Le prasugrel en pratique dans le SCA ST-

Axel de Labriolle
Clinique du Pont de Chaume
Montauban

Biarritz, le 09 juin 2011

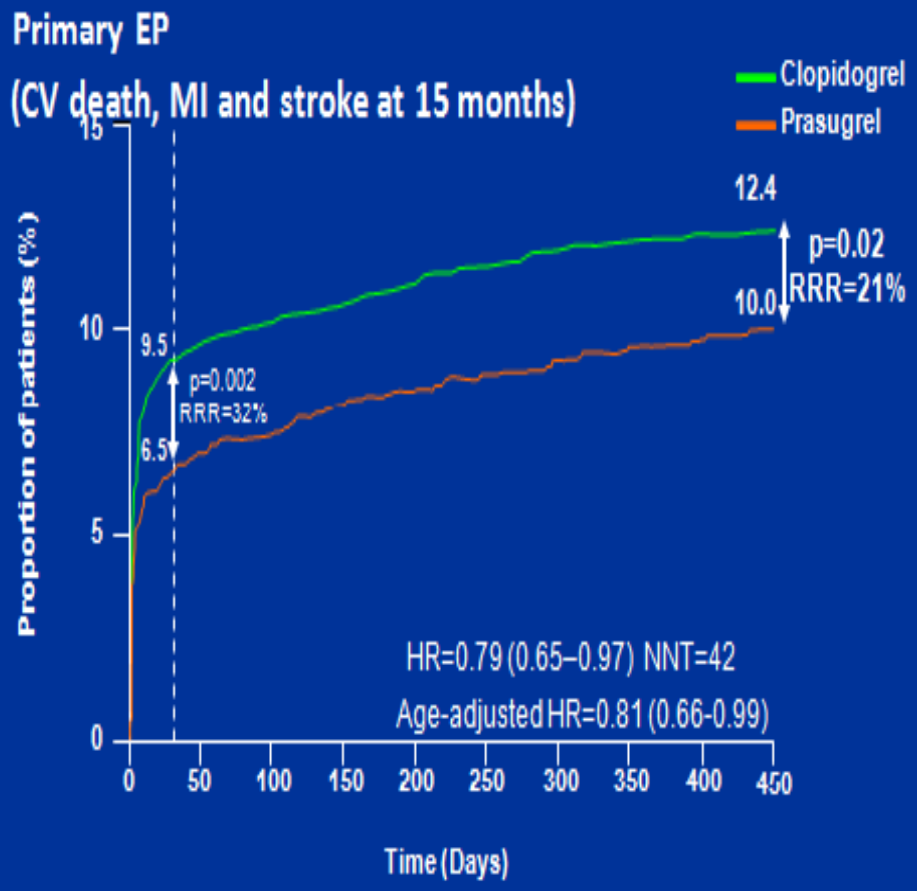
sondage

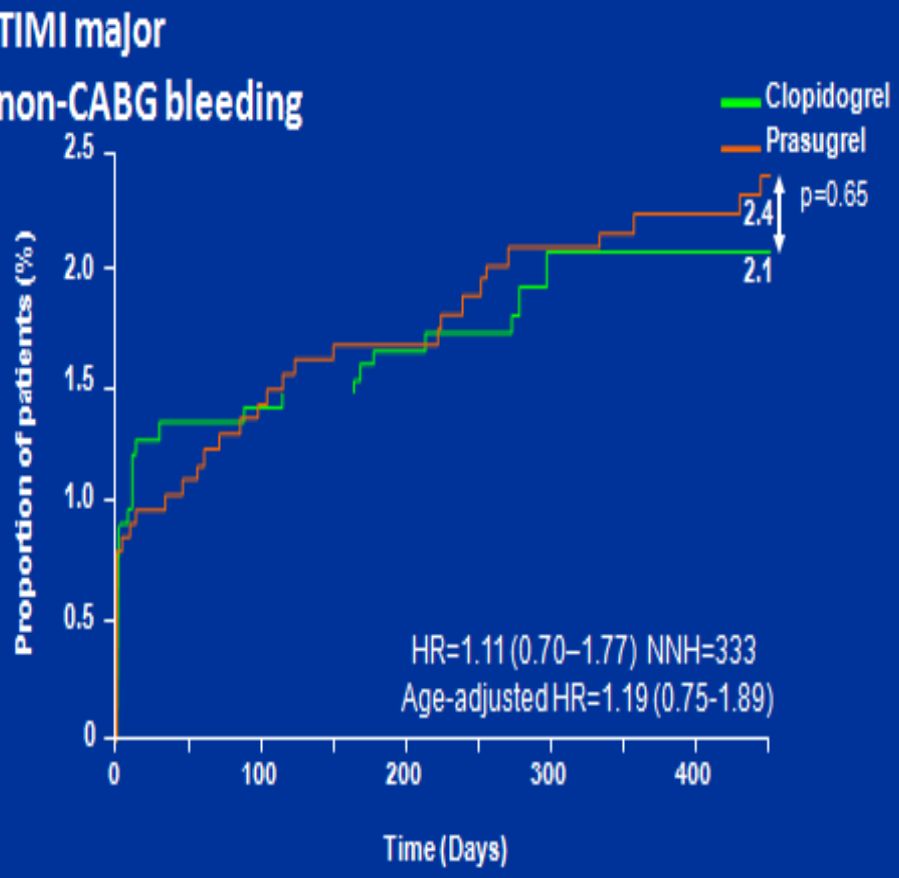
- Qui prescrit le prasugrel dans le SCA ST + ?

- Qui prescrit le prasugrel dans le SCA ST- ?

