Antithrombotic therapy in the ACS patient with atrial fibrillation

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Disclosures

DISCLOSURE STATEMENT OF FINANCIAL INTEREST

Kurt Huber, MD, FESC, FACC

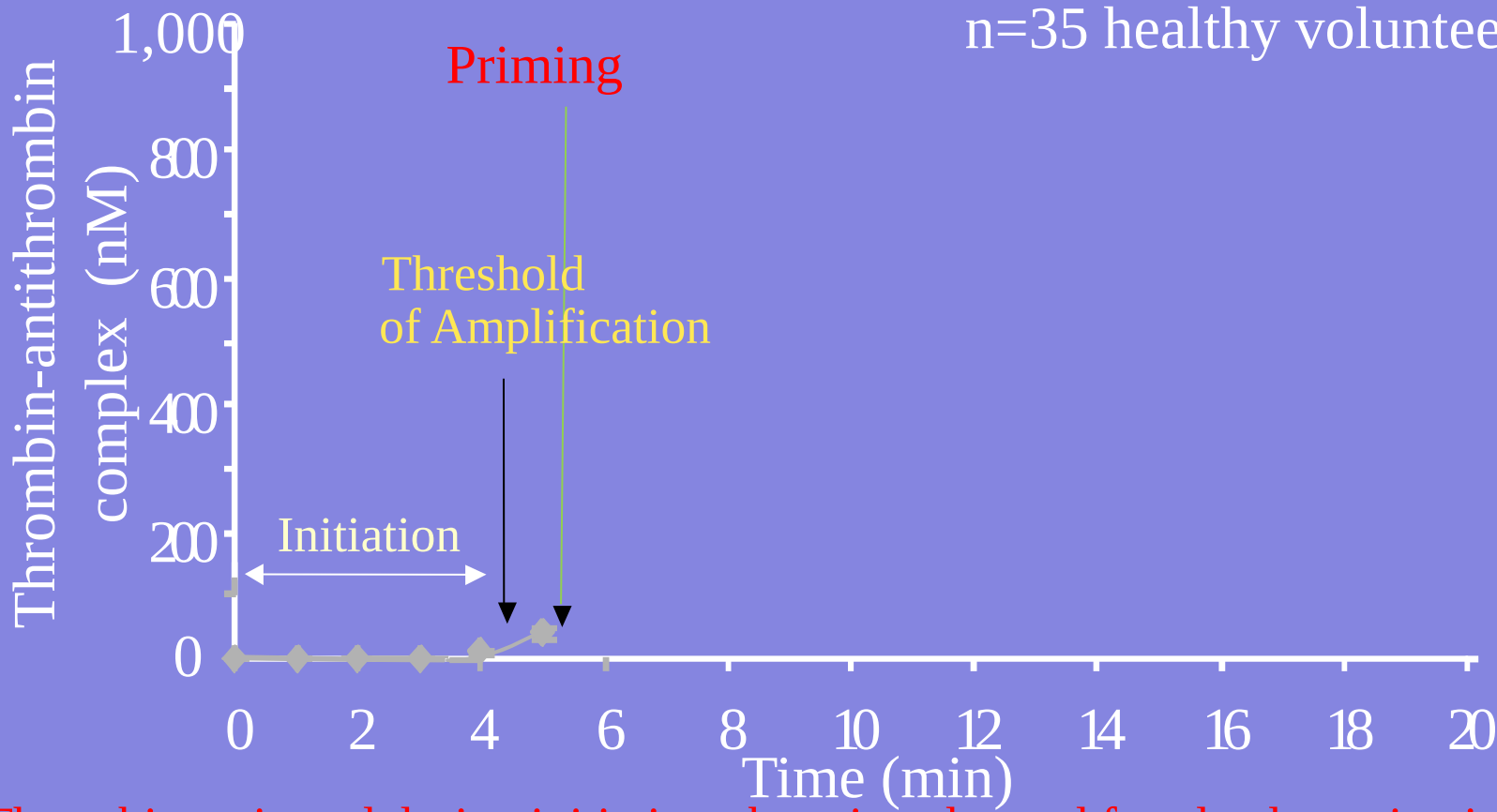
Research Grants **from Bristol-Myers Squibb, Eli Lilly, Medtronic, Sanofi-Aventis**

Consulting Fees **from AstraZeneca, Bayer, Boehringer-Ingelheim, Bristol-Myers Squibb, Daiichi Sankyo, Fibrex, Eli Lilly, Portola, Sanofi-Aventis, Schering-Plough, The Medicines Company**

Lecture Fees **from AstraZeneca, Boehringer-Ingelheim, Boston Scientific, Bristol-Myers Squibb, Cordis / Johnson&Johnson, Daiichi Sankyo, Eli Lilly, GlaxoSmithKline, Pfizer, and Sanofi-Aventis.**

