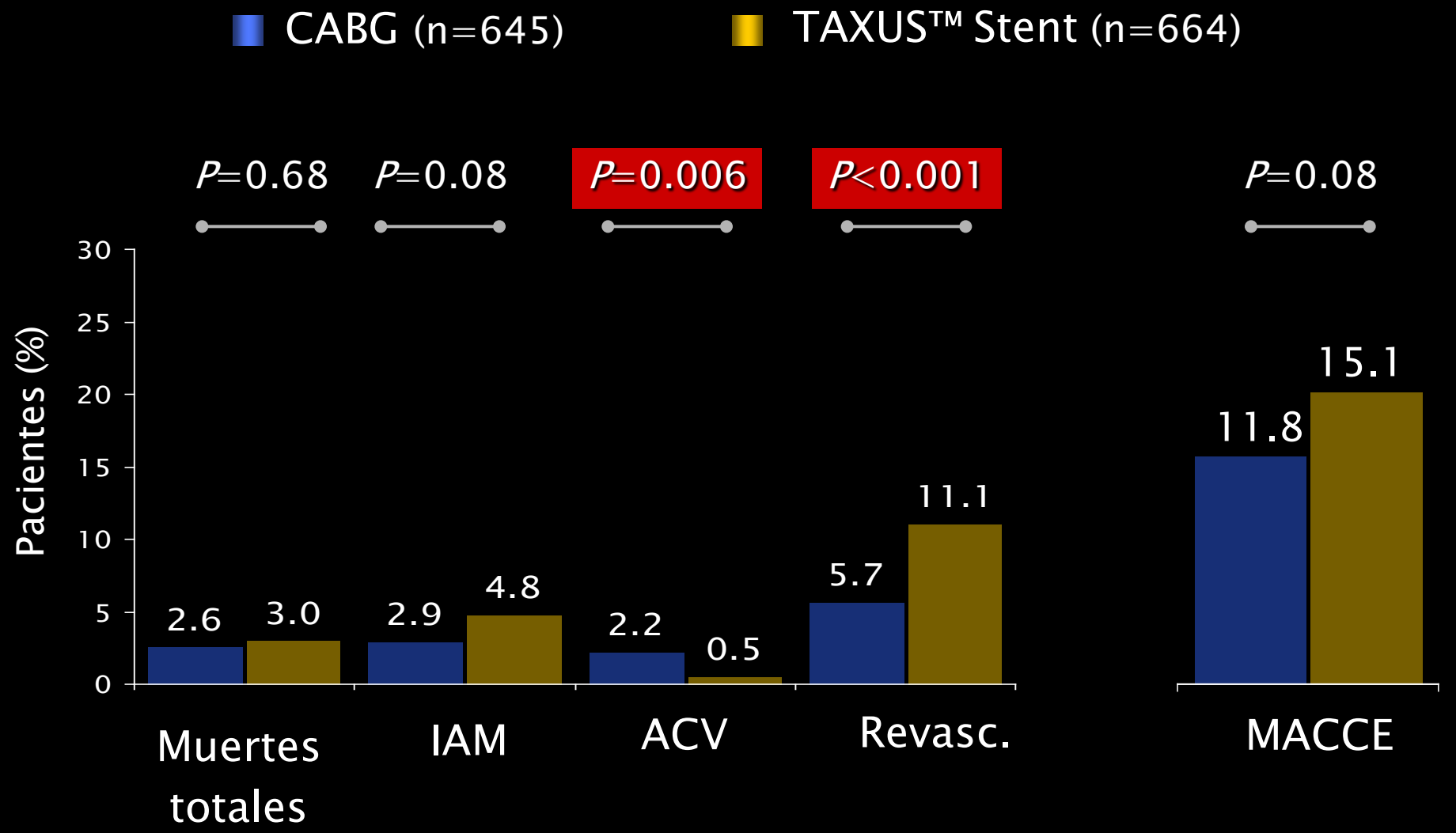
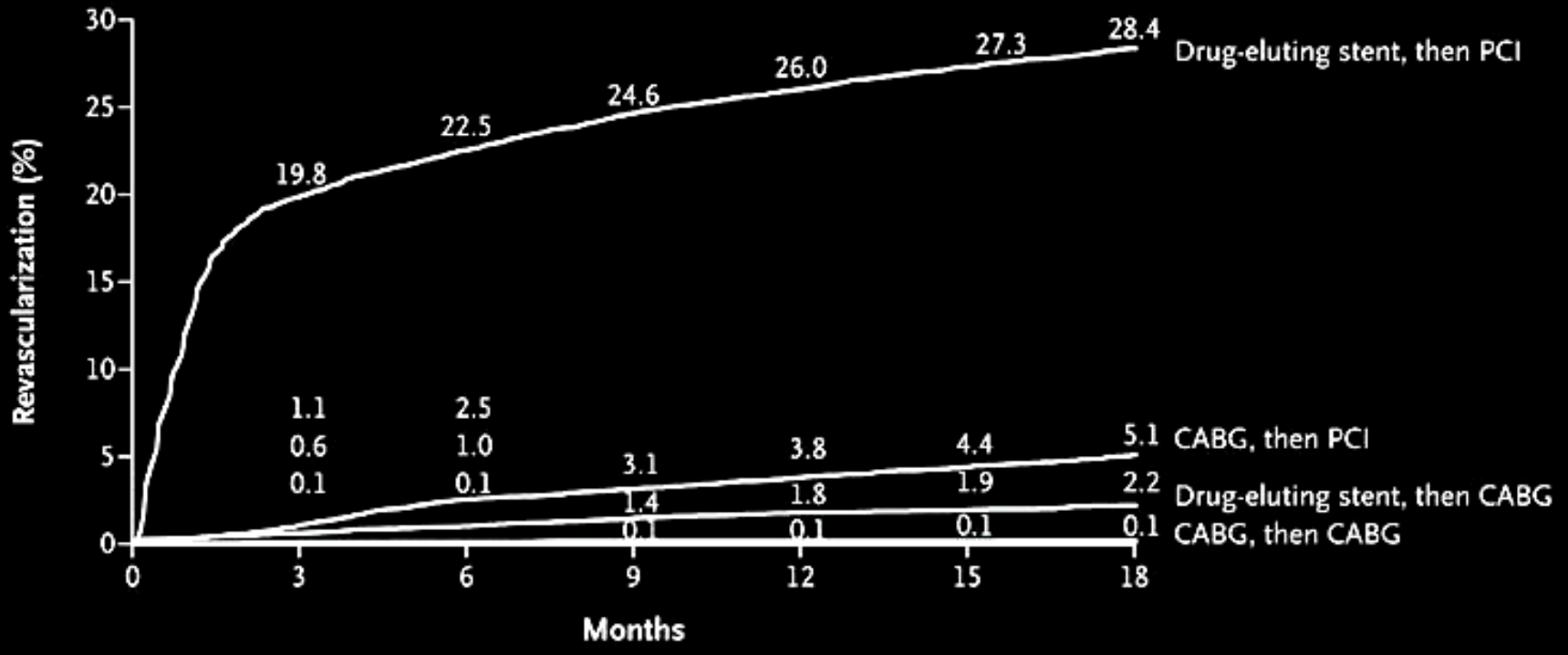
No Significant Increase in MACCE in 'Non-Diabetics' at 12-Months



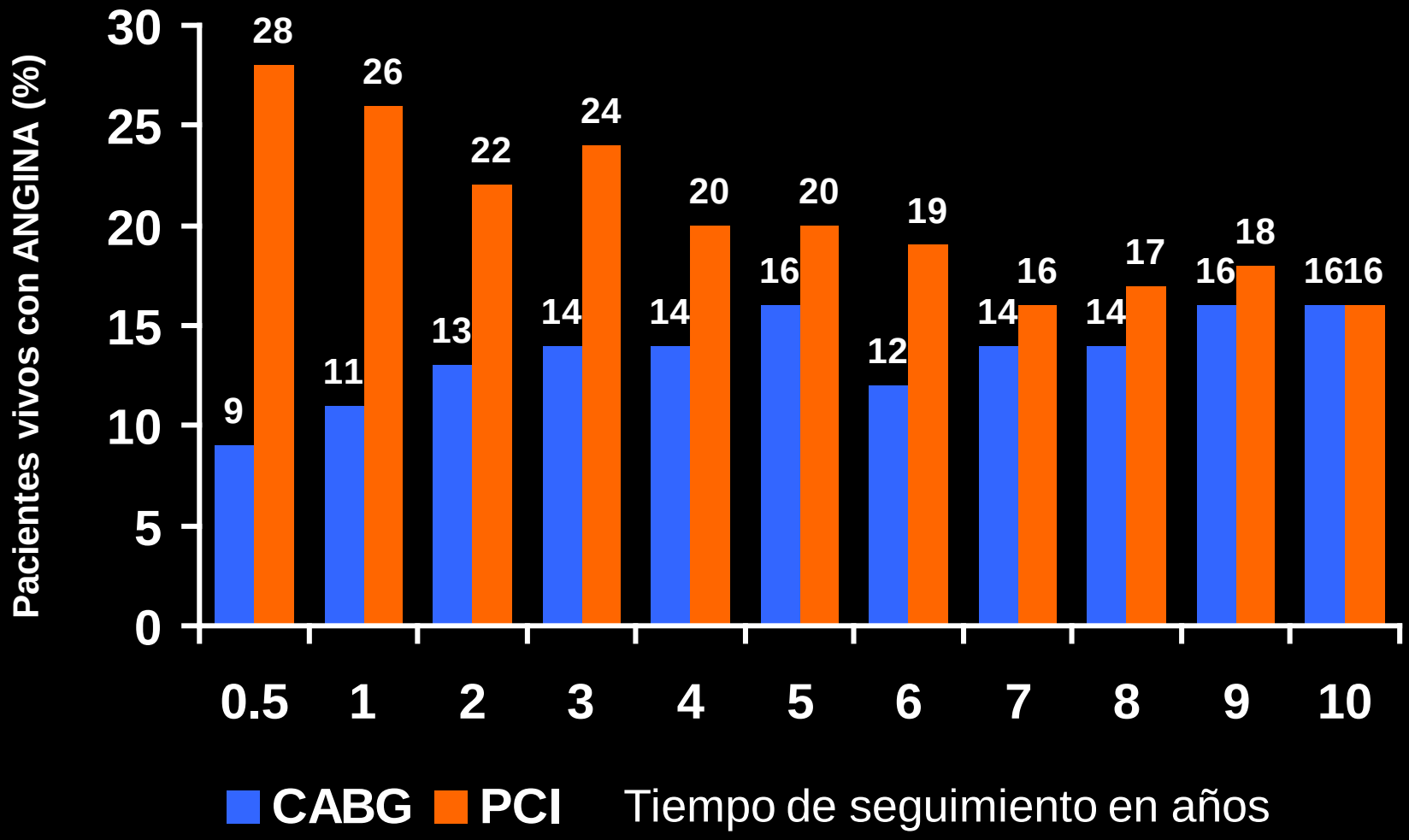
Rates of Revascularization within 18 Months after Initial Procedure



