ANTIAGREGACE:
NĚCO NOVÉHO?

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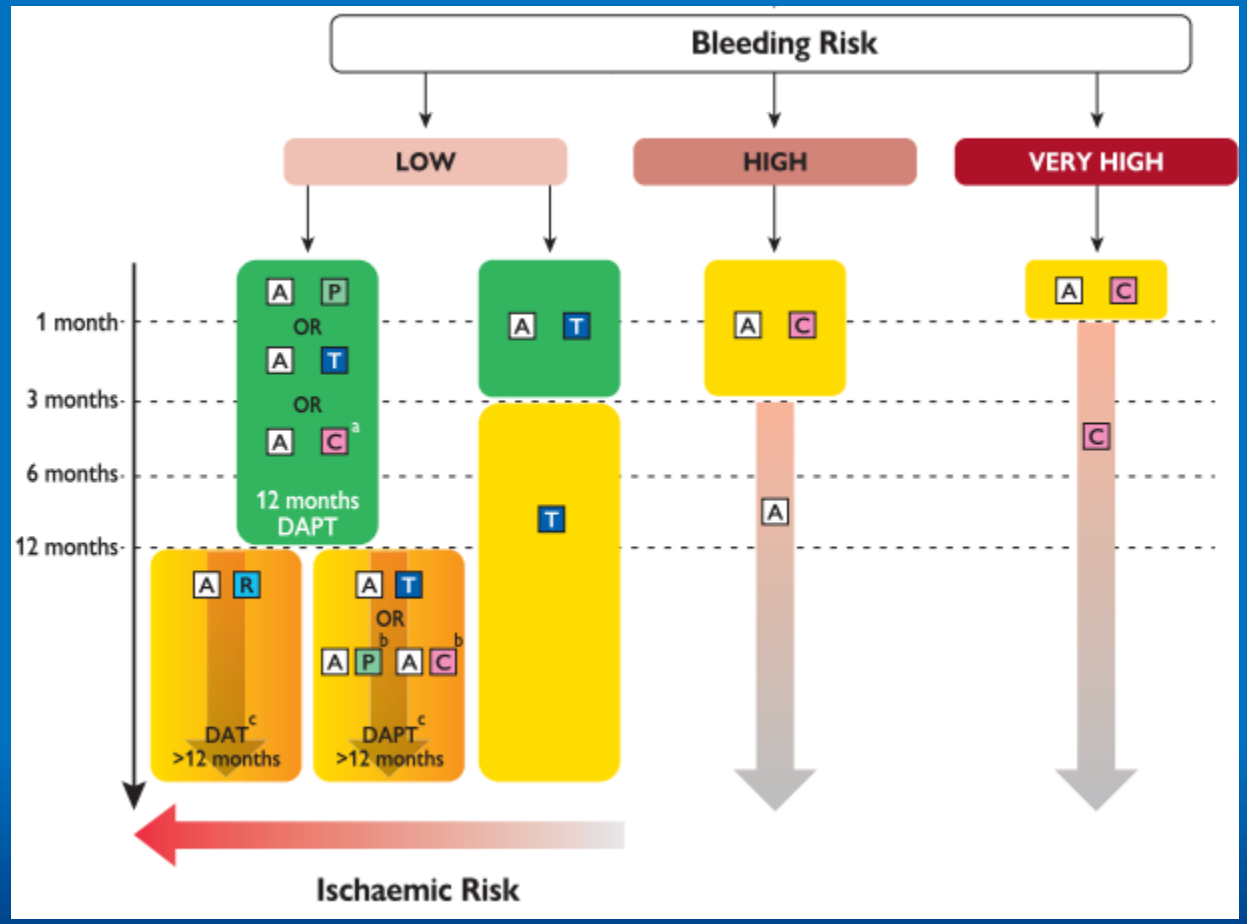
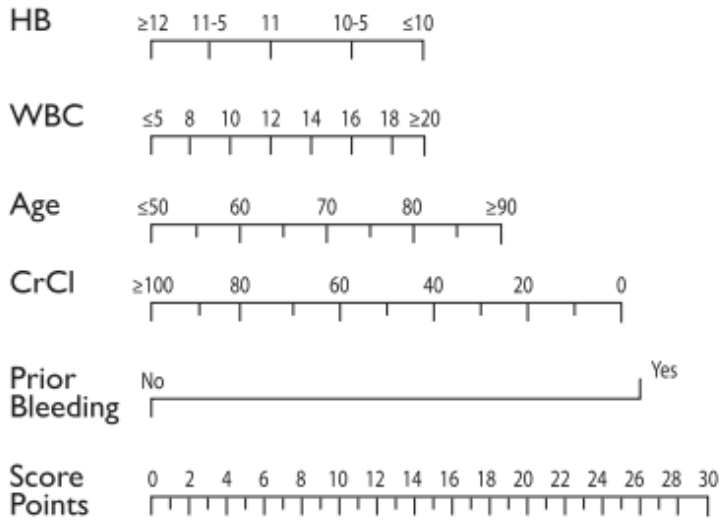
21. konference České asociace akutní kardiologie
Karlovy Vary, 4.12.2023

Protidestičková léčba :
koronární angioplastika (PCI) / akutní koronární syndrom (ACS)



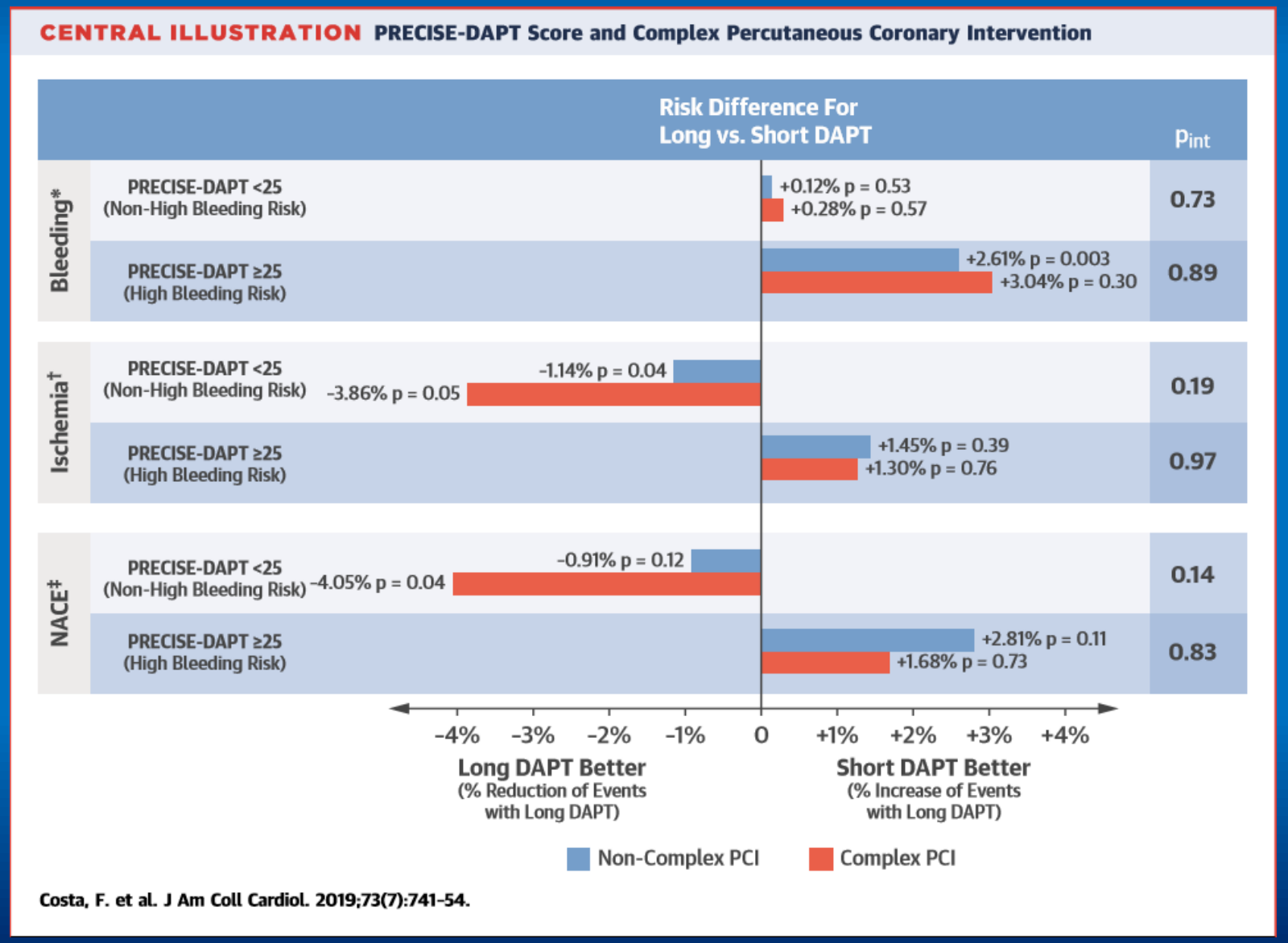
European Heart Journal (2021) **42**, 1289–1367

