

# Оптимална антиагрегантна терапия

(За най-благоприятен изход на перкутанните интервенции  
при пациентите с ОКС)

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# 2014 ESC Myocardial Revascularisation Guidelines:

STEMI – ASA + P2Y12, колкото се може по-скоро след ПМК –предимство за Тика и Празугрел /огр. ТИА, 75г/

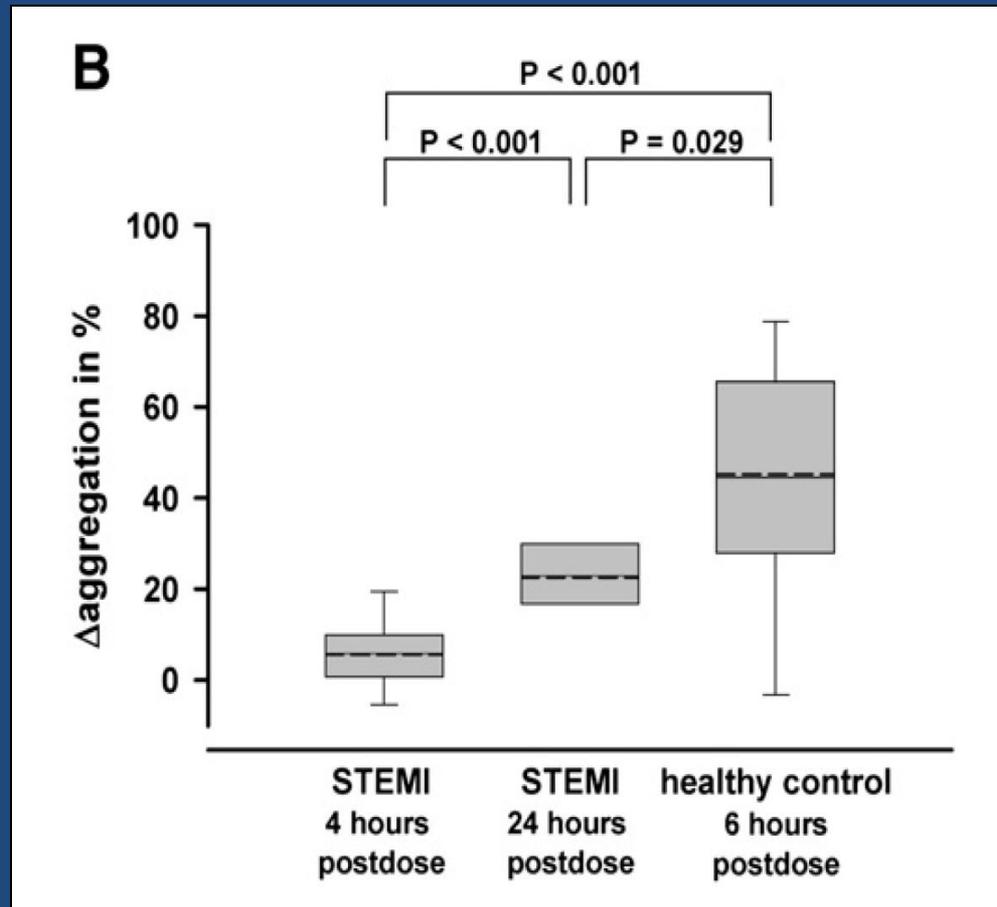
NSTEMI ПКИ – ASA + P2Y12  
предимство за Тика и Празугрел /огр. ТИА, 75г/

Клопидогрел при индикации за антикоагуланти, скорошно кървне от ГИТ

# Необходимост от венозни антиагреганти и ранно блокиране на тромбоцитите (основно при STEMI)

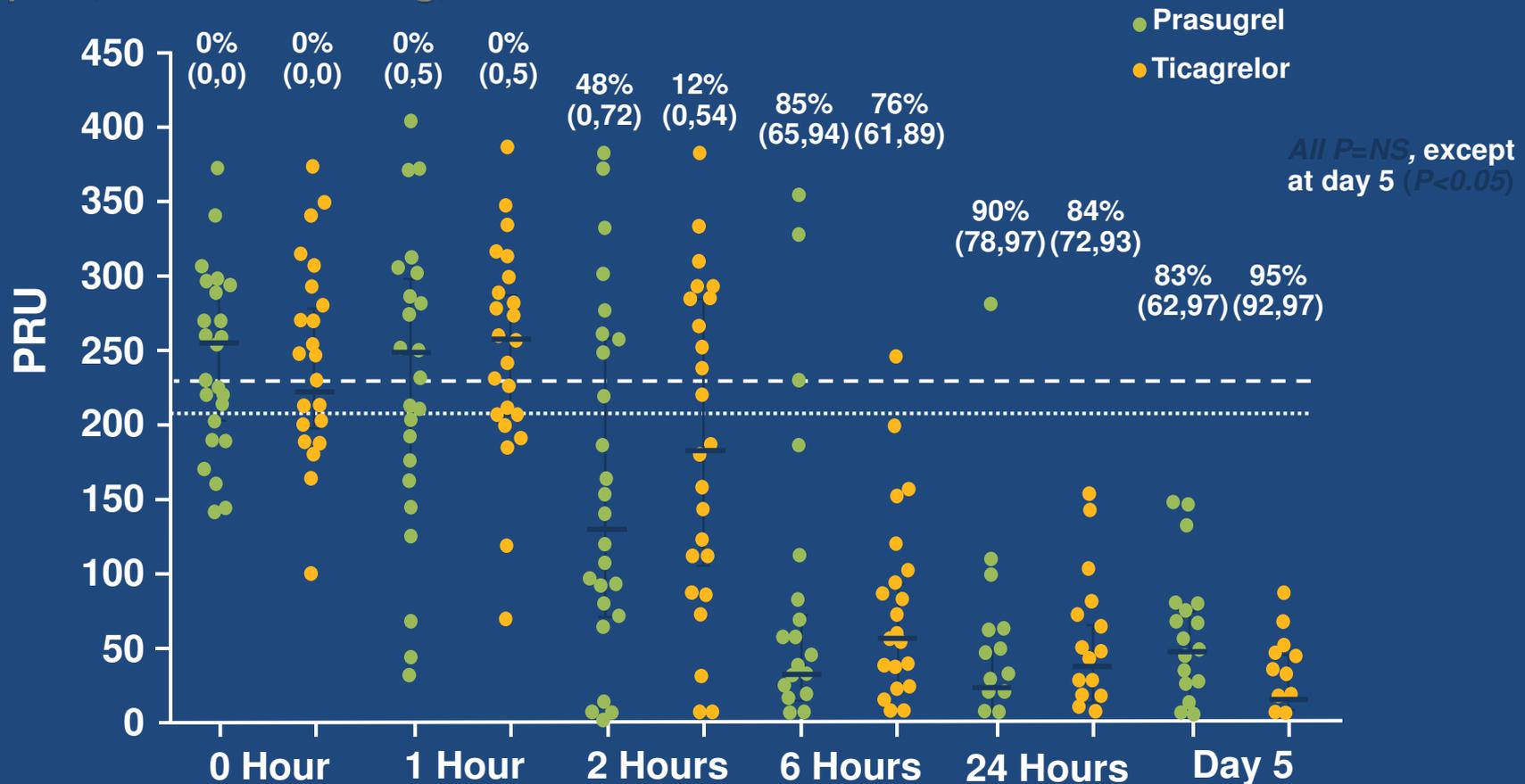
- ▶ Пациента не може да приема п.о.( напр. Повръща при долен МИ)
- ▶ Високорискови пациенти със забавен ефект от тиенопиридините
- ▶ Обратими антиагреганти като преход към хирургия