STEMI ANALYSIS

TRITON-TIMI 38



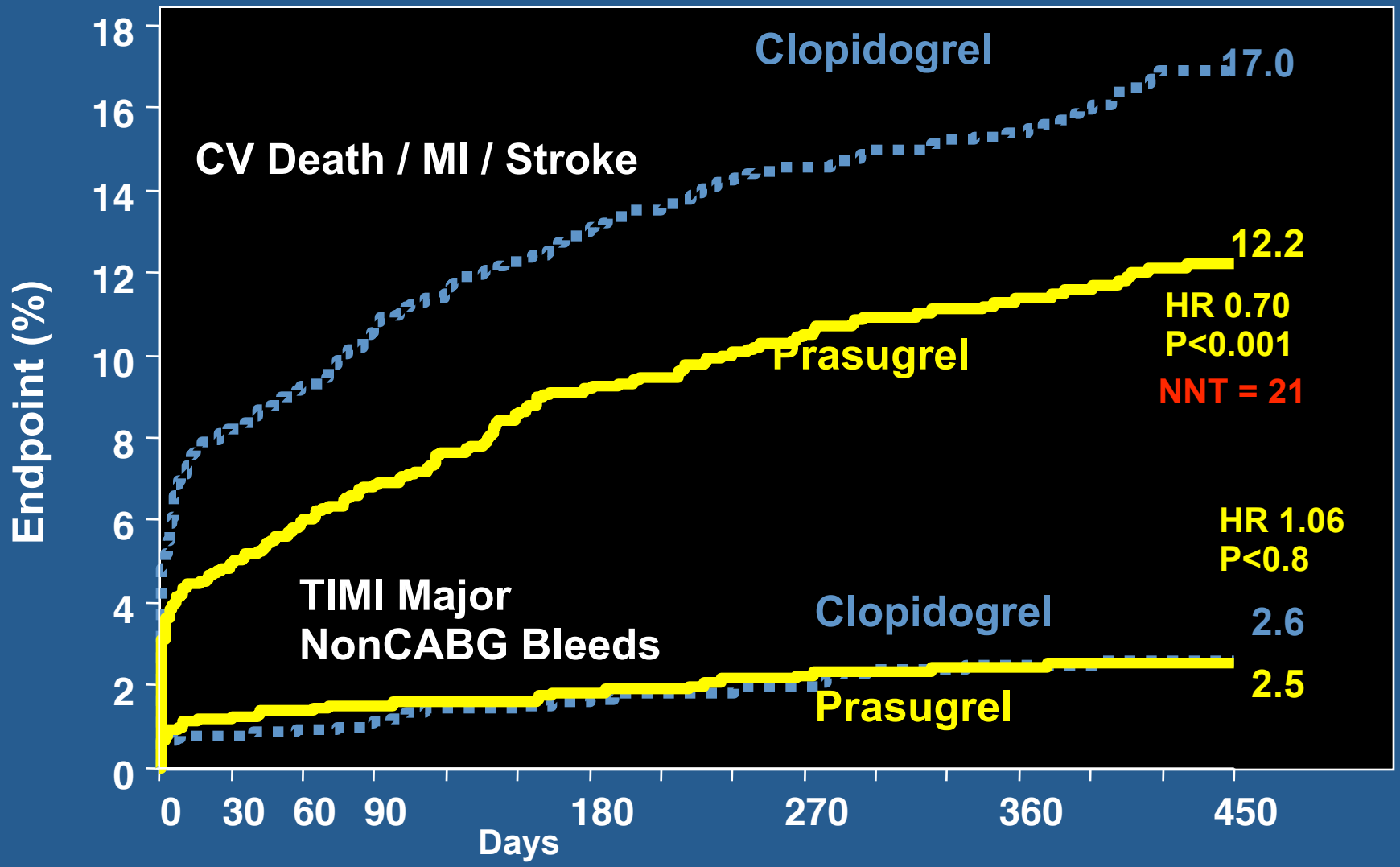


Montalescot et al. Lancet 2009;373:723-31

Diabetic subgroup analysis

TRITON TIMI 38

N=3146



Lancet 2009; 373: 723–31

SCA ST- ET PRASUGREL

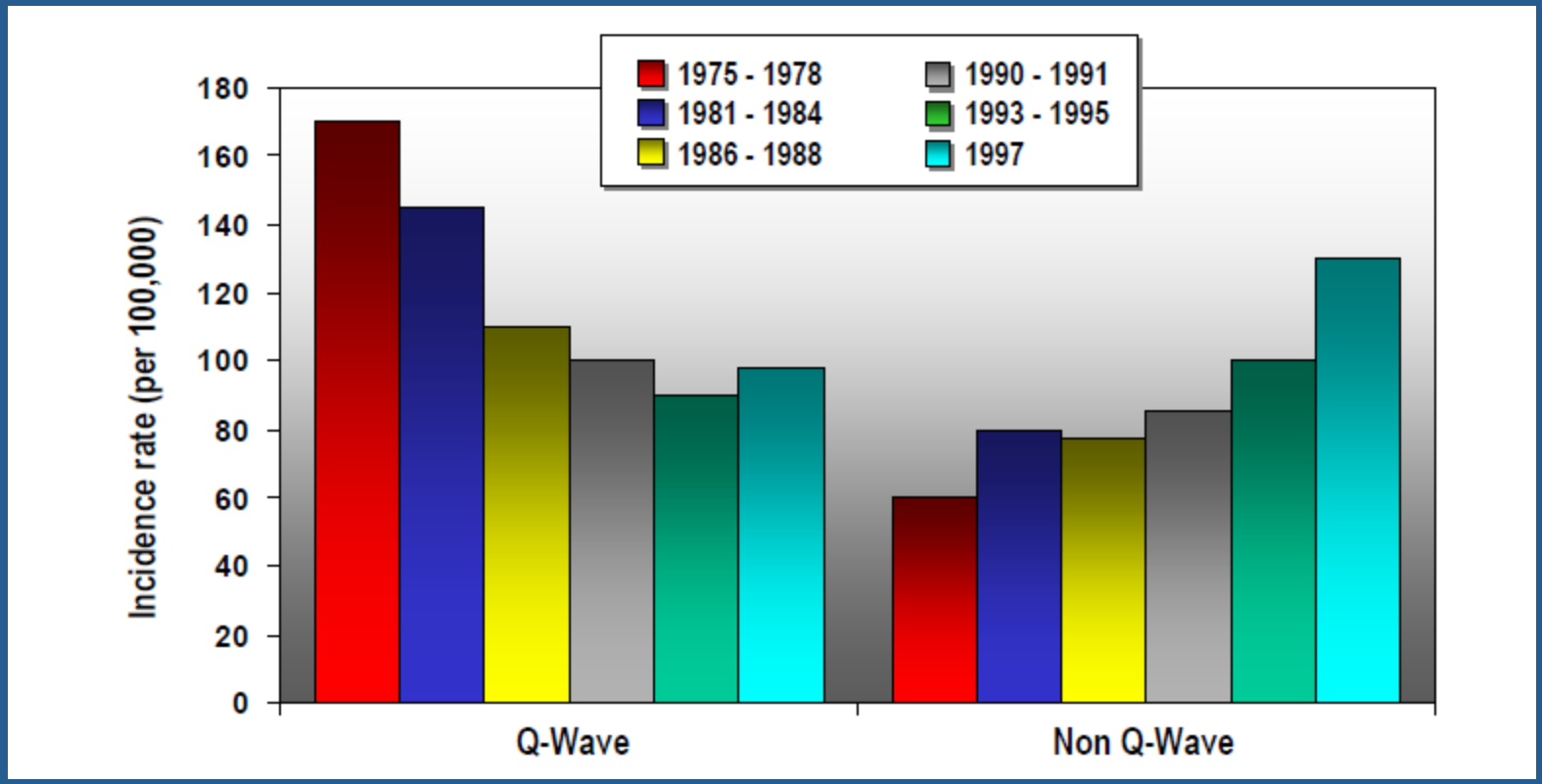
- Sous groupe SCA ST- non publié
- Il nous manque le risque hémorragique et le bénéfice net au sein de ce sous groupe (10 OOO pts)

  - Analyse en sous groupe
  - Données du monitoring plaquettaire
  - Reccomandations
  - Risque hémorragique
  - Etudes à venir : ACCOAST, TRILOGY ACS

Cas clinique

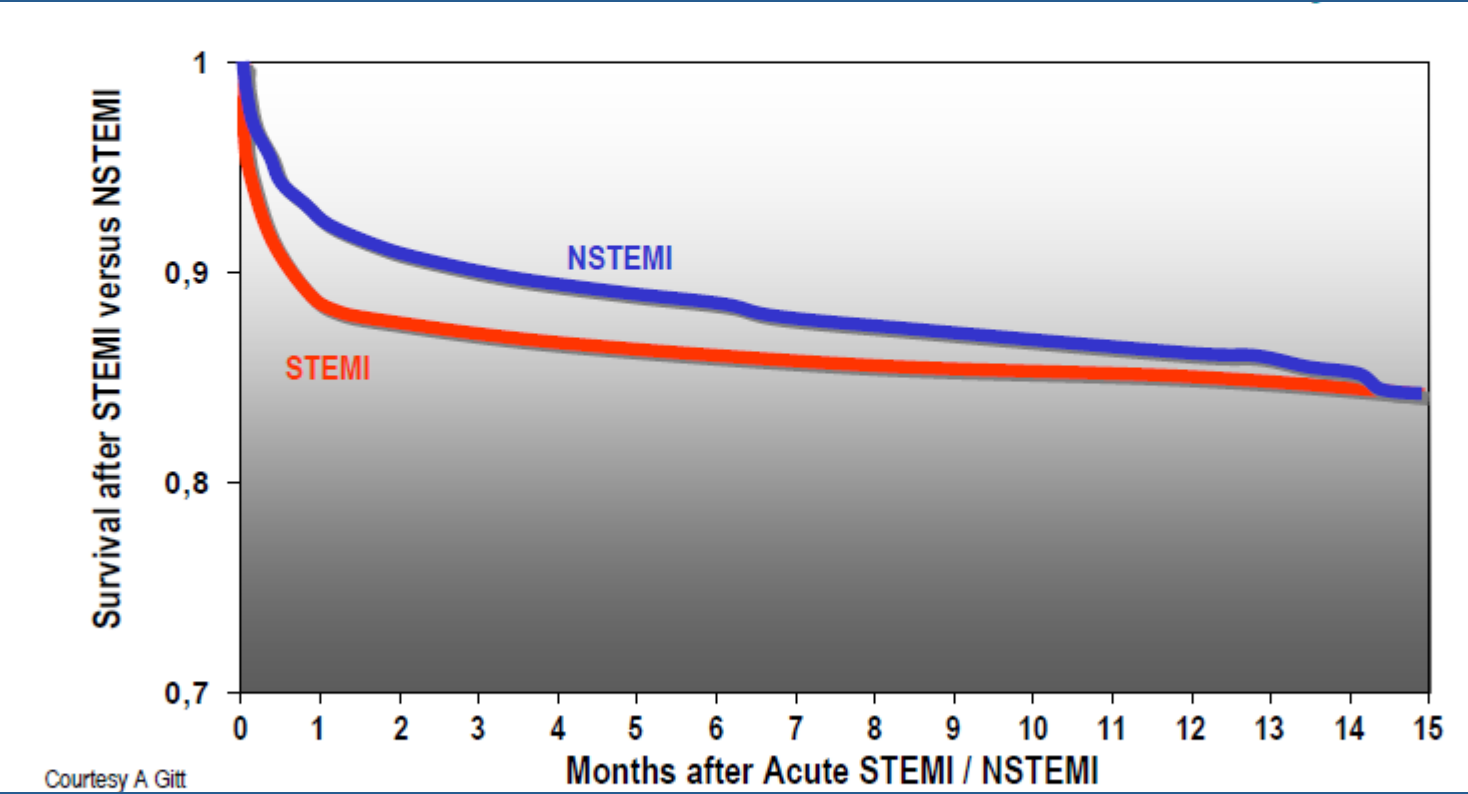
- Mr S, 82 ans, diabète non insulino dépendant sans ATCD médico-chirugicaux
- Est admis le 21 03 2011 pour douleurs thoraciques récidivantes depuis 48 h
- Examen clinique sans particularité
- Bilan biologique troponine à l'admission 2.32

