



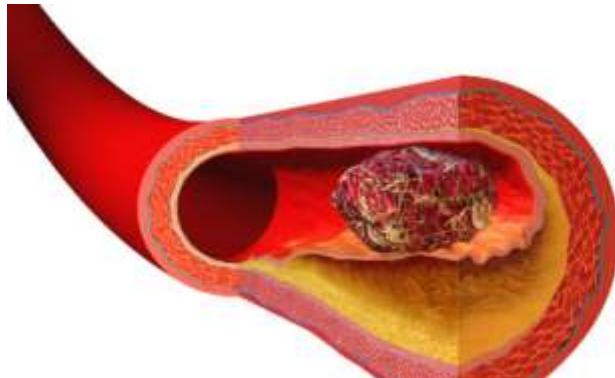
Recommendations for Antiplatelet Therapy After PCI for ACS

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Conflicts: none

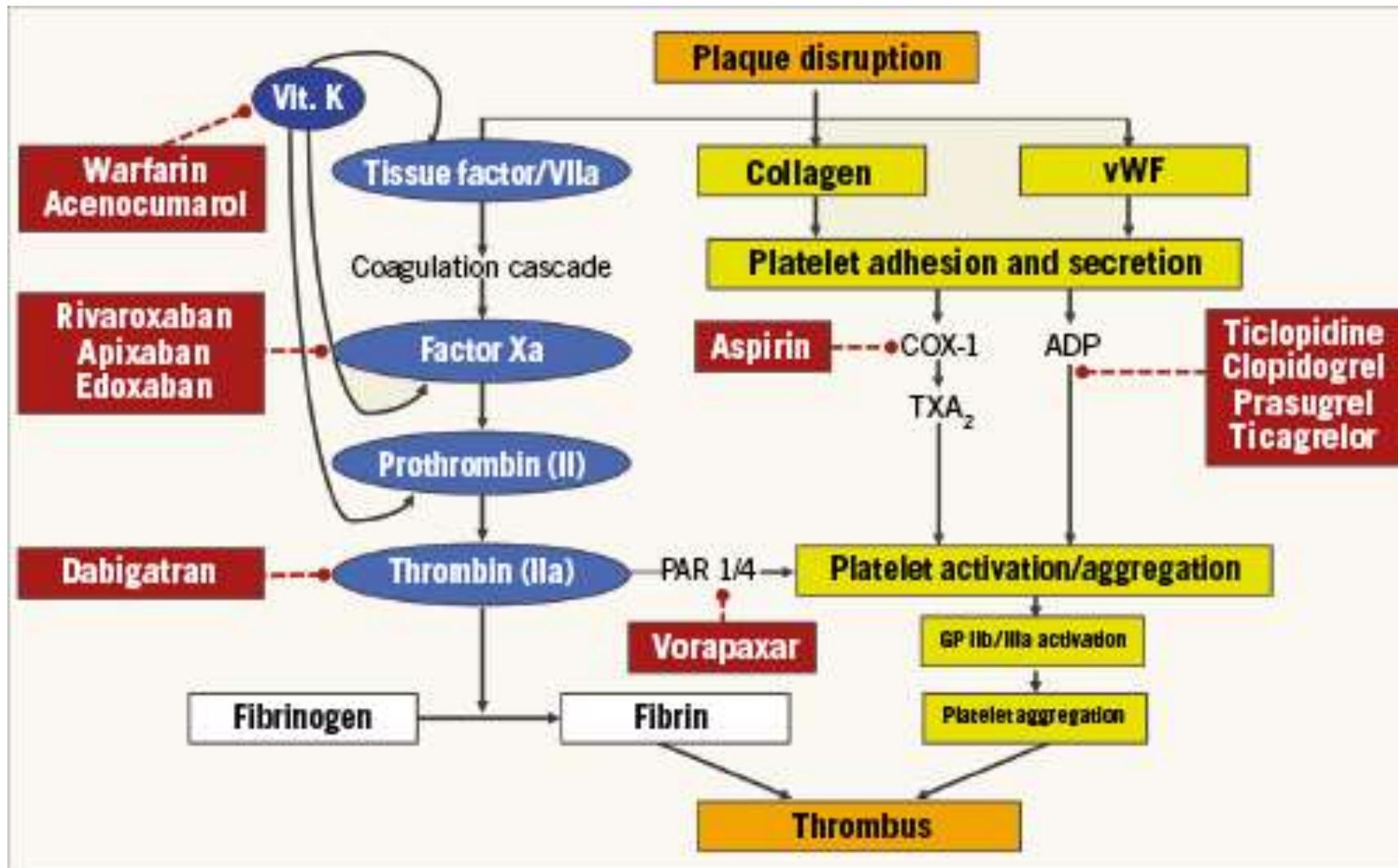


Case:

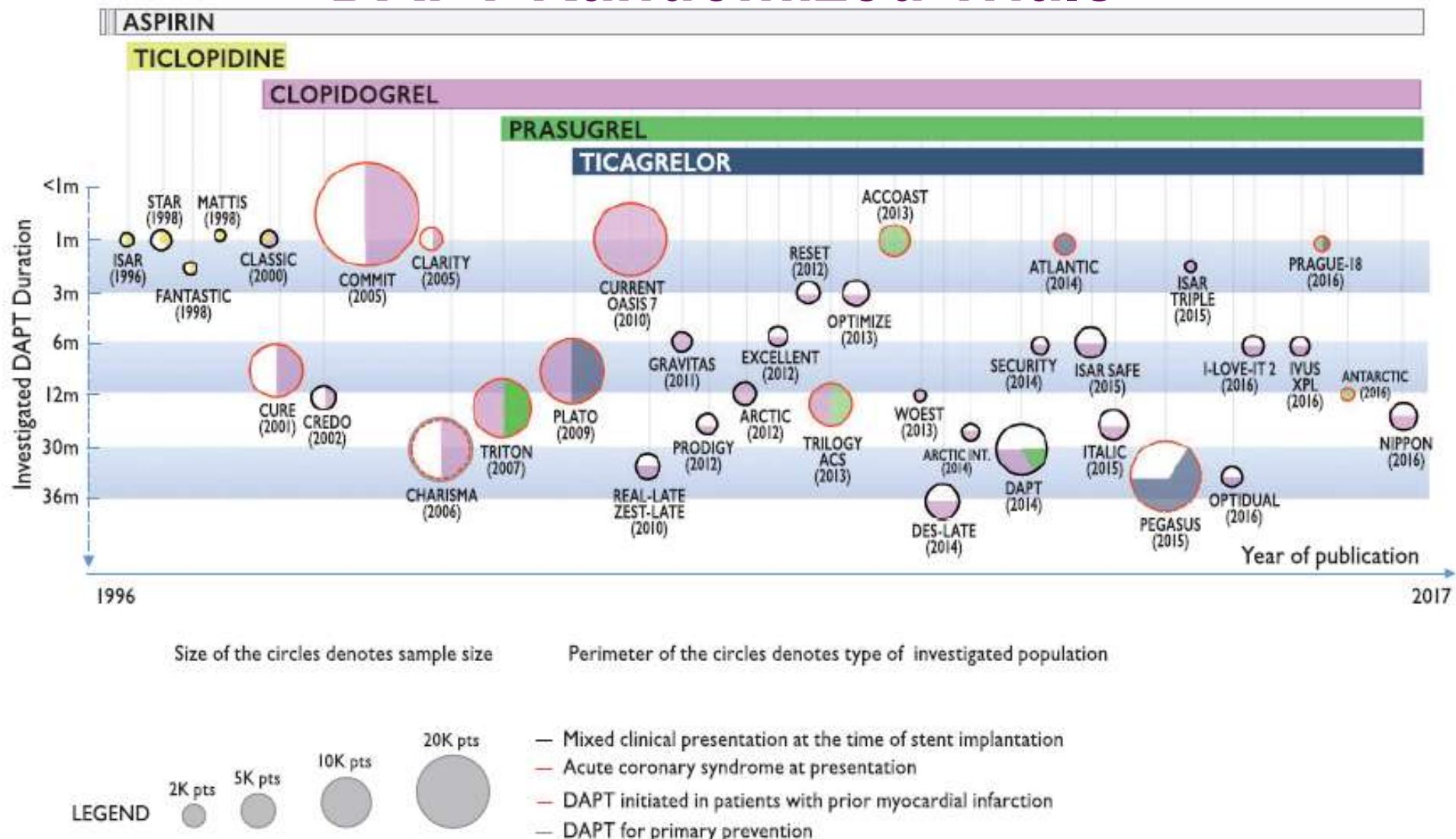
78 -Year-Old Woman With NSTEMI

- Should DAPT be started before coronary angiography?
- Should ticagrelor, prasugrel, clopidogrel, cangrelor, or a GPI be administered during PCI?
- Should DAPT de-escalation to clopidogrel be considered? When?
- Should “Short DAPT” be considered? When?
- Should a bridging strategy be employed if surgery is required?
- Should ticagrelor be used instead of ASA for secondary prevention?

