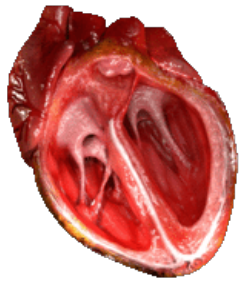
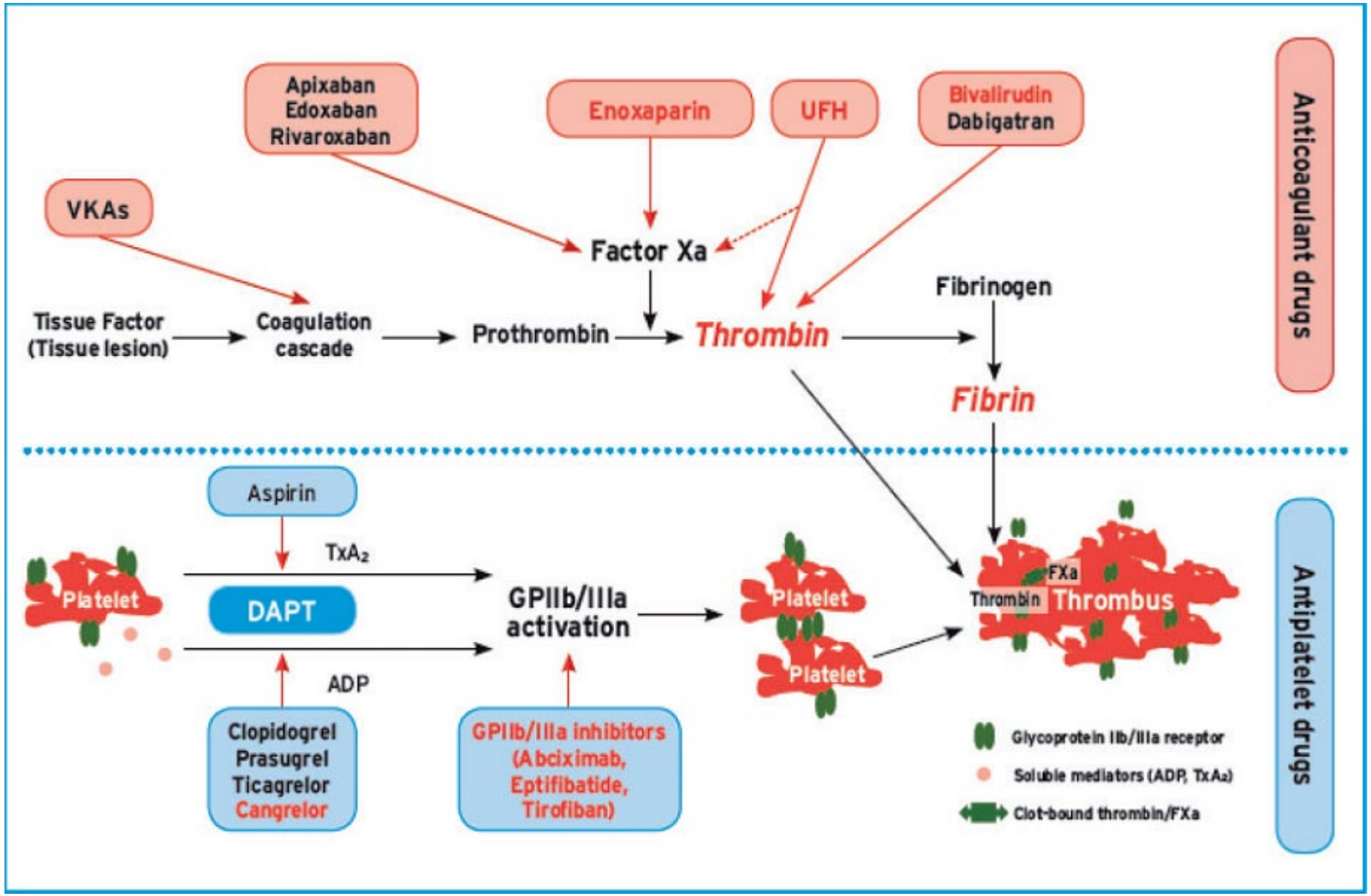
ΝΕΟΤΕΡΑ ΔΕΔΟΜΕΝΑ ΣΤΗΝ ΔΙΑΧΕΙΡΙΣΗ ΤΗΣ ΑΝΤΙΘΡΟΜΒΩΤΙΚΗΣ ΑΓΩΓΗΣ

Αντιθρομβωτική Αγωγή μετά από PCI

Ευάγγελος Οικονόμου
Καρδιολόγος, Γ' Πανεπιστημιακή Καρδιολογική Κλινική,
Γ.Ν.Ν.Θ.Α «Η Σωτηρία»





2018 ESC/EACTS Guidelines on myocardial revascularization

Editorial > Int J Cardiol. 2015;187:63-5. doi: 10.1016/j.ijcard.2015.03.281. Epub 2015 Mar 20.

Genetic testing and antiplatelet treatment: Still way to go?

Evangelos Oikonomou [1], Nikolaos Papageorgiou [1], Spyridon Papaioannou [1], Konstantinos Toutouzas [1], George Latsios [1], Gerasimos Siasos [1], Dimitris Tousoulis [2]

