Syndrome coronarien à haut risque
Comment faire mieux ?

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Conflits d'intérêt

- Subvention de recherche et honoraires
  - E Lilly; Pfizer; Astra Zeneca; Servier; Ipsen; Abott
  - The Medecine Company
- Consultant

Le traitement anti-thrombotique influence le risque de l'intervention et la survie

- Antiagrégants plaquettaires
  - Aspirine
  - Anti P2Y12
- Antithrombines
  - Indirectes (HNF, HBPM)
  - Directe : bivalirudine

ISAR-REACT 2

2022 patients avec un SCA avec ou sans élévation de troponine

Prétraitement avec 600mg de clopidogrel > 2 h avant angioplastie

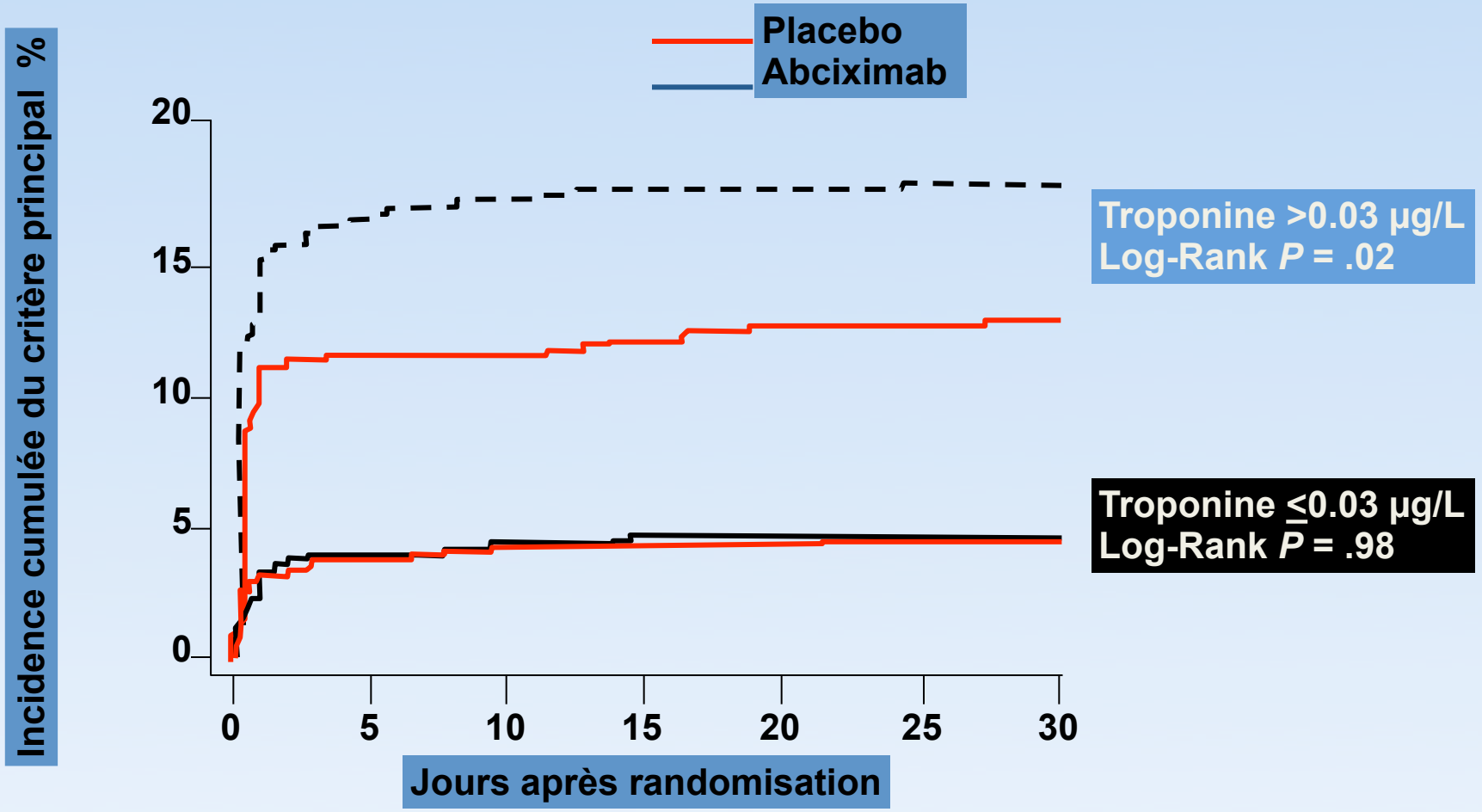
HNF + Abciximab IV
n=1012

HNF + Placebo
n=1010

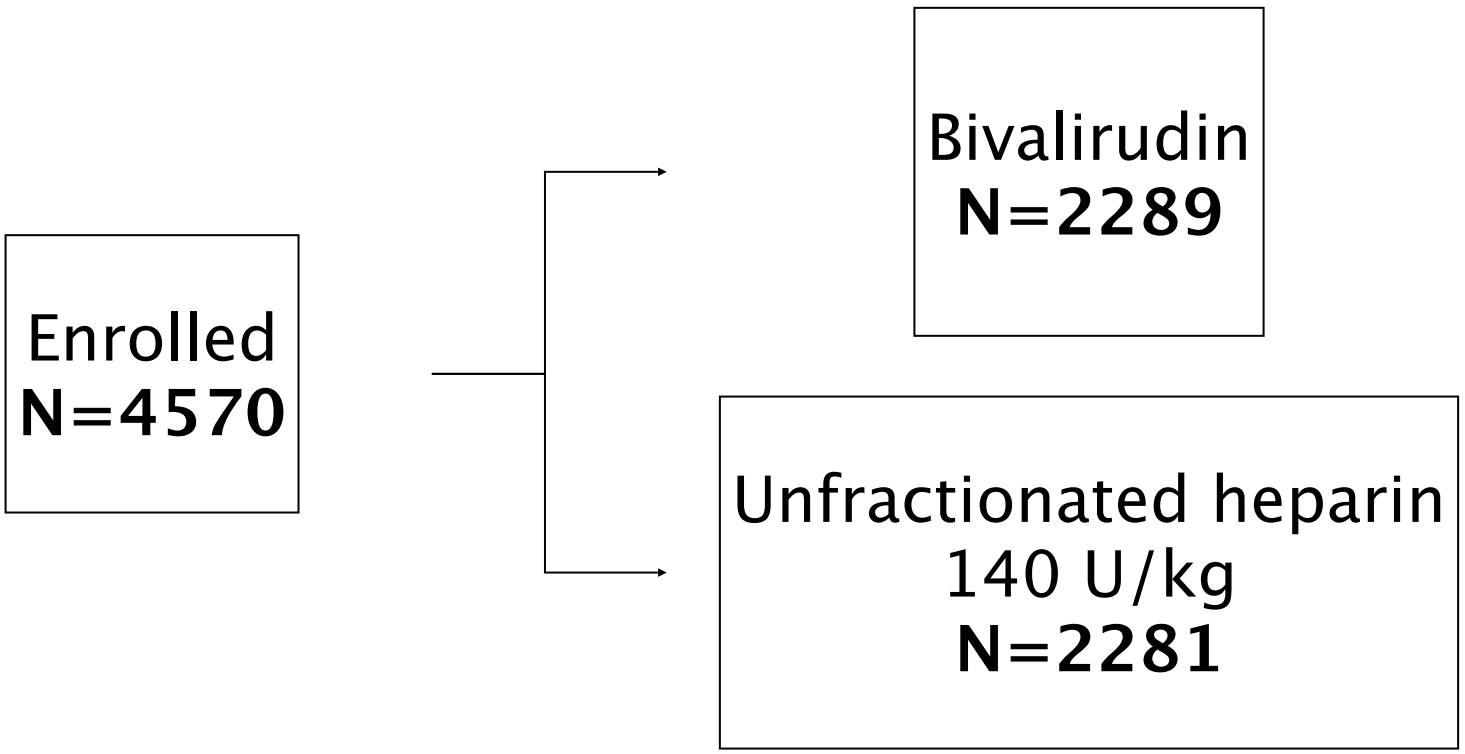
- Critère principal : mort, infarctus, ou revascularisation urgente dans les 30 jours suivants
- Critère secondaire : saignements intra-hospitaliers