Oral Antithrombotic Therapy

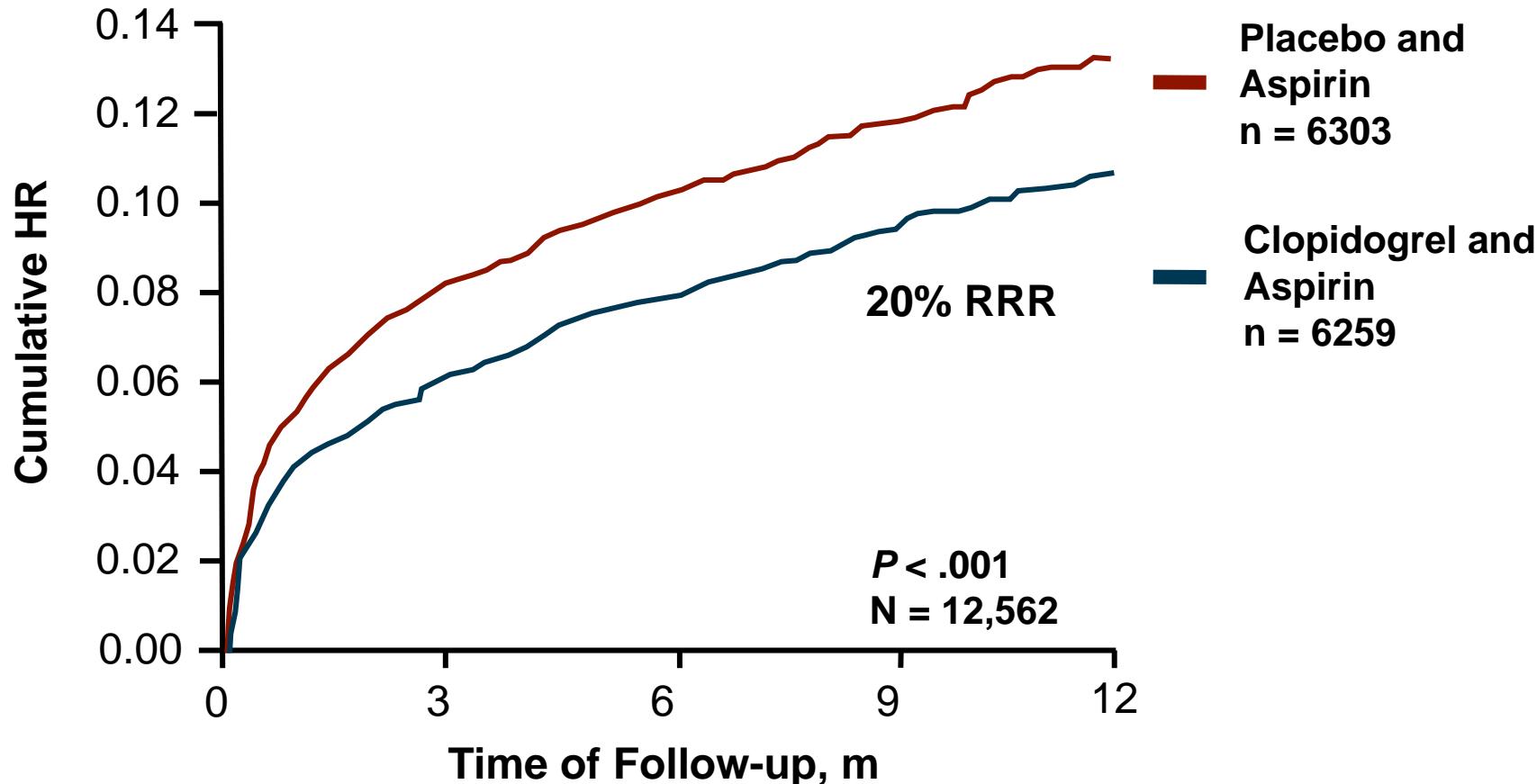


DAPT Randomized Trials



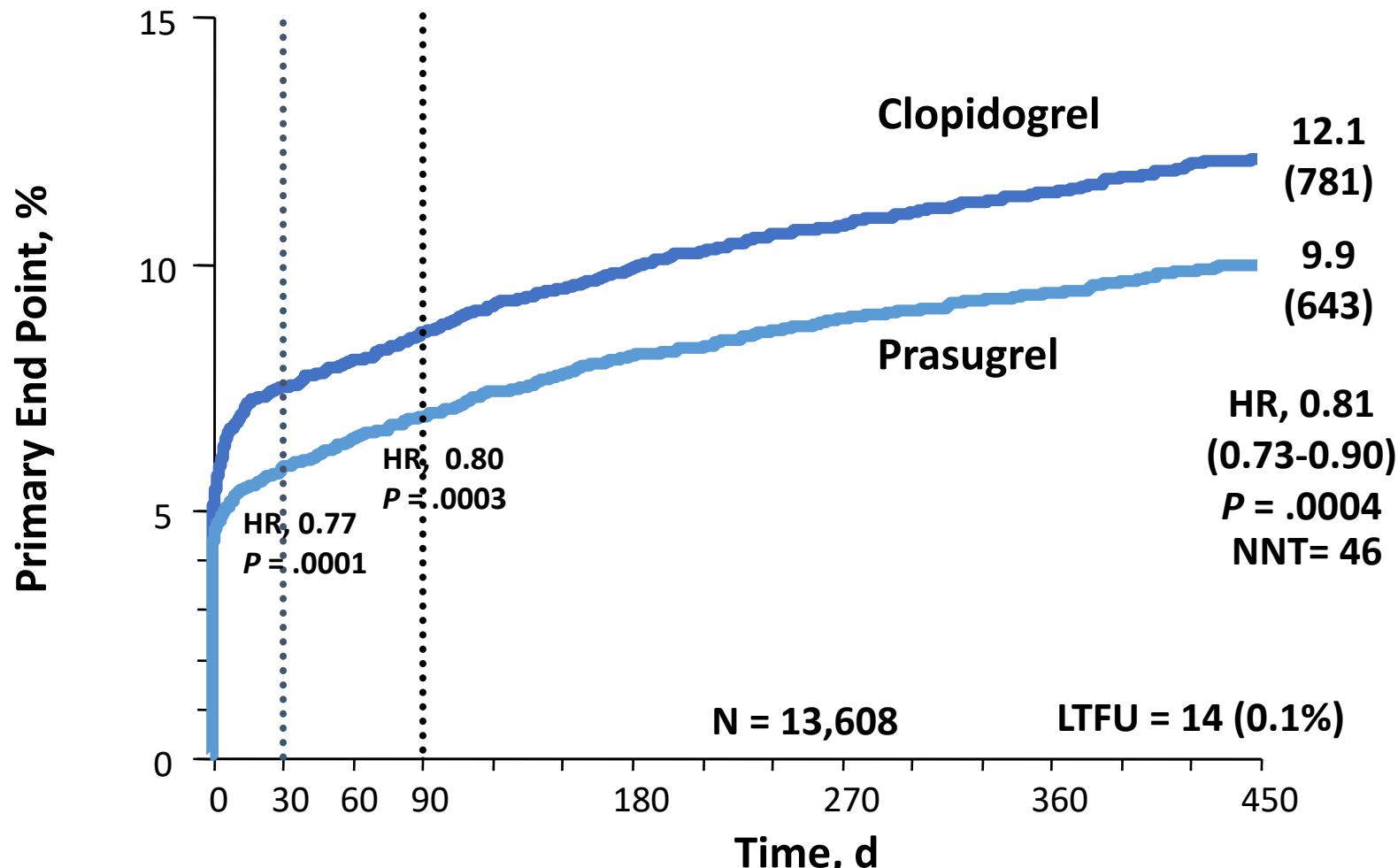
CURE: Clopidogrel for UA/NSTEMI

CV Death/MI/Stroke



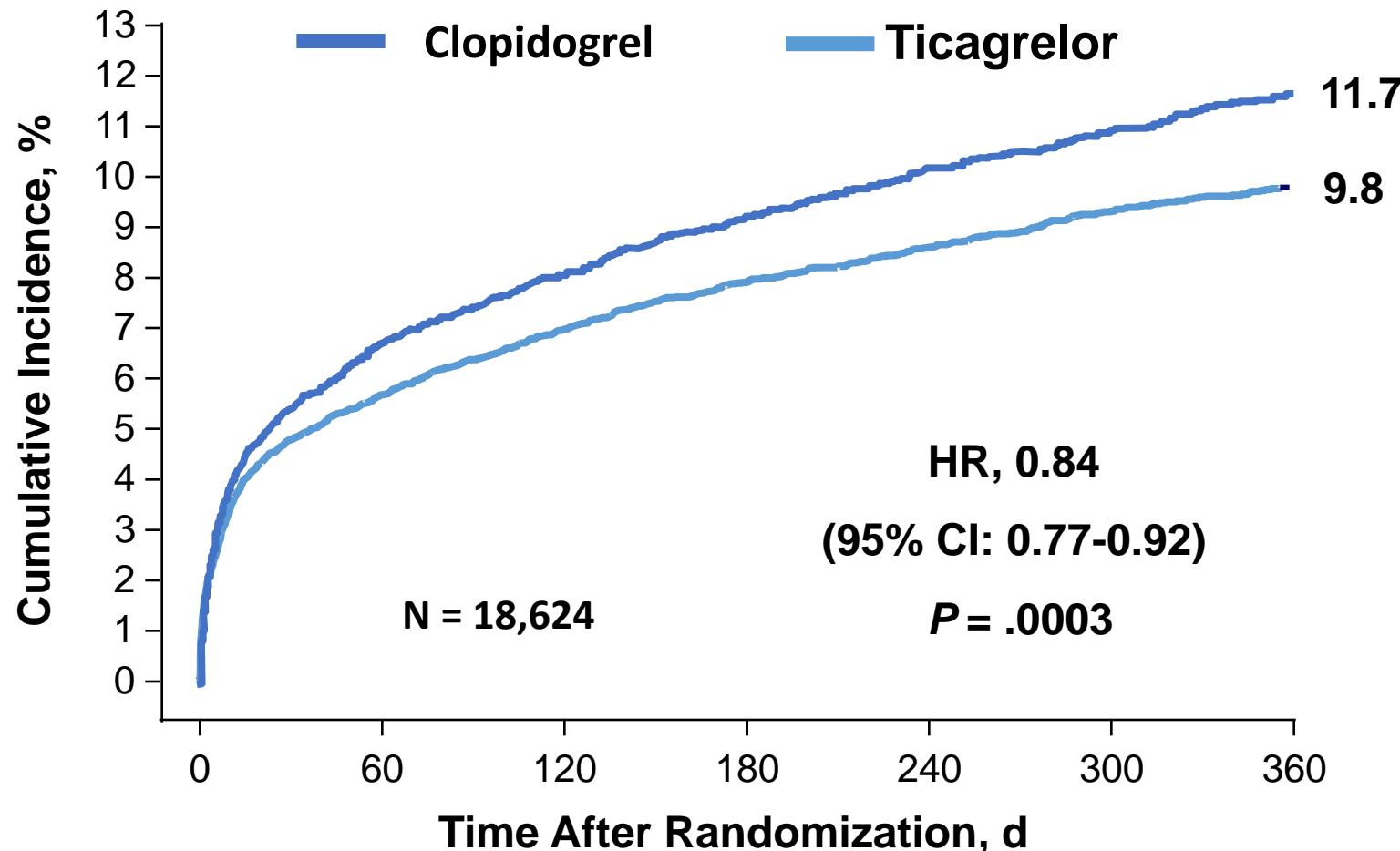
TRITON-TIMI 38: Prasugrel for ACS (+PCI)

CV Death/MI/Stroke



PLATO: Ticagrelor for ACS

CV Death/MI/Stroke



Aspirin Dosing in Patients Treated With DAPT

COR	LOE	Recommendation
I	B-NR	In patients treated with DAPT, a daily aspirin dose of 81 mg (range, 75 mg to 100 mg) is recommended.

Controversies in Dual Antiplatelet Therapy

Pretreatment (Loading)

Switching (Escalating/De-escalating)

Duration

Bridging

Secondary Prevention

Monotherapy

Triple Therapy

Dual Pathway Therapy



Controversies in DAPT

Pretreatment (Loading)

