Pretreatment with P2Y12 Inhibitors in ACS

Just Say YES!

Sorin J. Brener MD, FACC

Professor of Medicine

Director, Cardiac Catheterization Laboratory

New York Methodist Hospital

Chief Academic Officer - CRF

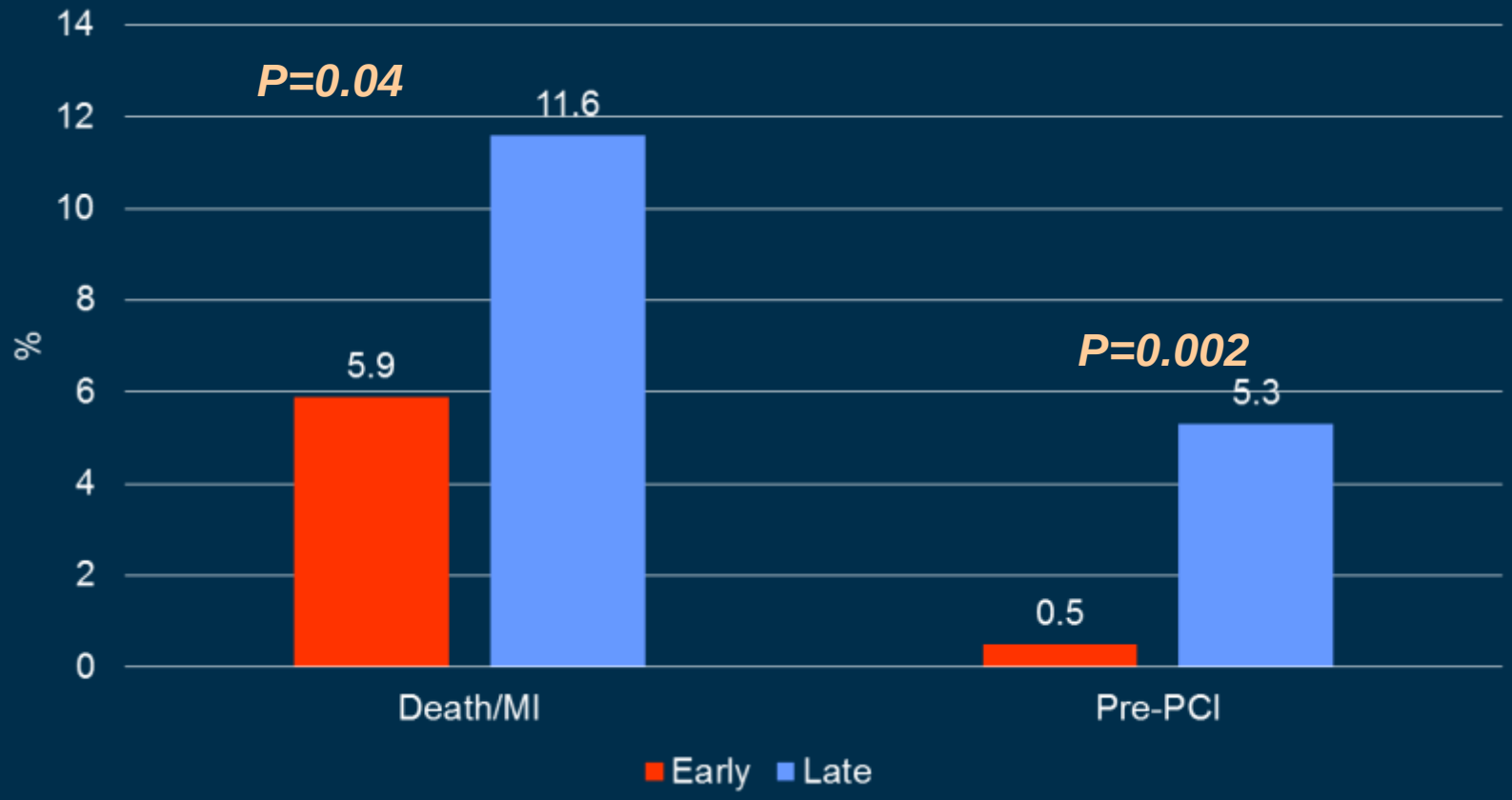
Disclosure Statement of Financial Interest

I, SORIN BRENER MD, DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.