Stratifikace rizika krvácení : PRECISE-DAPT

	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

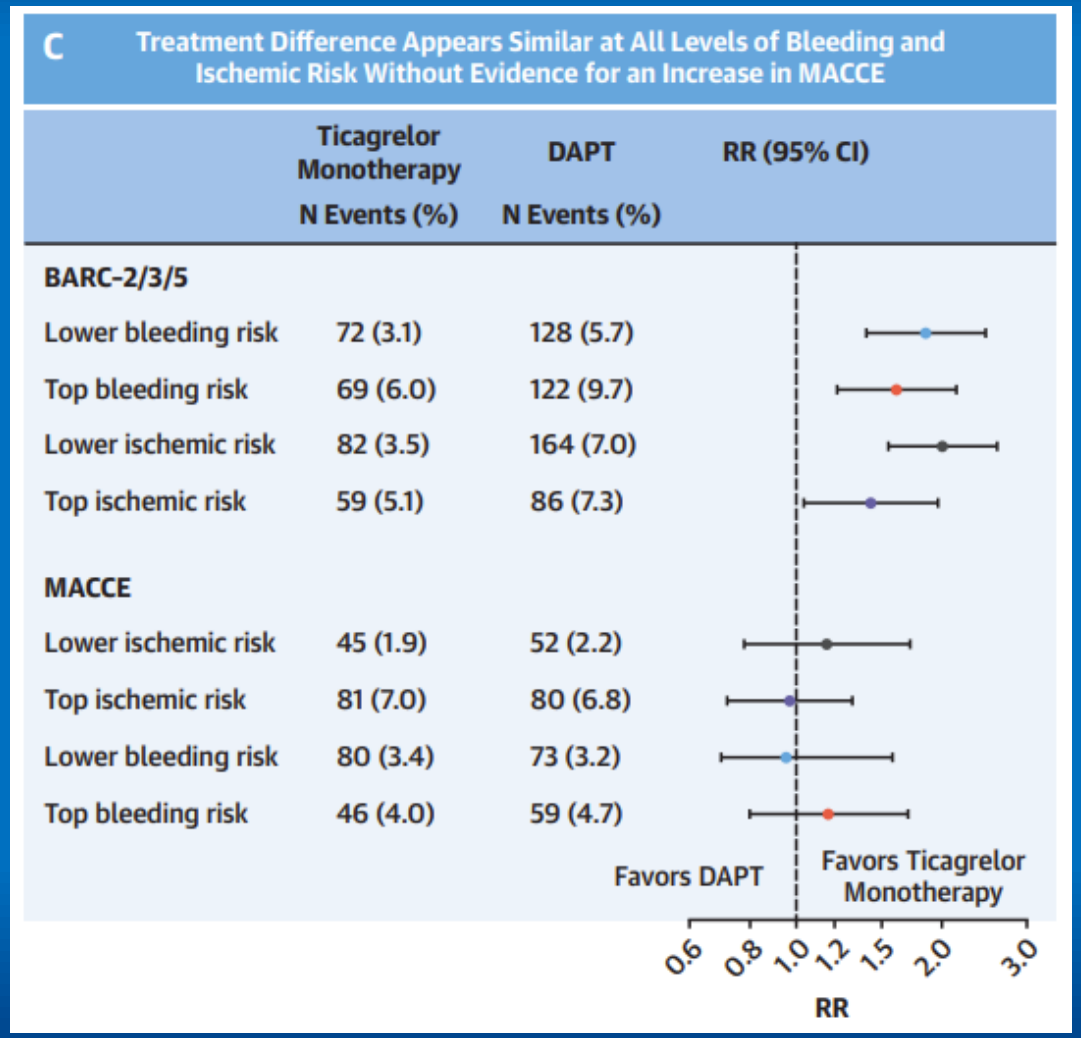
European Heart Journal (2018) **39**, 213–254

Duální protidestičková léčba (DAPT): je hodnocení ischemického rizika zbytečné?



Costa, F. et al. J Am Coll Cardiol. 2019;73(7):741-54.

Monoterapie ticagrelorem : je hodnocení jakéhokoliv rizika zbytečné?



Mendieta G, et al. J Am Coll Cardiol. 2023;82(8):687-700.

Stratifikace rizika krvácení : ARC - HBR

Table 3 **Major and minor criteria for hbr at the time of PCI**

Major	Minor
	Age ≥75 y
Anticipated use of long-term oral anticoagulation*	
Severe or end-stage CKD (eGFR <30 mL/min)	Moderate CKD (eGFR 30–59 mL/min)
Hemoglobin <11 g/dL	Hemoglobin 11–12.9 g/dL for men and 11–11.9 g/dL for women
Spontaneous bleeding requiring hospitalization or transfusion in the past 6 mo or at any time, if recurrent	Spontaneous bleeding requiring hospitalization or transfusion within the past 12 mo not meeting the major criterion
Moderate or severe baseline thrombocytopenia† (platelet count <100 × 109/L)	
Chronic bleeding diathesis	
Liver cirrhosis with portal hypertension	
	Long-term use of oral NSAIDs or steroids
Active malignancy‡ (excluding nonmelanoma skin cancer) within the past 12 mo	
Previous spontaneous ICH (at any time)Previous traumatic ICH within the past 12 moPresence of a bAVMModerate or severe ischemic stroke§ within the past 6 mo	Any ischemic stroke at any time not meeting the major criterion
Nondeferrable major surgery on DAPT	
Recent major surgery or major trauma within 30 d before PCI	

European Heart Journal (2019) **40**, 2632–2653

Stratifikace rizika krvácení : ARC - HBR

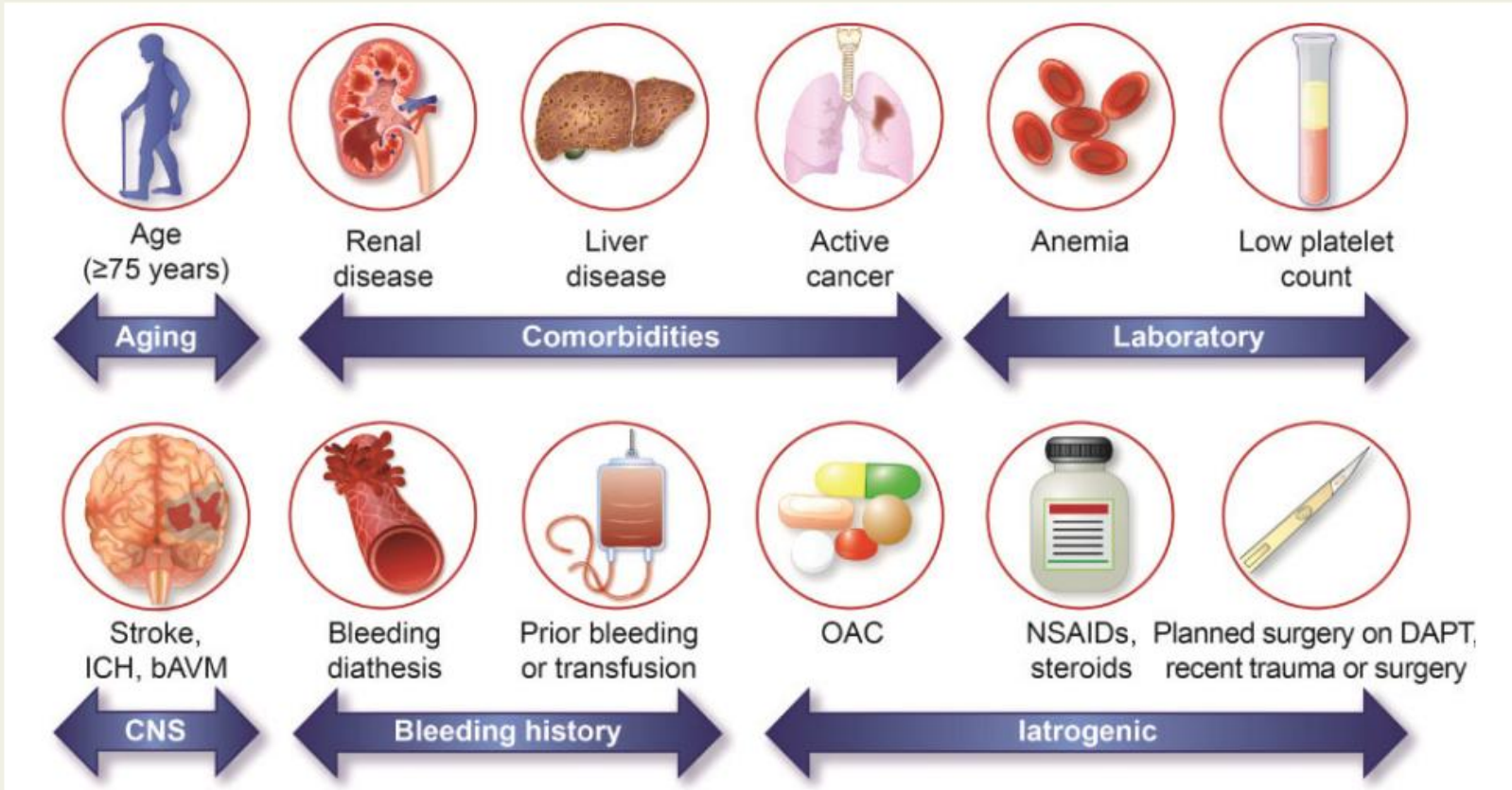


Figure Factors associated with an increased bleeding risk after percutaneous coronary intervention. bAVM indicates brain arteriovenous malformation; CNS, central nervous system; DAPT, dual antiplatelet treatment; ICH, intracranial hemorrhage; NSAID, nonsteroidal anti-inflammatory drug; and OAC, oral anticoagulation.