Hannan EL et al. N Engl J Med 2008;358:331-341

The NEW ENGLAND JOURNAL of MEDICINE

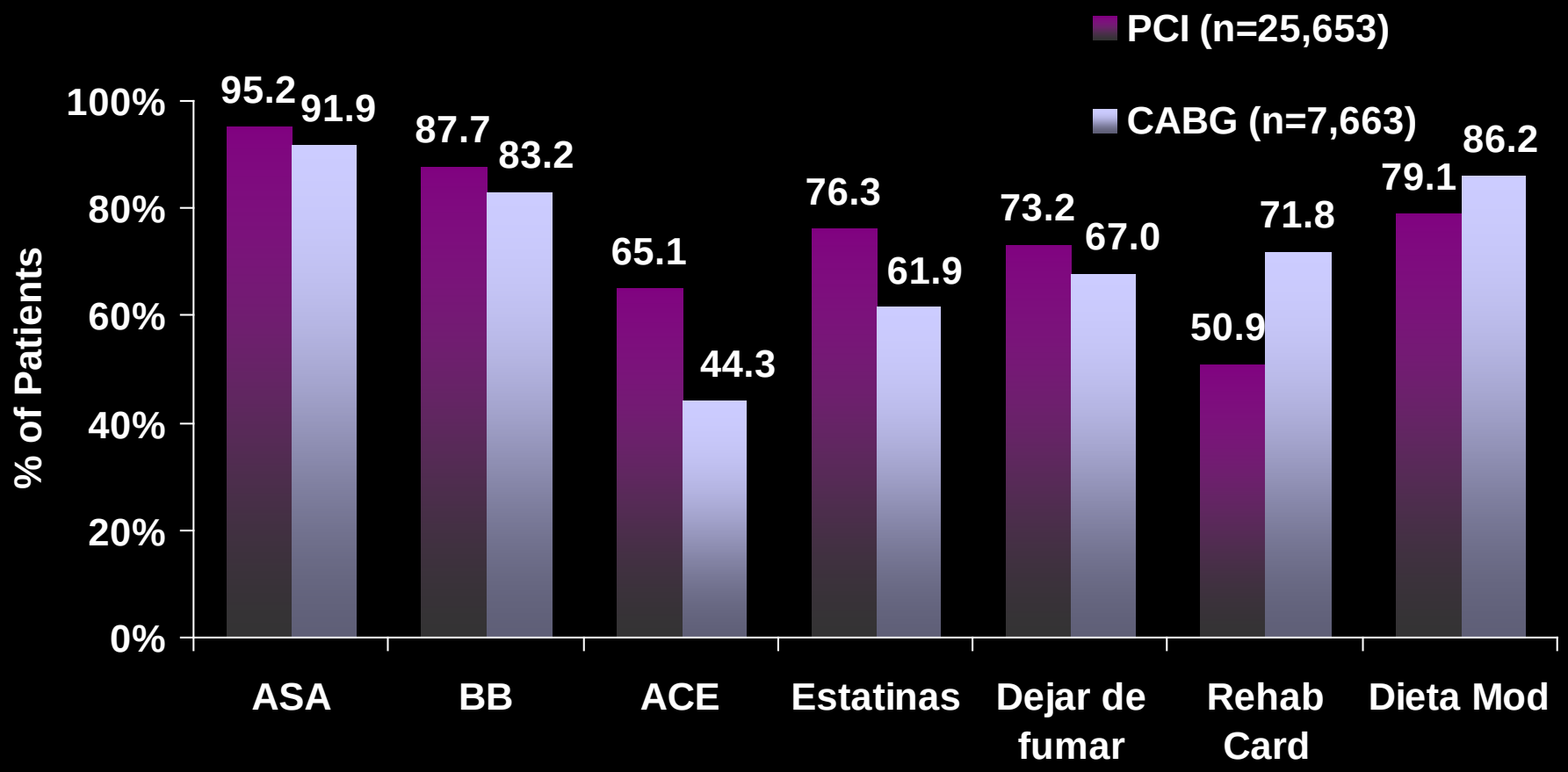
BARI



J Am Coll Cardiol, 2007; 49:1600-1606

CRUSADE

Discharge Care for CABG vs PCI



p<0.001 for all comparisons

Dyke et al, AHA 2004

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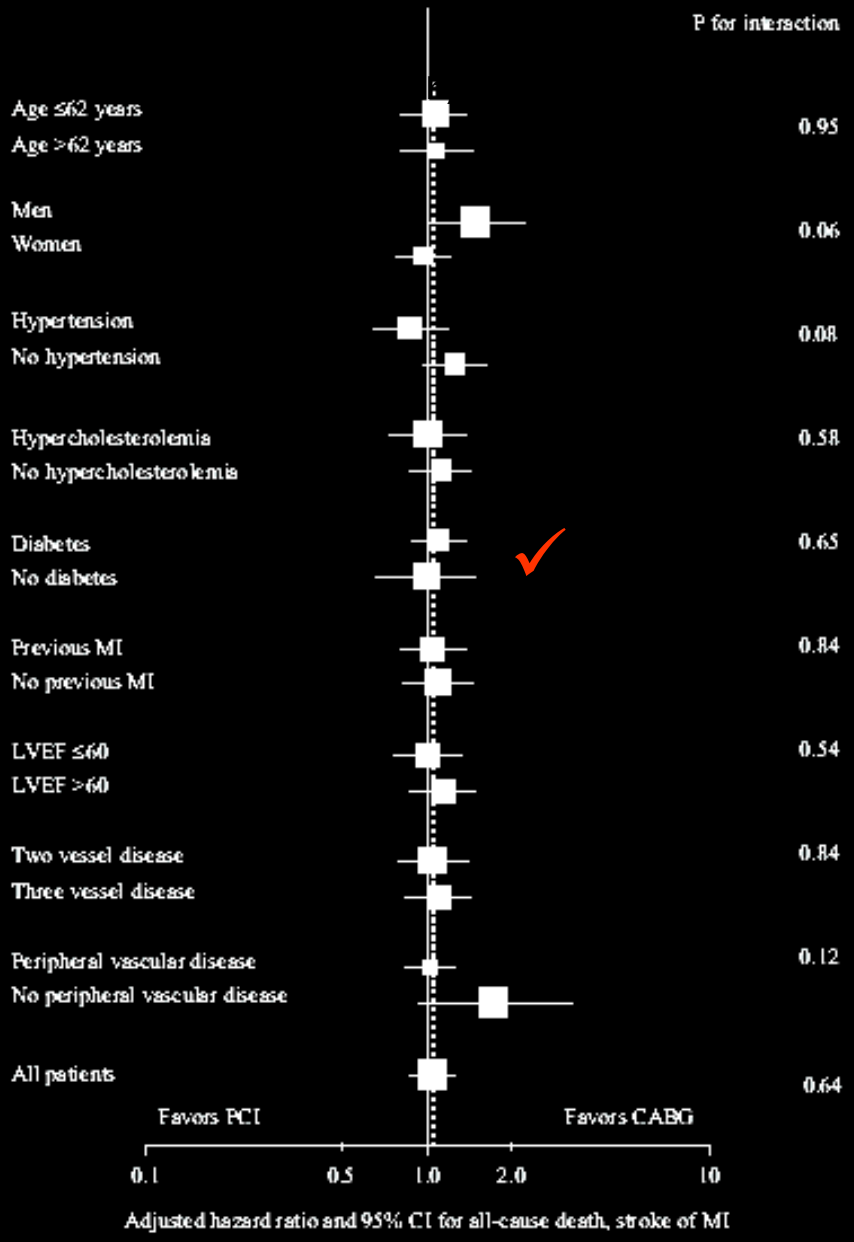
CARDIA: analisis bajo intencion de tratar

600 pacientes

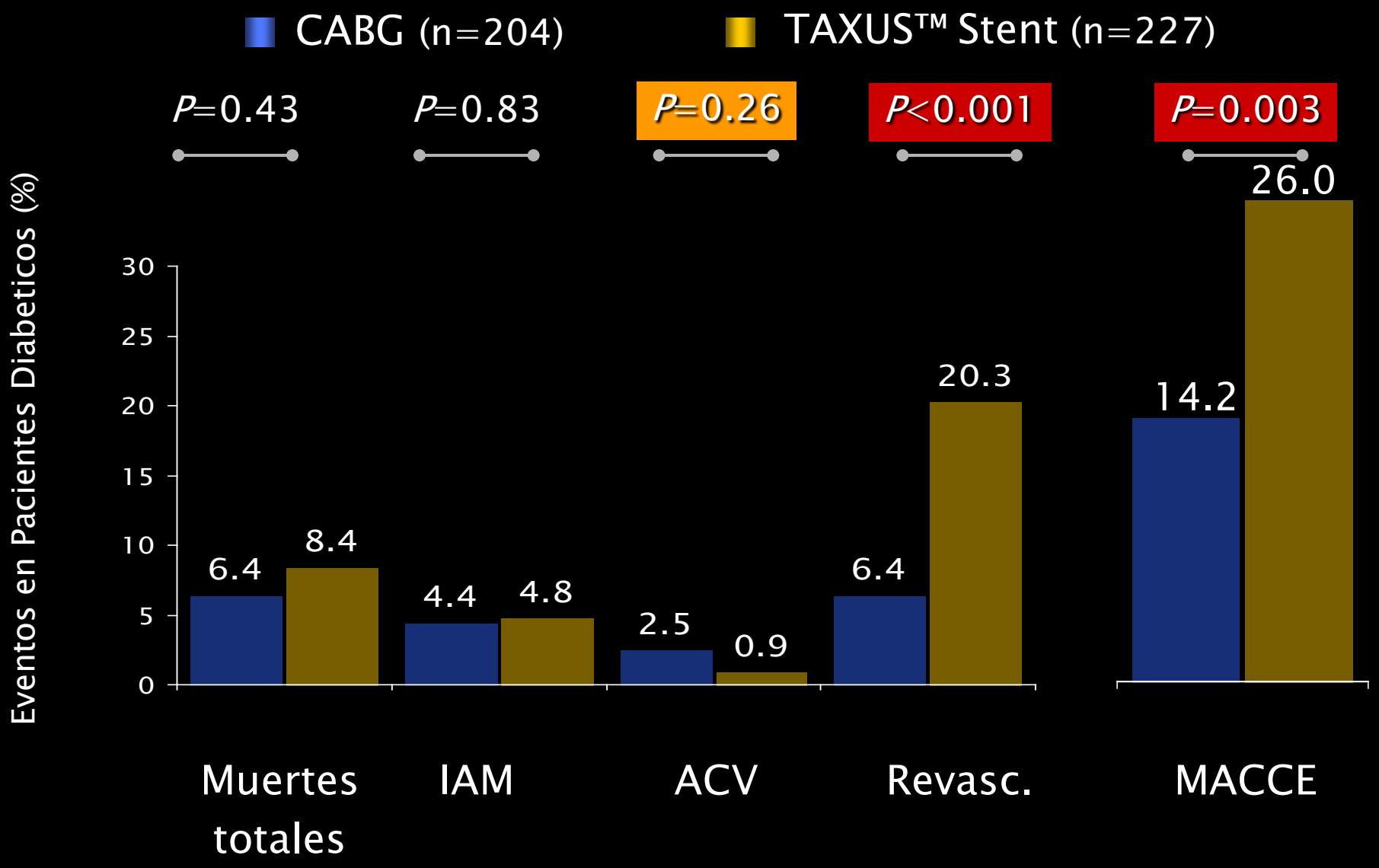
Eventos a 12 meses	CABG	PCI	Odds ratio (95% CI)	p
Muerte/IAM/ACV	10.2	11.6	1.15 (0.65–2.03)	0.63
ACV	2.5	0.4	0.16 (0.02–1.33)	0.09
Revascularizacion	2.0	9.9	5.31 (2.0–14.11)	0.001

Kapur A. European Society of Cardiology Congress 2008; September 1, 2008; Munich, Germany.



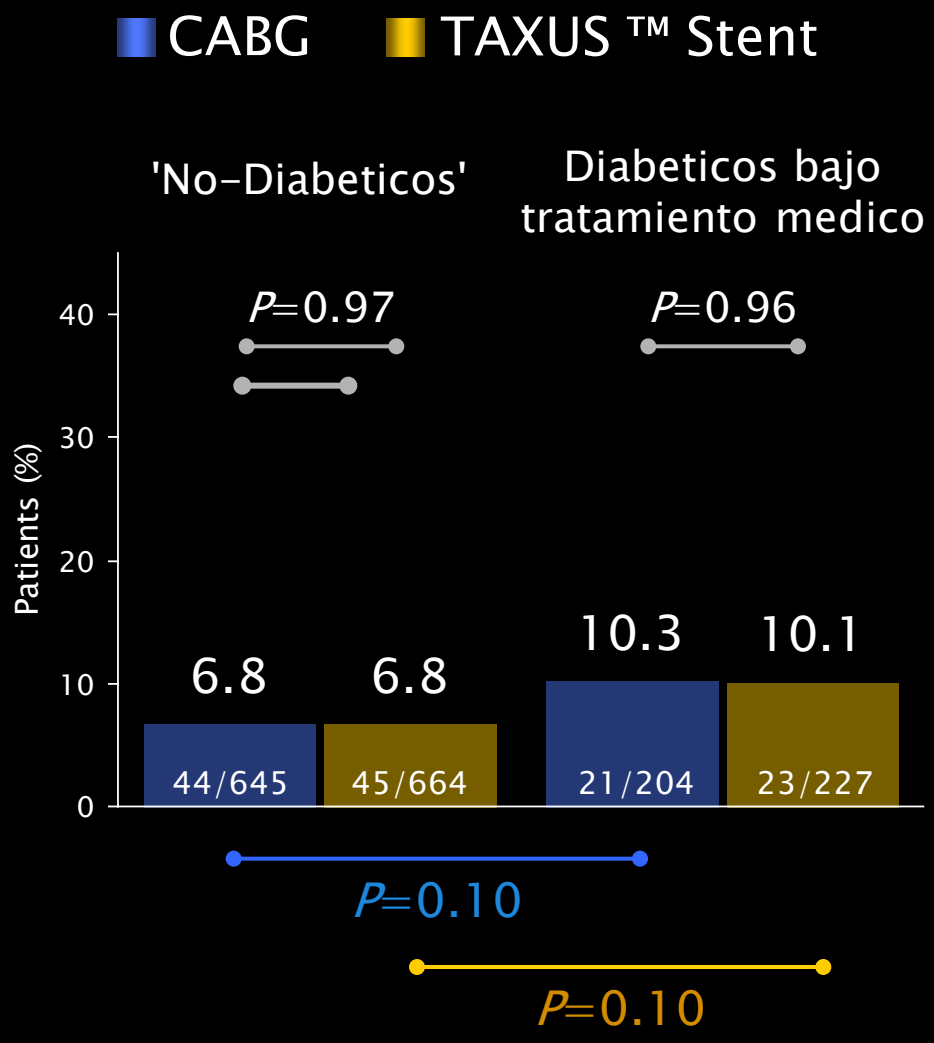
Daemen J et al. Circulation 2008;118;1146-1154

Incidencia de eventos a 12 meses en diabéticos



*Medically treated diabetes

SYNTAX
Muerte/IAM/ACV a 12-Meses



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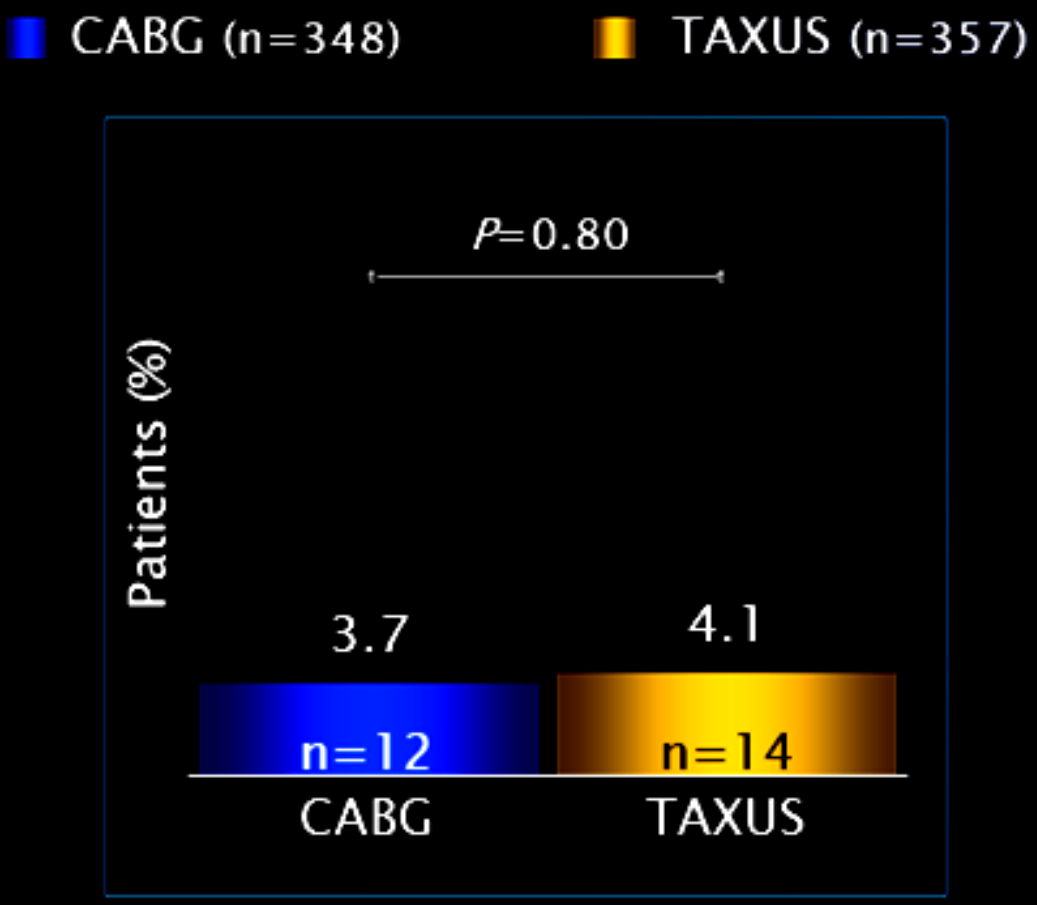
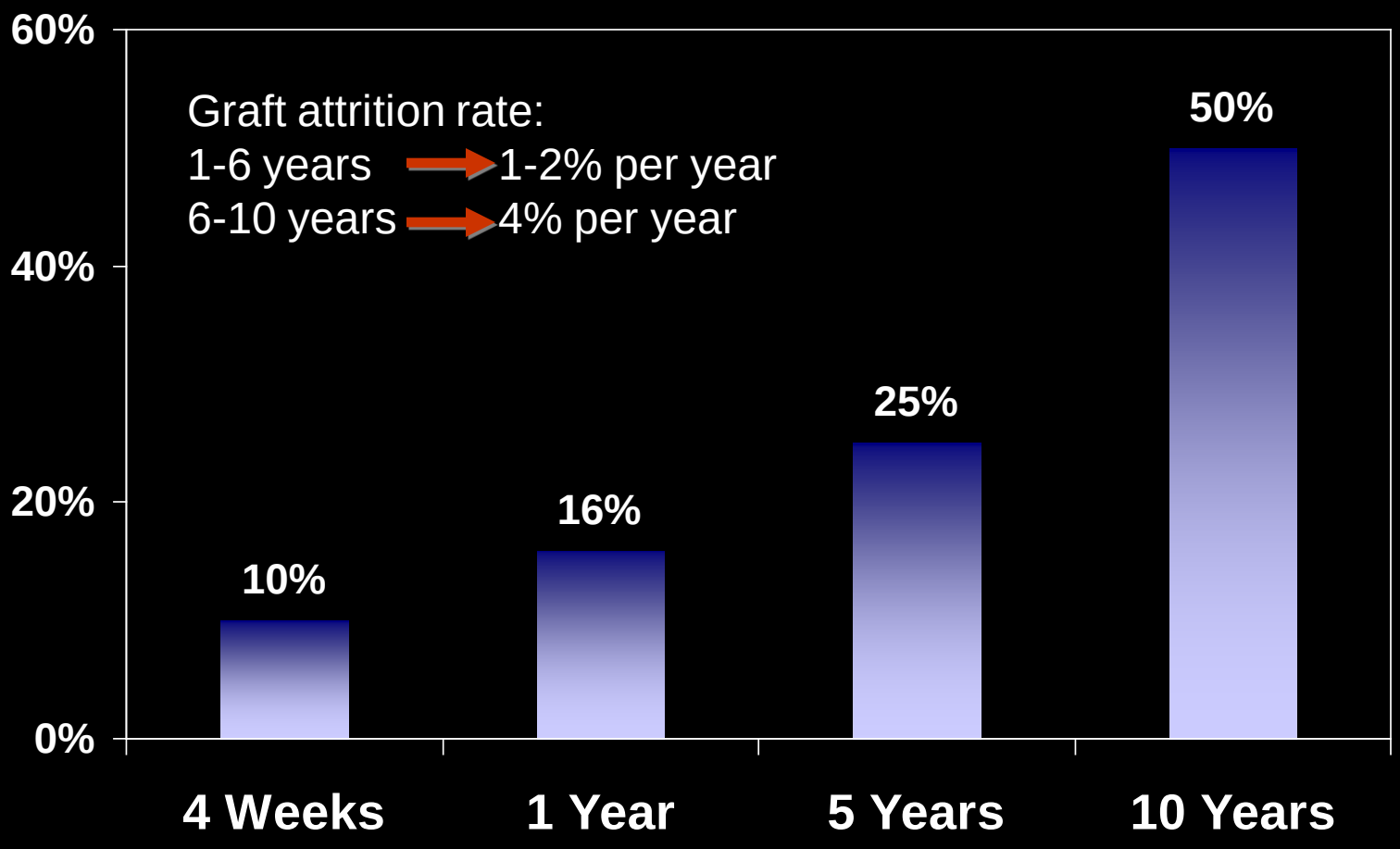
Symptomatic Graft Occlusion & Stent Thrombosis to 3 Years