Why Pretreat?

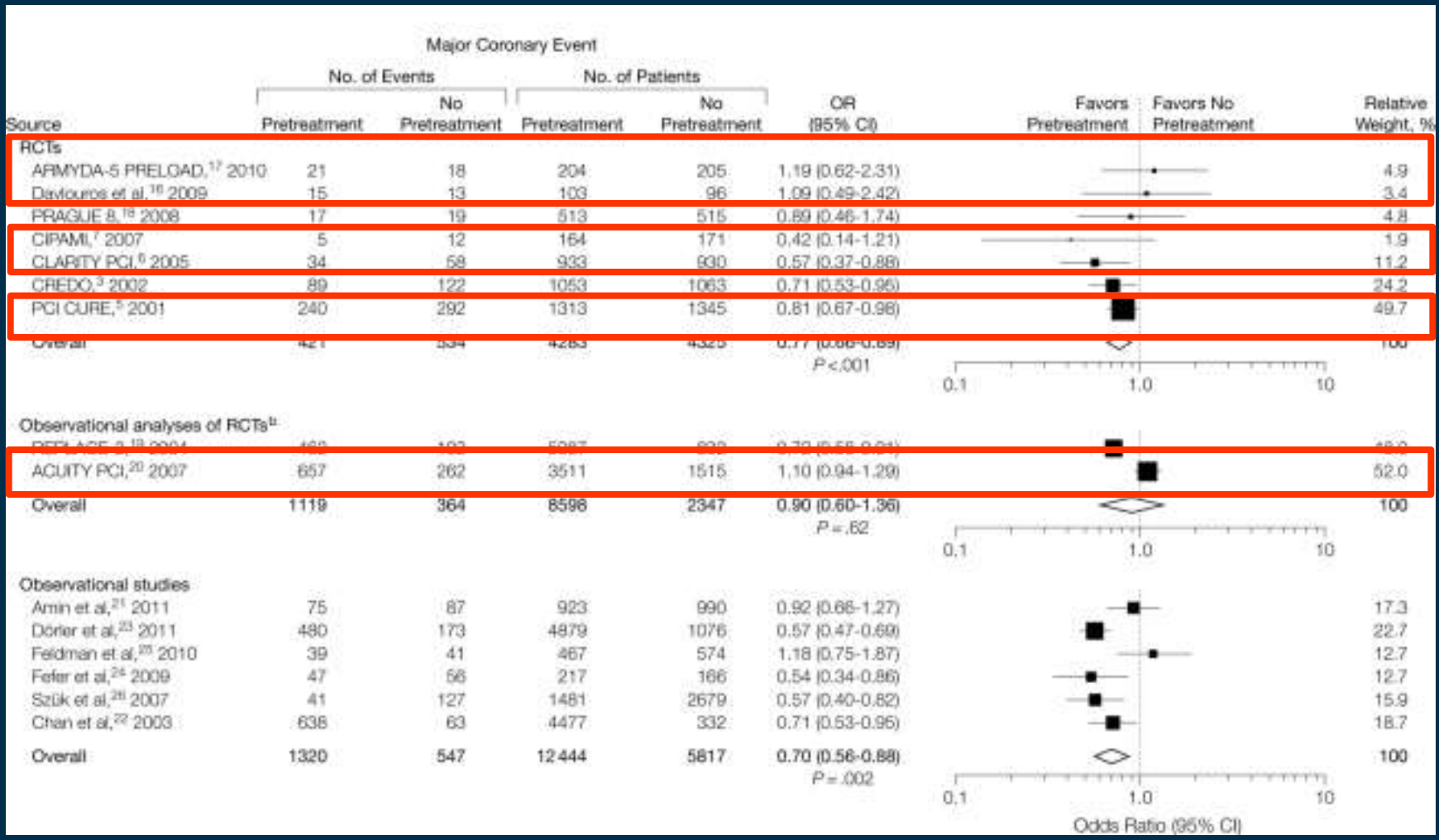
- In NSTE ACS angiography and PCI are performed ~24h from admission. Emergency CABG occurs in <1%
- A significant portion of MACE occur before PCI
- Risk of bleeding associated with pretreatment is relatively low
- It makes sense – provides antiplatelet therapy when needed after stent implantation