Kastrati A JAMA 2006;295

ISAR REACT 2: résultats en fonction de l'élévation initiale de la troponine



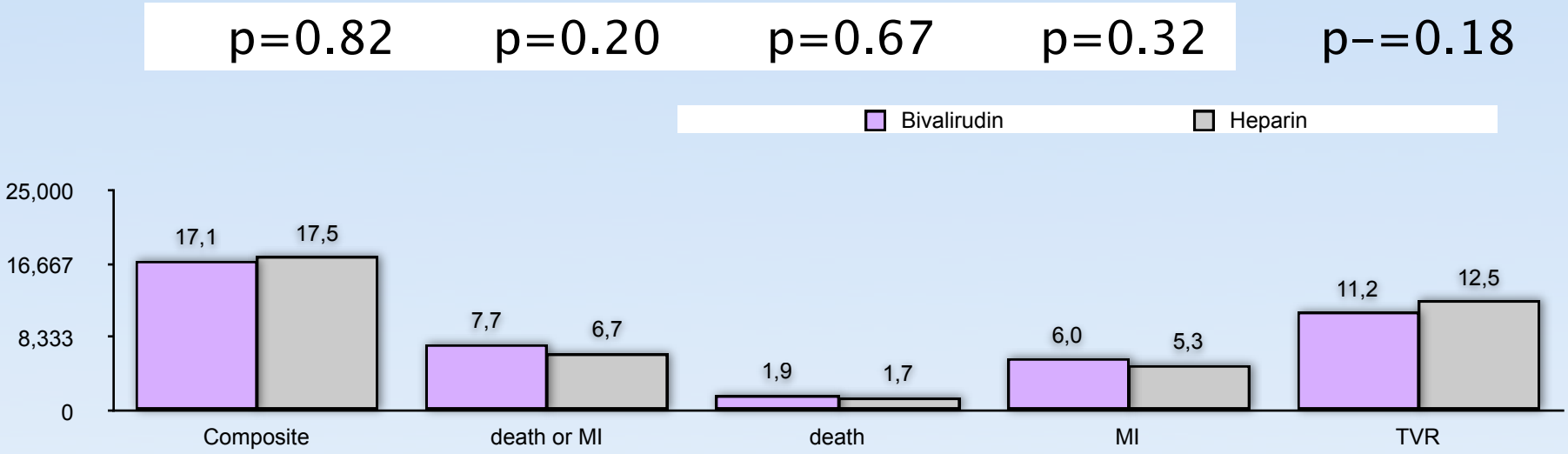
ISAR-REACT 3, 1 year outcome



Patients with stable and unstable angina (normal troponin or CKMB) pretreated with clopidogrel 600 mg at least 2 hours before PCI

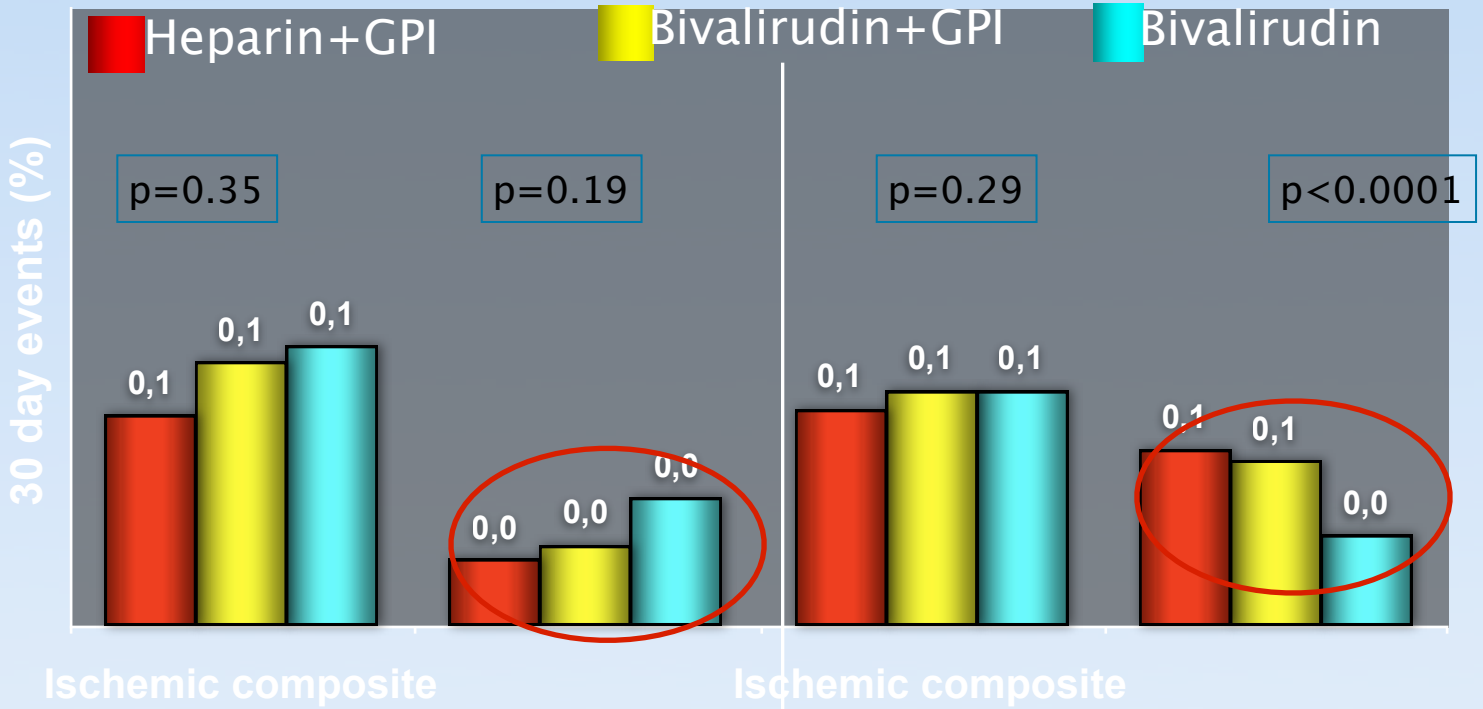
ISAR-REACT 3, 1 year outcome

Event rate at 1 year (%)



Schultz et al. Eur Heart J 2010;31:582-7

ACUITY Trial: Radial PCI Substudy



Hamon Eurointervention 2009;5:115

Safety and effectiveness of bivalirudin in routine care of patients undergoing percutaneous coronary intervention

JA Rassen, MA Mittleman, RJ Glynn, A Brookhart, S Schneeweiss

Dept of Pharmacoepidemiology and Pharmacoeconomics, Brigham & Women's Hospital; Depts of Epidemiology and Biostatistics, Harvard School of Public Health; Beth Israel Deaconess

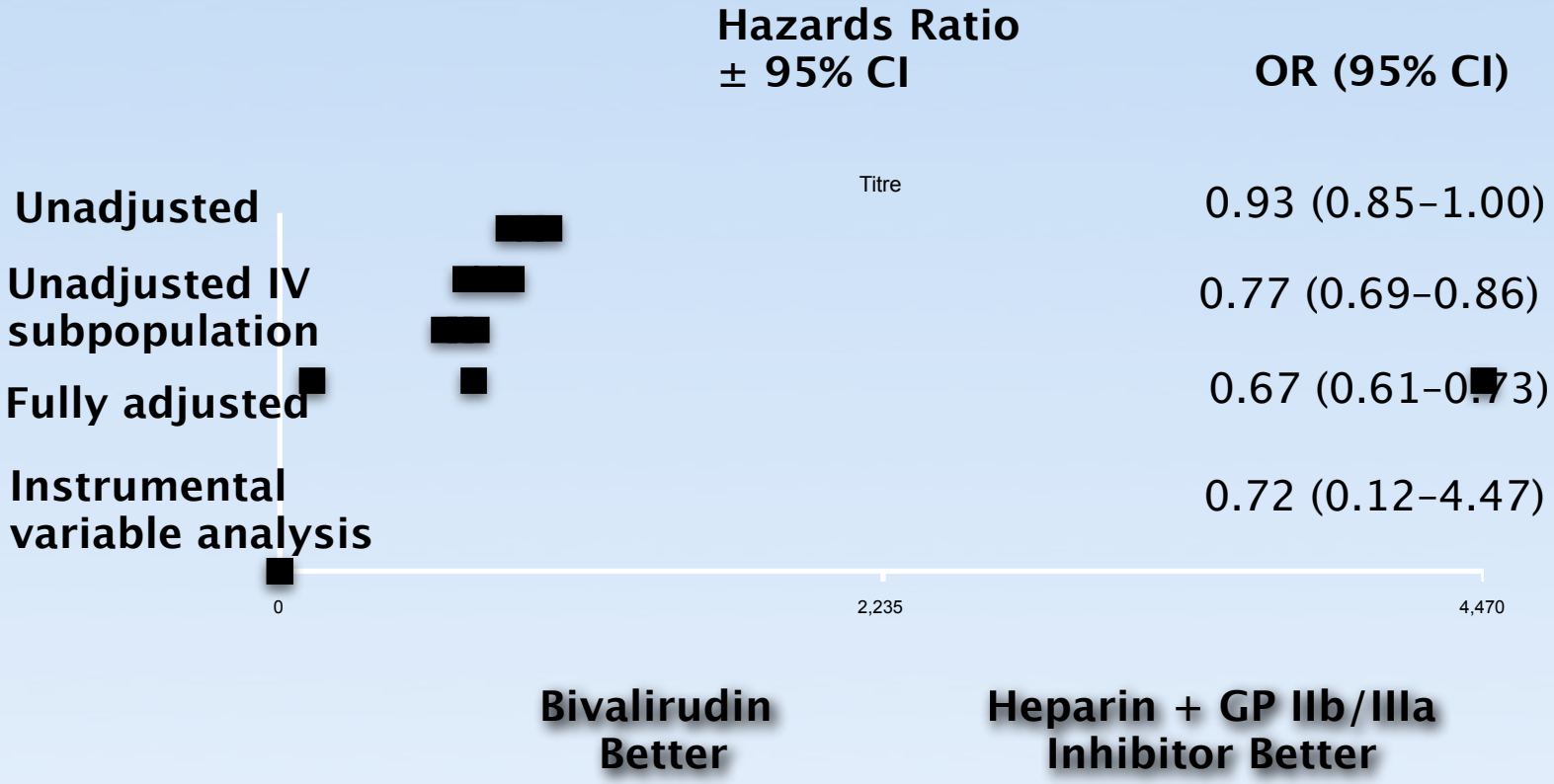
Eur Heart J, Nov 25, 2009

Methodology:

- A total of **127,185 PCI procedures** were identified from the database between June 2003 through December 2006
- Patient groups were defined as having received either bivalirudin plus provisional GPIIb/IIIa or the comparator, heparin plus GPIIb/IIIa
- Primary outcome: blood transfusion (whole blood, RBC, FFP, platelets, cryoprecipitate)
- Secondary outcomes: in hospital mortality and repeat PCI within the same hospital admission

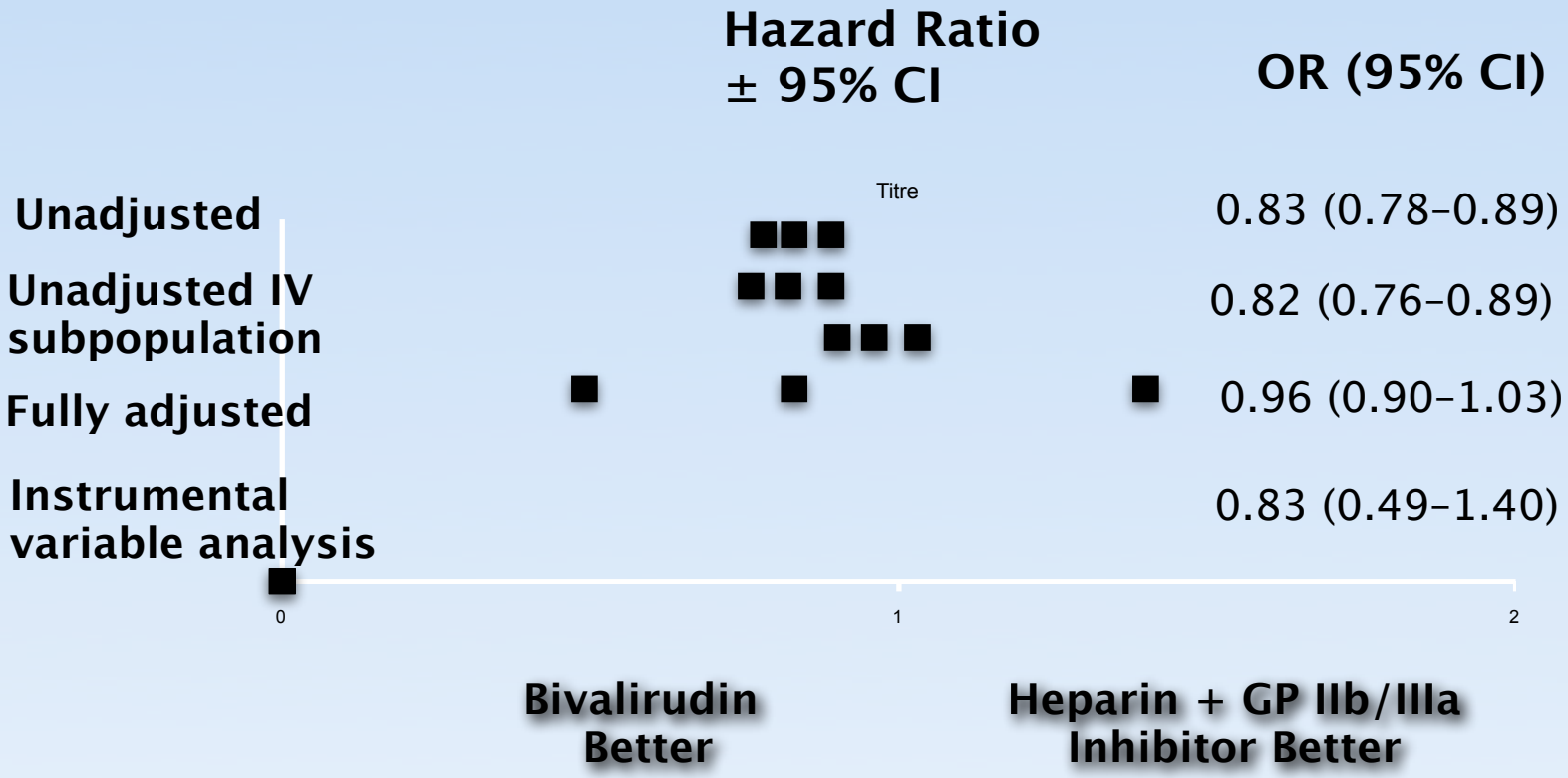
Rassen JA et al Eur Heart J 2009 On line ahead of print Nov 25 doi:10.1093/eurheartj/ehp437

Results: Transfusion*



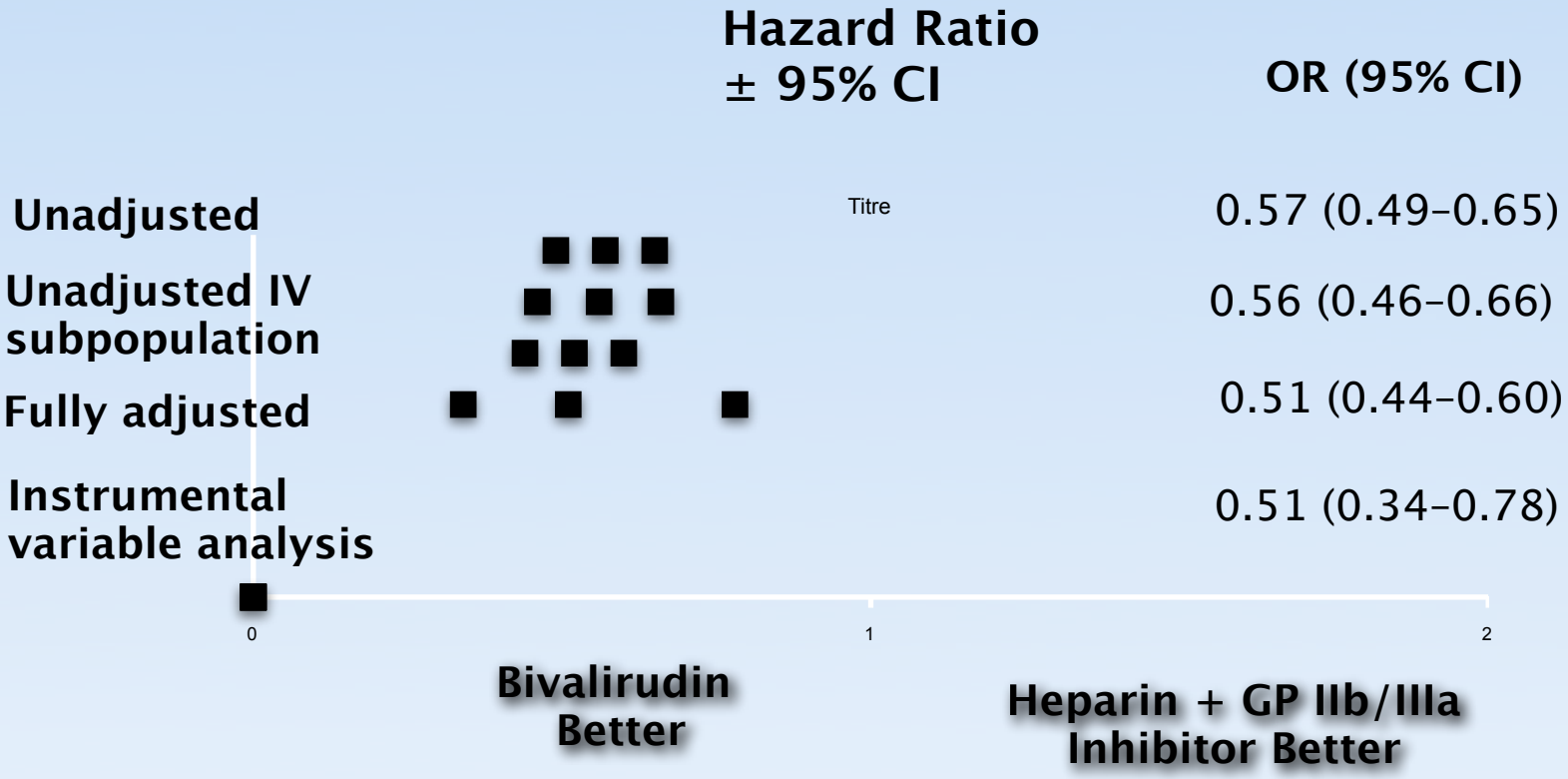
* At least one unit of any blood product