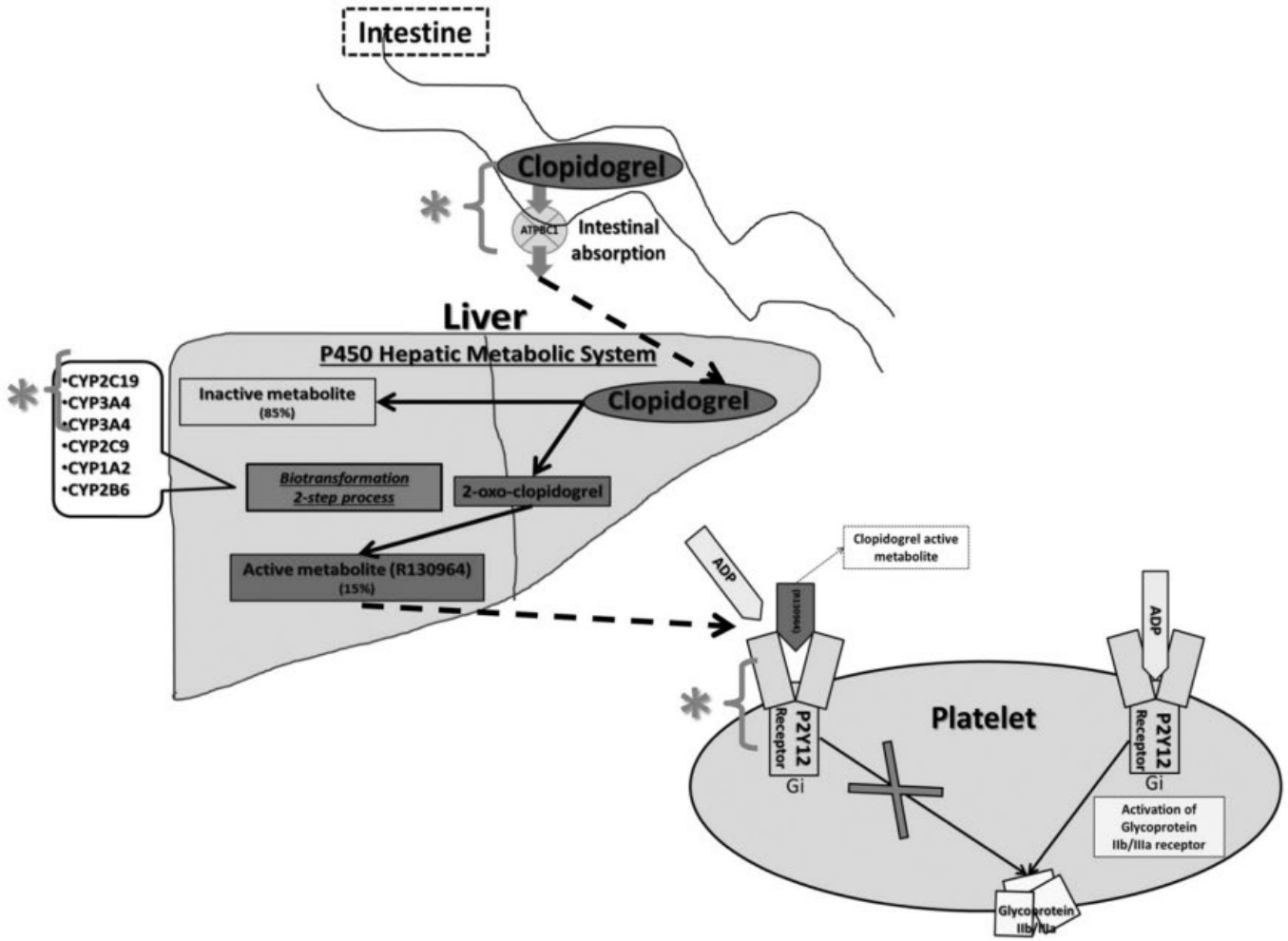
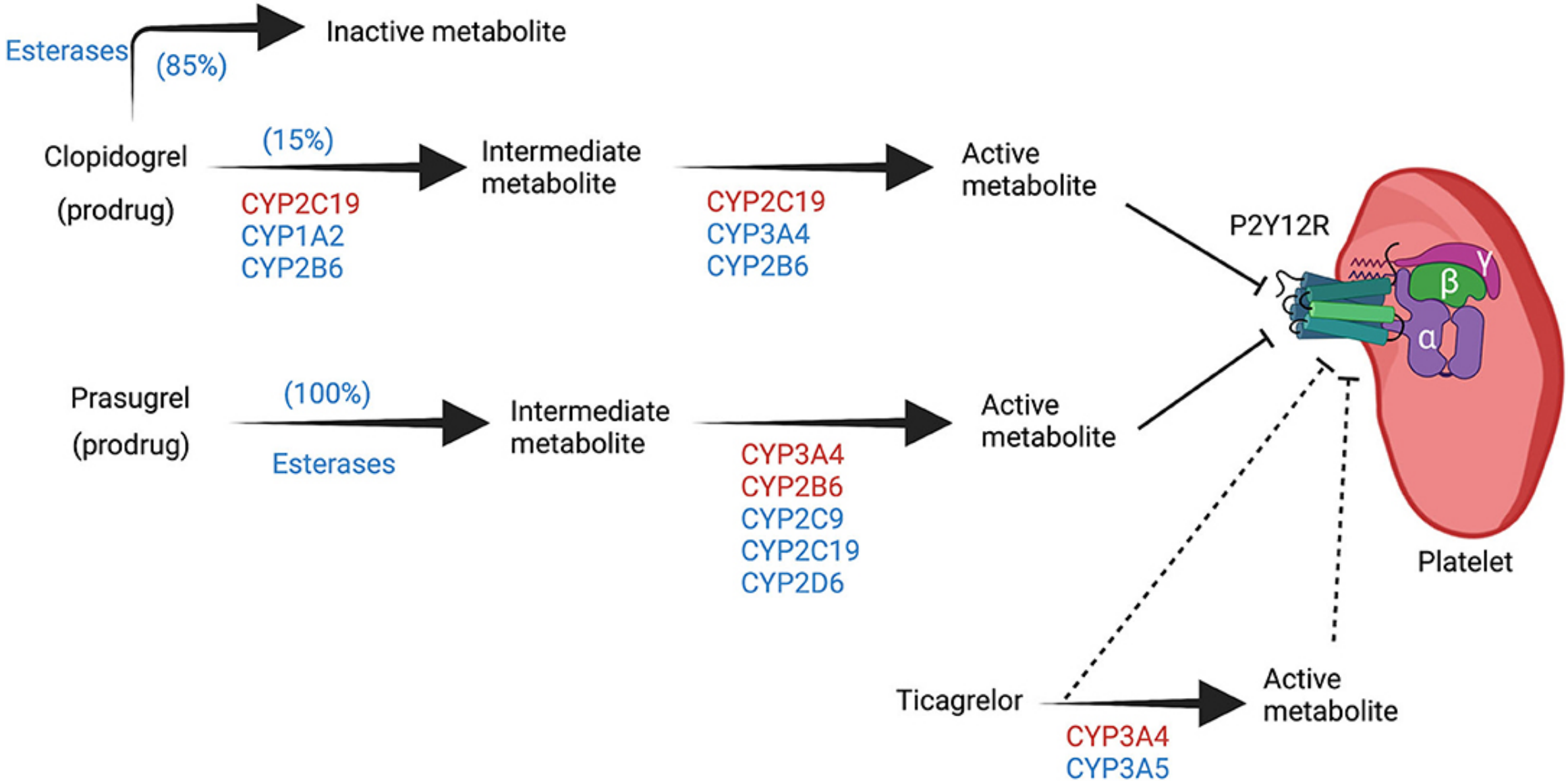


Fig. 1. Absorption and biotransformation of clopidogrel. The sites where single nucleotide polymorphisms can affect clopidogrel active metabolite concentration and function are marked with *. ATPBC1: adenosine triphosphate-binding cassete-1; CYP: Cytochrome P450.



Review > Front Cardiovasc Med. 2022 Mar 23;9:850028. doi: 10.3389/fcvm.2022.850028. eCollection 2022.

Genotype-Guided Use of P2Y12 Inhibitors: A Review of Current State of the Art

Abdullah Al-Abcha [1], Yasser Radwan [1], Danielle Blais [2], Ernest L Mazzaferri Jr [2], Konstantinos Dean Boudoulas [2], Essa M Essa [3], Richard J Gumina [2]