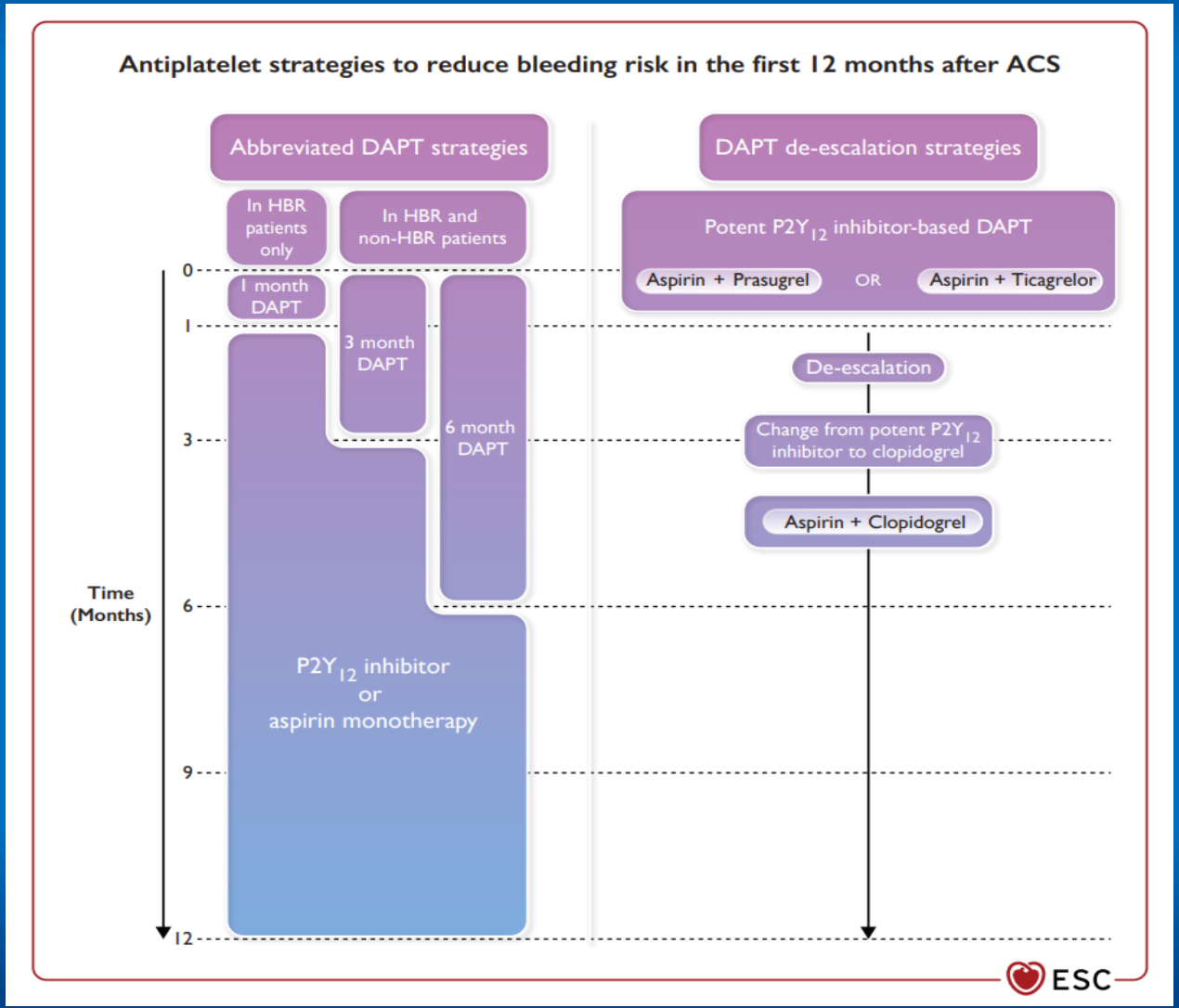
European Heart Journal (2019) **40**, 2632–2653

Snížení rizika krvácení : zkrácená DAPT nebo deeskalace DAPT

ESC European Society of Cardiology
European Heart Journal (2023) 00, 1–107 https://doi.org/10.1093/eurheartj/ehad191
ESC GUIDELINES

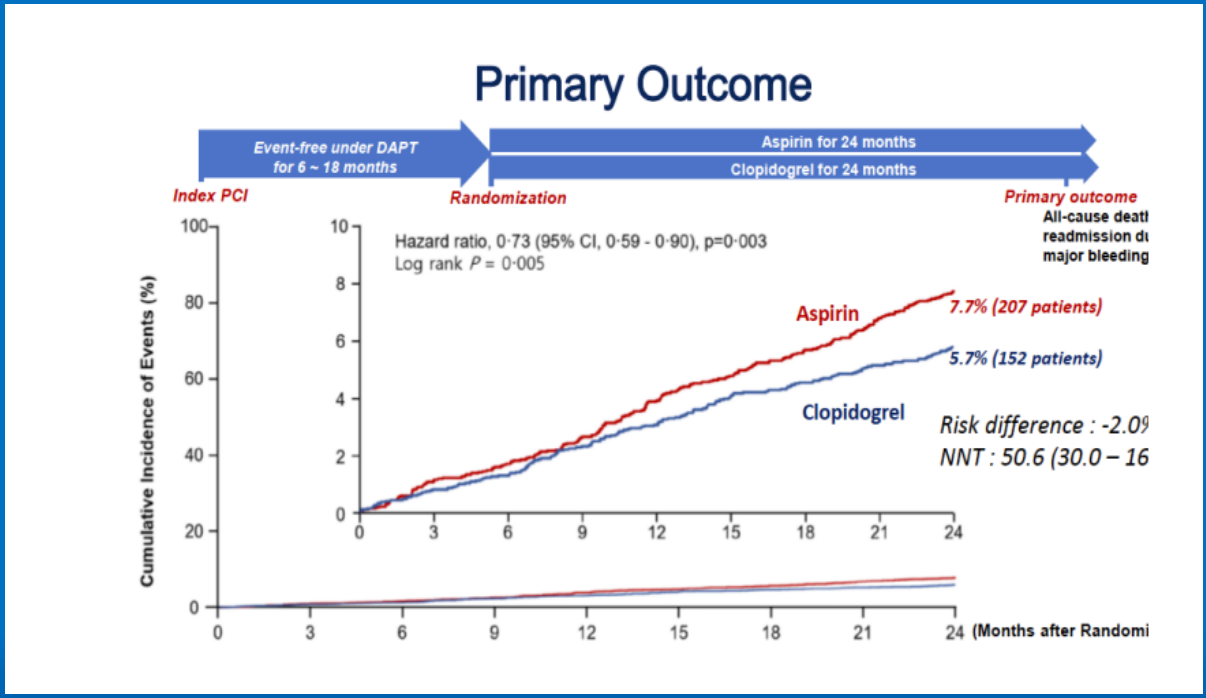
2023 ESC Guidelines for the management of acute coronary syndromes

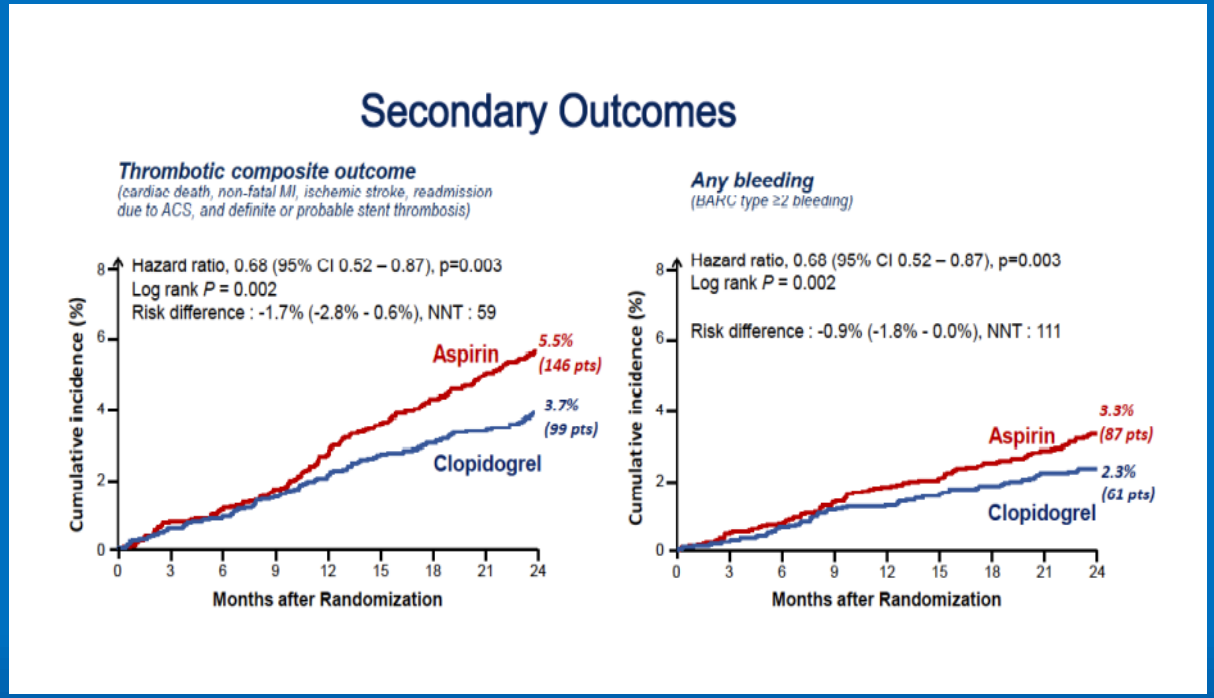
Developed by the task force on the management of acute coronary syndromes of the European Society of Cardiology (ESC)



