

# Implante Transcatéter Valvular Aórtico (TAVI):

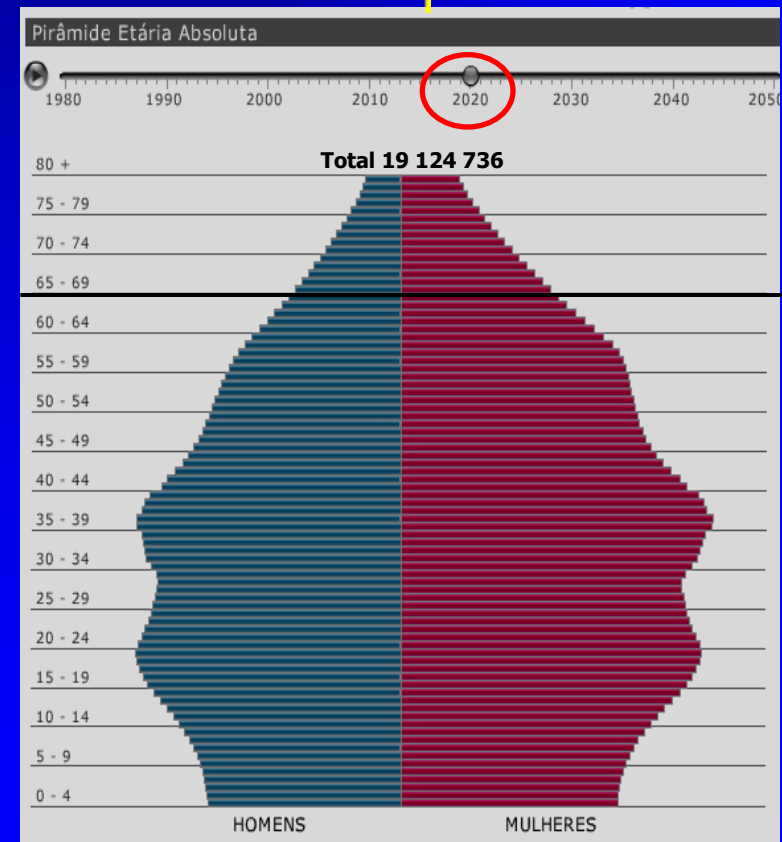
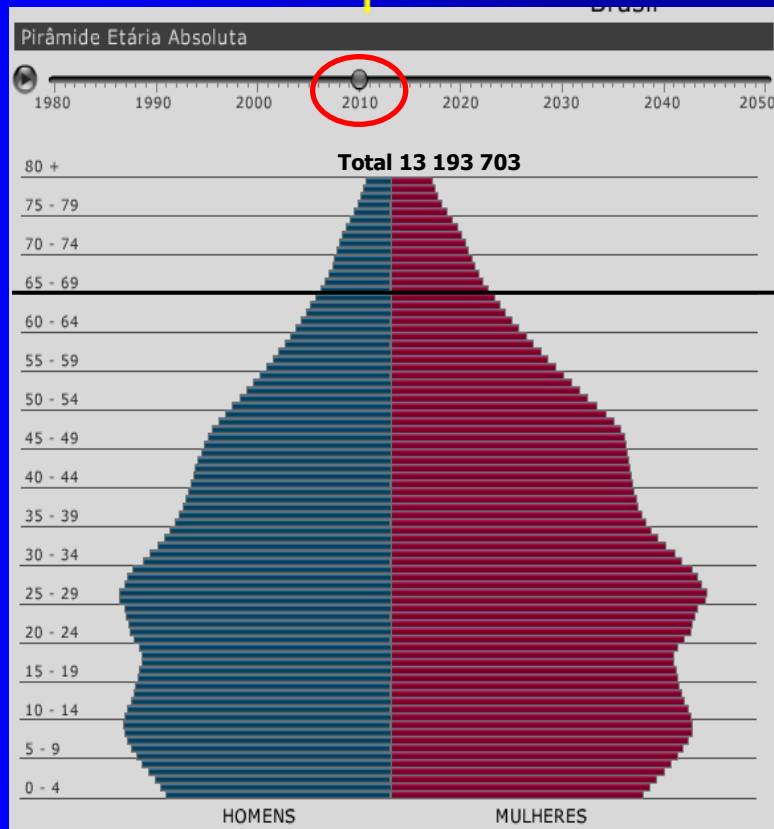
## Podremos Ampliar las Indicaciones?



# População Anciana > 65 anos

## Demografia

+ 44%



# Implante Valvar Aórtico

## *Prótesis Edwards Sapien*

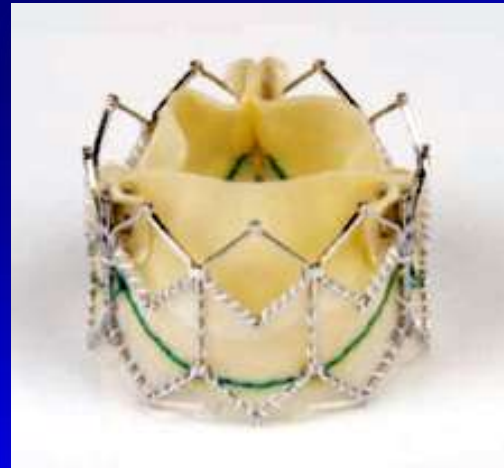
2005 – Percutaneous Valve Technologies → Edwards Lifesciences

**Edwards Sapien THV**  
**Acero Inoxidable**  
**Pericardio Bovino**



**23 e 26 mm**  
**Introducor 22 F e 24 F**

**Edwards Sapien XT**  
**Cromo Cobalto**  
**Pericardio Bovino**



**20/23/26/29 mm**  
**Introducor 18 F**

**Edwards Sapien 3**  
**Cromo Cobalto**  
**Pericardio Bovino**



Tereftalato de Polietileno - PET

**23/26/29 mm**  
**Introducor 14 - 16 F**

*Equine Pericardial Valve*



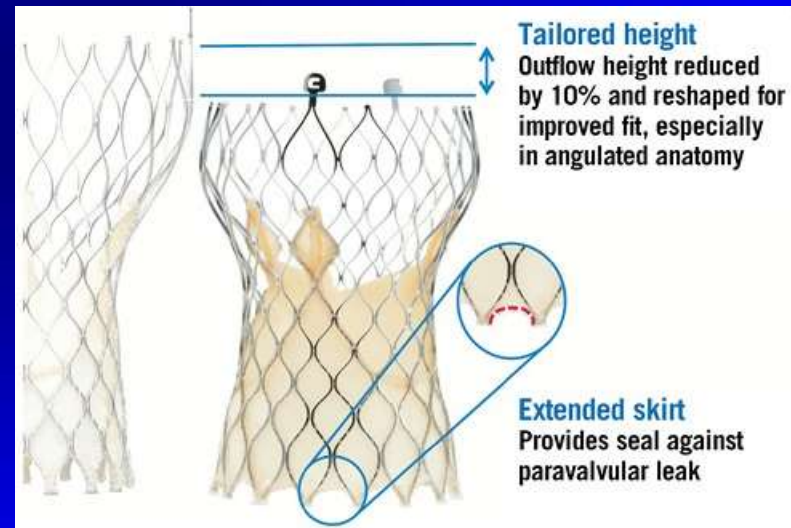
Single size 23mm

# CoreValve ReValving System

## Características

- Stent Autoexpansível de Nitinol - Folletos de Pericardio Porcino
  - Tamaños - 26, 29 e 31 mm - Introdutor 18 F

### Core Valve Evolut R



- Permite la recaptura y reposicionamiento
- Tecnología TrueFit - Mayor adaptación en anatomías mas anguladas
  - Mejor coaptación en el anillo valvar non circular
- AOT – Tratamiento antimineralizante → ↓ calcificación precoz y tardía

# Implante Transcateter CoreValve

## Resultados del Procedimiento

	25 F n = 10	21 F n = 24	18 F n = 102
Artéria Iílica	10 (100%)	0	0
Artéria Subclávia	0	2 (8,3%)	1 (1%)
Artéria Femoral	0	22 (91,7%)	100 (99%)*
Éxito do Procedimiento	7 (70%)	19 (70,8%)	101 (91,2%)*
Muerte	1 (10%)	2 (8,3%)	0*
AVC	1 (10%)	1 (4,2%)	3 (2,9%)
IAM	0	1 (4,2%)	1 (1%)
ECCAM	2 (20%)	4 (16,7%)	4 (3,9%)**
Taponamiento Cardíaco	0	0	2 (2%)
Marca – Passo Definitivo	1 (10%)	3 (13,6%)	30 (33,3%)