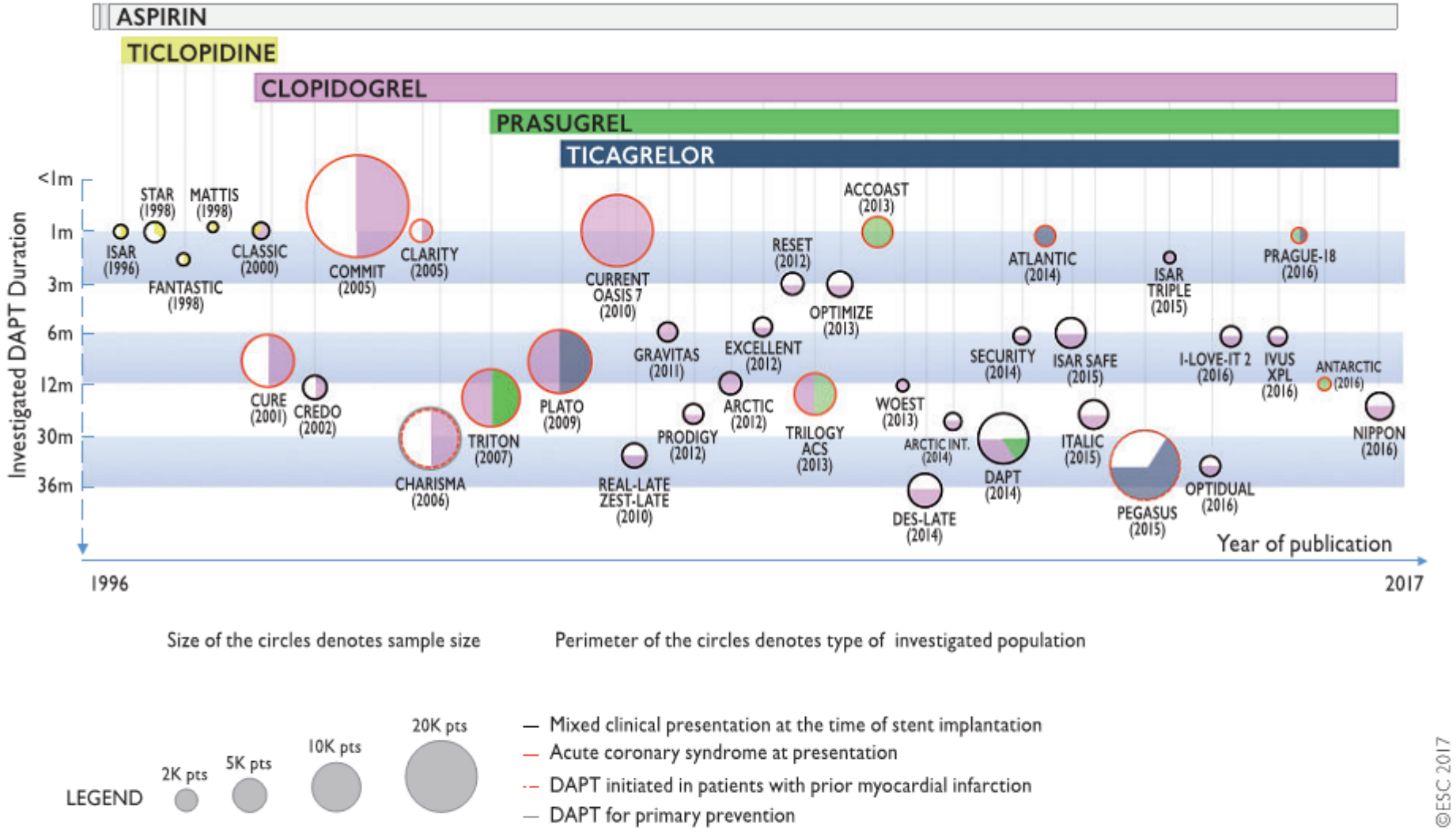
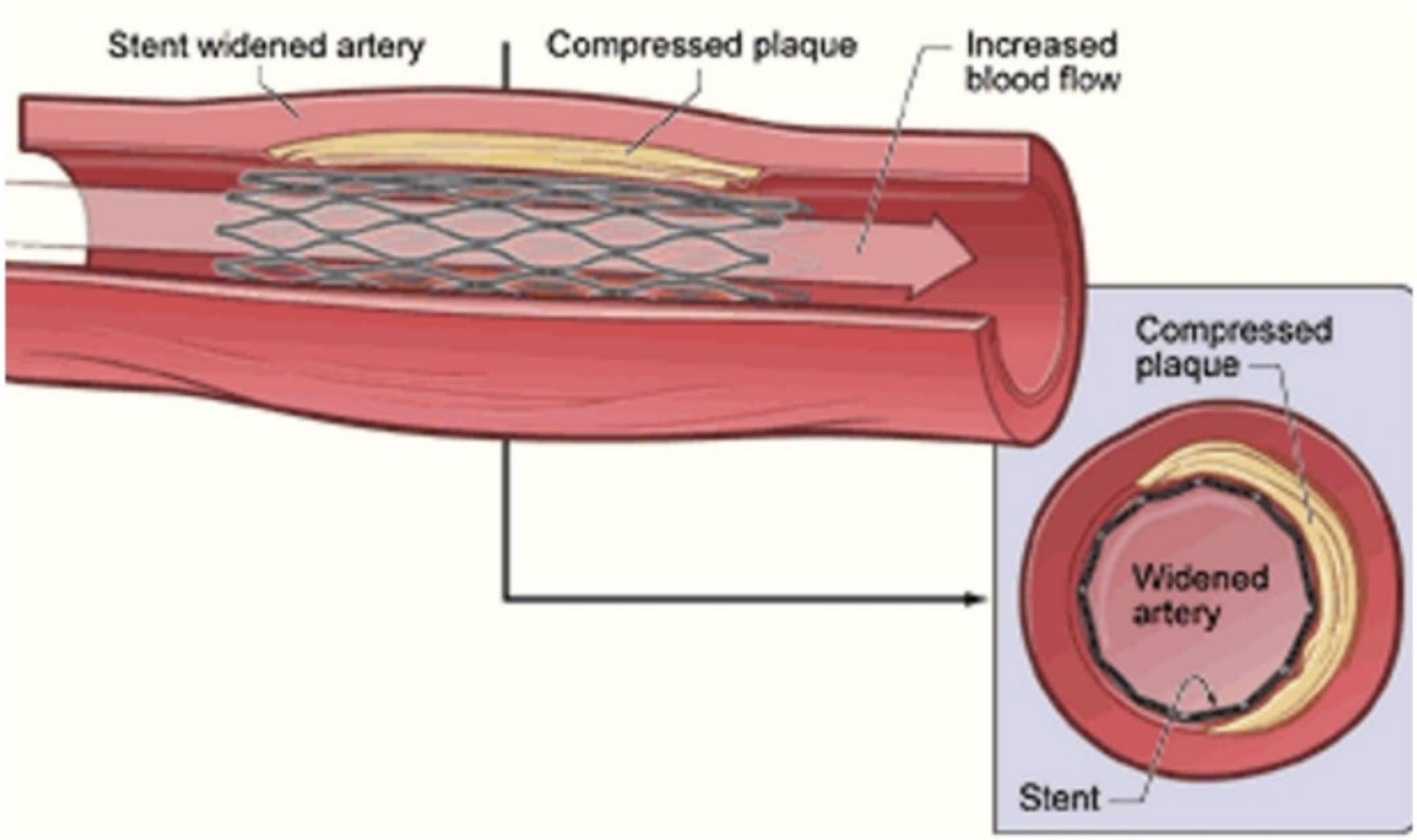


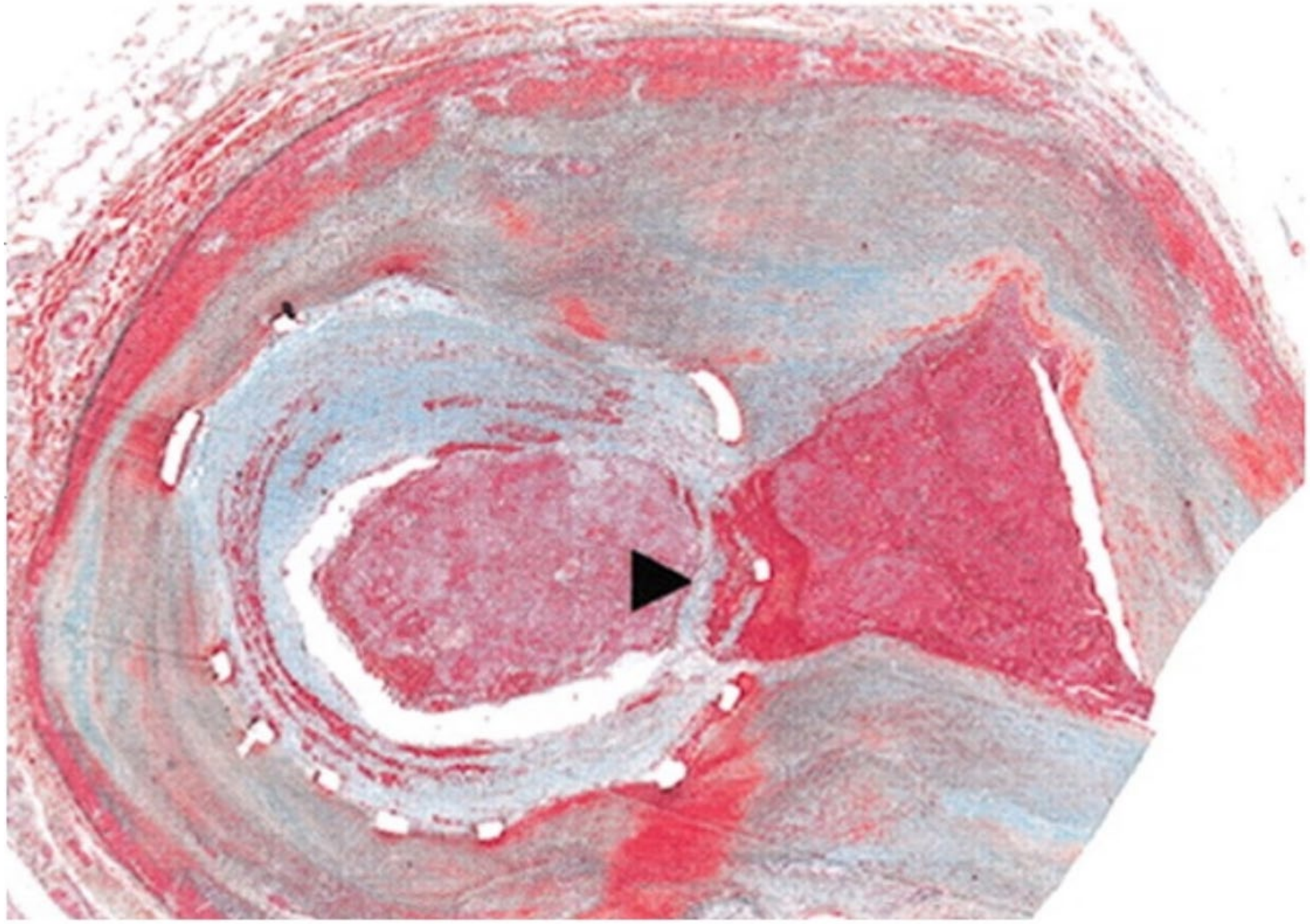
Figure 1: History of dual antiplatelet therapy (DAPT) in patients with coronary artery disease. The size of the circles denotes sample size. The colours of perimeters identify the type of included patient populations within each study. The colours within each circle identify the antiplatelet agent(s) investigated. Head-to-head studies comparing similar durations of two different antiplatelet strategies are shown with a vertical line, whereas those investigating different treatment durations are shown with a horizontal line. Studies investigating different treatment strategies or regimens and not treatment durations or type (e.g. pre-treatment in ACCOAST, tailored therapy in GRAVITAS, double dose of clopidogrel in CURRENT OASIS 7, etc.) are represented with a single colour indicating the $P2Y_{12}$ inhibitor, which was tested on top of aspirin.

pts = patients.

