

# **SORT-OUT III: A Prospective Randomized Comparison of Zotarolimus-Eluting and Sirolimus-Eluting Stents in Patients with Coronary Artery Disease**

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# SORT-OUT III: A Prospective Randomized Comparison of Zotarolimus-Eluting and Sirolimus-Eluting Stents in Patients with Coronary Artery Disease

Conflicts of interests for Michael Maeng, M.D.

*Cordis, Johnson & Johnson:*

Speaker fees

*Medtronic:*

Consultant fee

# Background

- Three published studies (Endeavor III, ISAR-TEST-2, ZEST-AMI) have shown that the zotarolimus-eluting Endeavor stent (END) is inferior to the sirolimus-eluting Cypher stent (CYP) with regard to angiographic endpoints - None of these studies were powered to assess clinical endpoints

# Purpose

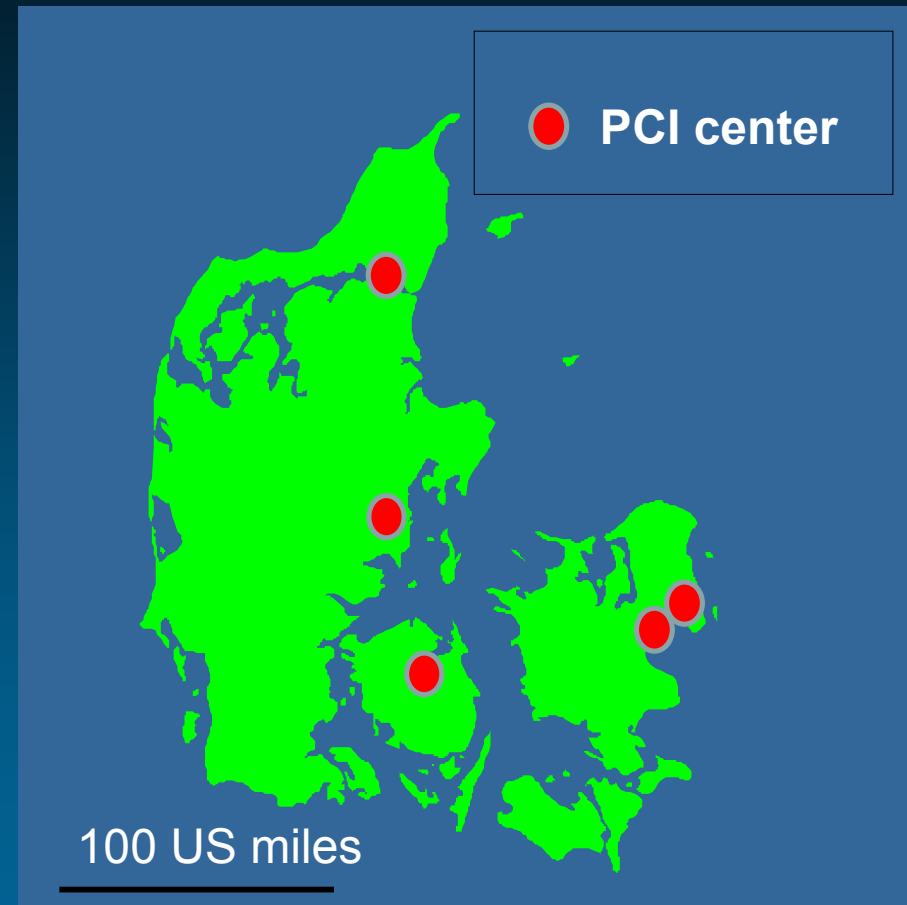
To compare the clinical outcome in routine clinical care (“all-comer”) patients randomized to Endeavor or Cypher stent implantation

# PCI Organization in Denmark

Population of 5,5 million inhabitants

5 high volume PCI centers

12-month dual anti-platelet therapy  
is recommended



# Methods

- The study was performed within the framework of the Danish Organization for Randomized Trials with Clinical Outcome (SORT OUT)
- We designed the study to reflect daily clinical practice. Therefore, no control angiography or study-related patient contact were scheduled
- We used patient driven clinical event detection by use of the Danish Civil Registration system, the National Patient Registry, and the Danish Heart Registries