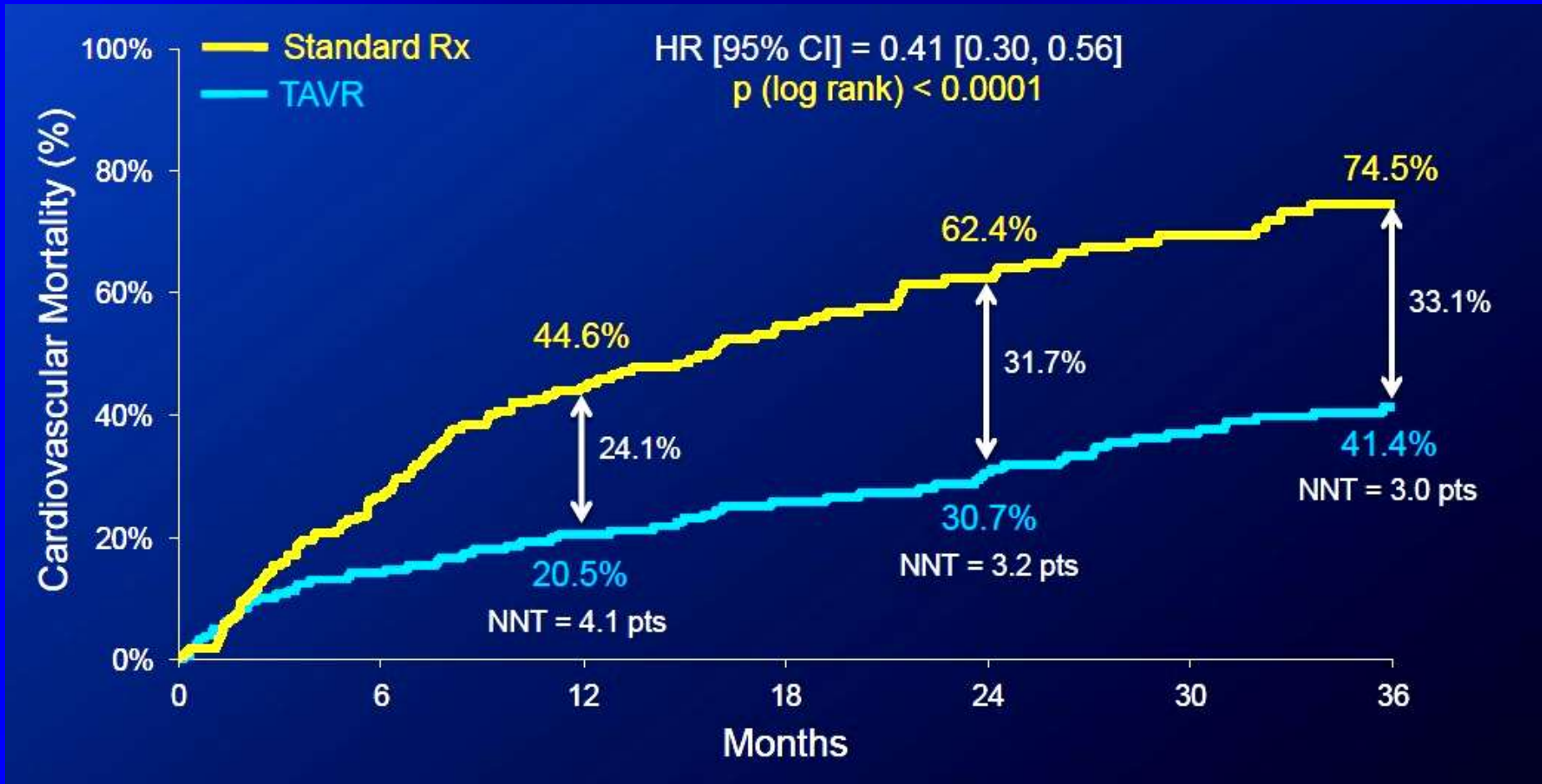
\* p = 0,003    \*\* p = 0,008

Grube E. Circulation Cardiovasc Interv 2008;1:167-175



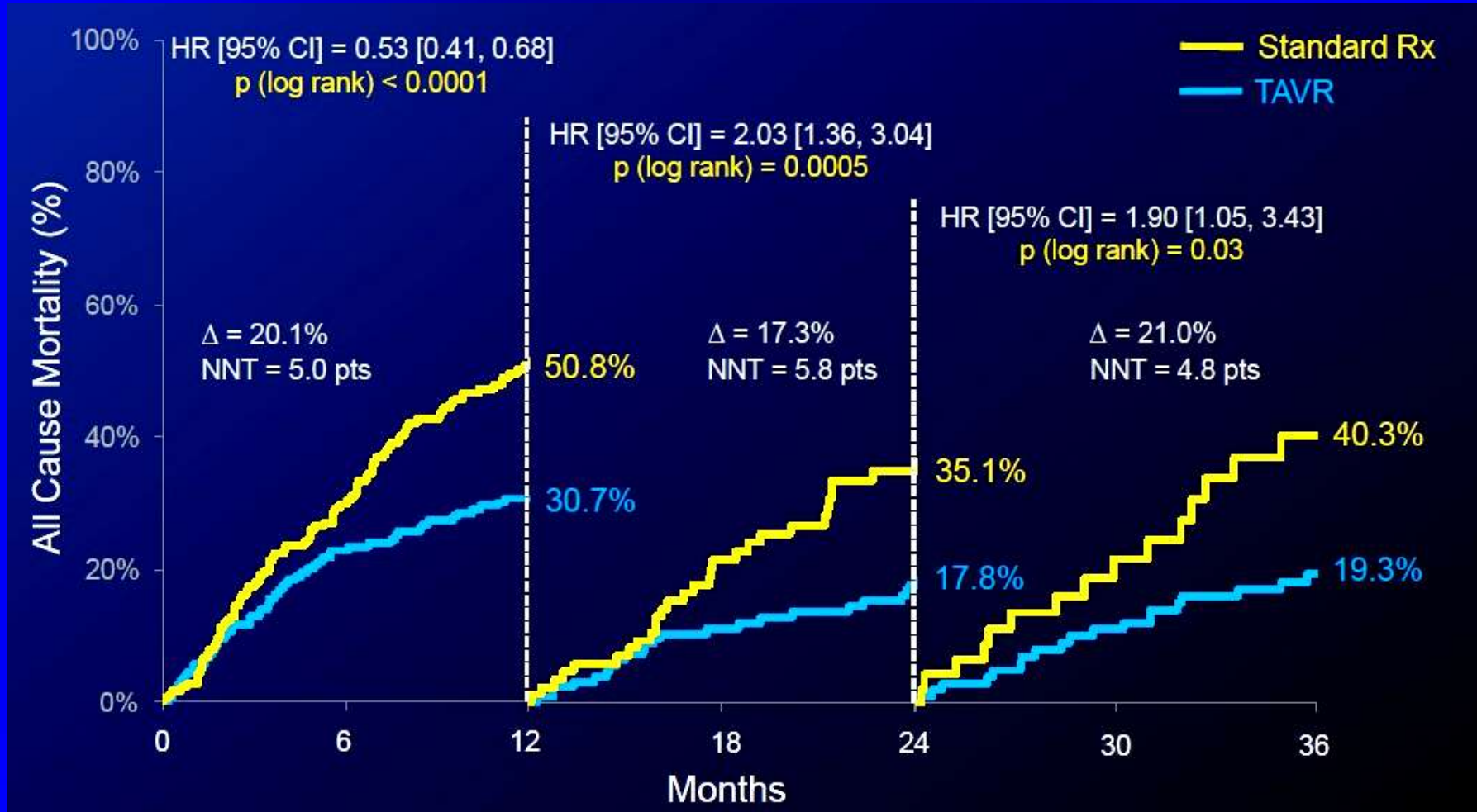
# PARTNER TRIAL B

## *Mortalidad CV*



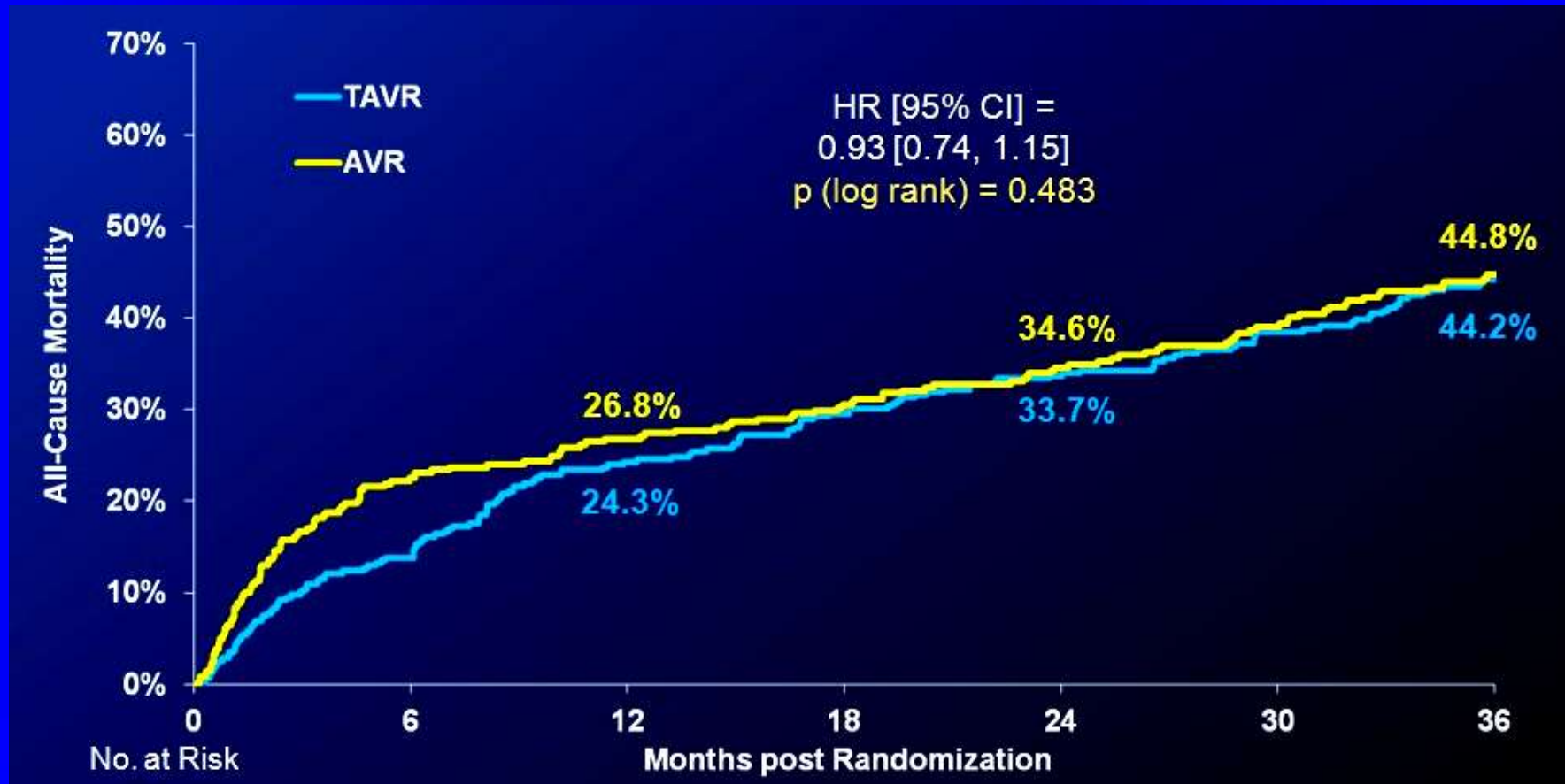
# PARTNER TRIAL B

## *Landmark Analysis*



# PARTNER TRIAL A

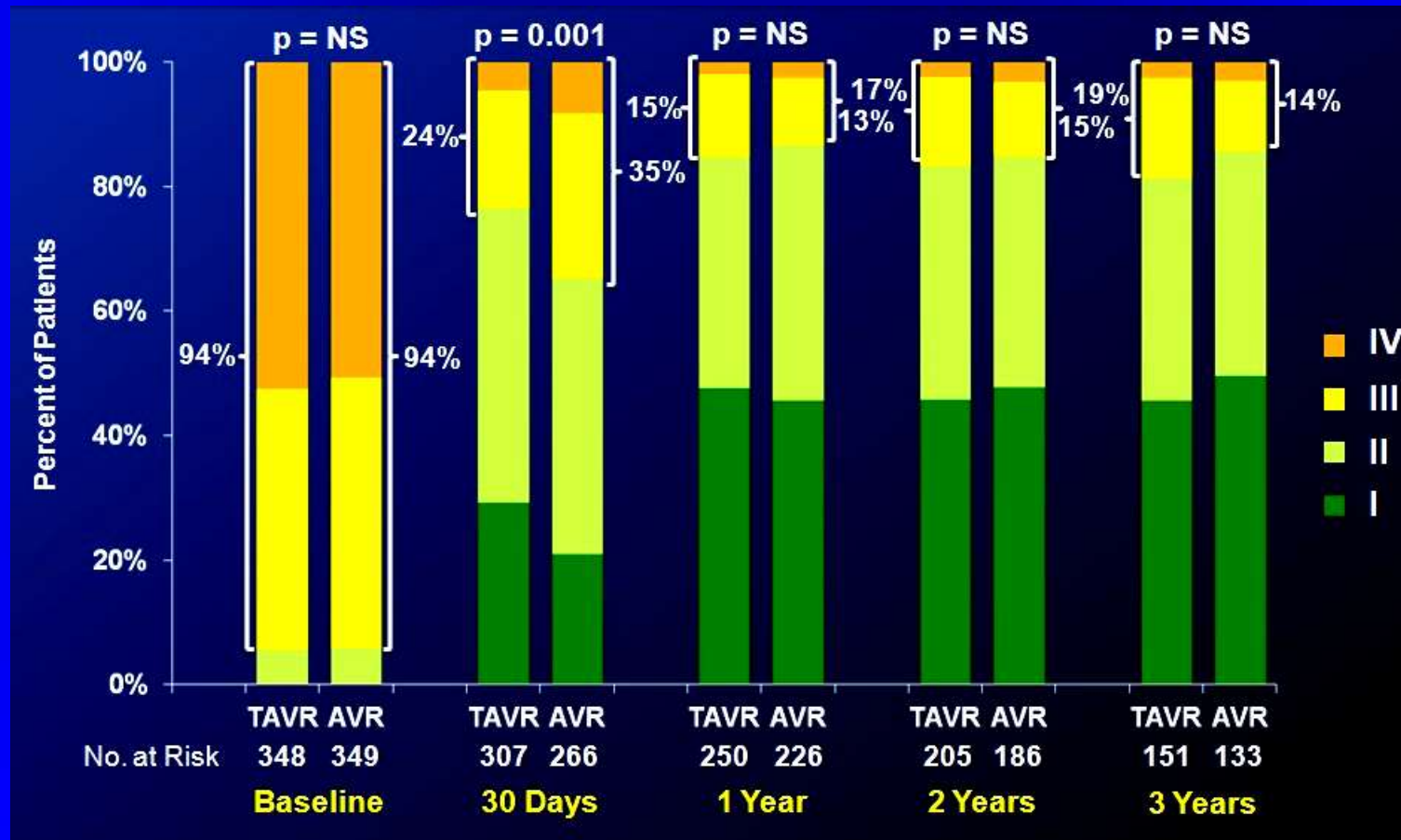
## *Mortalidad Total - 3 años*





# PARTNER TRIAL A

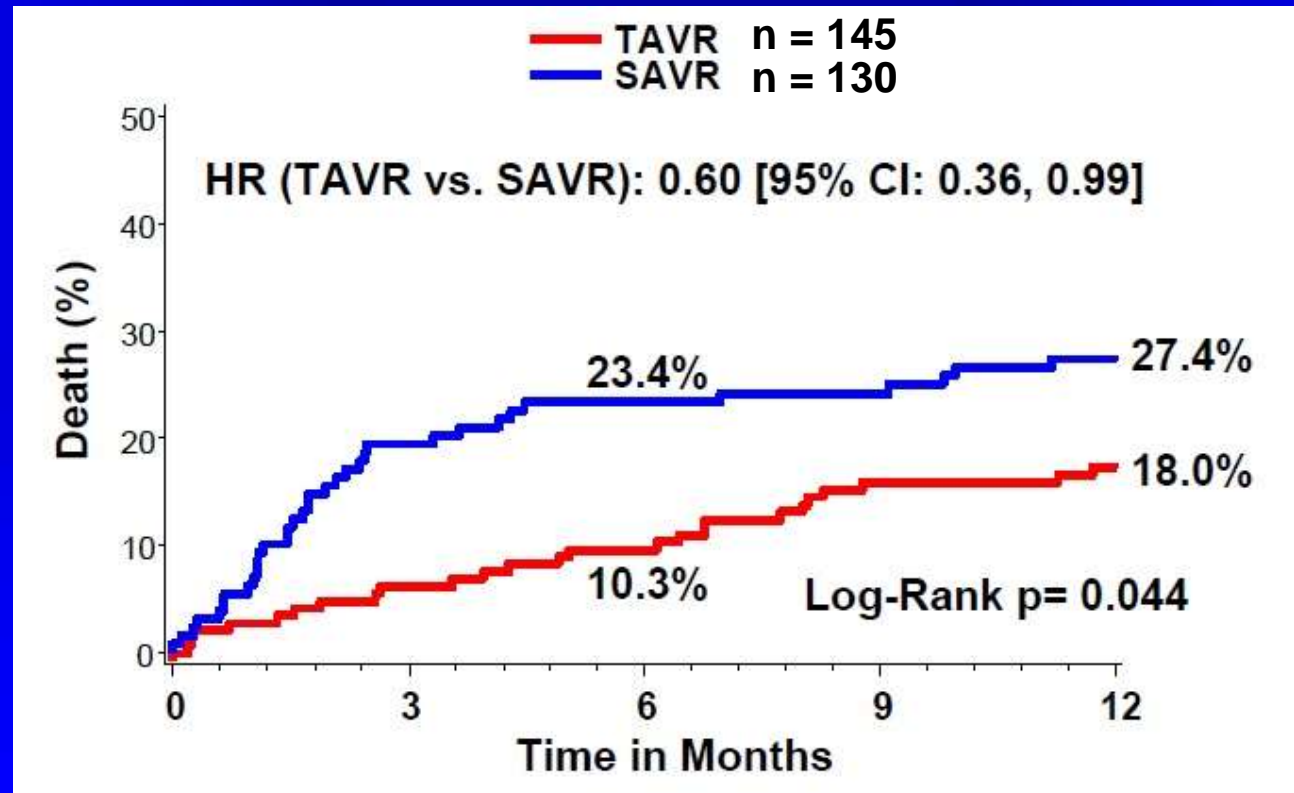