Vessel Trauma



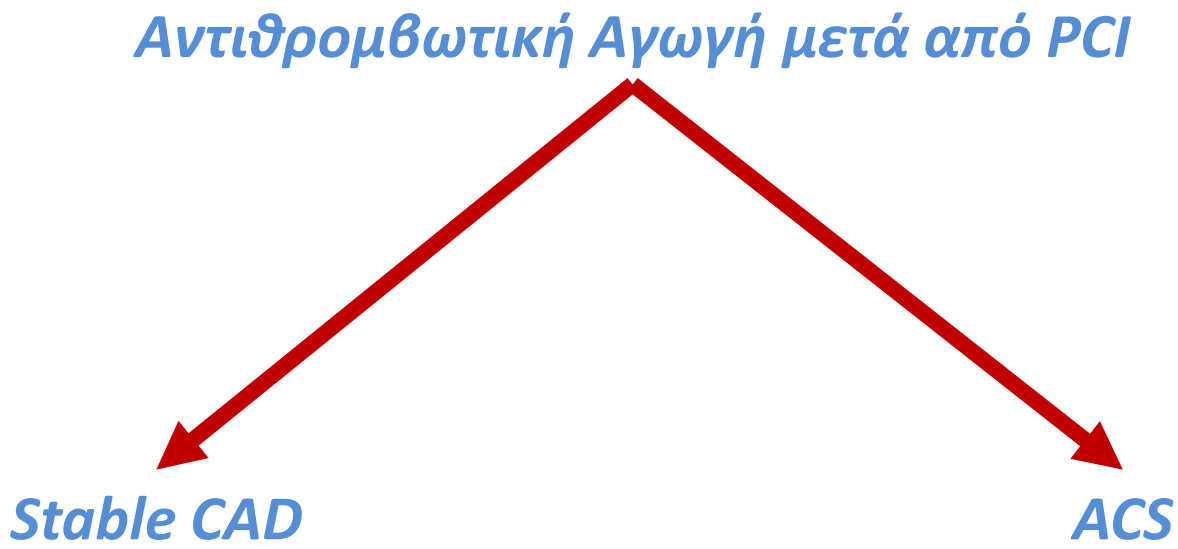
Stent Thrombosis

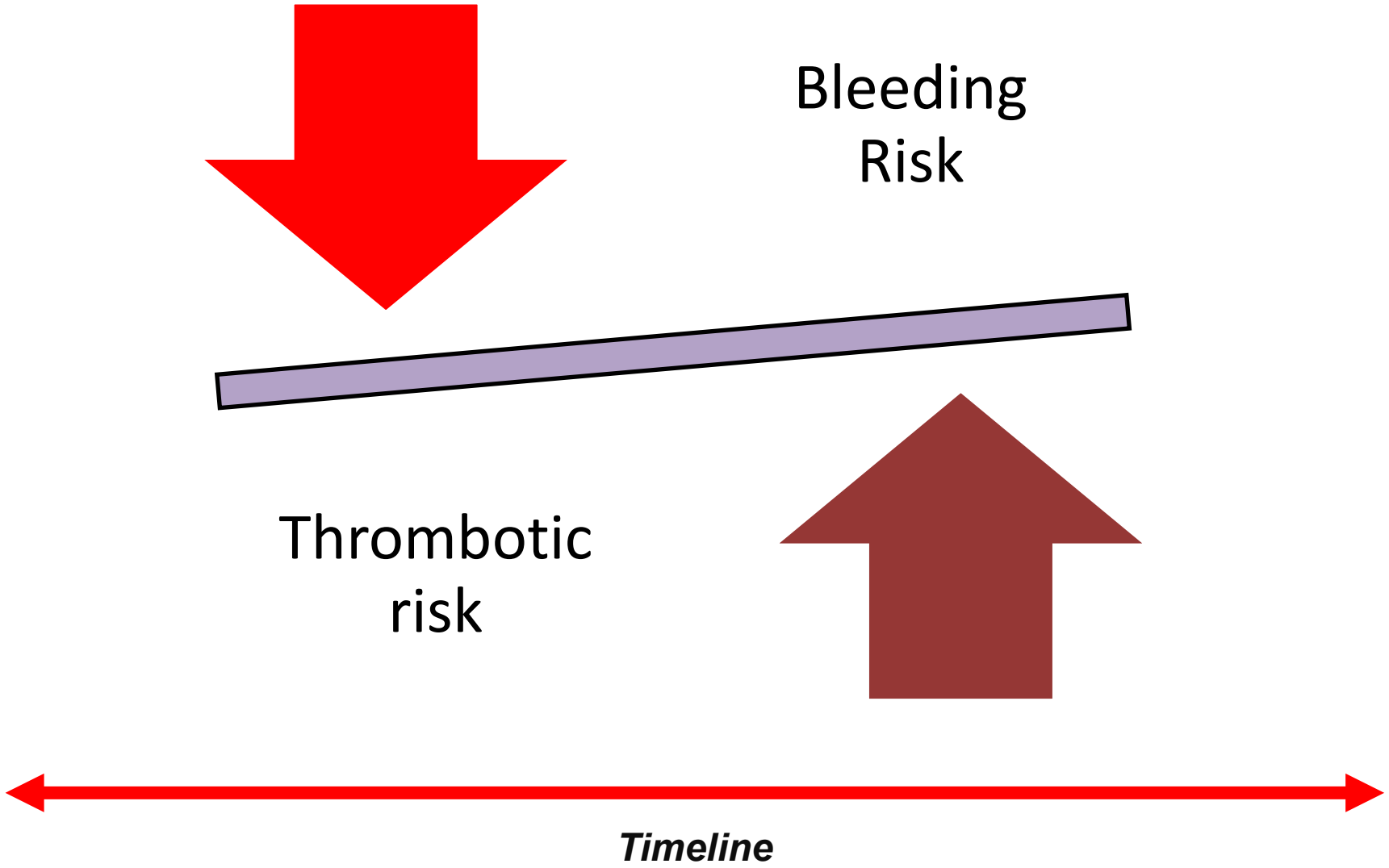


2018 ESC/EACTS Guidelines on myocardial revascularization

Table 7 Doses of antiplatelet and anticoagulant drugs used during and after myocardial revascularization

Antiplatelet drugs	
Aspirin	Loading dose of 150–300 mg orally or 75–150 mg i.v. if oral ingestion is not possible, followed by a maintenance dose of 75–100 mg/day.
Clopidogrel	Loading dose of 600 mg orally, followed by a maintenance dose of 75 mg/day.
Prasugrel	Loading dose of 60 mg orally, followed by a maintenance dose of 10 mg/day. In patients with body weight <60 kg, a maintenance dose of 5 mg is recommended. In patients aged >75 years, prasugrel is generally not recommended, but a dose of 5 mg should be used if treatment is deemed necessary.
Ticagrelor	Loading dose of 180 mg orally, followed by a maintenance dose of 90 mg b.i.d.
Abciximab	Bolus of 0.25 mg/kg i.v. and 0.125 μg/kg/min infusion (maximum 10 μg/min) for 12 h.
Eptifibatide	Double bolus of 180 μg/kg i.v. (given at a 10 min interval) followed by an infusion of 2.0 μg/kg/min for up to18 h.
Tirofiban	Bolus of 25 μg/kg over 3 min i.v., followed by an infusion of 0.15 μg/kg/min for up to 18 h.
Cangrelor	Bolus of 30 μg/kg i.v. followed by 4 μg/kg/min infusion for at least 2 h or duration of procedure, whichever is longer.
Anticoagulant drugs for PCI	
Unfractionated heparin	• 70–100 U/kg i.v. bolus when no GP IIb/IIIa inhibitor is planned. • 50–70 U/kg i.v. bolus with GP IIb/IIIa inhibitors.
Enoxaparin	0.5 mg/kg i.v. bolus.
Bivalirudin	0.75 mg/kg i.v. bolus followed by i.v. infusion of 1.75 mg/kg/h for up to 4 h after the procedure as clinically warranted.
Oral anticoagulant drugs (concomitant treatment after PCI)	
Vitamin K antagonists (e.g. warfarin, phenprocoumon)	Dosing is based on INR value and the respective clinical indication.
Apixaban	Maintenance doses of 5 and 2.5[a] mg b.i.d.
Dabigatran	Maintenance doses of 150 and 110 mg b.i.d.
Edoxaban	Maintenance doses of 60 and 30[a] mg/day
Rivaroxaban	Maintenance doses of 20 and 15[a] mg/day, and 2.5 mg b.i.d. (vascular dose).