# Methods

Inclusion: Indication for treatment with a DES

Exclusion: Inability to provide informed consent  
Life expectancy < 1 year  
Allergy to aspirin or clopidogrel  
Participation in another trial

# Endpoints

## **Primary endpoint:**

Major adverse cardiac events (MACE) defined as a composite of cardiac mortality, myocardial infarction (MI), or target vessel revascularization (TVR)

## **Secondary endpoints:**

All cause mortality

Cardiac mortality

MI

Definite stent thrombosis (ARC definition)

TVR

Target lesion revascularization (TLR)

# Results

- 2,332 patients were enrolled
- Complete 18-month follow-up in 2,200 (94%) patients

# Selected Patient Characteristics

	<b>END</b>	<b>CYP</b>
No of patients	1162	1170
Age (yrs)	64	64
Male (%)	73	72
Diabetes (%)	15	14
Hypertension (%)	54	51
Lipid-lowering therapy (%)	70	68
Previous CABG (%)	7	7
Previous PCI (%)	21	17
Previous MI (%)	26	27

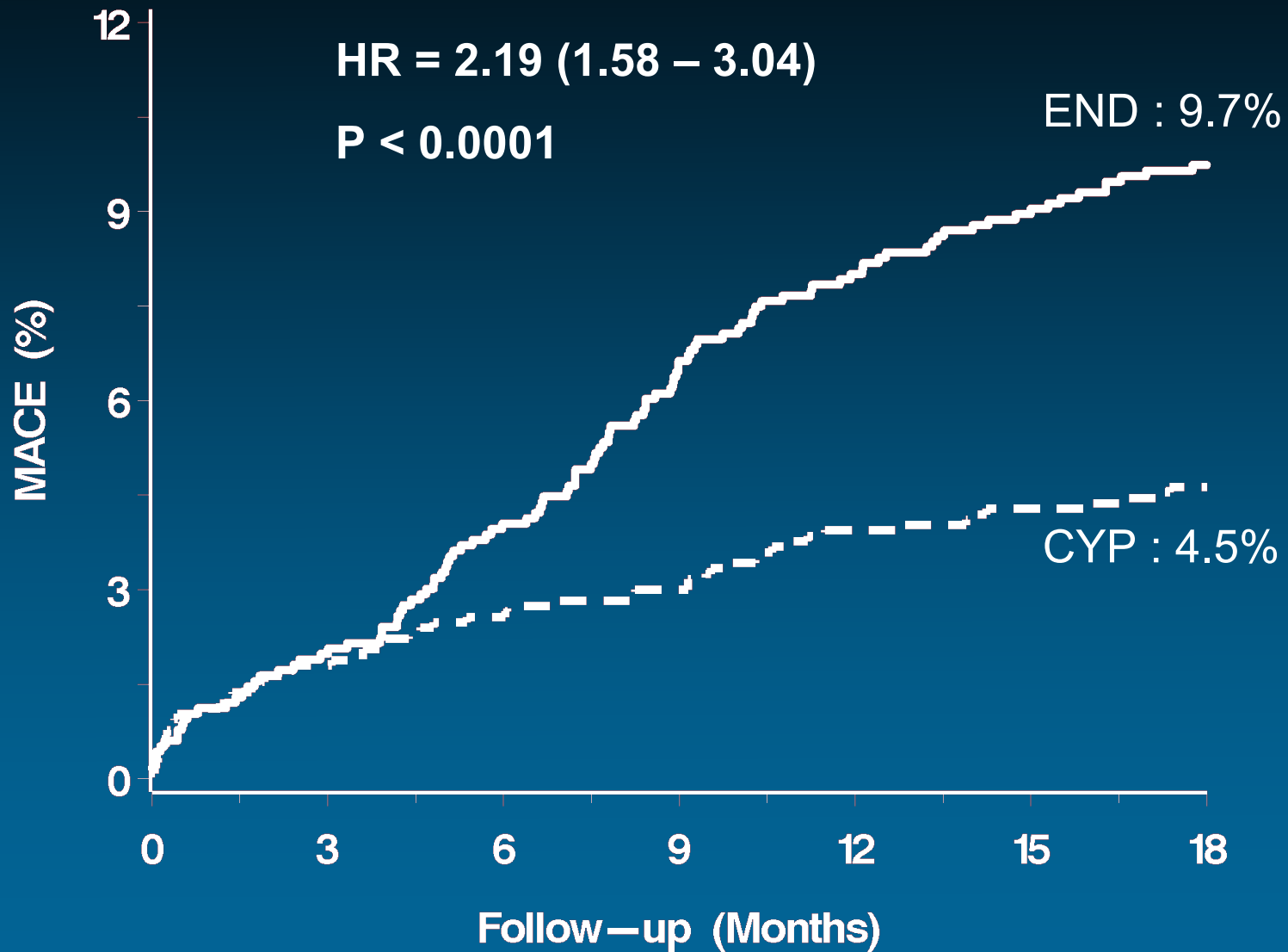
# PCI Indication

	<b>END</b>	<b>CYP</b>
Stable angina (%)	53	51
NSTEMI/UAP (%)	38	38
STEMI (%)	6	9
Other (%)	4	3

