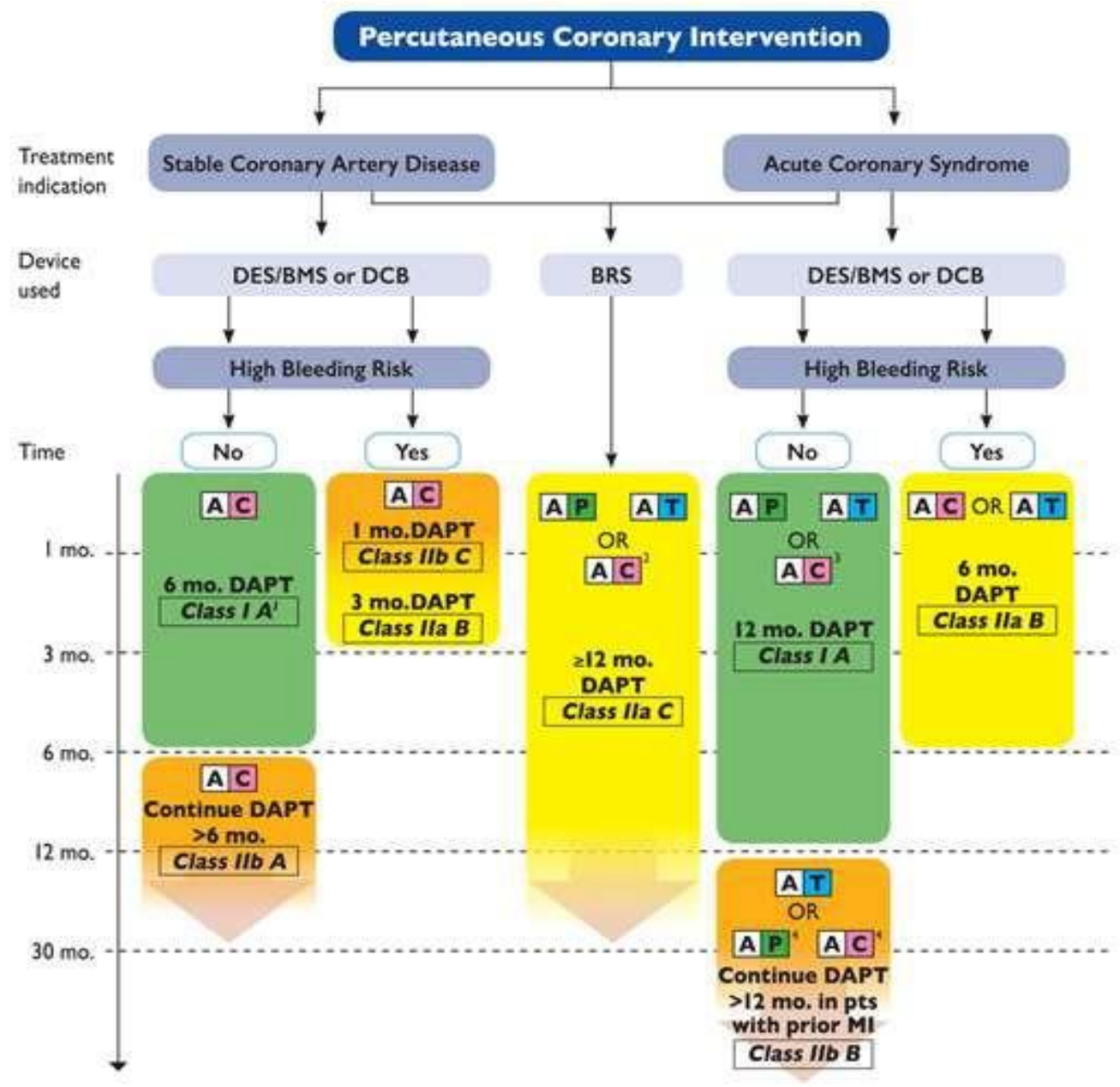


Nahradí monoterapie clopidogrelem aspirin v dlouhodobé sekundární prevenci po koronární intervenci?

Petr Kala

FN Brno a LF MU





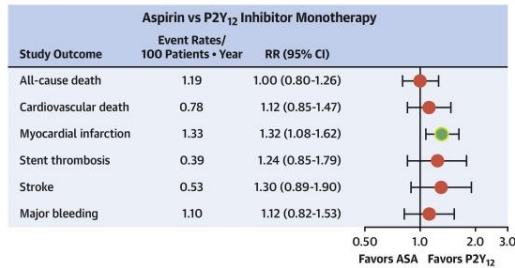
A = Aspirin **C** = Clopidogrel **P** = Prasugrel **T** = Ticagrelor

©ESC 2017

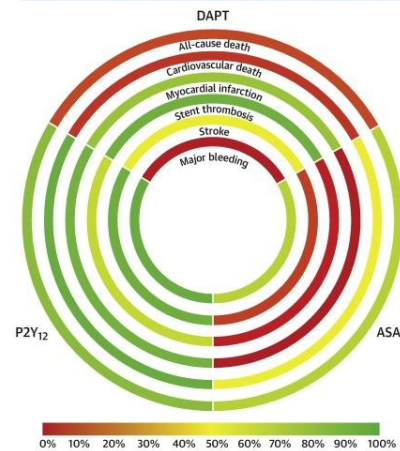
Metaanalýza ASA vs P2Y12 monoth

CENTRAL ILLUSTRATION: Forest Plot for the Comparisons Between Aspirin and P2Y₁₂ Inhibitor Monotherapies and Rank-Heat Plot for the Network Meta-Analysis

19 Randomized Studies Comparing Antiplatelet Therapies After DAPT, N = 73,126



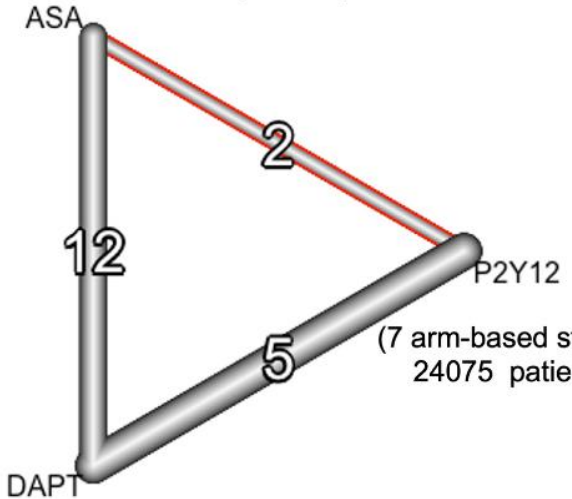
Probability of Being Ranked First for Prevention of Events



Andò G, et al. J Am Coll Cardiol Intv. 2022;15(22):2239-2249.