LM Subset



Post-procedure; ITT population

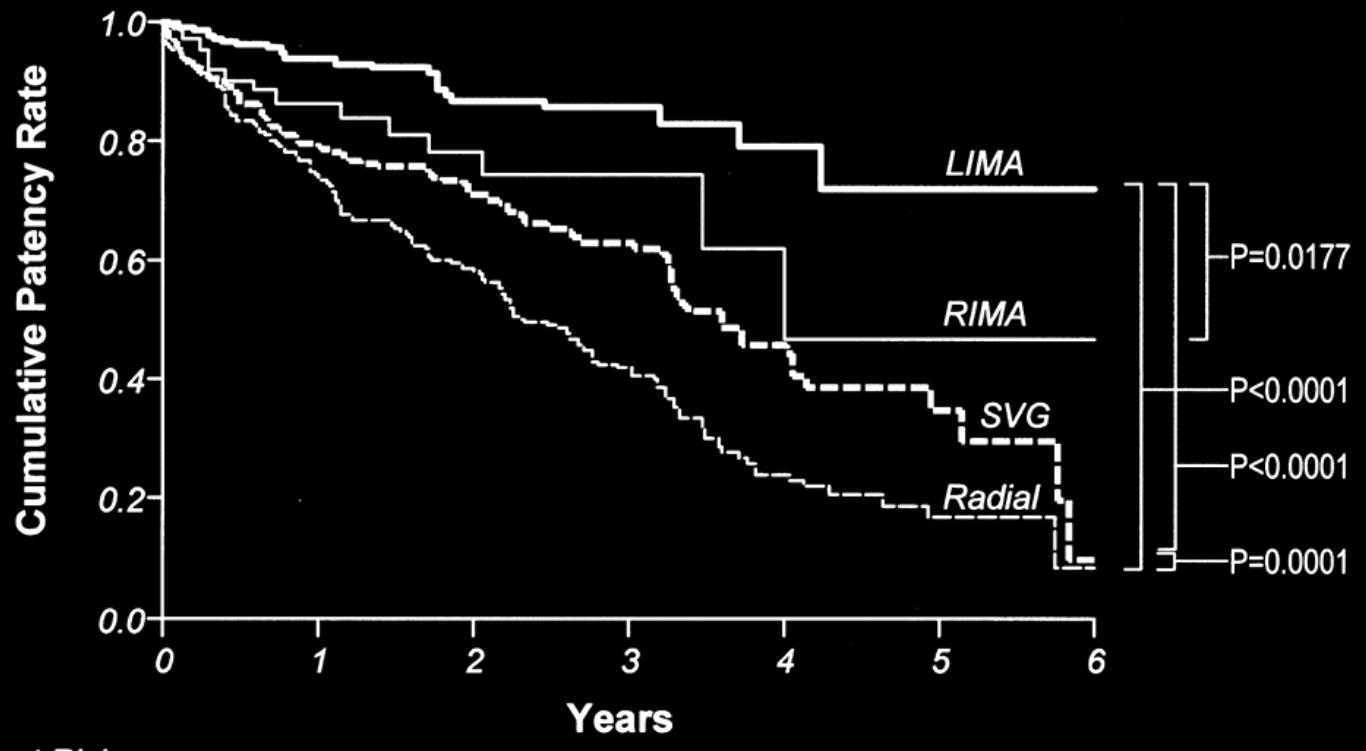
Vein Graft Occlusion Rates



Patency Rates: Type of Bypass Graft

February 1996 to October 2001

Cleveland Clinic Data

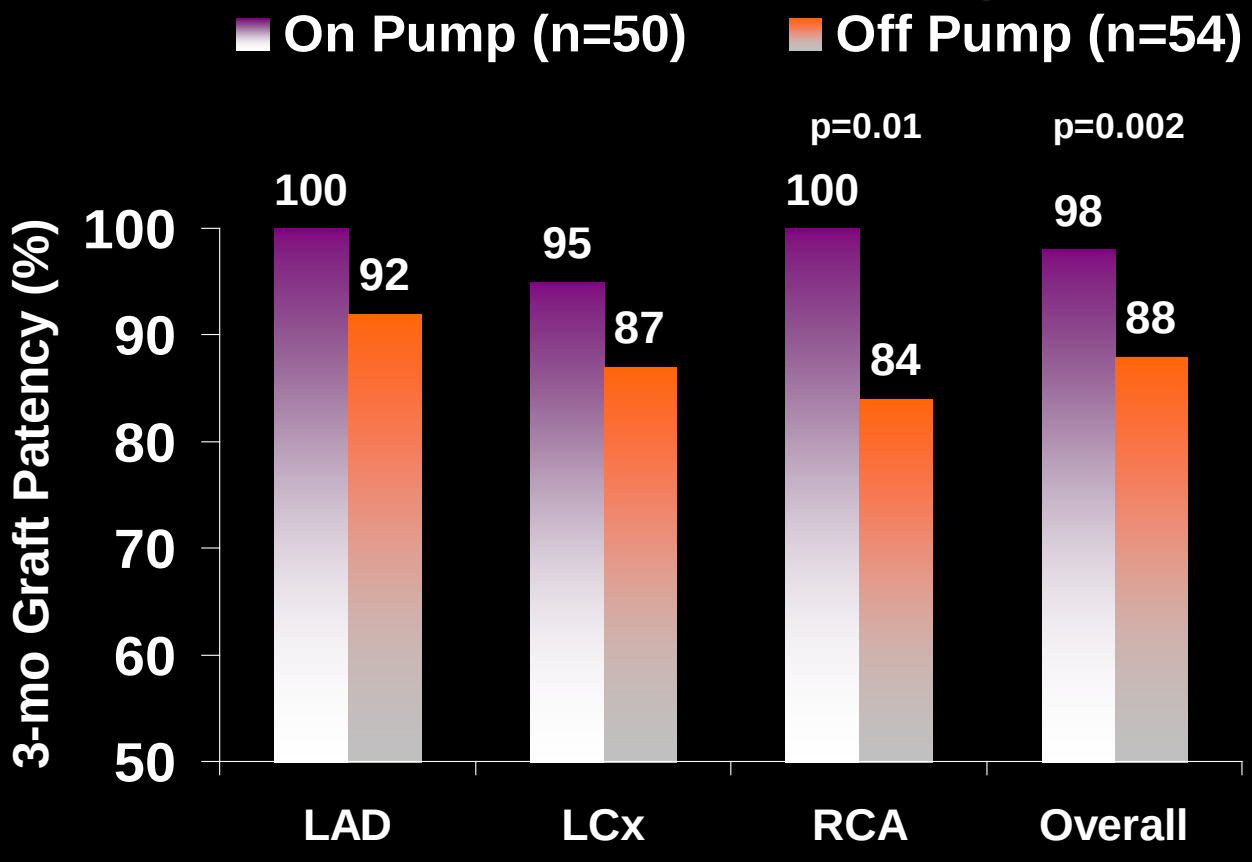


Numbers at Risk:

LIMA	*265*	*146*	*89*	*38*	*17*	*3*	*0*
RIMA	*75*	*37*	*22*	*10*	*4*	*0*	*0*
SVG	*267*	*157*	*114*	*63*	*27*	*7*	*0*
Radial	*392*	*220*	*136*	*64*	*24*	*8*	*0*

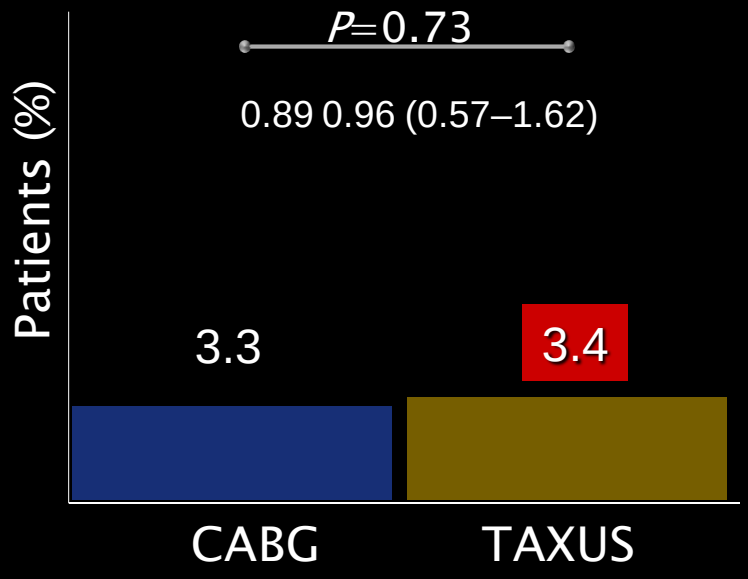
Khot, U. N. et al. Circulation 2004;109:2086-2091

Innovation in CT Surgery
OPCAB: Less Patency

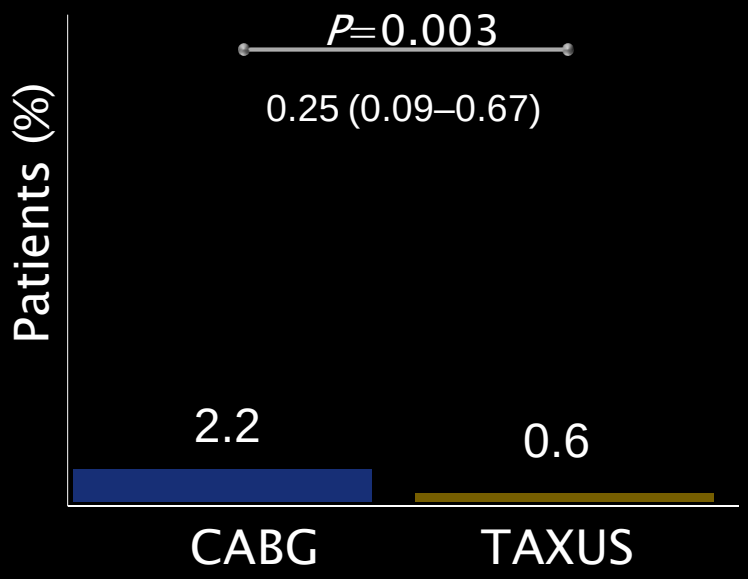


Khan et al. N Engl J Med 2004;350:21-8

Symptomatic Graft Occlusion & Stent Thrombosis to 12 Months



STROKE



CABG

TAXUS™ Stent

Patrick W. Serruys, N Engl J Med 360;10 March 5, 2009

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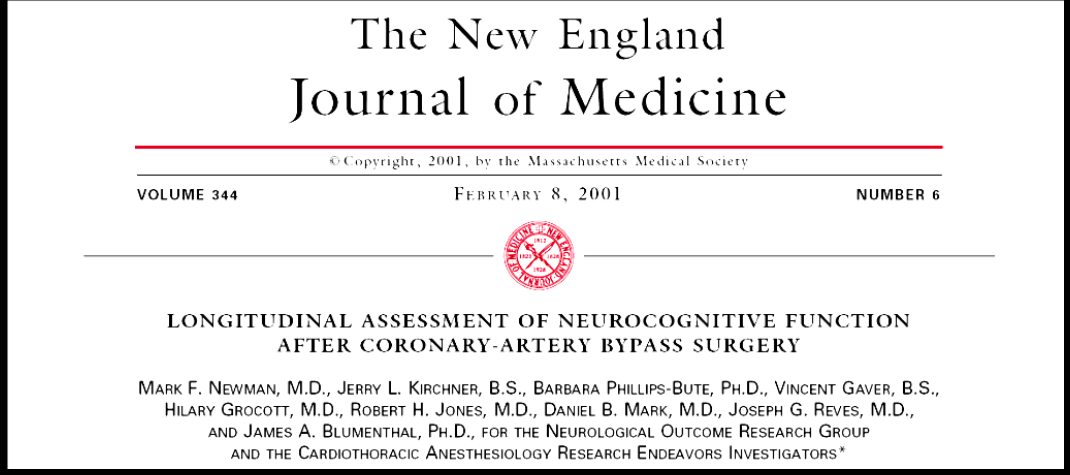
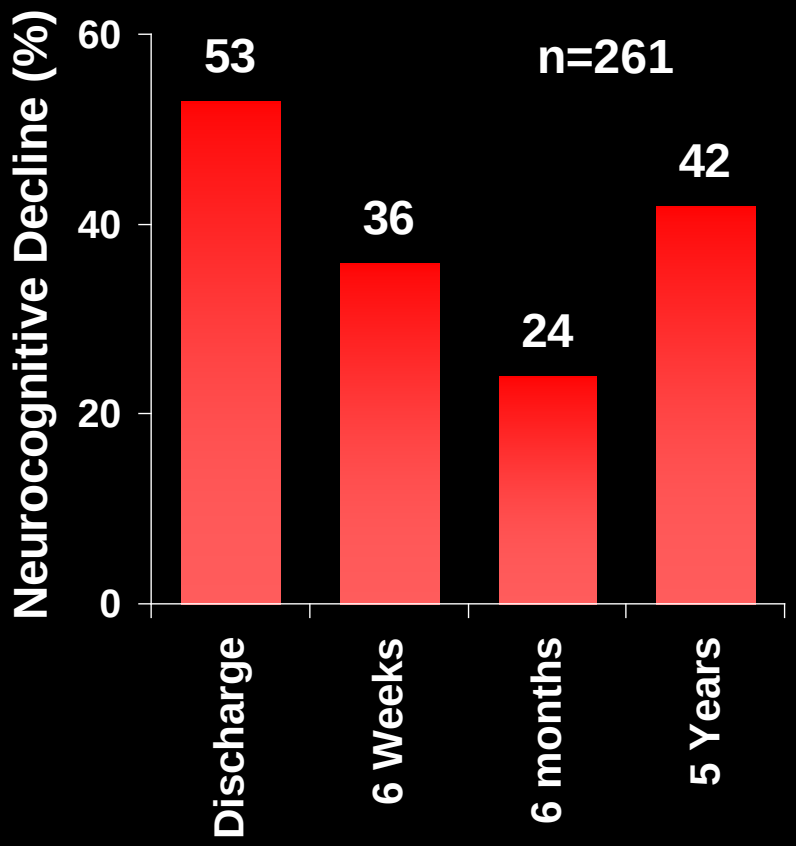