Αντιθρομβωτική Αγωγή μετά από PCI
Stable CAD
ACS


Bleeding
Risk
Thrombotic
risk
Timeline

Αντιθρομβωτική Αγωγή μετά από PCI
Stable CAD

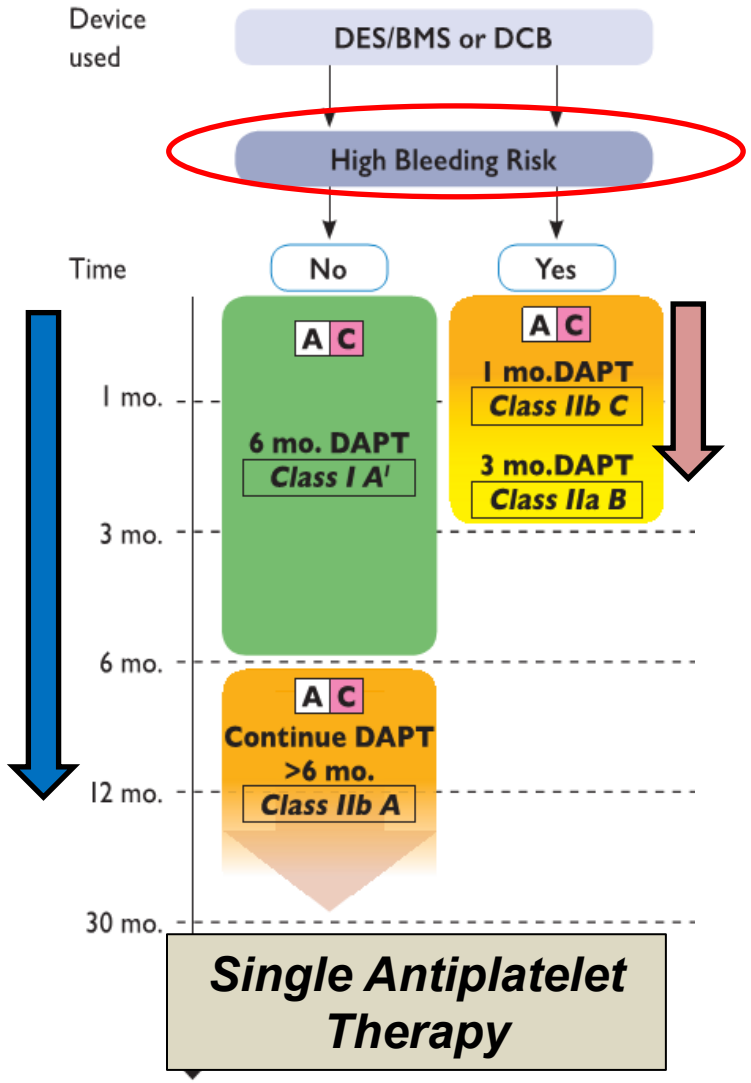
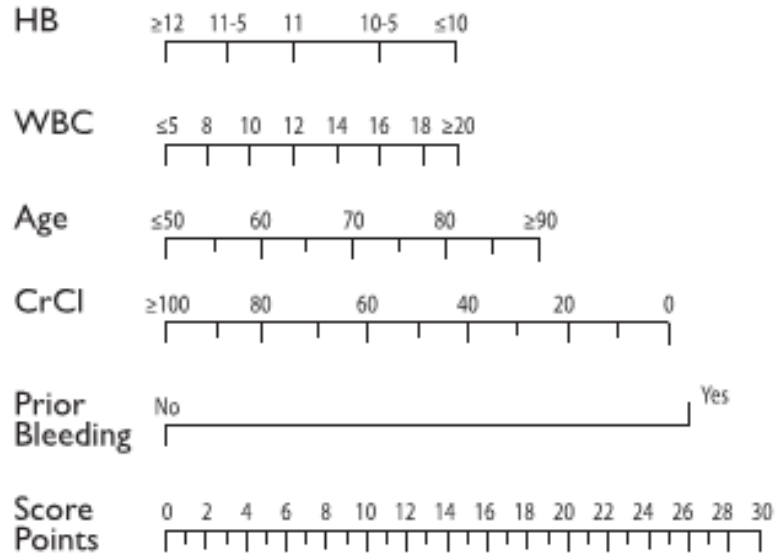


Figure 10 Algorithm for the use of antithrombotic drugs in patients undergoing percutaneous coronary intervention. High bleeding risk is considered as an increased risk of spontaneous bleeding during DAPT (e.g. PRECISE-DAPT score ≥25). Colour-coding refers to the ESC classes of recommendations (green = class I; yellow = class IIa; and orange = class IIb).

Derivation and validation of the predicting bleeding complications in patients undergoing stent implantation and subsequent dual antiplatelet therapy (PRECISE-DAPT) score: a pooled analysis of individual-patient datasets from clinical trials

	PRECISE-DAPT score [18]
Time of use	At the time of coronary stenting
DAPT duration strategies assessed	Short DAPT (3–6 months) vs. Standard/long DAPT (12–24 months)
Score calculation[a]	
Score range	0 to 100 points
Decision making cut-off suggested	Score ≥25 → Short DAPT Score <25 → Standard/long DAPT
Calculator	www.precisedaptscore.com

DAPT score [15]

After 12 months of uneventful DAPT

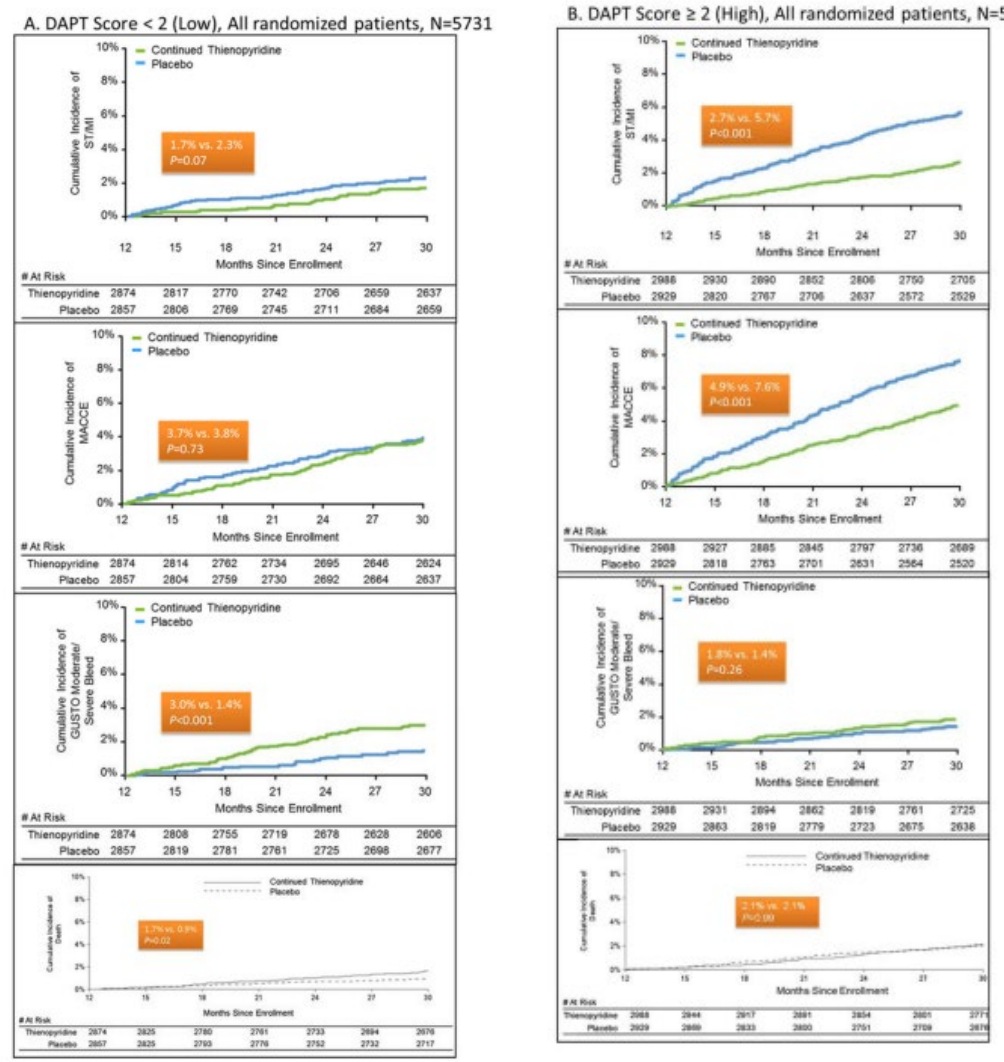
Standard DAPT (12 months)
vs.
Long DAPT (30 months)

