



**Intravenous antiplatelet
therapy in high-risk ACS**

**GP IIb/IIIa
inhibitors
are still
the best option**

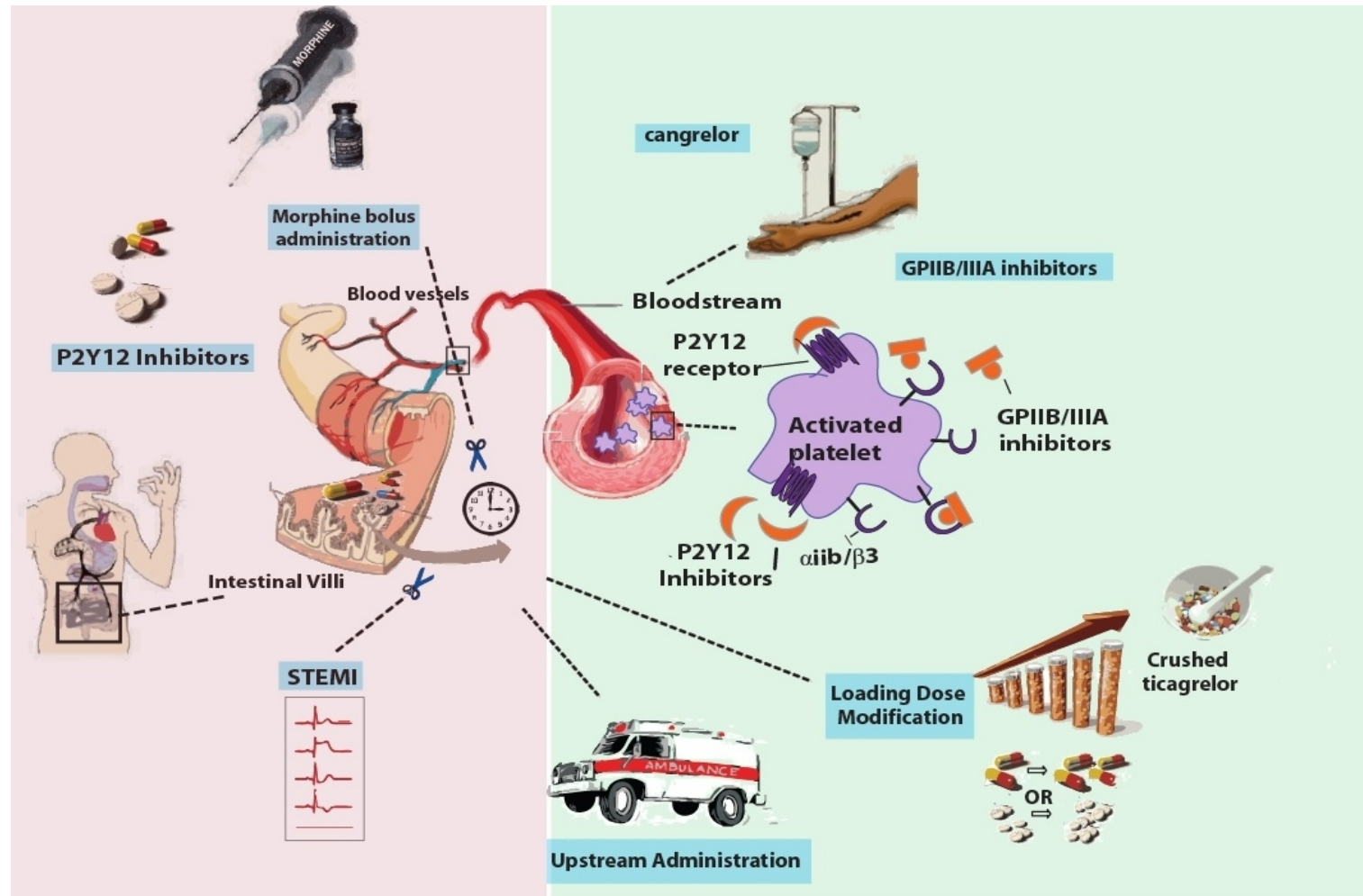
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Case Summary

- 80 yrs old male
- Anterior STEMI
- LAD prox total occlusion
- Cardiogenic shock
- Endotracheal intubation
- Time symptom onset to angiography about 130-140 minutes

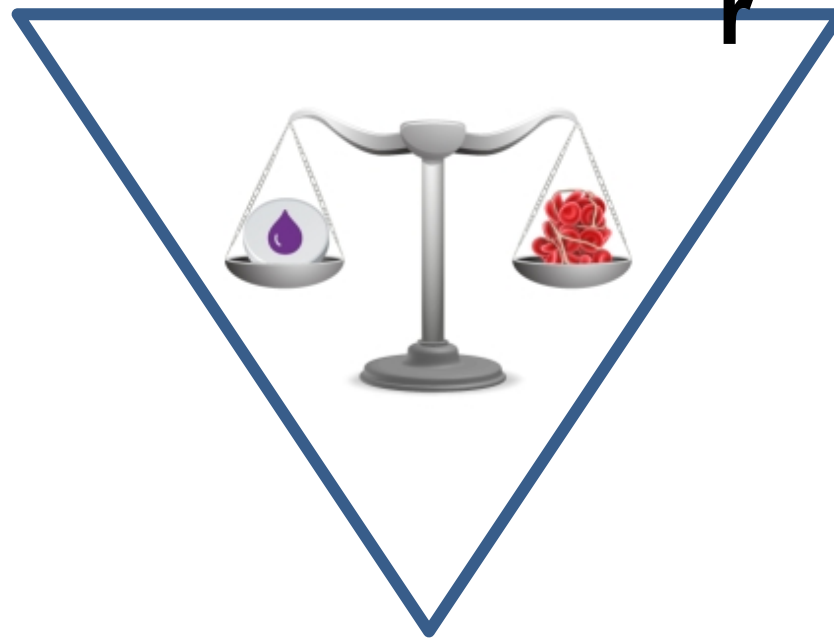
Intravenous antiplatelet agents in primary PCI Myth or must?



How to deal in clinical practice?