Tendance et pronostic du SCA non ST +



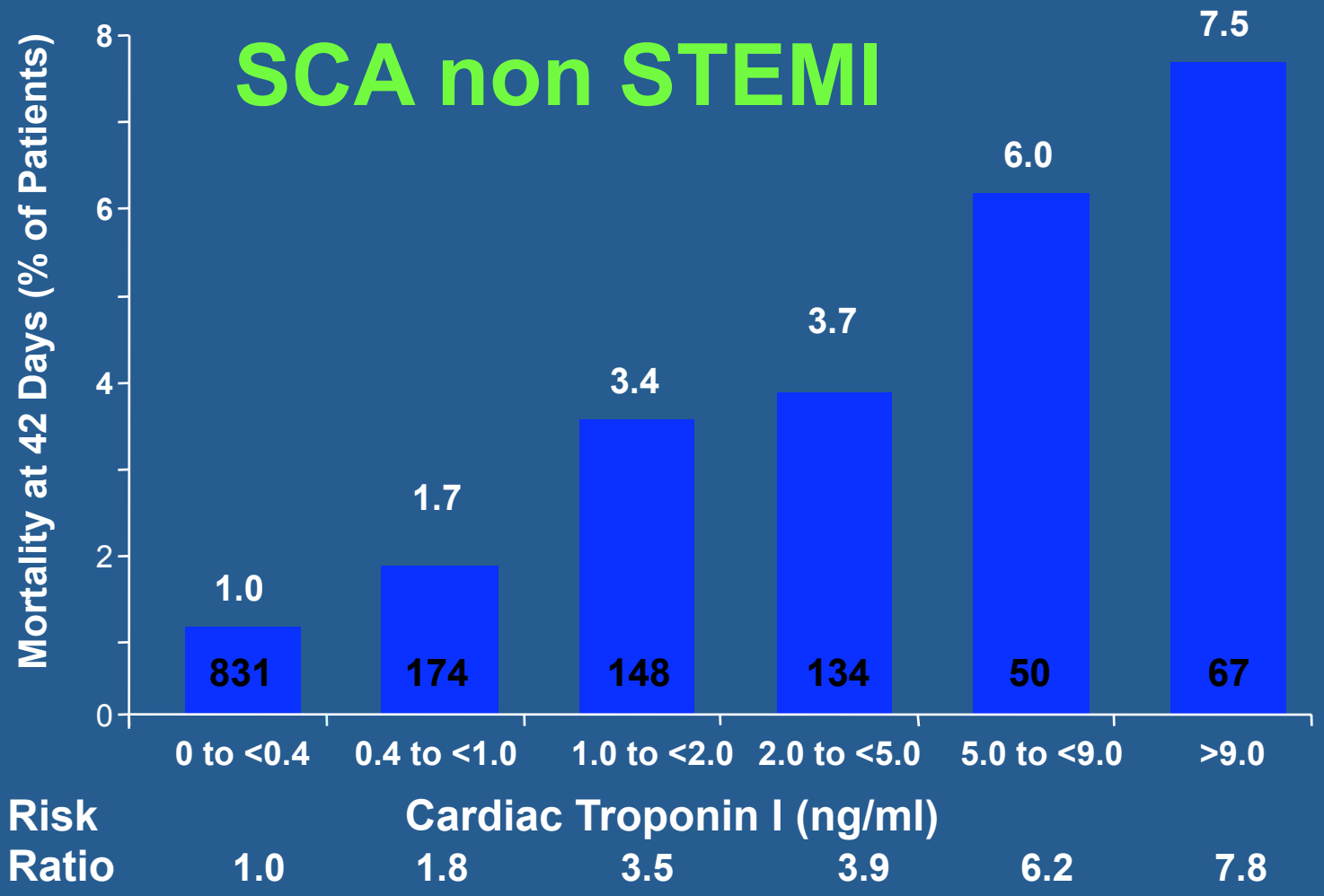
Furman MI et al, JACC 2001; 37:1571-80

STEMI vs non STEMI
Mortalité cumulée à 1 an



Guidelines in non STEMI ACS, Eur Heart Journal 2007

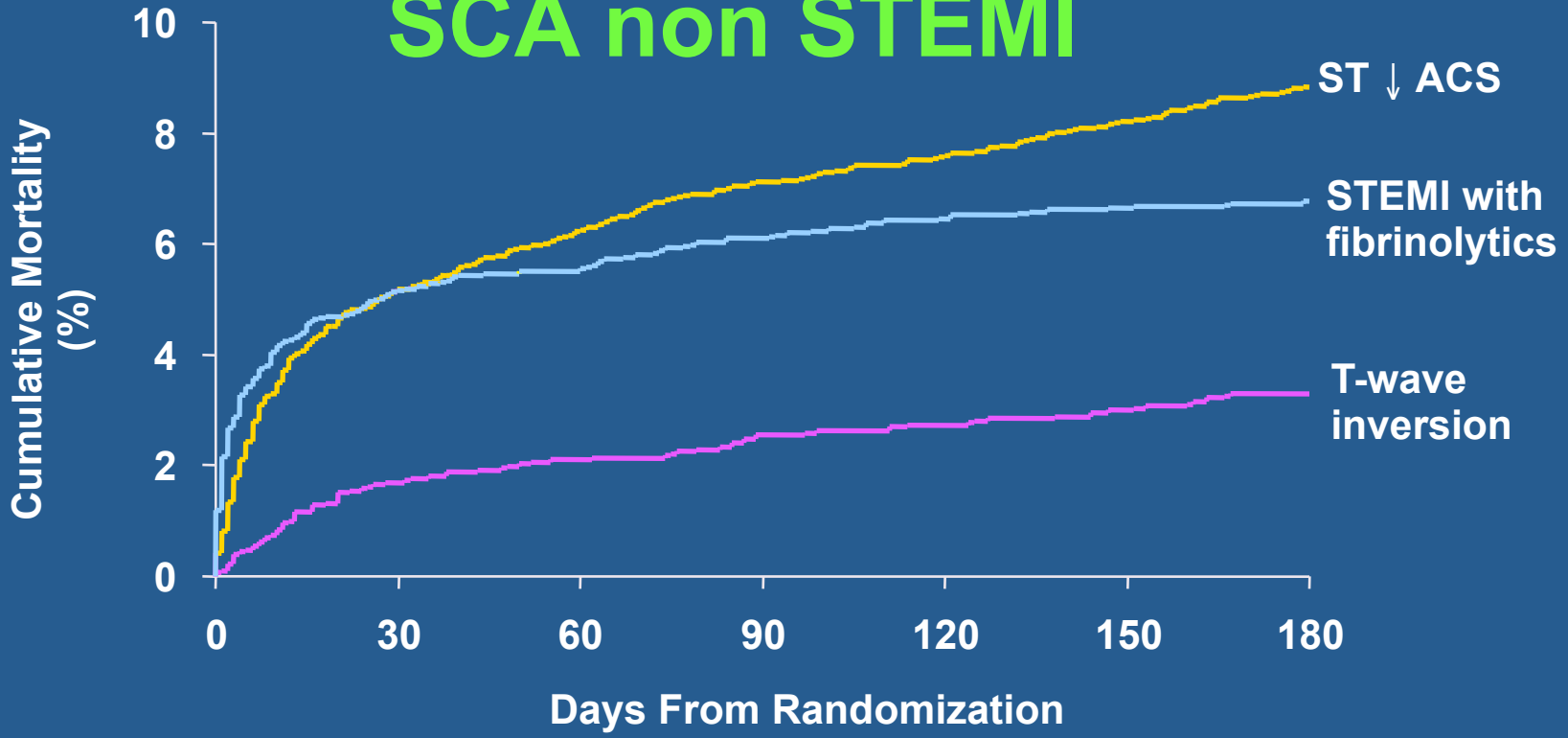
Troponin I et mortalité à 1



TIMI 3B, Antman EA, et al. N Engl J Med. 1996;335:1342-1349.