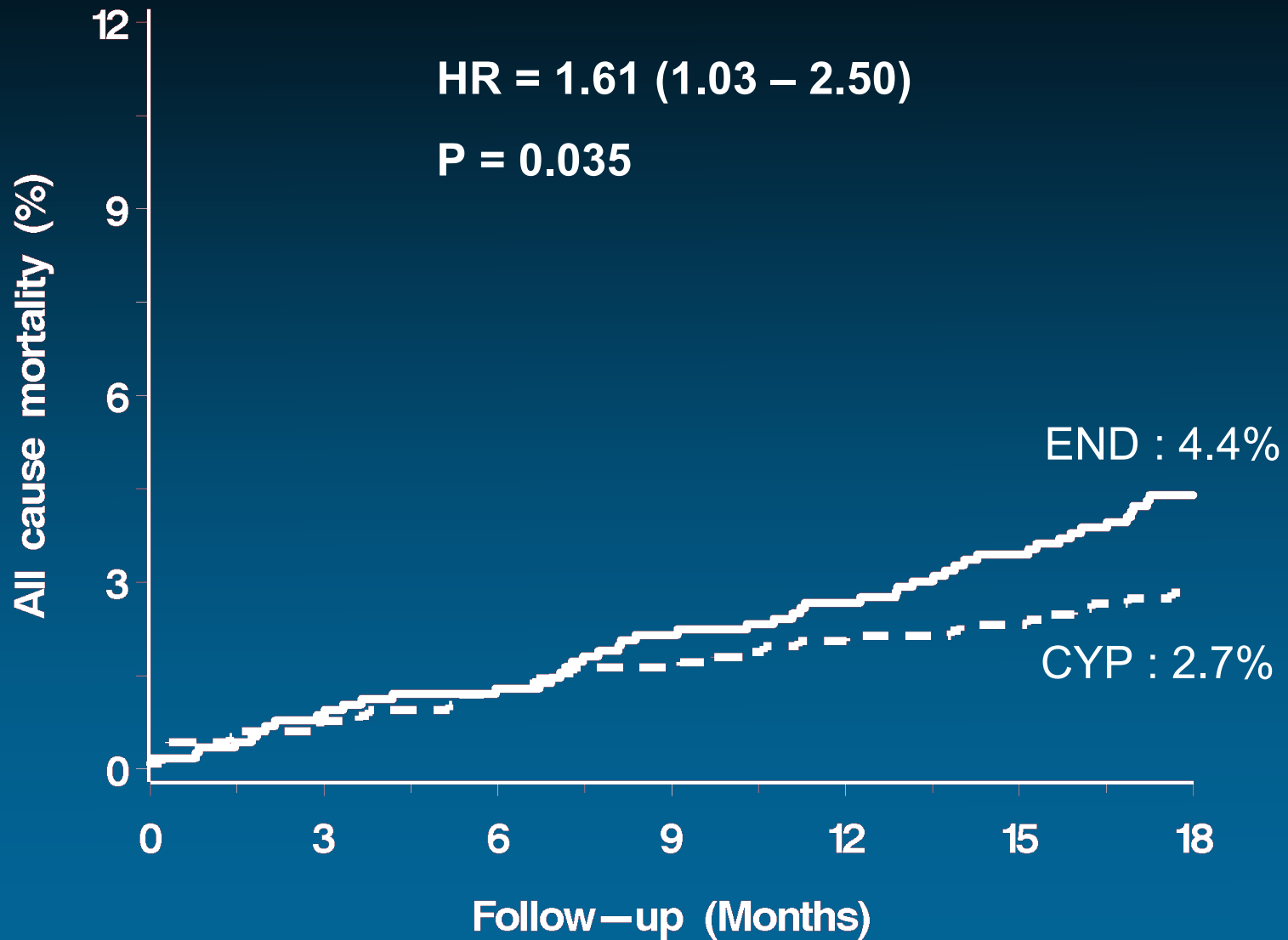
# Selected Lesion Characteristics

	<b>END</b>	<b>CYP</b>
No of lesions/patient	1.6	1.5
Stents/patient	1.8	1.7
Lesion length (mm)	13	14
Stent length (mm)	18	18
Stent diameter (mm)	3.2	3.2
Lesion type A (%)	20	18
Lesion type B (%)	45	48
Lesion type C (%)	36	35