# Bioavailability of Clopidogrel is Markedly Reduced in STEMI Patients



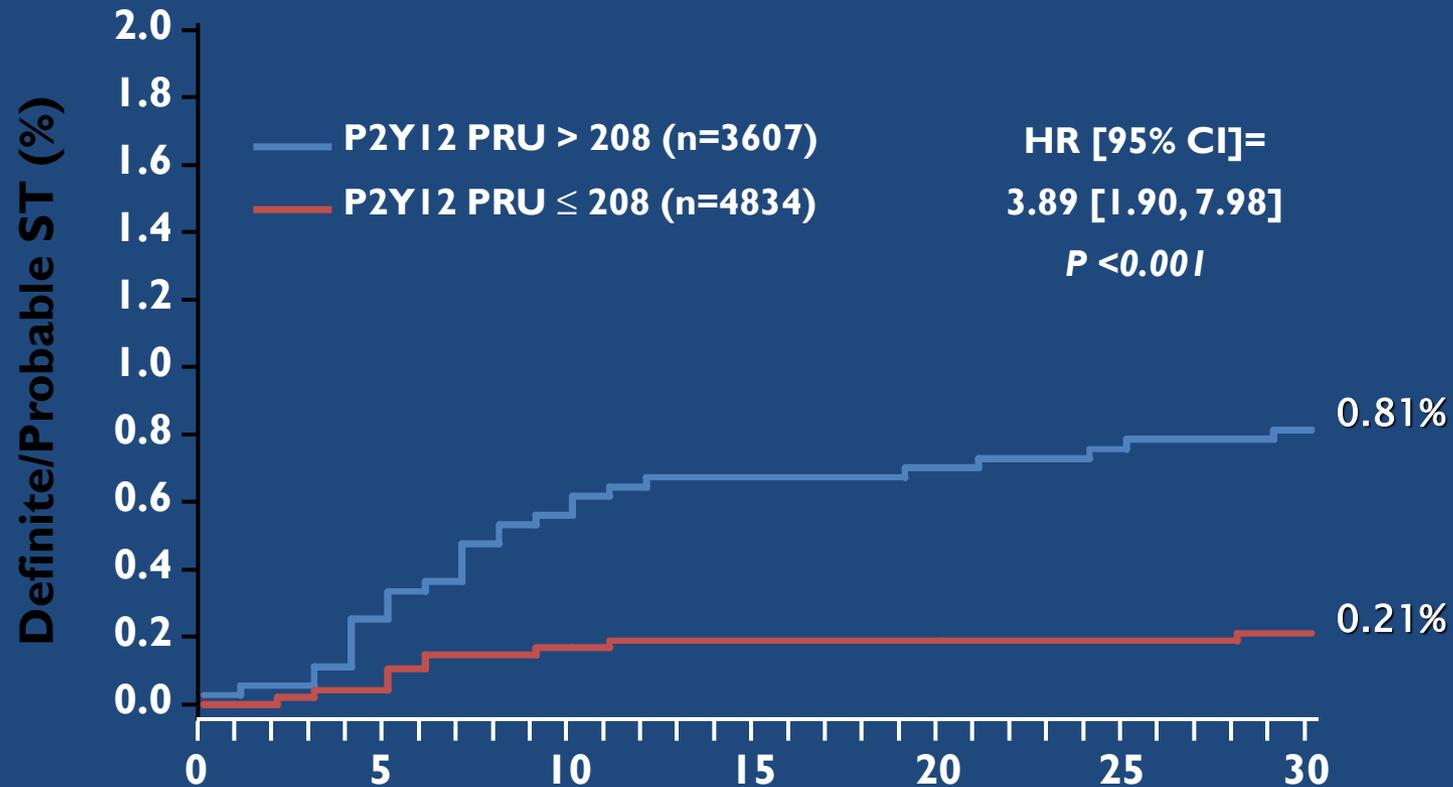
# Ticagrelor и Prasugrel PD при STEMI

Verify Now P2Y<sub>12</sub> at 0, 1, 2, 6, 24 hrs, and 5 days post randomisation in 55 STEMI pts (standard dosing). % inhibited:



# ADAPT-DES: Relationship Between VerifyNow P2Y<sub>12</sub> PRU and Stent Thrombosis within 30 Days

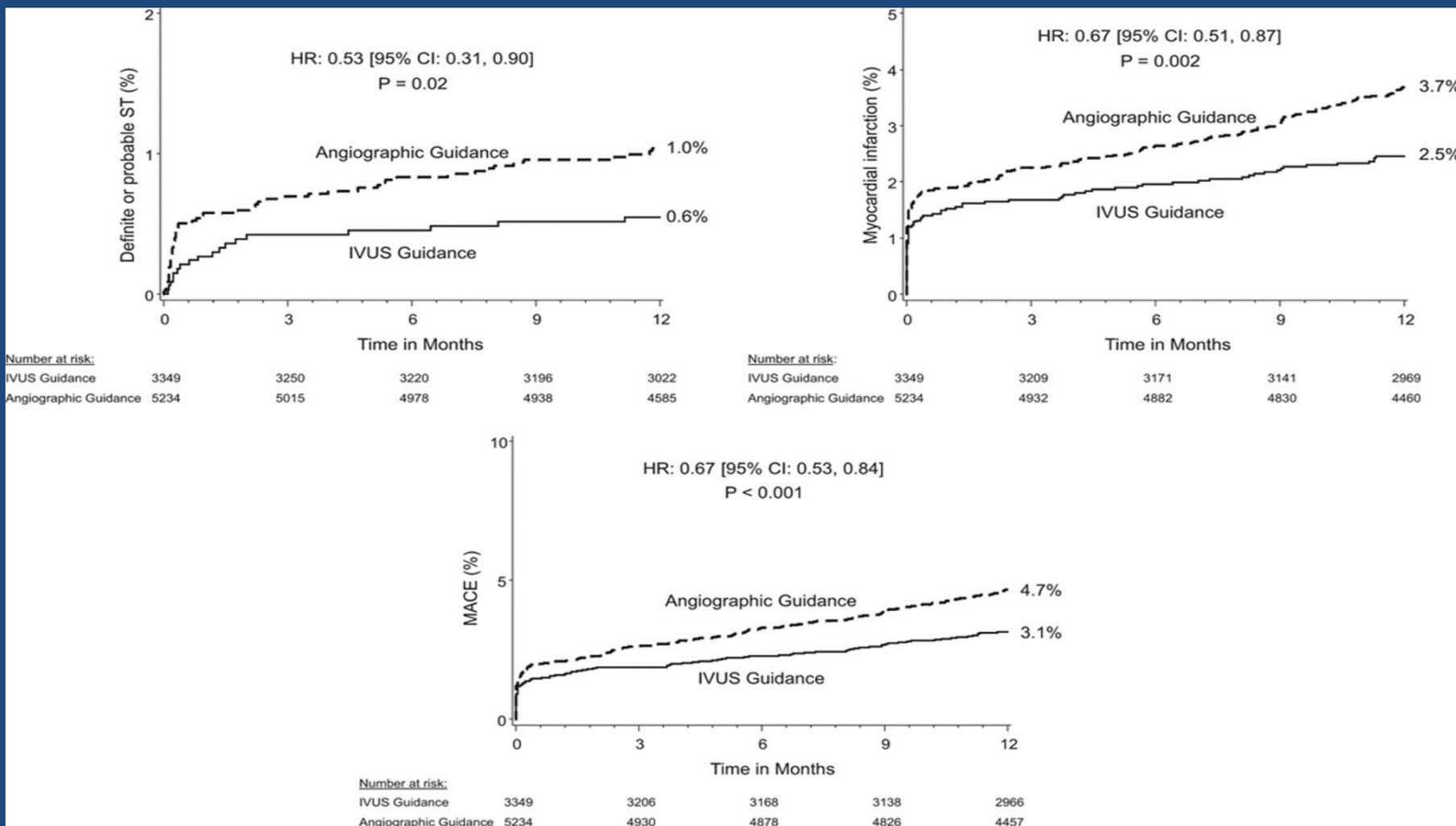
## Definite or probable stent thrombosis