Age	
≥75	−2 pt
65 to <75	−1 pt
<65	0 pt
Cigarette smoking	+1 pt
Diabetes mellitus	+1 pt
MI at presentation	+1 pt
Prior PCI or prior MI	+1 pt
Paclitaxel-eluting stent	+1 pt
Stent diameter <3 mm	+1 pt
CHF or LVEF <30%	+2 pt
Vein graft stent	+2 pt

−2 to 10 points

Score ≥2 → Long DAPT
Score <2 → Standard DAPT

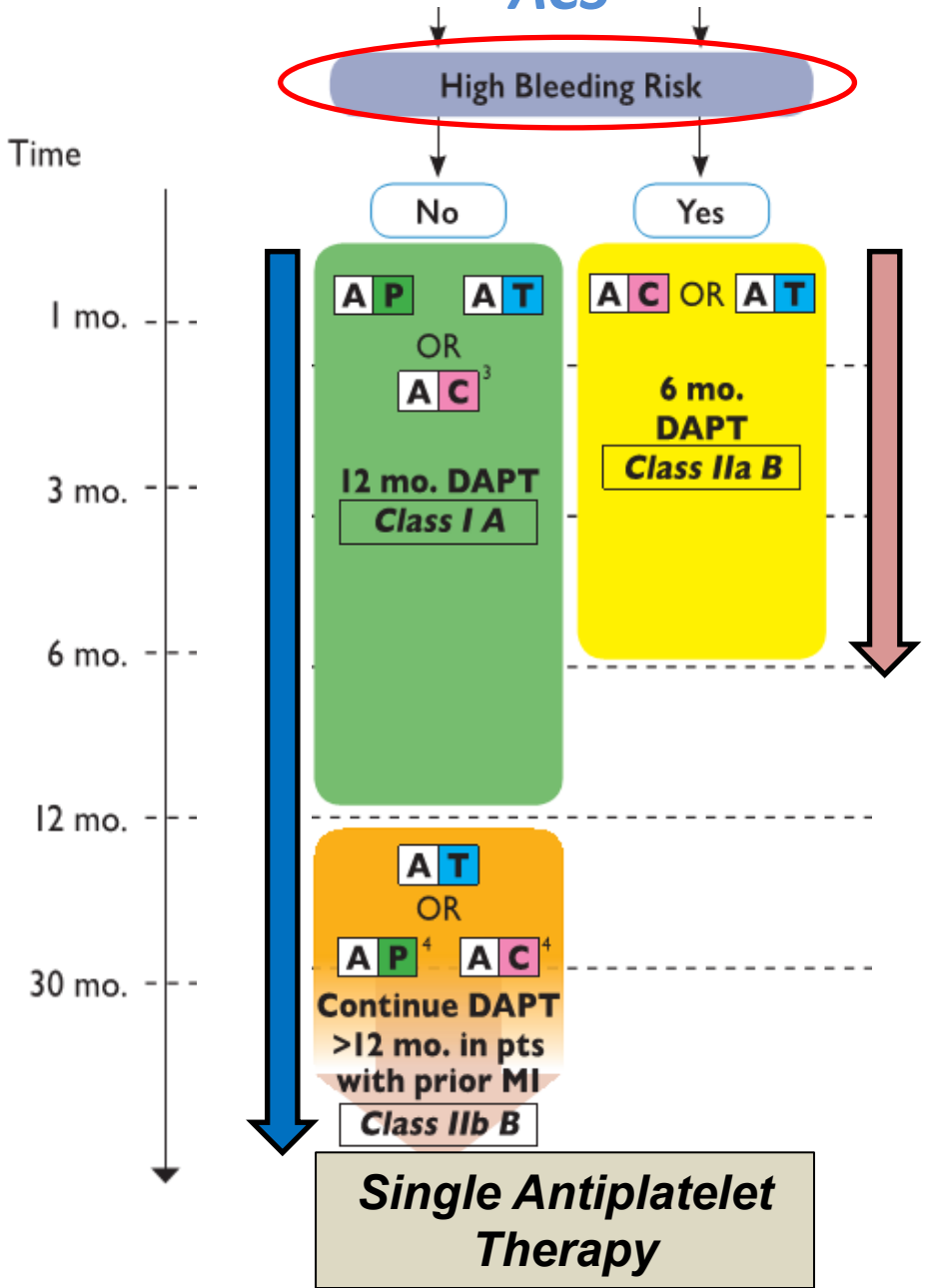
www.daptstudy.org



Development and Validation of a Prediction Rule for Benefit and Harm of Dual Antiplatelet Therapy Beyond One Year after Percutaneous Coronary Intervention: An Analysis from the Randomized Dual Antiplatelet Therapy Study

Αντιθρομβωτική Αγωγή μετά από PCI

ACS

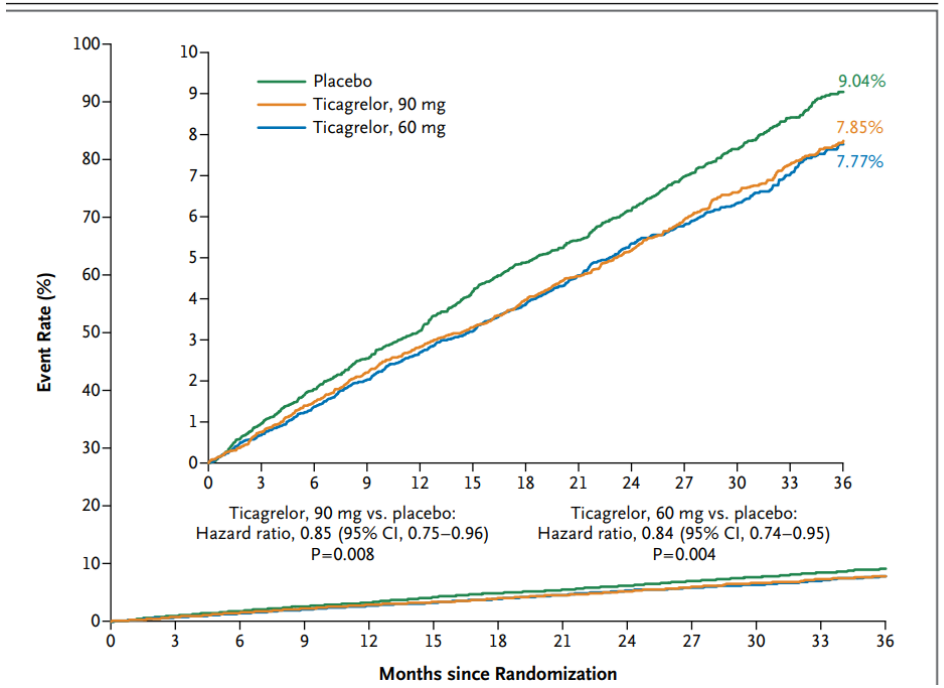


Αντιθρομβωτική Αγωγή μετά από PCI
ACS
Ειδικές Περιπτώσεις

In patients with MI and high ischaemic risk[c] who have tolerated DAPT without a bleeding complication, ticagrelor 60 mg b.i.d. for longer than 12 months on top of aspirin may be preferred over clopidogrel or prasugrel.[732–734]	IIb	B