Vienna Registry

Eur Heart J 2011;32:2954

Spanish Registry

Am J Cardiol 2015;115:1019

ACCOAST-ACS

N Engl J Med 2013;369:999

ATLANTIC

N Engl J Med 2014;371:1016

SCAAR Registry

Circ Cardiovasc Interv 2018;11:e005528

SWEDEHEART

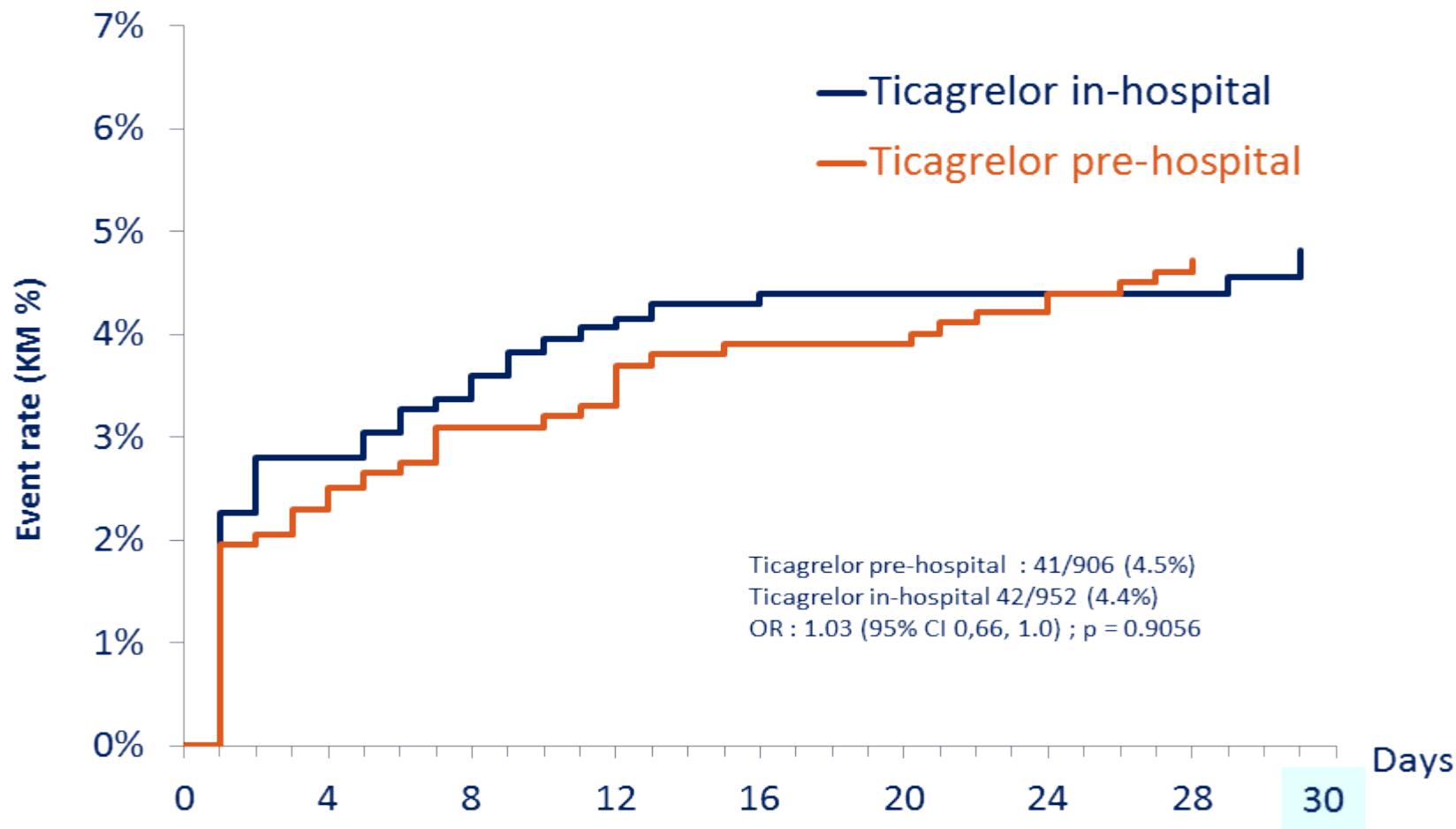
Circ Cardiovasc Interv 2018;11:e005528

FAST-MI Registry

Circ Cardiovasc Interv 2018;11:e007241



ATLANTIC Trial: 30-Day MACE



MACE: death, MI, stent thrombosis, stroke or urgent revascularization

Controversies in DAPT



Switching (Escalating)

TIMI-TRITON NEJM 2007;357:2001

PLATO NEJM 2009;361:1045

GRAVITAS JAMA 2011;305:1097

TRIGGER-PCI JACC 2012;59:2159

ARCTIC NEJM 2012;367:2100

ANTARCTIC Lancet 2016;388:2015

Controversies in DAPT



Switching (De-escalating)