### Number at risk

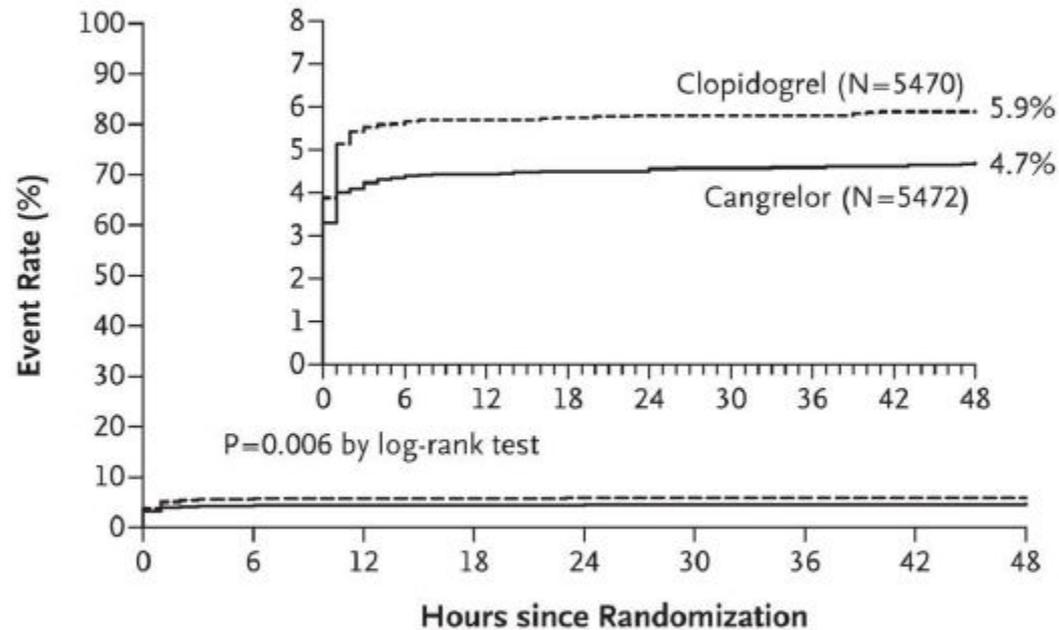
	0	5	10	15	20	25	30
>208 PRU	3607	3540	3534	3534	3534	3482	3482
≤208 PRU	4834	4754	4752	4752	4752	4686	4686

# Най - голяма полза от ИКУЗ при ОКС. Оптимална техника + антиагреганти= брак по сметка



Bernhard Witzenbichler et al. Circulation. 2014;129:463-470

# CHAMPION PHOENIX: KM Curves for Death, MI, IDR or Stent Thrombosis at 48h

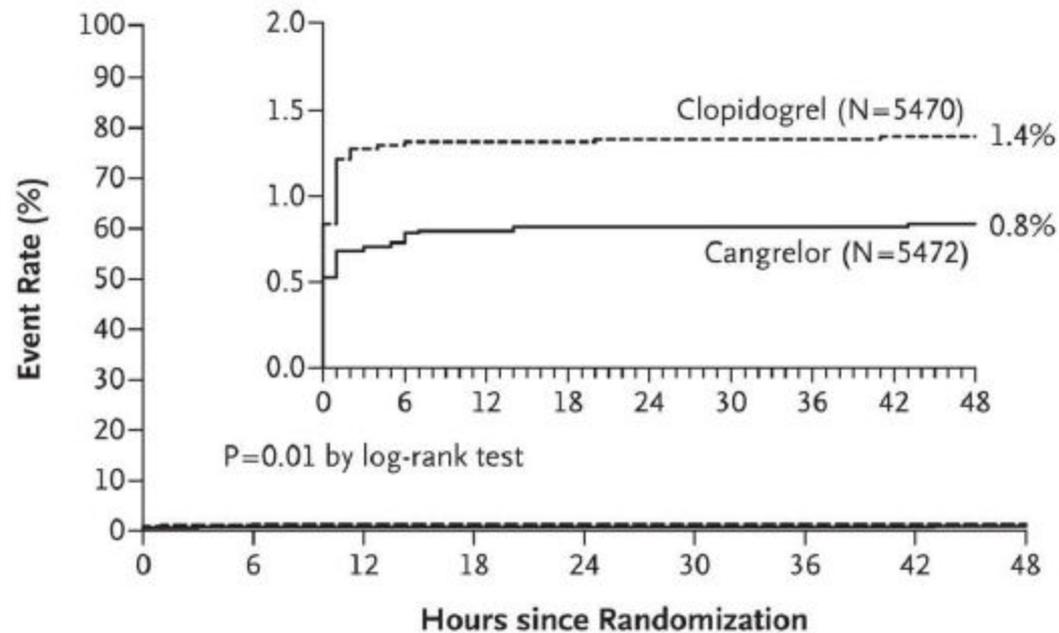


## No. at Risk

Cangrelor	5472	5233	5229	5225	5223	5221	5220	5217	5213
Clopidogrel	5470	5162	5159	5155	5152	5151	5151	5147	5147



# CHAMPION PHOENIX: KM curves for Stent Thrombosis at 48 h



## No. at Risk

Cangrelor	5472	5426	5421	5419	5419	5418	5417	5416	5414
Clopidogrel	5470	5392	5389	5388	5386	5385	5385	5383	5383

# Основно предимство спрямо ептифибатид/тирофибан

- ▶ Обратимост на ефекта

# Доболнична интравенозна антиагрегантна терапия за STEMI

Дефиниции:

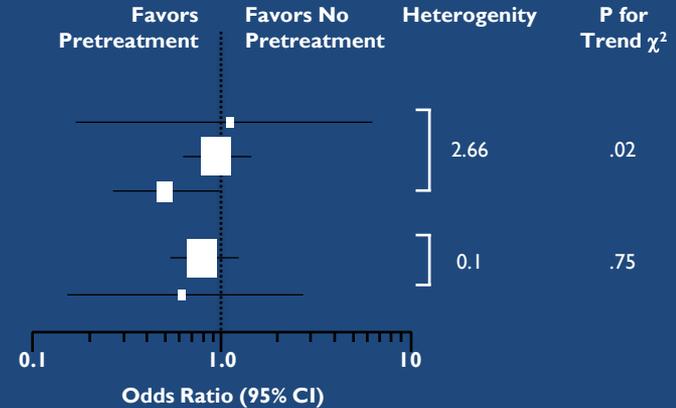
1. Назначаване при ПМК без да е необходим лекар
2. Назначаване в линейката

# Importance of Pre-hospital Treatment with Clopidogrel in ACS

## All-cause Mortality

No. of Patients

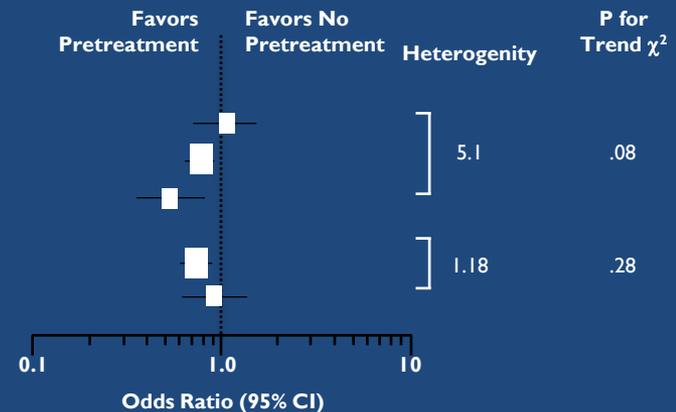
Presenting feature	No. of Patients		OR (95% CI)
	Pretreatment	No Pretreatment	
Elective PCI	820	816	1.12 (0.17-7.27)
NSTE ACS	2366	2408	0.93 (0.63-1.36)
STEMI	1097	1101	0.50 (0.26-0.96)
<b>Loading dose</b>			
≤300 mg	3299	3338	0.79 (0.54-1.17)
600-900 mg	984	987	0.62 (0.15-2.61)