Results: Repeat PCI

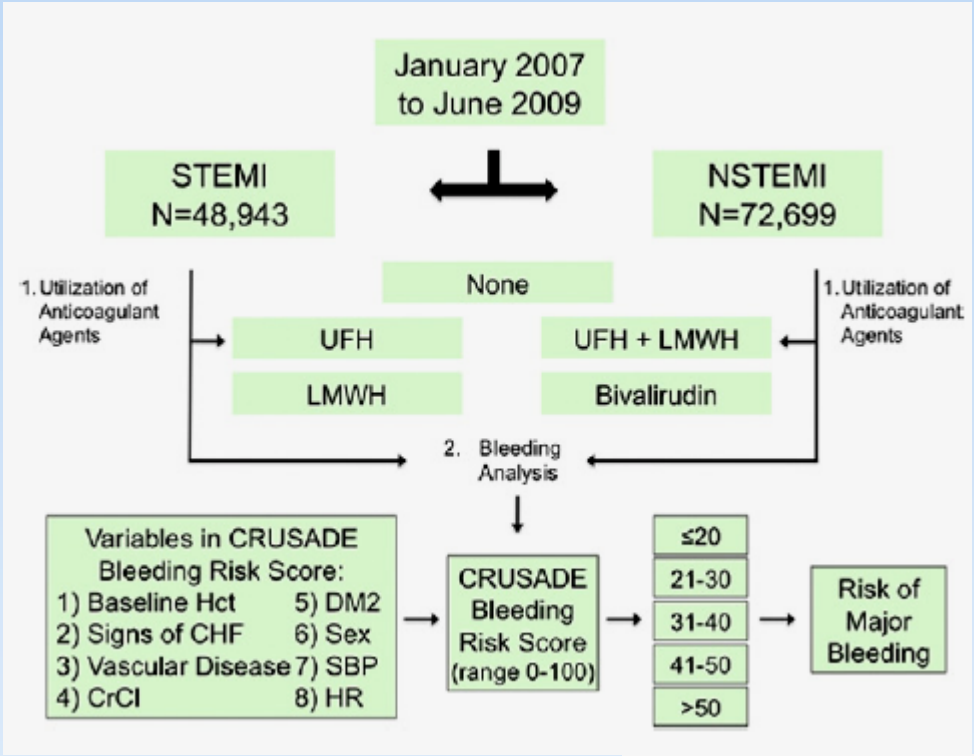


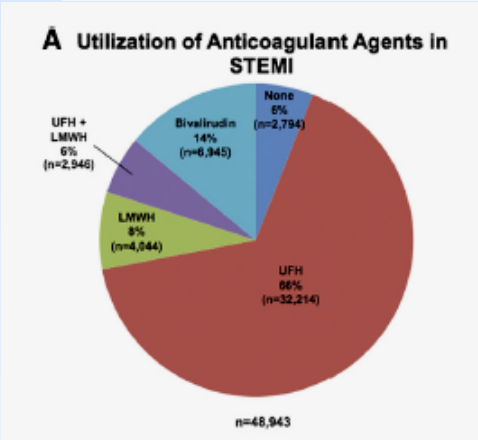
Results: Death

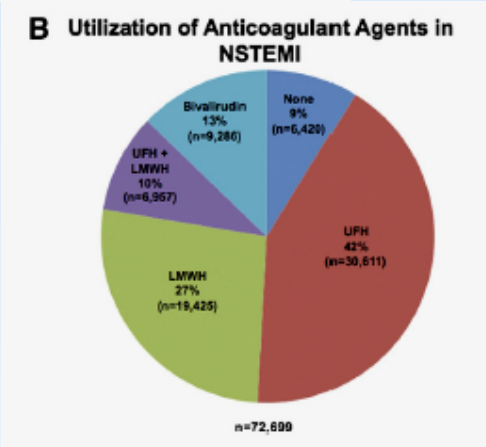
- **In-hospital mortality rate: bivalirudin 0.8%, 2.1% heparin + GPI**



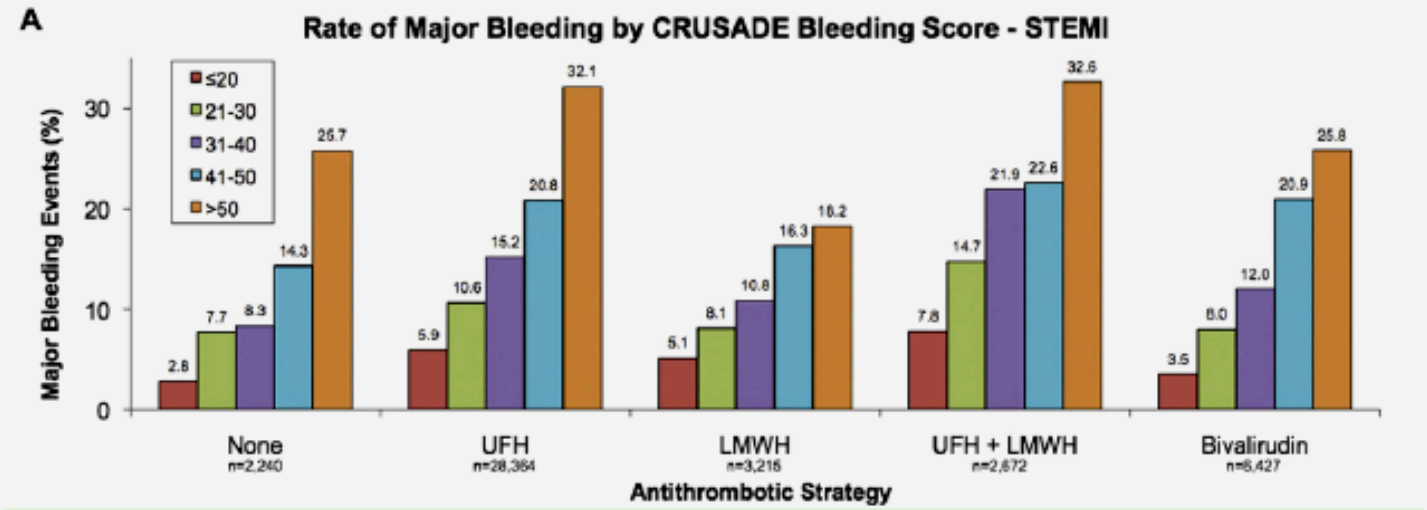
Bleeding in NCDR ACTION Registry (USA)

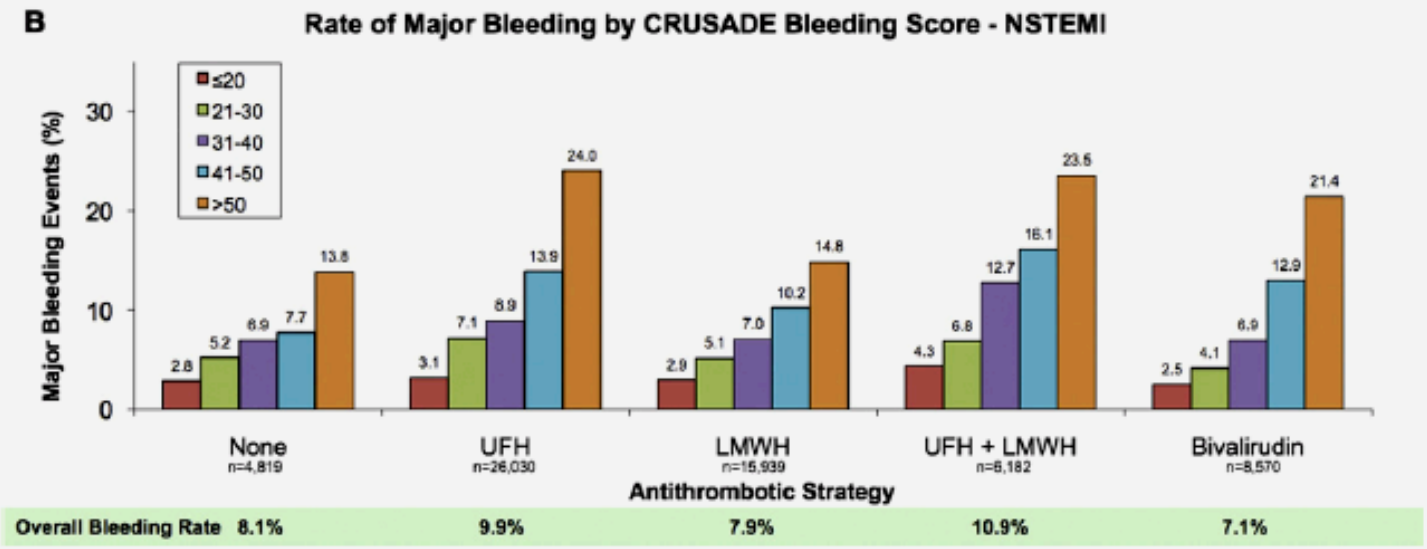






Kadiaka JACC Intv 2010;3:1166





Kadiaka JACC Intv 2010;3:1166

HORIZONS AMI

Harmonizing Outcomes with Revascularization and Stents in AMI

3602 pts with STEMI with symptom onset ≤12 hours

Aspirin, thienopyridine

R 1:1

- UFH + GP IIb/IIIa inhibitor (abciximab or eptifibatide)
- Bivalirudin monotherapy (± provisional GP IIb/IIIa)