GPI's

Cangrelo



**Prasugrel - Ticagrelor –
(Clopidogrel)**

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Impact of GPI in contemporary PCI

The National Cardiovascular Data Registry CathPCI Registry

TABLE 2 Unadjusted and Risk-Adjusted In-Hospital Outcomes

Outcome	GPI (n = 326,283)	No GPI (n = 644,582)	Unadjusted OR	95% CI	p Value	Adjusted OR	95% CI	p Value
Mortality	7,817 (2.4)	8,886 (1.4)	1.76	1.70-1.81	<0.001	0.83	0.79-0.88	<0.001
Major bleeding within 72 h	12,069 (3.7)	9,457 (1.5)	2.58	2.51-2.65	<0.001	1.56	1.51-1.61	<0.001

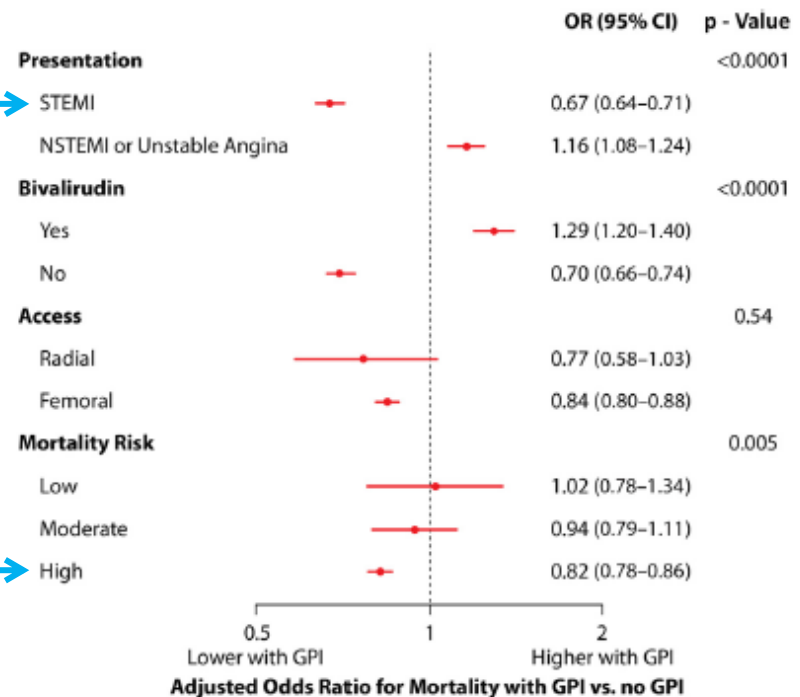
Values are n (%) unless otherwise indicated.

CI = confidence interval; GPI = glycoprotein IIb/IIIa inhibitor; OR = odds ratio.

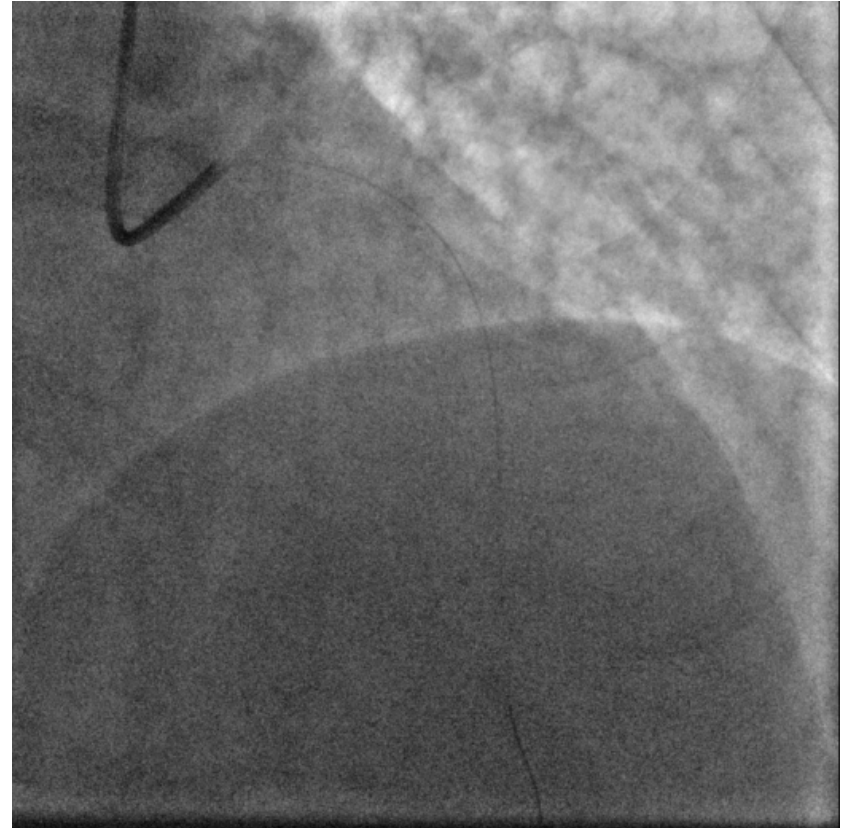
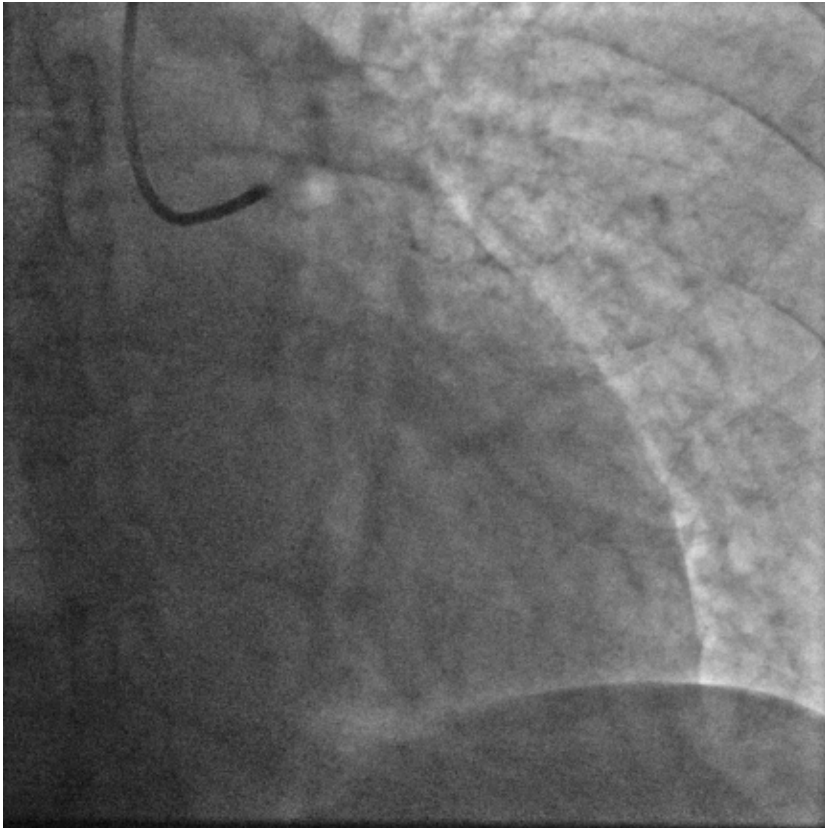
**970.865 patients
included**