BACKGROUND

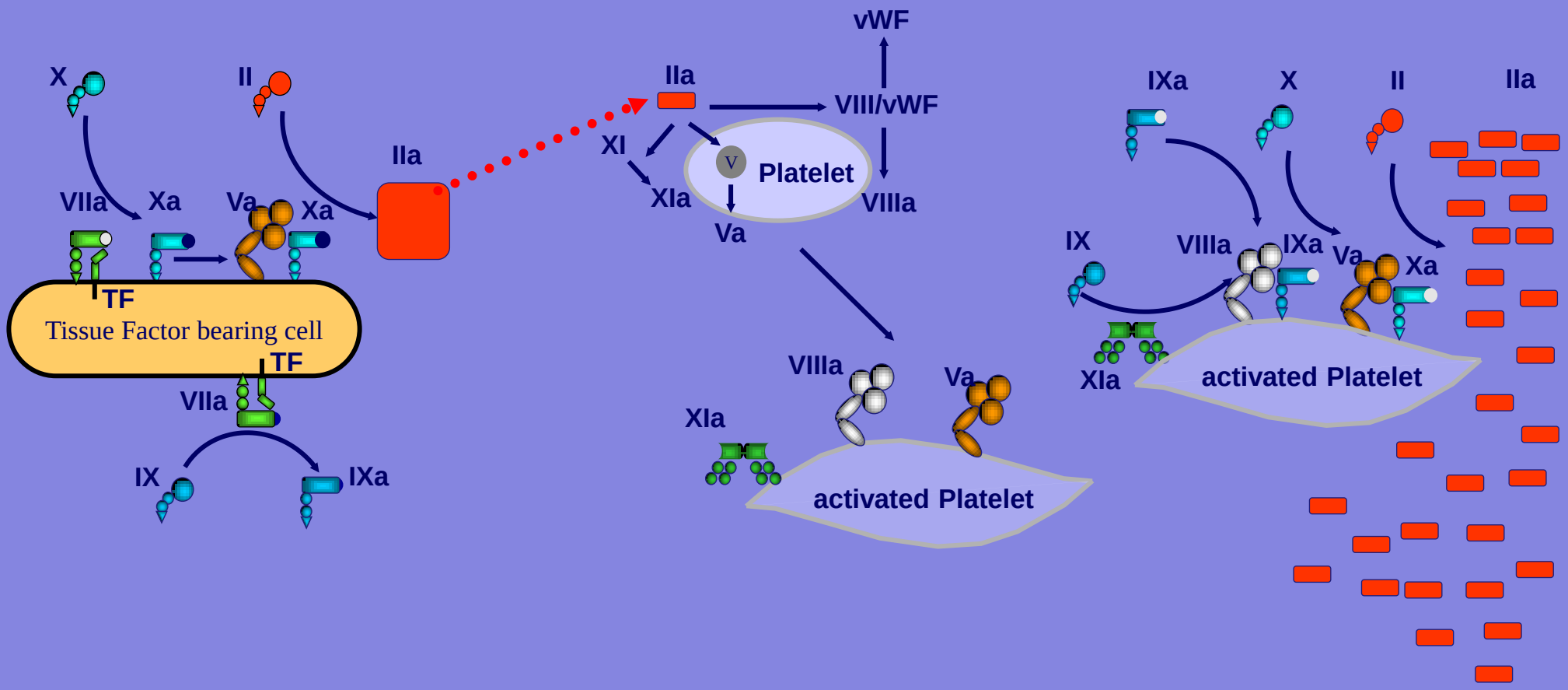
Thrombin generation in thrombosis



Thrombin activated during initiation phase is only used for platelet activation in the priming phase. Platelets in the Priming Phase are almost exclusively activated by trombin induced during the initiation phase

Adapted with permission from Mann K et al. *Arterioscler Thromb Vasc Biol*. 2003;23:17-25.
Coughlin S et al Thromb Haem 2001; 86: 298–307

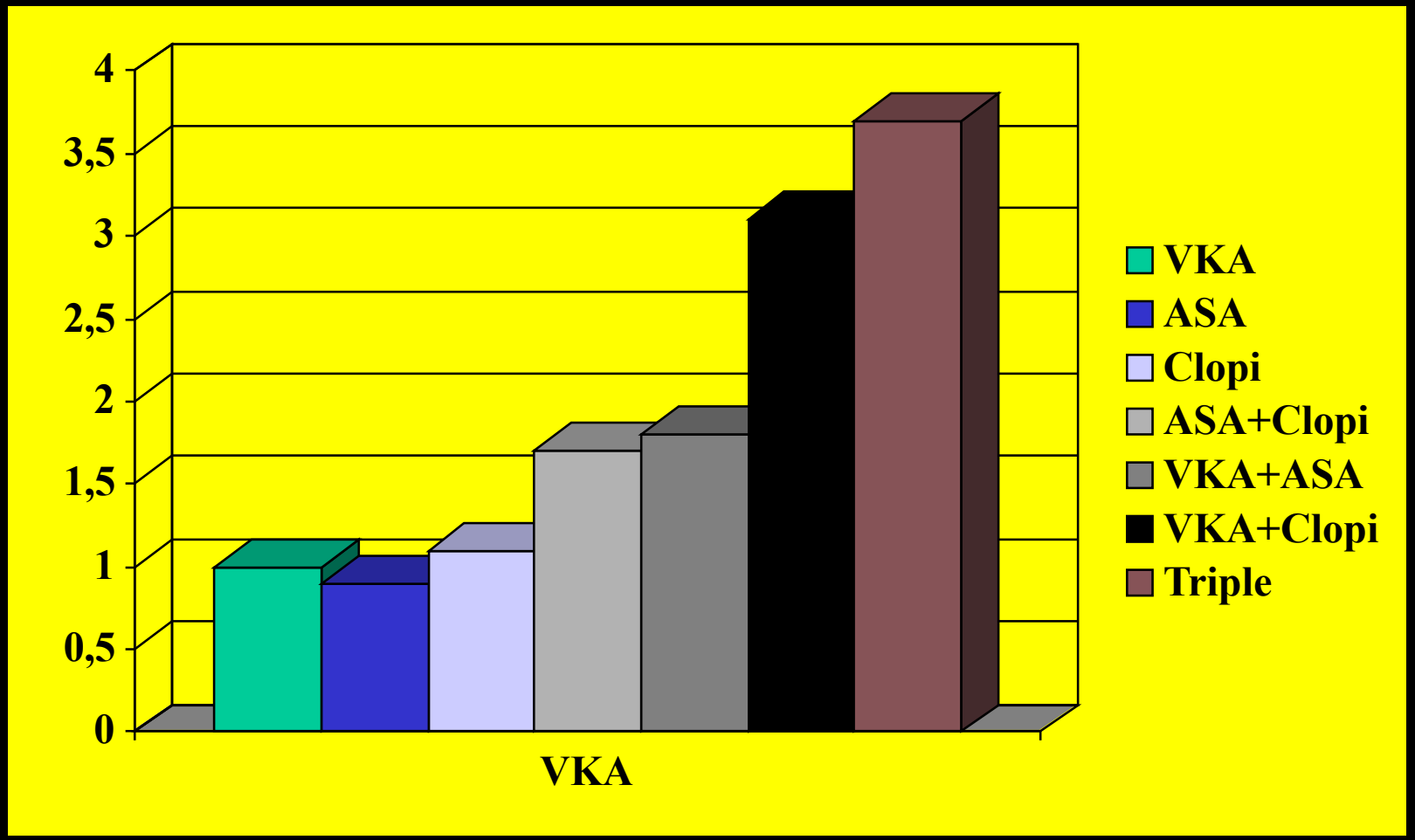
Cell-based model of coagulation



(mod. after Monroe et al., Arterioscler Thromb Vasc Biol, 22: 1381-1389, 2002)