The New England
Journal of Medicine

VOLUME 344 FEBRUARY 8, 2001 NUMBER 6

LONGITUDINAL ASSESSMENT OF NEUROCOGNITIVE FUNCTION AFTER CORONARY-ARTERY BYPASS SURGERY

MARK F. NEWMAN, M.D., JERRY L. KIRCHNER, B.S., BARBARA PHILLIPS-BUTE, PH.D., VINCENT GAVER, B.S., HILARY GROCOTT, M.D., ROBERT H. JONES, M.D., DANIEL B. MARK, M.D., JOSEPH G. REVES, M.D., AND JAMES A. BLUMENTHAL, PH.D., FOR THE NEUROLOGICAL OUTCOME RESEARCH GROUP AND THE CARDIOTHORACIC ANESTHESIOLOGY RESEARCH ENDEAVORS INVESTIGATORS*



- Cognitive decline = 1 SD from pt baseline score
  - Similar to the difference in function between 40- and 60-year-old subjects
- Independent Predictors (Multivariable Analysis)
  - Cognitive decline @ D/C
  - Older age
  - Fewer years of education
- No clear evidence that OPCAB is preventive

Newman et al. N Engl J Med 2001;344:395-402

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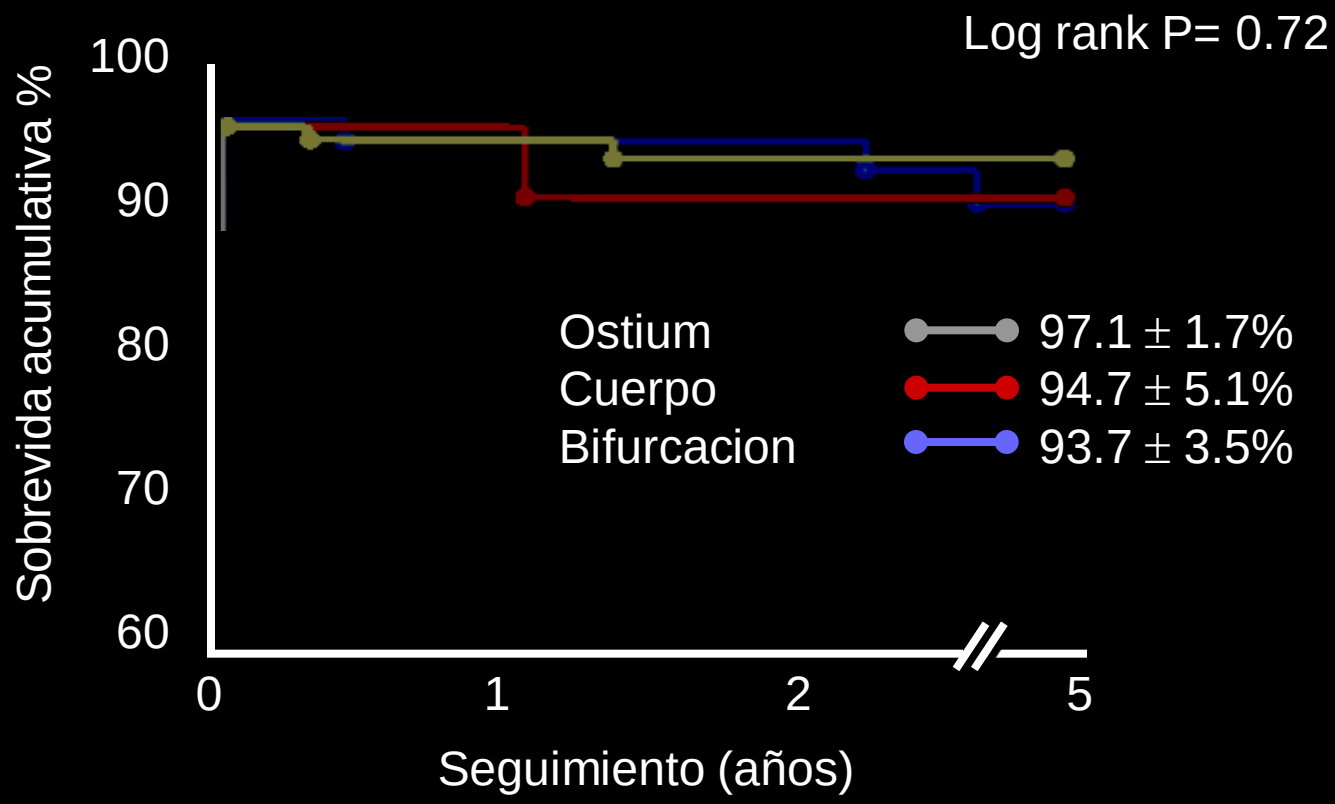
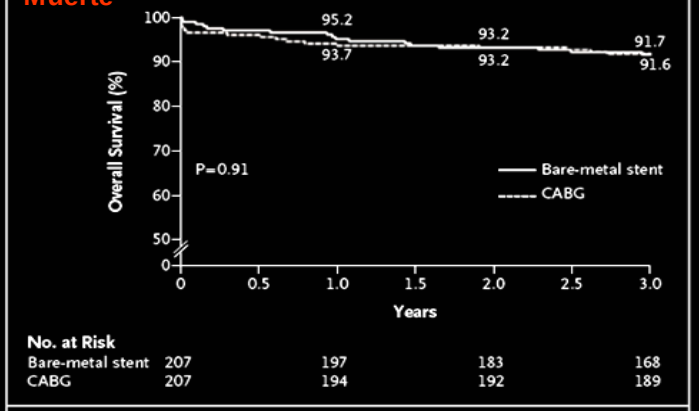
Tronco de CI
Sobrevida con BMS según segmento



Park SJ. Am J Cardiol 2003; 91: 12-16

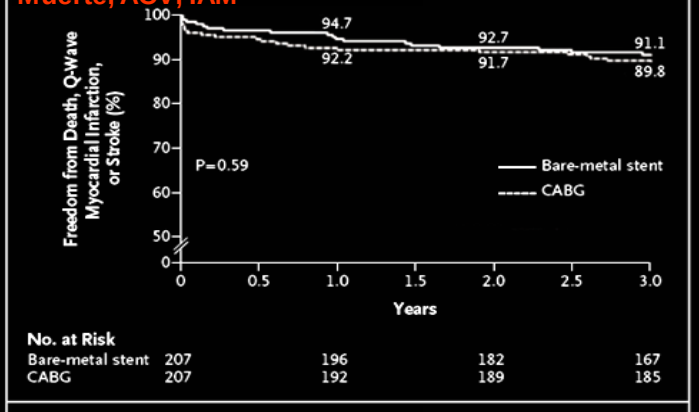
BMS vs CABG (414 pacientes)

Muerte



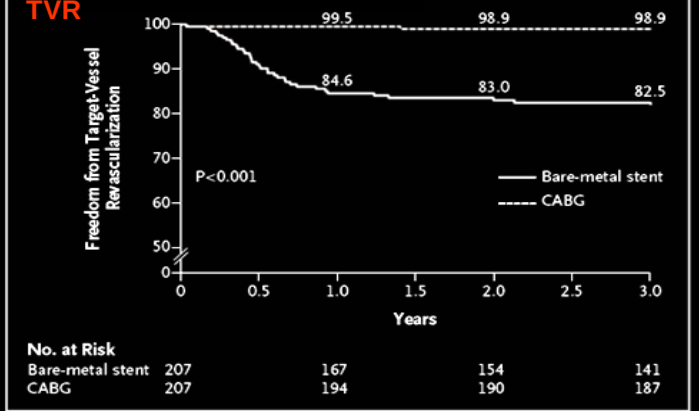
No. at Risk				
Bare-metal stent	207	197	183	168
CABG	207	194	192	189

Muerte, ACV, IAM



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

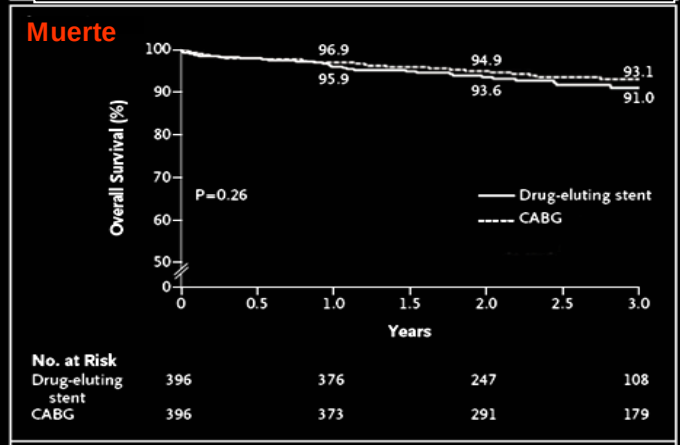
TVR



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

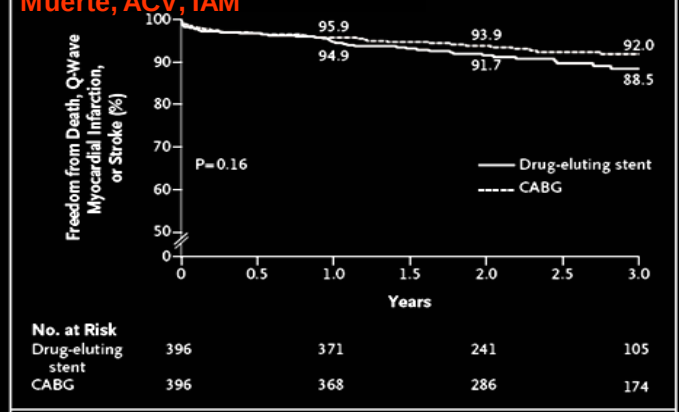
DES vs CABG (792 pacientes)

Muerte



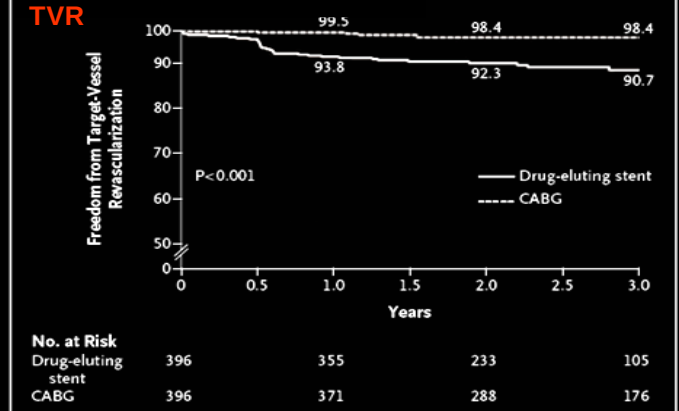
No. at Risk				
Drug-eluting stent	396	376	247	108
CABG	396	373	291	179

Muerte, ACV, IAM



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

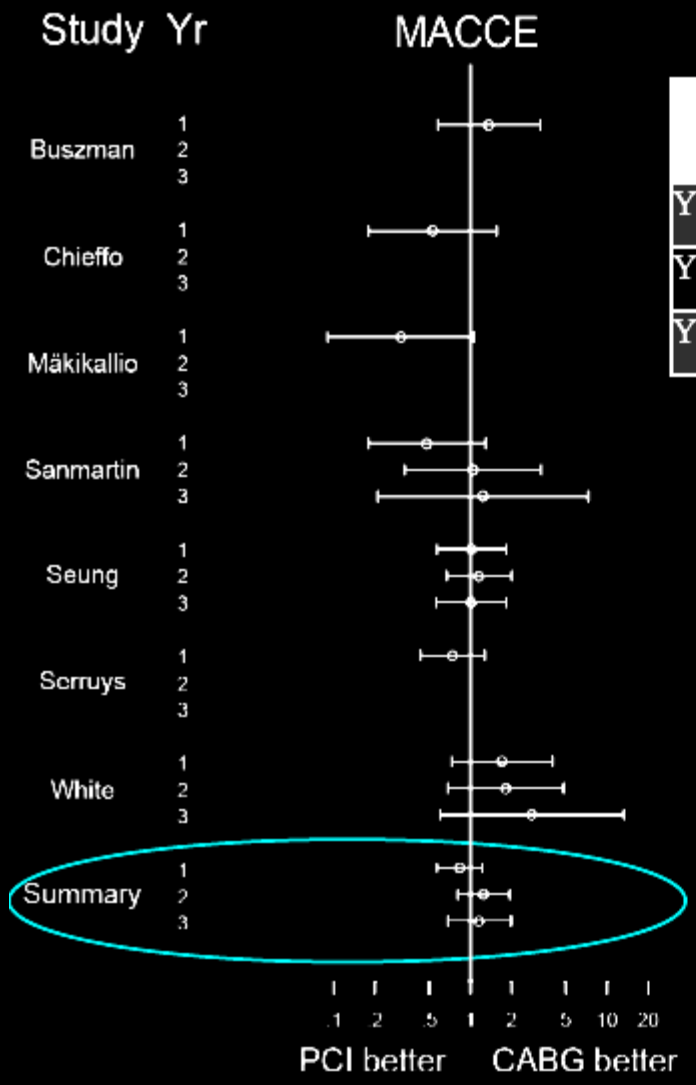
TVR



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

Park S, et al .N Engl J Med, 2008

Meta-Análisis
(3773 pacientes)

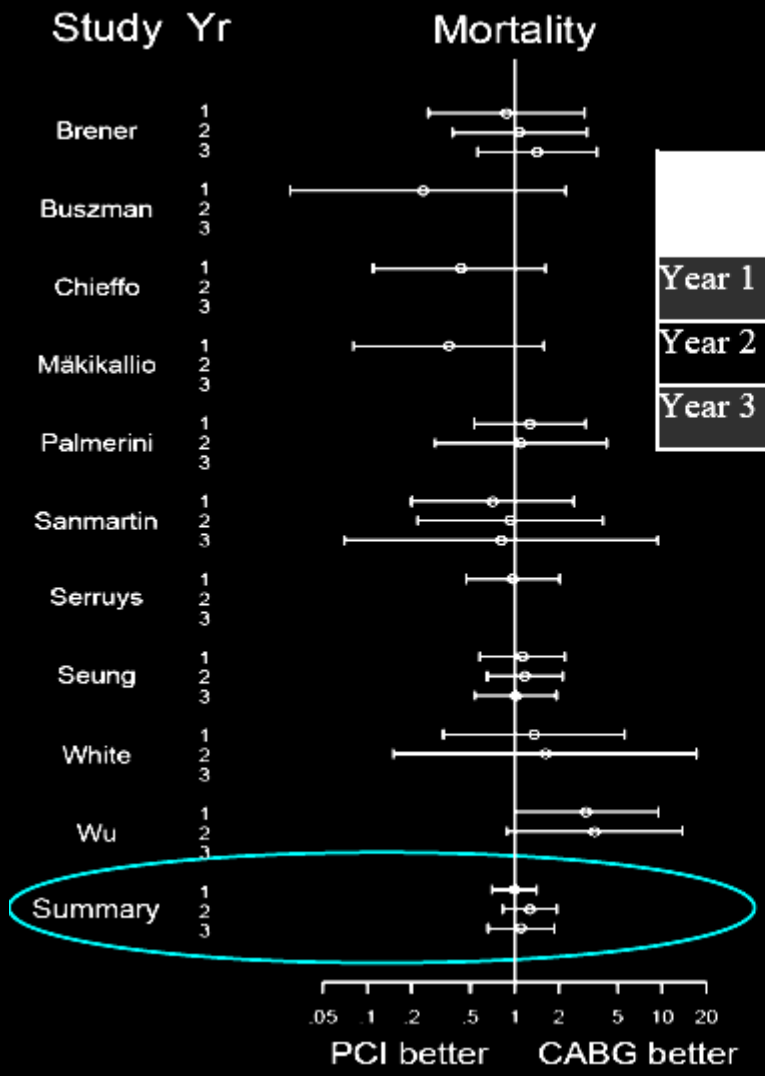


	CABG n	PCI n	Summary OR	95% CI
Year 1	1614	1239	**0.84**	0.57-1.22
Year 2	652	432	**1.25**	0.81-1.94
Year 3	451	236	**1.16**	0.68-1.98

