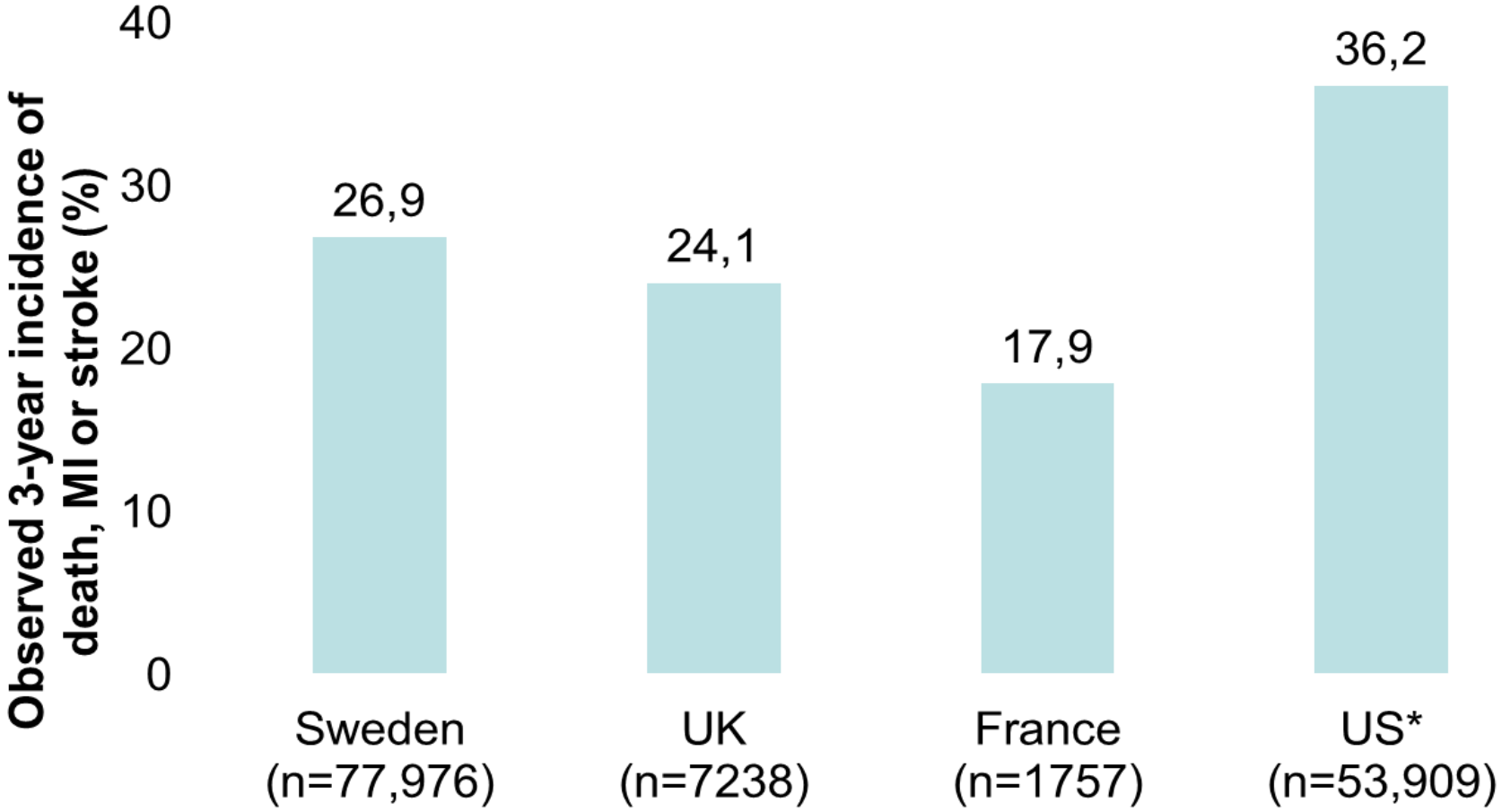
VI SESSIONE:
NUOVE FRONTIERE IN CARDIOLOGIA

Verso la LONG DAPT per tutti?

Plinio Cirillo,
Università di Napoli «Federico II»

Up to a third of patients who are event free for the first year post-MI, will suffer a MI, stroke or death within 3 years.

APOLLO 4-country analysis:
Observed Incidence



*US sample restricted to patients aged ≥65 years. MI, myocardial infarction.

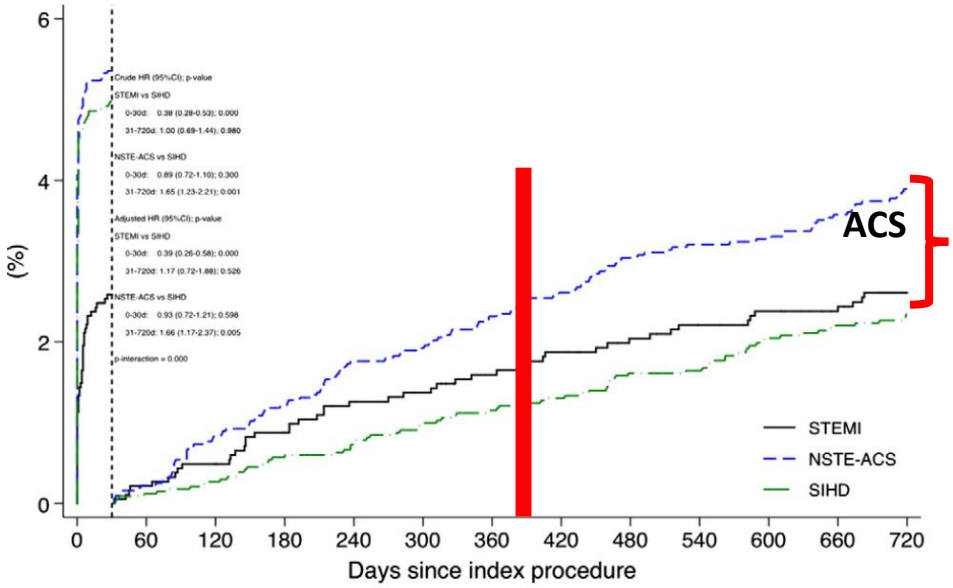
Rapsomaniki E, et al. ESC Late Breaking Registry presentation 2014: In press.

Rationale for long DAPT after PCI

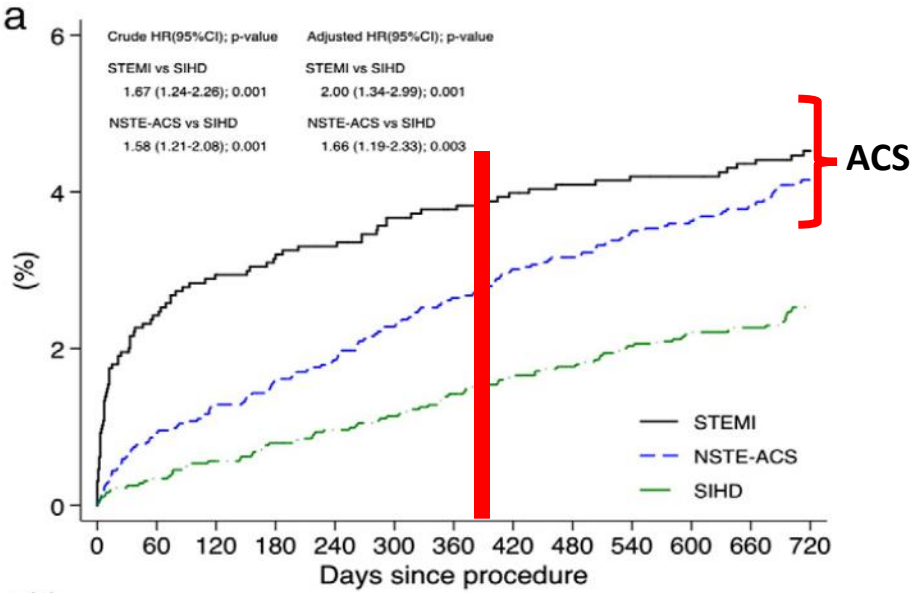
Risk and timing of recurrent ischemic events among patients with stable ischemic heart disease, non–ST-segment elevation acute coronary syndrome, and ST-segment elevation myocardial infarction