Major Bleeding* per Year

Odds Ratios



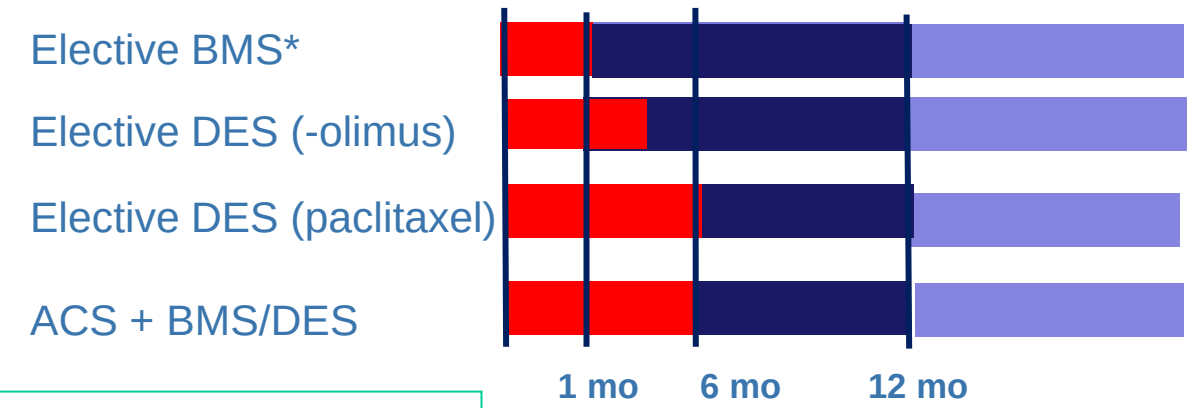
* non-fatal and fatal

Hansen et al. Arch Intern Med 2010;170:1433-1441

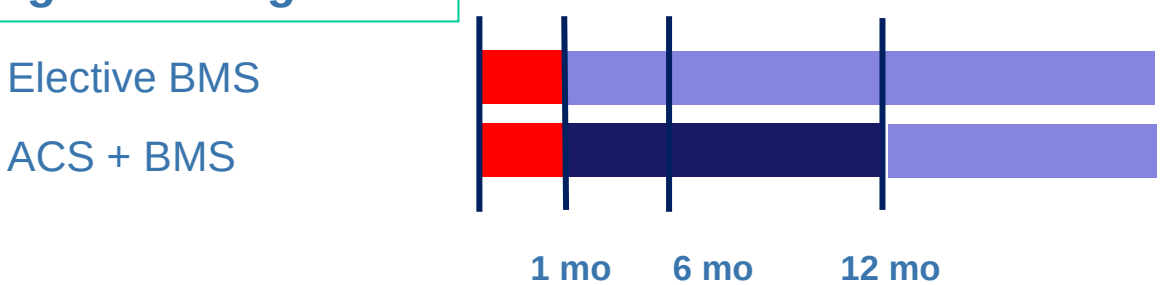
“triple”-Therapy in pts. with Atrial Fibrillation after ACS or Elective Stent Implantation

ESC Guidelines in AF patients at moderate to high thromboembolic risk in whom OAC is required

Low bleeding risk



High bleeding risk**



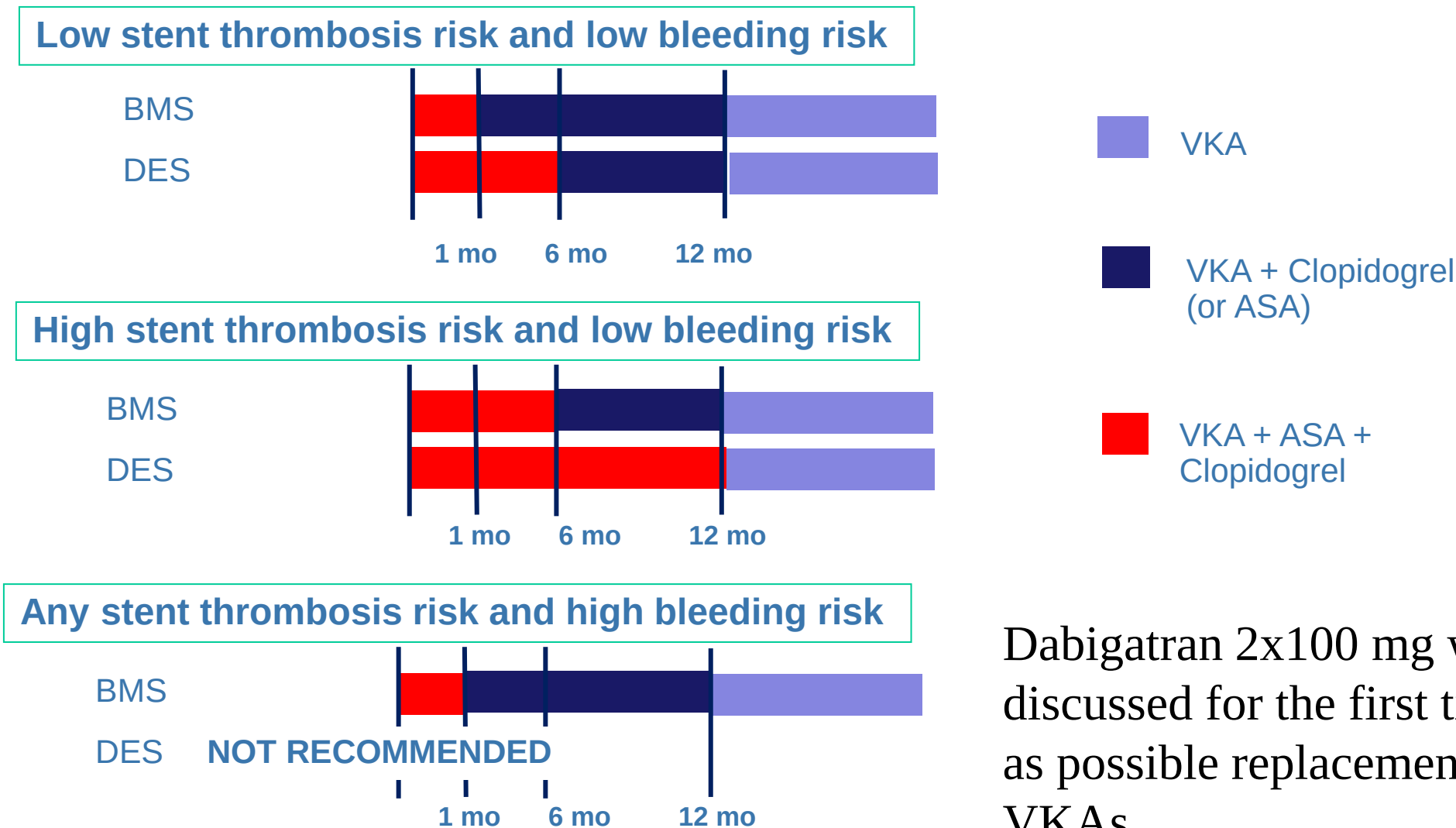
VKA (INR 2.0-3.0)