**326.283 receiving GPI
(33.6%)**

FIGURE 1 Subgroup Analysis: In-Hospital Mortality



Anterior STEMI plus severe thrombus burden



Tirofiban versus Prasugrel in STEMI

The FABULOS PRO Trial

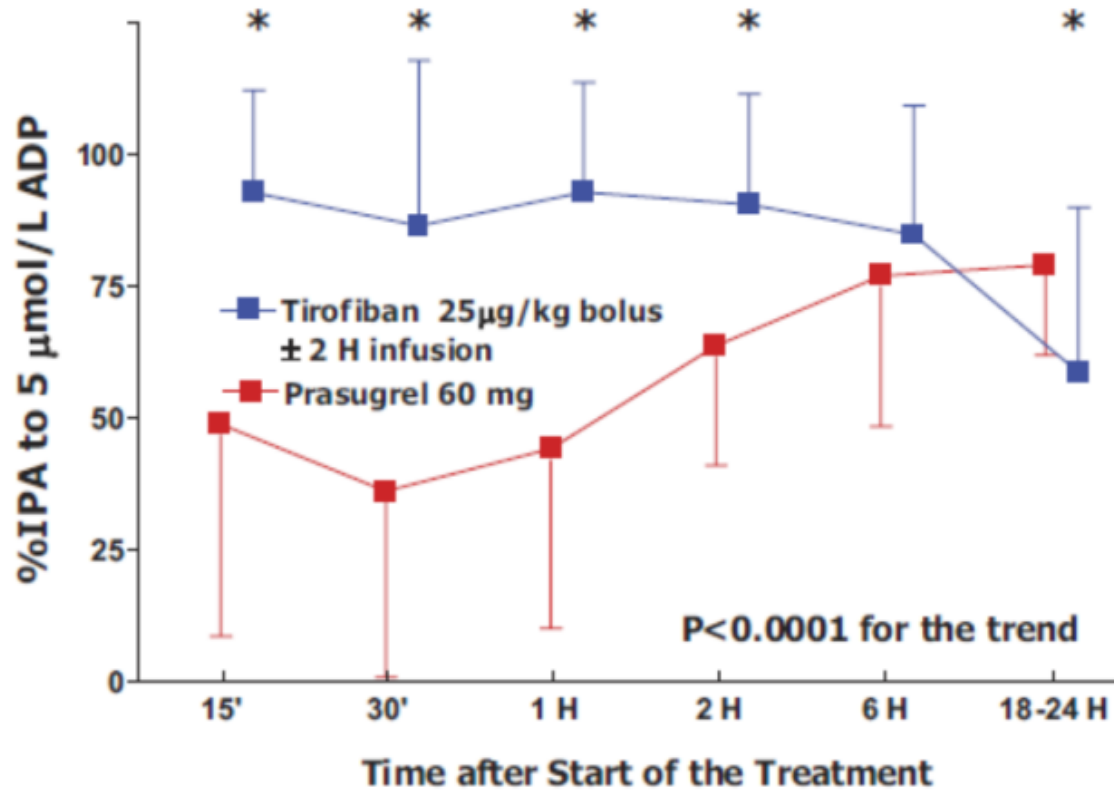
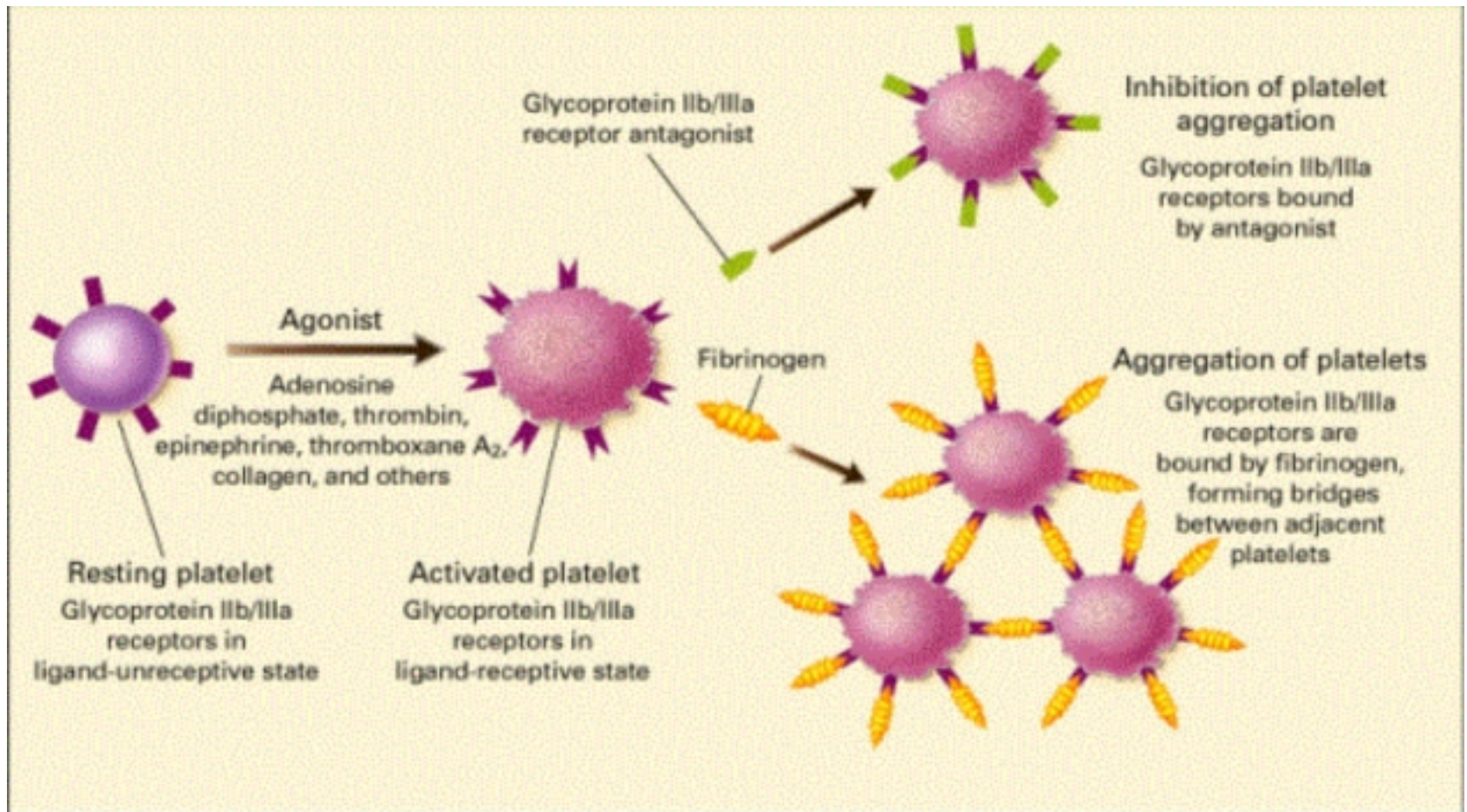