No Difference In
Death, MI and Stroke
Up To 3 Years

Naik H et al. JACC Intervention 2009; 2: 730-747

Meta-Análisis
(3773 pacientes)

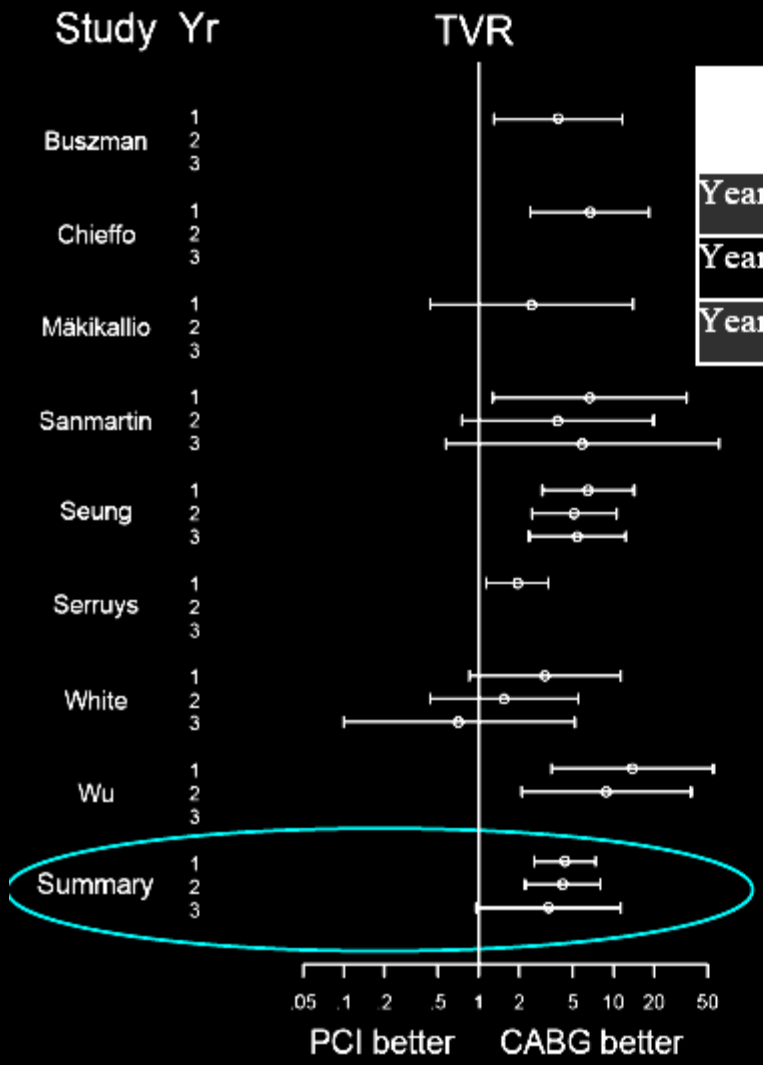


	CABG n	PCI n	Summary OR	95% CI
Year 1	1932	1393	**1.00**	0.70-1.41
Year 2	890	528	**1.27**	0.83-1.94
Year 3	578	263	**1.11**	0.66-1.86

No Difference In
Mortality
Up To 3 Years

Naik H et al. JACC Intervention 2009; 2: 730-747

Meta-Análisis
(3773 pacientes)



	CABG n	PCI n	Summary OR	95% CI
Year 1	1692	1240	**4.36**	2.60-7.32
Year 2	699	417	**4.20**	2.21-7.97
Year 3	447	211	**3.30**	0.96-11.33

Increased TVR
Up To 3 years

Naik H et al. JACC Intervention 2009; 2: 730-747

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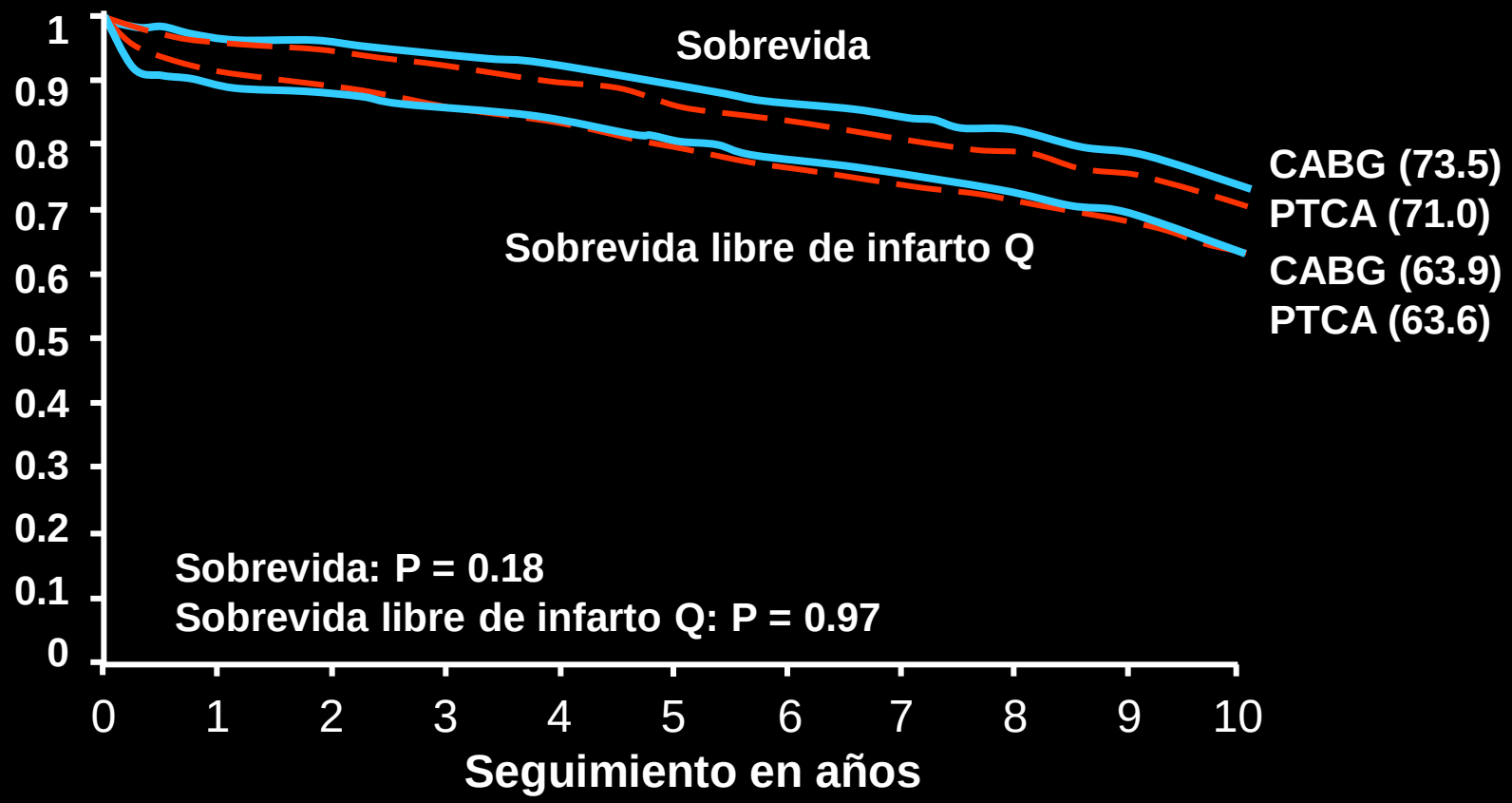
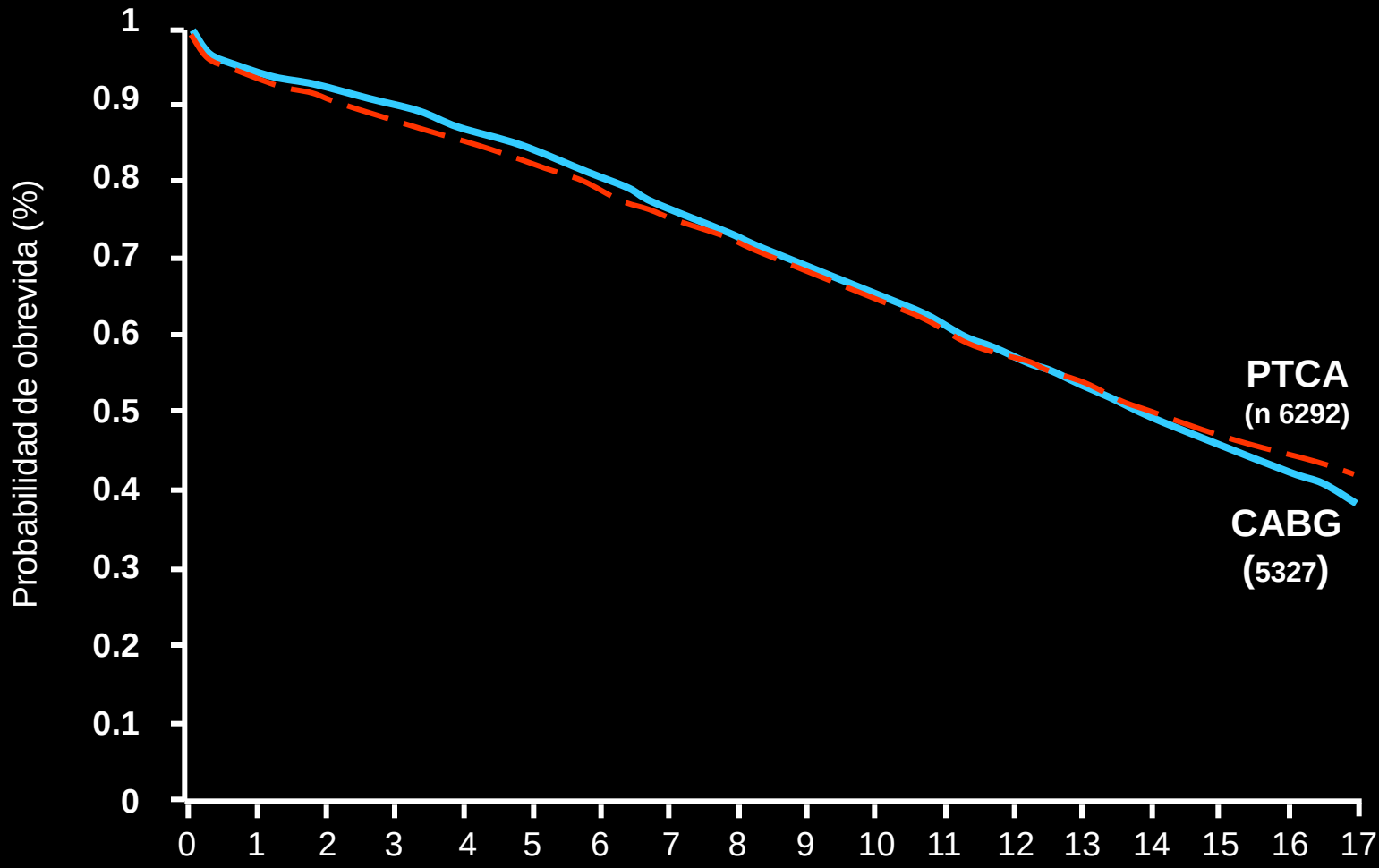