Thomas Pilgrim, MD,[a] Pascal Vranckx, MD, PhD,[b] Marco Valgimigli, MD, PhD,[a] Giulio G. Stefanini, MD, Phd,[c] Raffaele Piccolo, MD,[a] Julie Rat, MSc,[d] Martina Rothenbühler, MSc,[d] Stefan Stortecky, MD,[a] Lorenz Räber, MD, PhD,[a] Stefan Blöchlinger, MD,[a] Lukas Hunziker, MD,[a] Sigmund Silber, MD,[c] Peter Jüni, MD,[f] Patrick W. Serruys, MD, PhD,[g] and Stephan Windecker, MD[a] *Bern, Switzerland; Hasselt, Belgium; Milan, Italy; Munich, Germany; Toronto, Canada; and London, United Kingdom*

8800 patients



Myocardial infarction



Cardiac mortality

(Am Heart J 2016;175:56-65.

Rationale for long DAPT after PCI

Residual platelet reactivity to predict long-term clinical outcomes after clopidogrel loading in patients with acute coronary syndromes: comparison of different cutoff values by light transmission aggregometry from the responsiveness to clopidogrel and stent thrombosis 2-acute coronary syndrome (RECLOSE 2-ACS) study

Renato Valenti · Rossella Marcucci · Davide Capodanno · Giuseppe De Luca · Angela Migliorini · Anna Maria Gori · Guido Parodi · Betti Giusti · Nazario Carrabba · Rita Paniccia · Giulia Cantini · Marco Marrani · Gian Franco Gensini · Rosanna Abbate · David Antoniucci

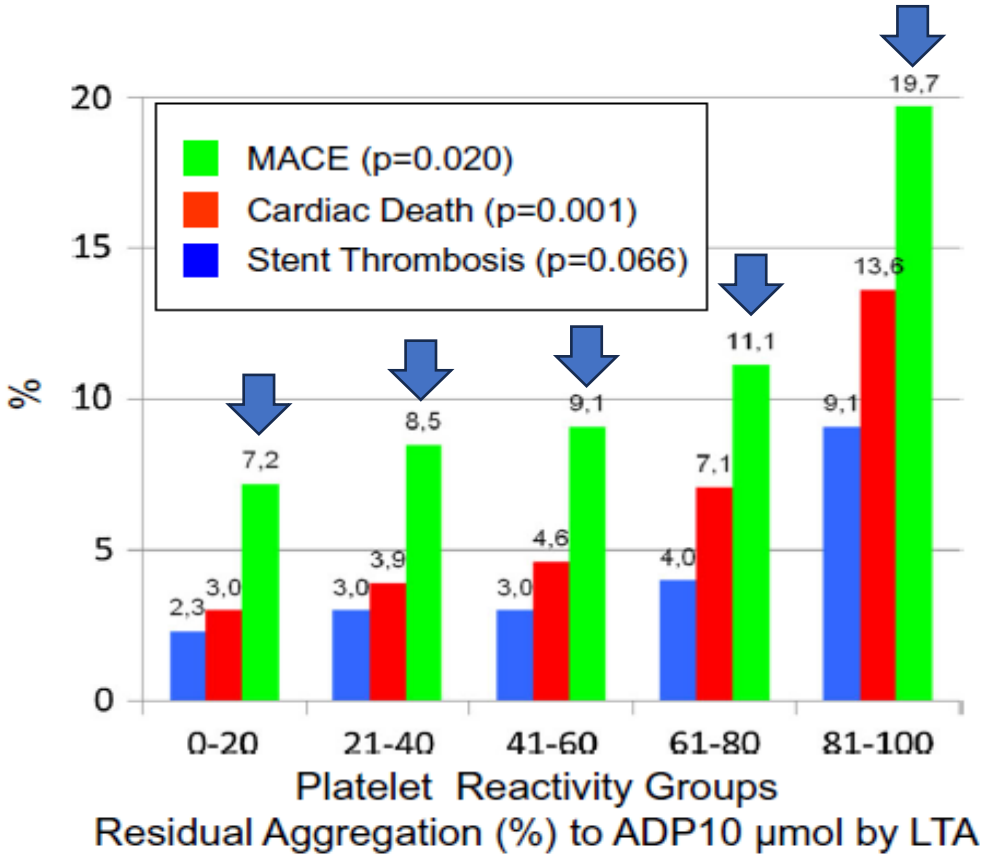
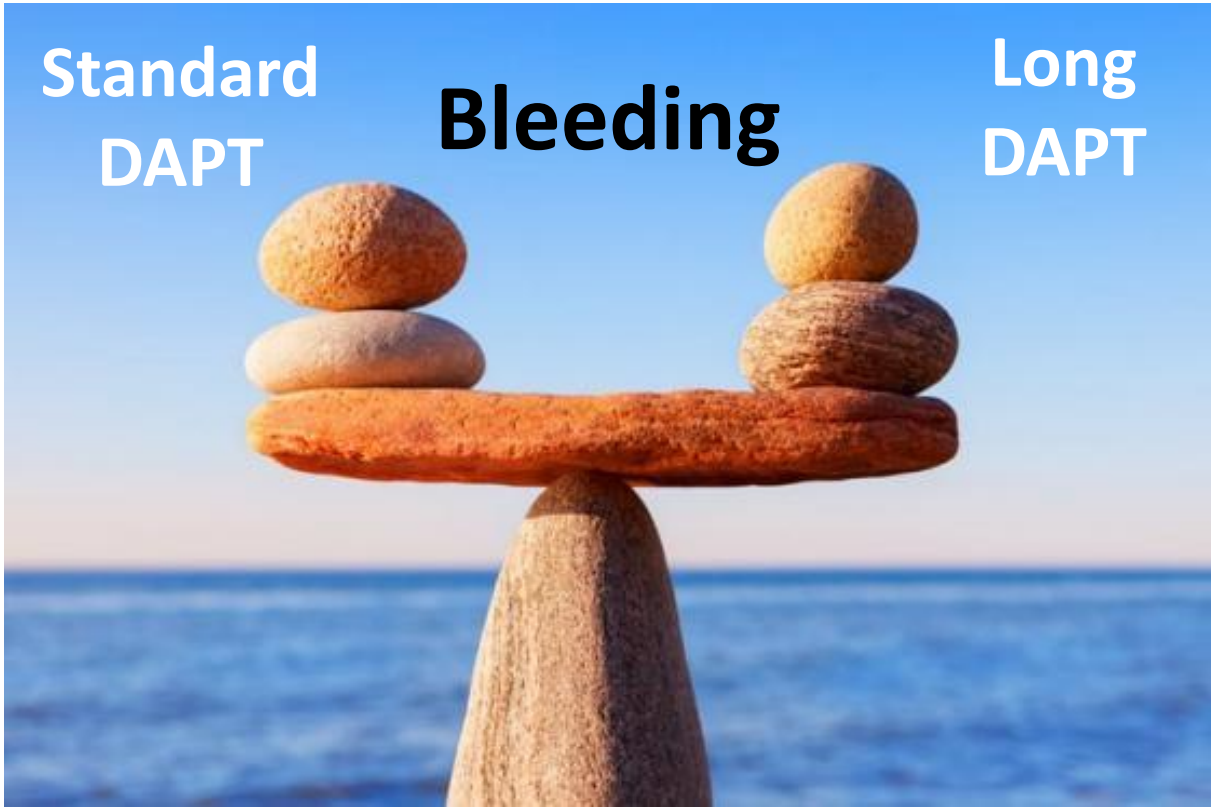


Fig. 1 Two-year outcome according to platelet reactivity groups after clopidogrel loading. Caption: *MACE* major adverse cardiovascular events

J Thromb Thrombolysis (2015) 40:76–82


ALLORA
LONG DAPT
PER TUTTI!!!!!