## Major Coronary Event

No. of Patients

Presenting feature	No. of Patients		OR (95% CI)
	Pretreatment	No Pretreatment	
Elective PCI	820	816	1.05 (0.70-1.57)
NSTE ACS	2366	2408	0.78 (0.66-0.91)
STEMI	1097	1101	0.54 (0.36-0.81)
<b>Loading dose</b>			
≤300 mg	3299	3338	0.74 (0.63-0.87)
600-900 mg	984	987	0.93 (0.64-1.36)

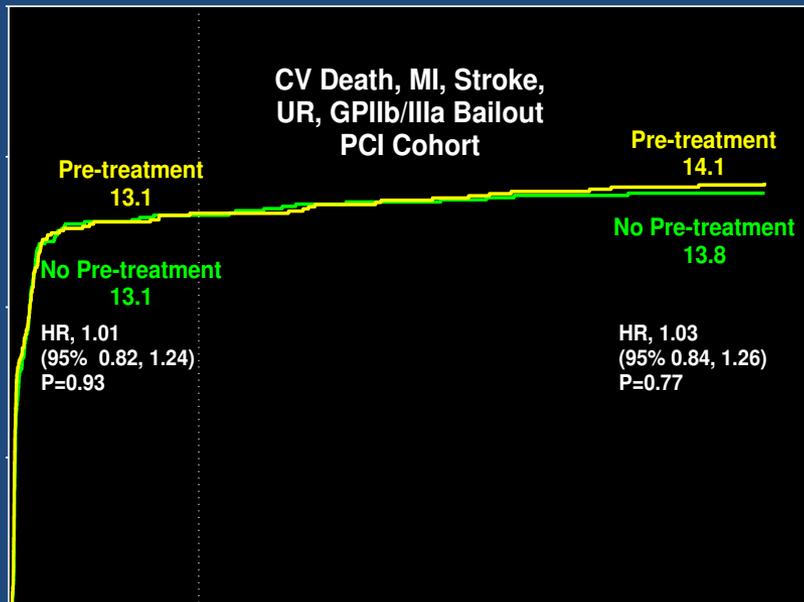




# The ACCOAST Trial: Lack of Benefit but Real Harm of Prasugrel Upstream Compared to Downstream Loading

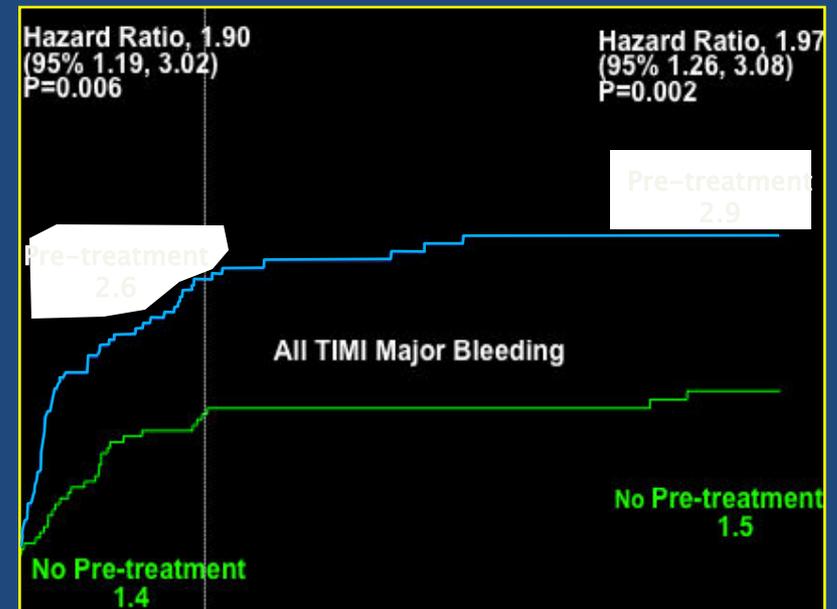
## Primary efficacy endpoint

CV Death, MI, Stroke, Urg Revasc, GP IIb/IIIa bailout



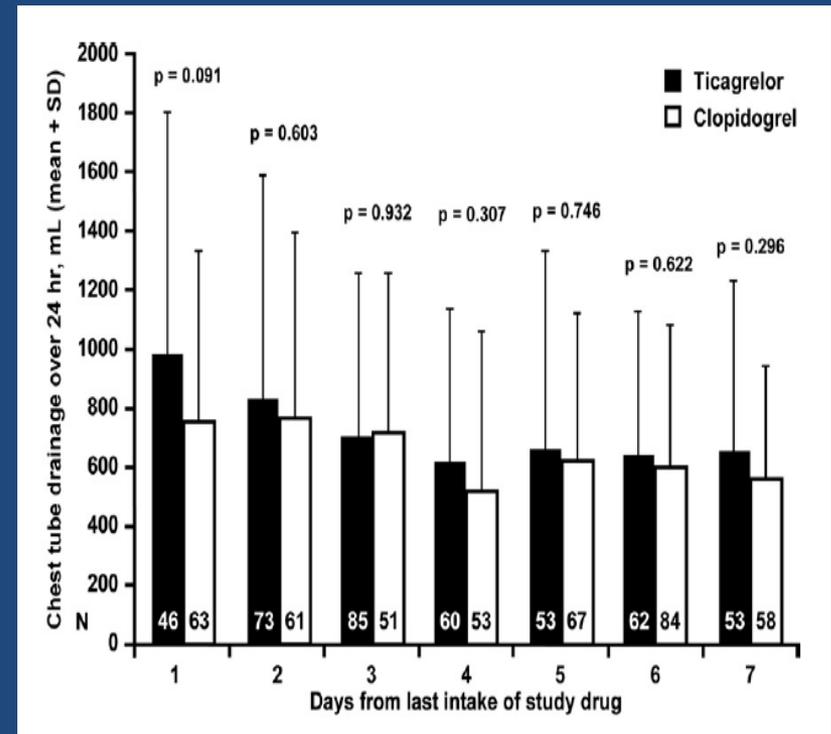
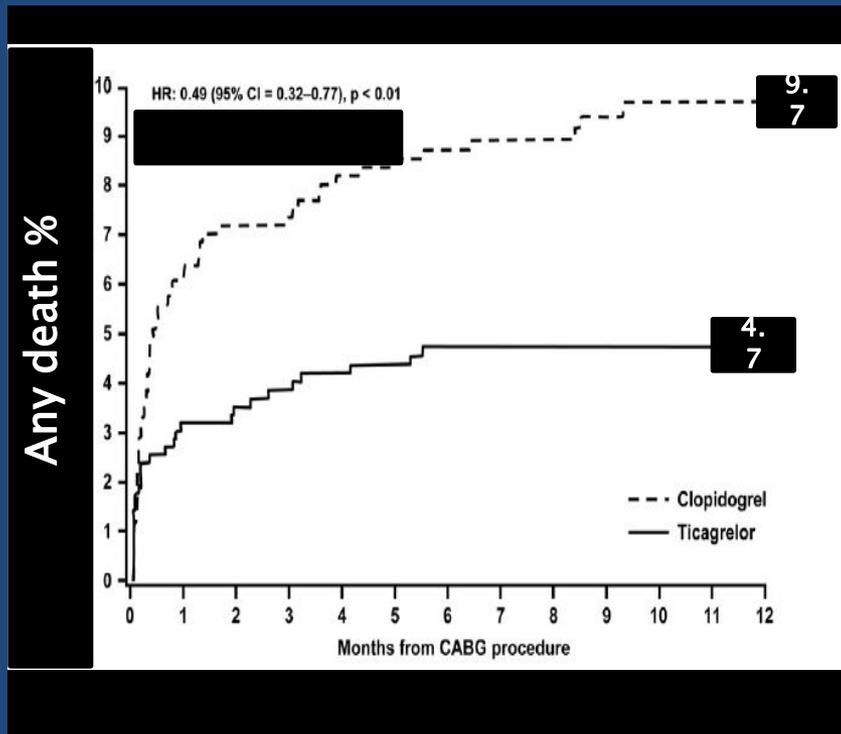
## Primary safety endpoint