European Heart Journal (2023) **44**, 3720–3826

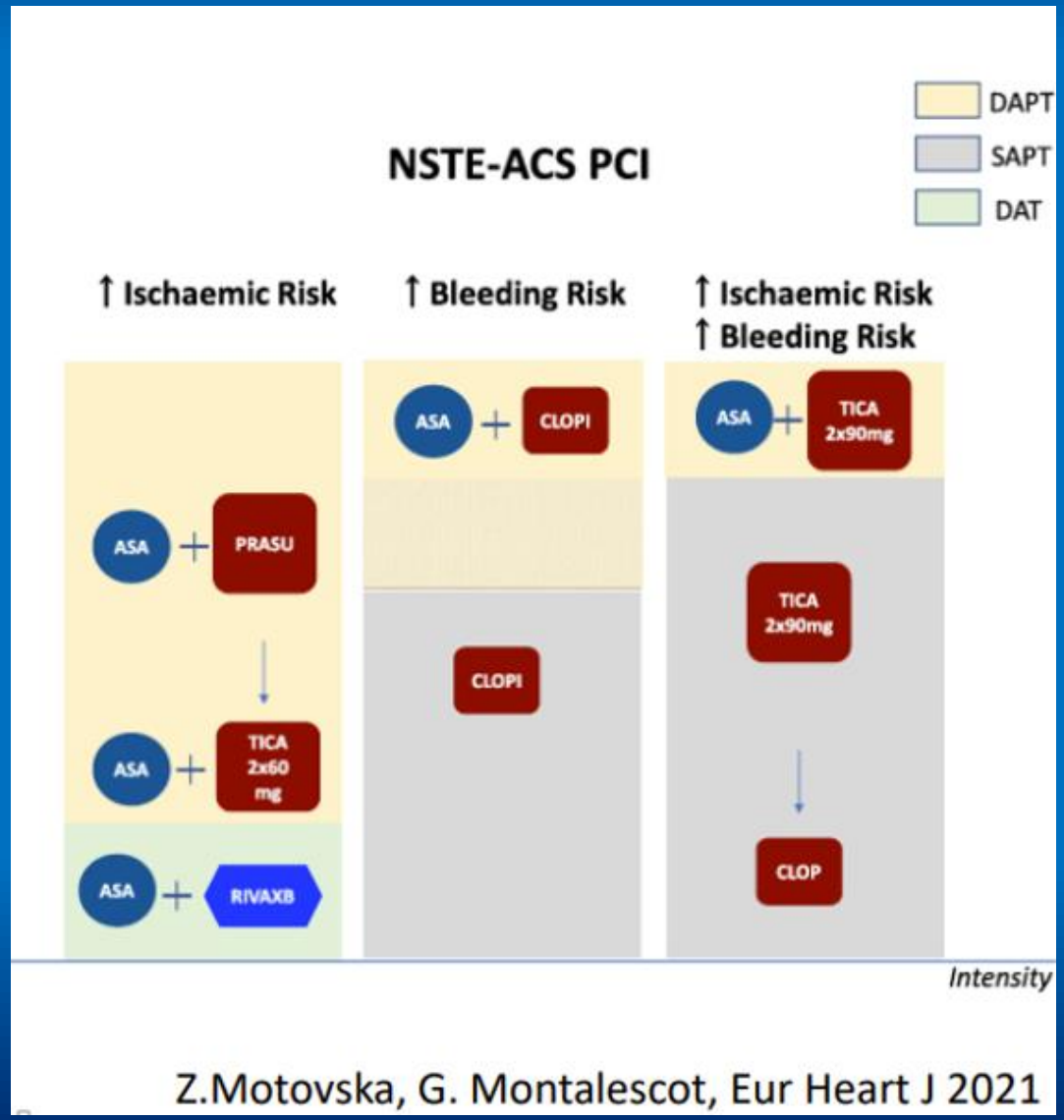
Trendy v antiagregační terapii: HOST-EXAM study





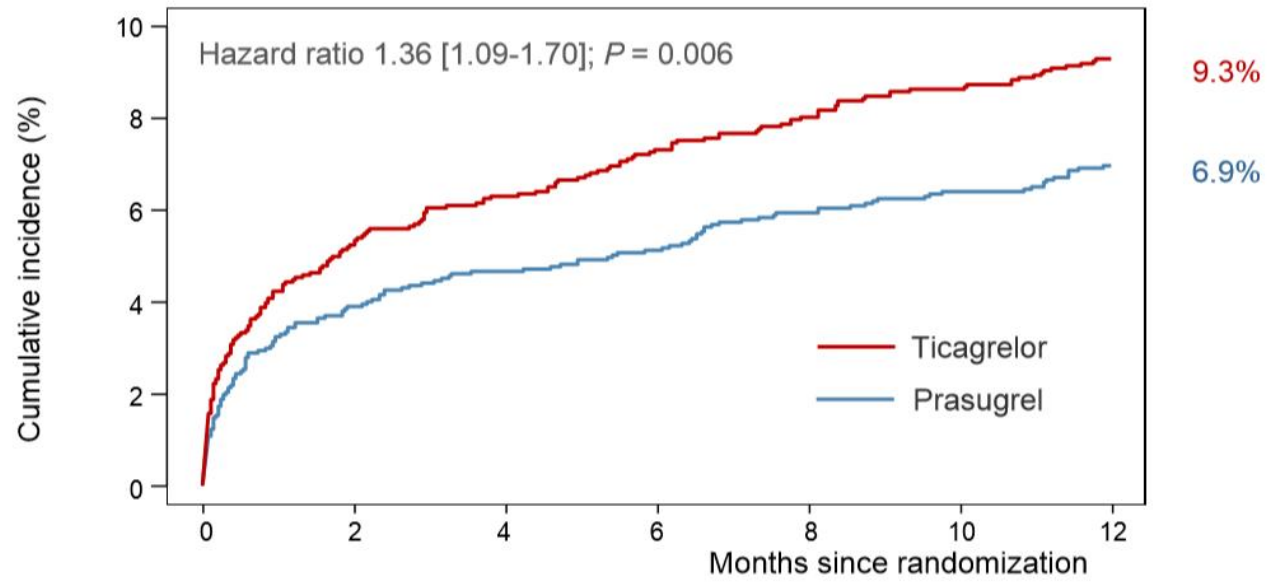
Lancet. 2021 Jun 26;397(10293):2487-2496.

Trendy v antiagregační terapii : po ukončení DAPT monoterapie $P2Y_{12}$



Trendy v antiagregační terapii: jakou DAPT při ACS?

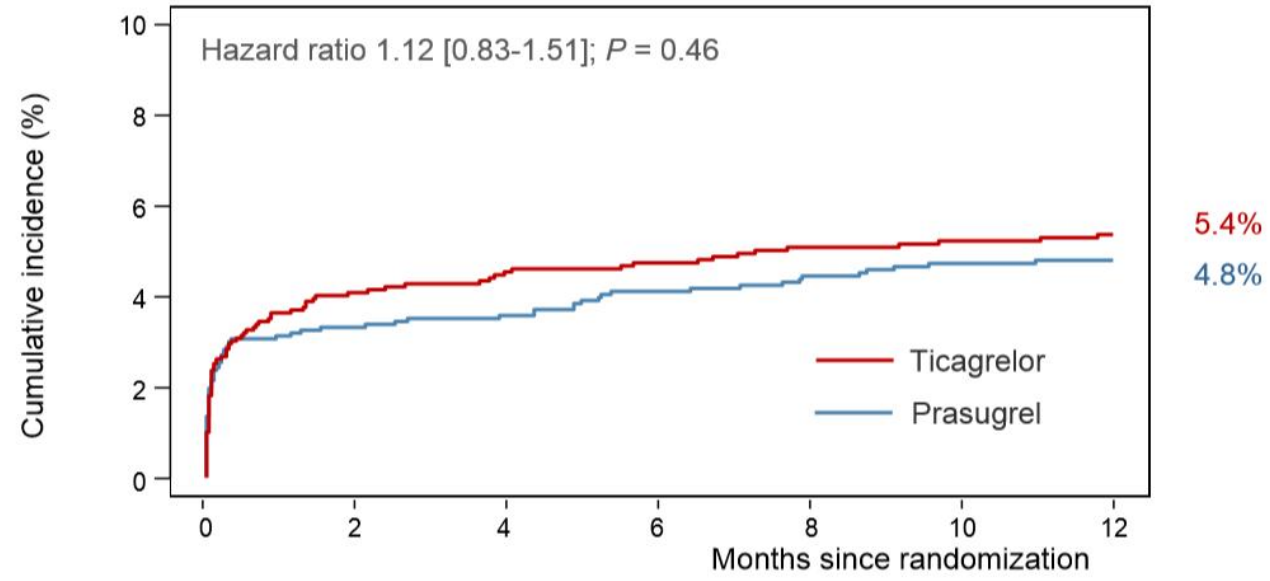
Primary End point
(Composite of Death, MI, or Stroke)



No. at Risk							
Ticagrelor	2012	1877	1857	1835	1815	1801	1772
Prasugrel	2006	1892	1877	1862	1839	1829	1803

Trendy v antiagregační terapii: jakou DAPT při ACS?