WARNING !!!!!



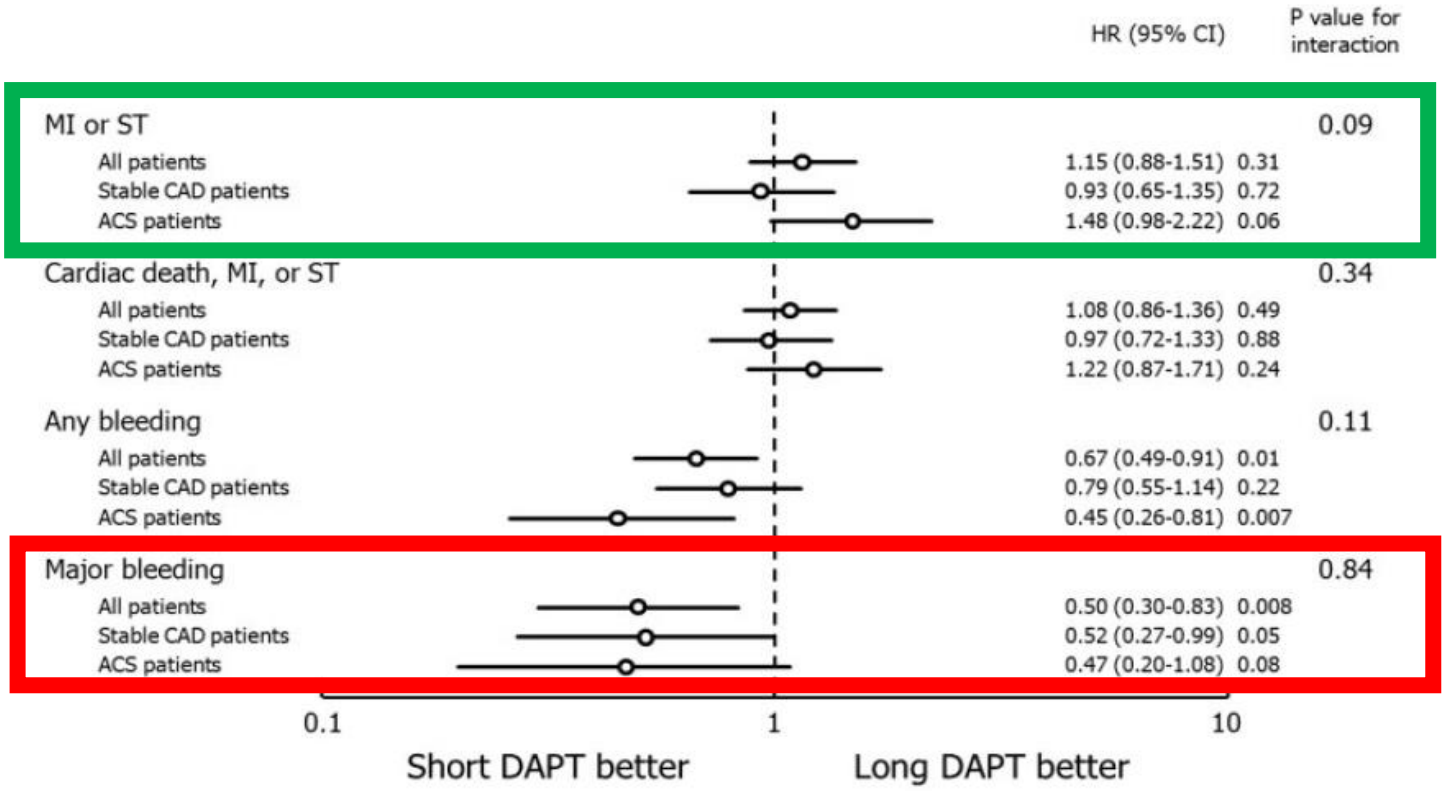
Three, six, or twelve months of dual antiplatelet therapy after DES implantation in patients with or without acute coronary syndromes: an individual patient data pairwise and network meta-analysis of six randomized trials and 11 473 patients

European Heart Journal (2017) **38**, 1034–1043
doi:10.1093/eurheartj/ehw627

Tullio Palmerini[1], Diego Della Riva[1], Umberto Benedetto[2], Letizia Bacchi Reggiani[1], Fausto Feres[3], Alexandre Abizaid[3], Martine Gilard[4], Marie-Claude Morice[5], Marco Valgimigli[6], Myeong-Ki Hong[7], Byeong-Keuk Kim[7], Yangsoo Jang[7], Hyo-Soo Kim[8], Kyung Woo Park[8], Antonio Colombo[9], Alaide Chieffo[9], Diego Sangiorgi[1], Giuseppe Biondi-Zoccai[10], Philippe Généreux[11], Gianni D. Angelini[2], Maria Pufulete[2], Jonathon White[11], Deepak L. Bhatt[12], and Gregg W. Stone[11]*