VKA (INR 2.0-2.5) + Clopidogrel (or ASA)

VKA (INR 2.0-2.5) + ASA + Clopidogrel

Adapted from *Camm J et al. Eur Heart J 2010;31:2369-2429*

A North-American consensus document on antithrombotic therapy in AF patients and a coronary stent with moderate/high stroke risk ($CHADS_2$ ≥2)



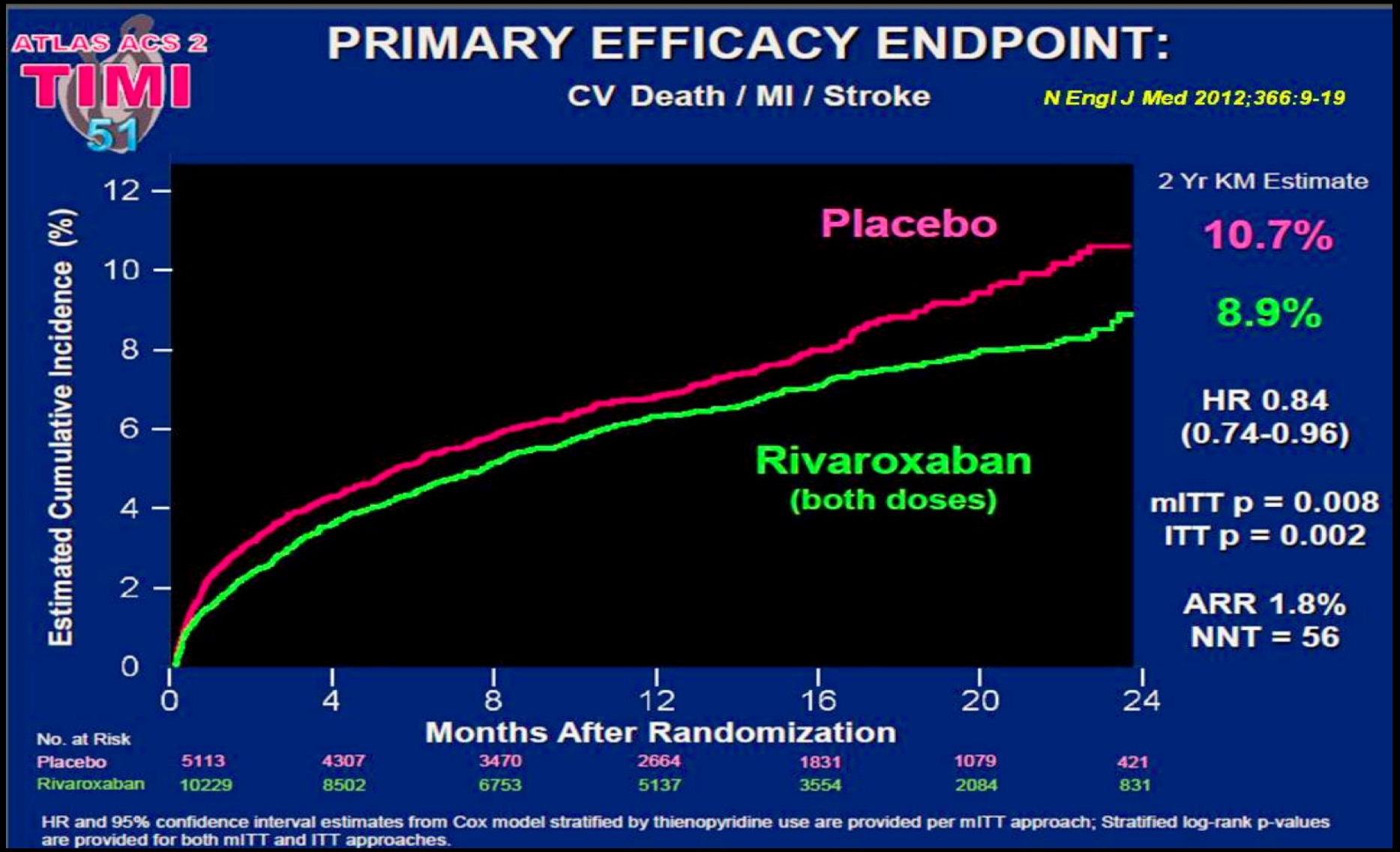
Dabigatran 2x100 mg was discussed for the first time as possible replacement of VKAs