TIMI major bleeding



# Ticagrelor: Substantial Mortality Reduction Without Excess Risk of CABG-related Bleeding Post-randomisation Analysis of the PLATO Trial

N=1899



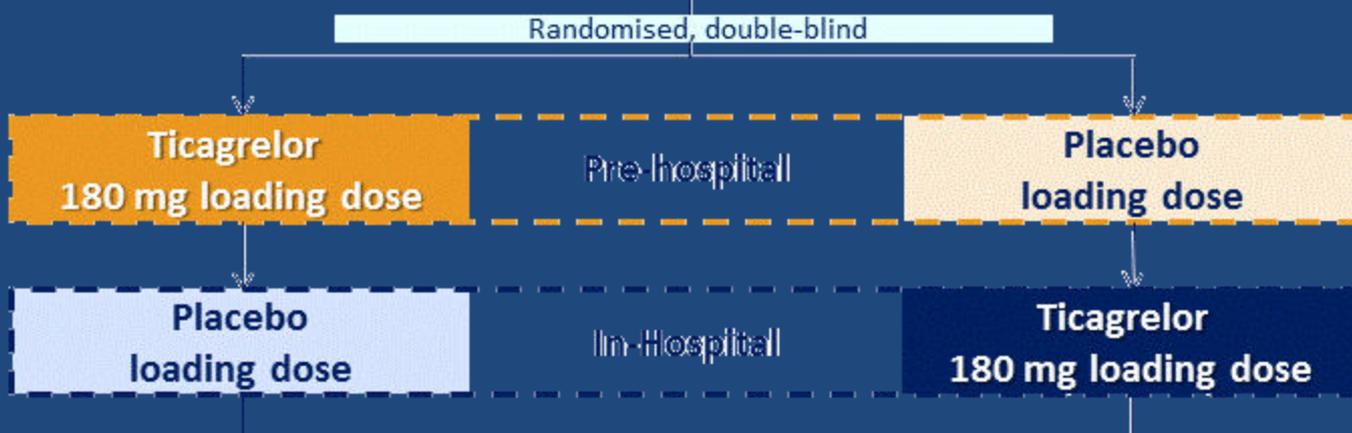
**No red flags for bleeding!**

# Какво прибавя ATLANTIC

Atlantic Population

- Documented evidence of STEMI
- Planned for angioplasty (PCI)
- onset of ischaemic symptoms within 6h
- initially managed by ambulance physician/personnel; also concerning patients not pre-treated for STEMI in emergency rooms of non-PCI hospitals