Thrombosis

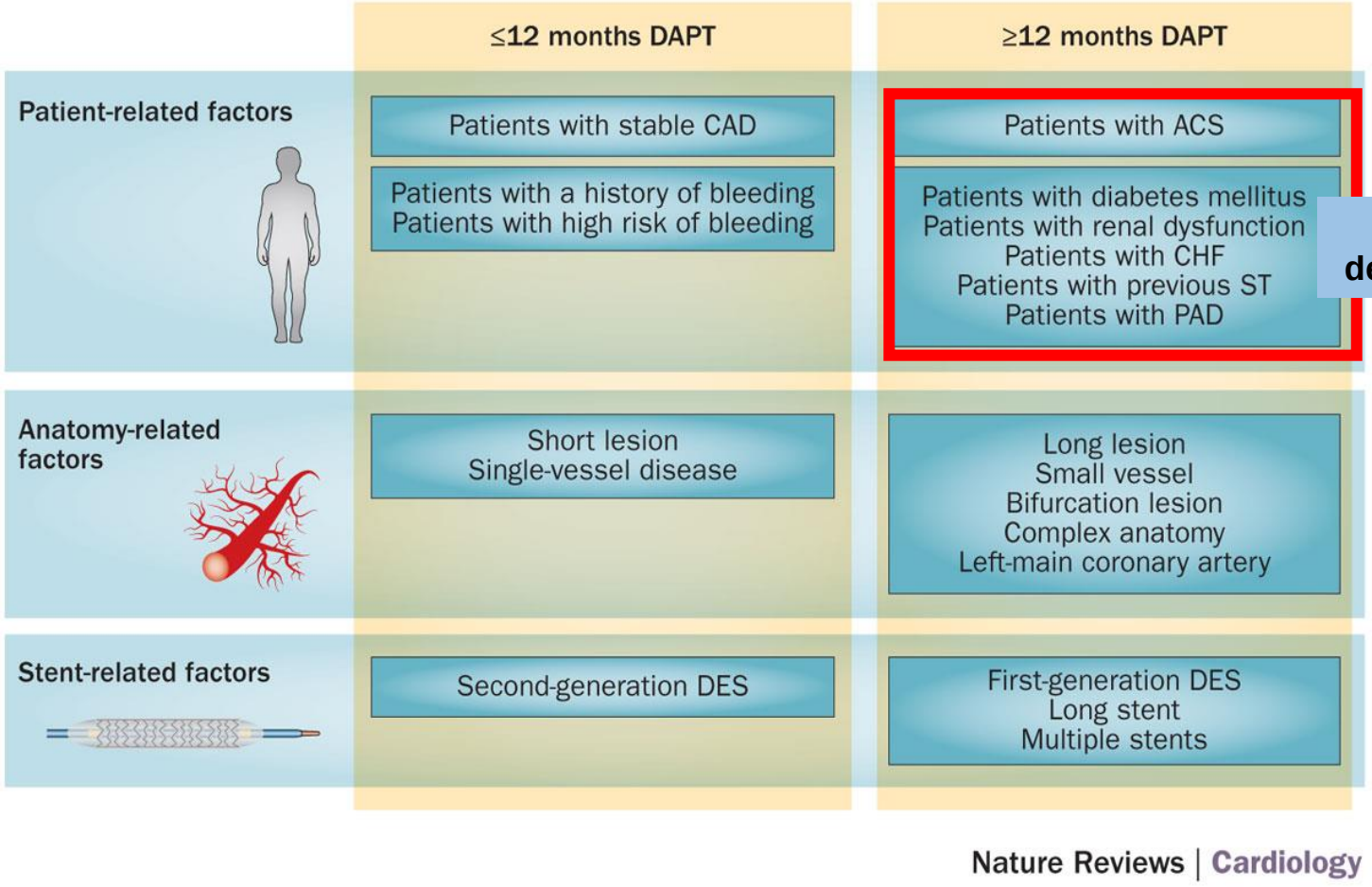
Haemostasis



We have to identify patients suitable for long DAPT

HOW ????

Factors for physicians to consider in determining the optimal duration of DAPT after DES implantation for individual patients



Eisen, A. & Bhatt, D. L. (2015) Defining the optimal duration of DAPT after PCI with DES *Nat. Rev. Cardiol.* doi:10.1038/nrcardio.2015.87

Combined association of key risk factors on ischaemic outcomes and bleeding in patients with myocardial infarction

Daniel Lindholm,[1] Giovanna Sarno,[2] David Erlinge,[3] Bodil Svennblad,[4] Lars Pål Hasvold,[5] Magnus Janzon,[6] Tomas Jernberg,[7] Stefan K James[4]

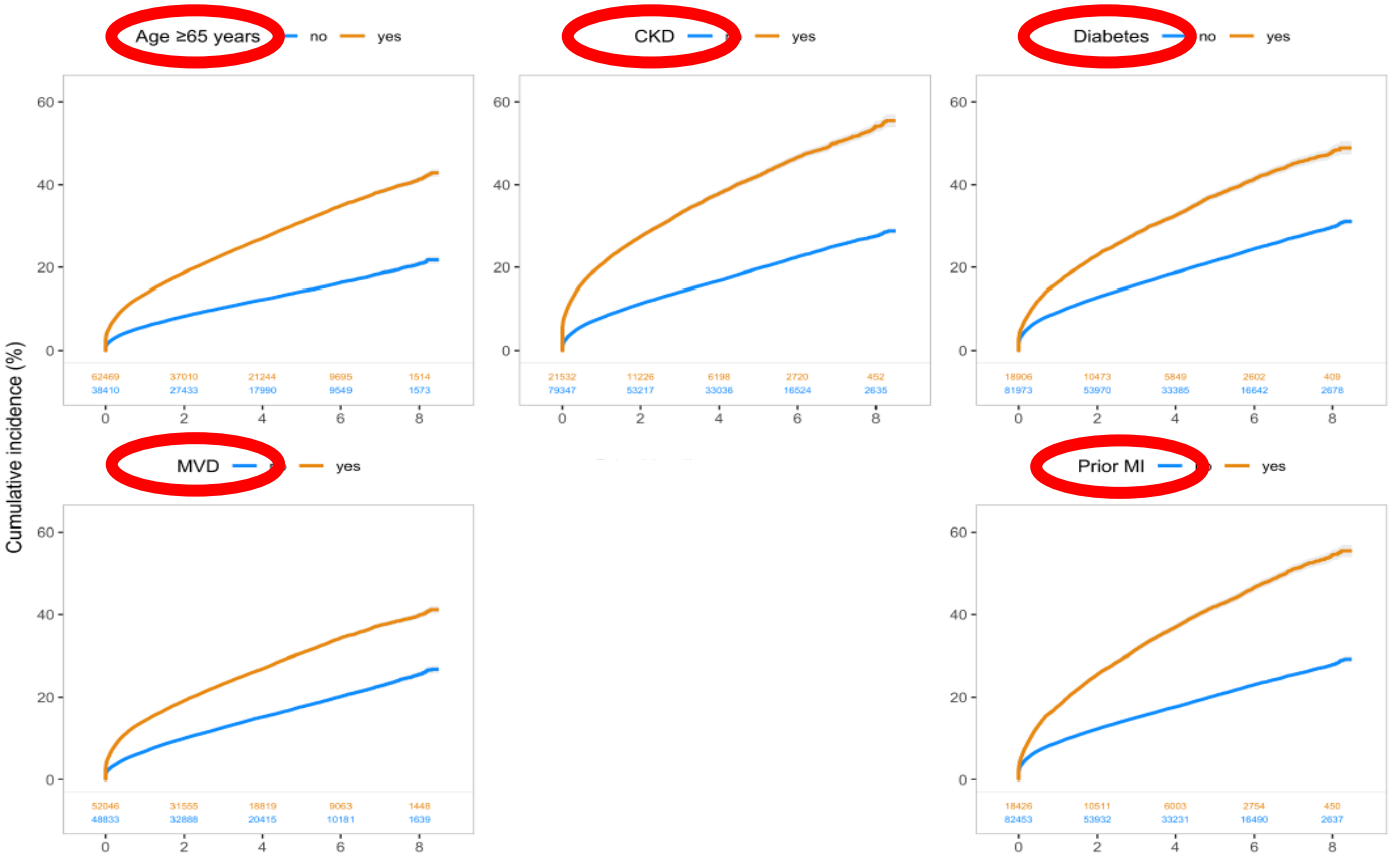


Figure 2 CVD/MI/stroke: Kaplan-Meier estimates of CVD/MI/stroke in relation to risk factors. CKD, chronic kidney disease; CVD, cardiovascular death; MI, myocardial infarction; MVD, multivessel disease.

Lights and shadows of long-term dual antiplatelet therapy in "real life" clinical scenarios

Marino Scherillo[1] · Plinio Cirillo[2] · Dario Formigli[1] · Giulio Bonzani[3] · Paolo Calabrò[4] · Paolo Capogrosso[5] · Pio Caso[6] · Giovanni Esposito[2] · Rosario Farina[7] · Paolo Golino[4] · Tonino Lanzillo[8] · Franco Mascia[9] · Ciro Mauro[10] · Federico Piscione[11] · Girolamo Sibilio[12] · Bernardino Tuccillo[13] · Bruno Villari[14] · Bruno Trimarco[2]

Journal of Thrombosis and Thrombolysis (2018) 46:559–569

The final take-home message is that an accurate clinical evaluation between ischemic and hemorrhagic risk should be done when deciding the choice of the long term DAPT. In this context, the Study Group propose the acronym MADRE (**M**ultivessel disease, **A**ge > 65 yrs., **D**iabetes, **R**enal impairment, **E**vent recurrence) to facilitate recognition of those patients who might have the greater benefit in prolonging DAPT.