## *Clase Funcional (NYHA) - 3 años*



# PARTNER TRIAL A

## *Diabetes Mellitus*

**n = 275**



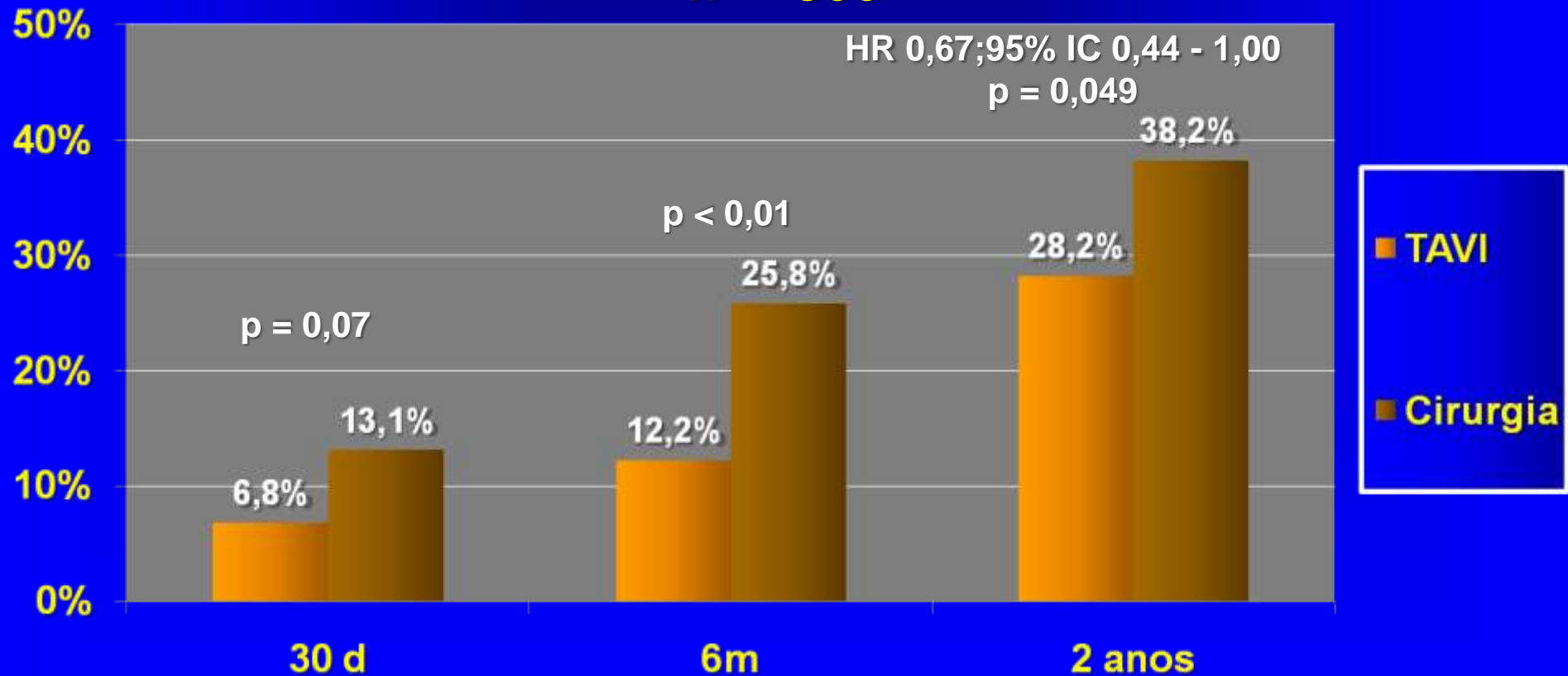
interaction p = 0,048

Lindman B.R. J Am Coll Cardiol 2014;63:1090-99

# PARTNER TRIAL A

## *Mortalidad Total - Sexo Femenino*

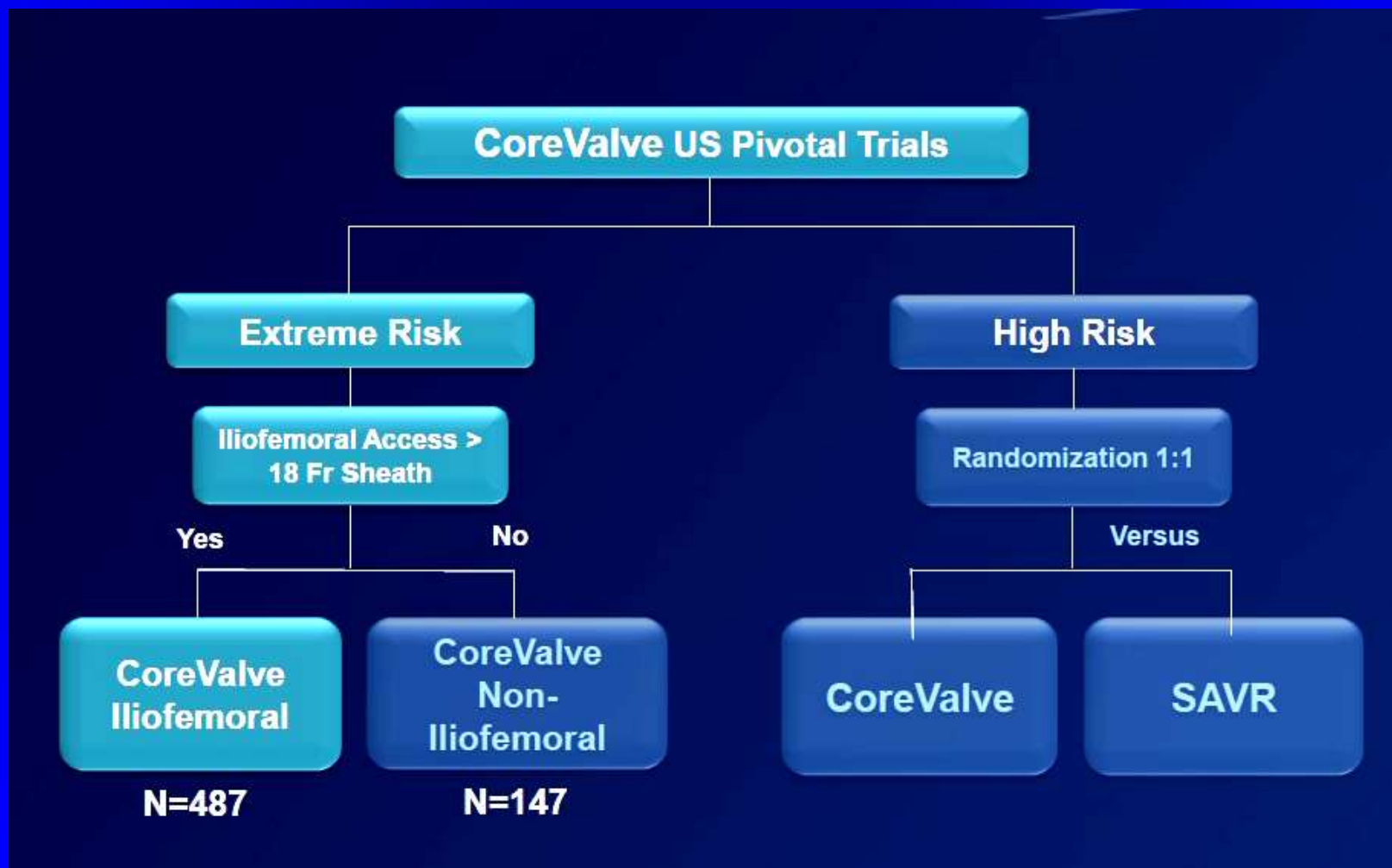
n = 300



Via Transfemoral – HR 0,55; 95% IC 0,32 – 0,93; p = 0,02

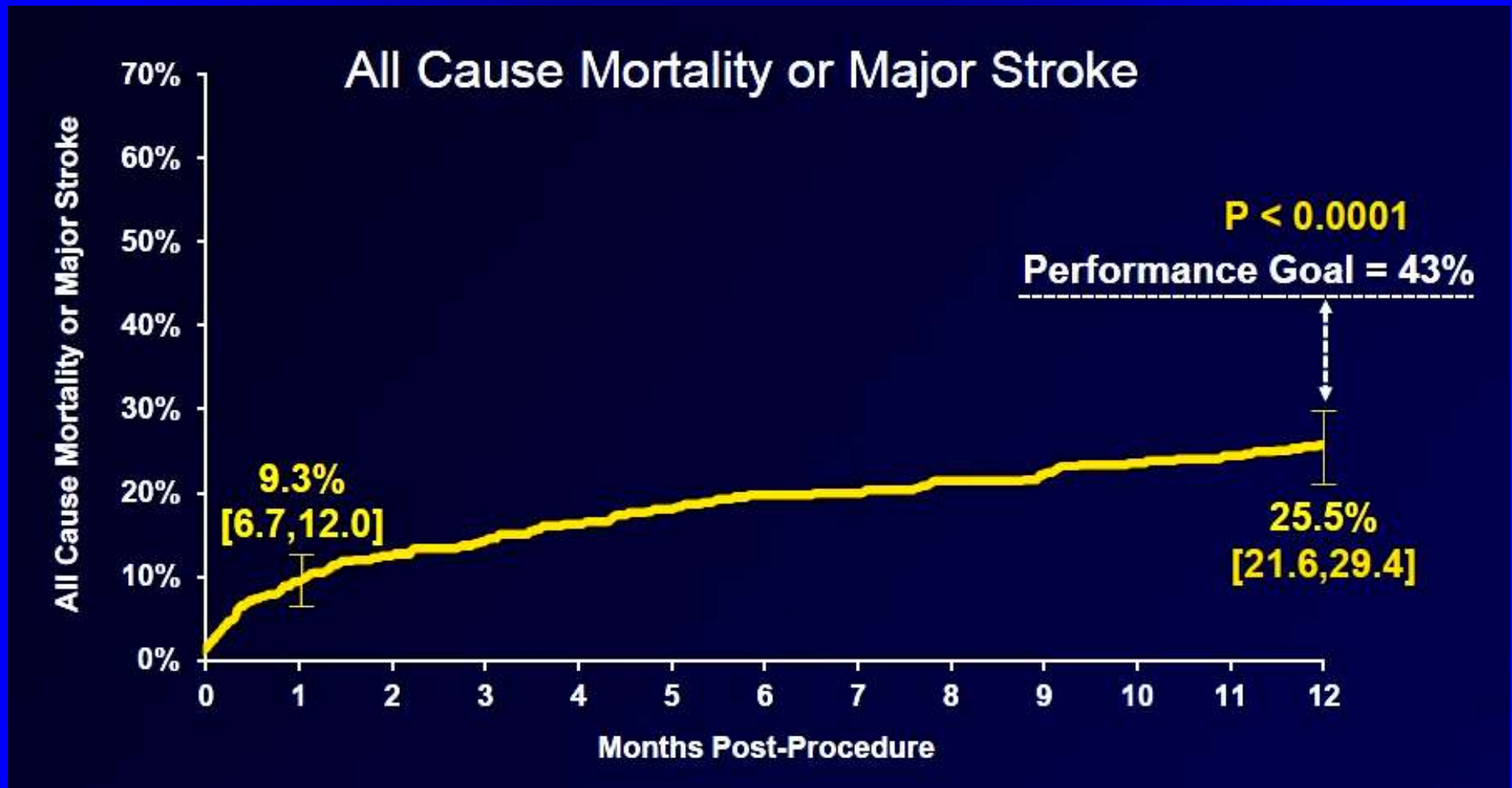
# CoreValve Pivotal US Trials

## *Diseño del Estudio*



# CoreValve Pivotal US Trials

## *Endpoint Primario*



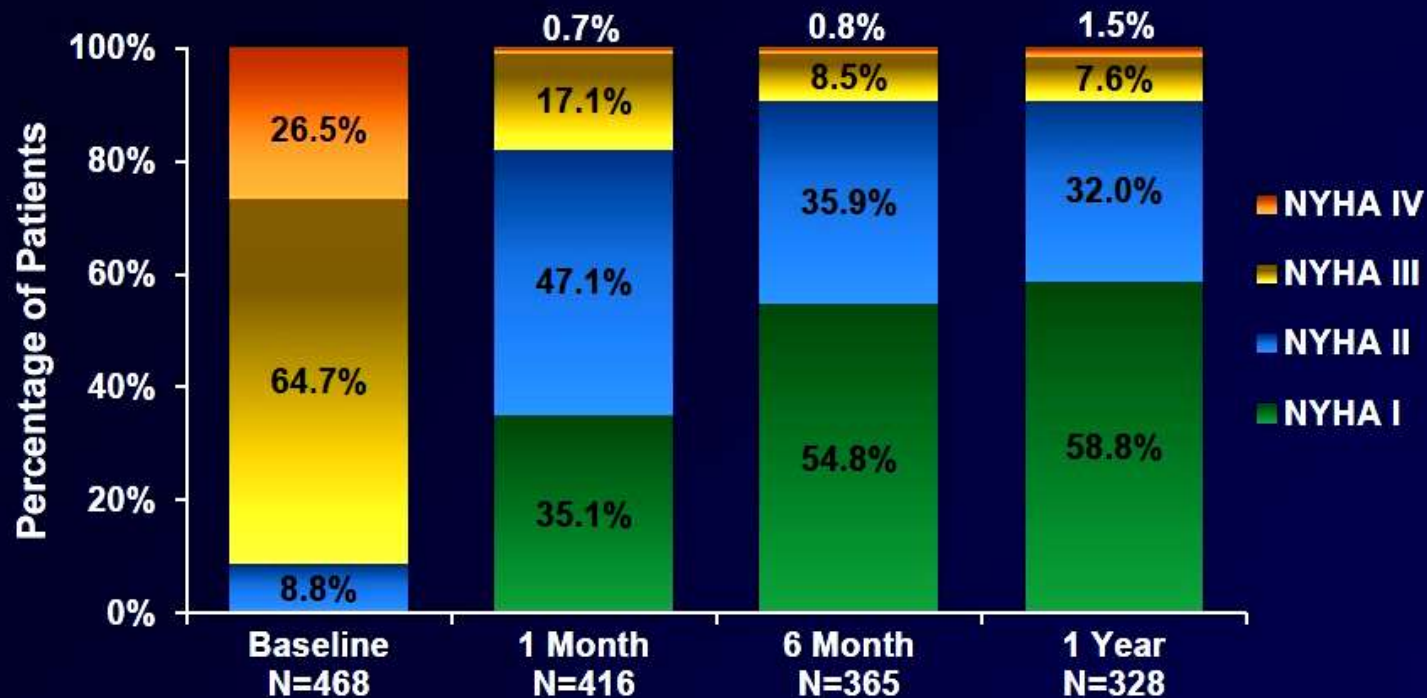