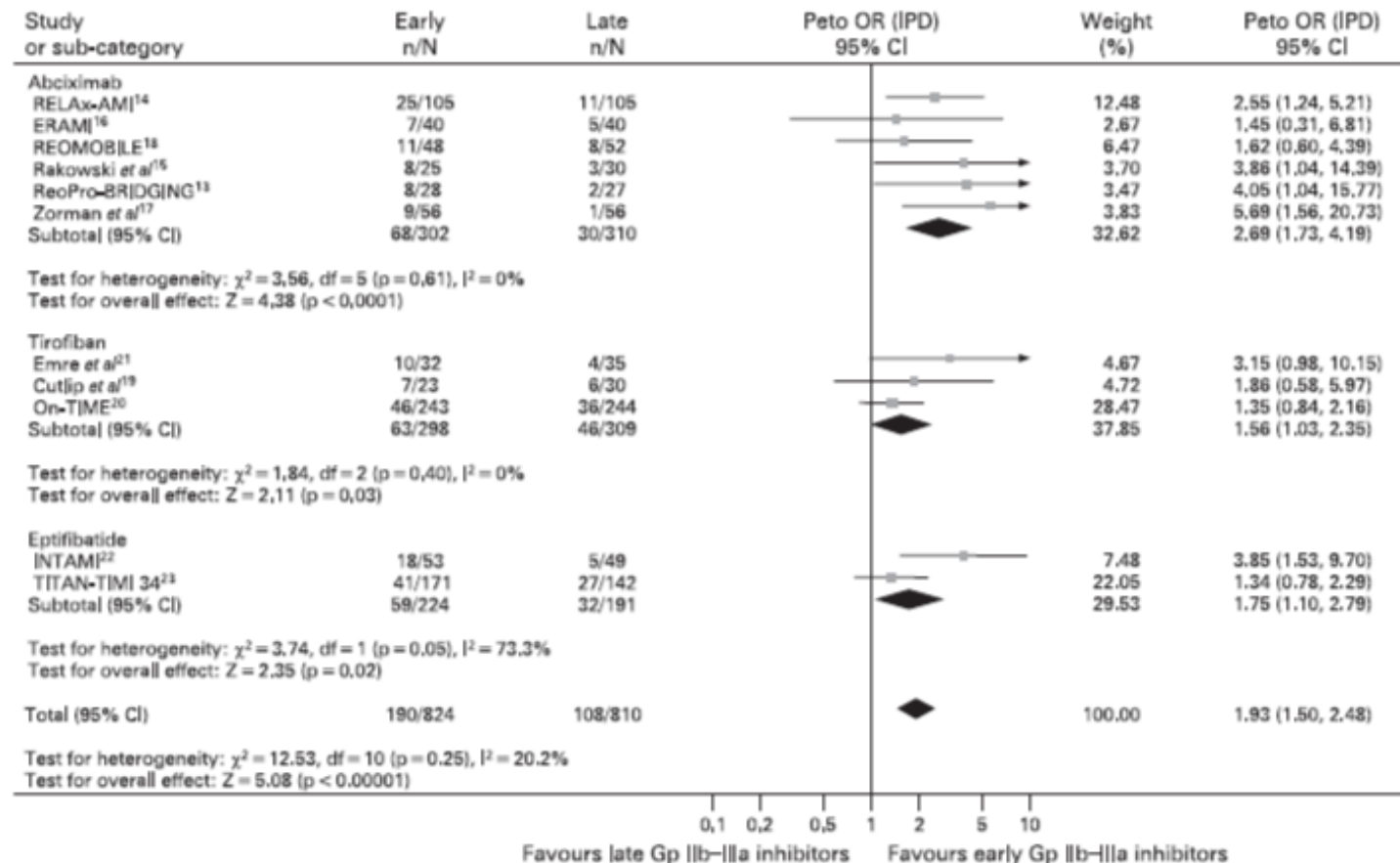
Figure 3. Kinetics of Platelet Inhibition Over Time After 5 $\mu\text{mol/l}$ ADP

GP IIb/IIIa inhibitors



GPI's and pre-PCI TIMI flow in STEMI

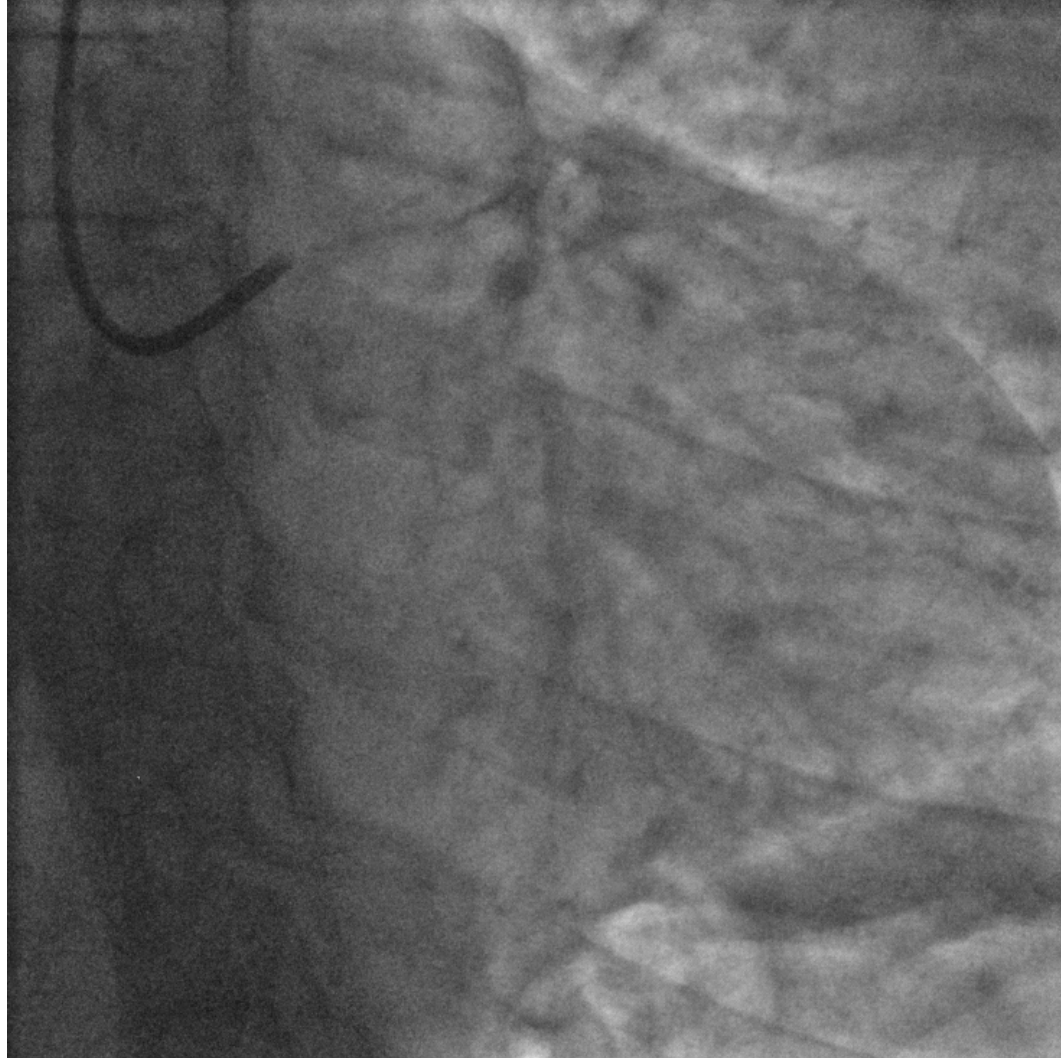
TIMI-3 flow pre-PCI 23% vs. 13.3% (p<0.001)