BARC Type 3-5 Bleeding
(Safety End point)



No. at Risk							
Ticagrelor	1989	1441	1399	1356	1319	1296	1266
Prasugrel	1773	1465	1427	1397	1357	1333	1307

Trendy v antiagregační terapii: jakou DAPT při ACS?

Summary And Conclusion

DZHK
DEUTSCHES ZENTRUM FÜR
HERZ-KREISLAUF-FORSCHUNG E.V.

Technische Universität München

In ACS patients with or without ST-segment elevation, treatment with Prasugrel as compared with Ticagrelor significantly reduced the composite rate of death, myocardial infarction, or stroke without an increase in major bleeding.

Trendy v antiagregační terapii: jakou DAPT při ACS?

Prasugrel should be considered in preference to ticagrelor for NSTE-ACS patients who proceed to PCI.[174]	IIa	B

ESC European Society of Cardiology

European Heart Journal (2021) **42**, 1289–1367
doi:10.1093/eurheartj/ehaa575

ESC GUIDELINES

2020 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation

Trendy v antiagregační terapii: jakou DAPT při ACS?

Prasugrel should be considered in preference to ticagrelor for ACS patients who proceed to PCI.[244,290]	IIa	B

ESC European Society of Cardiology

European Heart Journal (2023) **00**, 1–107
https://doi.org/10.1093/eurheartj/ehad191

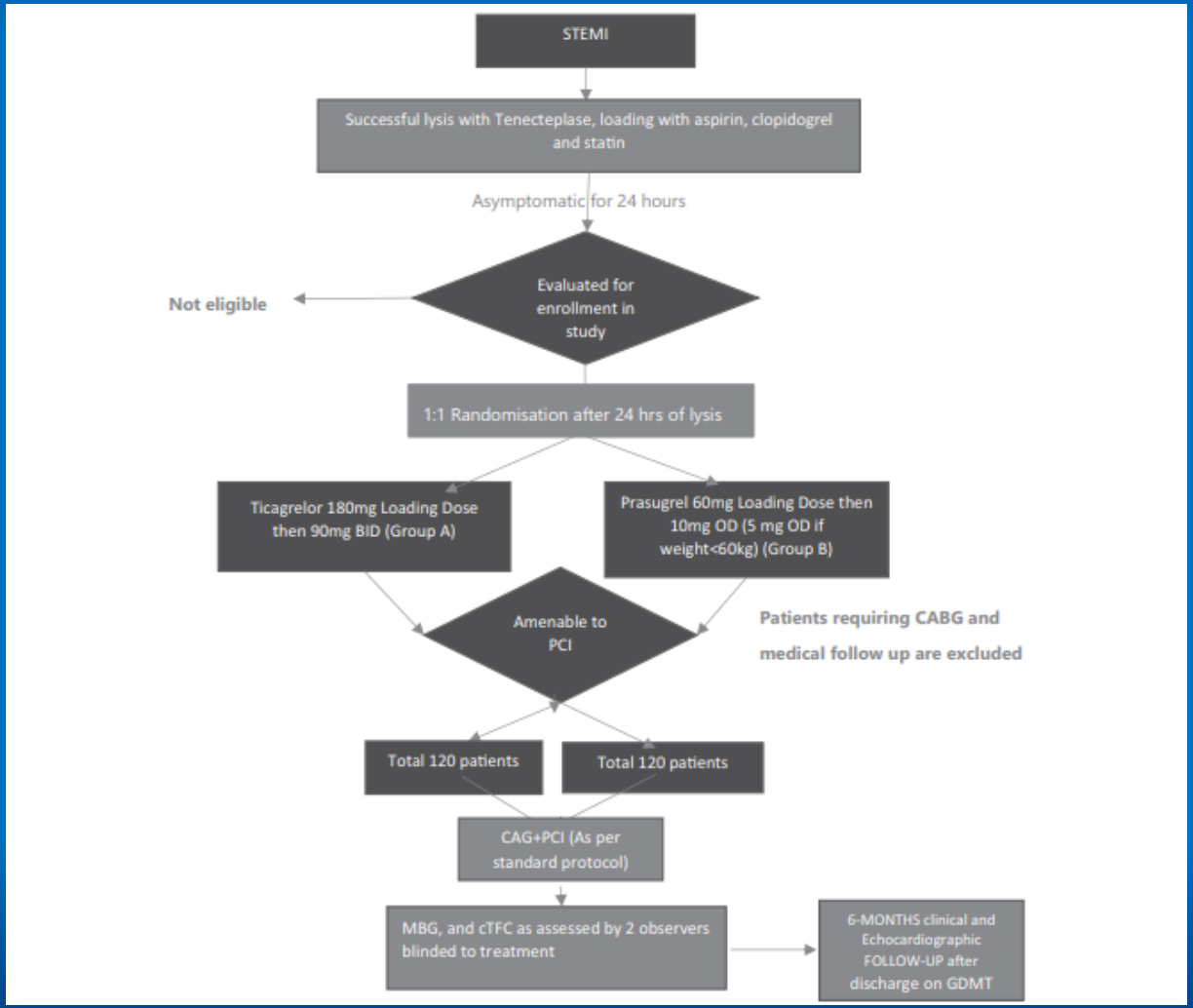
ESC GUIDELINES

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)

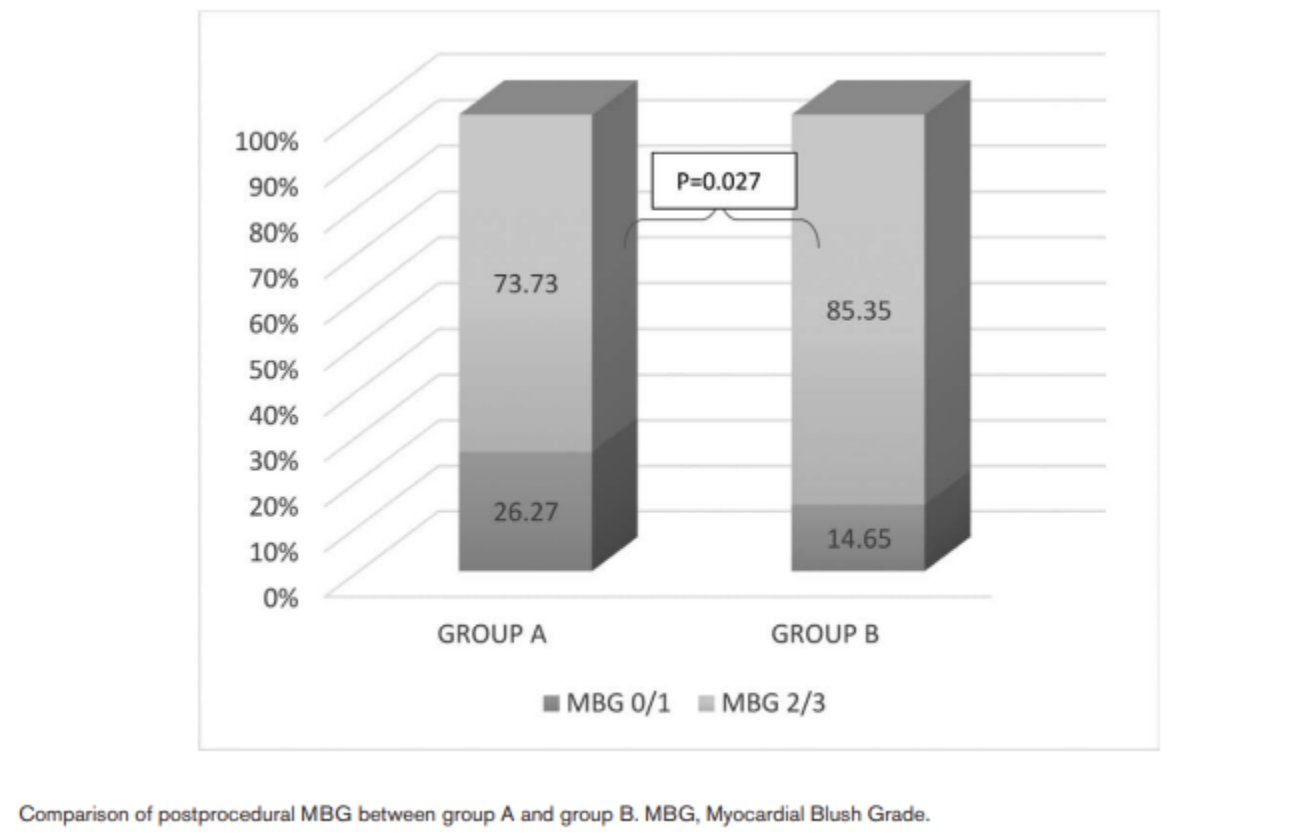
European Heart Journal (2023) **44**, 3720–3826

Trendy v antiagregační terapii : opravdu je prasugrel lepší při ACS?