FIGURE 1 Antiplatelet Strategies Included in the Network

(14 arm-based studies, 20732 patients)



(17 arm-based studies, 28319 patients)

The width of connecting lines between different treatment nodes reflects the populations available for each comparison, while the superimposed number reflects the number of direct comparisons. The comparison of interest (aspirin monotherapy [ASA] vs any P2Y₁₂ inhibitor monotherapy [P2Y₁₂]) is highlighted in red. DAPT = dual antiplatelet therapy.

Metaanalýza ASA vs P2Y12 monoth

Ando et al. JACCVI 2022

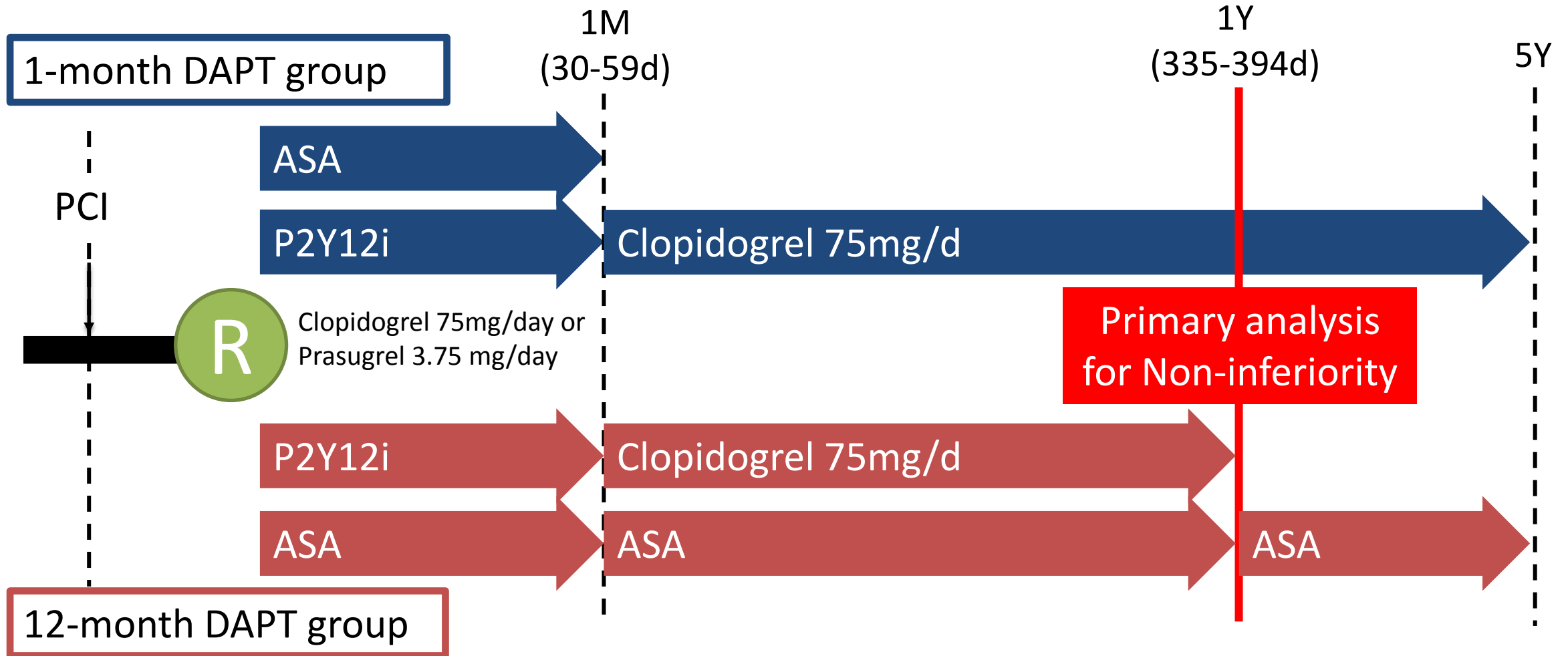
TABLE 1 Design of Studies Included in the Systematic Review

Trial	N	Timing of Randomization After PCI	Treatment Before DAPT Interruption in Any of the Trial Arms	Timing of DAPT Interruption in Any of the Trial Arms	Treatment After DAPT Interruption in Any of the Trial Arms	Timing of the Primary Endpoint
P2Y ₁₂ -I monotherapy (experimental) vs DAPT (control)						
GLOBAL LEADERS, first year	7,980 7,988	In-hospital	DAPT (ticagrelor + ASA) DAPT (clopidogrel + ASA in patients with CCS) (ticagrelor + ASA in patients with ACS)	1 mo	SAPT (ticagrelor) DAPT (clopidogrel + ASA in patients with CCS) (ticagrelor + ASA in patients with ACS)	12 mo
SMART-CHOICE	1,495 1,498	0-3 mo	DAPT (clopidogrel or prasugrel or ticagrelor + ASA) DAPT (clopidogrel or prasugrel or ticagrelor + ASA)	3 mo	SAPT (clopidogrel or prasugrel or ticagrelor) DAPT (clopidogrel or prasugrel or ticagrelor + ASA)	12 mo
SMART-2	1,500 1,509	In-hospital	DAPT (clopidogrel + ASA) DAPT (clopidogrel + ASA)	1 mo	[REDACTED] DAPT (clopidogrel + ASA)	[REDACTED]
TICO	1,527 1,529	In-hospital	DAPT (ticagrelor + ASA) DAPT (ticagrelor + ASA)	3 mo	SAPT (ticagrelor) DAPT (ticagrelor + ASA)	12 mo
TWILIGHT	3,555 3,564	3 mo (event-free patients)	DAPT (ticagrelor + ASA) DAPT (ticagrelor + ASA)	3 mo	SAPT (ticagrelor) DAPT (ticagrelor + ASA)	12 mo