Adapted from *Faxon DP. Circ Cardiovasc Interv 2011;4:522-534*

„Triple“ Therapy
in Secondary Prevention after ACS
with a NOAC added to DAPT

ATLAS-2 Studie

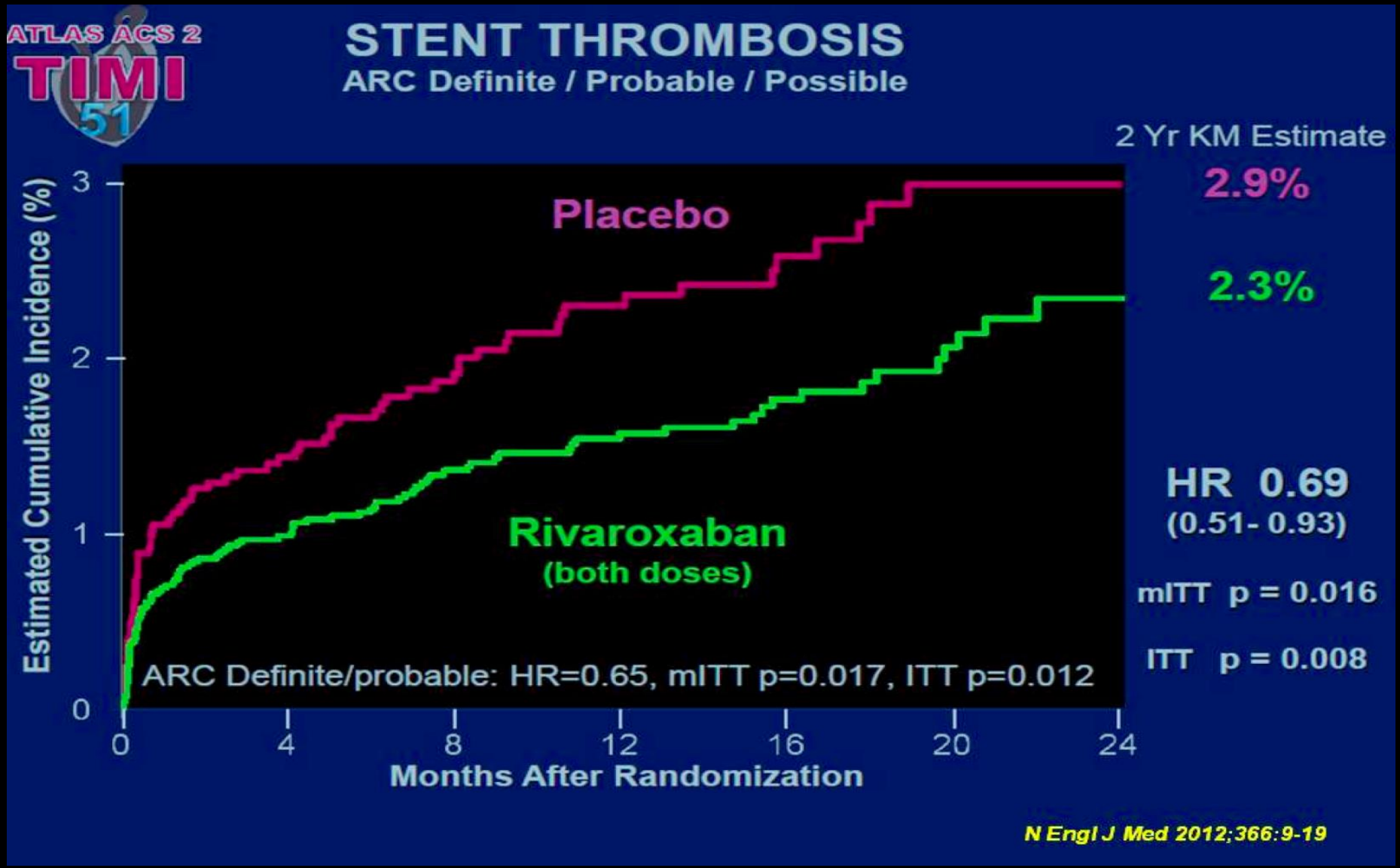
(Rivaroxaban)