Coron Artery Dis 2023;34:381-88

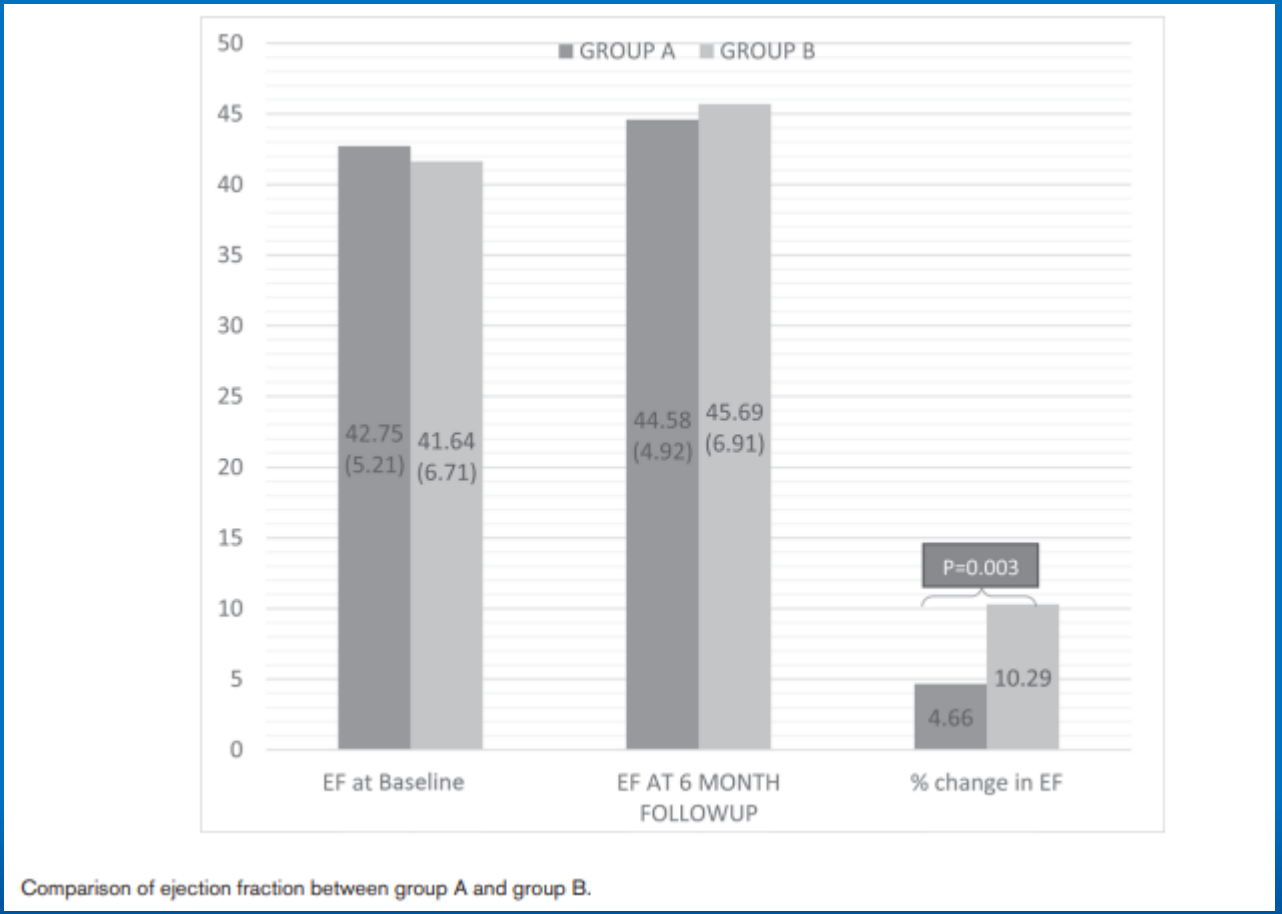
Trendy v antiagregační terapii : opravdu je prasugrel lepší při ACS?



Comparison of postprocedural MBG between group A and group B. MBG, Myocardial Blush Grade.

Coron Artery Dis 2023;34:381-88

Trendy v antiagregační terapii : opravdu je prasugrel lepší při ACS?



Comparison of ejection fraction between group A and group B.

Coron Artery Dis 2023;34:381-88

Trendy v antiagregační terapii : opravdu je prasugrel lepší při ACS?

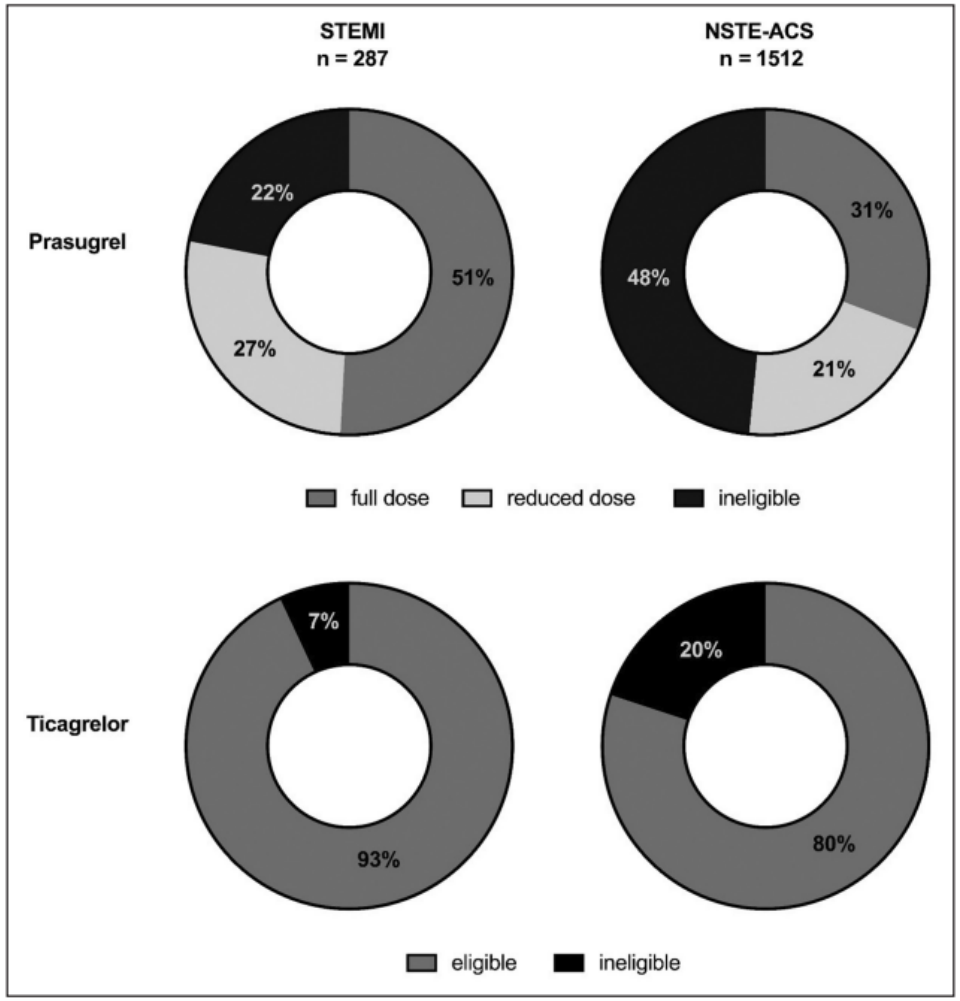
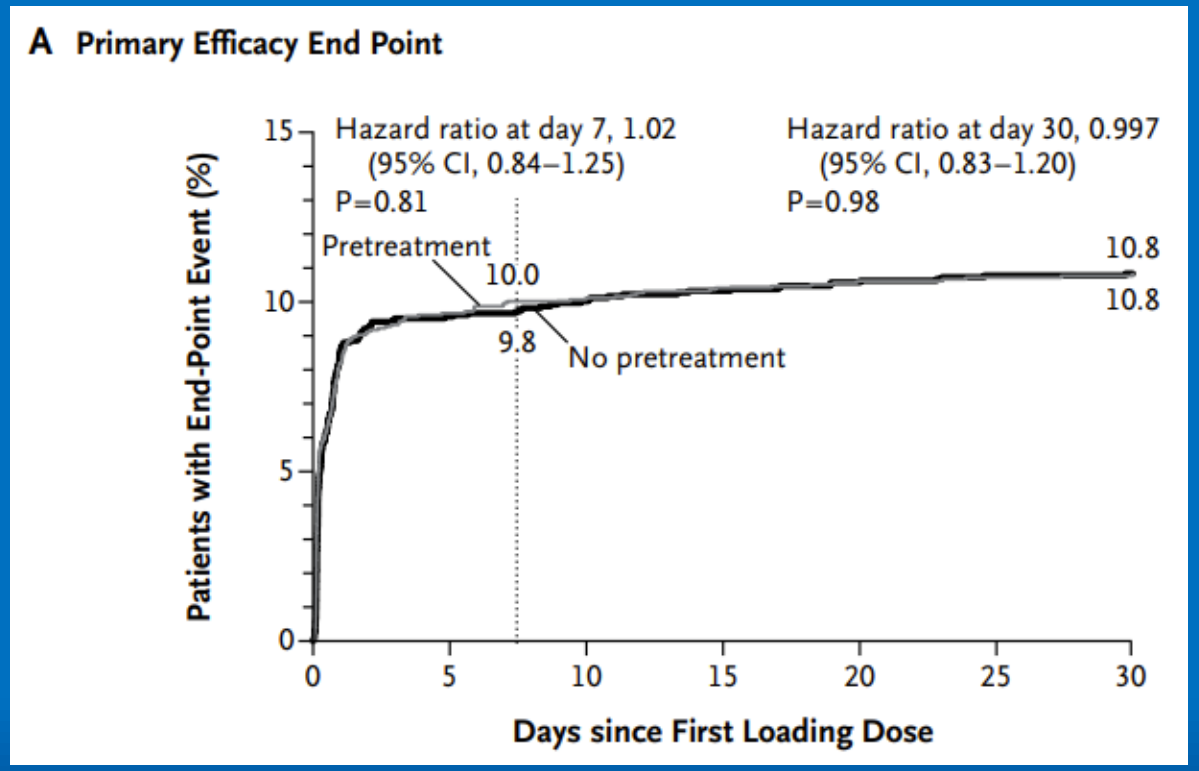
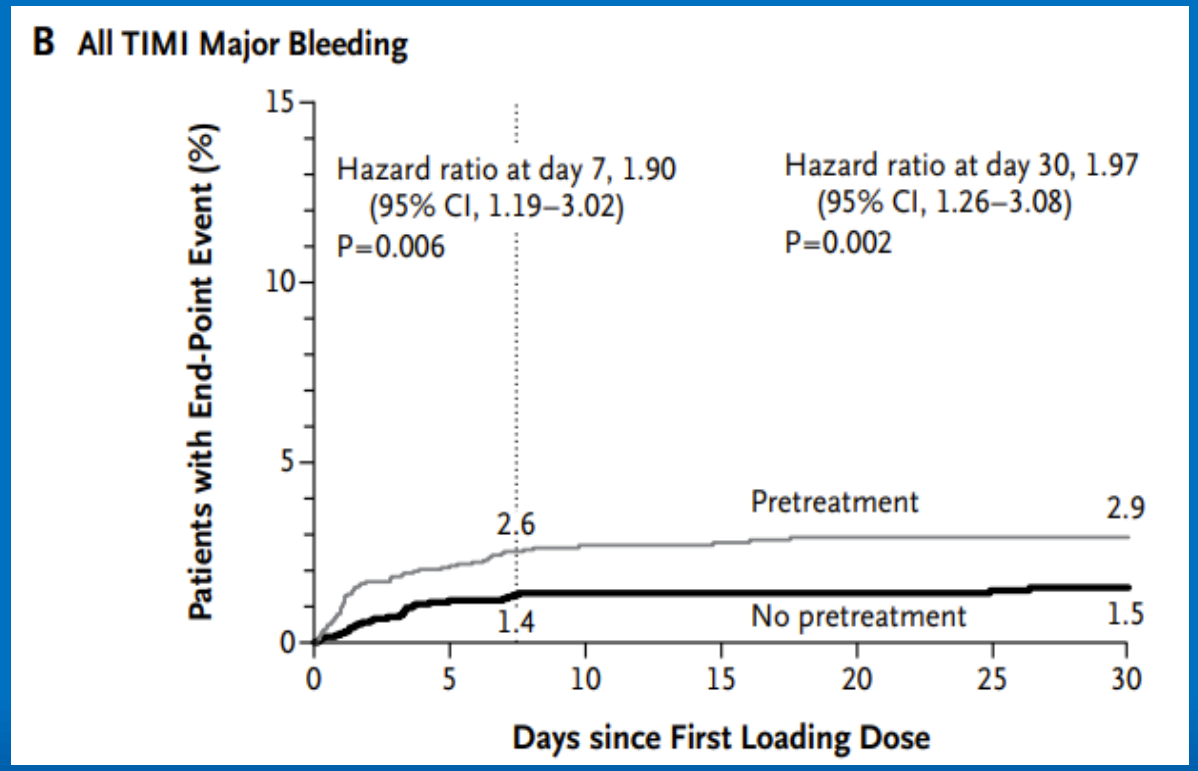