# CoreValve Pivotal US Trials

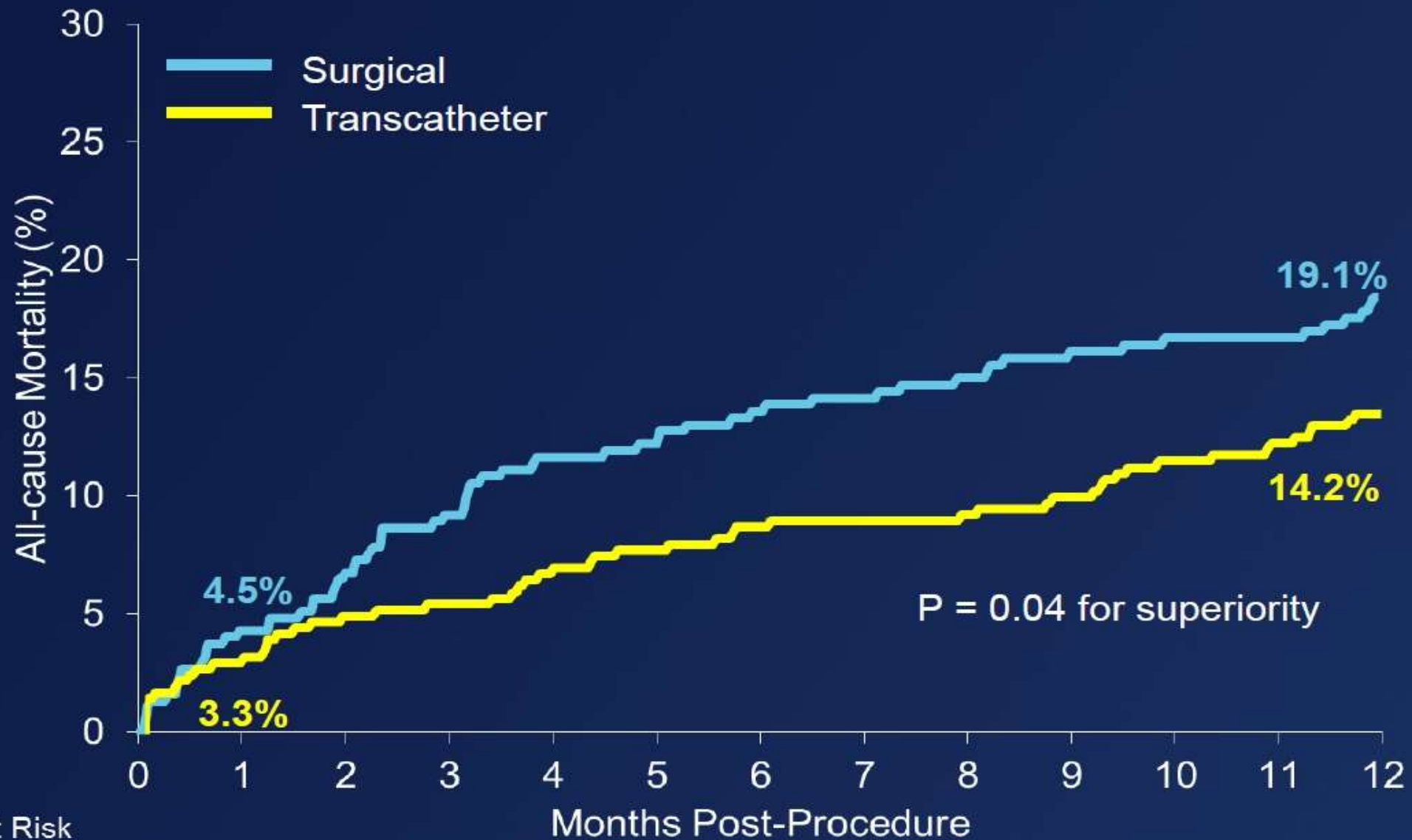
## *Clase Funcional - NYHA*

90% of Patients Improved at Least 1 NYHA Class by 1 Year

60% of Patients Improved at Least 2 NYHA Classes by 1 Year



# Primary Endpoint: 1 Year All-cause Mortality



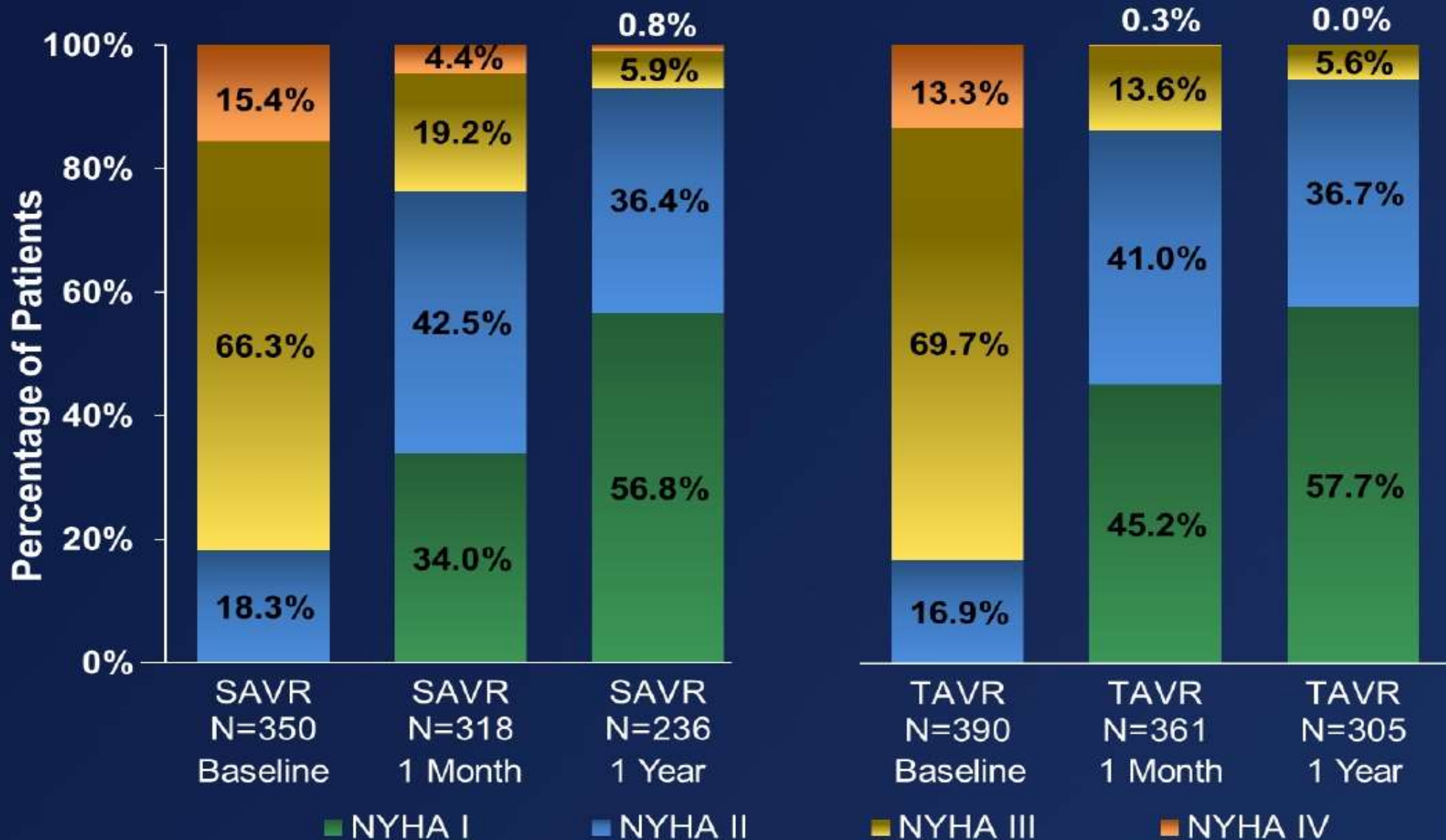
No. at Risk

Surgical	357	341	297	274
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Transcatheter	390	377	353	329
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Adams D.H. N Engl J Med 2014;370:1790-98