Emergent angiography, followed by triage to…

CABG – Primary PCI – Medical Rx

3006 pts eligible for stent randomization

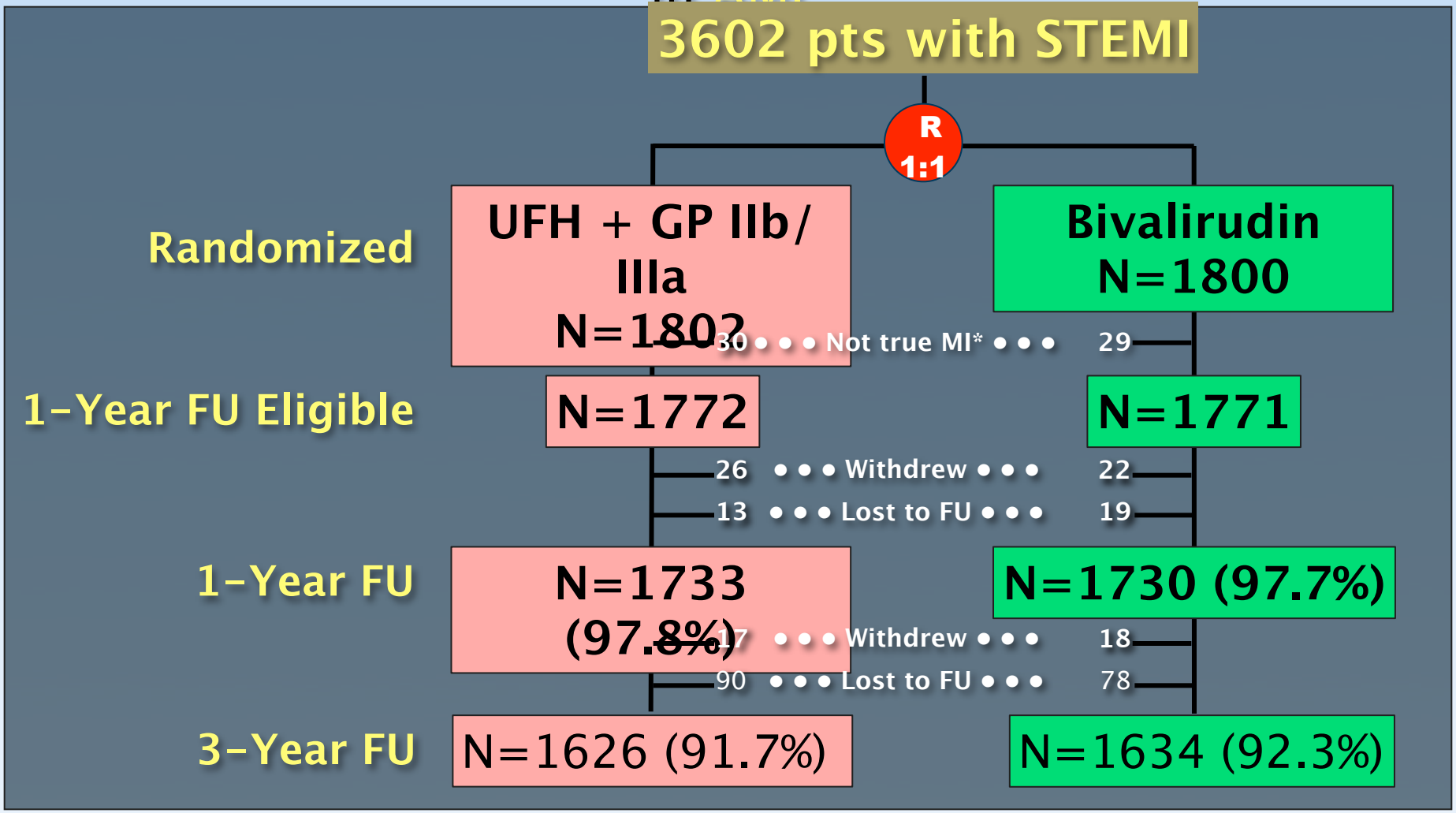
R 3:1

- Paclitaxel-eluting TAXUS stent
- Bare metal EXPRESS stent

Clinical FU at 30 days, 6 months, 1 year, and then yearly through 5 years; angio FU at 13 months