MADRE:

Multivessel disease,

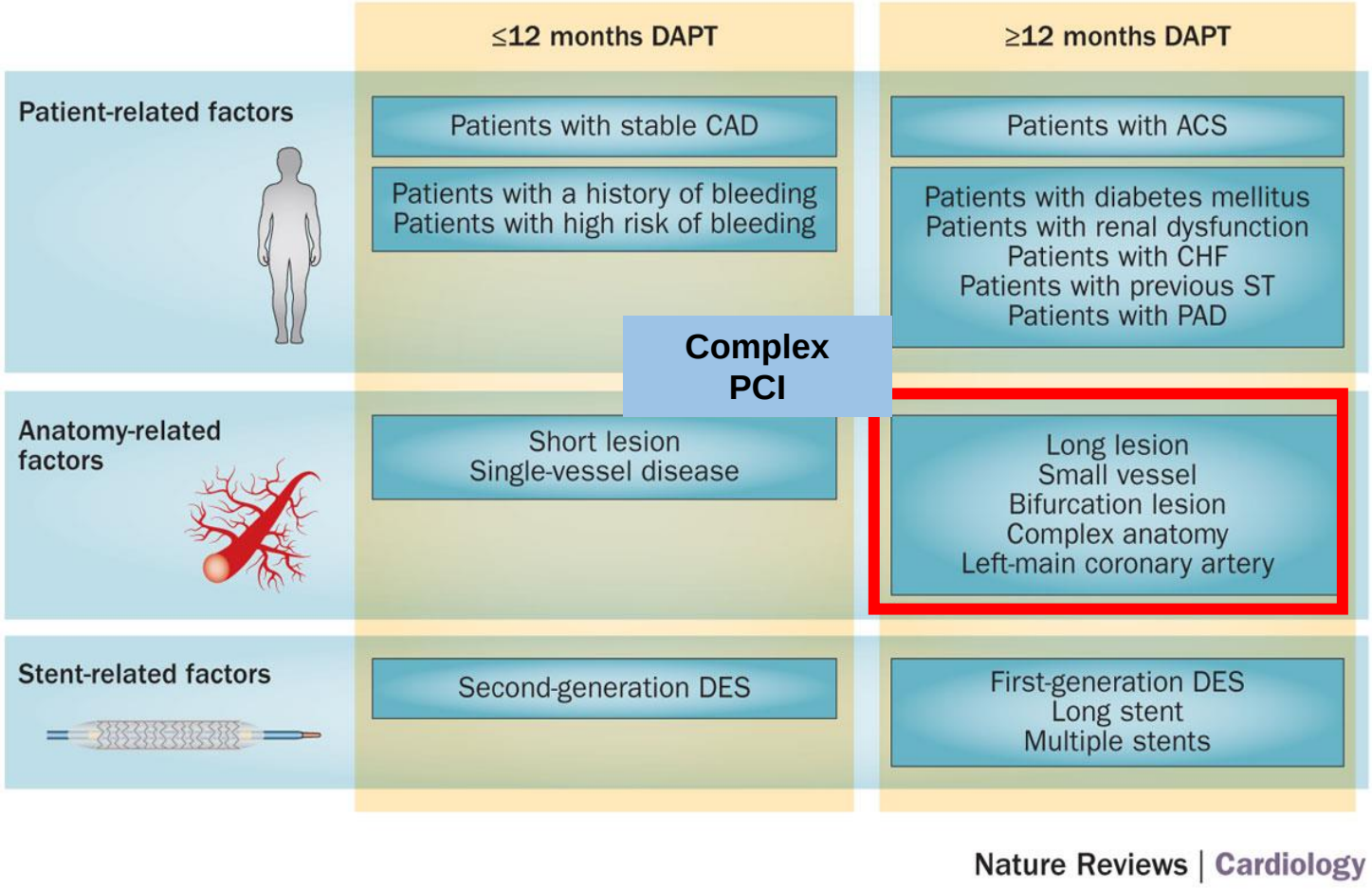
Age > 65 years

Diabetes

Renal impairment

Event recurrence

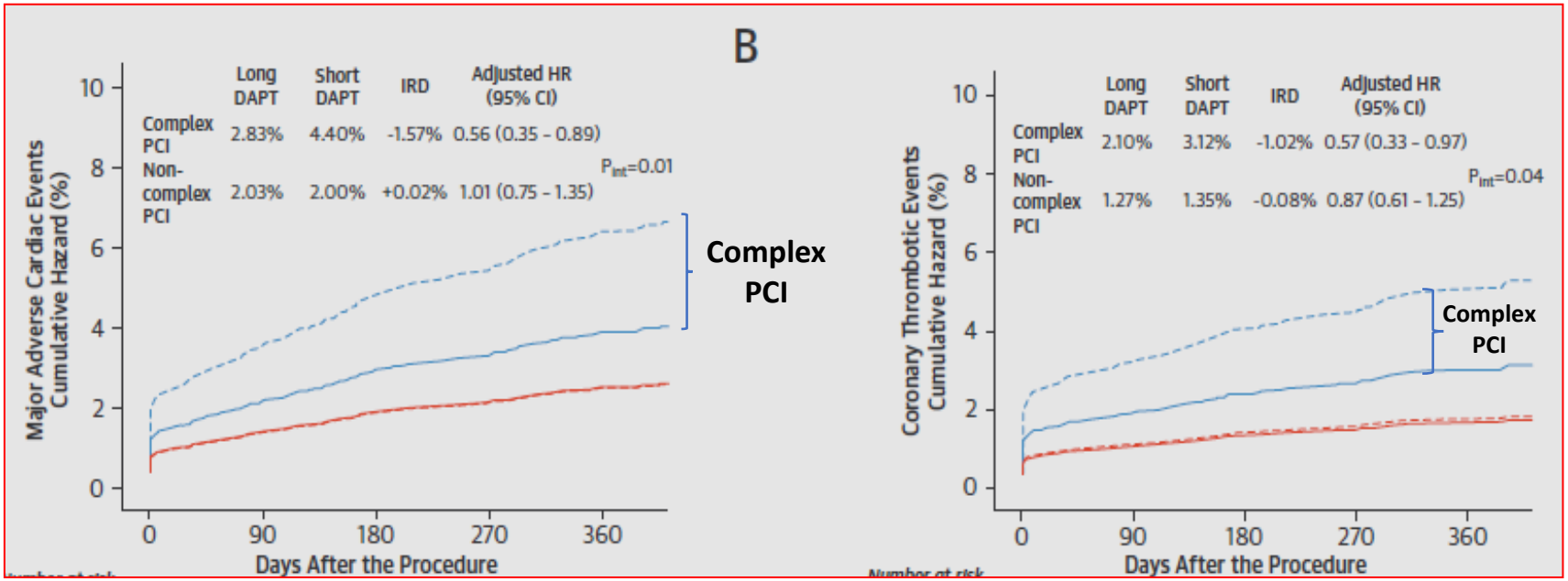
Factors for physicians to consider in determining the optimal duration of DAPT after DES implantation for individual patients