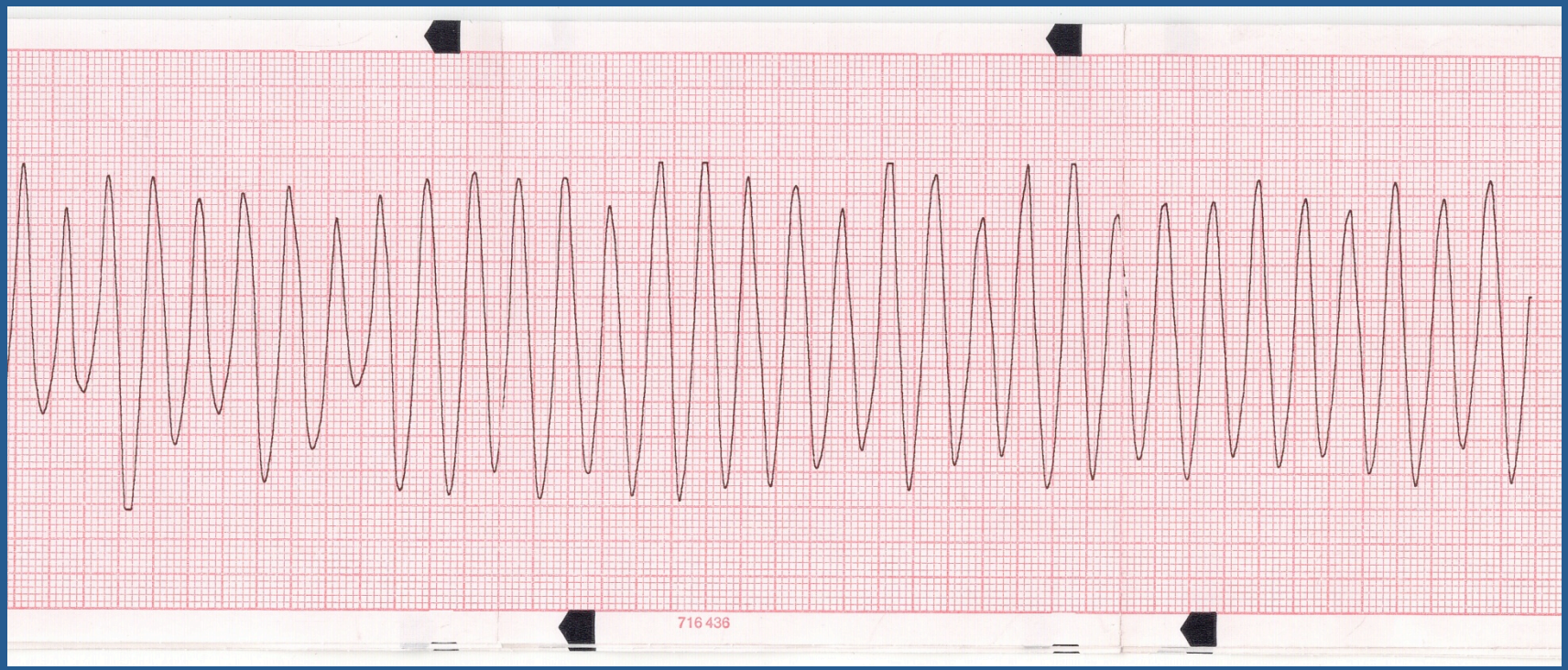
Anomalies ECG basales et mortalité à 6 mois

SCA non STEMI



GUSTO IIB, Global Use of Strategies To Open Occluded Arteries in Acute Coronary Syndromes; ECG, electrocardiogram; ACS, acute coronary syndrome; STEMI, ST-segment elevation myocardial infarction.
Savonitto S, et al. JAMA. 1999;281:707-713. (with permission)