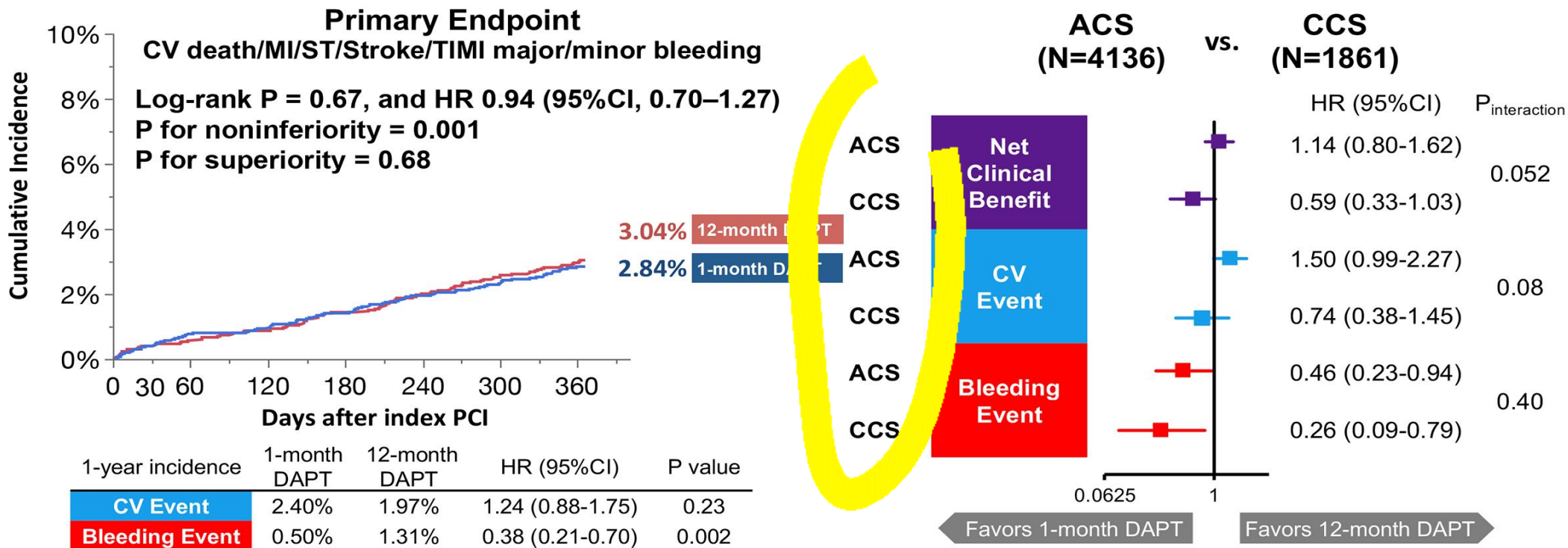
P2Y ₁₂ -I monotherapy (experimental) vs ASA (control)						
GLOBAL LEADERS, second year	5,308 5,813	Patients event free at 1 y post-PCI and adherent to assigned treatment were included	SAPT (ticagrelor) DAPT (clopidogrel + ASA in patients with CCS) (ticagrelor + ASA in patients with ACS)	12 mo	SAPT (ticagrelor) SAPT (ASA)	12 mo
TEST EXAM	2,710 2,728	6-18 mo ^a (event-free patients)	DAPT (clopidogrel or prasugrel or ticagrelor + ASA) DAPT (clopidogrel or prasugrel or ticagrelor + ASA)	6-18 mo ^a	[REDACTED] SAPT (ASA)	[REDACTED]

STOPDAPT-2:

Prospective multicenter open-label randomized trial comparing 1-month versus 12-month DAPT after CoCr-EES implantation with limited exclusion criteria.



Clopidogrel Monotherapy After 1-Month Dual Antiplatelet Therapy In Percutaneous Coronary Intervention: From the STOPDAPT-2 Total Cohort