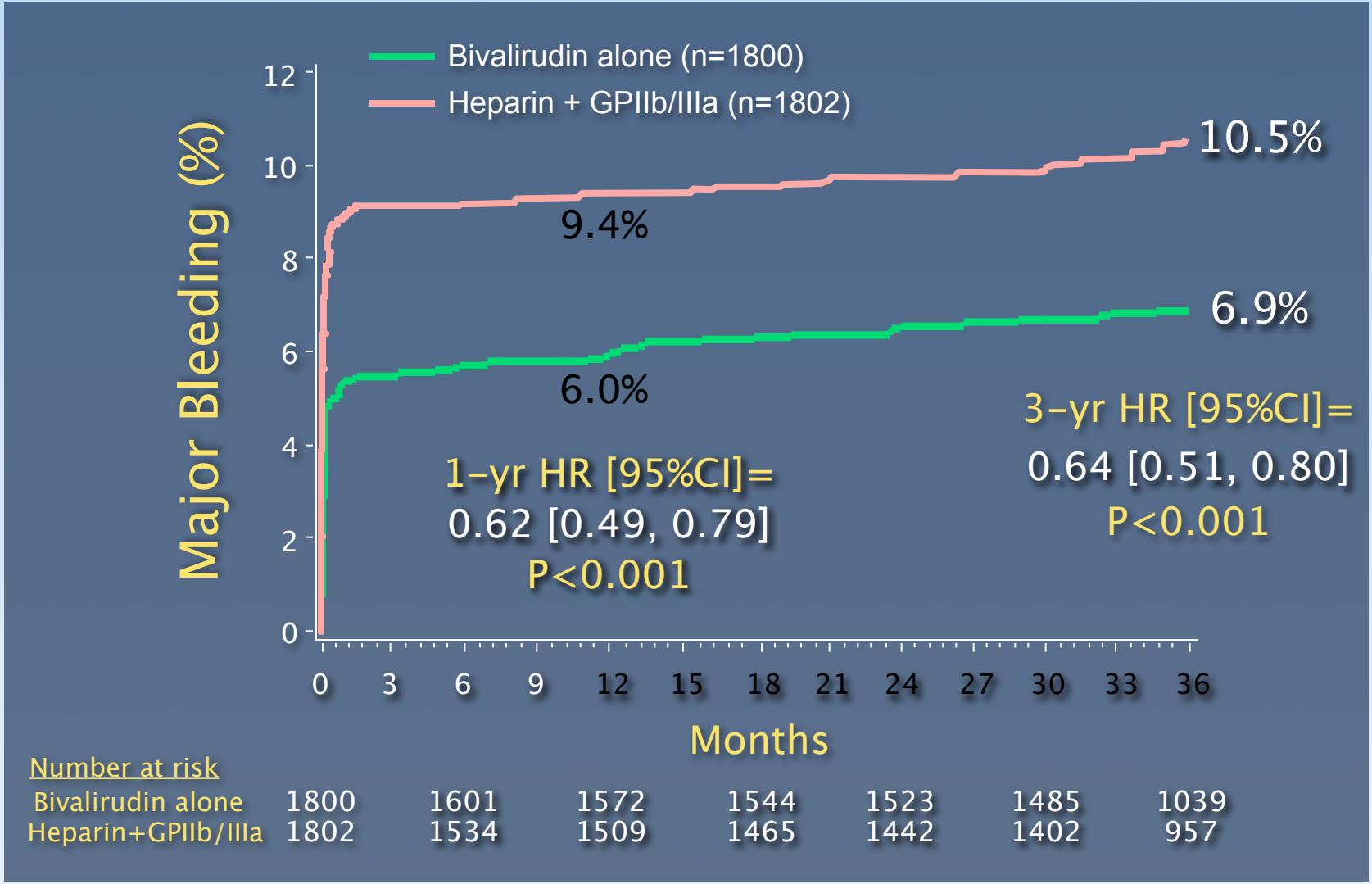
HORIZONS AMI

Harmonizing Outcomes with Revascularization and Stents in AMI



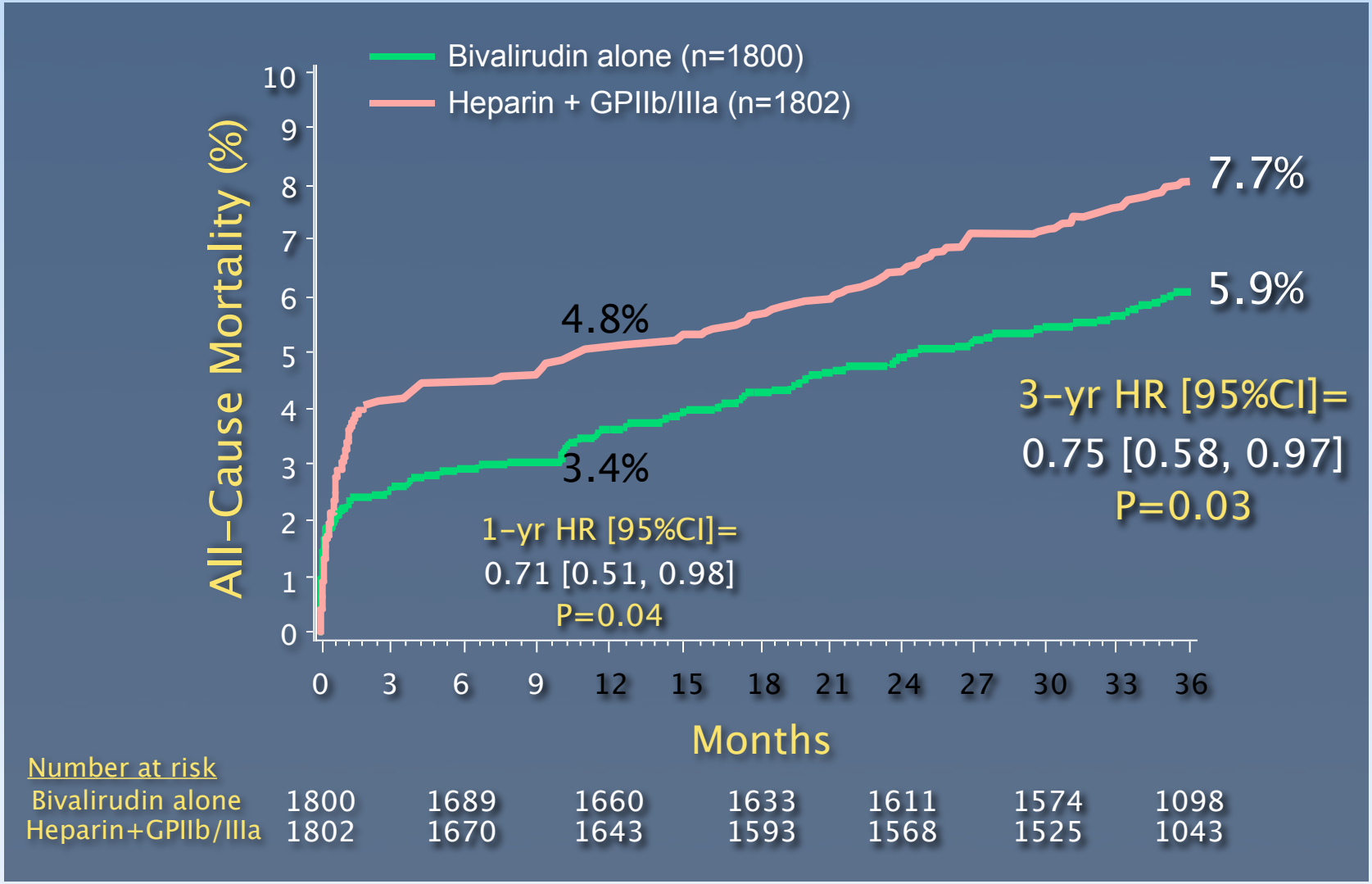
* Biomarkers WNL and no DS >50% by core lab determination (30 day FU

Three-Year Major Bleeding (non-CABG)*

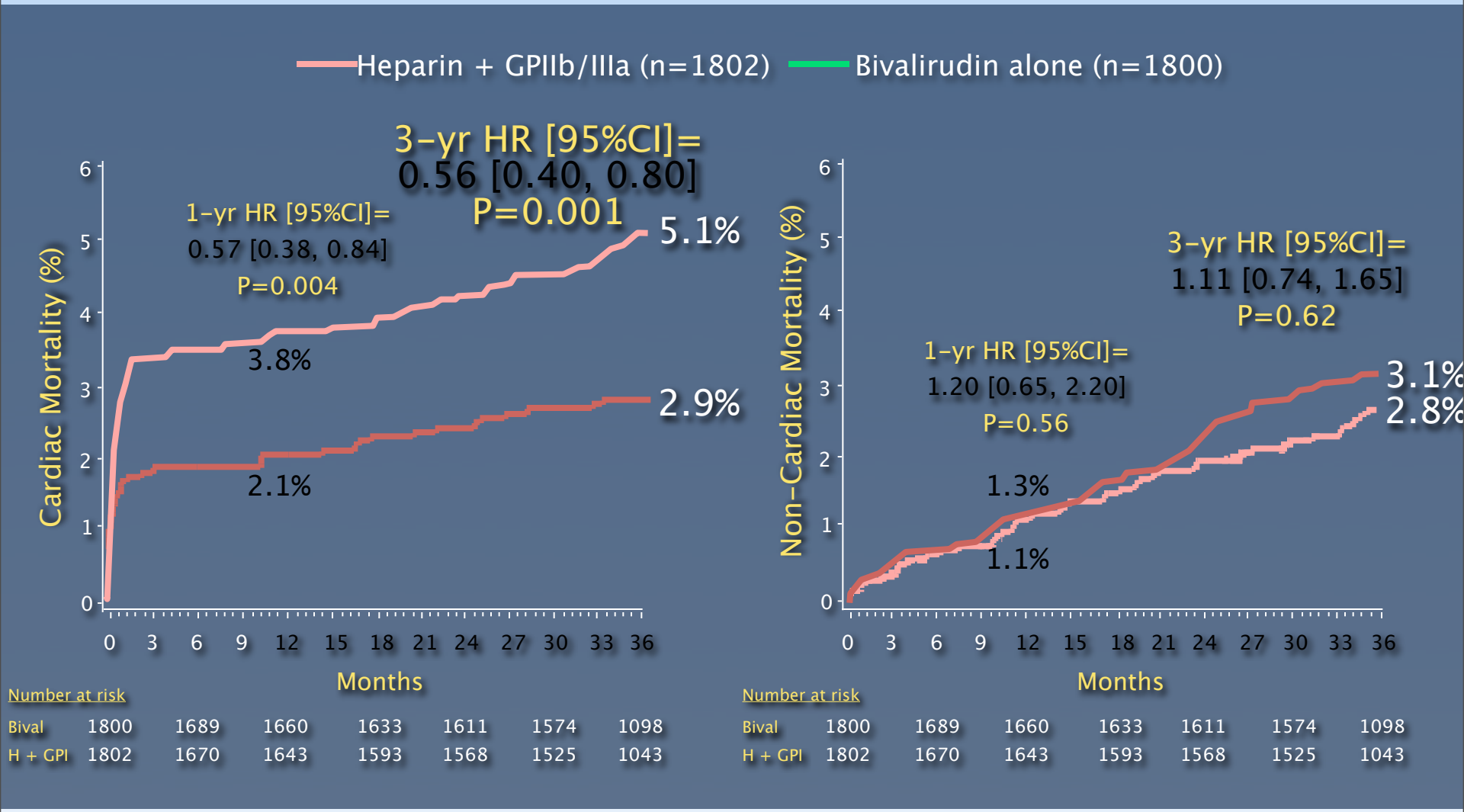


* Intracranial intraocular, retroperitoneal, access site bleed requiring intervention/surgery, hematoma ≥5 cm, hgb ↓ ≥3g/dL with or ≥4g/dL w/o overt source; reoperation for bleeding; or blood product transfusion