Alors que le patient est encore branché au scope, il perd



Flutter Ventriculaire puis FV

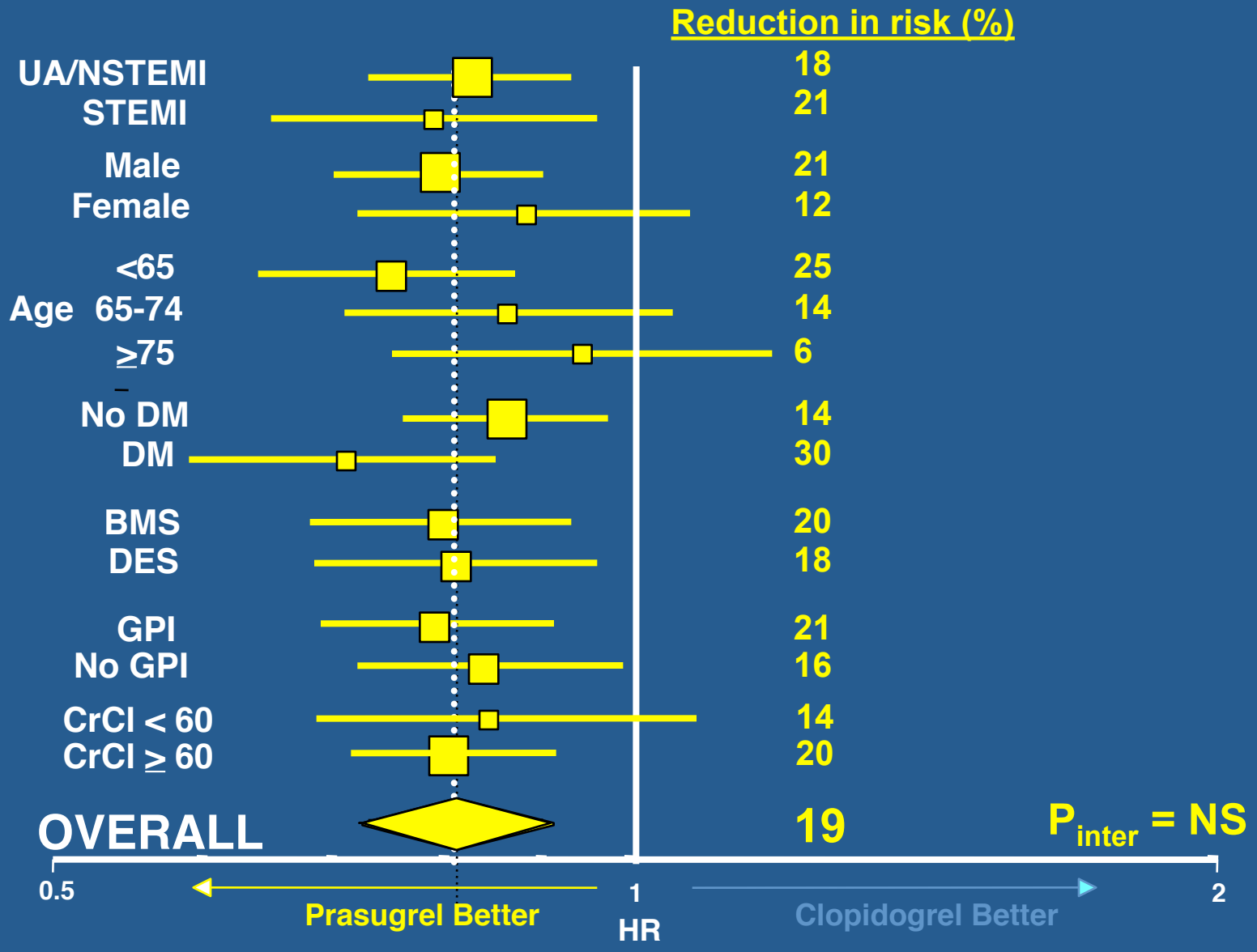
Restauration du rythme sinusal par 1

- Le patient est ensuite traité médicalement

- Prasugrel 60 mg per os
- Aspegic 250 mg IV
- HNF 5000 UI IV

- Transfert en salle de coronarographie

CV Death, MI, Stroke
Major Subgroups

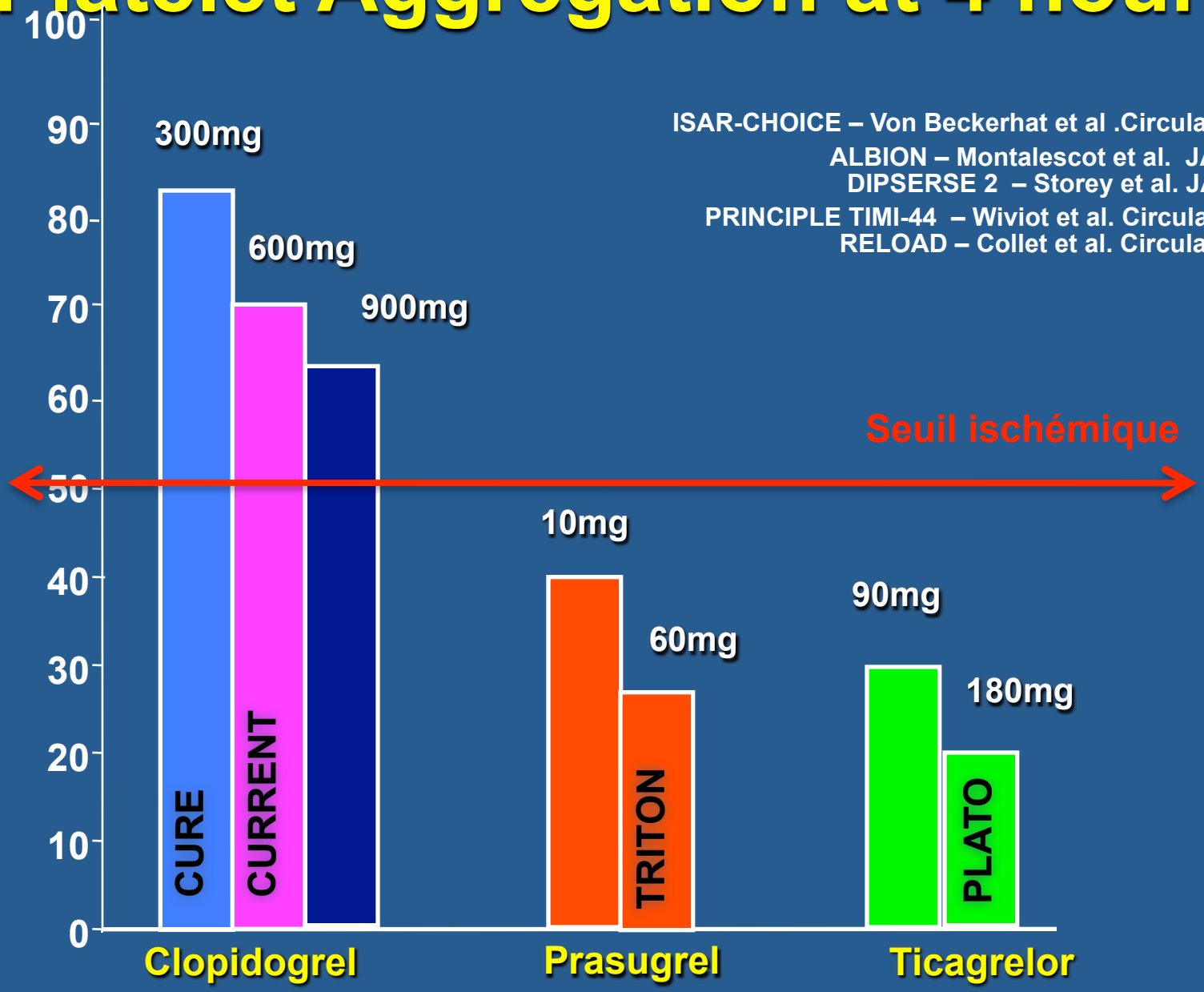


Notion de seuil ischémique

Study	Assay	Cut-Off Value	Endpoint	AUC	Odds Ratio
Gurbel et al (44)	LTA	>46% 5um ADP >59% 20uM ADP	2 y post-PCI MACE	0.77 0.78	3.9 3.8
Price et al (43)	VerifyNow P2Y12 Assay	>235 PRU	6 months Post-PCI CVD + MI	0.71	NA
Bonello et al (47)	VASP-PRI	>50% PRI	6 months Post-PCI MACE	0.55	NA
Frere et al (39)	LTA VASP-PRI	>70% 10 uM ADP >53% PRI	1 month Post-PCI MACE + stroke	0.74 0.73	?
Blindt et al (37)	VASP-PRI	>48% PRI	6 months Stent thrombosis	0.79	1.16
Cuisset et al (56)	LTA	>67% 10 uM ADP	1 months Stent thrombosis	0.69	5.8
Sibbing et al (55)	Multiplate analyzer-ADP	>468 AU-min 6.4 uM ADP	30 day stent thrombosis	0.78	?
Breet et al (57)	LTA VerifyNow P2Y12 assay Plateletworks	>42.9% 5uM ADP >64.5% 20uM ADP >236 PRU >80.5% 20uM ADP	1 year death, MI, stent thrombosis, and stroke	0.63 0.62 0.62 0.61	2.09 2.05 2.53 2.22

Bonello L et al. JACC 2010.

Platelet Aggregation at 4 hours



ISAR-CHOICE – Von Beckerhat et al .Circulation 2005

ALBION – Montalescot et al. JACC 2007

DIPSERSE 2 – Storey et al. JACC 2007

PRINCIPLE TIMI-44 – Wiviot et al. Circulation 2007

RELOAD – Collet et al. Circulation 2008

Reco ACC/AHA 2011 – SCA ST–

More shades of gray: AHA/ACC 2011 NSTEMI guidelines

NSTE-ACS

Recommendation		LOE
DAP when medium/h… strategy planned, at presentation		A
- Clopidogrel before PCI	I	B
- Clopidogrel at the time of PCI	I	A
- Prasugrel at the time of PCI	I	B
GP IIb/IIIa at the time of PCI	I	A

Prasugrel† 60 mg may be considered for administration promptly upon presentation in patients with UA/NSTEMI for whom PCI is planned, before definition of coronary anatomy if both the risk for bleeding is low and the need for CABG is considered unlikely (22,35,36). *(Level of Evidence: C)*