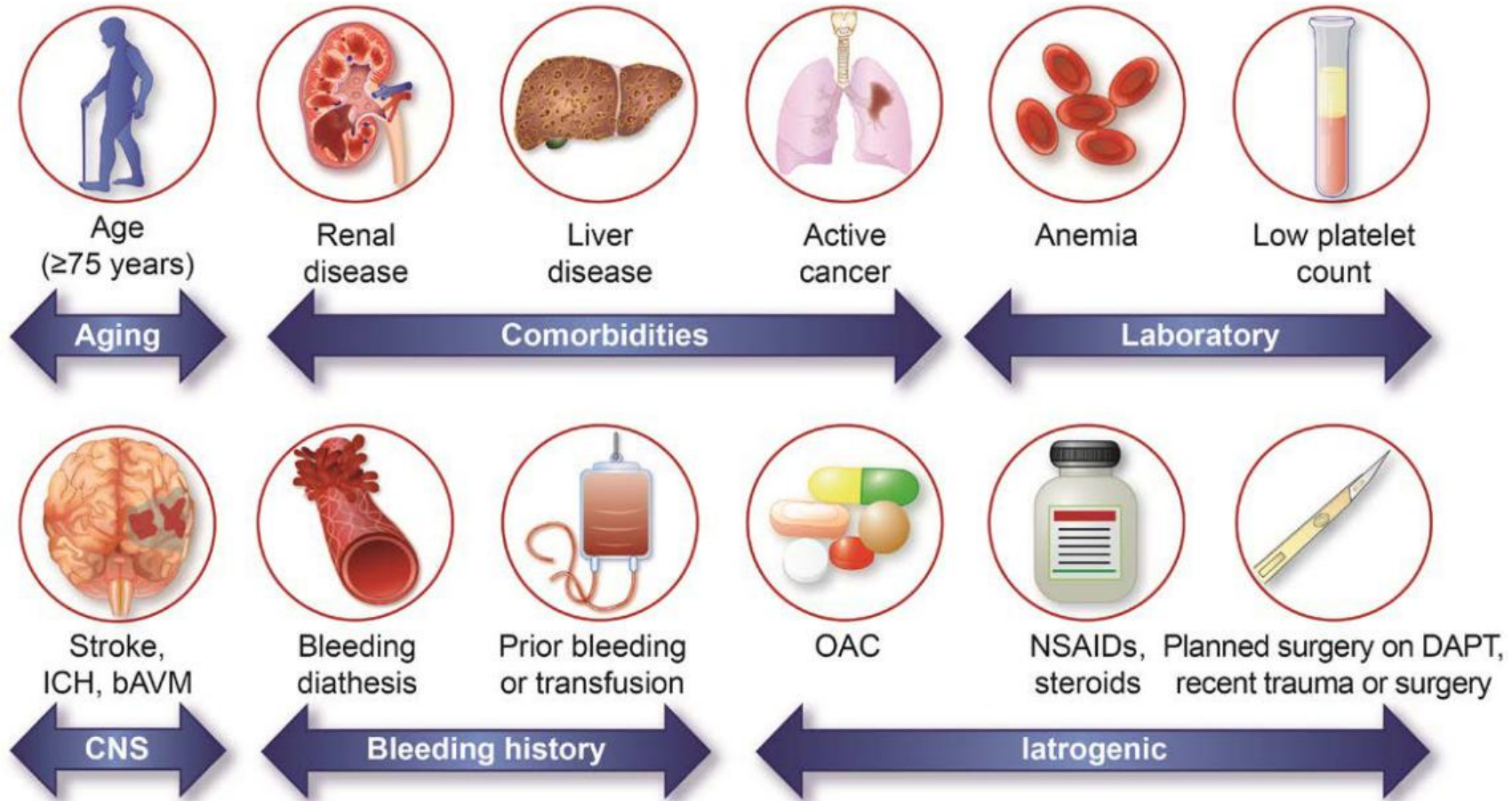


Yuki Obayashi. Circulation: Cardiovascular Interventions. Clopidogrel Monotherapy After 1-Month Dual Antiplatelet Therapy in Percutaneous Coronary Intervention: From the STOPDAPT-2 Total Cohort, Volume: 15, Issue: 8, Pages: e012004, DOI: (10.1161/CIRCINTERVENTIONS.122.012004)

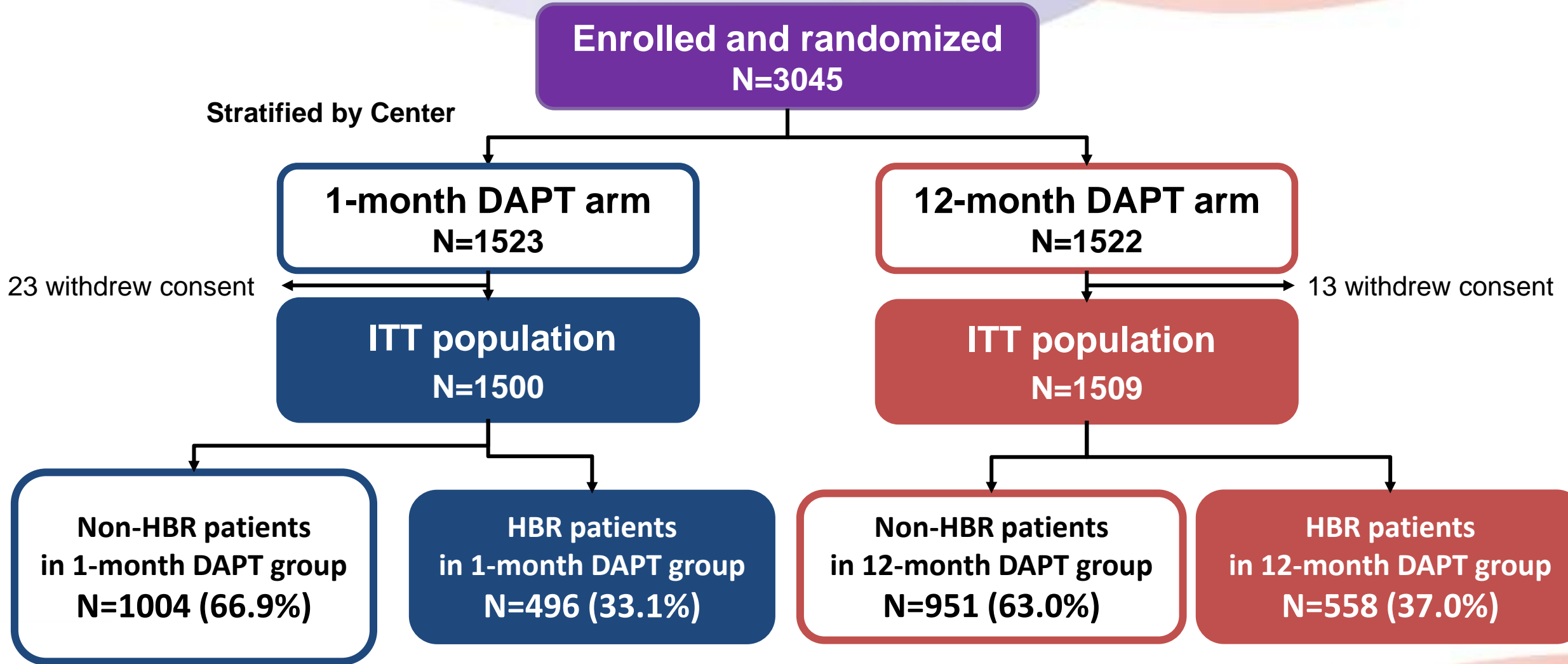
© 2022 The Authors. Circulation: Cardiovascular Interventions is published on behalf of the American Heart Association, Inc., by Wolters Kluwer Health, Inc. This is an open access article under the terms of the Creative Commons Attribution Non-Commercial-NoDerivs License, which permits use, distribution, and reproduction in any medium, provided that the original work is properly cited, the use is noncommercial, and no modifications or adaptations are made.