Case Summary

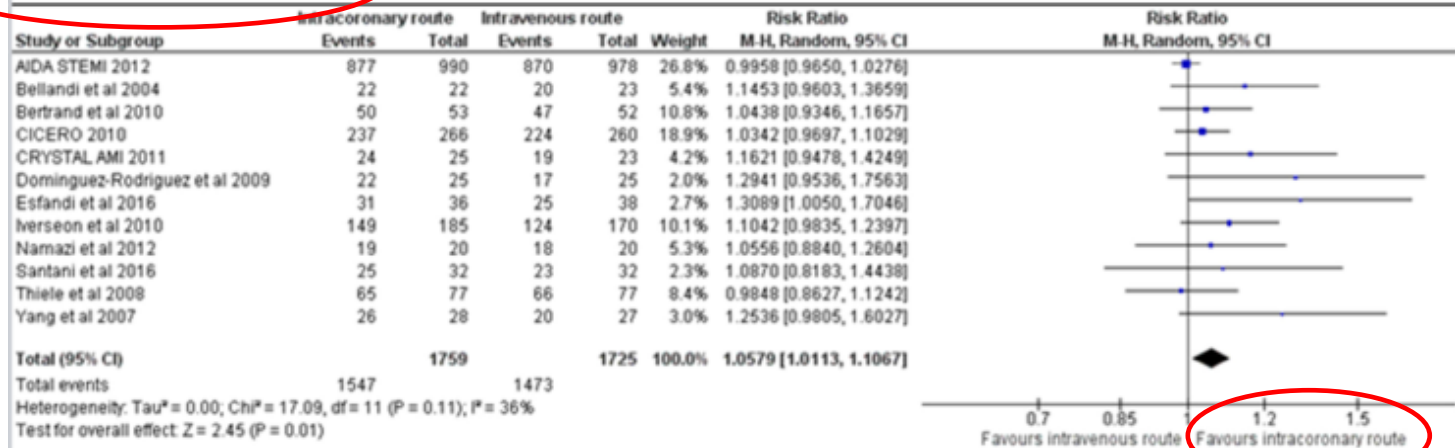
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68 yrs old patient, anterior STEMI, Killip IV