Wright RS, et al. Circulation 2011;123:DOI: 10.1161/CIR.0b013e31820f2f3e

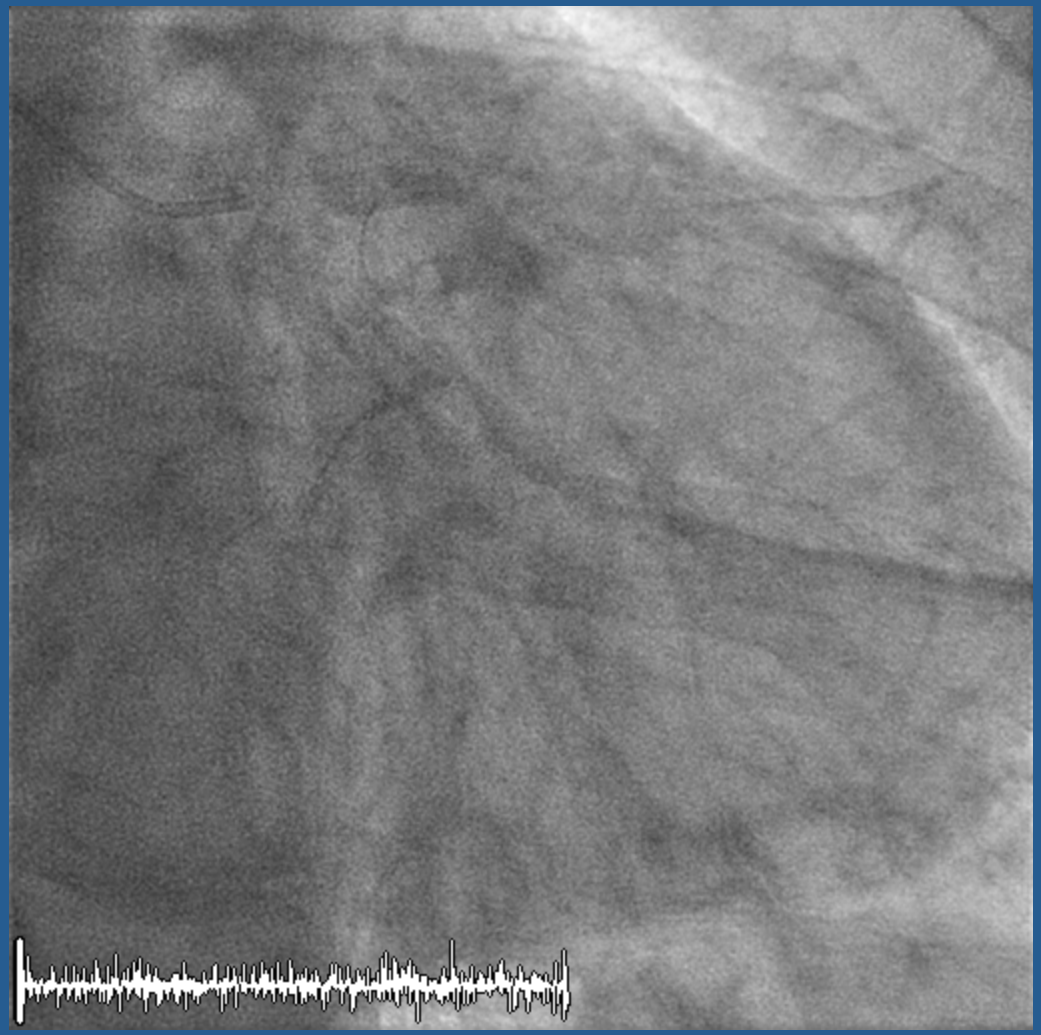
European Heart Journal
doi:10.1093/eurheartj/ehq277
ESC/EACTS GUIDELINES
Guidelines on myocardial revascularization

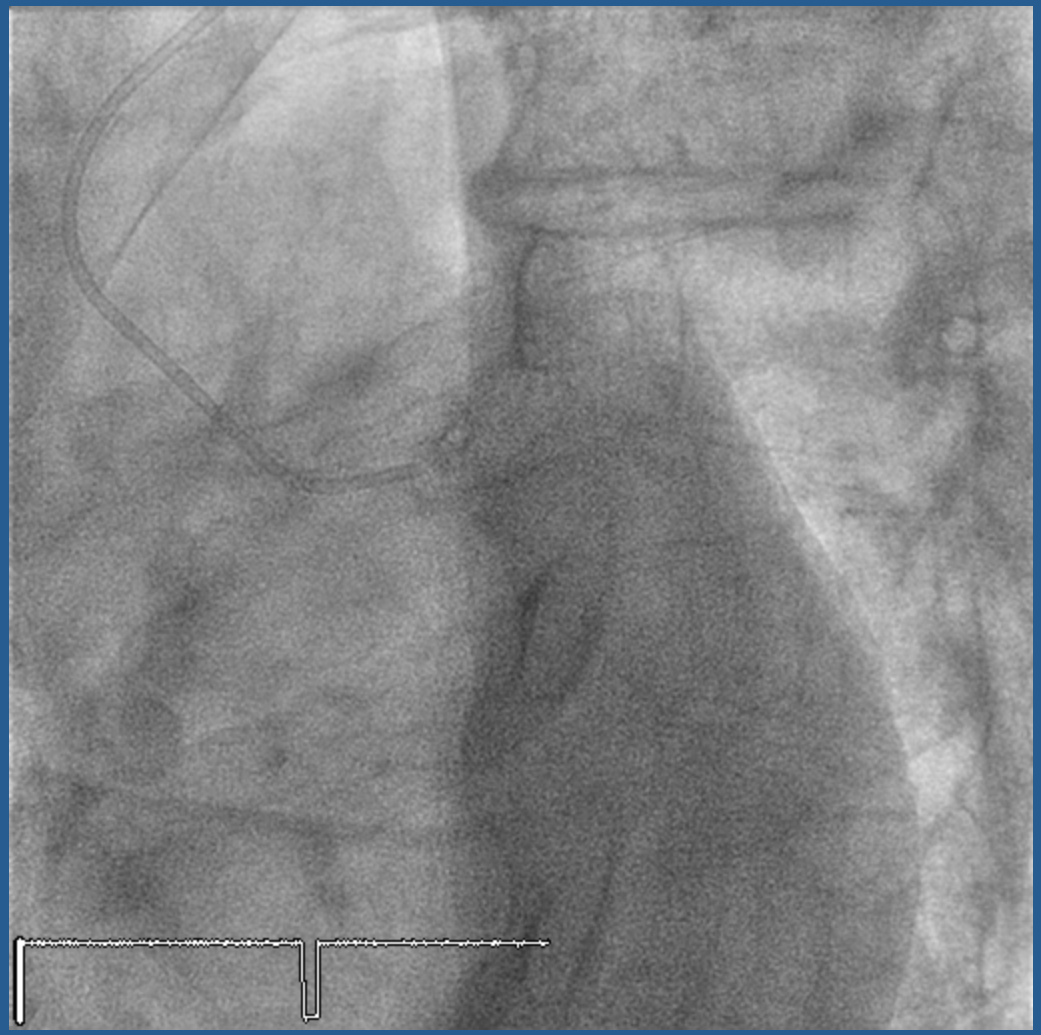
Reco ESC 2010 – SCA ST–

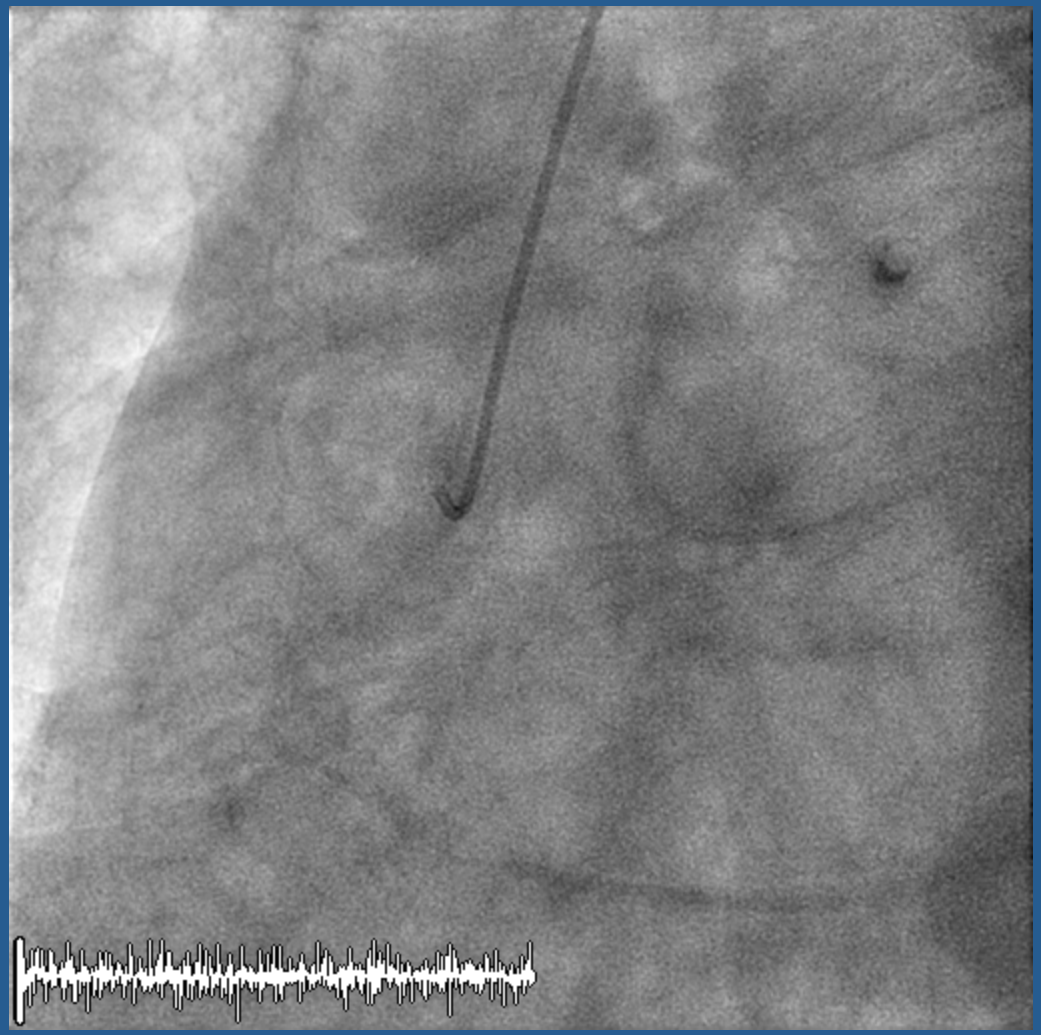
NSTE-ACS		Class	Level
Antiplatelet therapy			
	ASA	I	C
	Clopidogrel (with 600 mg loading dose as soon as possible)	I	C
	Clopidogrel (for 9–12 months after PCI)	I	B
	Prasugrel[d]	IIa	B
	Ticagrelor[d]	I	B
	+ GPIIb–IIIa antagonists (in patients with evidence of high intracoronary thrombus burden)		
	Abciximab (with DAPT)	I	B
	Tirofiban, Eptifibatide	IIa	B
	Upstream GPIIb–IIIa antagonists	III	B