# NYHA Class Survivors

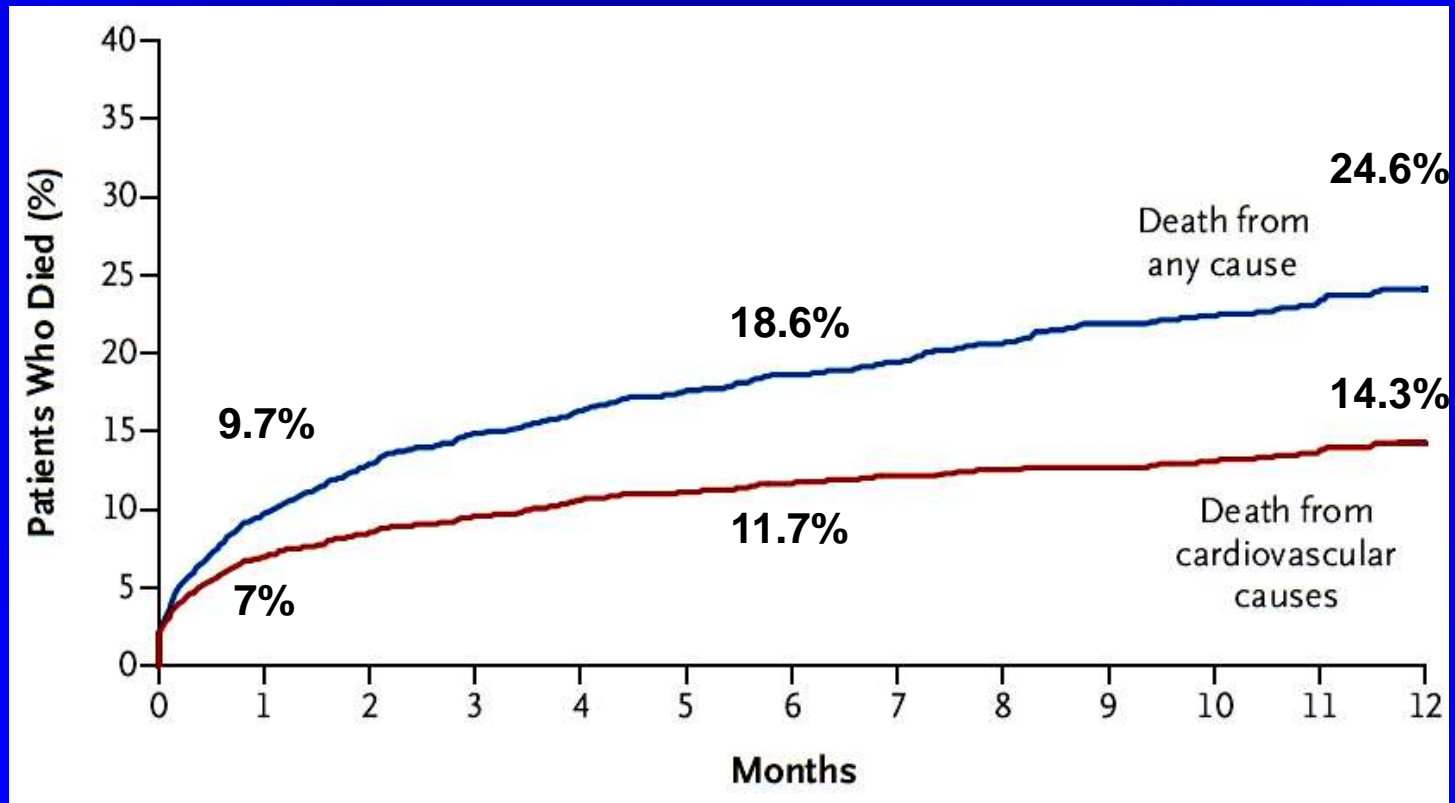


# French Registry 2

## Mortalidad - 1 año

Enero/2010 - Octubre/2011 35 centros n = 3.195

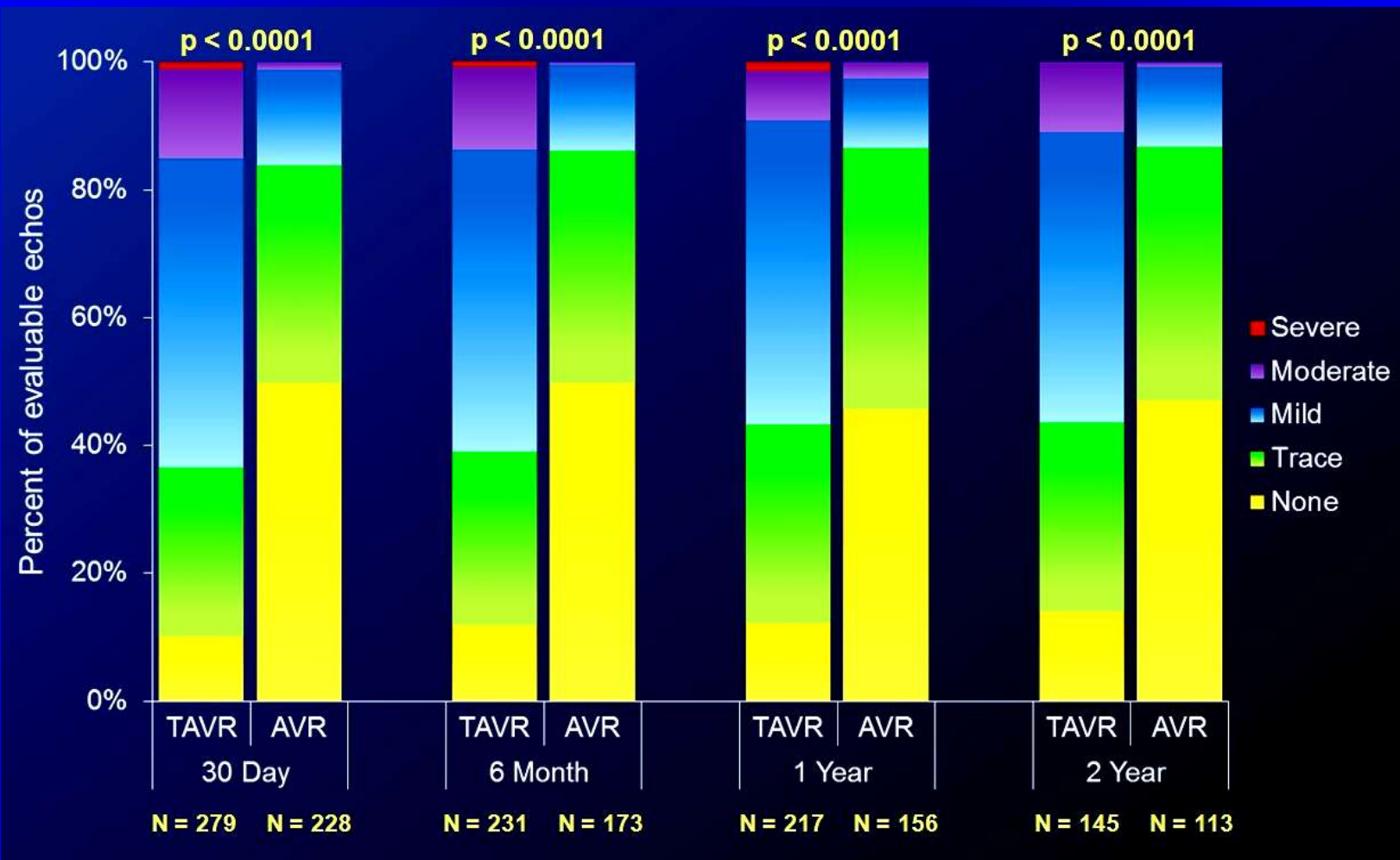
Euroscore Logístico –  $21,9 \pm 14,3\%$  STS Score –  $14,4 \pm 12\%$