Eisen, A. & Bhatt, D. L. (2015) Defining the optimal duration of DAPT after PCI with DES *Nat. Rev. Cardiol.* doi:10.1038/nrcardio.2015.87

Efficacy and Safety of Dual Antiplatelet Therapy After Complex PCI

Gennaro Giustino, MD,[a,b,c] Alaide Chieffo, MD,[c] Tullio Palmerini, MD,[d] Marco Valgimigli, MD, PhD,[e] Fausto Feres, MD,[f] Alexandre Abizaid, MD,[f] Ricardo A. Costa, MD,[f] Myeong-Ki Hong, MD, PhD,[g] Byeong-Keuk Kim, MD, PhD,[g] Yangsoo Jang, MD, PhD,[g] Hyo-Soo Kim, MD, PhD,[h] Kyung Woo Park, MD,[h] Martine Gilard, MD,[i] Marie-Claude Morice, MD,[j] Fadi Sawaya, MD,[j] Gennaro Sardella, MD,[k] Philippe Genereux, MD,[b,l] Bjorn Redfors, MD, PhD,[b] Martin B. Leon, MD,[c,l] Deepak L. Bhatt, MD, MPH,[m] Gregg W. Stone, MD,[b,l] Antonio Colombo, MD[c]



Panminerva Medica 2022 mese;64(0):000-000
DOI: 10.23736/S0031-0808.22.04604-3

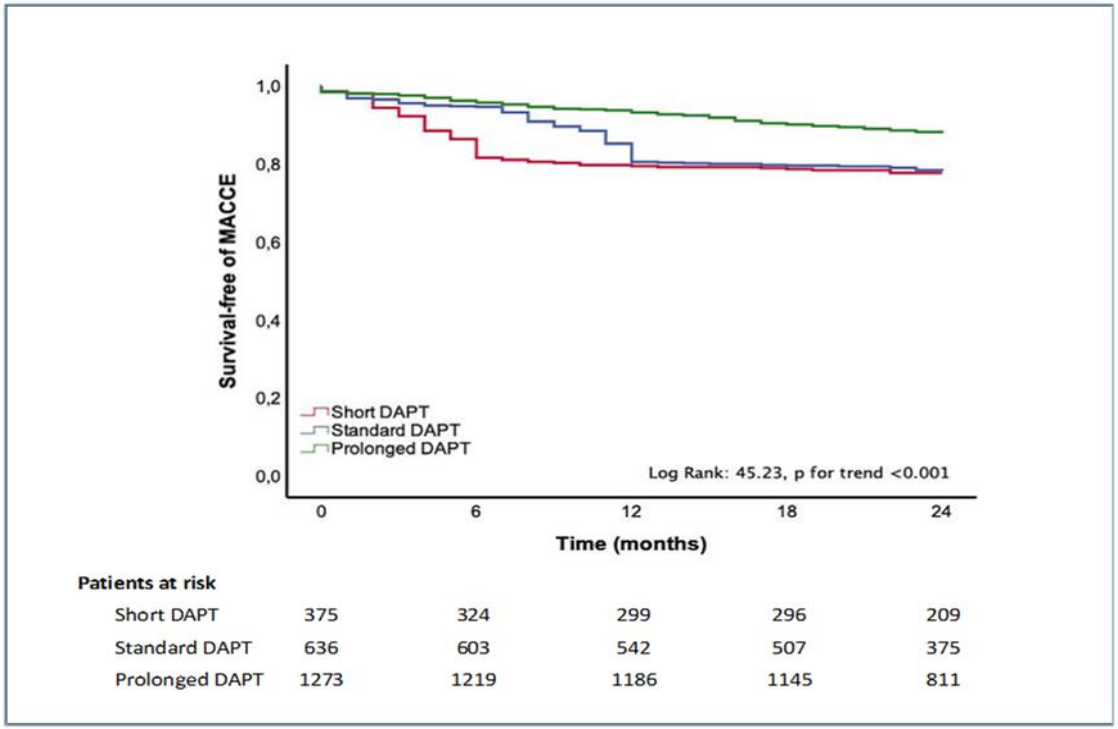
ORIGINAL ARTICLE

Impact of dual antiplatelet therapy duration on clinical outcome after coronary bifurcation stenting: results from the Euro Bifurcation Club registry

Plinio CIRILLO [1] *, Luigi DI SERAFINO [1], Habib GAMRA [2], Marco ZIMARINO [3, 4], Emanuele BARBATO [1, 7], Carlo BRIGUORI [5], Ignatio J. AMAT-SANTOS [6], Alaide CHIEFFO [8], Andrejs ERGLIS [9], Robert J. GIL [10], Sasko A. KEDEV [11], Ivo PETROV [12], Francesco RADICO [3], Tullio NIGLIO [1], Sunao NAKAMURA [13], Ricardo A. COSTA [14], Vojko KANIC [15], Matteo PERFETTI [4], Mariano PELLICANO [1, 7, 16], Kristina MARIC [17], Tullio TESORIO [16], Vladan VUKCEVIC [18], Giovanni ESPOSITO [1], Goran STANKOVIC [18] on behalf of The EuroBifurcation Club

2284 consecutive patients who completed at least 18 months follow-up

Patients divided into 3 groups: Short DAPT (<6 months, N.=375); Standard DAPT (≥6 months but ≤12-months, N.=636); Prolonged DAPT (>12-months, N.=1273)



Patients at risk					
Short DAPT	375	324	299	296	209
Standard DAPT	636	603	542	507	375
Prolonged DAPT	1273	1219	1186	1145	811

Figure 2.—Two-years MACCE free survival.
The Kaplan-Meier curves for survival free of major adverse cardiac and cerebrovascular events for all patients grouped according to the DAPT duration (MACCE; log rank 45.23, P for trend <0.001).

Trade-off of myocardial infarction vs. bleeding types on mortality after acute coronary syndrome: lessons from the Thrombin Receptor Antagonist for Clinical Event Reduction in Acute Coronary Syndrome (TRACER) randomized trial

Marco Valgimigli[1,2]*, Francesco Costa[2,3], Yuliya Lokhnygina[4], Robert M. Clare[4], Lars Wallentin[5], David J. Moliterno[6], Paul W. Armstrong[7], Harvey D. White[8], Claes Held[5], Philip E. Aylward[9], Frans Van de Werf[10], Robert A. Harrington[11], Kenneth W. Mahaffey[11], and Pierluigi Tricoci[4]

12 944 patients with non-ST-segment elevation ACS

BLEEDING IMPACTS ON MORTALITY!!!