ARC-HBR

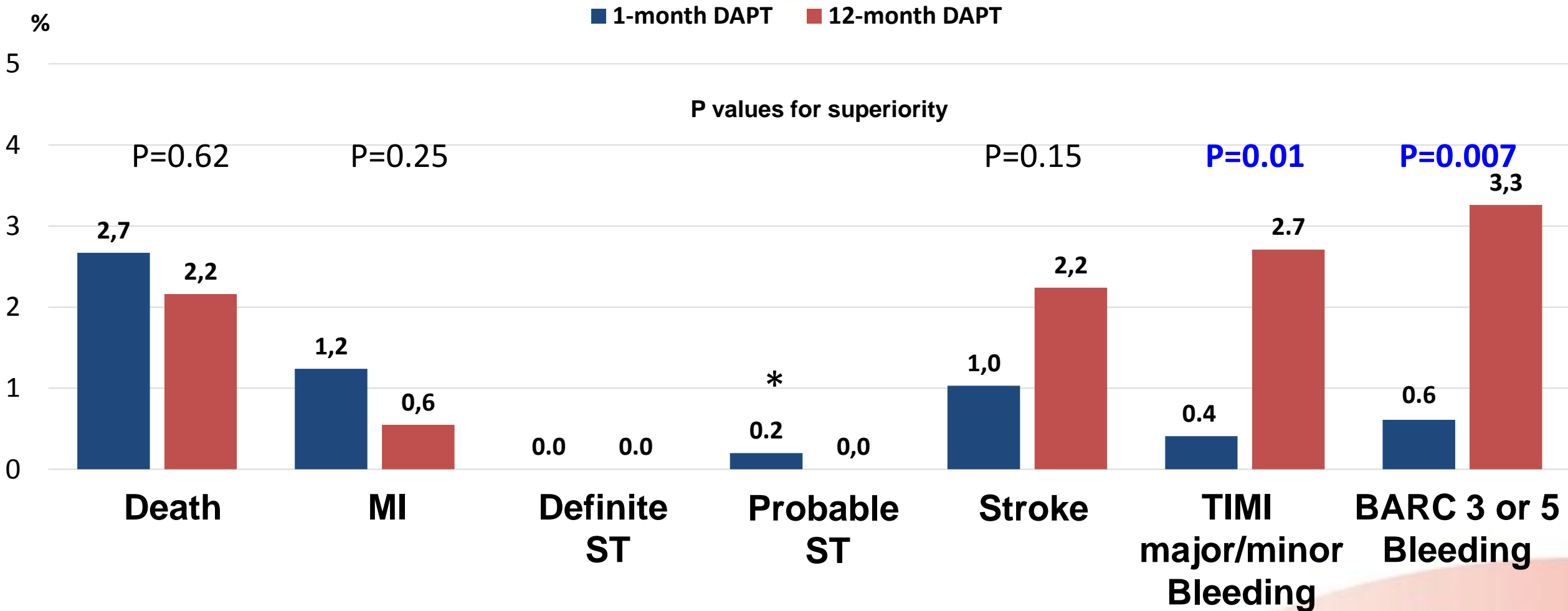
- Newly proposed ARC-HBR criteria provided standardization of HBR definition



Study Flow



Clinical Outcomes at 1 year in HBR stratum



* 1 undefined death before discontinuing DAPT at 1-month

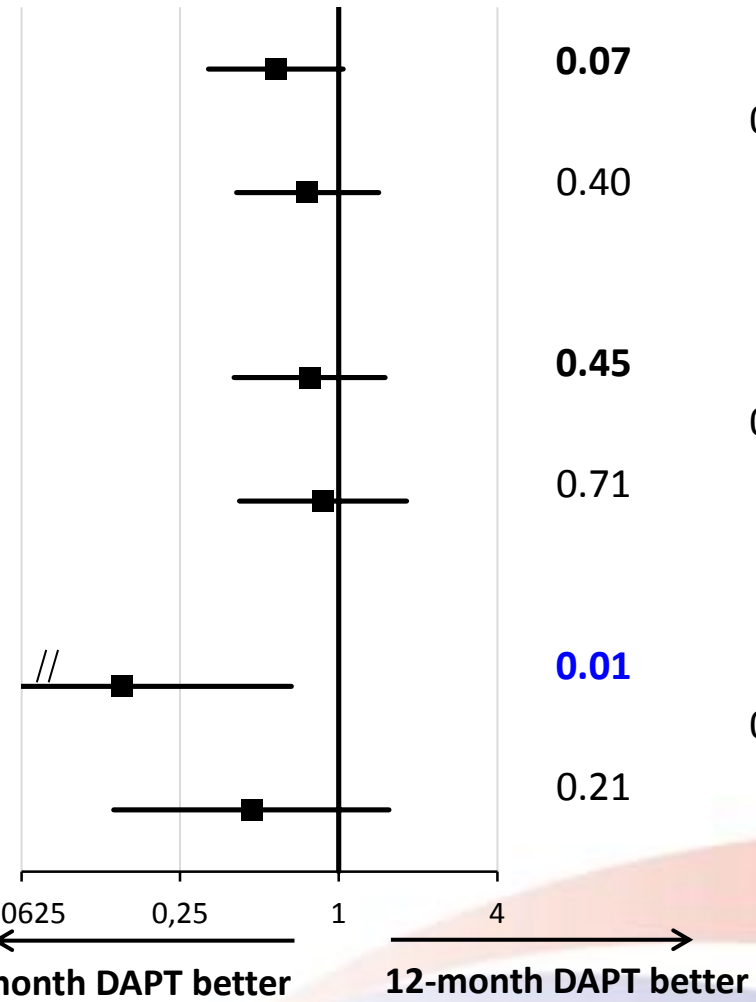
HBR subgroup analysis

**Inc. Malignancy (8.5%)
as HBR major**

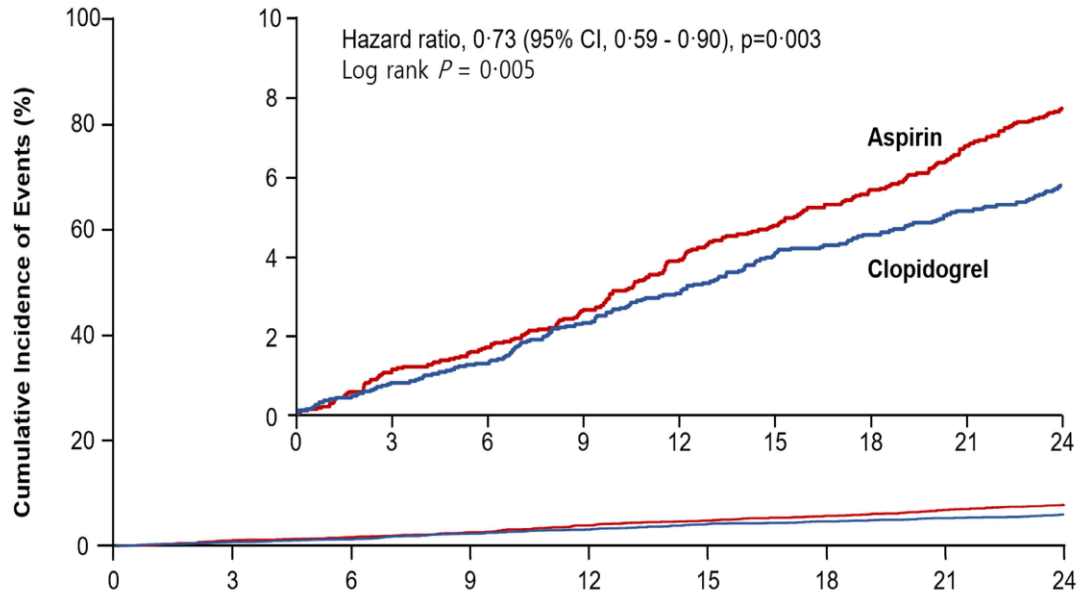
1-year incidence

(N with event/subtotal N)