ISAR COOL



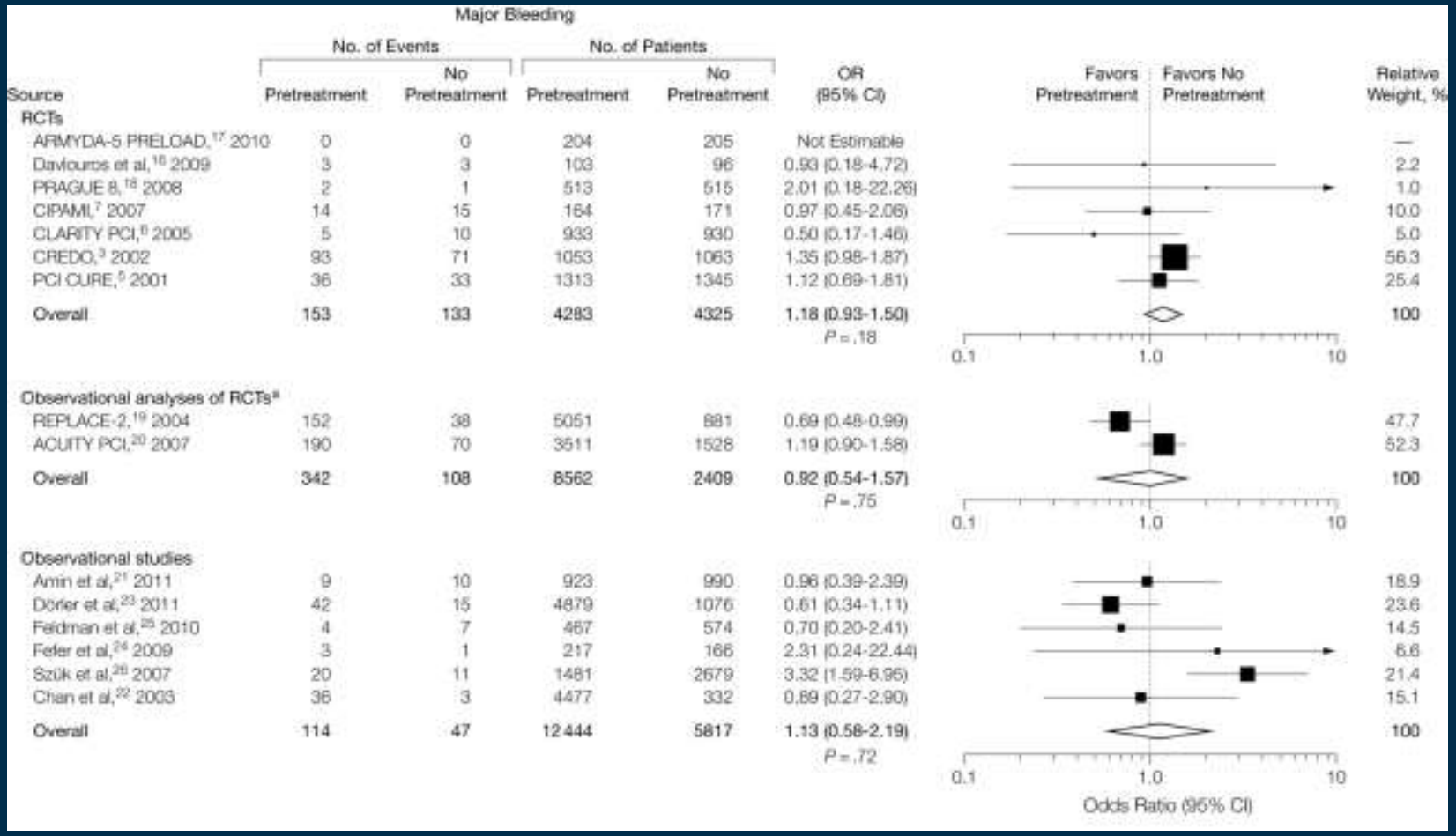
Neumann et al. JAMA 2003; 290:1593

Metaanalysis of Preatreatment



Bellemain-Appaix et al. JAMA 2012; 308:2507

Major Bleeding with Pretreatment



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PCI-CURE

Interventional Characteristics

	Placebo + ASA* (N = 1345)	Clopidogrel + ASA* (N = 1313)
Overall median days after randomization on which PCI was done	10	10
PCI during initial hospitalization	6	6
PCI after initial hospitalization	49	49
Stent use (%)	81.3	82.4
Use of open-label thienopyridine		