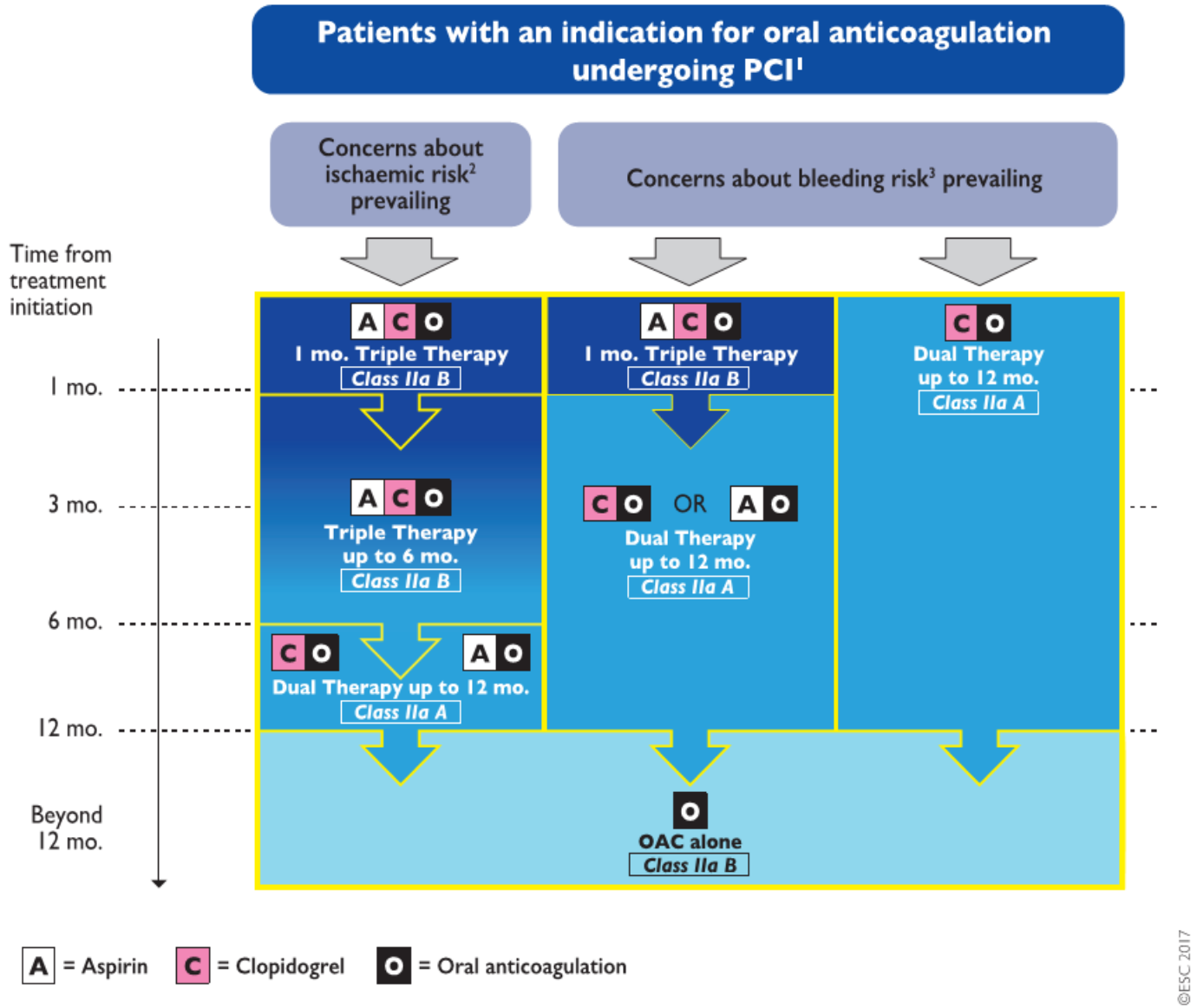
Long-Term Use of Ticagrelor in Patients with Prior Myocardial Infarction

PEGASUS-TIMI 54



Αντιθρομβωτική Αγωγή μετά από PCI
ACS
Ειδικές Περιπτώσεις

ESC Guidelines / European Journal of Cardio-Thoracic Surgery



Bleeding risk can be estimated by HAS-BLED

HAS-BLED Criteria	Score
Hypertension	1
Abnormal renal or liver function (1 point each)	1 or 2
Stroke	1
Bleeding	1
Labile INRs	1
Elderly (> 65 years)	1
Drugs or alcohol (1 point each)	1 or 2

Total Score	Bleeds per 100 patient years
0	1.13
1	1.02
2	1.88
3	3.74
4	8.7
5	12.5

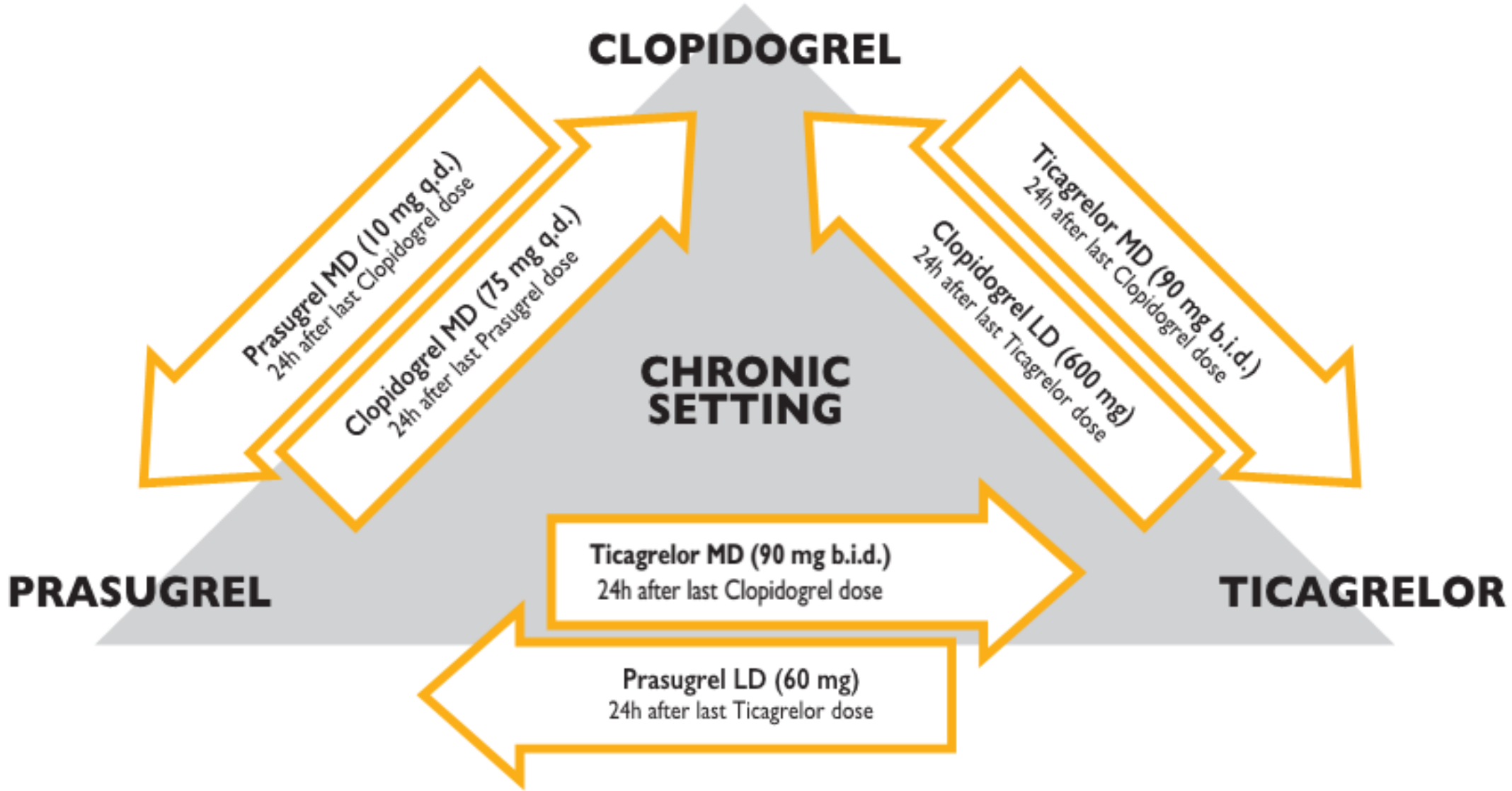
Table 6: Unfavourable patient profile for a combination of oral anticoagulant and antiplatelet therapy