TRANSLATE-ACS

Am Heart J 2017;183:62

SCOPE Registry

EuroIntervention 2017;13:459

TOPIC

Eur Heart J 2017;38:3070

TROPICAL-ACS

Lancet 2017;3990:1747

PRAGUE-18

J Am Coll Cardiol 2018;71:371

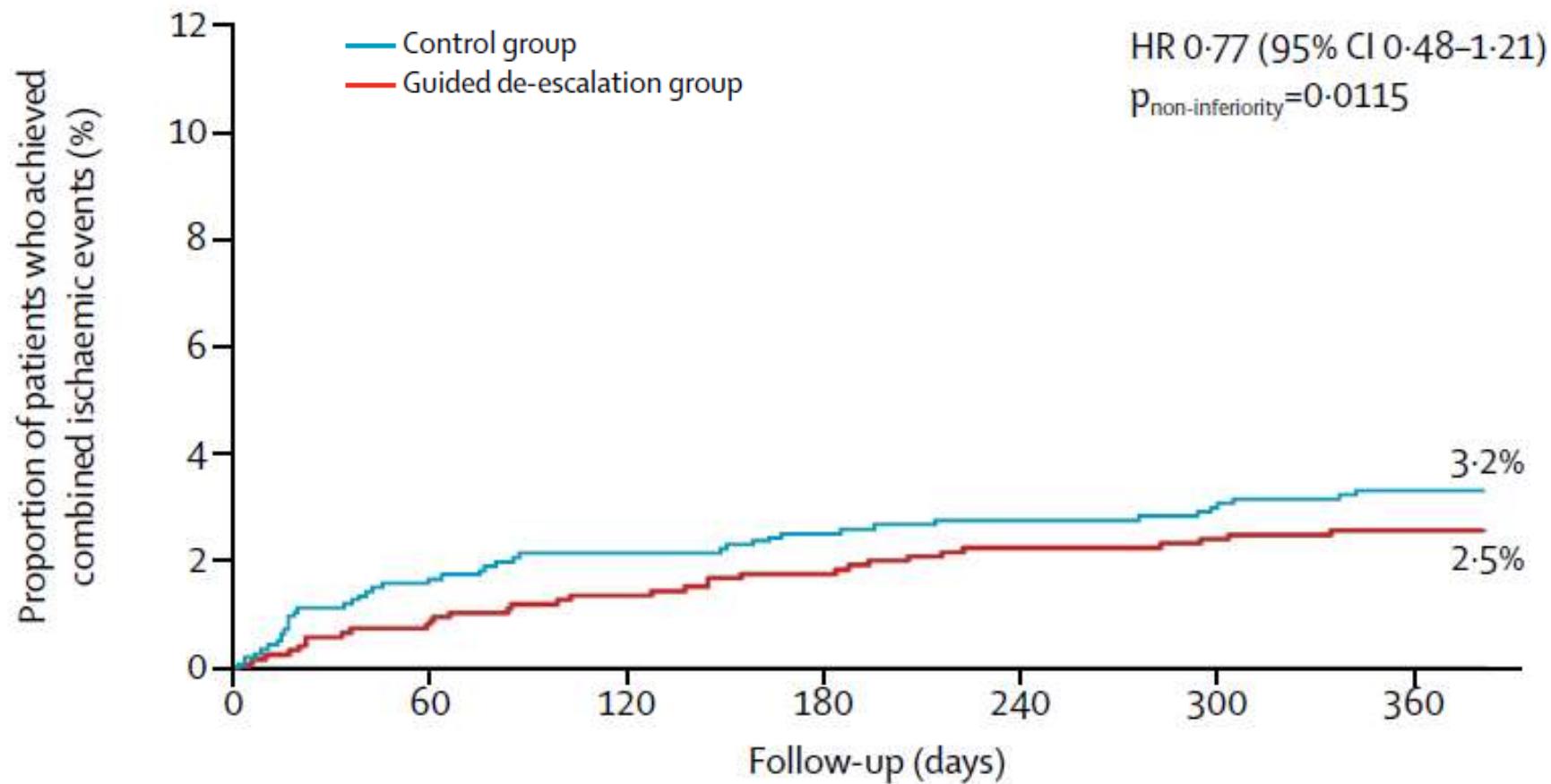
POPular Genetics

N Engl J Med 2019;381:1621

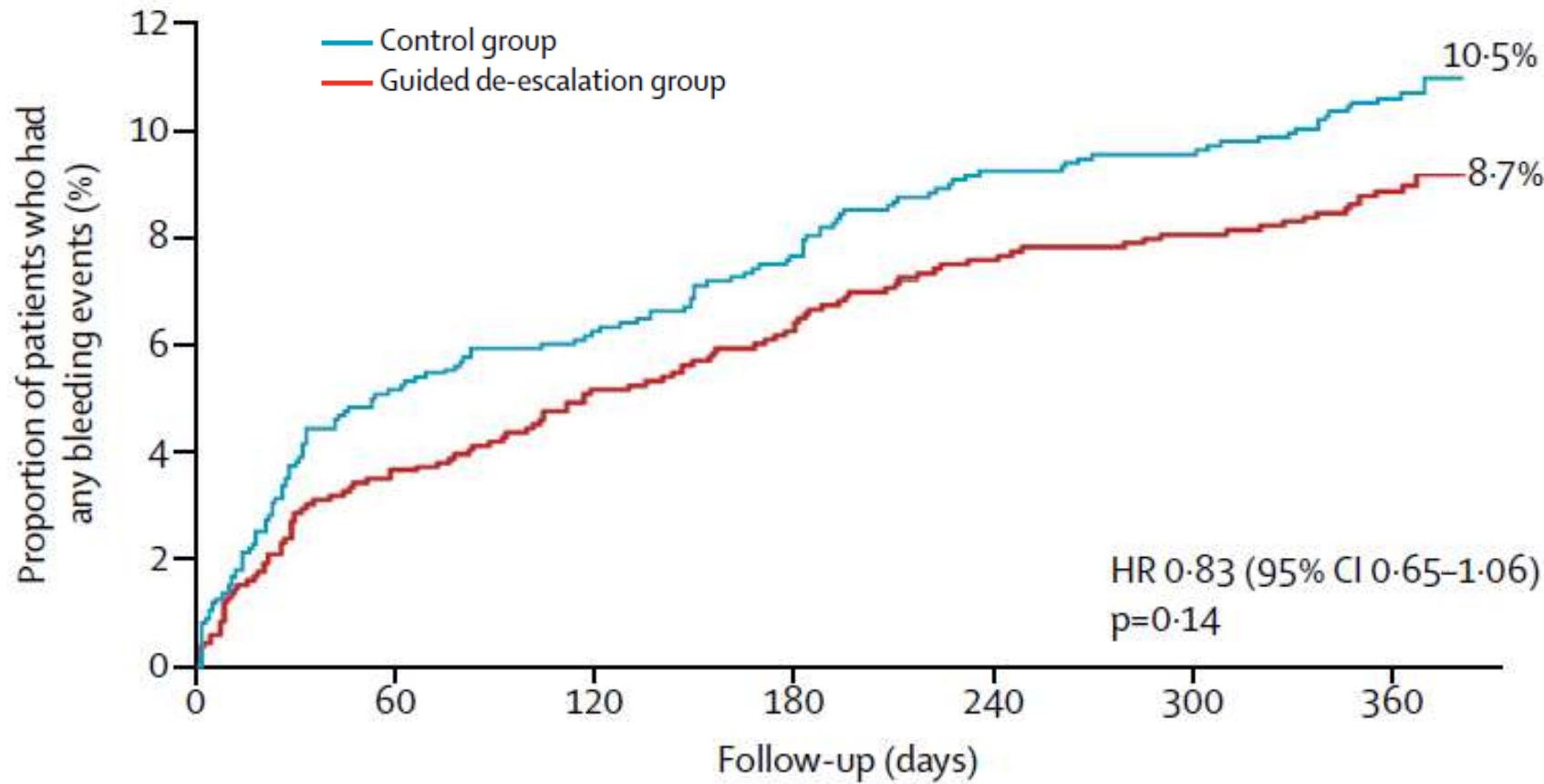
HOST-REDUCE-
POLYTECH-ACS

Lancet 2020;396:1079

TROPICAL-ACS: De-Escalation from Prasugrel to Clopidogrel Guided by Platelet Function Testing



TROPICAL-ACS: De-Escalation from Prasugrel to Clopidogrel Guided by Platelet Function Testing



Recommendation for Dual Antiplatelet Therapy in Patients After PCI

COR	LOE	Recommendation
2a	A	1. In selected patients undergoing PCI, shorter-duration DAPT (1–3 months) is reasonable, with subsequent transition to P2Y12 inhibitor monotherapy to reduce the risk of bleeding events.

Duration of DAPT: ACS

	Recommendations
I B	BMS/DES or Medical Therapy: DAPT for at least 12 months
IIb A	High ischemic risk, low bleeding risk: DAPT > 12 months
IIb C	Low ischemic risk, high bleeding risk: DAPT for at least 6 months
IIa B	Ticagrelor in preference to clopidogrel Prasugrel in preference to clopidogrel (PCI)
III B: Harm	Prasugrel should not be administered to patients with a prior history of stroke or TIA



Controversies in DAPT



Secondary Prevention

CHARISMA

NEJM 2006;354:1706

TRA 2P-TIMI 50

NEJM 2012;366:1404

ATLAS ACS-TIMI 46

Lancet 2009;374:29

ATLAS ACS 2-TIMI 51

NEJM 2012;366:9 mort!