Before PCI (%)	24.7	26.4
Overall (%)	84.1	82.9

** In combination with standard therapy*

Mehta, SR. et al for the CURE Trial Investigators. Lancet. August 2001;21:2033-41.

PCI-CURE

Efficacy Outcomes

	Placebo + ASA N = 1345*	*Clopidogrel + ASA* N = 1313*	*RRR*	*P value*
• From PCI to 30 days				
• MI, urgent revascularization or CV death	6.4%	4.5%	30%	0.03
• From PCI to follow-up				
CV death or MI	8.0%	6.0%	25%	0.047

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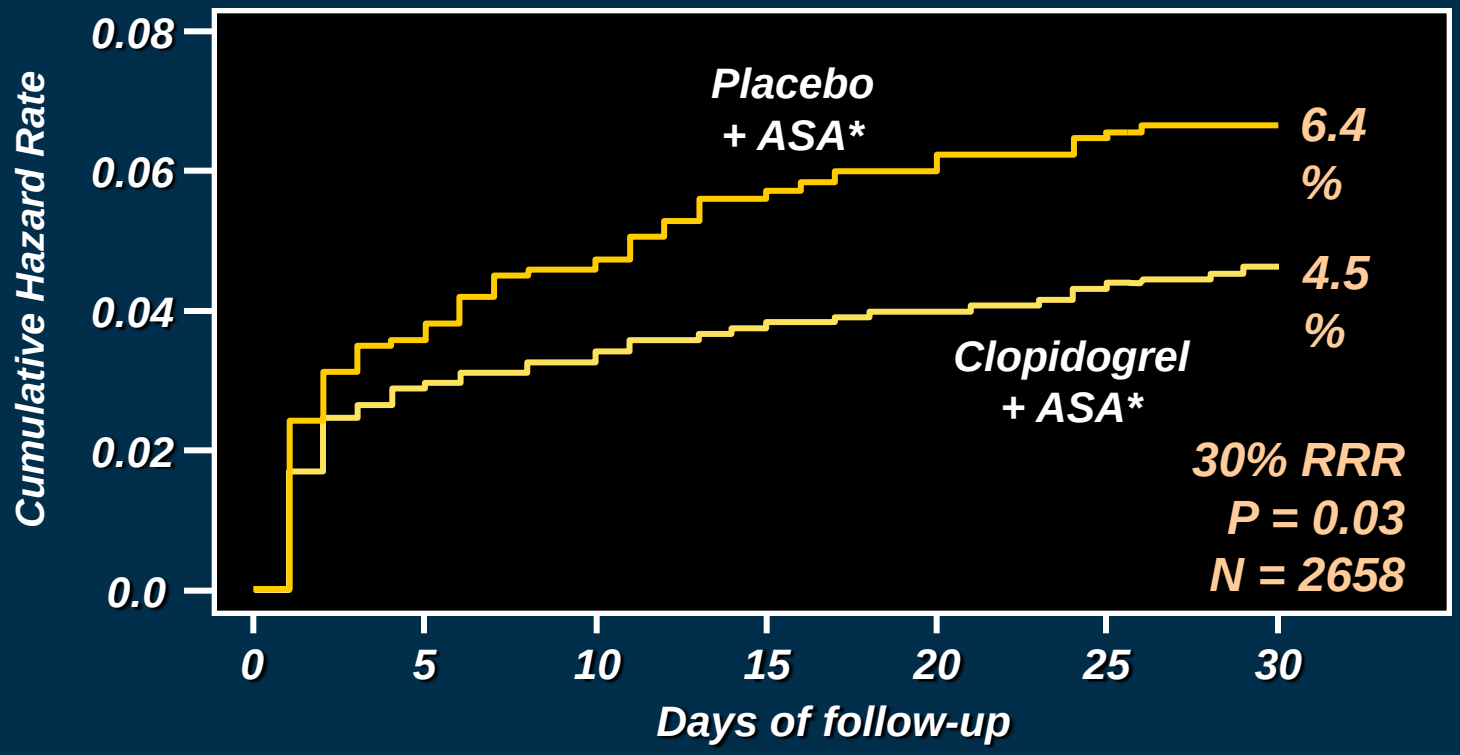
PCI-CURE