## STE-ACS planned for PCI (N = 1862)

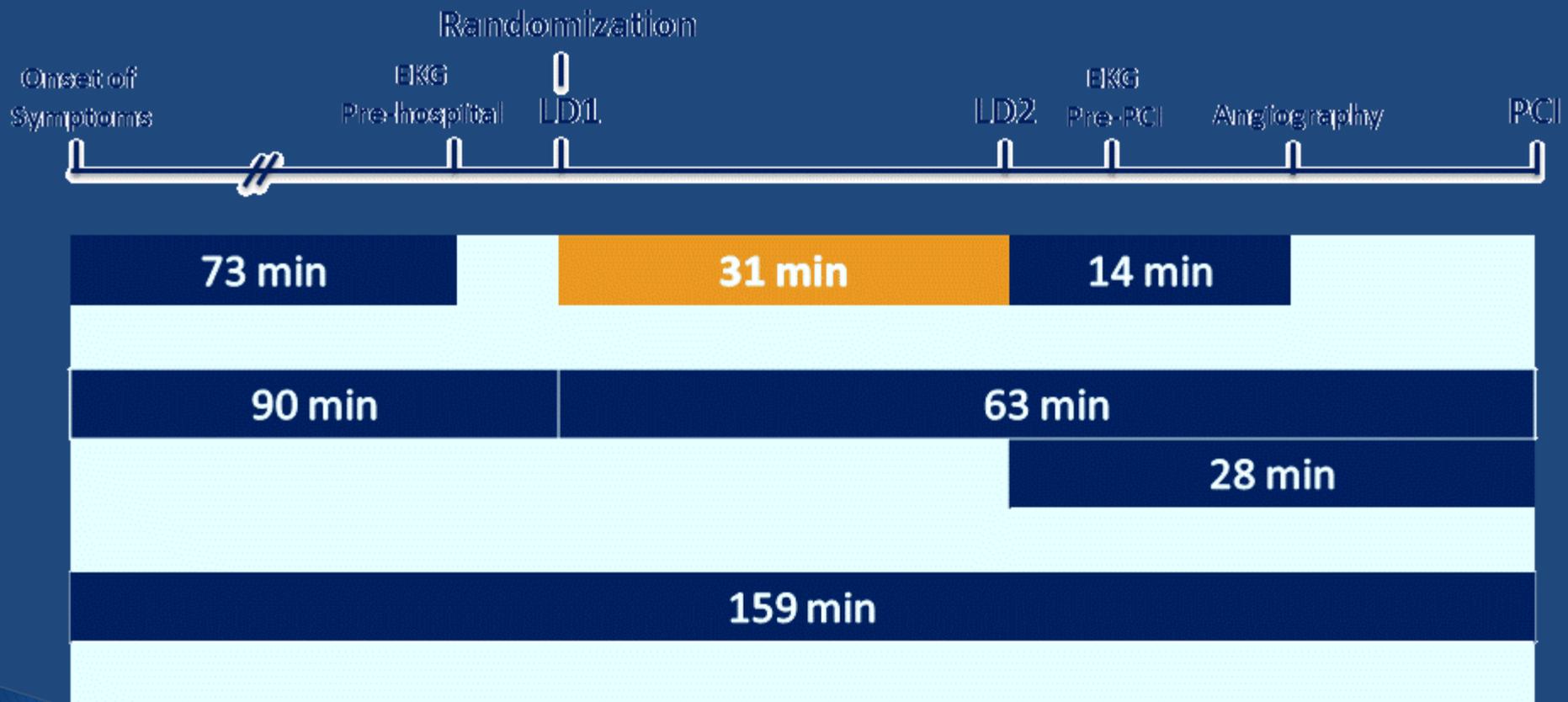


**Primary Objectives**

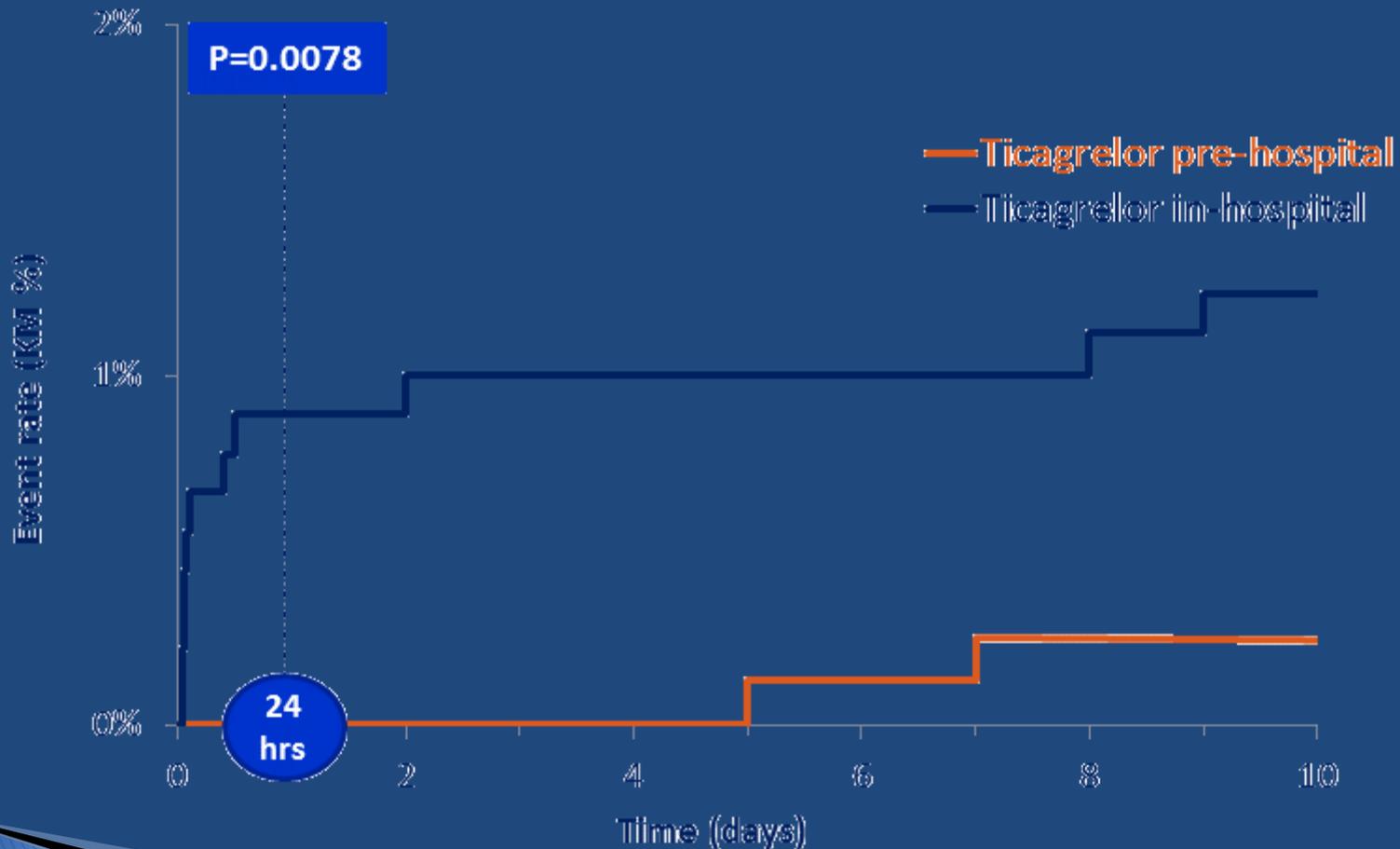
≥ 70% ST-segment elevation resolution pre-PCI **OR** TIMI flow grade 3 of MI culprit vessel at initial angiography

Ticagrelor 90 mg/bid 30 days

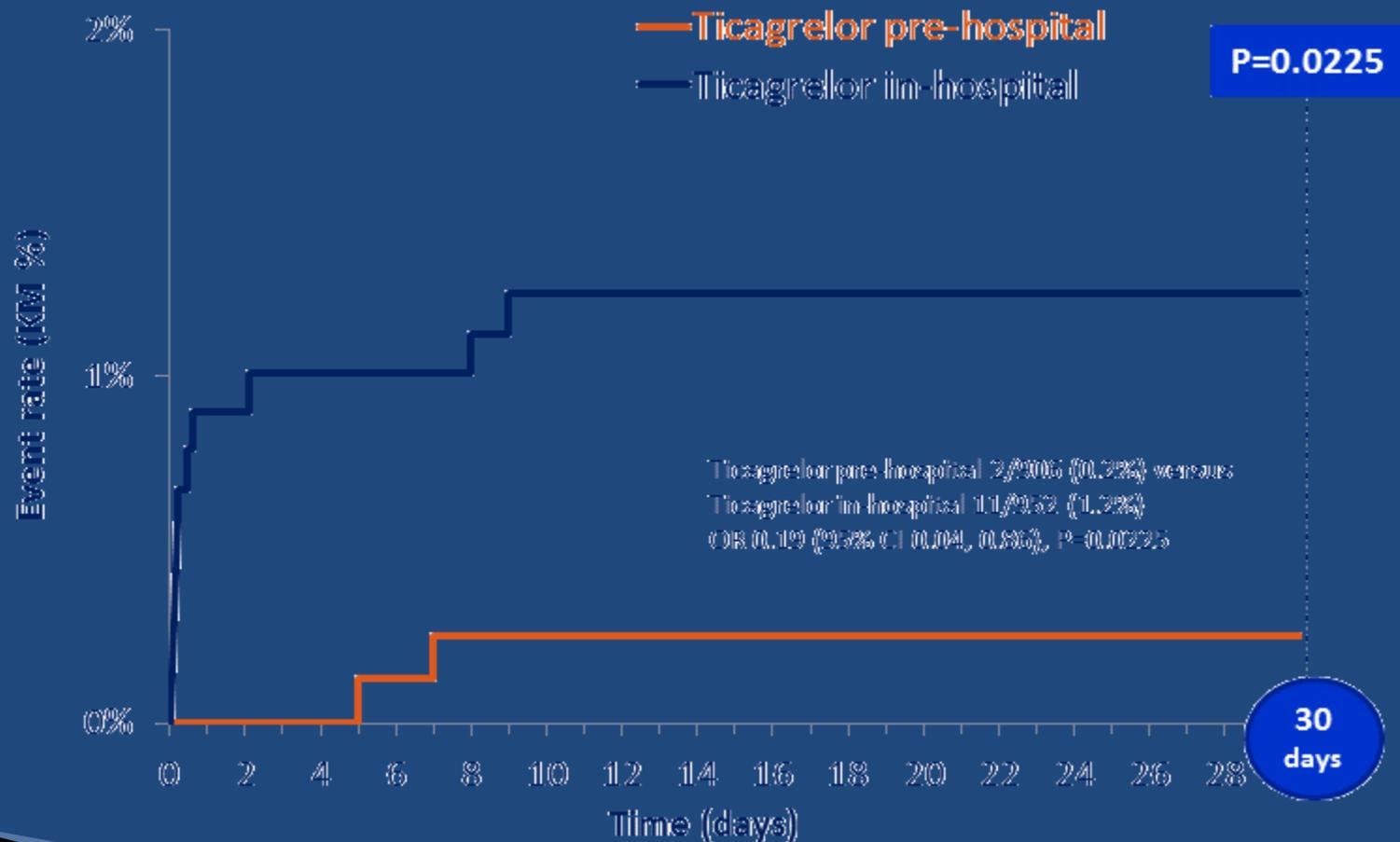
# Median times to pre- and in-hospital steps