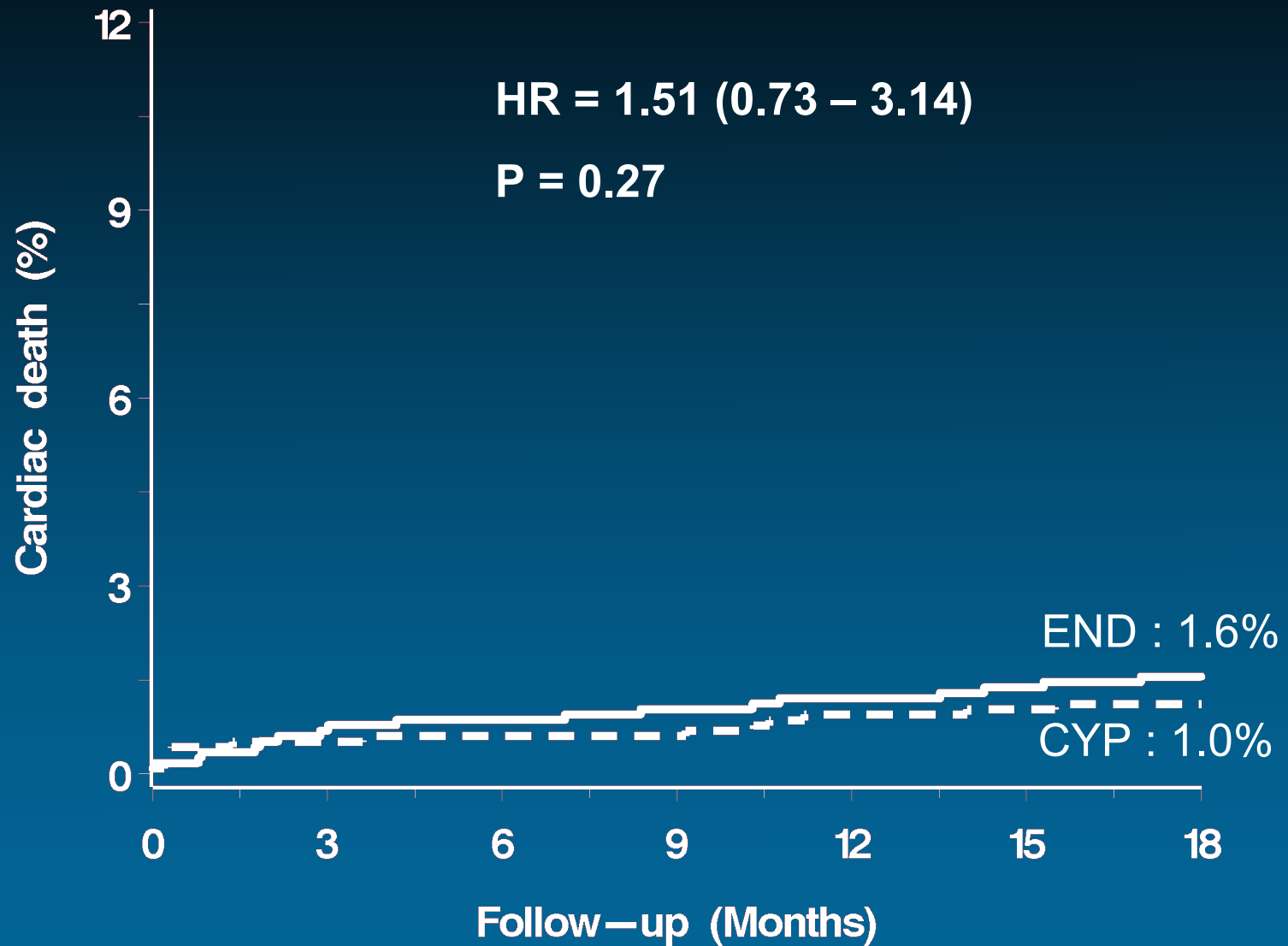
# MACE



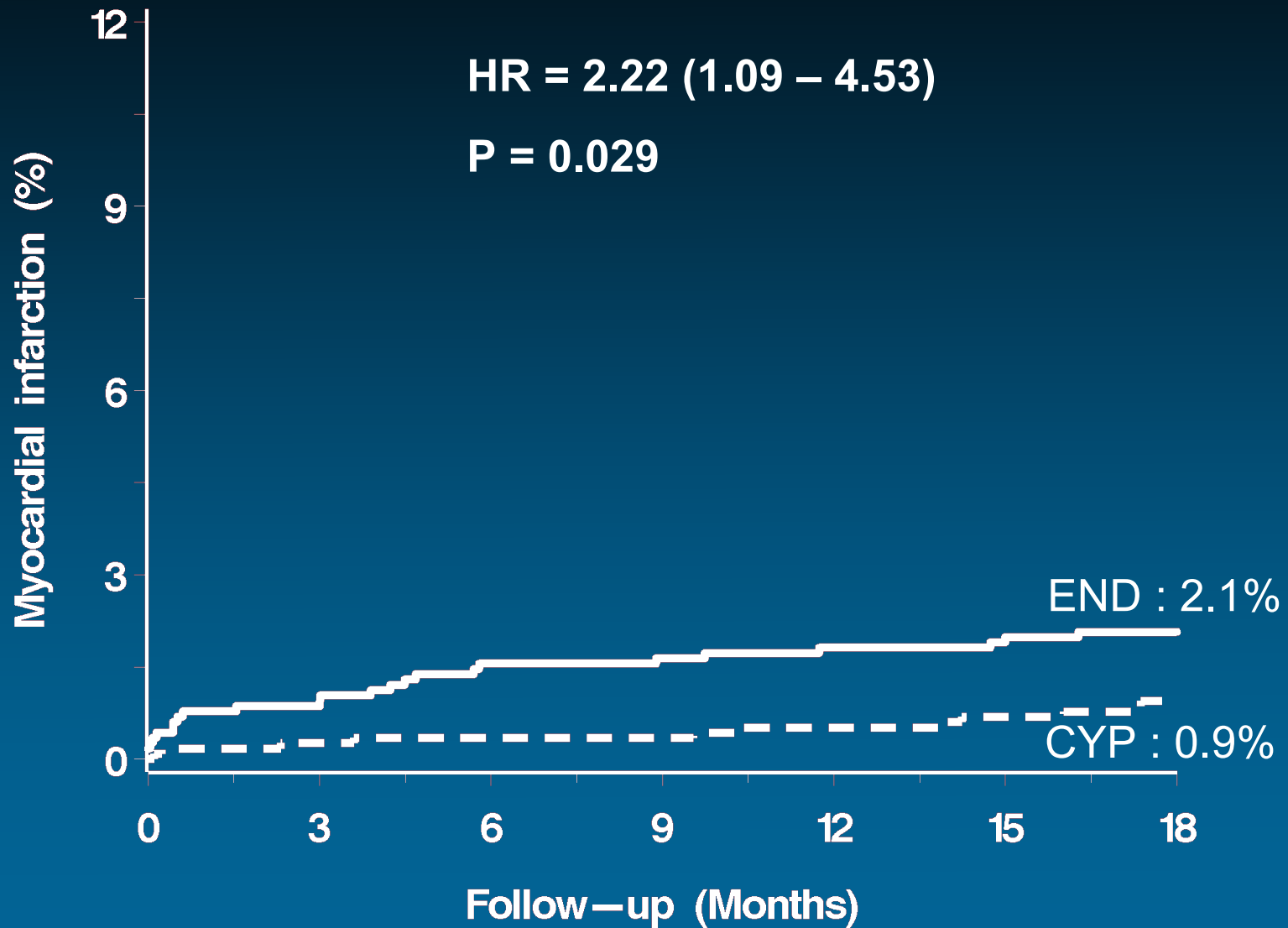
# All Cause Mortality