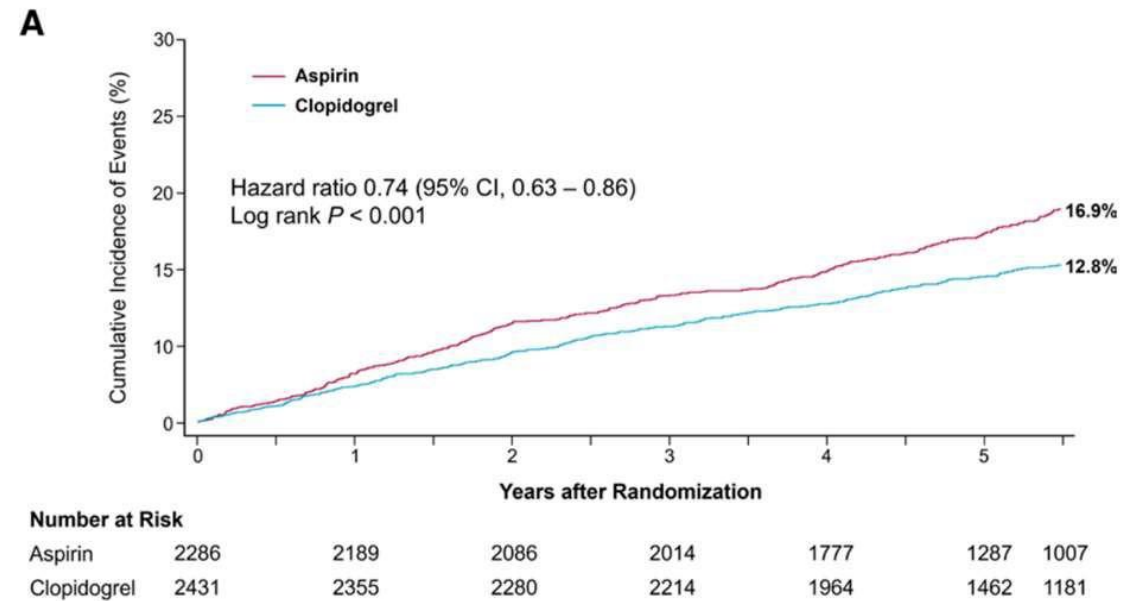
	1-month DAPT (N=1500)	12-month DAPT (N=1509)	Absolute difference (95%CI)	Hazard Ratio (95%CI)	P value	P _{interaction}
Primary Endpoint						
HBR	3.18% (17/544)	5.39% (33/619)	-2.21% (-4.53% to 0.11%)	0.58 (0.32-1.04)	0.07	0.53
Non-HBR	1.90% (18/956)	2.52% (22/890)	-0.62% (-1.97% to 0.73%)	0.76 (0.41-1.42)	0.40	
Major Secondary Cardiovascular Endpoint						
HBR	2.81% (15/544)	3.63% (22/619)	-0.82% (-2.86% to 1.22%)	0.78 (0.40-1.50)	0.45	0.82
Non-HBR	1.48% (14/956)	1.73% (15/890)	-0.25% (-1.40% to 0.90%)	0.87 (0.42-1.81)	0.71	
Major Secondary Bleeding Endpoint						
HBR	0.37% (2/544)	2.44% (15/619)	-2.07% (-3.39% to -0.75%)	0.15 (0.03-0.66)	0.01	0.24
Non-HBR	0.42% (4/956)	0.91% (8/890)	-0.49% (-1.24% to 0.26%)	0.47 (0.14-1.55)	0.21	



HOST-EXAM RCT



BK Koo, J Kang, KW Park, HS Kim et al. Lancet 2021



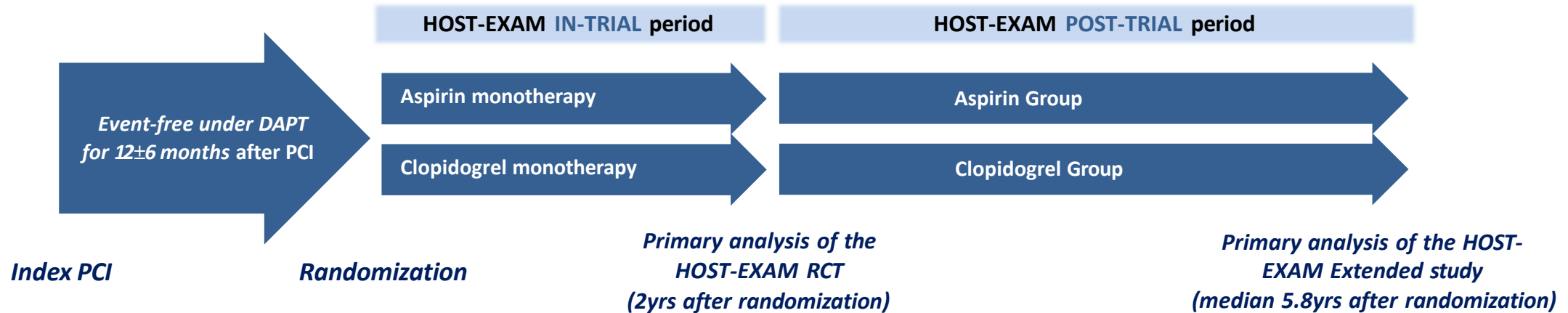
J Kang, KW Park, HS Kim, et al. Circulation 2023