Node Pacientes					
CABG	914	859	812	737	553
PTCA	915	842	790	714	540

J Am Coll Cardiol, 2007; 49:1600-1606

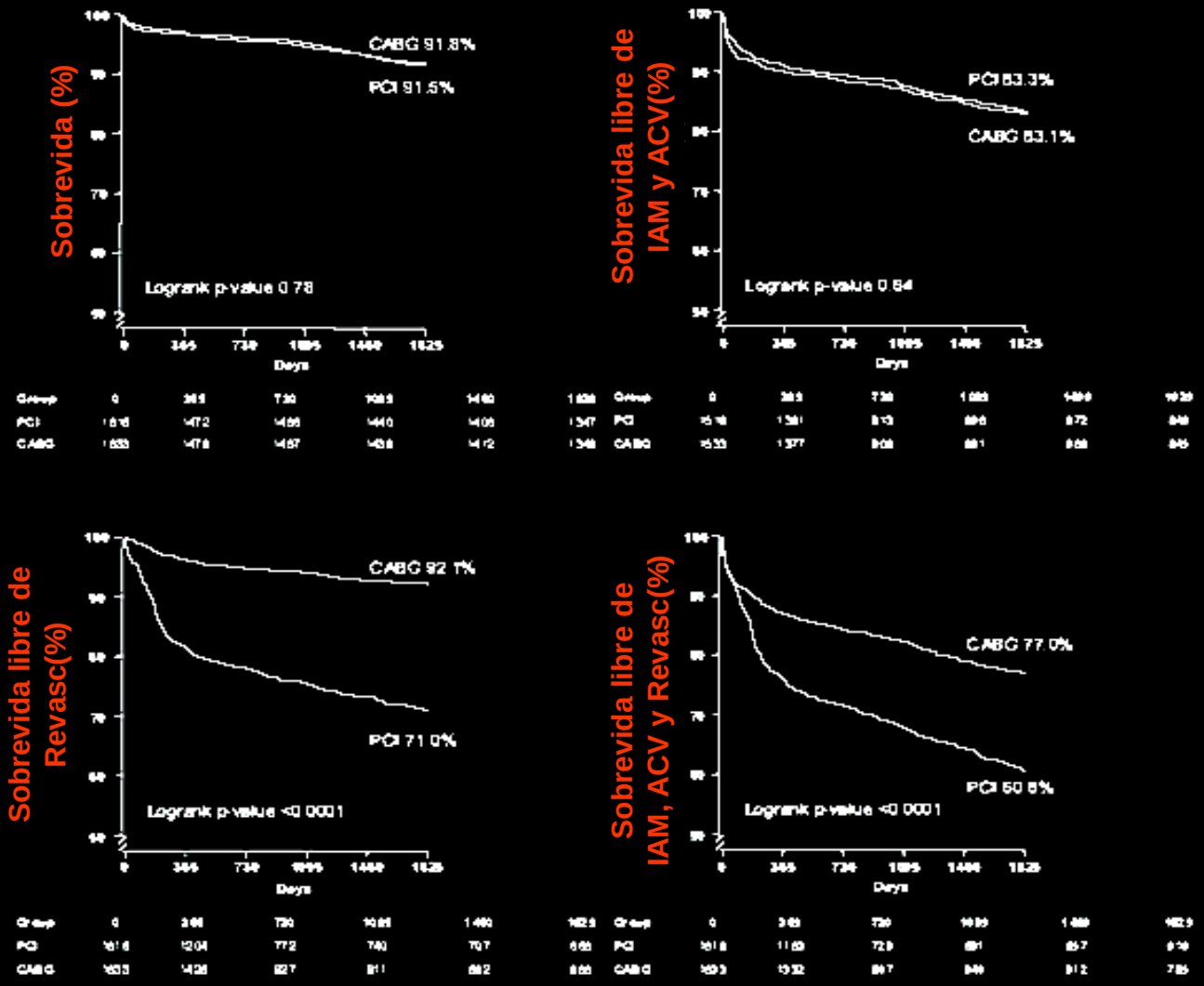
MVD CABG vs PCI

Duke University



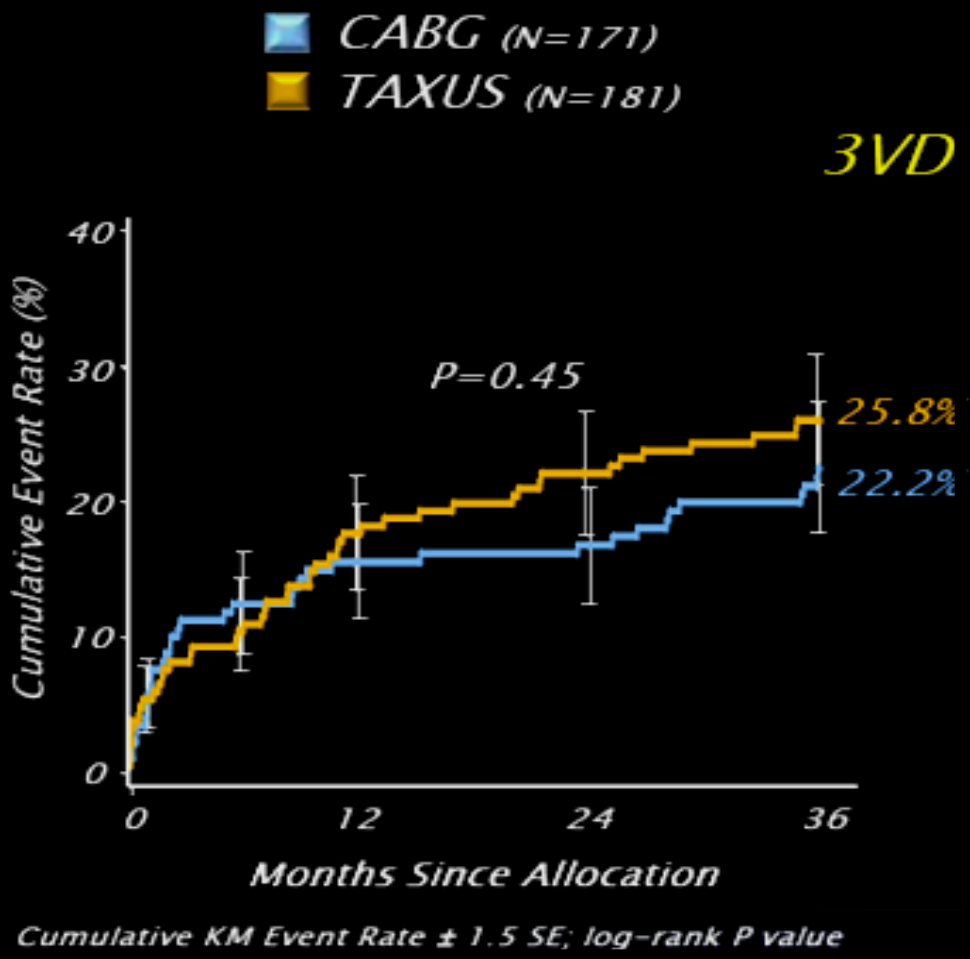
Smith et al, Ann Th Surg 2006

“Pooled” análisis de todos los RCTs BMS vs. CABG
3051 pacientes (5 años)



Daemen J et al. *Circulation* 2008;118;1146-1154

MACCE to 3 Years by SYNTAX Score Tercile *Low Scores (0–22)*

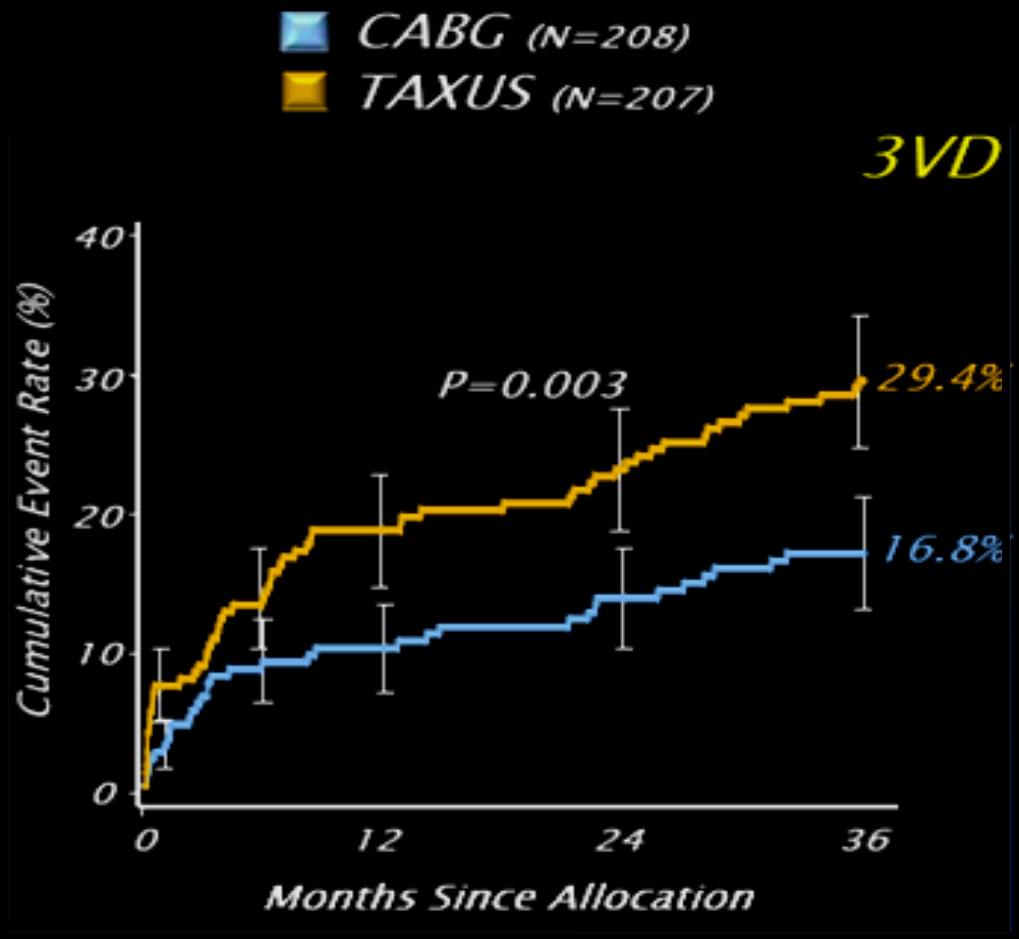


Cumulative KM Event Rate ± 1.5 SE; log-rank P value

	CABG	PCI	*P* value
Death	6.8%	7.3%	0.86
CVA	3.2%	1.2%	0.20
MI	4.9%	5.1%	0.93
Death, CVA or MI	12.3%	11.2%	0.75
Revasc.	11.6%	18.8%	0.06 ✓

Site-reported Data; ITT population

MACCE to 3 Years by SYNTAX Score Tercile *Intermediate Scores (23–32)*



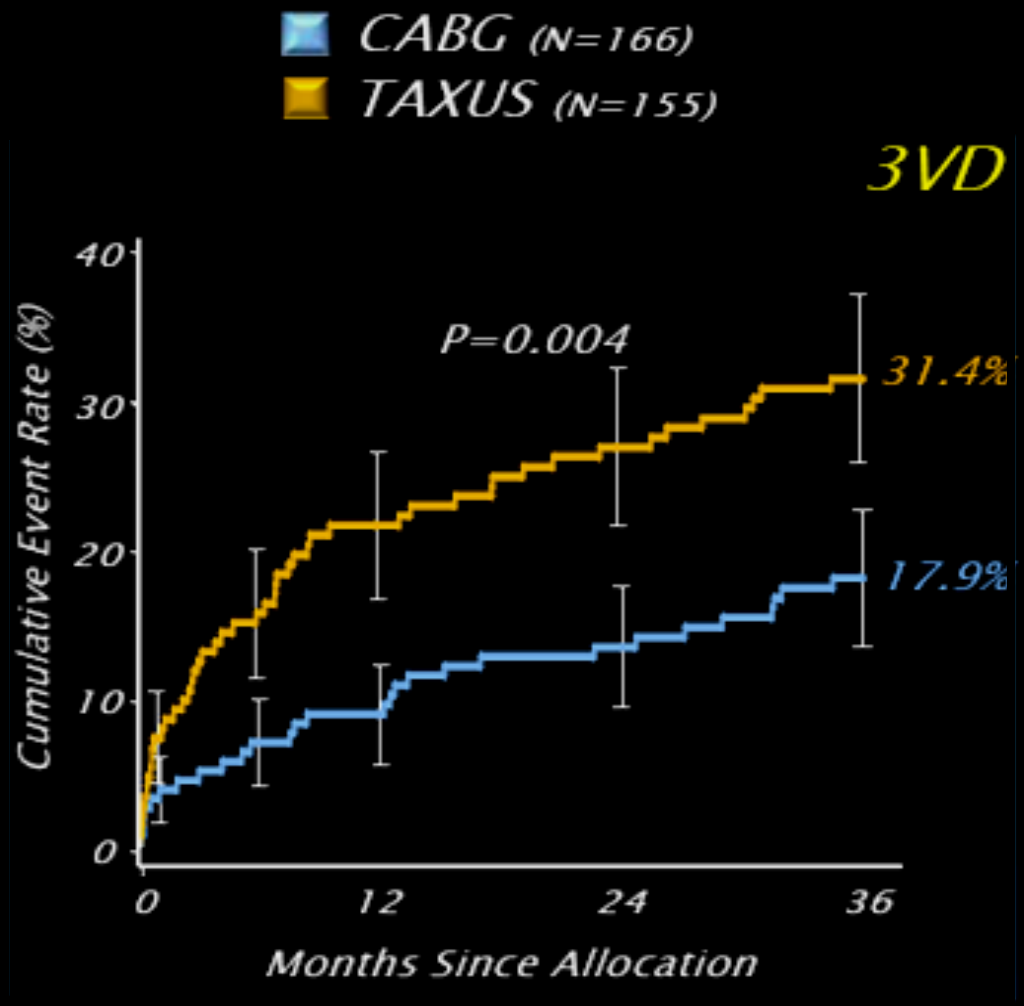
Cumulative KM Event Rate ± 1.5 SE; log-rank P value

	CABG	PCI	*P* value	
Death	5.7%	10.3%	0.09	✓
CVA	3.6%	2.5%	0.53	
MI	3.1%	8.9%	0.01	✓
Death, CVA or MI	11.3%	16.1%	0.16	
Revasc.	8.4%	18.2%	0.004	✓

Site-reported Data; ITT population

MACCE to 3 Years by SYNTAX Score Tercile *High Scores (≥33)*

SYNTAX



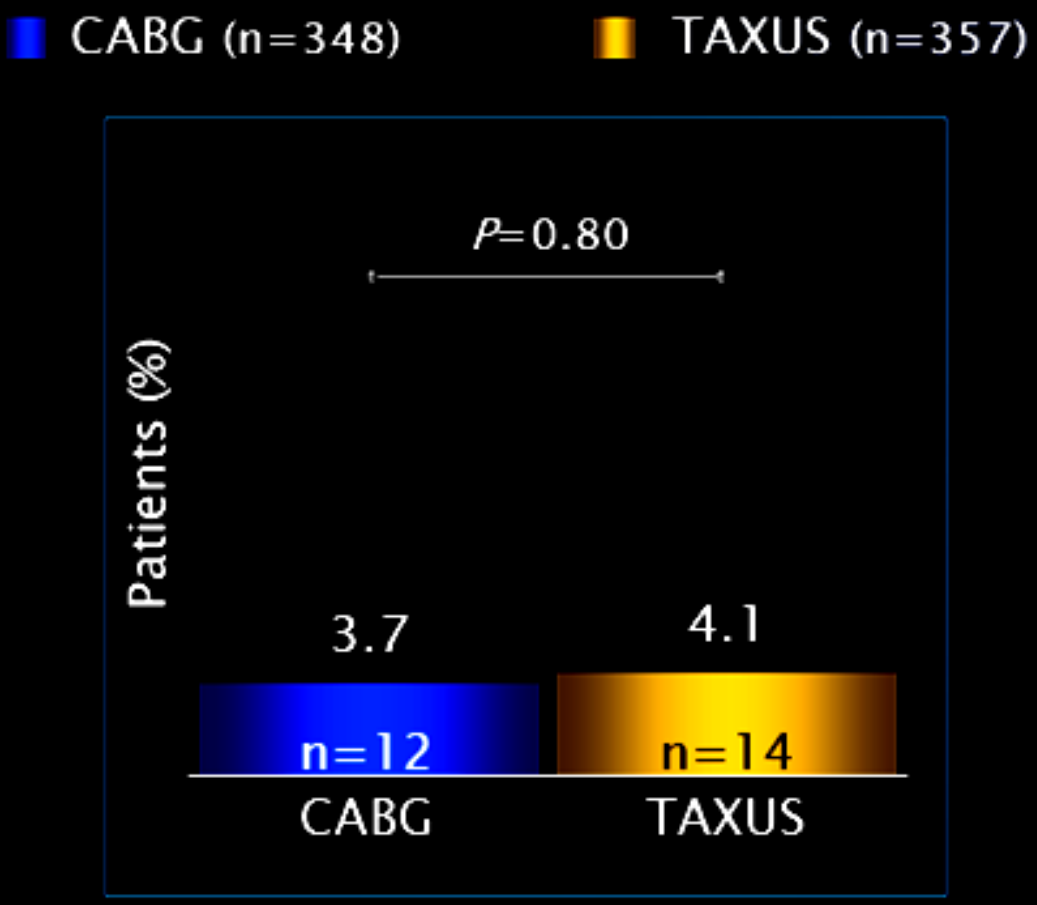
Cumulative KM Event Rate ± 1.5 SE; log-rank P value

	CABG	PCI	*P* value	
Death	4.5%	11.1%	0.03	✓
CVA	1.9%	4.3%	0.28	
MI	1.9%	7.2%	0.02	✓
Death, CVA or MI	8.3%	17.7%	0.01	✓
Revasc.	10.5%	21.5%	0.006	✓