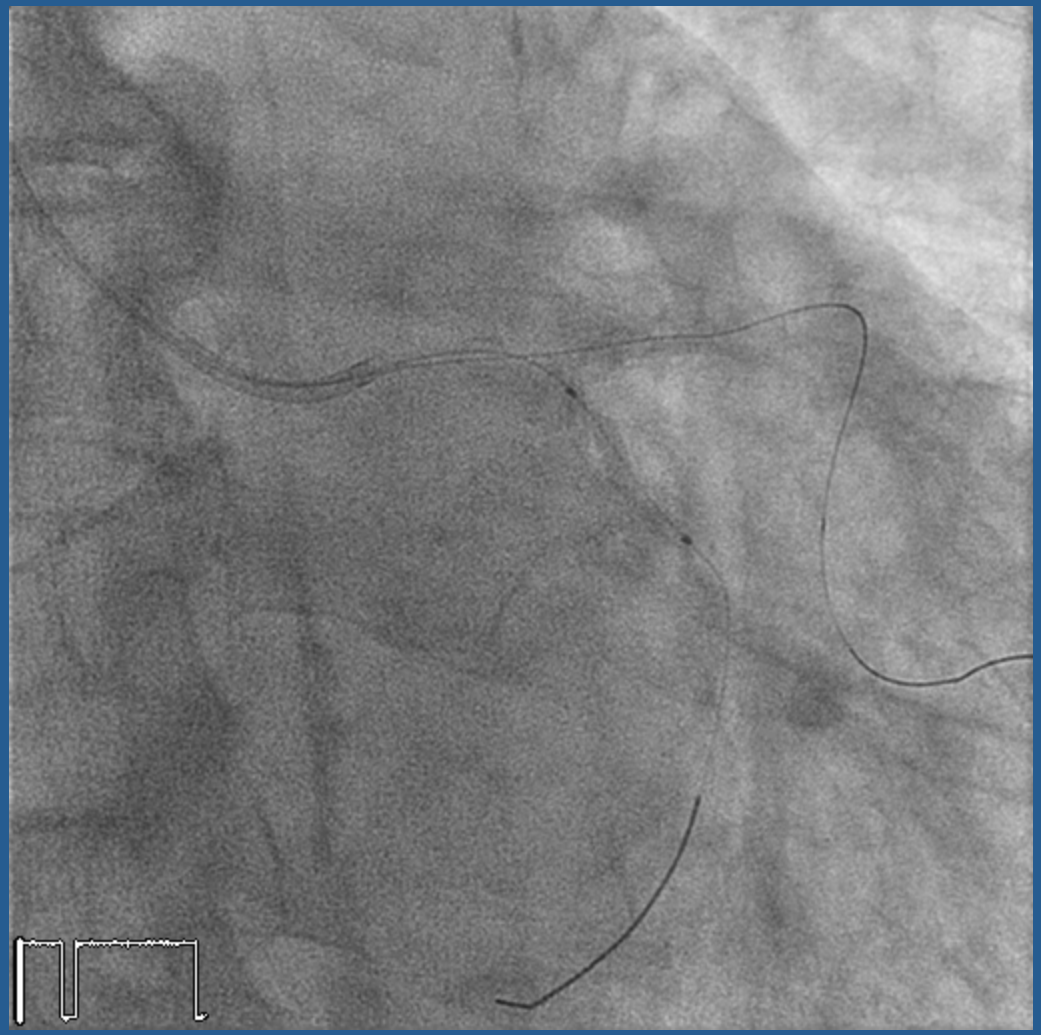
[redacted] Excluding patients with a higher bleeding risk, prasugrel offers significant benefit over clopidogrel with respect to cardiovascular events without increasing severe bleeding. [redacted]

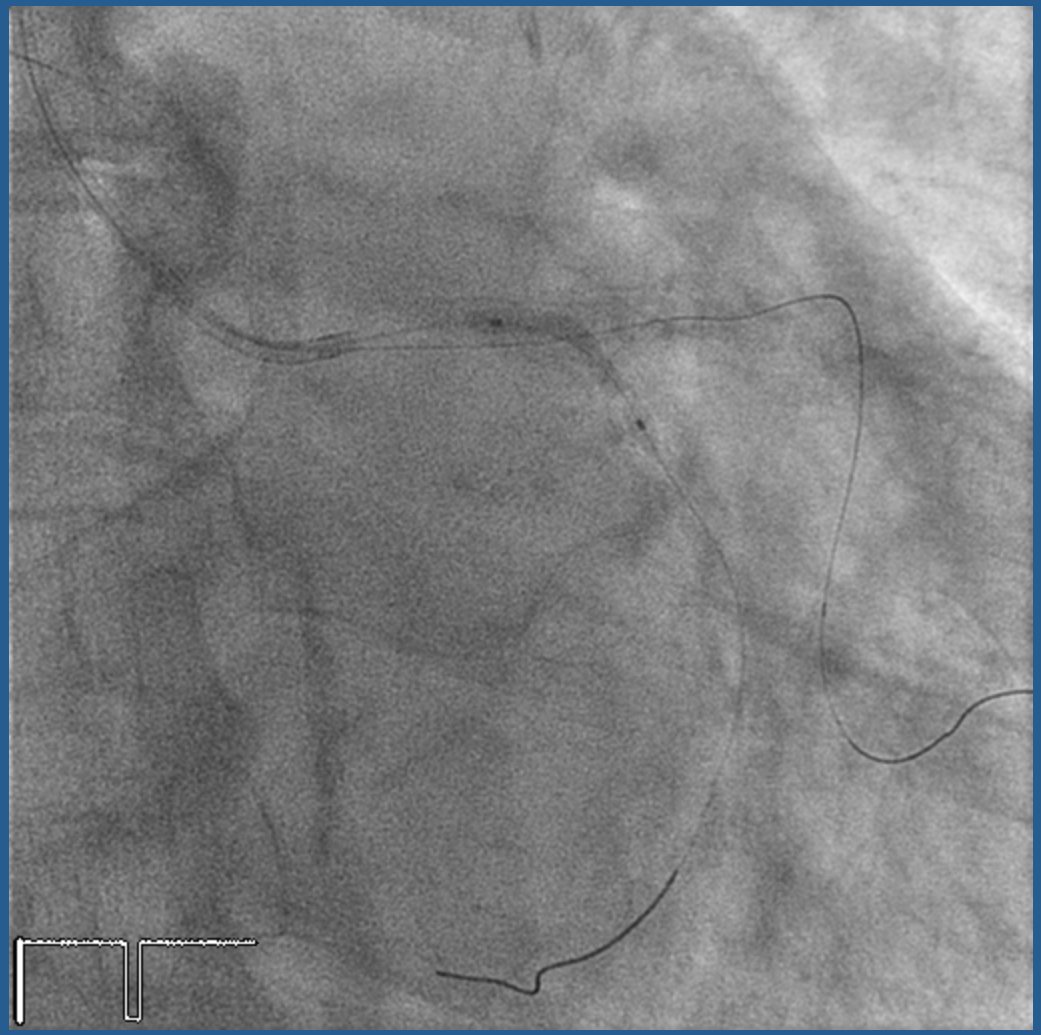
[redacted] In diabetic patients presenting with ACS, prasugrel confers a significant advantage over clopidogrel without increased bleeding.[247] Prasugrel should be used in patients who present with stent thrombosis whilst taking clopidogrel.