HOST-EXAM RCT

Study Population

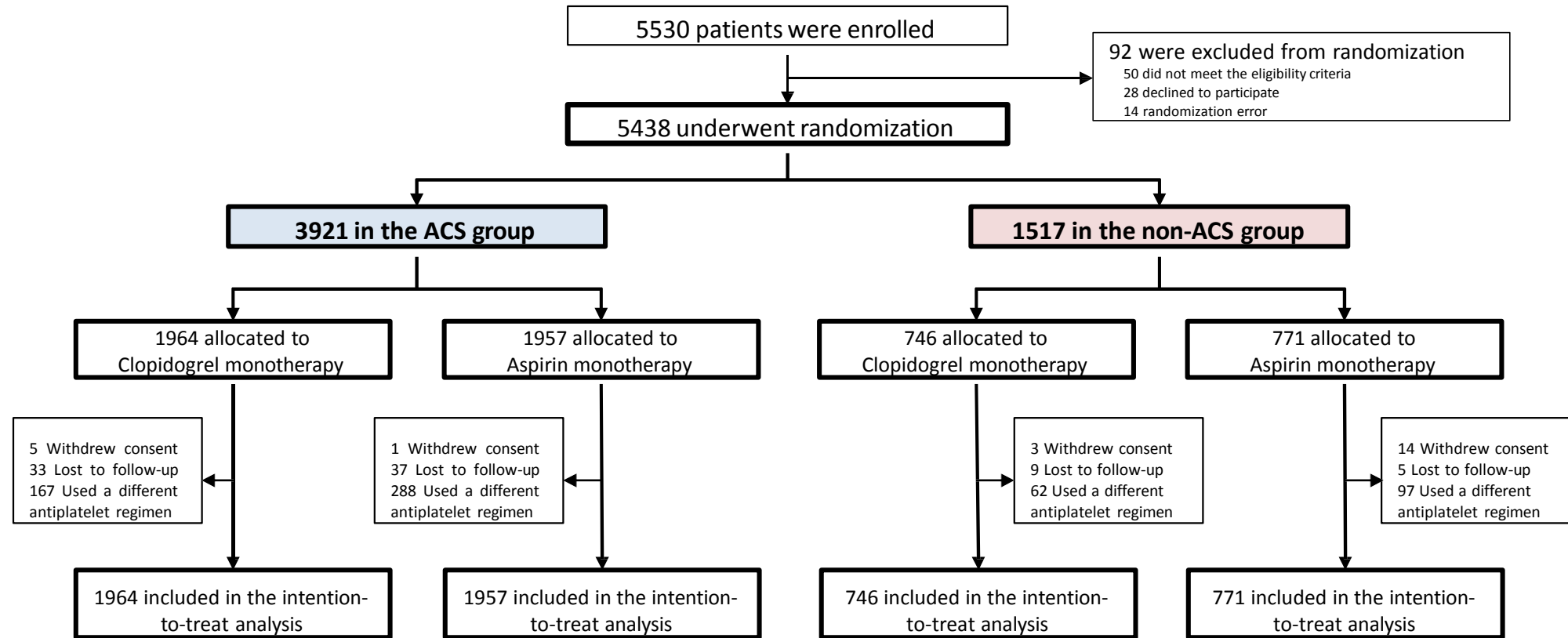


- 5,530 eligible patients screened, from 37 centers in K



- The total population was classified into two groups according to the initial clinical diagnosis at the time-point of Index PCI; **ACS or non-ACS**.

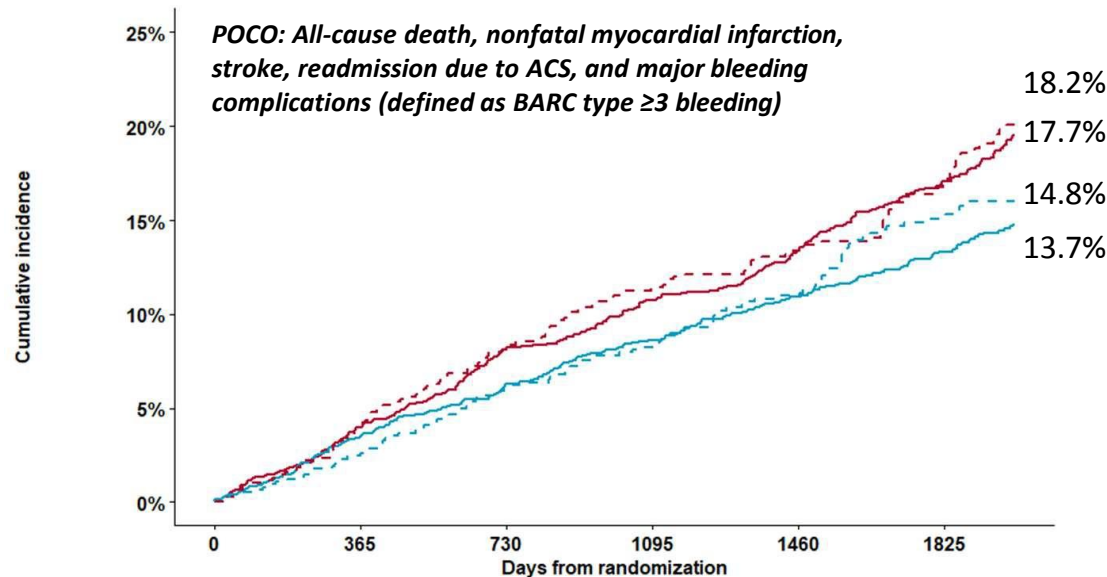
HOST-EXAM RCT



Výsledky



■ **Primary Endpoint: POCO (Patient Oriented Composite outcome)**

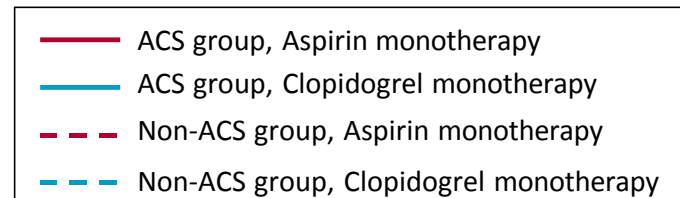


ACS group
: HR 0.78 (95% CI 0.66-0.92);
Log-rank p = 0.000

Non-ACS group
: HR 0.82 (95% CI 0.63-1.06);
Log-rank p = 0.100

P-interaction = 0.751

	0	365	730	1095	1460	1825
ACS group, Aspirin	1957	1880	1801	1739	1535	1116
ACS group, Clopidogrel	1964	1893	1840	1787	1579	1158
Non-ACS group, Aspirin	771	740	710	683	610	468
Non-ACS group, Clopidogrel	746	728	700	682	607	461