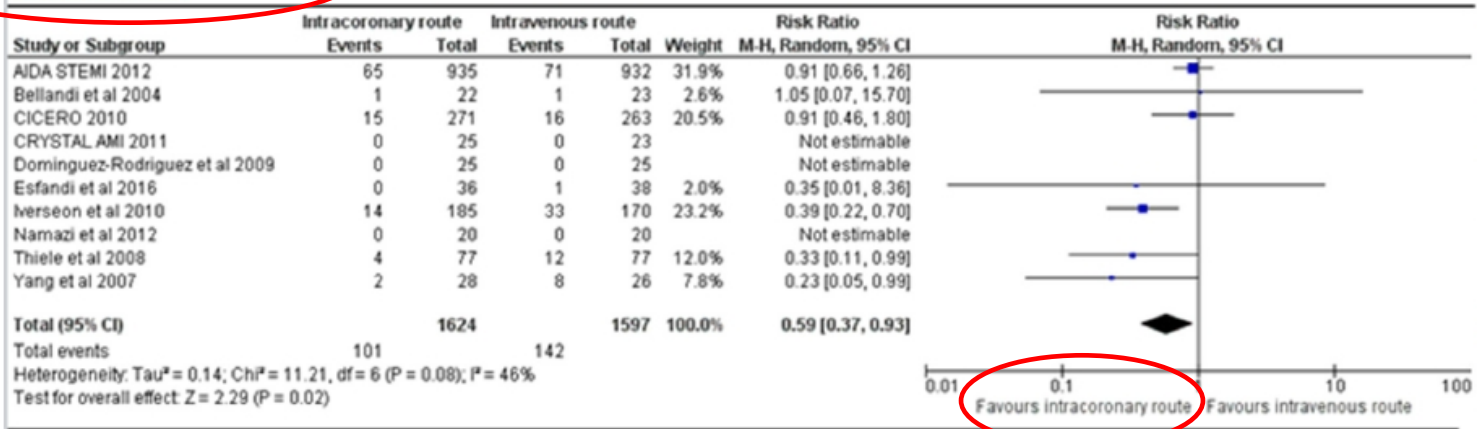


Intracoronary vs intravenous GPI

Achievement of TIMI-III flow



Short term MACE

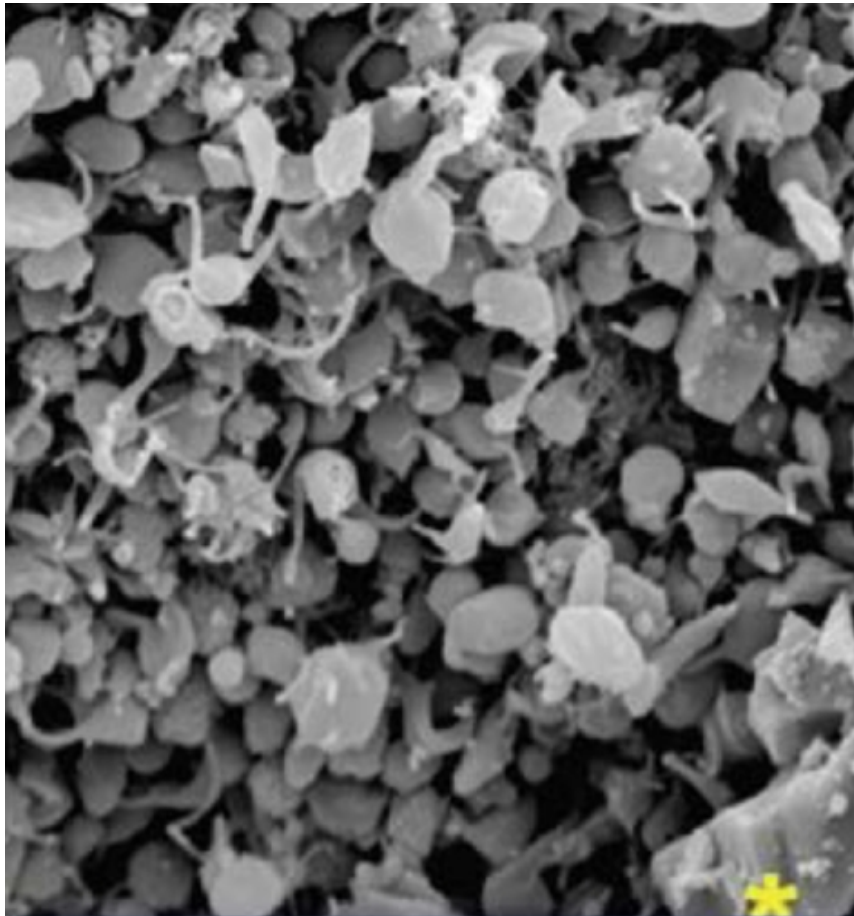


Case Summary

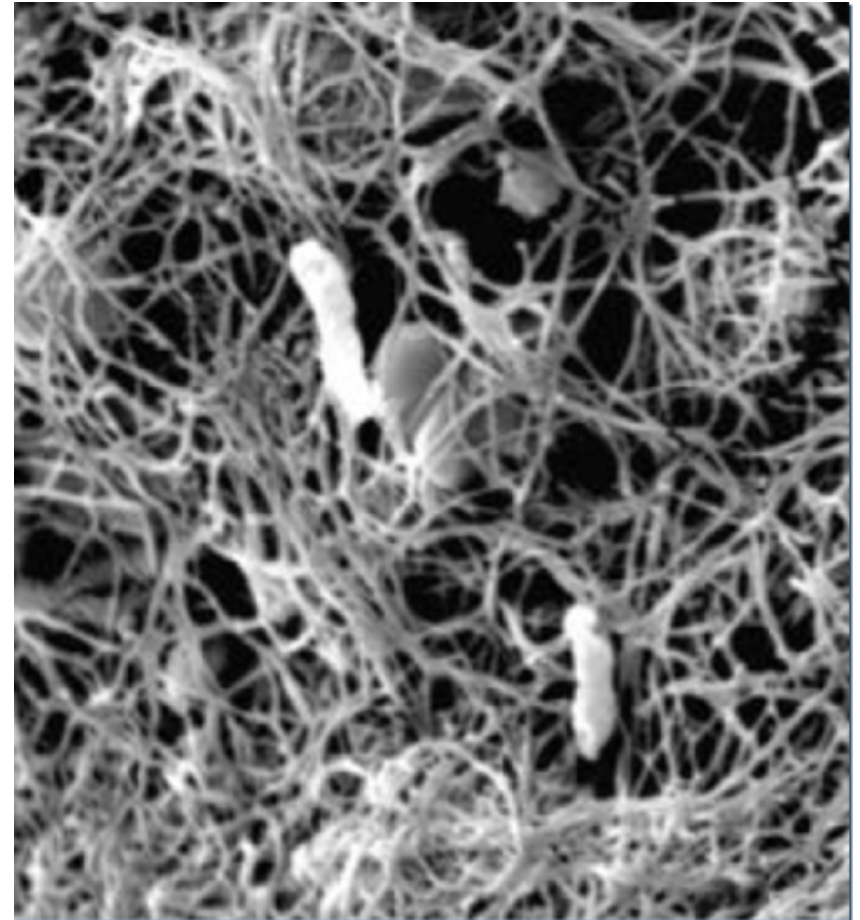
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Impact of time on thrombus composition