Site-reported Data; ITT population

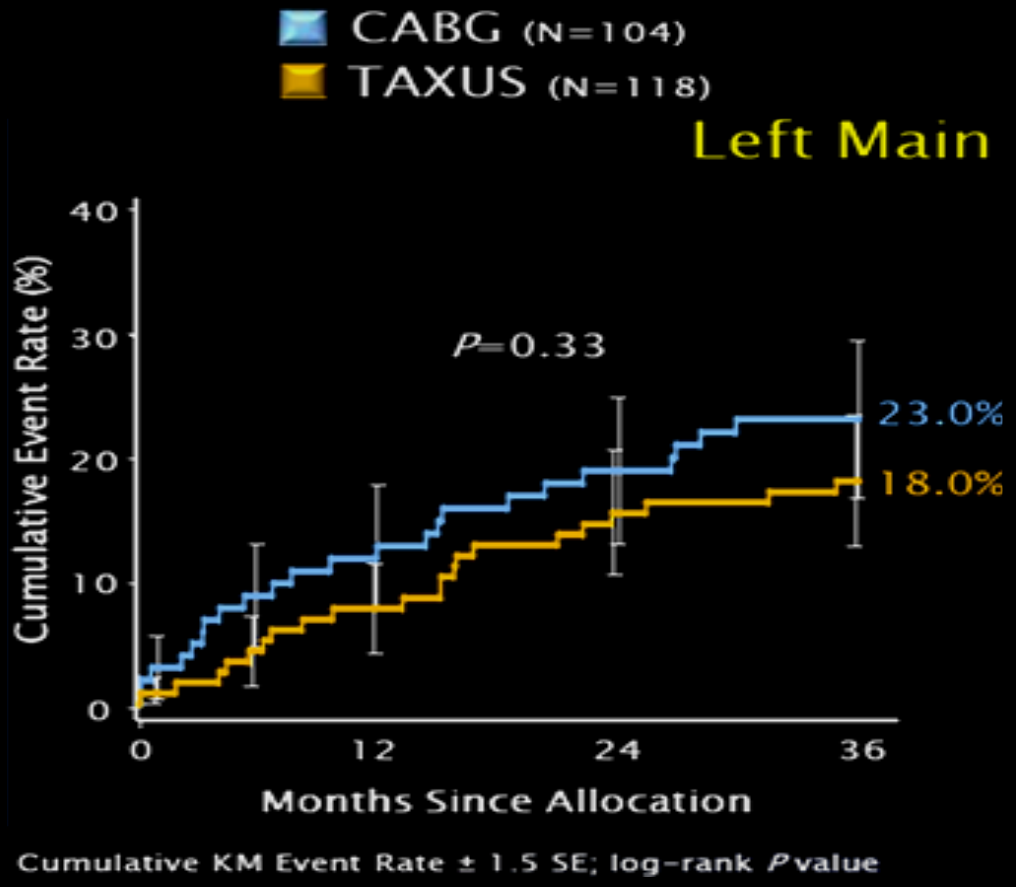
Symptomatic Graft Occlusion & Stent Thrombosis to 3 Years

LM Subset



Post-procedure; ITT population

MACCE to 3 Years by SYNTAX Score Tercile *Low Scores (0–22)*

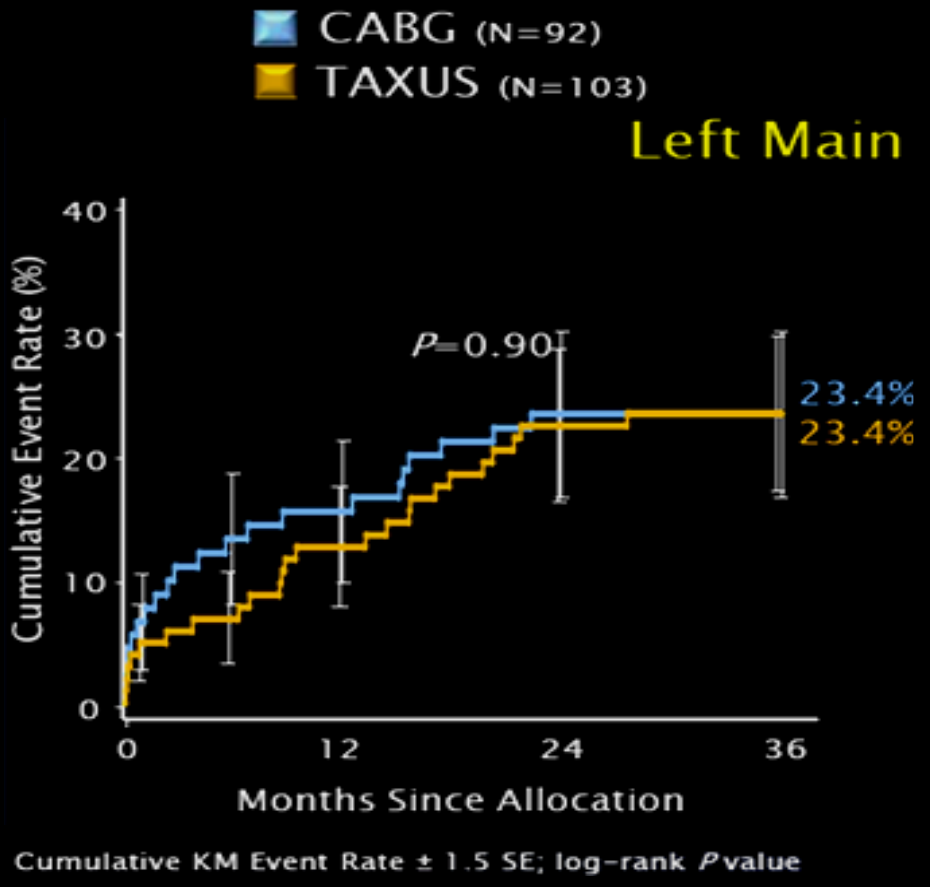


Cumulative KM Event Rate ± 1.5 SE; log-rank *P* value

	CABG	PCI	*P* value
Death	6.0%	> 2.6%	0.21
CVA	4.1%	> 0.9%	0.12
MI	2.0%	< 4.3%	0.36
Death, CVA or MI	11.0%	> 6.9%	0.26
Revasc.	13.4%	< 15.4%	0.69

Site-reported Data; ITT population

MACCE to 3 Years by SYNTAX Score Tercile *Intermediate Scores (23–32)*

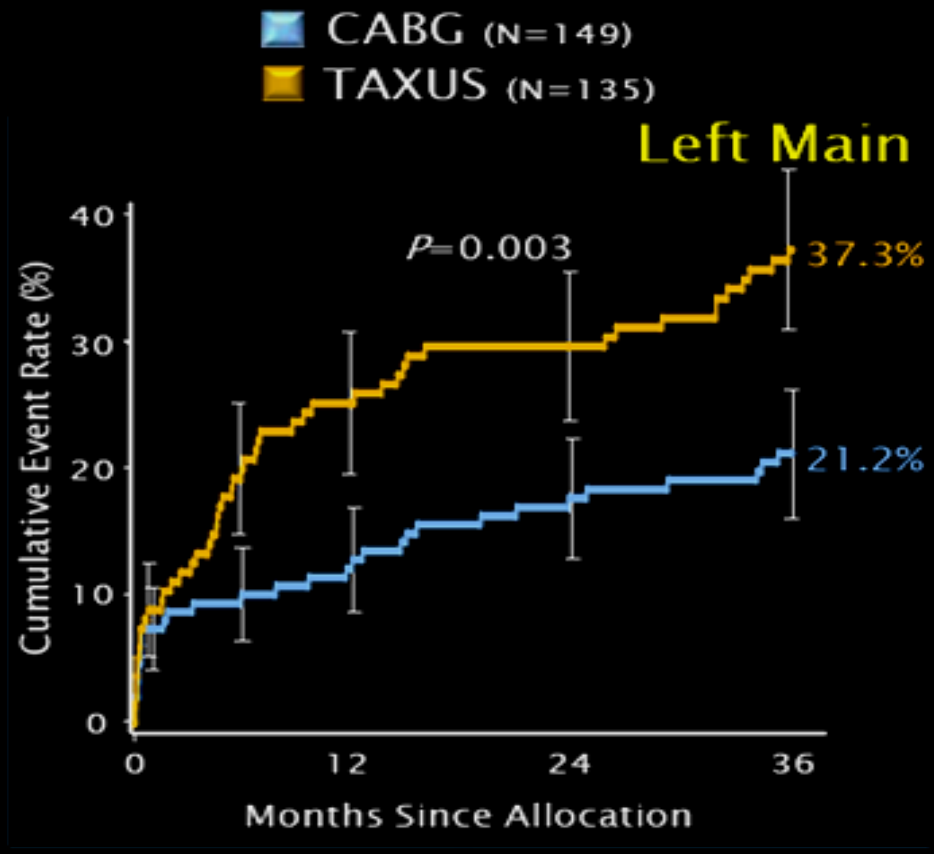


Cumulative KM Event Rate ± 1.5 SE; log-rank *P* value

	CABG	PCI	*P* value
Death	12.4%	> 4.9%	0.06
CVA	2.3%	> 1.0%	0.46
MI	3.3%	< 5.0%	0.63
Death, CVA or MI	15.6%	> 10.8%	0.29
Revasc.	14.0%	< 15.9%	0.75

Site-reported Data; ITT population

MACCE to 3 Years by SYNTAX Score Tercile *Left Main SYNTAX Score ≥33*



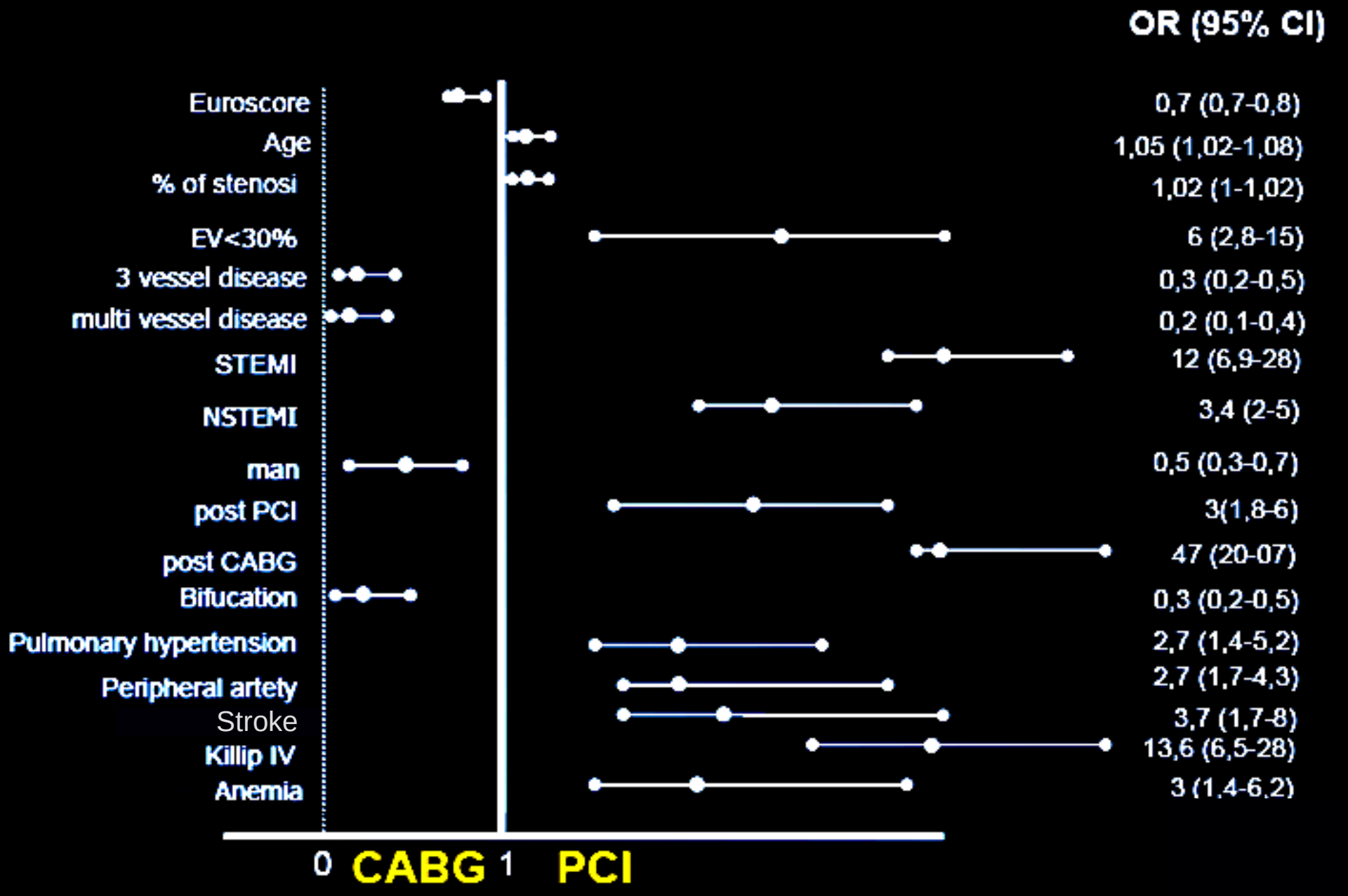
Cumulative KM Event Rate ± 1.5 SE; log-rank *P* value

	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 ✓

Site-reported Data; ITT population

- ✓ NECESIDAD DE NUEVA REVASCULARIZACION
- ✓ DIABETICOS
- ✓ TROMBOSIS DE STENT
- ✓ COMPLICACIONES NEUROLOGICAS
- ✓ TRONCO
- ✓ SEGUIMIENTO MAS ALEJADO
- ✓ PACIENTES DE MUY ALTO RIESGO

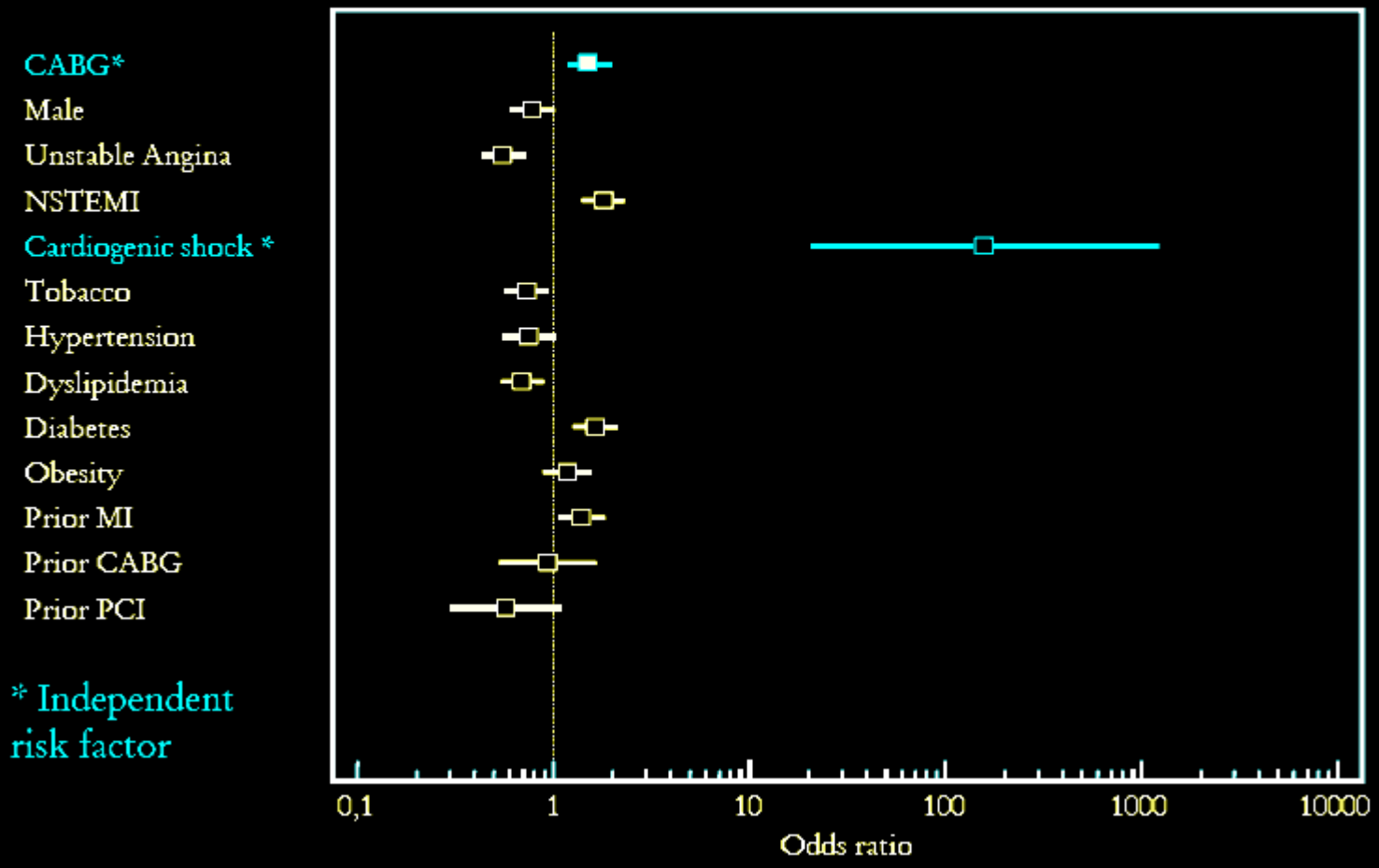
Factors influencing treatment selection
Index procedure : PCI vs CABG