# Definite stent thrombosis up to 10 days

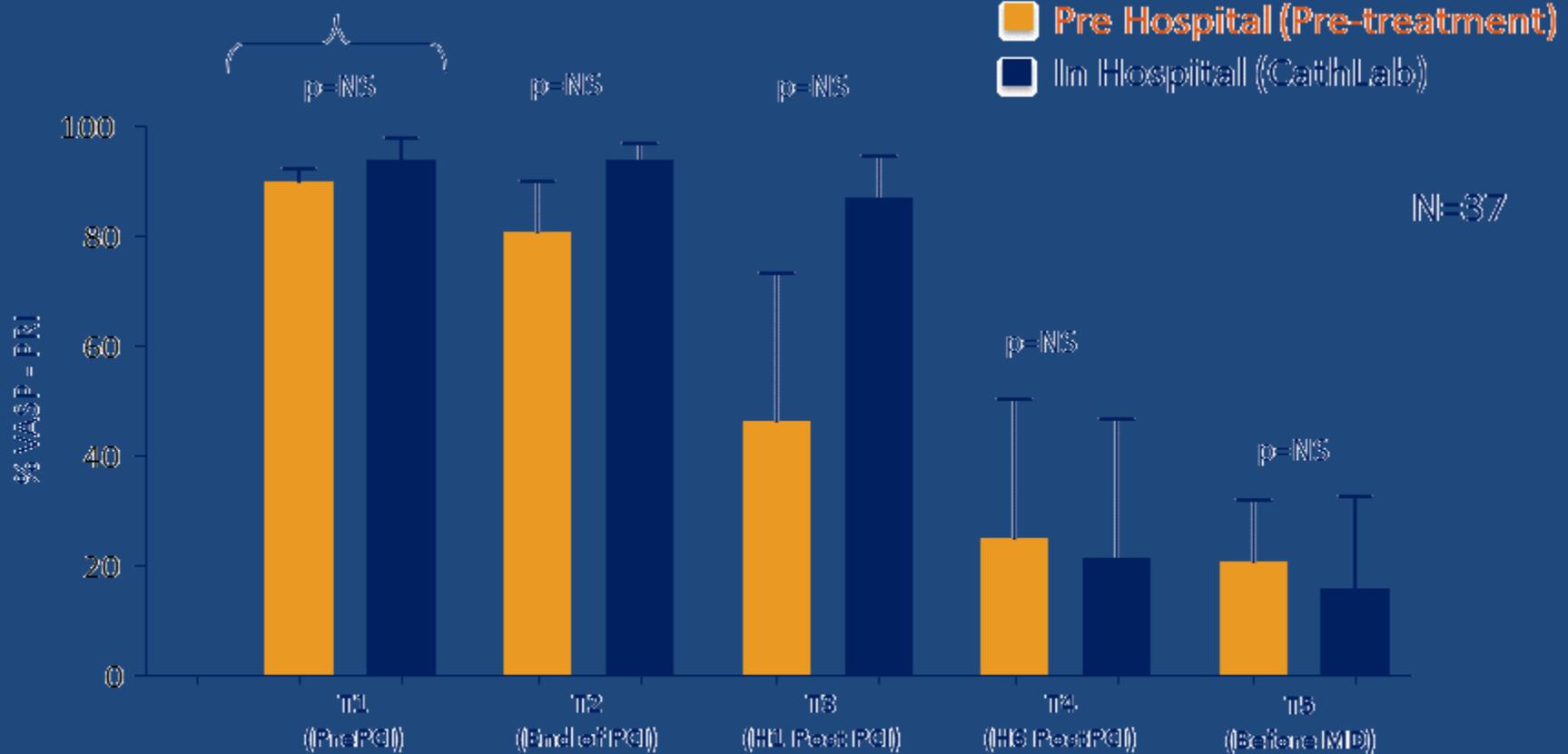


# Definite stent thrombosis up to 30 days



# Ticagrelor pre-hospital vs. in-hospital for VASP-PRI

Primary objective



↑  
LD1

↑↑  
LD2

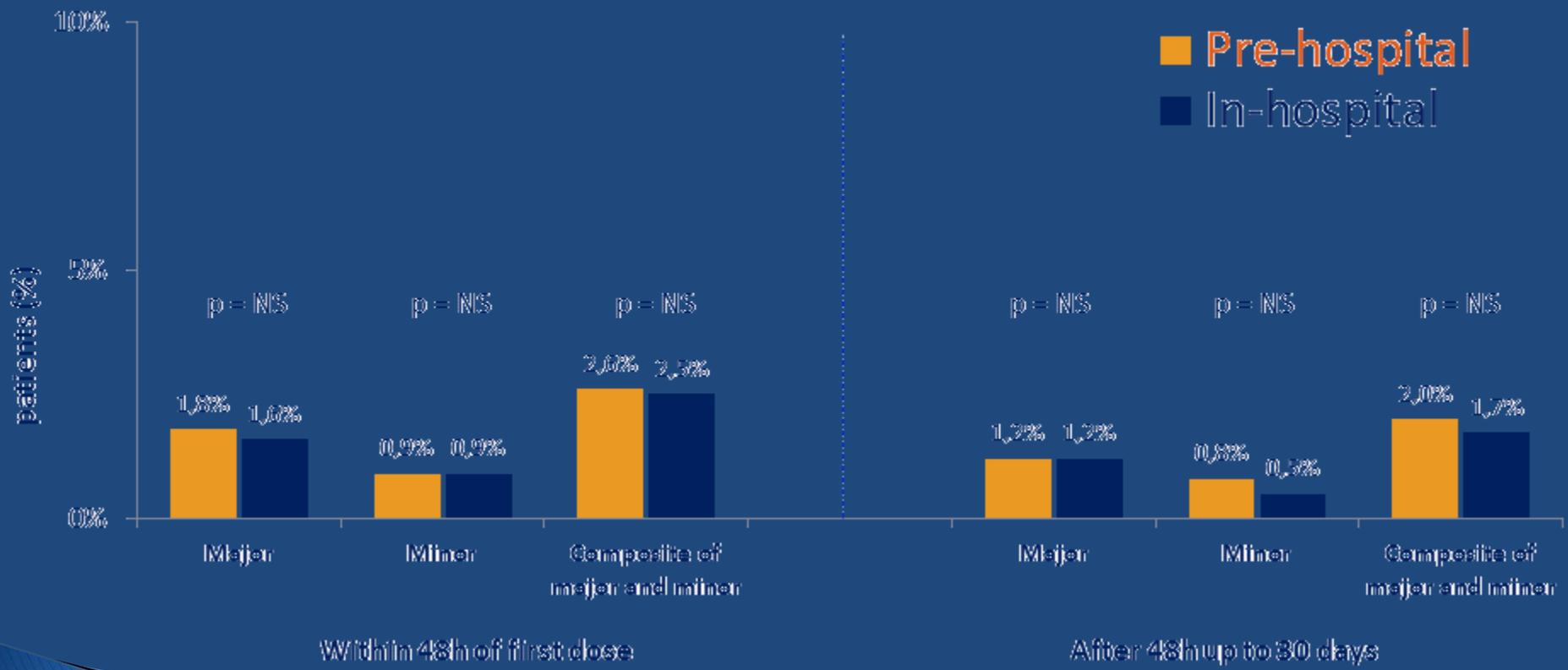
Pre-PCI TIMI Flow  
and ST resolution

↑

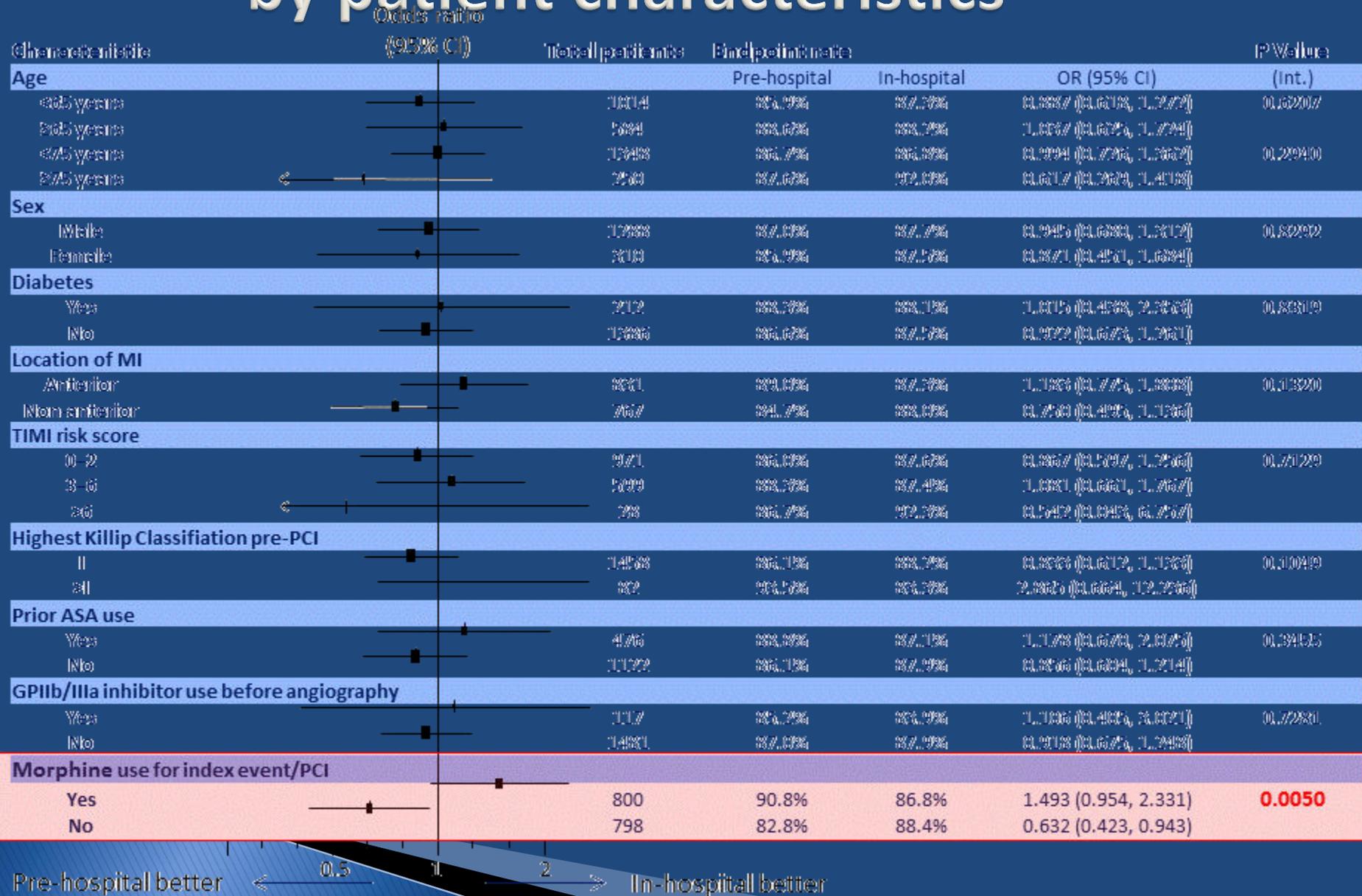
Post-PCI  
ST resolution

# Non-CABG-related bleeding events

(PLATO definitions) – Safety population

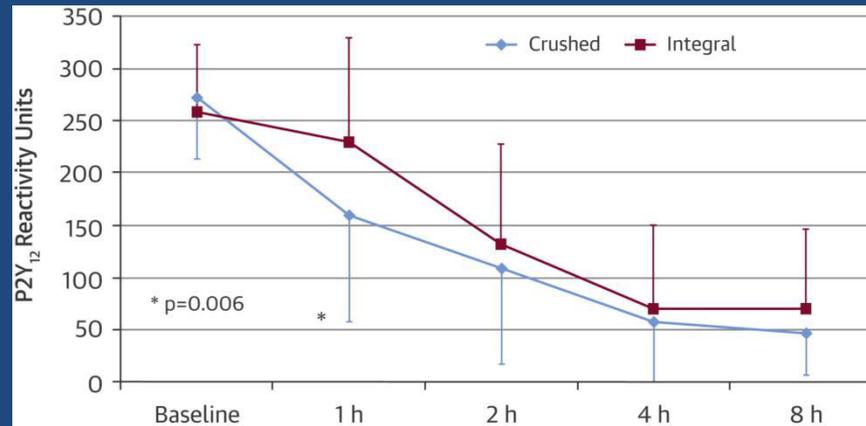


# Absence of ST-segment resolution by patient characteristics



## From: Ticagrelor Crushed Tablets Administration in STEMI Patients: The MOJITO Study

J Am Coll Cardiol. 2015;65(5):511-512. doi:10.1016/j.jacc.2014.08.056

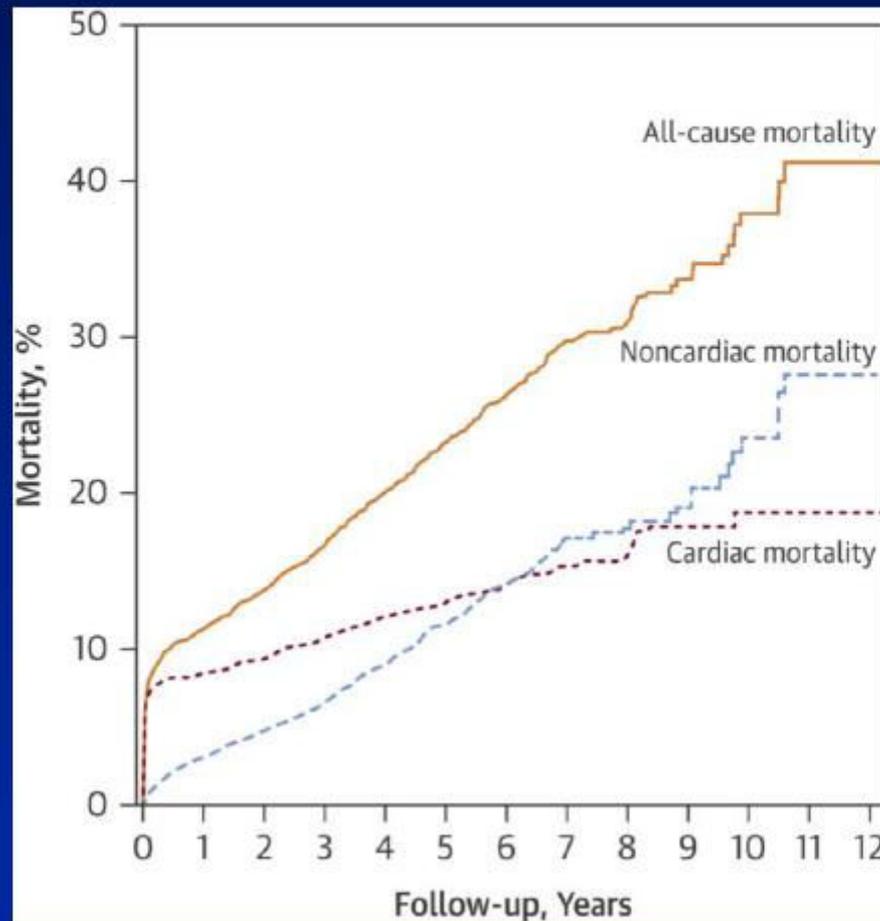


### Figure Legend:

#### Platelet Inhibition Over Time

Platelet reactivity was assessed at baseline, 1, 2, 4, and 8 h after a 180-mg ticagrelor loading dose in patients treated by crushed tablets (diamonds) or integral tablets (squares). Data are expressed as mean  $\pm$  SD.

# Short- and Long-Term Cause of Death in Patients Treated With Primary PCI for STEMI



Pedersen F et al. *J Am Coll Cardiol.* 2014;64(20):2101-2108. doi:10.1016/j.jacc.2014.08.037.

# ПОСЛАНИЯ

- ▶ Оптималната антиагрегантна терапия е в основата на съвременното лечение на ОКС
- ▶ Бързината на блокиране на тромбоцитите е особено важна при наличие на коронарна тромбоза(STEMI)
- ▶ Основната полза от пълното и бързо блокиране на тромбоцитната агрегация е намаляване на острата тромбоза на стента