Figure 2. **Eligibility for prasugrel and ticagrelor in patients with ACS after consideration of contraindications and warnings according to EMA label restrictions.**

J Am Heart Assoc. 2023;12:e030879. DOI: 10.1161/JAHA.123.030879

Předléčení NSTEMI : prasugrel před nebo při PCI (ACCOAST)





N Engl J Med 2013;369:999-1010

Předléčení STEMI: ticagrelor před transportem nebo před PCI (ATLANTIC)

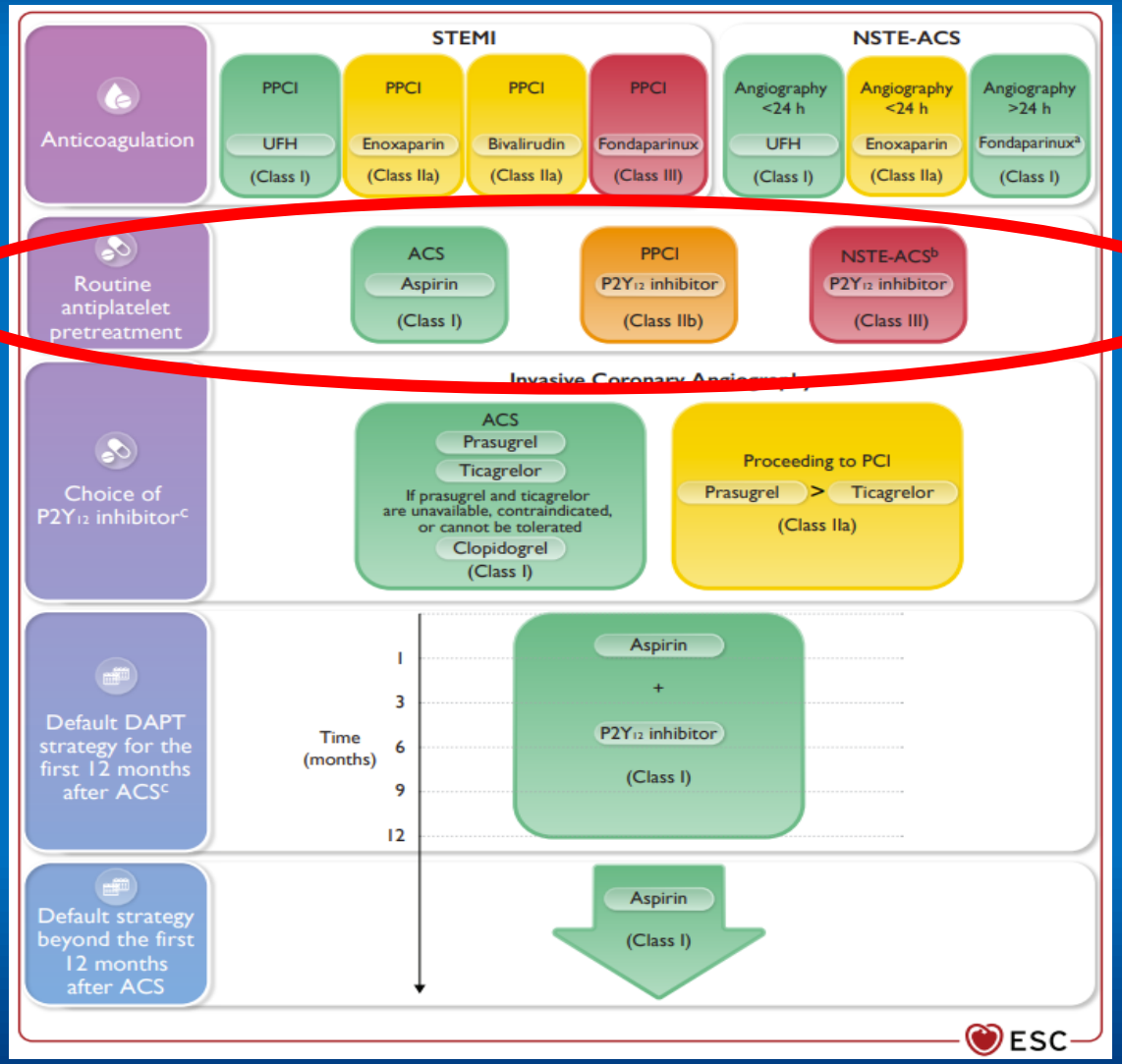
Tabulka 5. Ticagrelor před transportem nebo před přímou PCI pro STEMI. Studie ATLANTIC.

	Ticagrelor před transportem (n=906)	Ticagrelor v nemocnici (n=952)	OR (95% CI)
Absence poklesu STE≥70% před PCI	86.8%	87.6%	0.93 (0.69-1.25)
Absence TIMI3 průtoku v IRA před PCI	82.6%	83.1%	0.97 (0.75-1.25)
Úmrtí, AMI, CMP, ST, urgentní revaskularizace	41 (4.5%)	42 (4.4%)	1.03 (0.66-1.60)
Celková mortalita	30 (3.3%)	19 (2.0%)	1.68 (0.94-3.01)
Trombóza stentu (definite/probable 30 dnů)	21 (2.3%)	20 (2.1%)	1.11 (0.60-2.05)
CMP	4 (0.4%)	2(0.2%)	2.11 (0.39-11.53)
Závažné krvácení (48 hodin)	16 (1.8%)	15 (1.6%)	p=0.76

OR – poměr šancí, STE – elevace úseků ST, IRA – infarct related artery (infarktová tepna), AMI – akutní infarkt myokardu, CMP – cévní příhoda mozková, ST – trombóza stentu

Montalescot G. N Engl J Med 2014;371:1016-27.