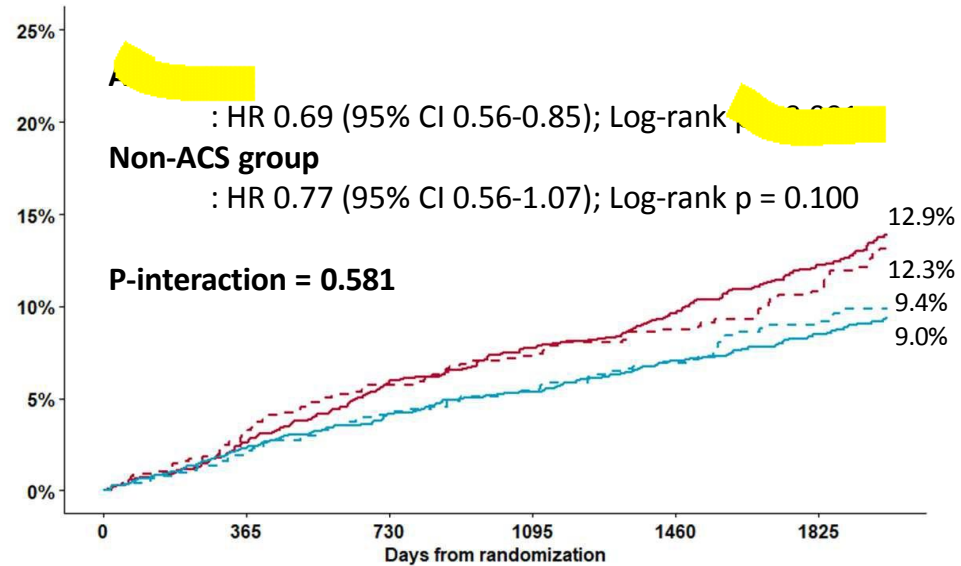


Výsledky

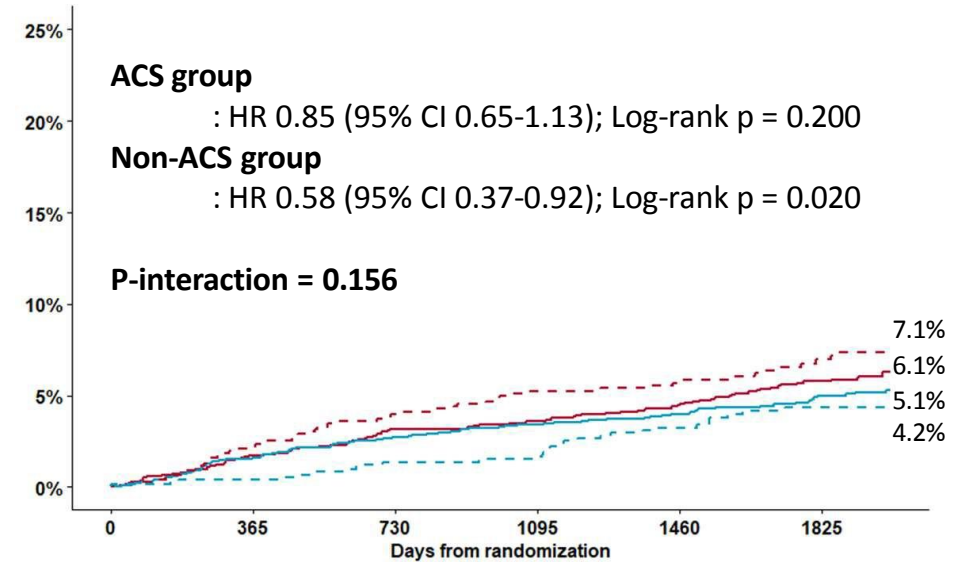


Secondary Endpoints

< Thrombotic composite endpoint >



< Bleeding endpoint >



Výsledky



Other Secondary Endpoints

	ACS				Non-ACS				Interaction p-value
	Clopidogrel (N=1,964)	Aspirin (N=1,957)	HR (95% CI)	p-value	Clopidogrel (N=746)	Aspirin (N=771)	HR (95% CI)	p-value	
All-cause death	120 (6.7%)	107 (6.2%)	1.13 (0.87-1.47)	0.364	55 (8.0%)	54 (8.0%)	1.06 (0.73-1.55)	0.757	0.790
Cardiac death	58 (3.3%)	58 (3.4%)	1.01 (0.70-1.45)	0.974	23 (3.4%)	26 (4.0%)	1.09 (0.53-1.61)	0.772	0.795
Non-cardiac death	62 (3.5%)	49 (2.8%)	1.27 (0.88-1.85)	0.207	32 (4.7%)	28 (4.2%)	1.19 (0.72-1.98)	0.498	0.835
Non-fatal myocardial infarction	32 (1.6%)	53 (2.7%)	0.60 (0.39-0.93)	0.022	13 (1.7%)	9 (1.2%)	1.50 (0.64-3.51)	0.351	0.060
Stroke	35 (1.8%)	57 (2.9%)	0.61 (0.40-0.93)	0.022	11 (1.5%)	17 (2.2%)	0.66 (0.31-1.42)	0.292	0.838
Major bleeding	92 (4.7%)	149 (7.6%)	0.61 (0.47-0.79)	0.001	34 (4.6%)	49 (6.4%)	0.71 (0.46-1.10)	0.124	0.550
Major bleeding (BARC type ≥3)	55 (2.8%)	71 (3.6%)	0.77 (0.54-1.09)	0.144	12 (1.6%)	31 (4.0%)	0.40 (0.20-0.77)	0.005	0.083
Any revascularization	98 (5.0%)	121 (6.2%)	0.80 (0.62-1.05)	0.106	49 (6.6%)	59 (7.7%)	0.86 (0.59-1.25)	0.634	0.785
Stent thrombosis	6 (0.3%)	15 (0.8%)	0.40 (0.16-1.03)	0.058	7 (1.0%)	4 (0.5%)	1.82 (0.53-6.21)	0.340	0.056

Nahradí monoterapie clopidogrelem aspirin v dlouhodobé sekundární prevenci po koronární intervenci?

SHRNUTÍ

- Možná...u pacientů s AKS (vs monoth ticagrelorem po odeznění finančních restrikcí).
- Měl by u pacientů s HBR.
- Pravděpodobně zatím ne u pacientů s CHKS.
- Otázka non-respondence a testování účinku u clopidogrelu.
- Potřeba randomizovaných dat z Evropy/USA.

Děkuji za pozornost