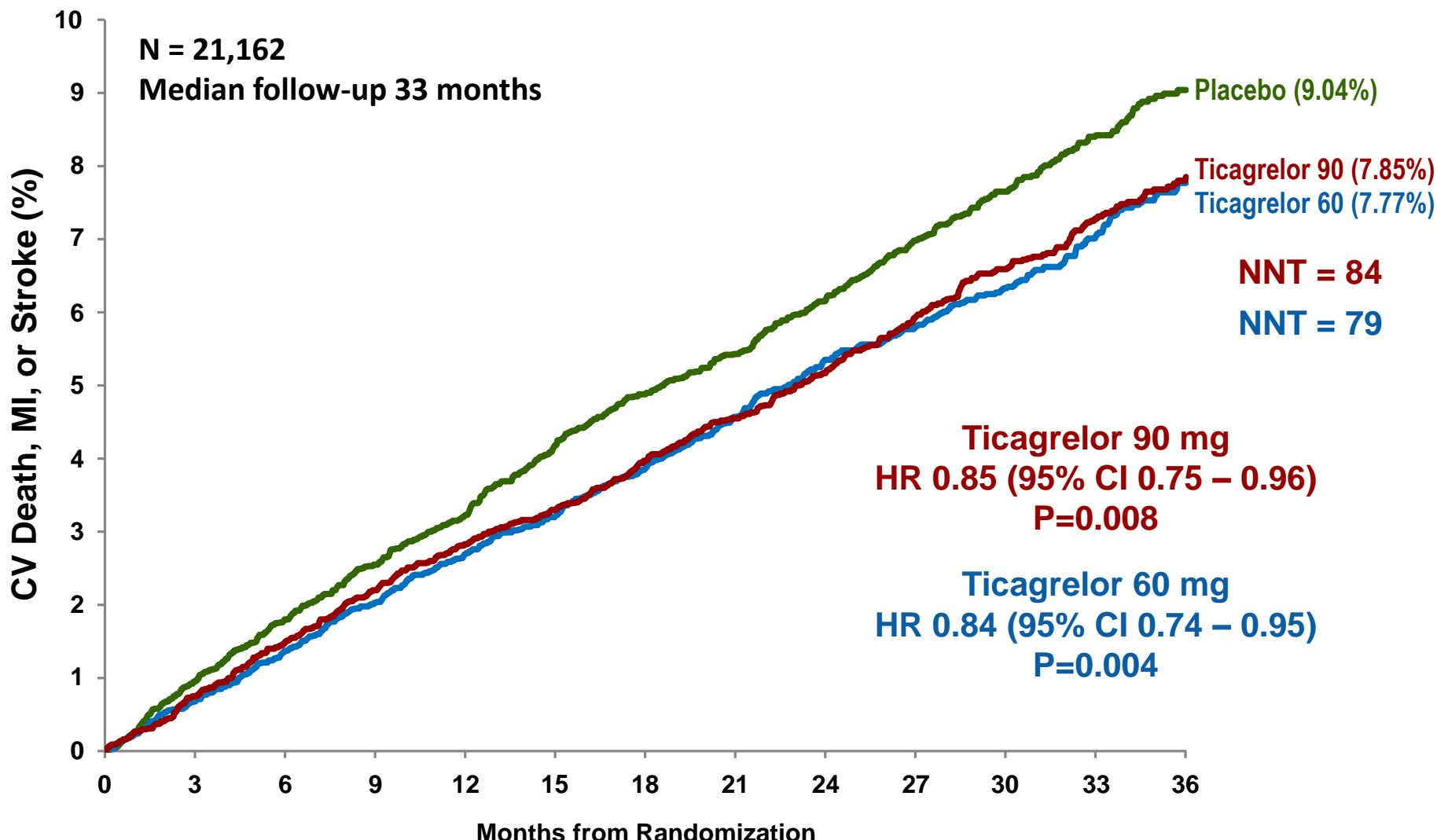
PEGASUS-TIMI 54

NEJM 2015;372:1791

THEMIS

NEJM 2019;381:1309

Primary Endpoint



Annual Events per 1000 Pts

	Ticagrelor 90	Ticagrelor 60
Ischemic Events (CV Death, MI, CVA)	-4.0	-4.2
TIMI Major Bleeding Events	+4.1	+3.1

DAPT -> P2Y12 or ASA Monotherapy

GLOBAL LEADERS

Lancet 2018;392:940

TWILIGHT

NEJM 2019;381:2032

STOP-DAPT-2

JAMA 2019;321:2414

SMART-CHOICE

JAMA 2019;321:2428

TICO

JAMA 2020;323:2407

RESET

JACC 2012;60:1340

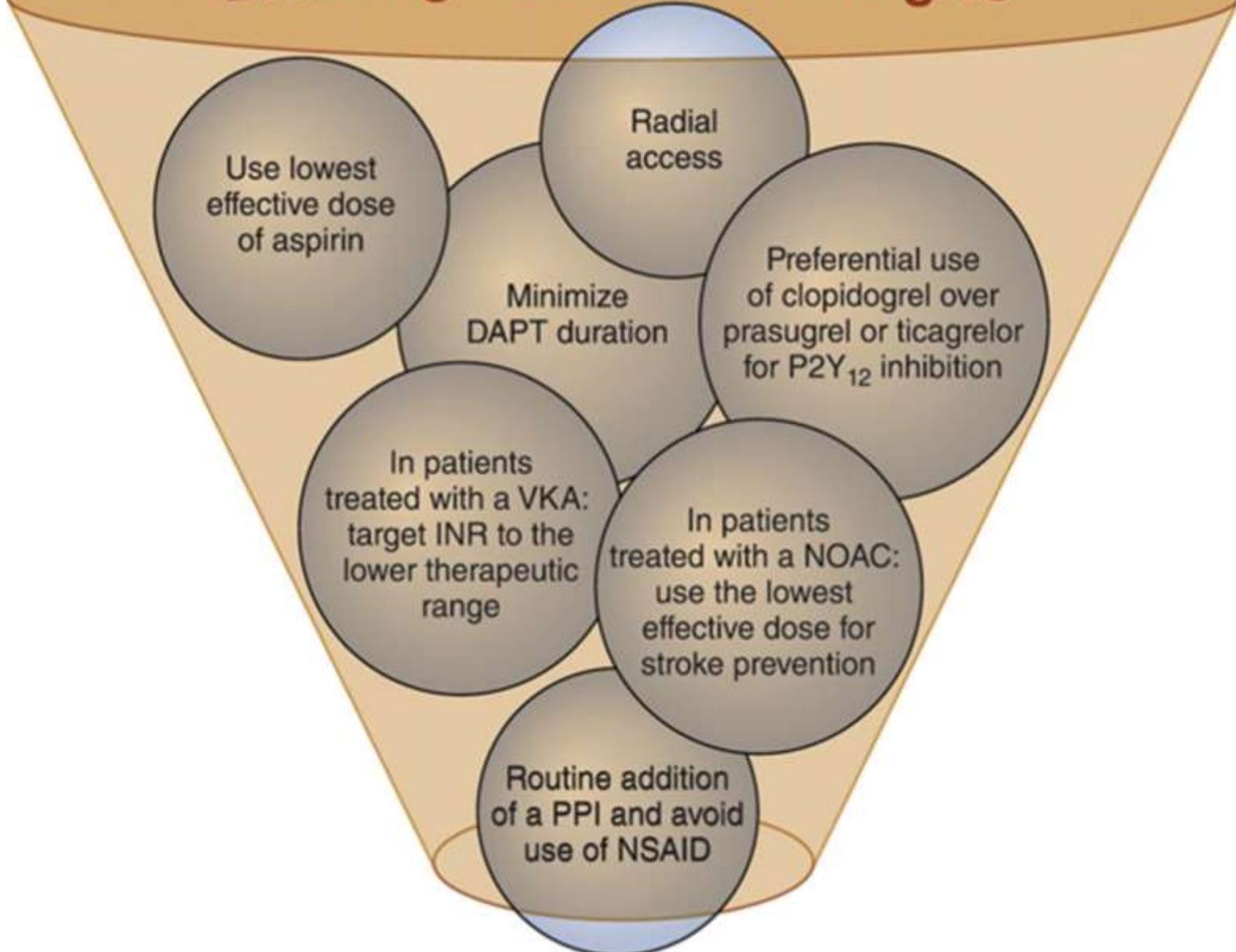
OPTIMIZE

JAMA 2013;310:2510.

REDUCE

EuroIntervention 2019;15:e990

Bleeding Reduction Strategies





Conclusions: DAPT

- Escalation not proven accept for ACS (1 month?)
- De-escalation if ischemia risk > bleeding risk
- Short DAPT if bleeding risk > ischemia risk
- Bridging rarely necessary in perioperative management