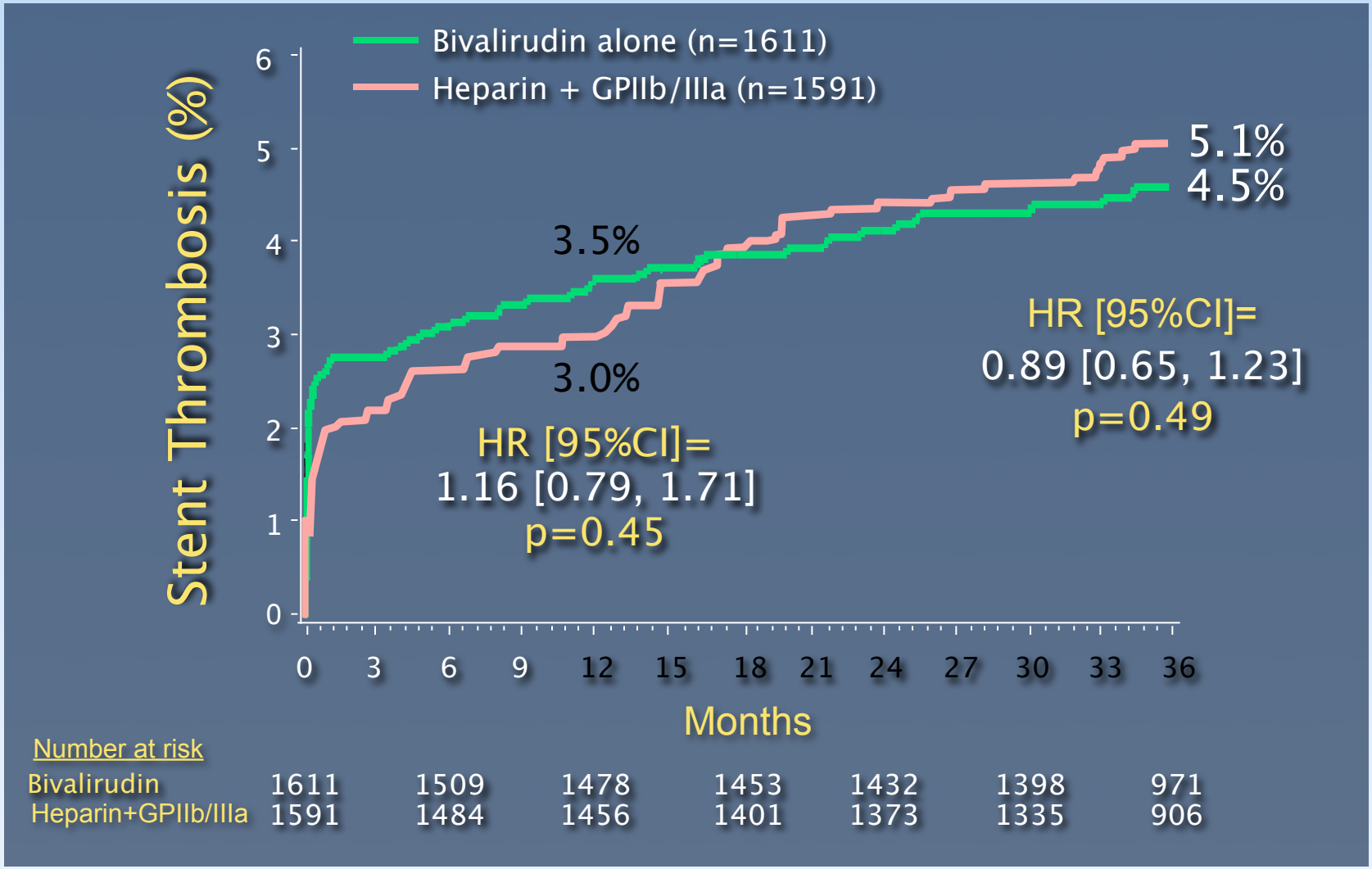
Three-Year All-Cause Mortality



3-Year Mortality: Cardiac and Non



Three-Year Stent Thrombosis
(ARC Definite/Probable)



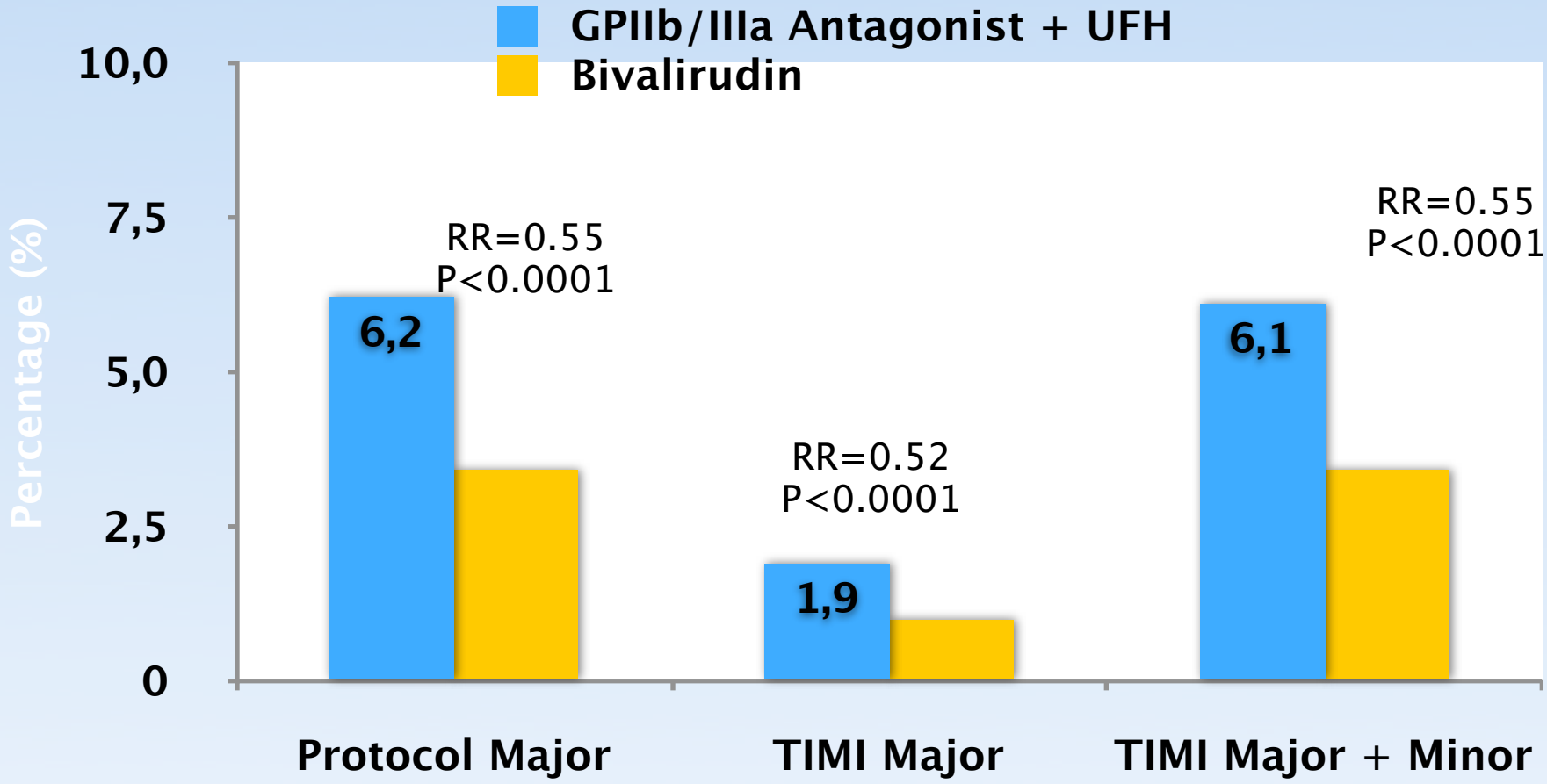
Beyond Access Site Bleeding: Incidence, Sources, and Impact of Antithrombotic Therapy in the PCI Patient

A Combined Analysis of 17,393 Patients REPLACE-2, ACUITY and HORIZONS-AMI

Freek W.A. Verheugt, Steven R. Steinhubl, Martial Hamon, Harald Darius, Ph. Gabriel Steg, Marco Valgimigli, Steven P. Marso, Sunil V. Rao, Anthony H. Gershlick.

Onze Lieve Vrouwe Gasthuis, Amsterdam

Impact of Randomized Antithrombotic Therapy: All Bleeding Sources



Switching antithrombin therapy ? HORIZONS-SWITCH Analysis - Bleedings

	Switch Group (n = 1,178)	Control Group (n = 1,179)	p Value
30-day adverse events			
Major bleeding, all	7.6% (89)	12.3% (144)	0.0001
Major bleeding (non-CABG-related)	5.2% (61)	9.2% (108)	0.0002
TIMI bleeding, all	6.5% (76)	10.8% (127)	0.0002
Major	3.6% (42)	6.0% (70)	0.007
Minor	3.0% (35)	4.9% (57)	0.02
Blood product transfusion	2.1% (25)	3.2% (38)	0.10
Thrombocytopenia <100,000 cells/mm^3*	2.2% (25/1,142)	4.0% (46/1,146)	0.01
2-year adverse events			
Major bleeding, all	8.4% (98)	13.0% (152)	0.0003
Major bleeding, non-CABG-related	6.0% (69)	9.9% (115)	0.0004
TIMI bleeding, all	6.9% (80)	11.4% (133)	0.0002
Major	4.0% (46)	6.4% (75)	0.007
Minor	3.1% (36)	5.1% (60)	0.01
Blood product transfusion	2.7% (31)	3.9% (45)	0.10