Mega JL *et al*. Lancet 2009;374:29-3

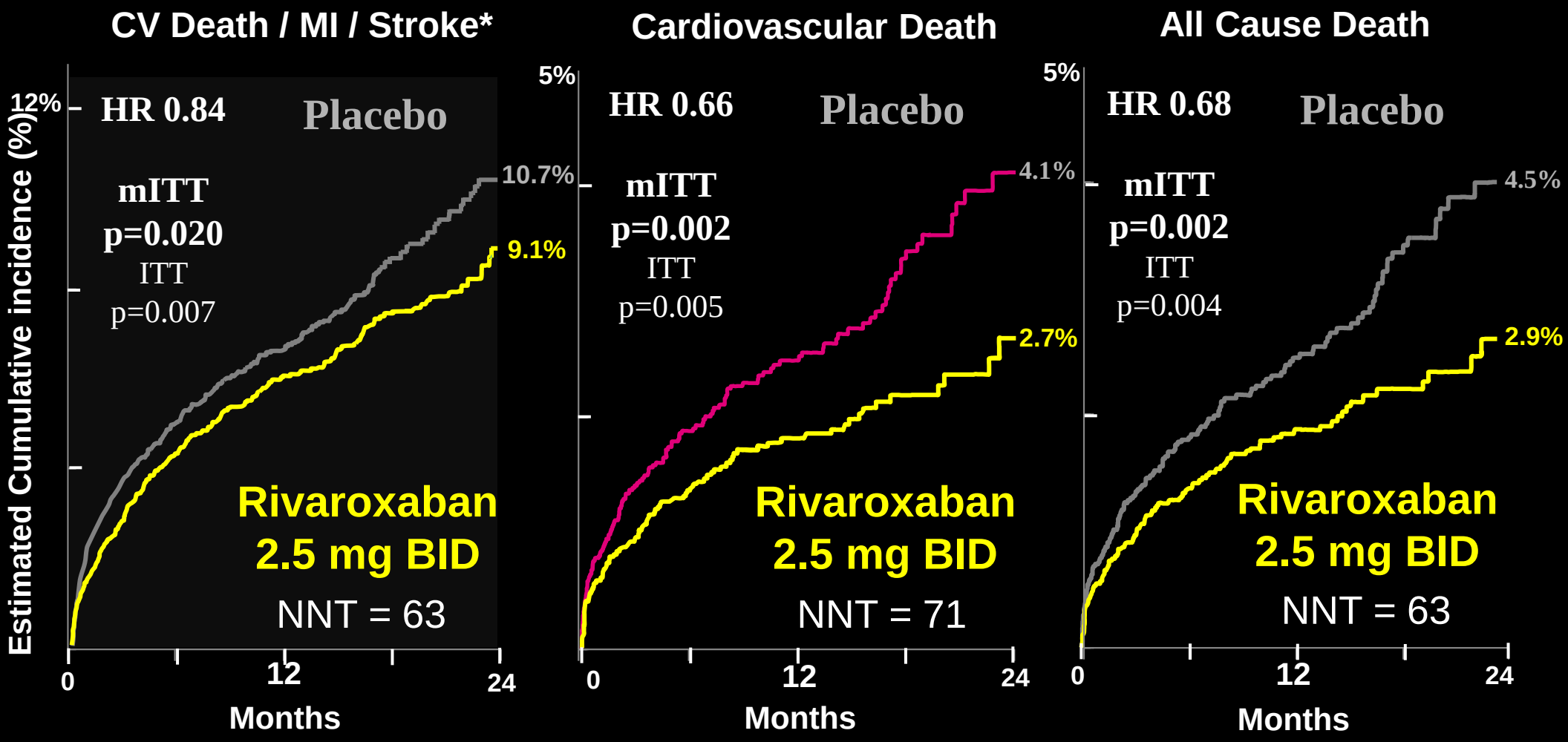
ATLAS-2 Studie

(Rivaroxaban)



Mega JL *et al*. Lancet 2009;374:29-3

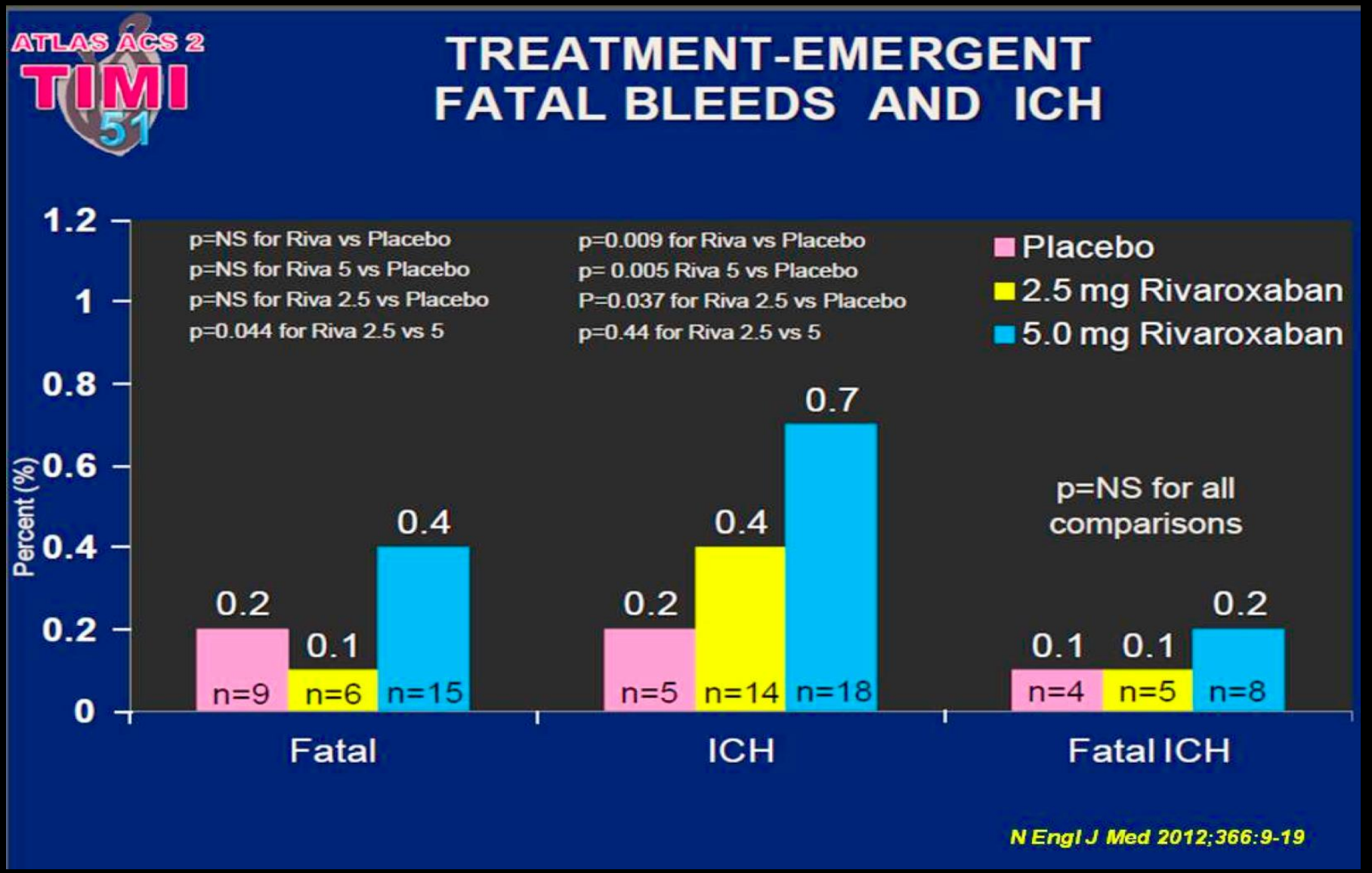
PRIMARY EFFICACY ENDPOINT*: 2.5 mg PO BID



* First occurrence of cardiovascular death, MI, stroke (ischemic, hemorrhagic, and uncertain) as adjudicated by the CEC across thienopyridine use strata
Two year Kaplan-Meier estimates, HR and 95% confidence interval estimates from Cox model stratified by thienopyridine use are provided per mITT approach; Stratified log-rank p-values are provided for both mITT and ITT approaches; NNT=Number needed to treat.

ATLAS-2 Studie

(Rivaroxaban)



Mega JL *et al*. Lancet 2009;374:29-38

Should we skip aspirin ?