# PARTNER TRIAL A

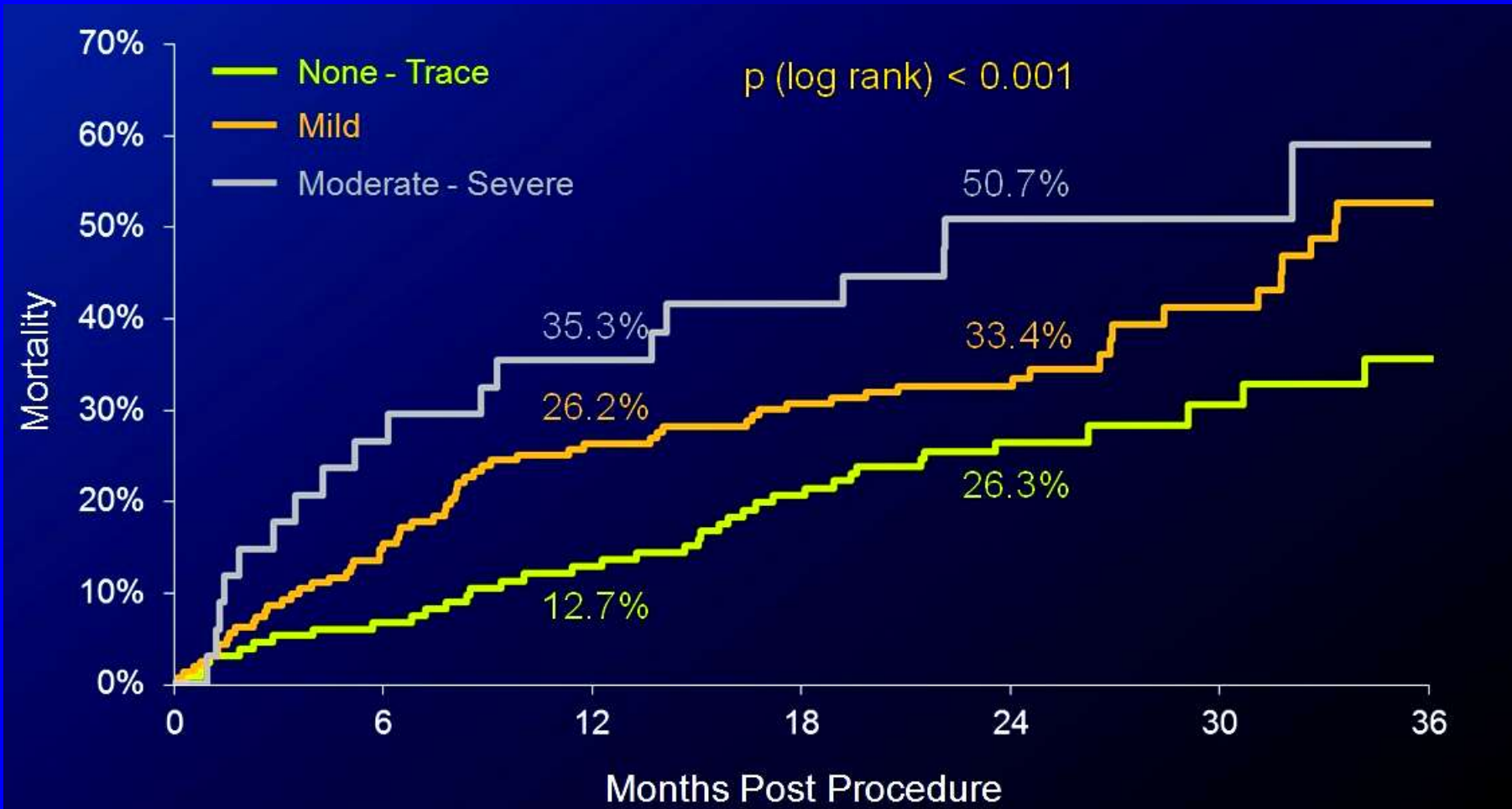
## *Grado de Insuficiencia Aórtica*



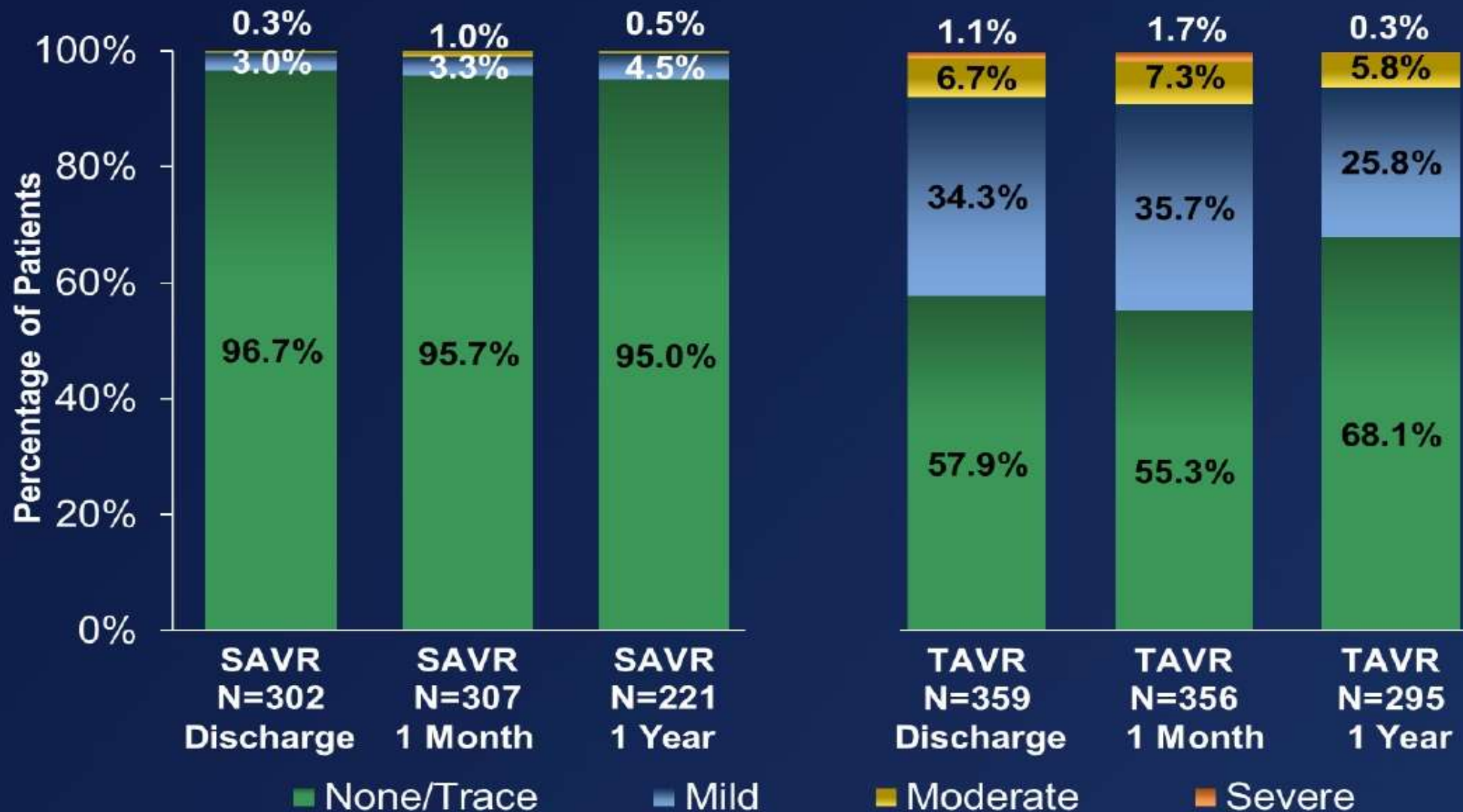


# PARTNER TRIAL A

## Regurgitación Aórtica vs Mortalidad (TAVR)



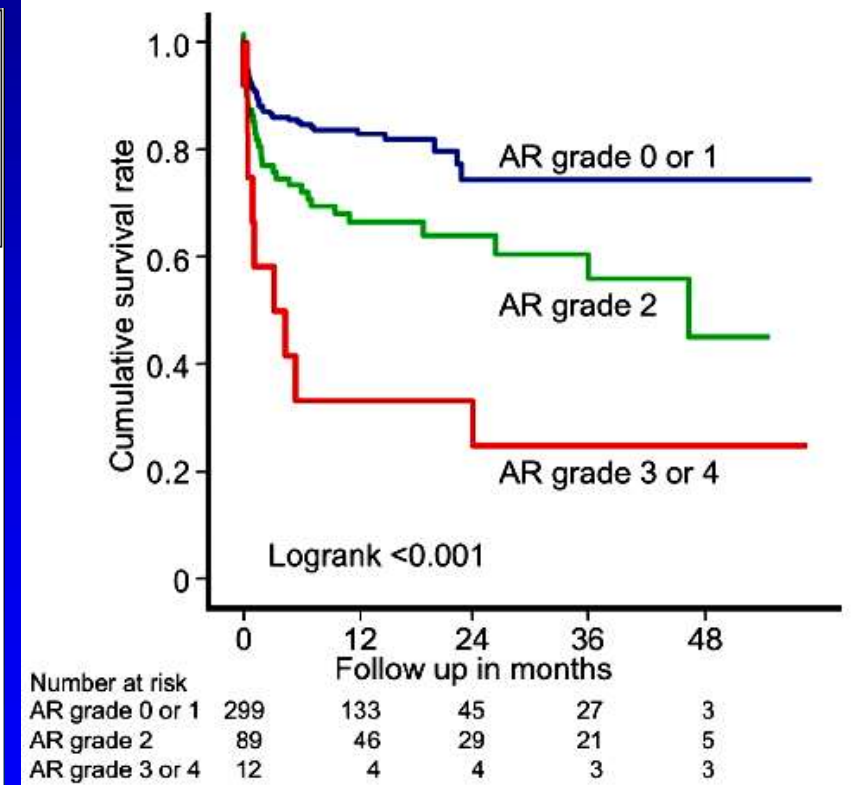
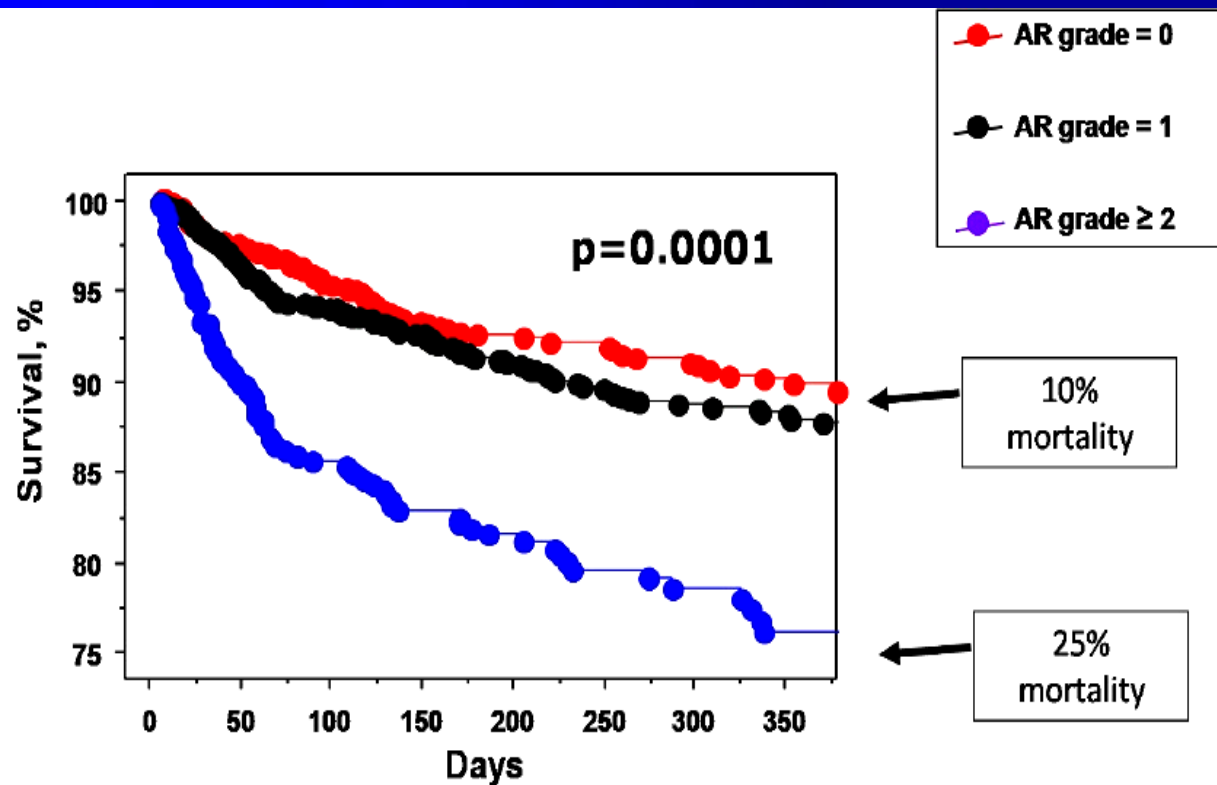
# Paravalvular Regurgitation



There was significantly lower PVL with SAVR over TAVR at each time point ( $P < 0.001$ )