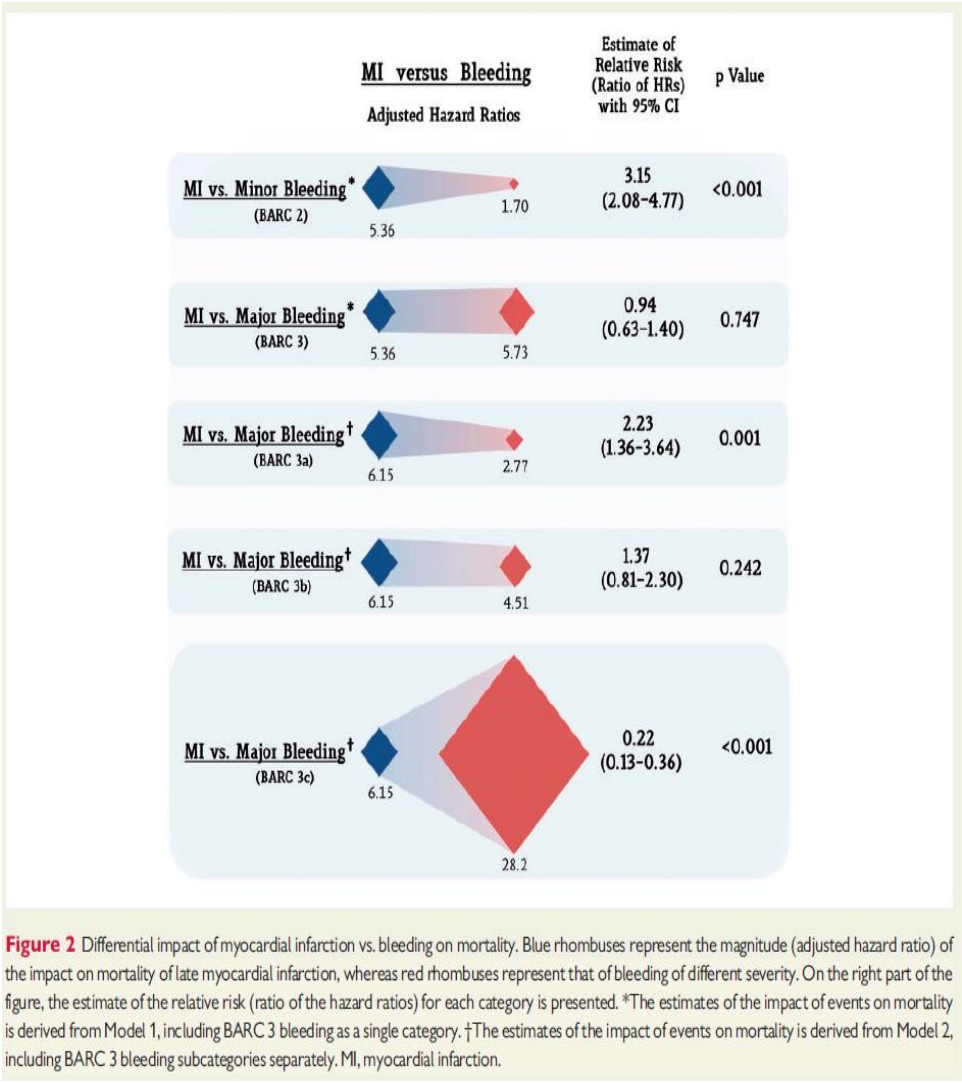


Figure 2 Differential impact of myocardial infarction vs. bleeding on mortality. Blue rhombuses represent the magnitude (adjusted hazard ratio) of the impact on mortality of late myocardial infarction, whereas red rhombuses represent that of bleeding of different severity. On the right part of the figure, the estimate of the relative risk (ratio of the hazard ratios) for each category is presented. *The estimates of the impact of events on mortality is derived from Model 1, including BARC 3 bleeding as a single category. †The estimates of the impact of events on mortality is derived from Model 2, including BARC 3 bleeding subcategories separately. MI, myocardial infarction.

Eur Heart J 2017; 38(11):804-810

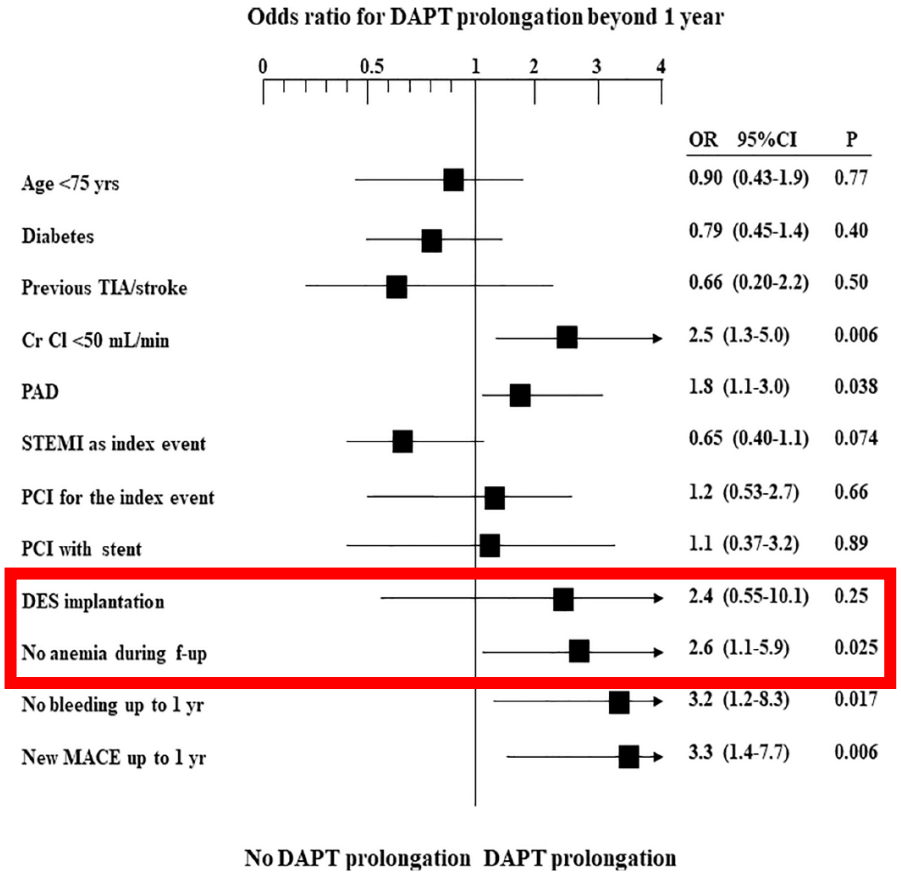
RESEARCH ARTICLE

Prevalence and predictors of dual antiplatelet therapy prolongation beyond one year in patients with acute coronary syndrome

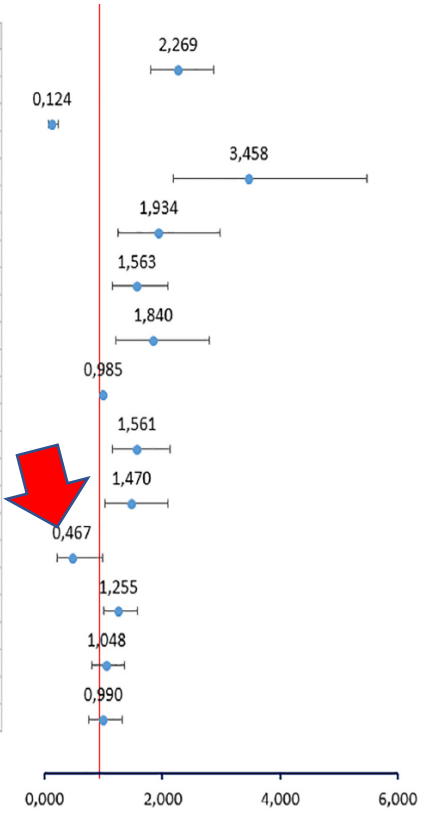
Giuseppe Patti[1]*, Ilaria Cavallari[1], Emilia Antonucci[2], Paolo Calabrò[3], Plinio Cirillo[4], Paolo Gresele[5], Gualtiero Palareti[2], Vittorio Pengo[6], Pasquale Pignatelli[7], Elisabetta Ricottini[1], Rossella Marcucci[8]

Contemporary management of patients referring to cardiologists one to three years from a myocardial infarction: The EYESHOT Post-MI study