WOEST

WOEST Trial - Study Design

1:1 Randomisation:

Double therapy group:

OAC + 75mg Clopidogrel qd

1 month minimum after BMS

1 year after DES

Triple therapy group

OAC + 75mg Clopidogrel qd + 80mg Aspirin qd

1 month minimum after BMS

1 year after DES

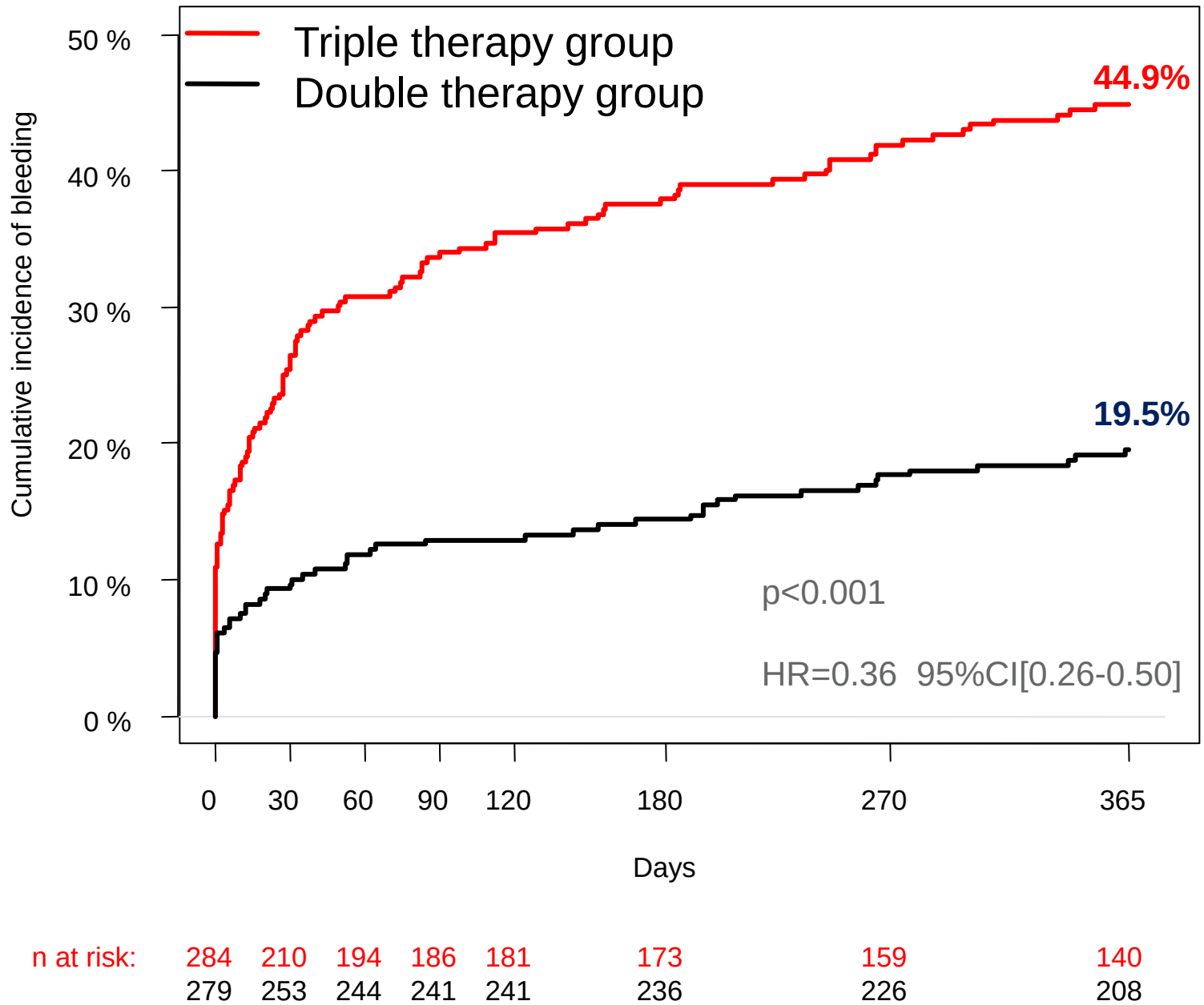
Follow up: **1 year**

Primary Endpoint: **The occurence of all bleeding events (TIMI criteria)**