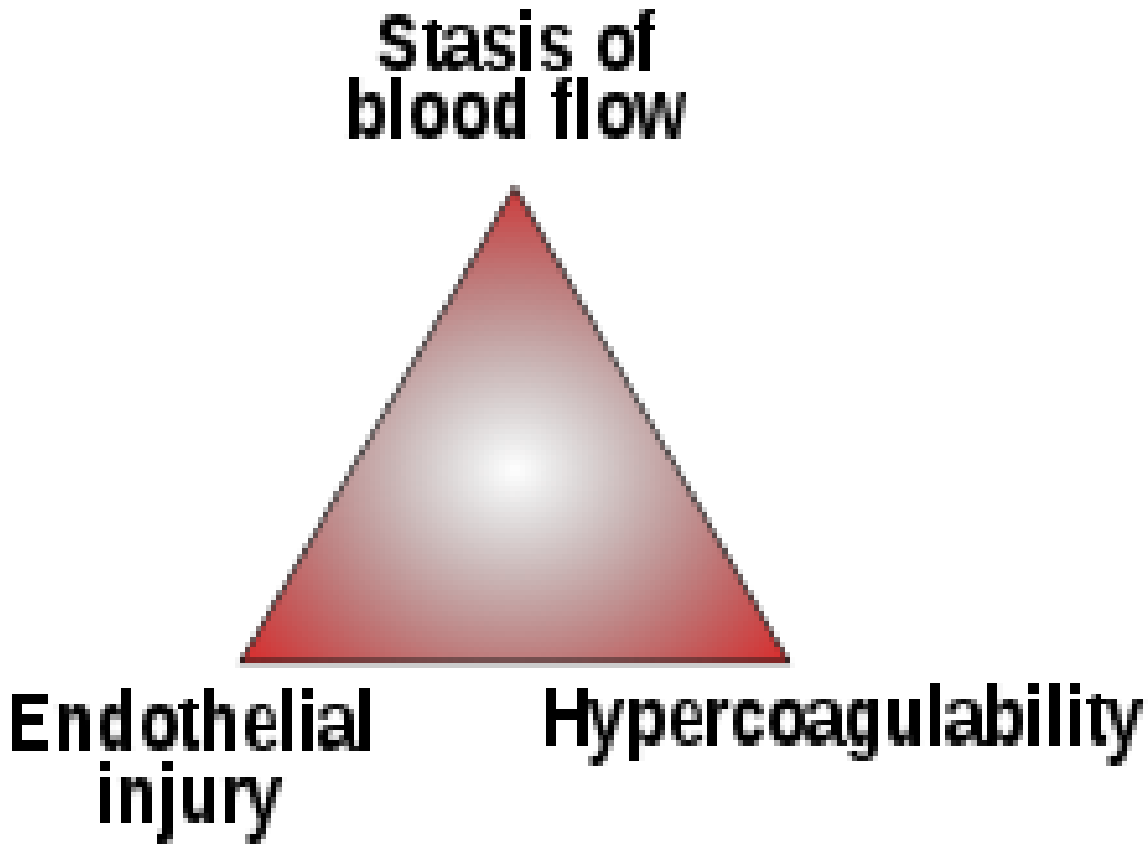
• Short life expectancy
• Ongoing malignancy
• Poor expected adherence
• Poor mental status
• End stage renal failure
• Advanced age
• Prior major bleeding/prior haemorrhagic stroke
• Chronic alcohol abuse
• Anaemia
• Clinically significant bleeding on dual antithrombotic therapy

Triple therapy with aspirin, clopidogrel, and OAC for longer than 1 month and up to 6 months should be considered in patients with high ischaemic risk due to ACS or other anatomical/procedural characteristics that outweigh the bleeding risk [195].	IIa	B

Table 5: High-risk features of stent-driven recurrent ischaemic events

• Prior stent thrombosis on adequate antiplatelet therapy
• Stenting of the last remaining patent coronary artery
• Diffuse multivessel disease especially in diabetic patients
• Chronic kidney disease (i.e. creatinine clearance <60 ml/min)
• At least three stents implanted
• At least three lesions treated
• Bifurcation with two stents implanted
• Total stent length >60 mm
• Treatment of a chronic total occlusion


CLOPIDOGREL
Prasugrel MD (10 mg q.d.)
24h after last Clopidogrel dose
Clopidogrel MD (75 mg q.d.)
24h after last Prasugrel dose
CHRONIC SETTING
Clopidogrel LD (600 mg)
24h after last Ticagrelor dose
Ticagrelor MD (90 mg b.i.d.)
24h after last Clopidogrel dose
PRASUGREL
Ticagrelor MD (90 mg b.i.d.)
24h after last Clopidogrel dose
TICAGRELOR
Prasugrel LD (60 mg)
24h after last Ticagrelor dose

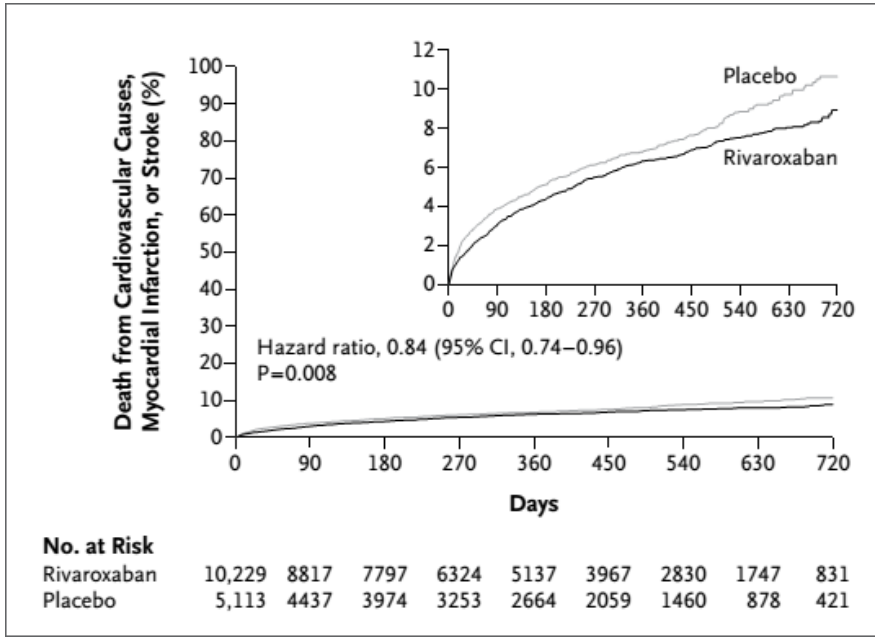

Stasis of
blood flow
Endothelial
injury
Hypercoagulability

Αντιθρομβωτική Αγωγή μετά από PCI
ACS
Ειδικές Περιπτώσεις

In ACS patients with no prior stroke/TIA, and at high ischaemic risk as well as low bleeding risk, receiving aspirin and clopidogrel, low-dose rivaroxaban (2.5 mg b.i.d. for approximately 1 year) may be considered after discontinuation of parenteral anticoagulation.[720]	IIb	B

Rivaroxaban in Patients with a Recent Acute Coronary Syndrome

ATLAS ACS 2–TIMI 51 Investigators*



Συμπεράσματα

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Διπλή αντιαιμοπεταλιακή Αγωγή Με ασπιρίνη και Κλοπιδογρέλη για 6 μήνες και εφ' όρου ζωής μονή

Για Αγγειοπλαστική σε έδαφος οξέος στεφανιαίου συνδρόμου

Διπλή αντιαιμοπεταλιακή Αγωγή για 12 μήνες και εφ' όρου ζωής μονή

Προσοχή στον αιμορραγικό και ισχαιμικό κίνδυνο

Ευχαριστώ