< 3 hours platelet rich



> 6 hours fibrin rich

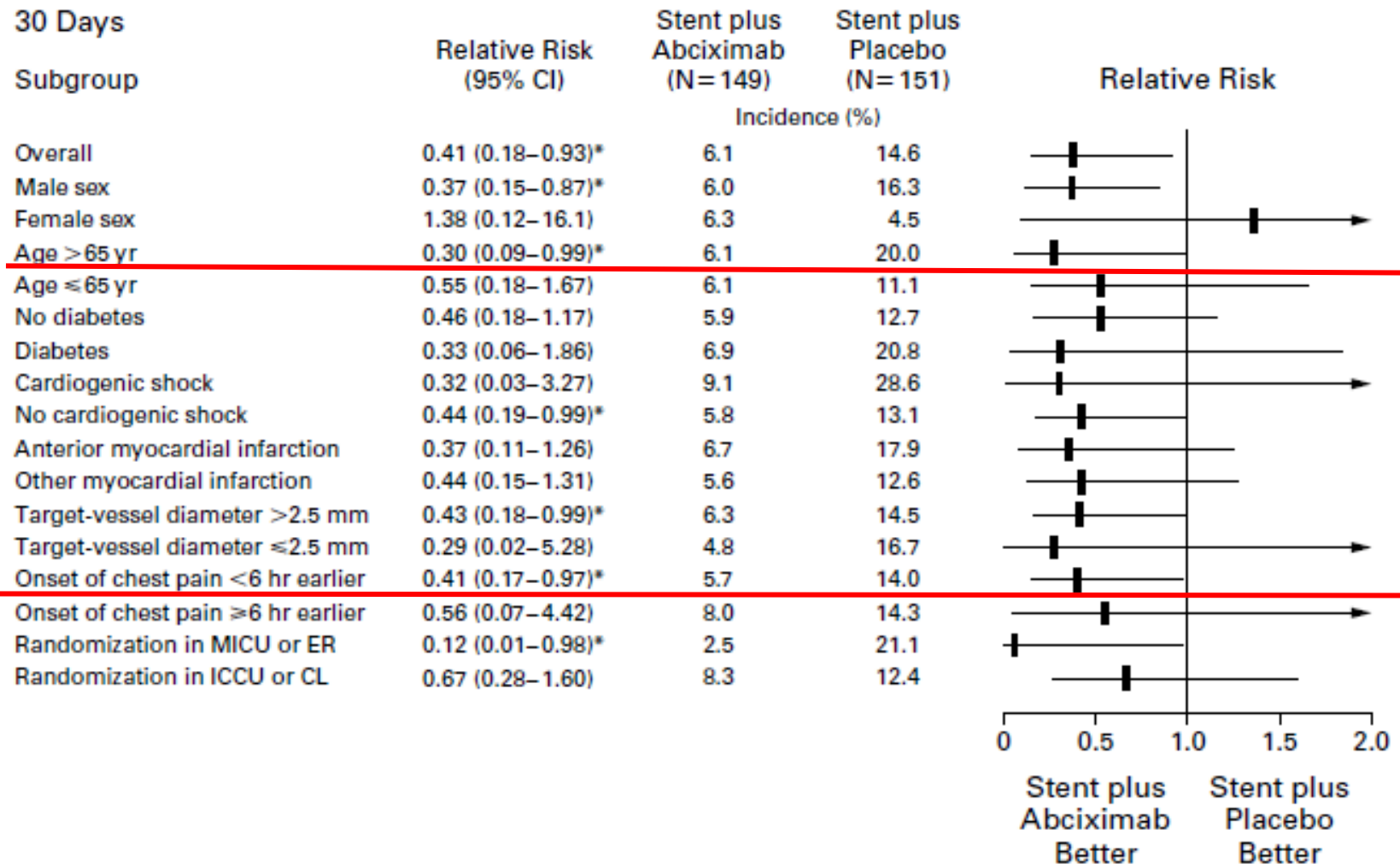


* Cholesterol crystal

Silvain G., et al. JACC 2011;57:1359-67

GPIIb/IIIa in acute myocardial infarction

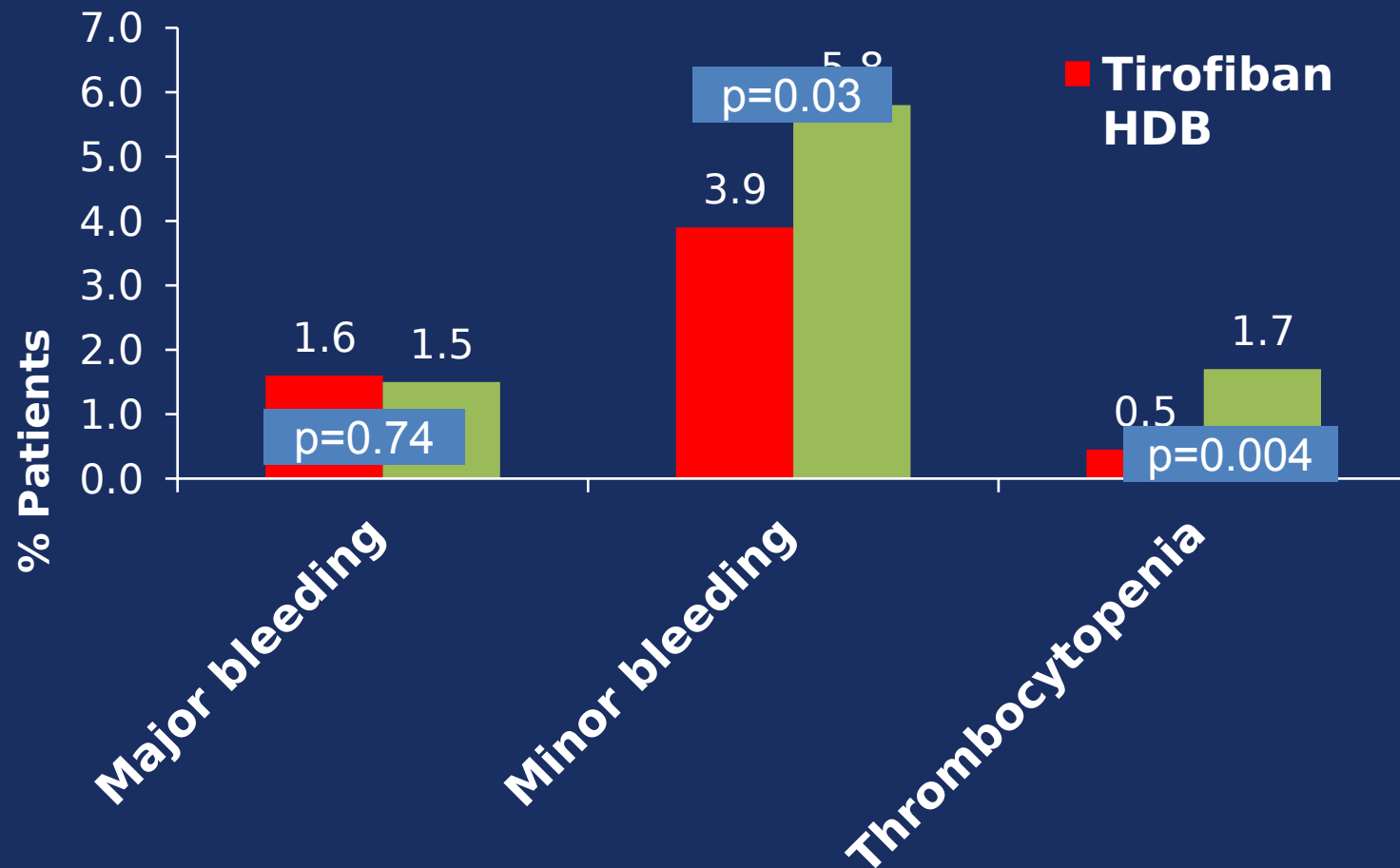
THE ADMIRAL TRIAL



Case Summary

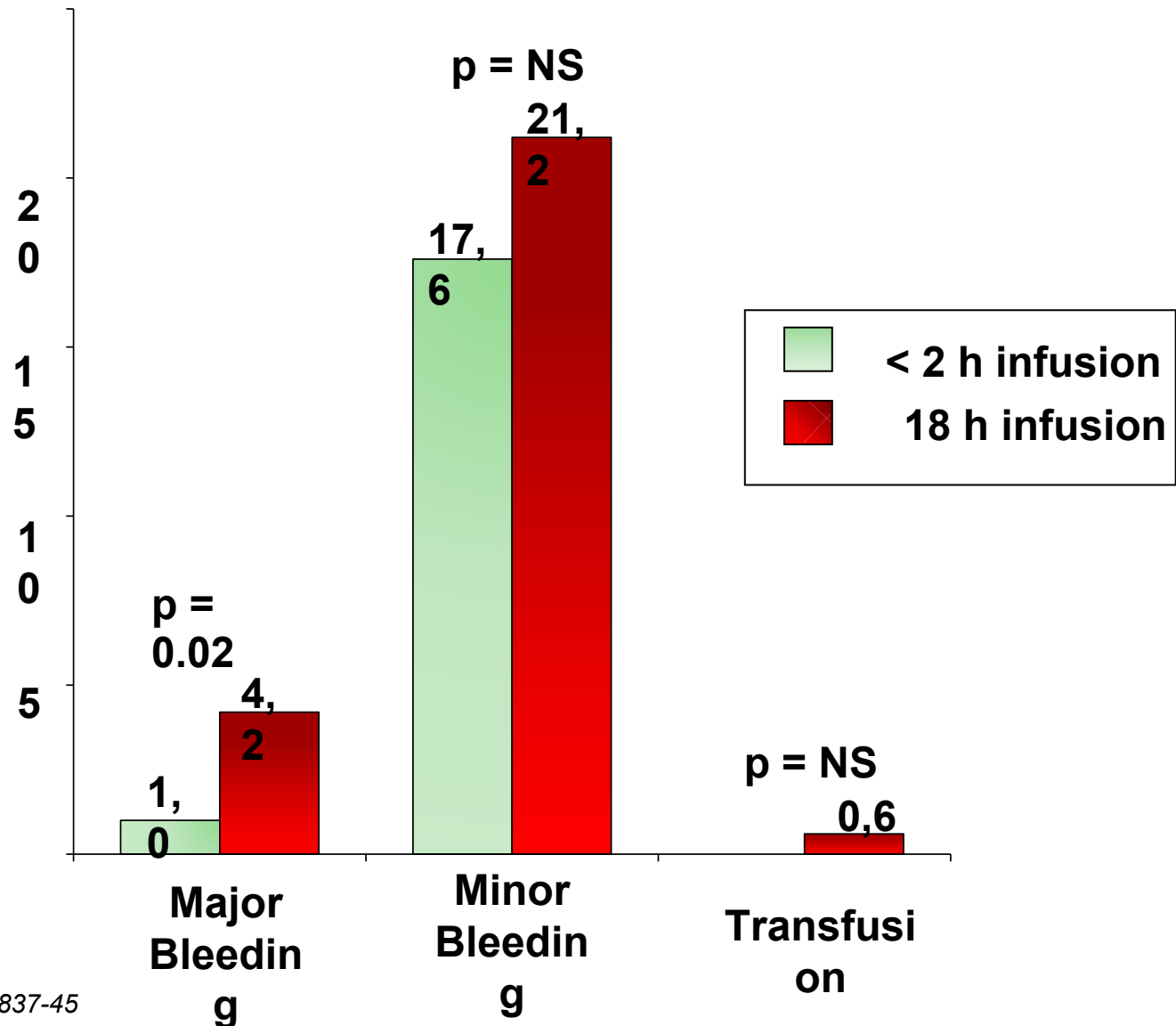
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Meta-Analysis: Safety of HDB Tirofiban vs. Abciximab in ACS