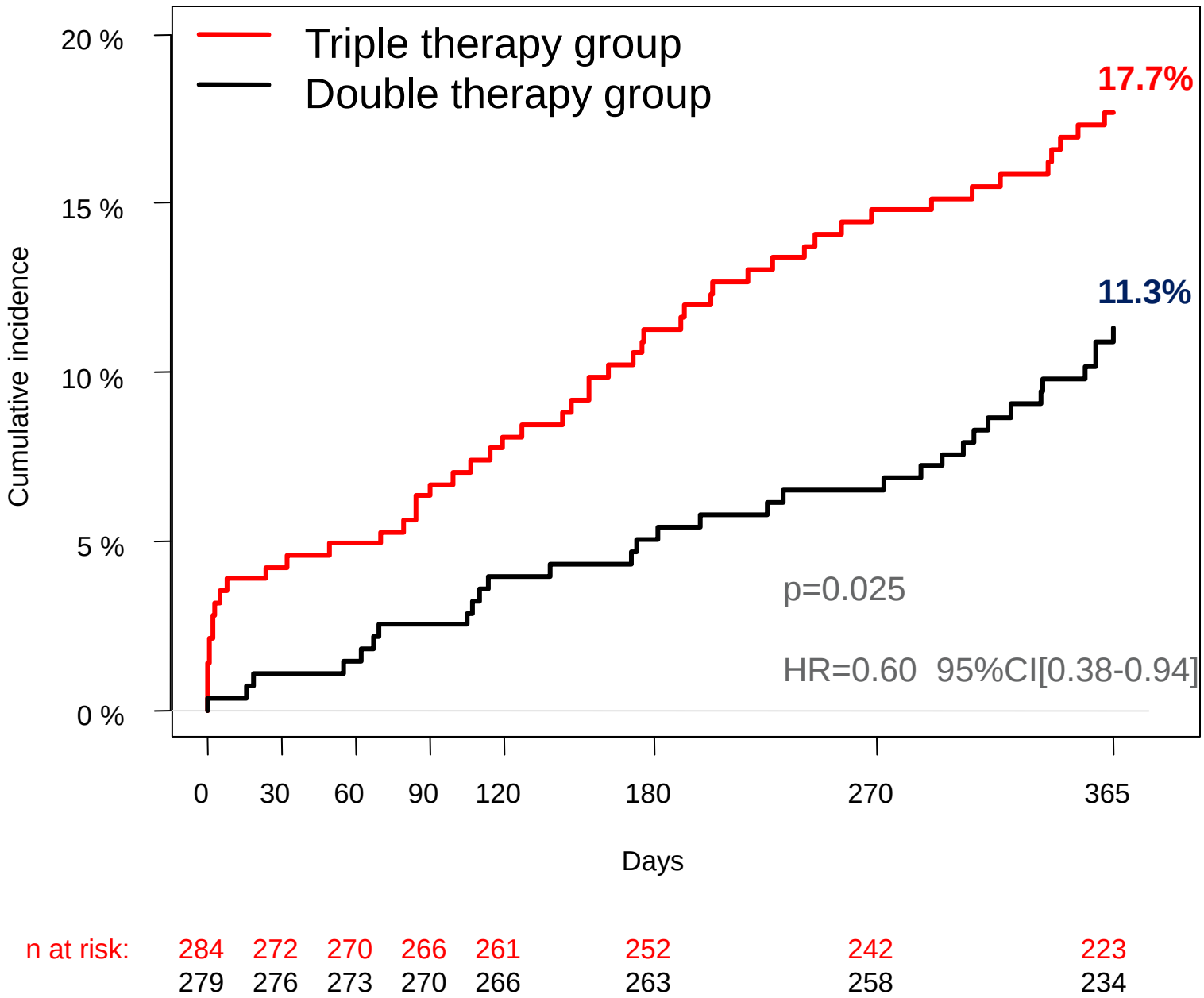
Secondary Endpoints:

- **Combination of stroke, death, myocardial infarction, stent thrombosis and target vessel revascularisation**
- **All individual components of primary and secondary endpoints**

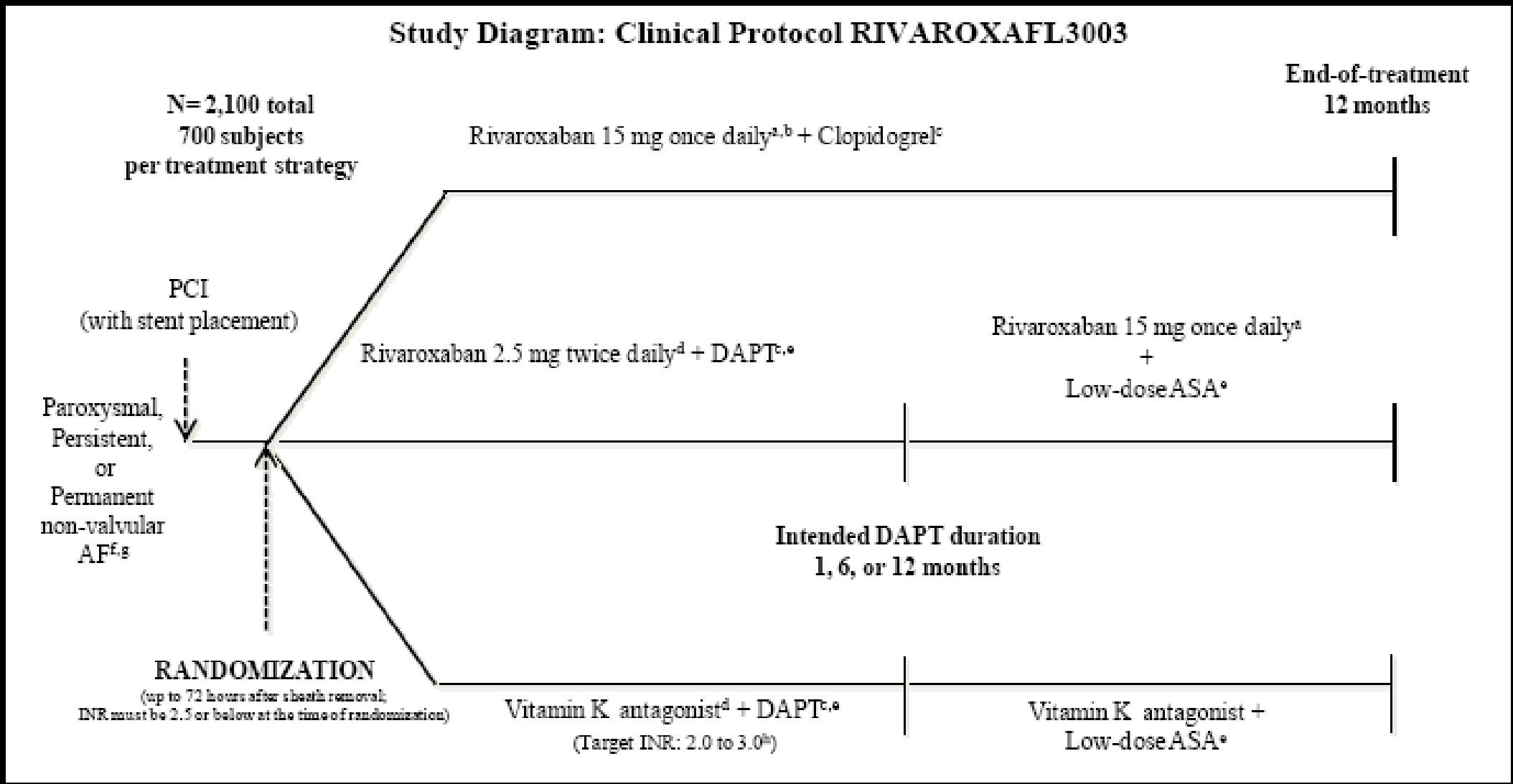
Primary Endpoint: Total number of bleeding events (TIMI criteria)



Secondary Endpoint (Death, MI,TVR, Stroke, ST)



PIONEER AF-PCI



Thank you