Leonardo De Luca [a,*], Federico Piscione [b], Furio Colivicchi [c], Donata Lucci [d], Franco Mascia [e], Barbara Marinoni [f], Plinio Cirillo [g], Daniele Grosseto [h], Ciro Mauro [i], Paolo Calabrò [j], Federico Nardi [k], Roberta Rossini [l], Giovanna Geraci [m], Domenico Gabrielli [n], Andrea Di Lenarda [o], Michele Massimo Gulizia [p], on behalf of the EYESHOT Post-MI Investigators [1]



	OR	95%CI	P
(12-24] vs (24-36] months from last MI	2.269	1.791-2.875	<.0001
Use of oral anticoagulant	0.124	0.068-0.228	<.0001
Prior PCI with >2 stents vs No PCI	3.458	2.185-5.472	<.0001
History of PAD	1.934	1.255-2.982	0.0028
Multiple MI	1.563	1.162-2.103	0.0032
Prior PCI with ≤ 2 stents vs No PCI	1.840	1.208-2.802	0.0045
Age (per 1-year increase)	0.985	0.975-0.995	0.0045
Hospital admission vs outpatient visit	1.561	1.147-2.126	0.0046
Chronic renal failure	1.470	1.028-2.103	0.0348
History of major bleeding	0.467	0.222-0.985	0.0457
NSTEMI vs STEMI	1.255	0.998-1.578	0.0520
Diabetes	1.048	0.813-1.350	0.7182
Female vs Male	0.990	0.745-1.316	0.9465



How identify
High Bleeding Risk patients???

Risk score vs clinical judgments

Use of risk scores as guidance for the duration of dual antiplatelet therapy

Recommendations	Class[a]	Level[b]
The use of risk scores designed to evaluate the benefits and risks of different DAPT durations[c] may be considered.[15,18]	IIb	A

However, none of these risk prediction models have been prospectively tested in the setting of RCTs. Therefore, their value in improving patient outcomes remains unclear.

Determinants of High Bleeding Risk

Elderly,
Previous bleeding events,
Anemia,
Thrombocytopenia,
Coagulation diseases,
Renal dysfunction,
Low body weight and gender,
Chronic treatment with steroids or FANS,
Atrial Fibrillation (DOACs)

Determinants of High Ischemic Risk

ACS
Diabetes
Chronic Renal Failure
Heart Failure
Recurrent Events
Previous ST
PAD
Multivessel Disease
Stenting of LM

Clinical "Dynamic" Assessment

2023 ESC Guidelines for the management of acute coronary syndromes

Developed by the task force on the management of acute coronary syndromes of the European Society of Cardiology (ESC)

Prolonging antithrombotic therapy		
Discontinuation of antiplatelet treatment in patients treated with an OAC is recommended after 12 months.[324,325]	I	B
Adding a second antithrombotic agent to aspirin for extended long-term secondary prevention should be considered in patients with high ischaemic risk and without HBR[c].[314–318]	IIa	A
Adding a second antithrombotic agent to aspirin for extended long-term secondary prevention may be considered in patients with moderate ischaemic risk and without HBR[c].[314–318]	IIb	A

Consensus statement

Check for updates

De-escalation or abbreviation of dual antiplatelet therapy in acute coronary syndromes and percutaneous coronary intervention: a Consensus Statement from an international expert panel on coronary thrombosis

Diana A. Gorog[1,2,32], Jose Luis Ferreiro[3,4,32], Ingo Ahrens[5,6], Junya Ako[7], Tobias Geisler[8], Sigrun Halvorsen[9,10], Kurt Huber[11,12], Young-Hoon Jeong[13,14], Eliano P. Navarese[15,16], Andrea Rubboli[17], Dirk Sibbing[18,19,20], Jolanta M. Siller-Matula[21], Robert F. Storey[22], Jack W. C. Tan[23], Jurrien M. ten Berg[24,25], Marco Valgimigli[26,27], Christophe Vandenbriele[28] & Gregory Y. H. Lip[29,30,31]

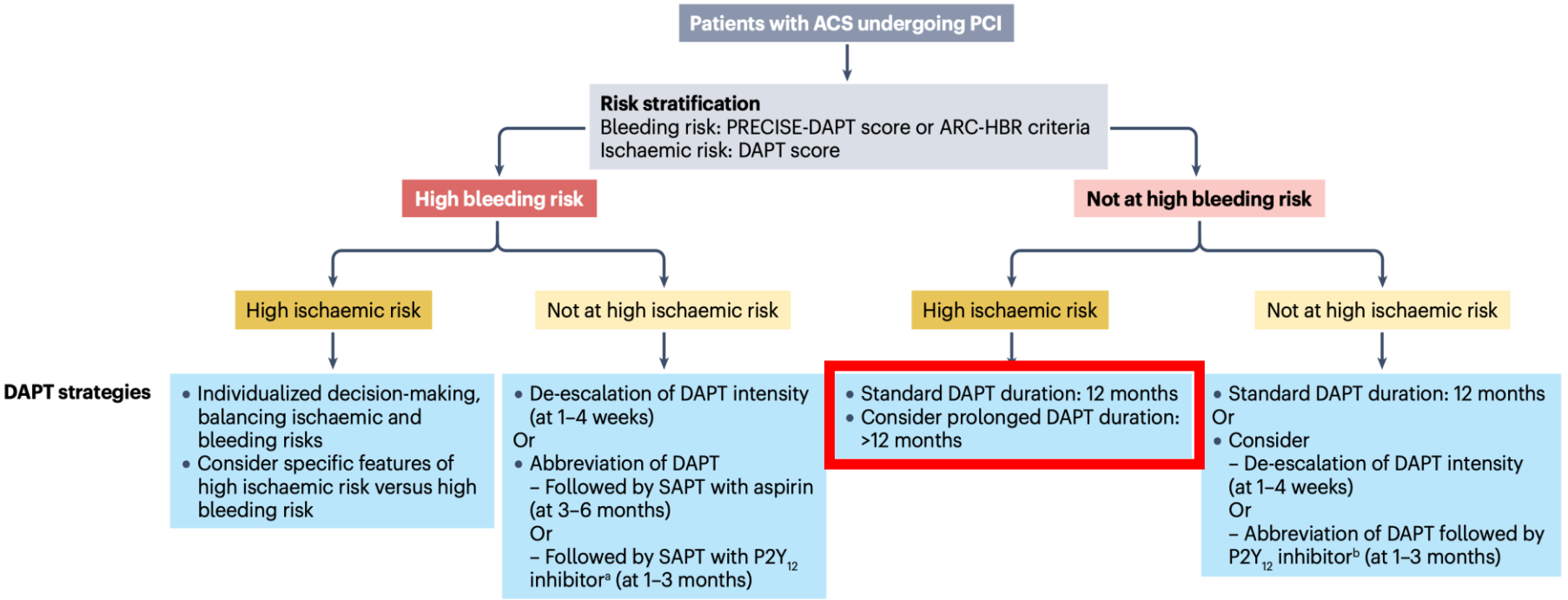


Fig. 2 | Algorithm for the selection of DAPT in patients with ACS undergoing PCI. ACS, acute coronary syndrome; ARC-HBR, Academic Research Consortium for High Bleeding Risk; DAPT, dual antiplatelet therapy; $P2Y_{12}$, P2Y purinoceptor 12; PCI, percutaneous coronary intervention; SAPT, single antiplatelet therapy. [a]Clopidogrel is the most studied $P2Y_{12}$ inhibitor in this setting. [b]Ticagrelor is the most studied $P2Y_{12}$ inhibitor in this setting.

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Grazie per l' attenzione.....