30 Day Results

Composite of cardiovascular death, MI, or urgent revascularization



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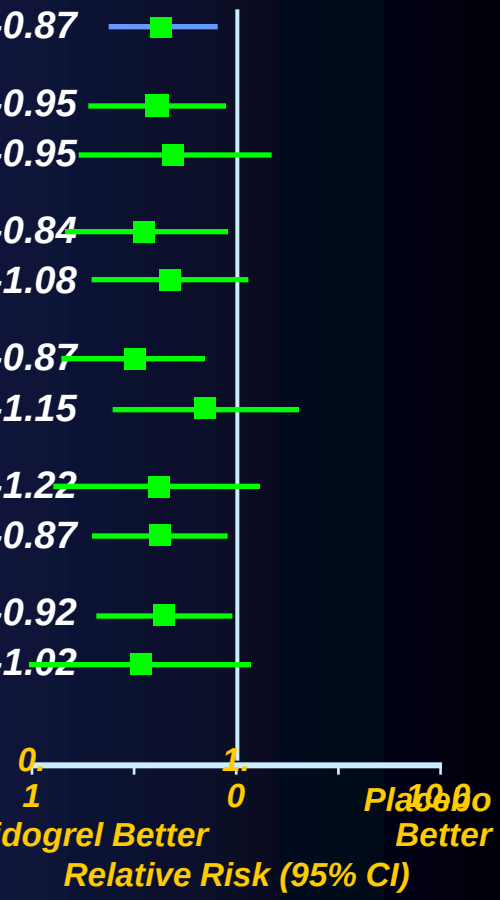
Subgroup Analysis

	Placebo + ASA*	Clopidogrel + ASA*	RR	95% CI
Overall	12.6%	8.8%	0.69	0.54-0.87
Stent	11.7%	8.7%	0.73	0.56-0.95
No stent	16.2%	9.4%	0.56	0.34-0.95
Age ≤ 65	9.8%	5.9%	0.59	0.41-0.84
Age > 65	16.9%	13.4%	0.79	0.57-1.08
Male	11.9%	7.9%	0.65	0.48-0.87
Female	14.1%	11.0%	0.77	0.52-1.15
Diabetes	16.5%	12.9%	0.77	0.48-1.22
No diabetes	11.7%	7.9%	0.66	0.50-0.87
During initial hosp	12.0%	8.3%	0.68	0.50-0.92
After initial hosp	13.8%	9.8%	0.70	0.48-1.02



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Bleeding Outcomes

	Placebo + ASA*	Clopidogrel + ASA*
From PCI to 30 days		
Major	1.4%	1.6% †
Life threatening	0.7%	0.7% †
Minor	0.7%	1.0% †
From PCI to end of follow-up		
Major	2.5%	2.7% †
Life threatening	1.3%	1.2% †
Minor	2.1%	3.5% ‡

** In combination with standard therapy*

† P = NS, ‡ P = 0.03

Mehta, SR. et al for the CURE Trial Investigators. Lancet. August 2001;21:2033-41.

Professional Guidelines Pretreatment in NSTE ACS

- ESC – Class Ib for 600 mg clopidogrel
  - If ticagrelor or Prasugrel not available
- ACC – Class Ib for 300-600 mg clopidogrel as soon as possible after admission

Final thoughts

- Available data suggest a possible role for pre-treatment with P2Y12 inhibitors to prevent ischemic events
- Most of these data pertain to clopidogrel – unknown whether newer agents with faster onset of action would behave differently
- In the absence of a significant increase in major bleeding, pre-treatment seems a logical strategy