Antitrombotická léčba při PCI pro akutní koronární syndrom 2023



European Heart Journal (2023) **44**, 3720–3826

Léčba STEMI primární PCI: p.o.inhibitory $P2Y_{12}$ a funkce LK

Infarct size following loading with Ticagrelor/Prasugrel versus Clopidogrel in ST-segment elevation myocardial infarction

Muhammad Sabbah [a,*,1], Lars Nepper-Christensen [a,1], Lars Køber [a,1], Dan Eik Høfsten [a,1],

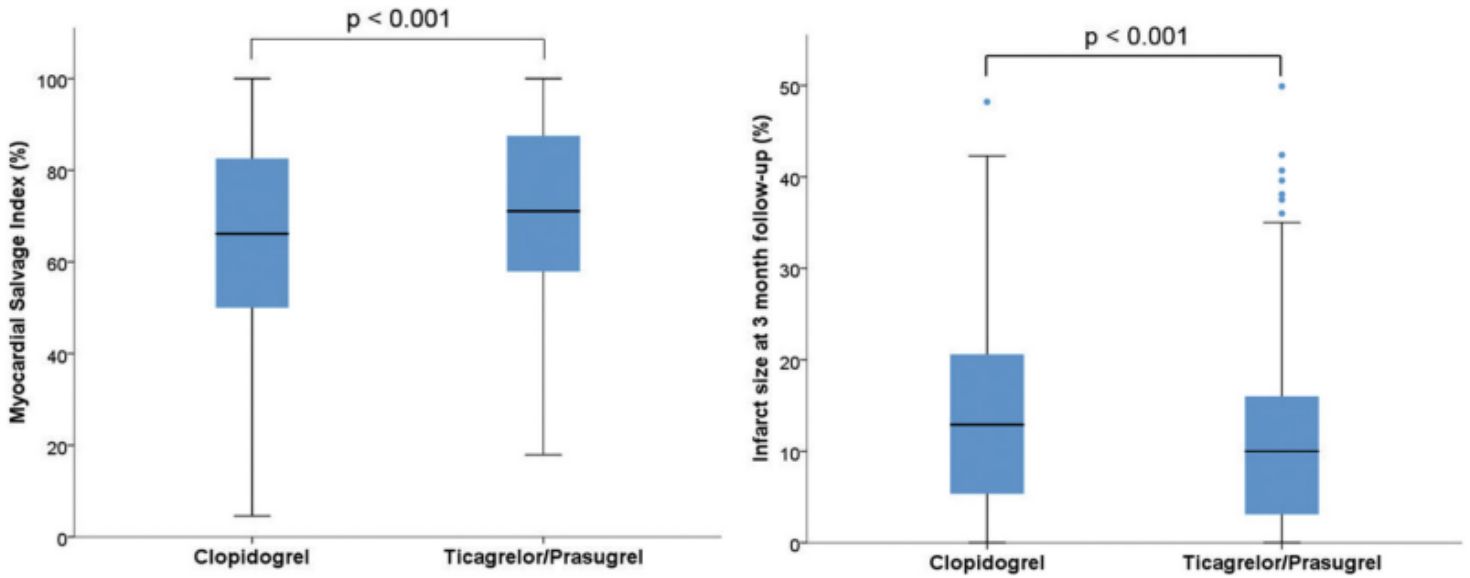
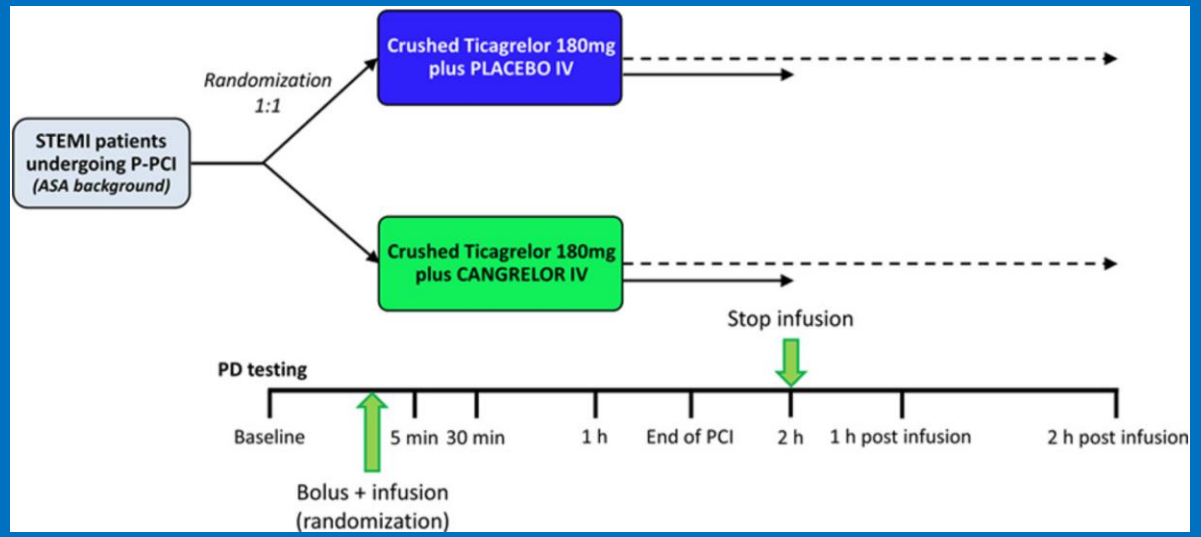


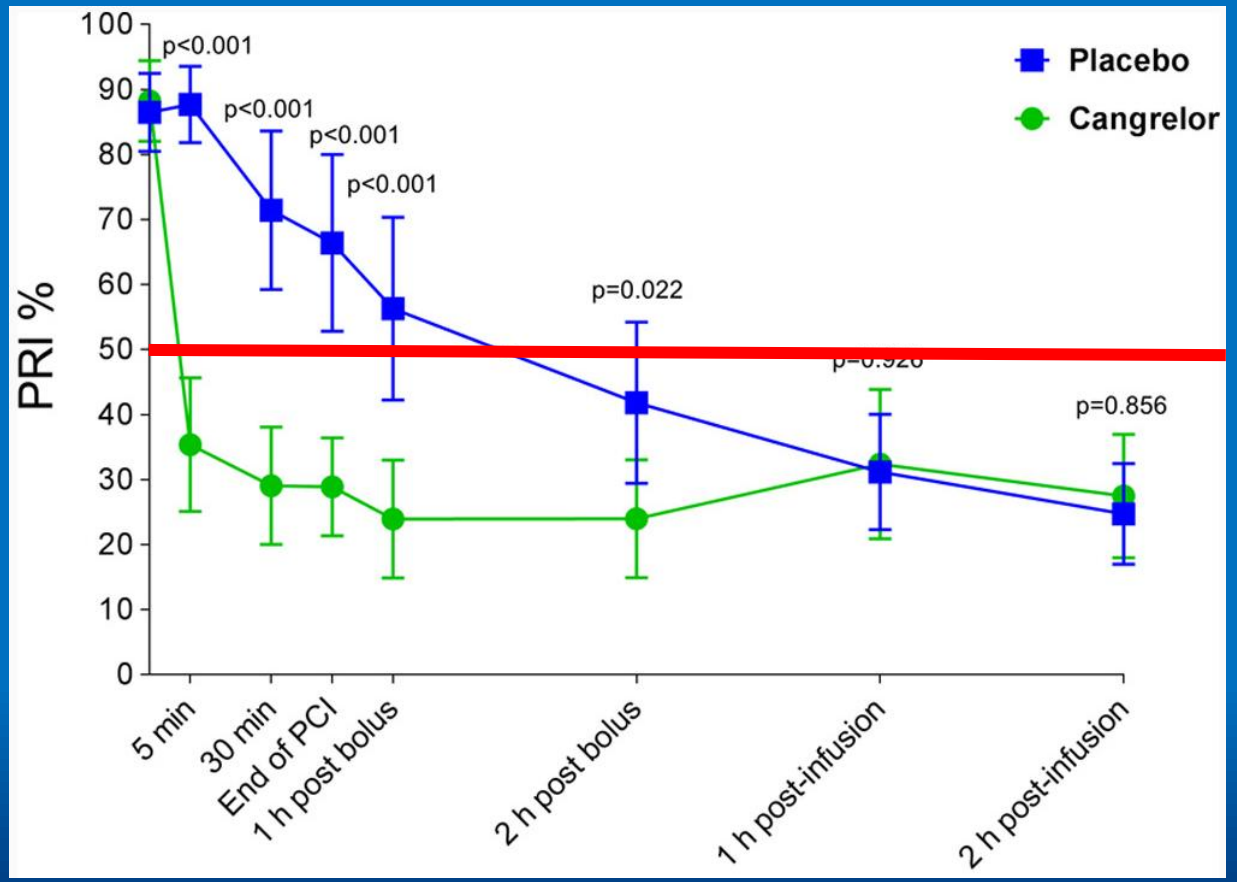
Fig. 2. Infarct size and myocardial salvage index at three-month follow-up according to anti-platelet treatment. Legend: Median, interquartile and total range of myocardial salvage index (left) and infarct size (right) according to treatment group (Clopidogrel vs Ticagrelor). There was a significant difference between treatment groups (Ticagrelor/Prasugrel vs Clopidogrel) for both infarct size and myocardial salvage index, $p < 0.001$ (see text for details).

International Journal of Cardiology 314 (2020) 7–12

Cangrelor : srovnání se silnými inhibitory $P2Y_{12}$ (CANTIC study)



Circulation. 2019;139:1661–1670



Trendy v protidestičkové terapii ACS 2023

1. První krok: stratifikace rizika **krvácení** / ischémie

2. U rizikových pacientů zvážit omezení rizika krvácení při DAPT
   (monoterapie $P2Y_{12}$, zkrácení DAPT, deeskalace DAPT)

3. Preferovat silné inhibitory $P2Y_{12}$ (prasugrel, ticagrelor)

4. Nepodávat inhibitory $P2Y_{12}$ před koronarografií

5. Potenciál intravenózního inhibitoru $P2Y_{12}$ při PCI (cangrelor)

Trendy v antiagregační terapii