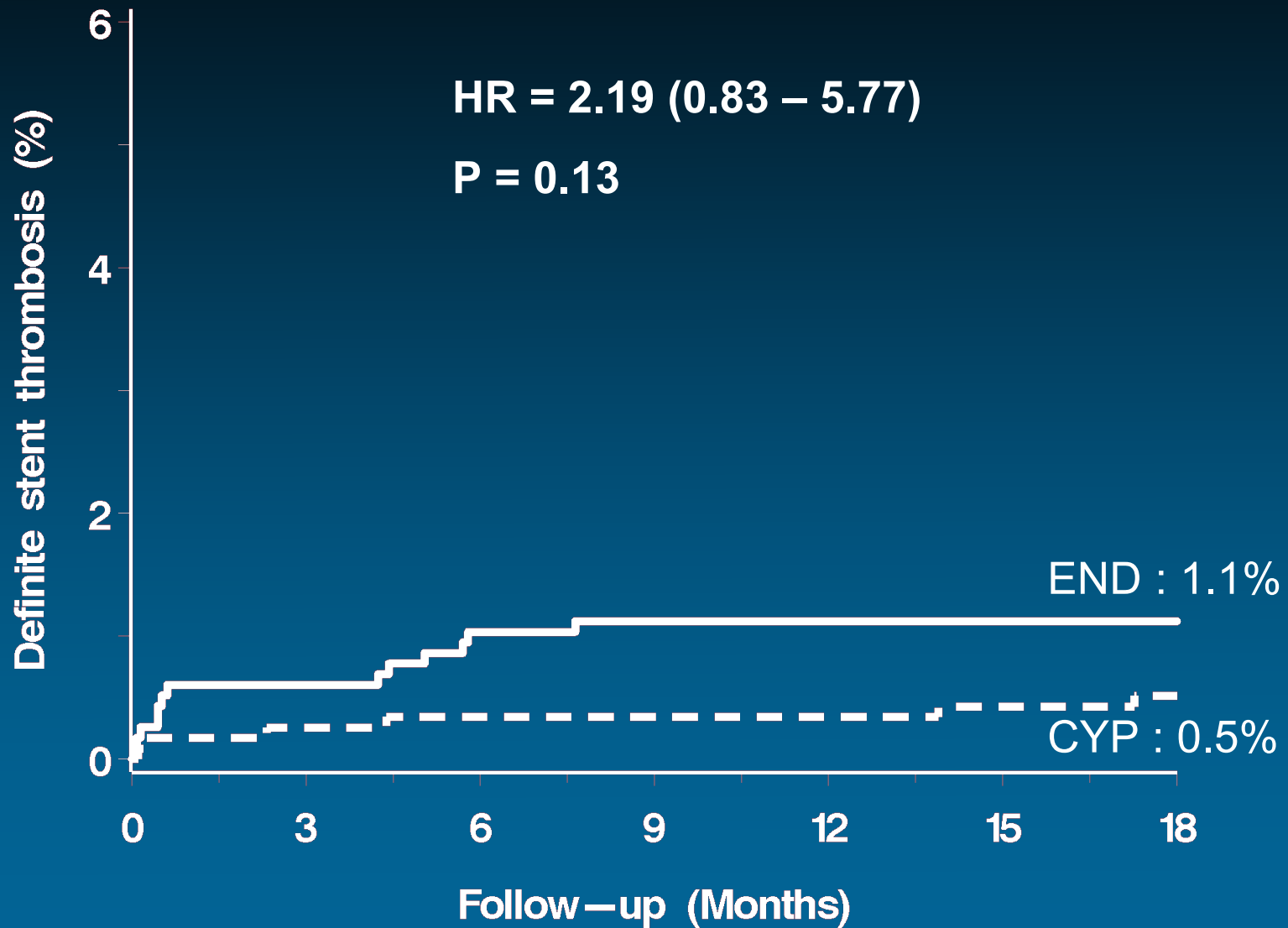
# Cardiac Death



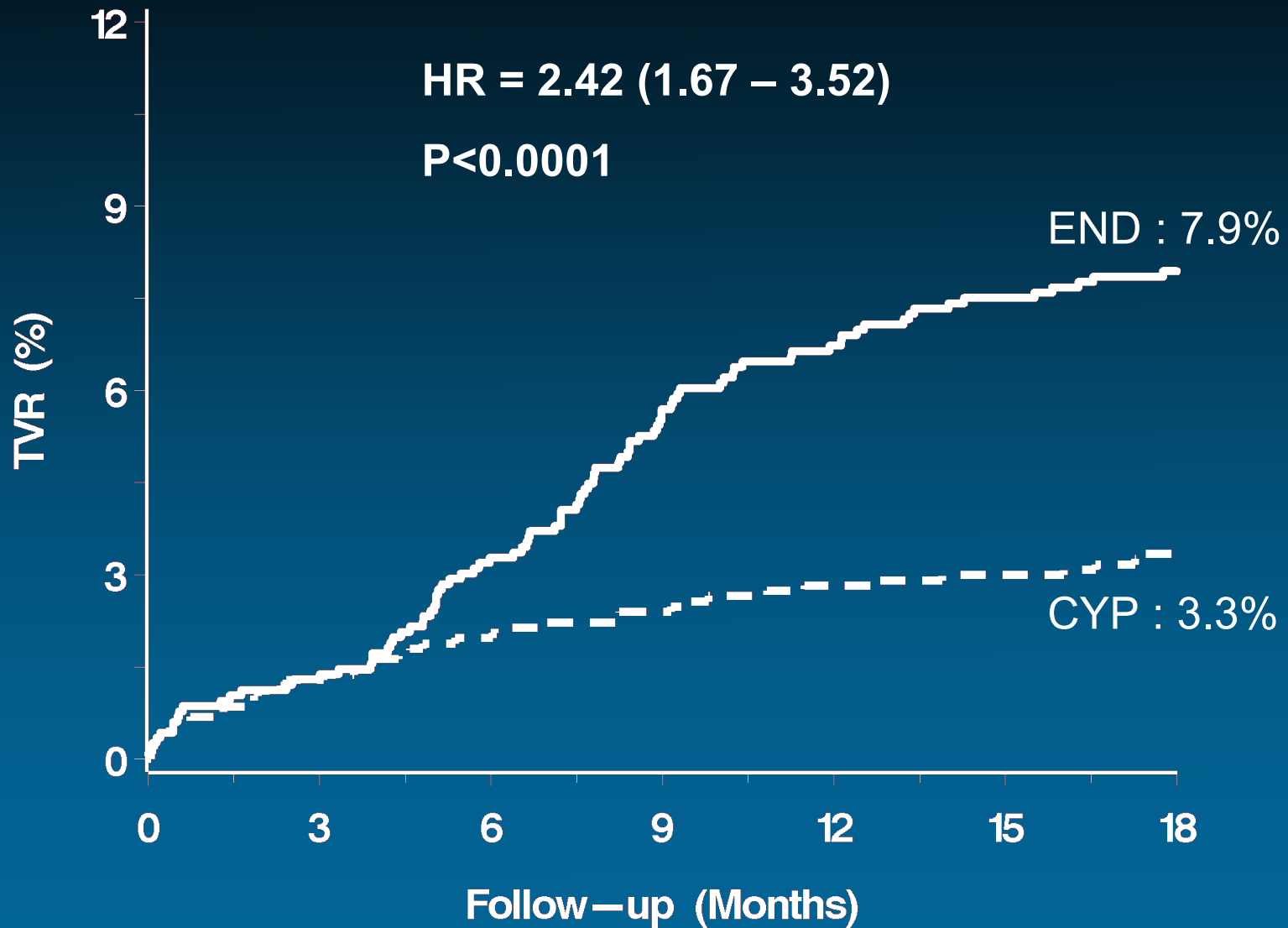
# Myocardial Infarction



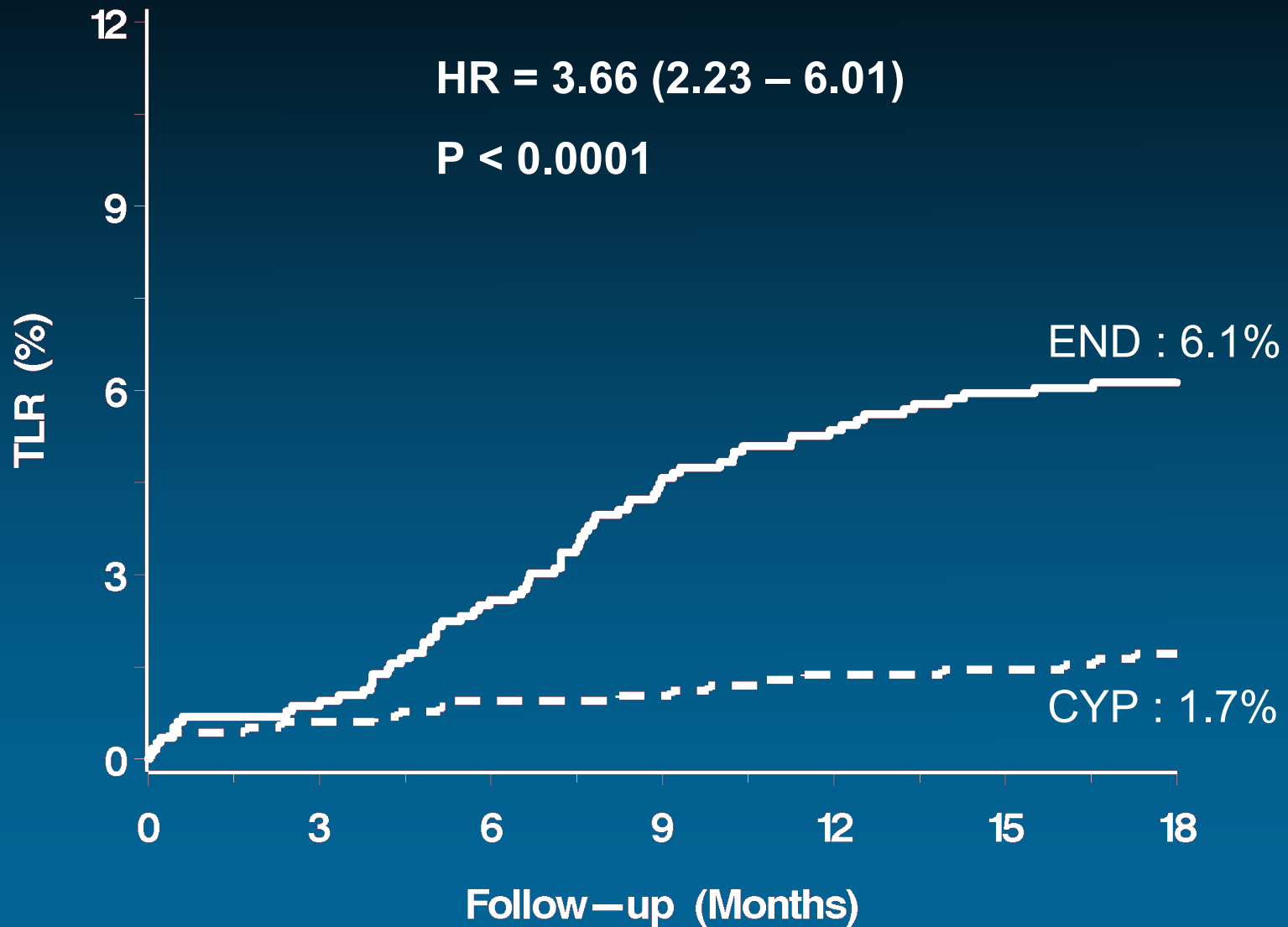
# Definite Stent Thrombosis



# Target Vessel Revascularization



# Target Lesion Revascularization



# Conclusion

The Endeavor stent was inferior to the Cypher stent in routine clinical care (“all-comer”) patients at 18-month follow-up

# For further details .....

The SORT OUT III 18-month manuscript is published on-line in *The Lancet* today

**Thank you for your attention**