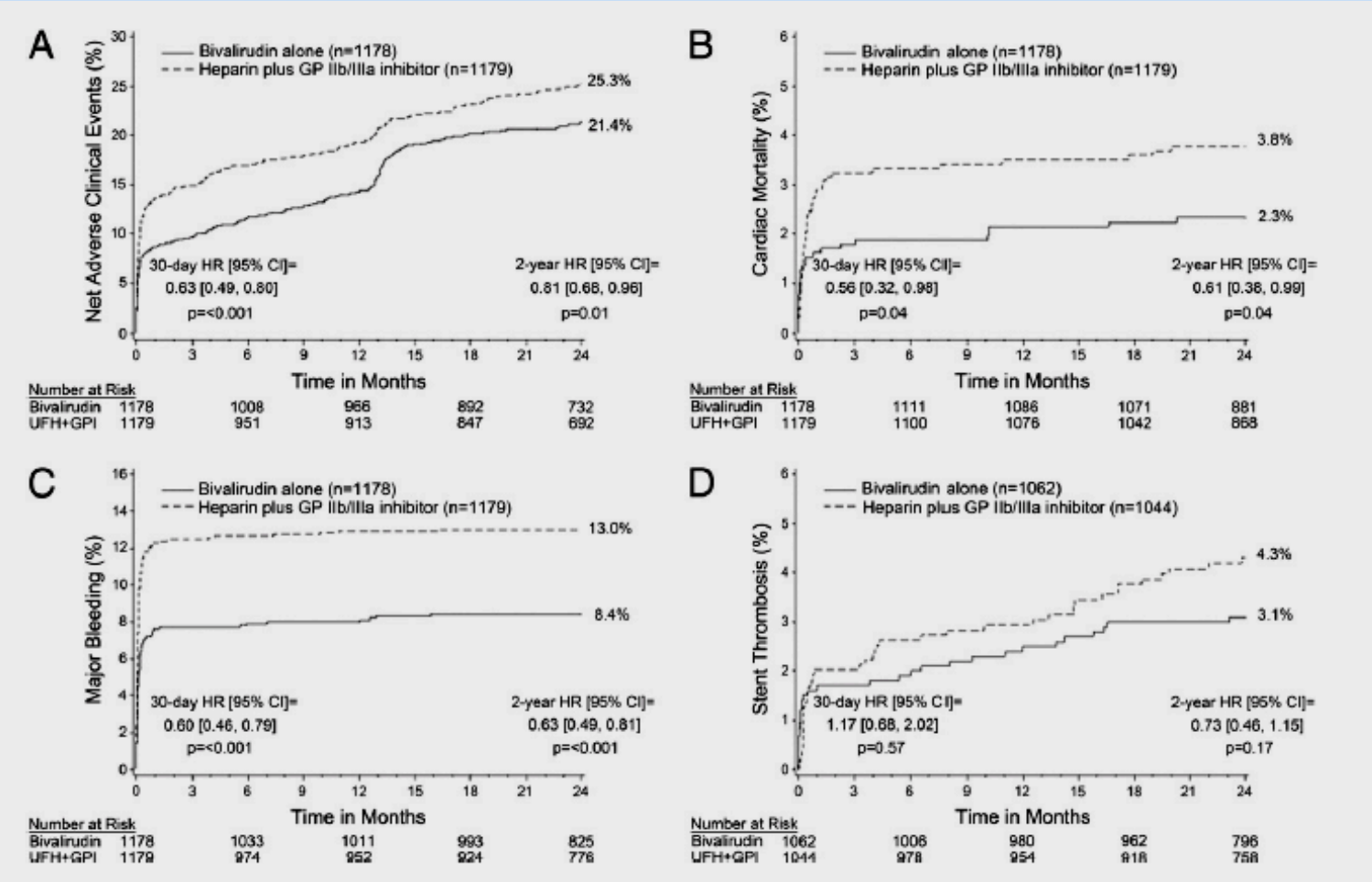
Dangas JACC 2011;57:2309-16

Switching antithrombin therapy ? HORIZONS-SWITCH Analysis - Ischemic

	Switch Group (n = 1,178)	Control Group (n = 1,179)	p Value
30-day adverse events			
Net adverse clinical events	8.7% (102)	13.6% (160)	0.0002
Major adverse cardiovascular events	4.5% (53)	5.8% (68)	0.18
Mortality, all-cause	2.0% (23)	3.2% (38)	0.0545
Cardiac	1.6% (19)	2.9% (34)	0.04
Noncardiac	0.3% (4)	0.3% (4)	0.99
Reinfarction	1.5% (18)	2.0% (23)	0.44
Death or reinfarction	3.2% (38)	4.8% (56)	0.06
Stroke	0.9% (10)	0.6% (7)	0.46
Target vessel revascularization	2.1% (24)	2.1% (24)	0.99
Stent thrombosis	1.7% (18)	2.0% (21)	0.60
Acute (≤24 h)	0.8% (9)	0.1% (1)	0.01
Subacute (>24 h to 30 days)	0.9% (9)	1.9% (20)	0.04
2-yr adverse events			
Net adverse clinical events	21.4% (245)	25.3% (291)	0.01
Major adverse cardiovascular events	17.5% (200)	18.6% (212)	0.06
Mortality	4.4% (50)	5.6% (65)	0.15
Cardiac	2.3% (27)	3.8% (44)	0.04
Noncardiac	2.1% (23)	1.9% (21)	0.81
Reinfarction	4.0% (45)	7.1% (78)	0.002
Death or reinfarction	7.8% (89)	11.9% (136)	0.001
Stroke	1.7% (19)	1.7% (19)	0.97
Target vessel revascularization	12.7% (141)	11.8% (128)	0.48
Stent thrombosis	3.1% (32)	4.3% (43)	0.17

Dangas JACC 2011;57:2309-16

Switching antithrombin therapy ? HORIZONS-SWITCH Analysis



Dangas JACC 2011;57:2309-16

Prehospital bivalirudin for patients with STEMI

Hirschl M Am J Emergency Med 2011 in press

Prehospital bivalirudin for patients with STEMI

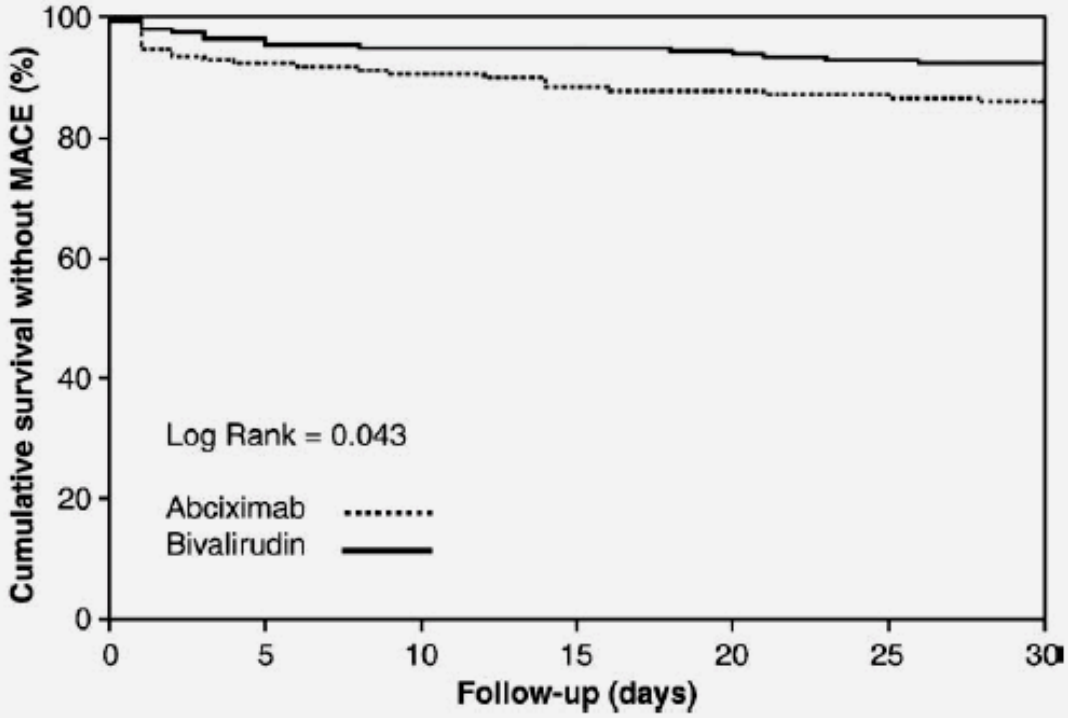
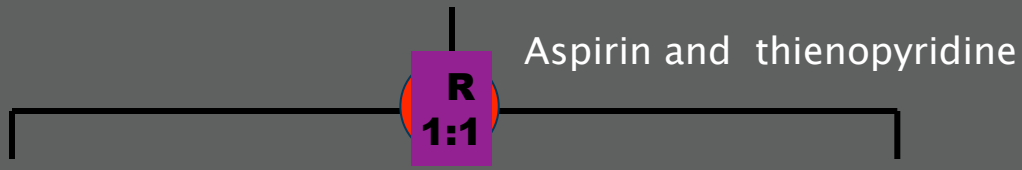


Fig. 3 Cumulative survival without MACE in both treatment groups.

Hirschl M Am J Emergency Med 2011 in press

EUROMAX Design

3680 pts with STEMI with symptom onset > 20 min and ≤12 hours in ambulance or non-PCI hospital



UFH ± routine or bailout GPI (any of the 3)

Bivalirudin monotherapy with prolonged infusion (Gp IIb/IIIa for bailout only)

Primary endpoint
30-day death, MI or non-CABG related protocol major bleeding

Clinical FU at 30 days and 1 year

Participating Countries

DK: Peter Clemmensen and Jacob Steinn

UK: Jonathan Hill and Tom Quinn

GER: Christian Hamm, Uw Zeymer and Lutz Ni

NL: Freek Verheugt and Jurrien ten Berg

POL: Dariusz Dudek

CZ: Petr Widimski

FRA: Pierre Coste and Frederick La tolle

AUS: Kurt Huber and Micha Hirschl

ESP: Francisco Fernandez-Aviles and Ervigio Corral

ITA: Leonardo Bolognese and Giovanni Gordini

Conclusions

- Le patient avec SCA à haut risque i.e l'infarctus du myocarde a besoin d'un traitement adapté
- Les registres et les études randomisées apportent des éléments de démonstration qui devraient modifier nos pratiques
- Les impacts médico-économiques sont un enjeu majeur pour le futur