# TAVI

## Regurgitación Aórtica vs Mortalidad

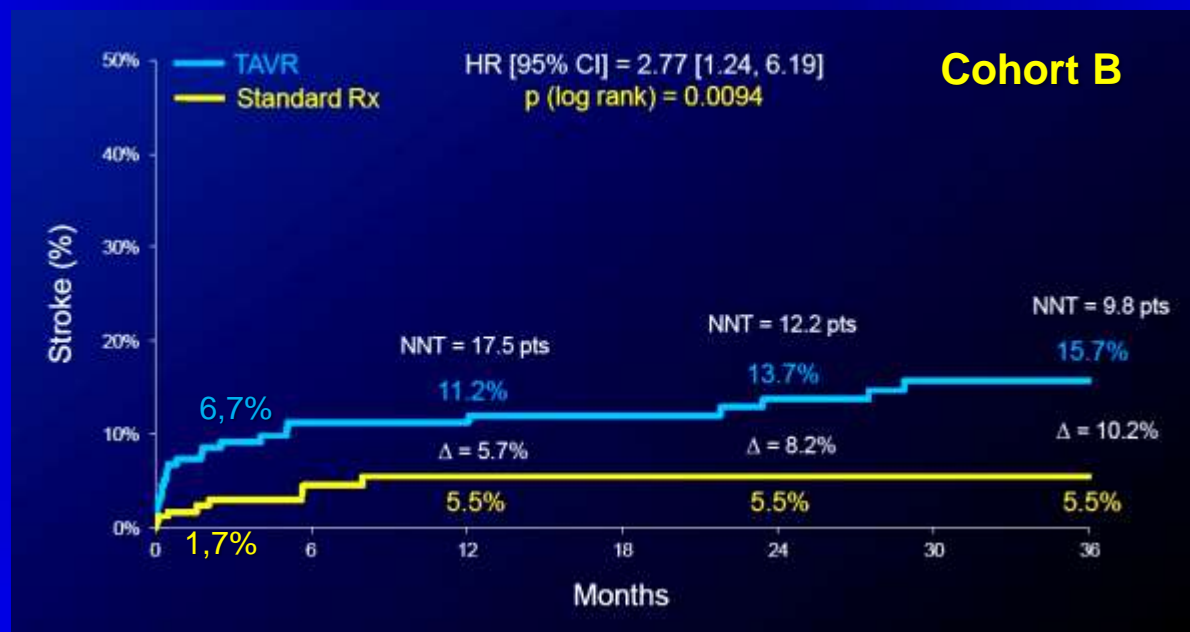


Registro Frances 2  
Van Belle TCT/2012

Instituto Cardiovascular de Paris  
Hayashida K. JACC Intv 2012;12:1247-56

# PARTNER TRIAL

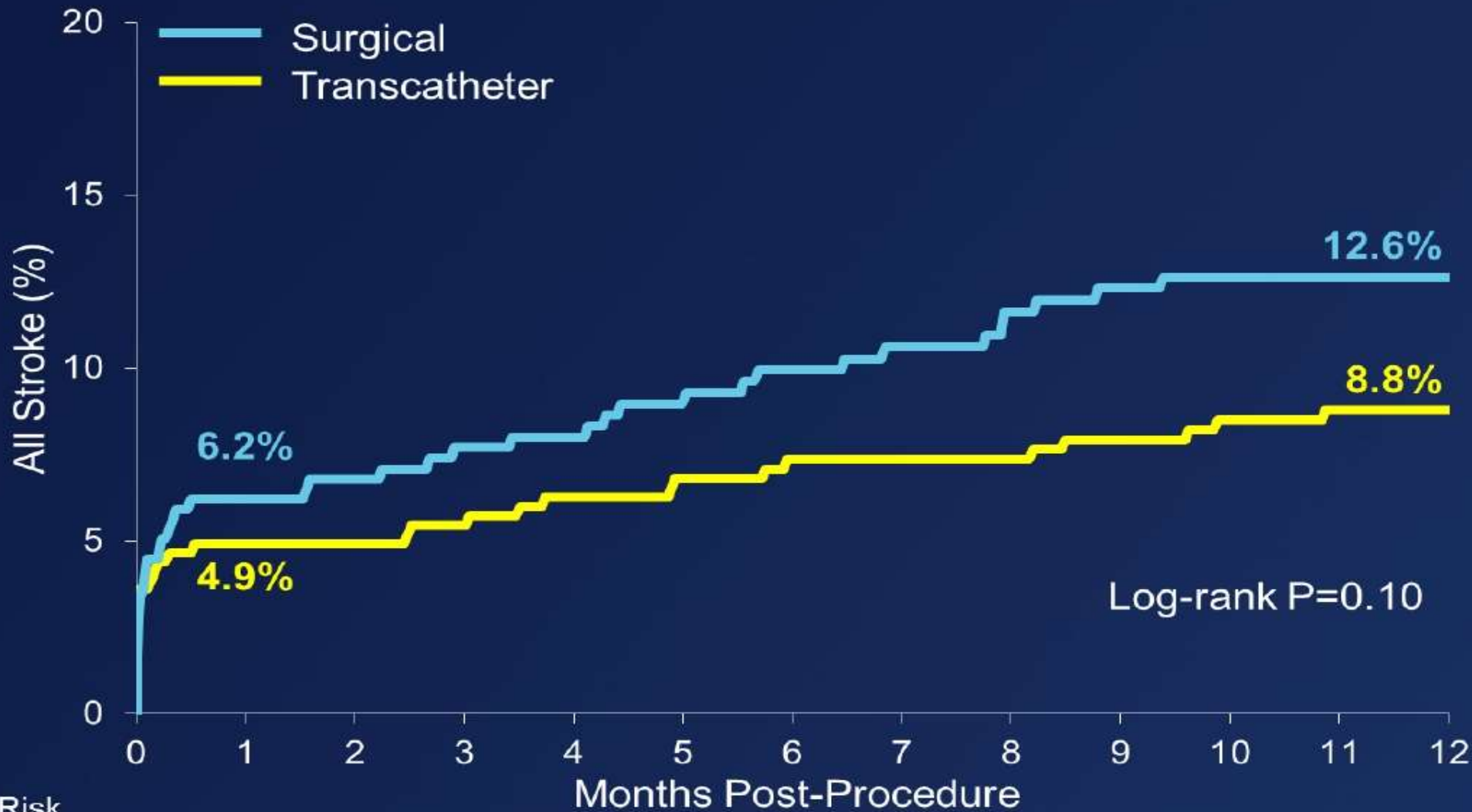
## AVC



**Cohort A**

3 años	TAVR n = 348	Cirugía n = 351	p
ACV	8,2%	9,3%	0,763
Muerte/ACV	47,1%	45,9%	0,839