Comparison of patients' cohorts: LM-PCI vs CABG vs Rx

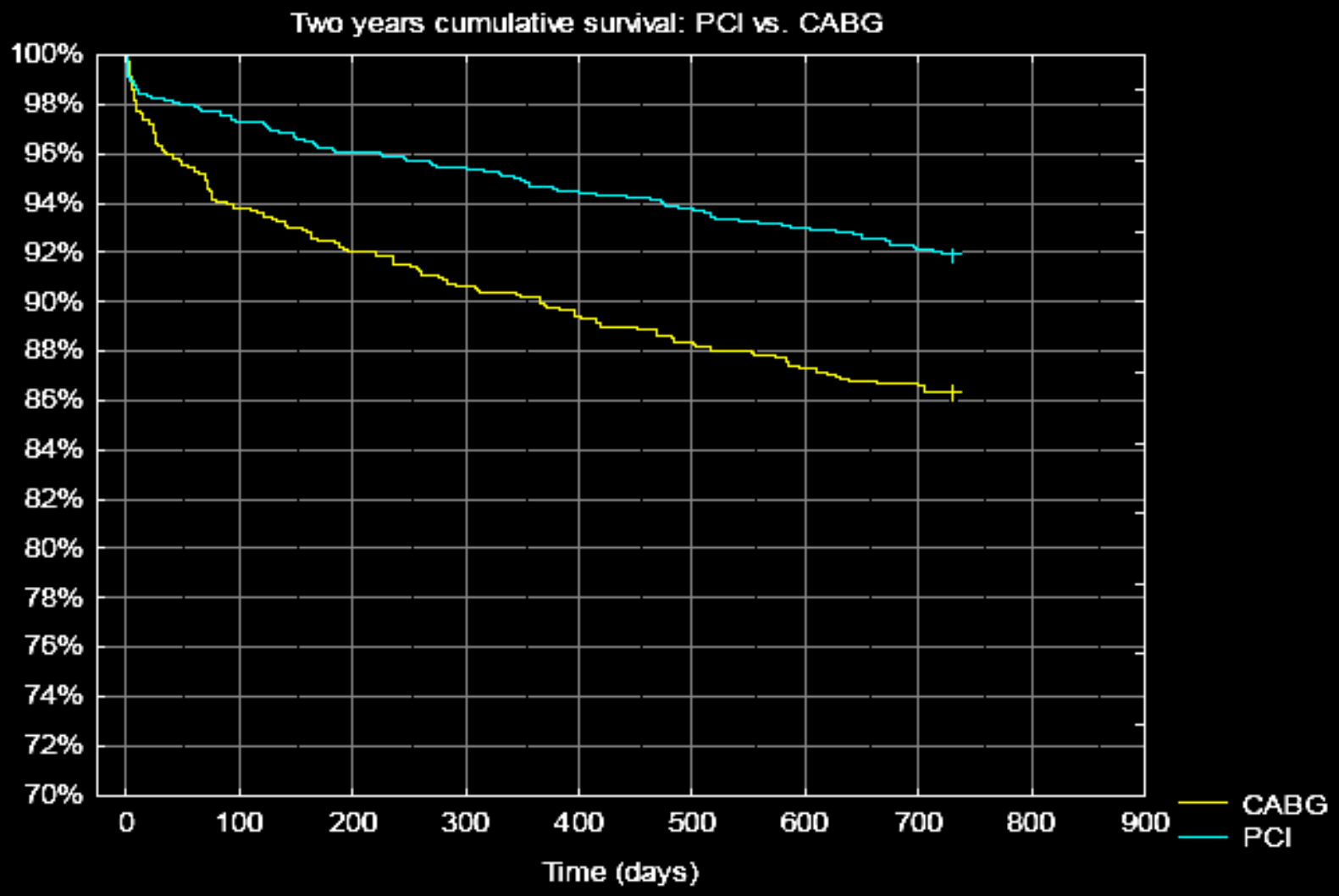
Risk factors	LM-PCI	CABG	Rx
Age	65,5	66,3	67,7
Stable angina	11% ✓	50% ✓	31%
Euroscore >6	66,7% ✓	1,74% ✓	62,7%
LVEF<30	14% ✓	3,3% ✓	11,1%
Killip IV	26,4% ✓	2,8% ✓	7,7%

Predictores Independientes de Riesgo que aumentan el riesgo de mortalidad en Enfermedad de MV + SIA



Pawel Buszman. Silesian Medical University. Poland
TCT Asia Pacific 2009

CABG vs. PCI in ACS - Registro Polaco (3.787 pacientes)



Pawel Buszman. Silesian Medical University. Poland
TCT Asia Pacific 2009

ERACI III- Registry

EUROSCORE and 30 Days Mortality by Subgroup: BMS,CABG and DES

	CABG	BMS	DES	p	
High	13.3% (2/15)	4.3% (1/23)	3.1% (1/32)	0.411	✓
Medium	5.7% (10/175)	1.3% (1/133)	0.6% (1/151)	0.007	✓
Low	2.8% (1/35)	0% (0/69)	0% (0/42)	0.212	✓

Rodriguez A et al EHJ,2007

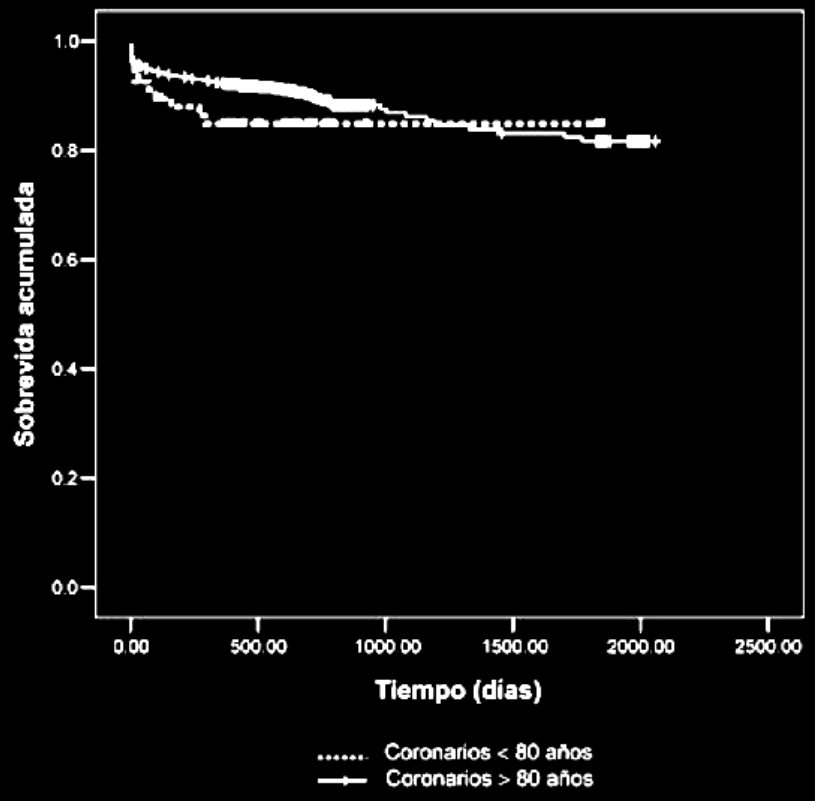
ARTÍCULO ORIGINAL
REV URUG CARDIOL 2007; 22

Cirugía cardíaca en octogenarios

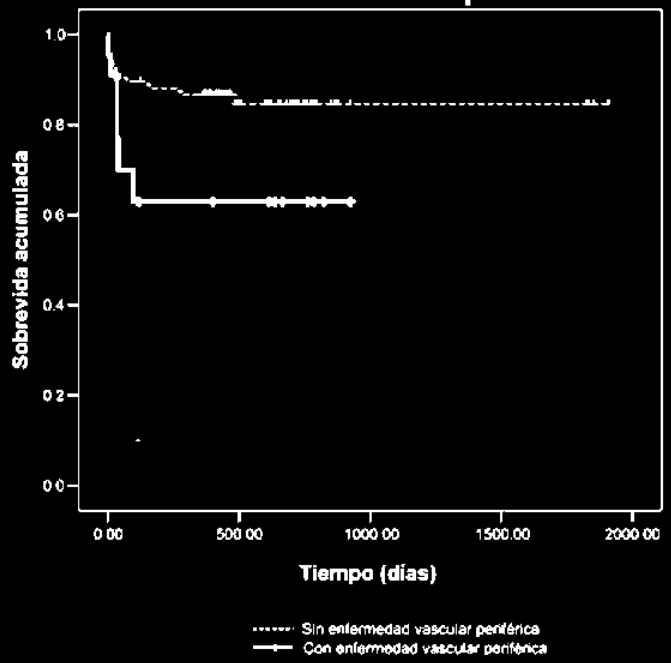
Comparación de los resultados a corto y mediano plazo con la población menor a 80 años *

DRES. HUGO MONTERO [1], ELENA MURGUíA [1,3], FERNANDO GENTA [1], LEANDRO CURA [1,4], ROBERTO STANHAM [1]
JORGE MARIñO [1], MAURICIO CASSINELLI [1,3], HéCTOR ESTABLE [1,2], PROF. DR. ÁLVARO LORENZO [1,5]

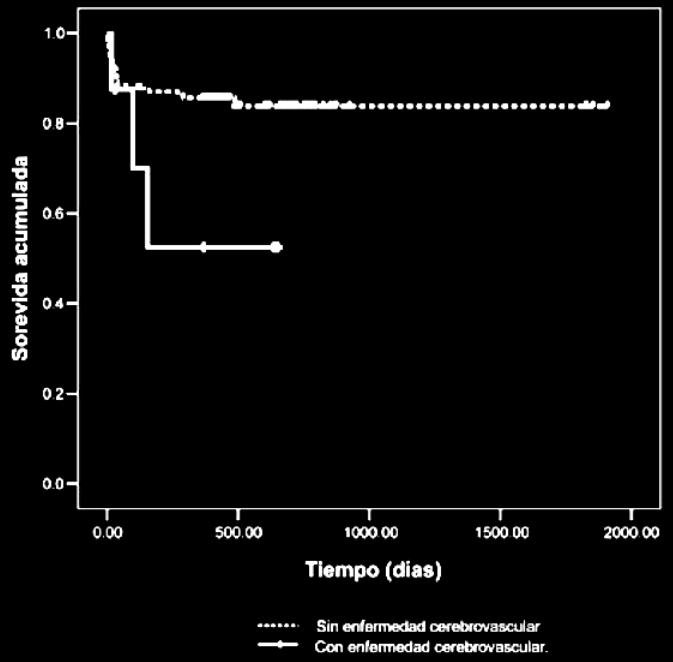
> 80 a



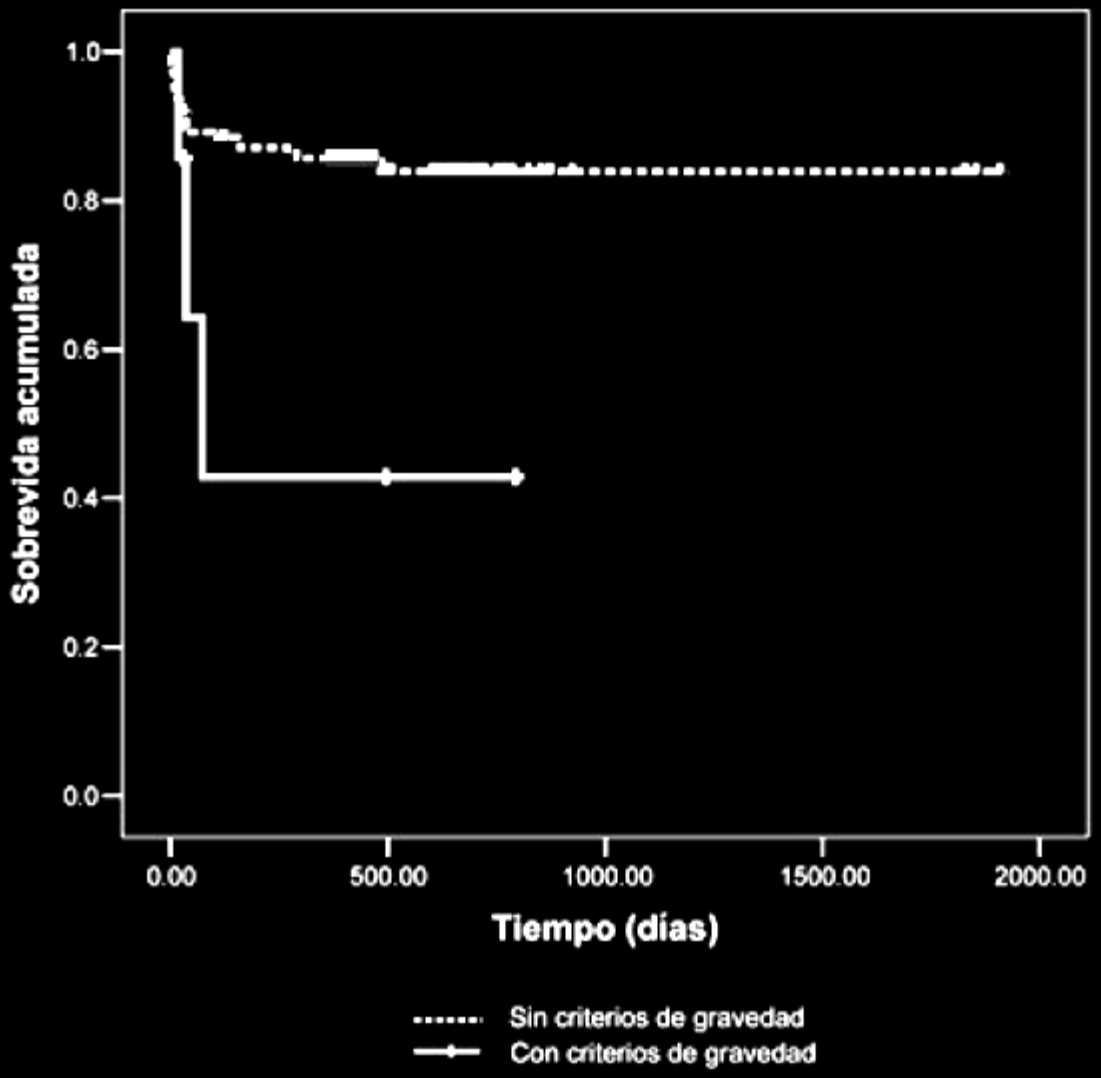
Enfermedad vascular periferica



Enfermedad cerebrovascular



CRITERIOS DE GRAVEDAD



Montero H y cols. Rev Uruguaya de Cardiol 2007; 22

PCI en MVD y Tronco

- ✓ Segura en múltiples vasos y tronco, aún en diabéticos (seguimiento hasta 17 años)
- ✓ Sus limitaciones podrían manifestarse en las dificultades anatómicas NO en las clínicas
- ✓ La tasa de oclusión de puentes es igual a la de los stents
- ✓ TLR post ATC se resuelve con ATC, el TLR post Cirugía también
- ✓ TLR es la única limitante clínica pero esta en baja desde los BMS y continua con los DES
- ✓ A cambio los pacientes sufren menos ACV
- ✓ Debemos aguardar una mayor evidencia que confirme sus ventajas en los pacientes mas comprometidos

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