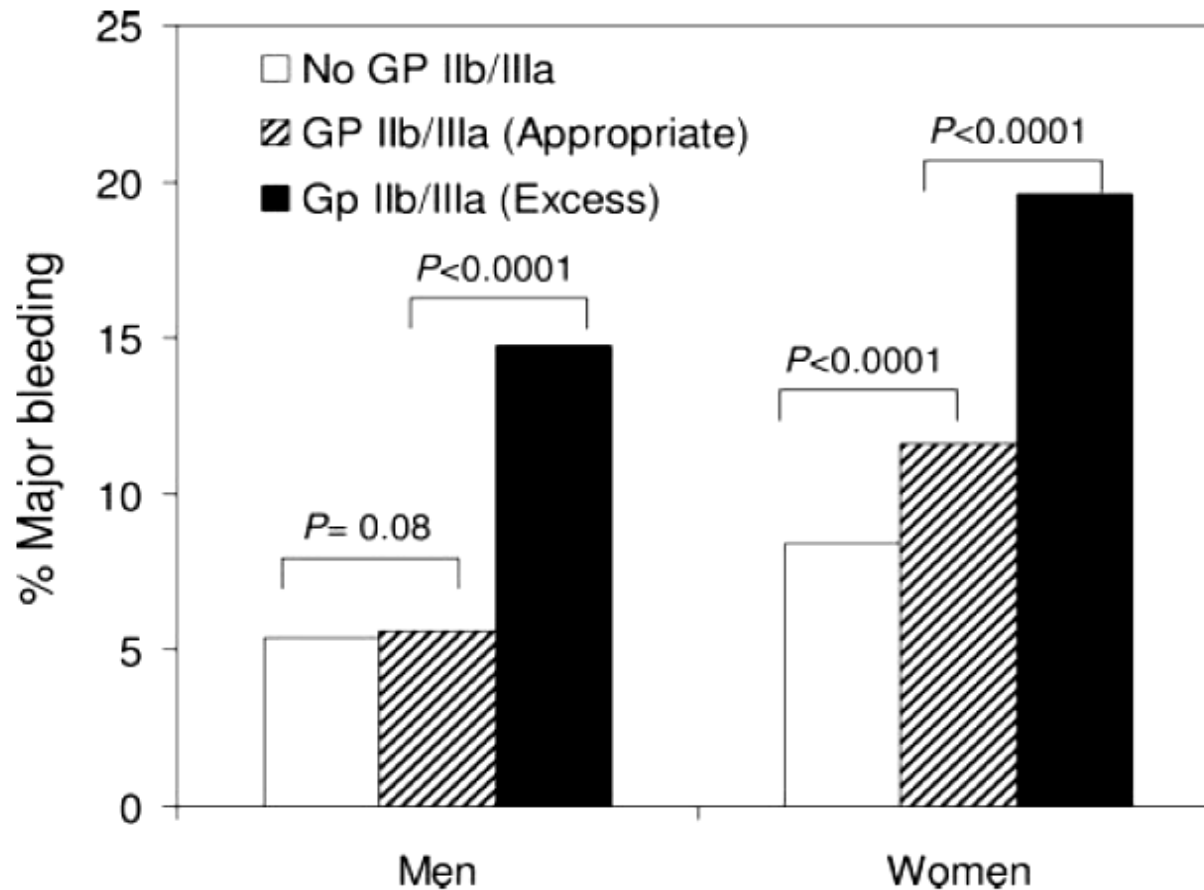


BRIEF PCI

GPI infusion duration and bleeding complications



Increased bleeding risk and GPI overdosing



GPI's are still the best solution

YES



**In STEMI at high ischemic risk
and/or**

high thrombotic burden

**In all primary PCI for bailout use in
case of procedural complications**