# All Stroke



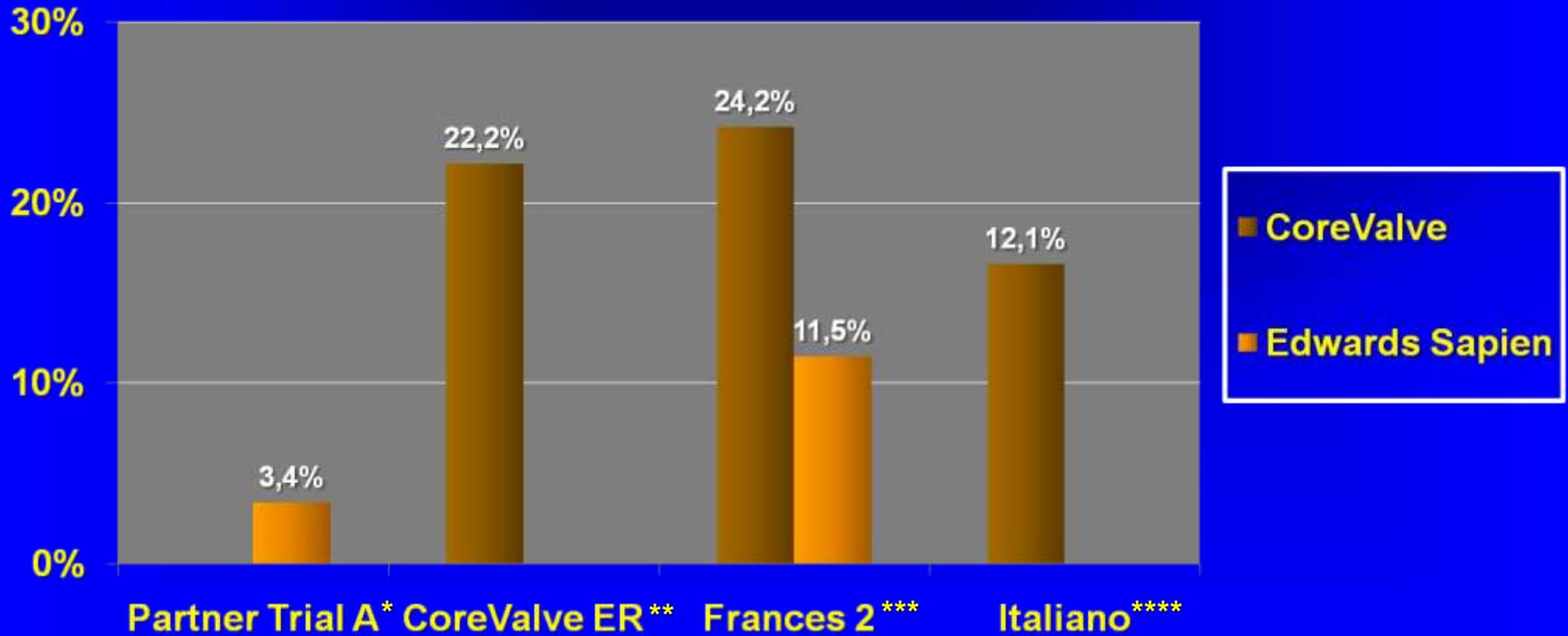
No. at Risk

Surgical	357	322	274	249
Transcatheter	390	363	334	314



# Implante Transcateter Valvar Aórtico

## *Necesidad de MP Definitivo - 30 días*



\* Smith C.R. N Engl J Med 2011;364:2187-98

\*\* Adams D.H. N Engl J Med 2014;370:1790-98

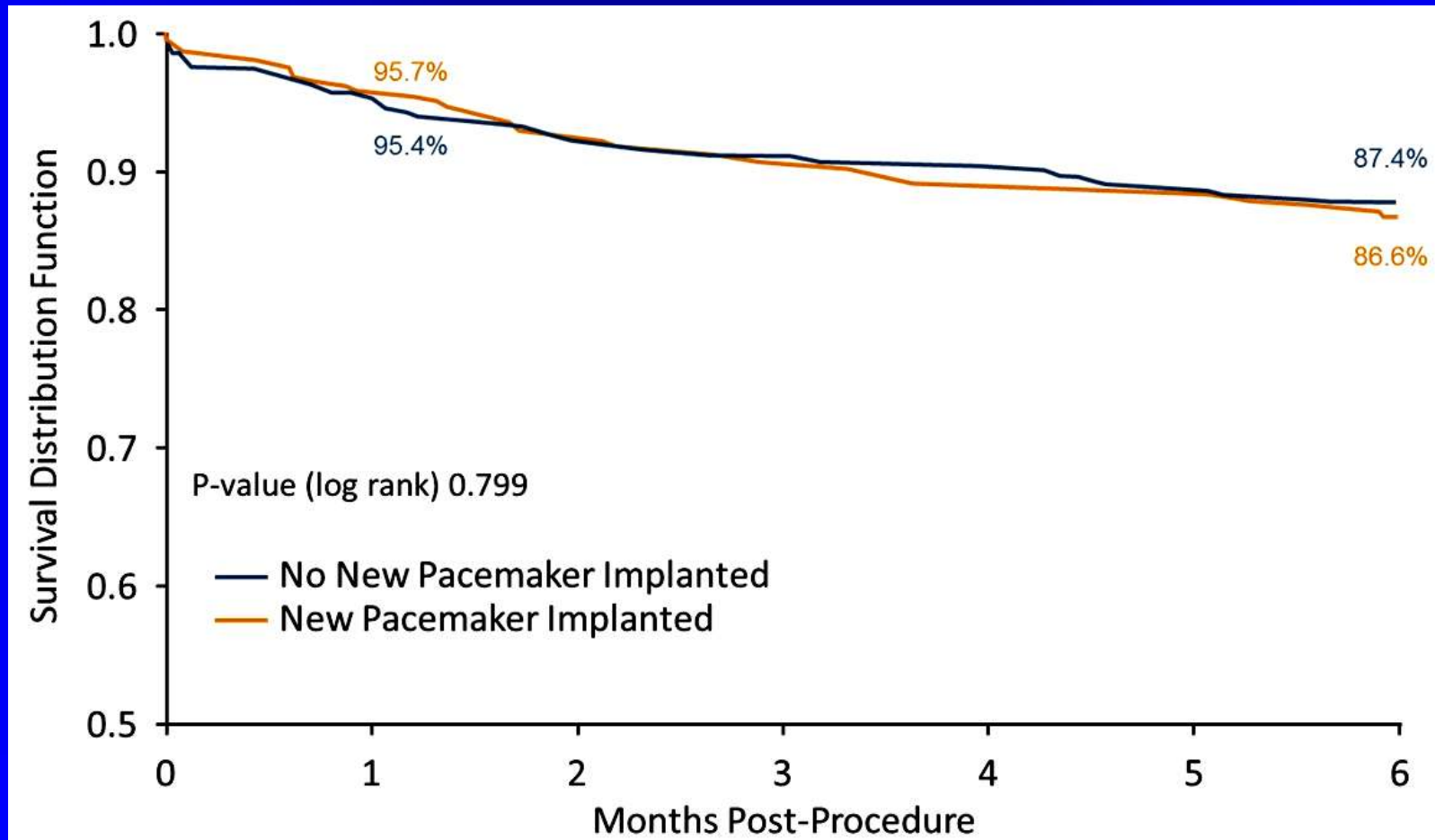
\*\*\* Eltchaninoff H. TVT/2013

\*\*\*\* Tamburino C. TVT/2013

# ADVANCED REGISTRY

## *Marca-Paso vs Mortalidad*

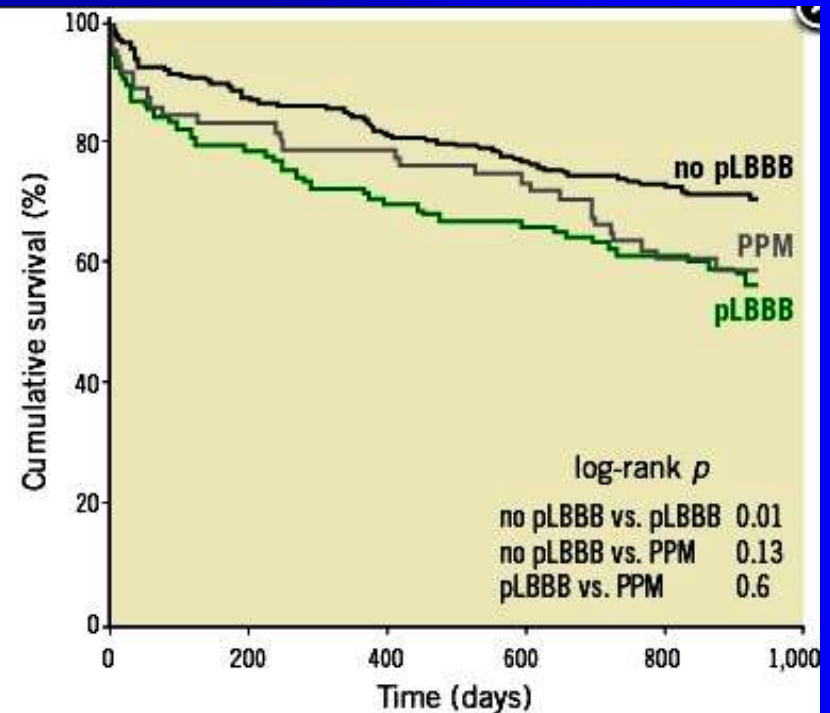
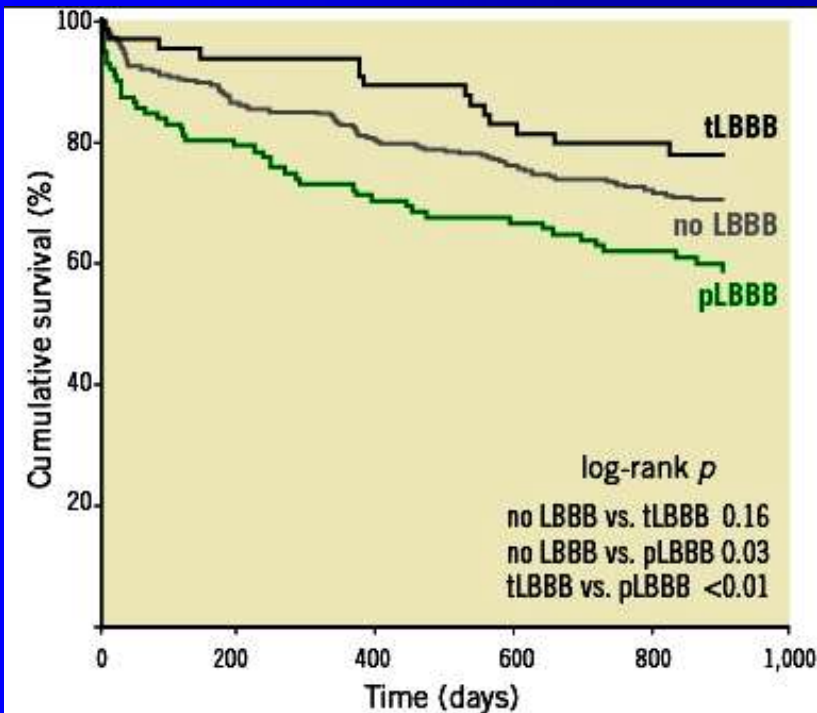
n = 1.015



# Disturbios de Conducción (BRI) *Sobrevivencia*

n = 476    5 centros (Holanda e Canadá)     $\Delta t$  – 898 días

BRI – 36,8%    CV – 53,8% vs ES - 21,7% (p<0,001)

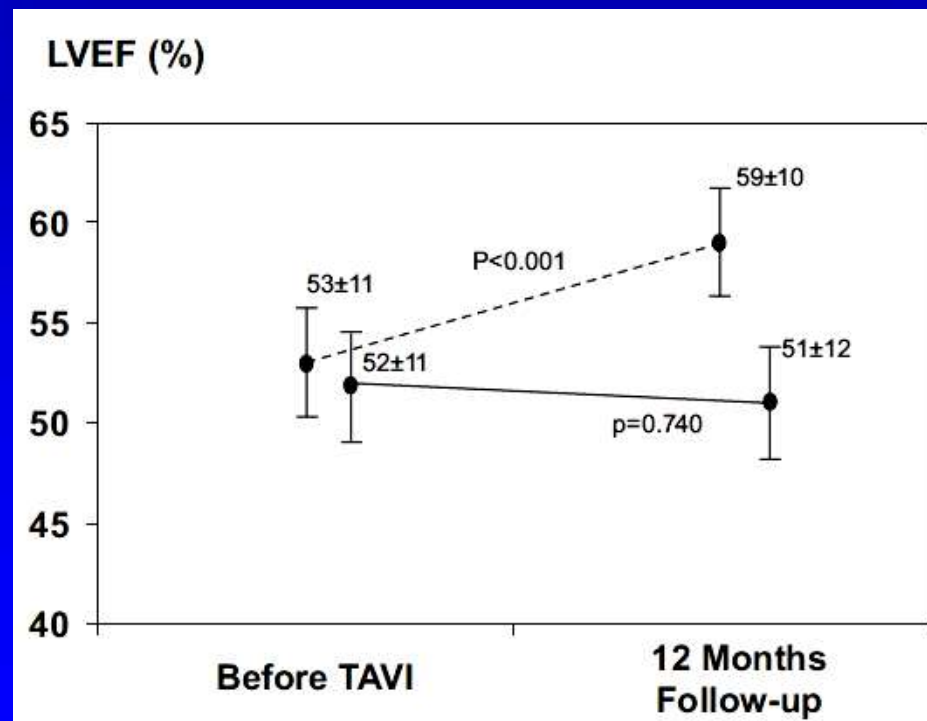


# Disturbios de Conducción

## *Sobrevivencia*

n = 90    2 centros Alemana

BRI o PPM = 39    Sin defectos de conducción = 51



# CoreValve<sup>®</sup> SURTAVI Trial

## Study Design

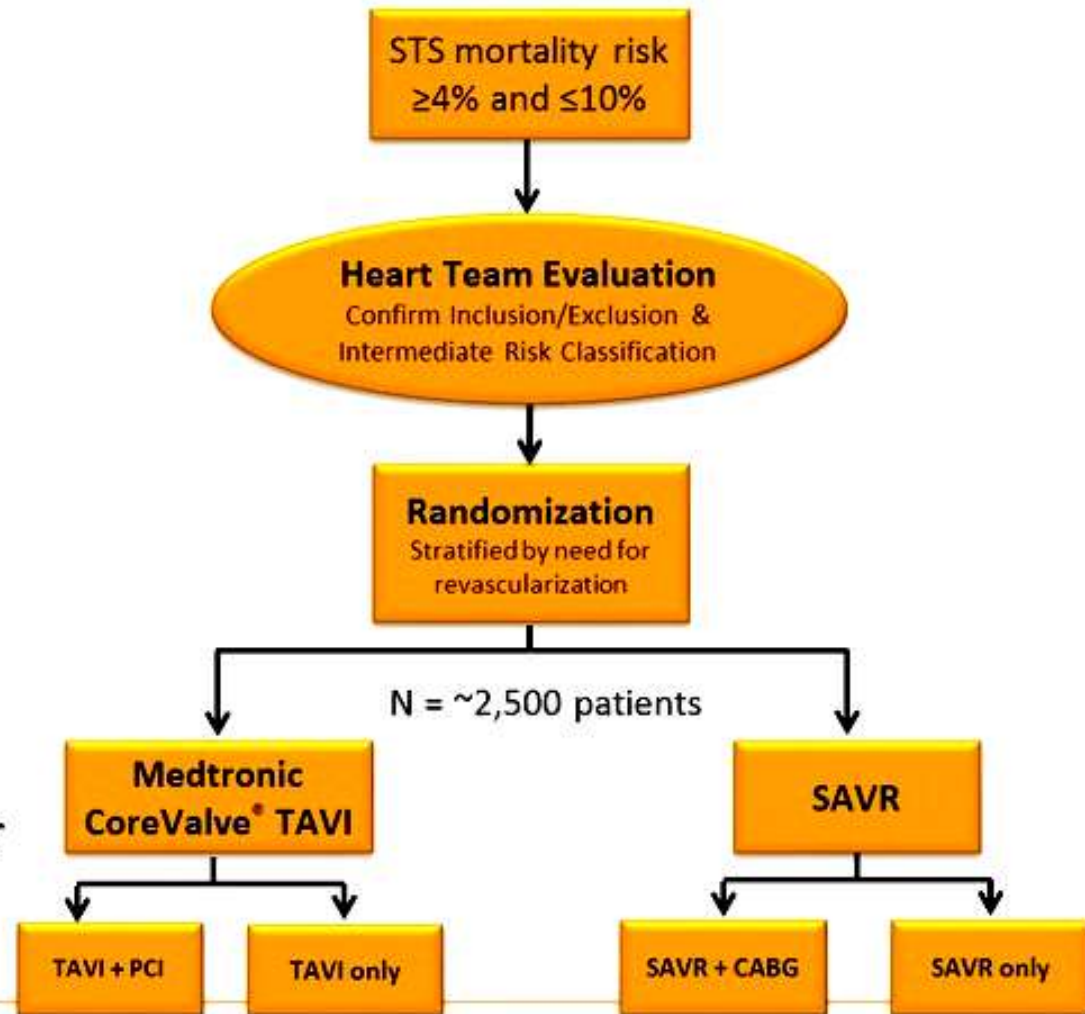
Randomized 1:1, non-inferiority study

The trial will ultimately be conducted at up to 75 worldwide centers

- Europe
- Canada
- United States

Long-term follow-up through 5 years

Approx 2,500 total number of trial subjects

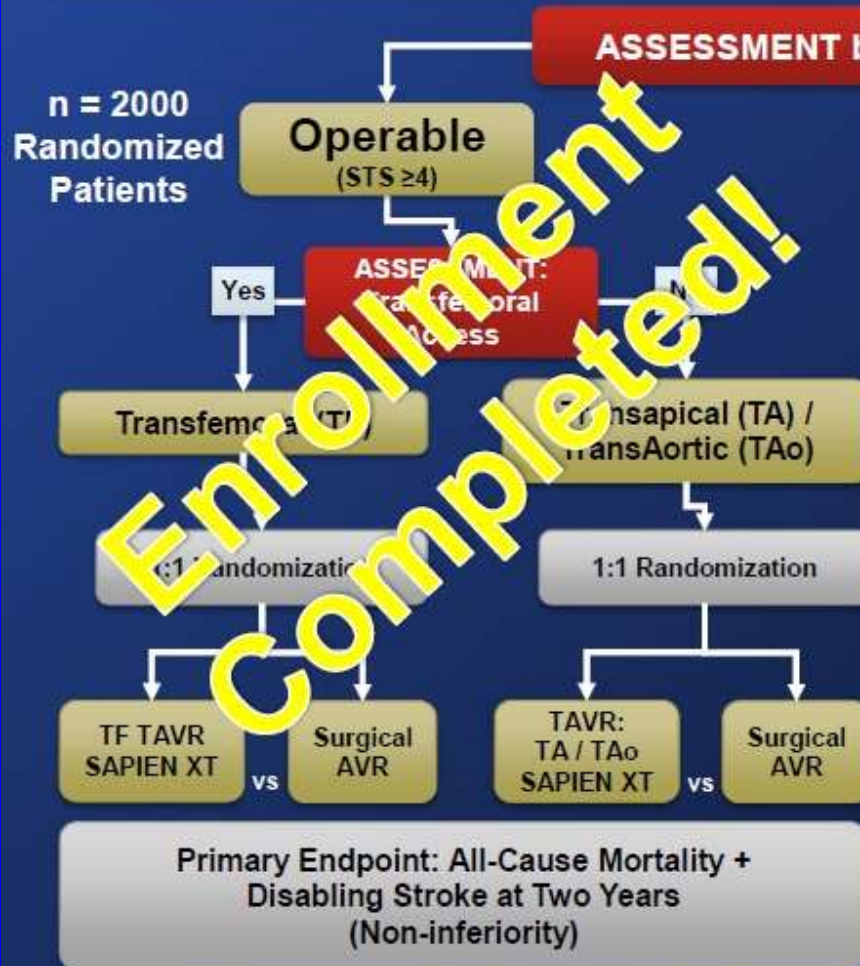




# The PARTNER IIA Trial Study Design



Symptomatic Severe Aortic Stenosis



- 2011 patients enrolled in 22 months!
- Mean STS ~6%
- ~75% TF access

**2014 AHA/ACC Guideline for the Management of Patients With Valvular Heart Disease:  
Executive Summary: A Report of the American College of Cardiology/American Heart  
Association Task Force on Practice Guidelines**

Rick A. Nishimura, Catherine M. Otto, Robert O. Bonow, Blase A. Carabello, John P. Erwin III,  
Robert A. Guyton, Patrick T. O'Gara, Carlos E. Ruiz, Nikolaos J. Skubas, Paul Sorajja, Thoralf M.  
Sundt III and James D. Thomas

## 3.5. Choice of Intervention

### Class I

TAVR is recommended in patients who meet an indication for AVR (Section 3.4) who have a prohibitive risk for surgical AVR (Section 2.5 in the full-text guideline) and a predicted post-TAVR survival greater than 12 months (72, 73). (*Level of Evidence: B*)

### Class IIa

TAVR is a reasonable alternative to surgical AVR in patients who meet an indication for AVR (Section 3.4) and who have high surgical risk for surgical AVR (Section 2.5 in the full-text guideline) (74, 75). (*Level of Evidence: B*)