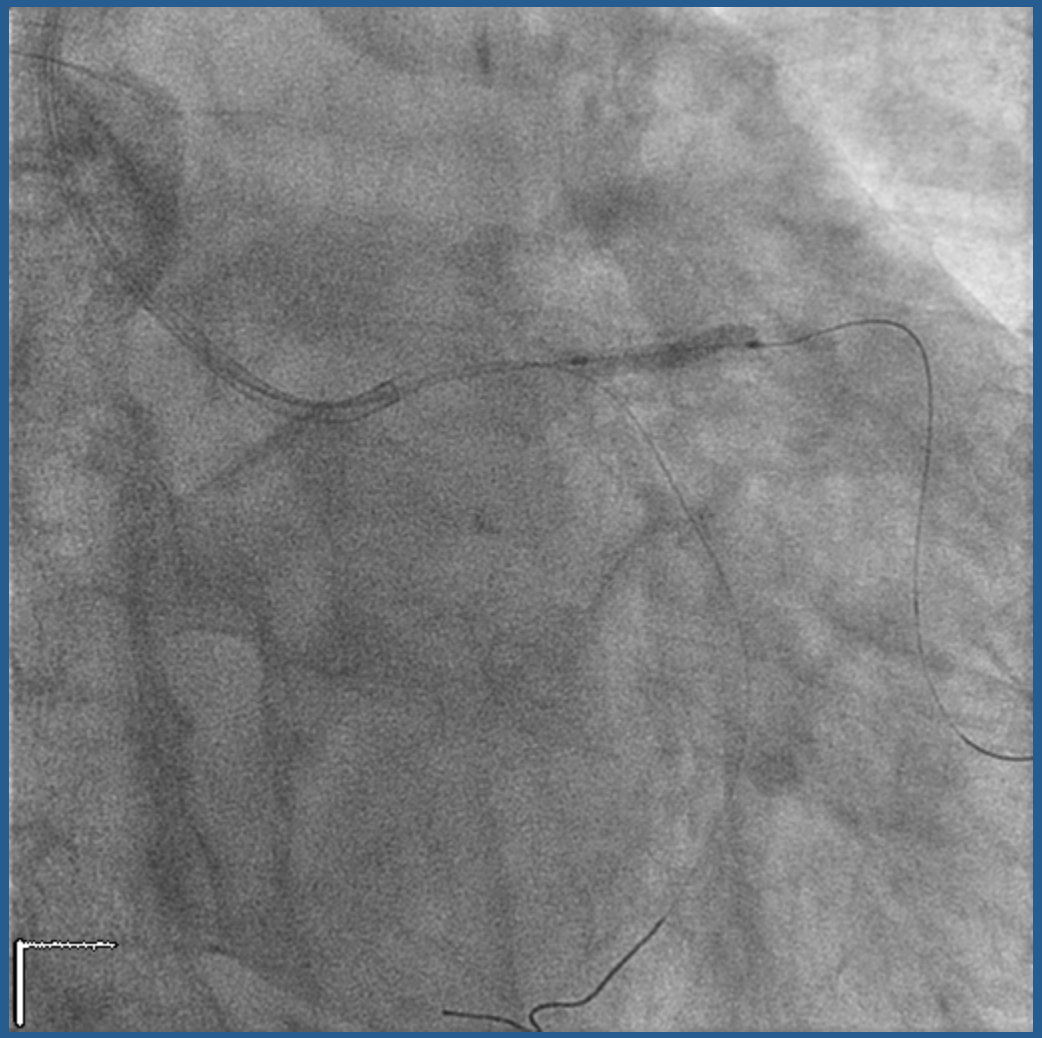


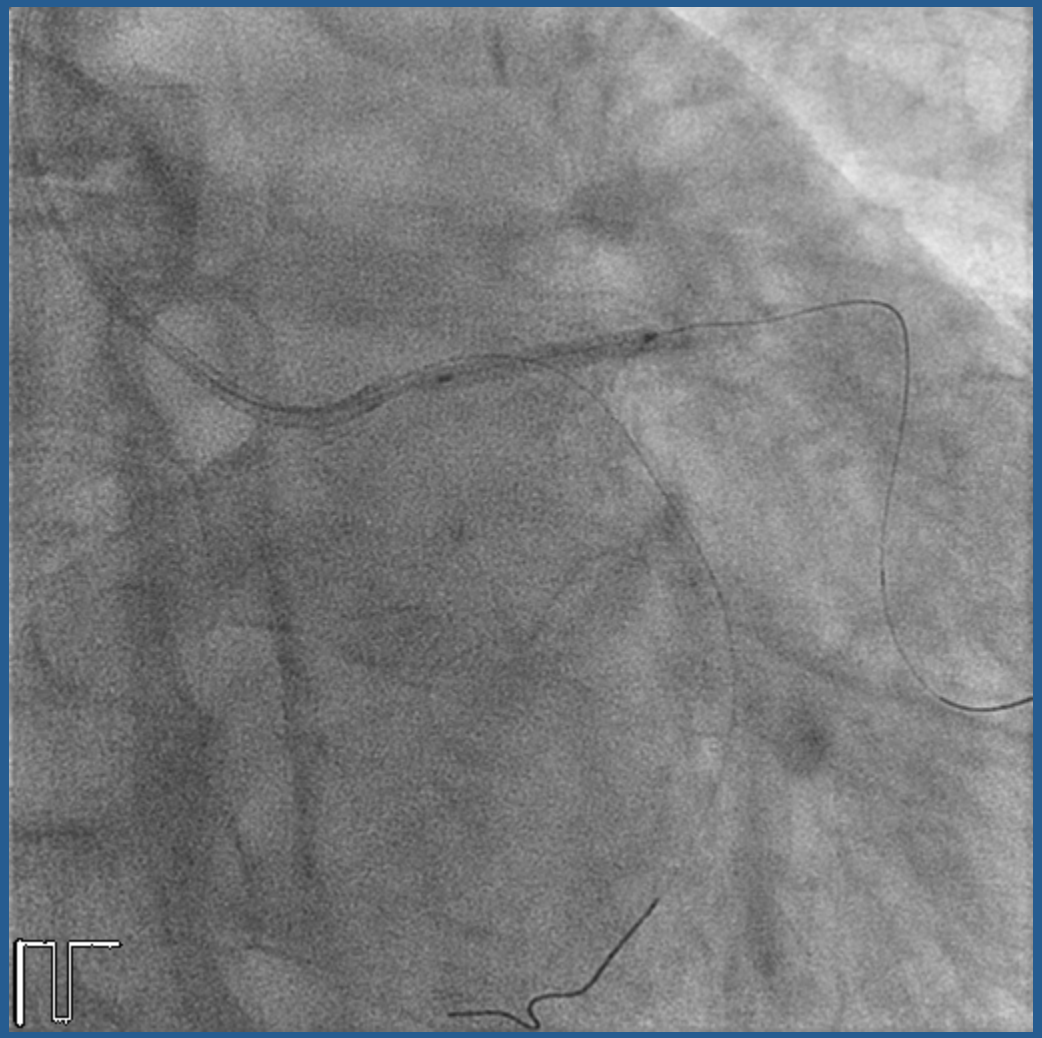


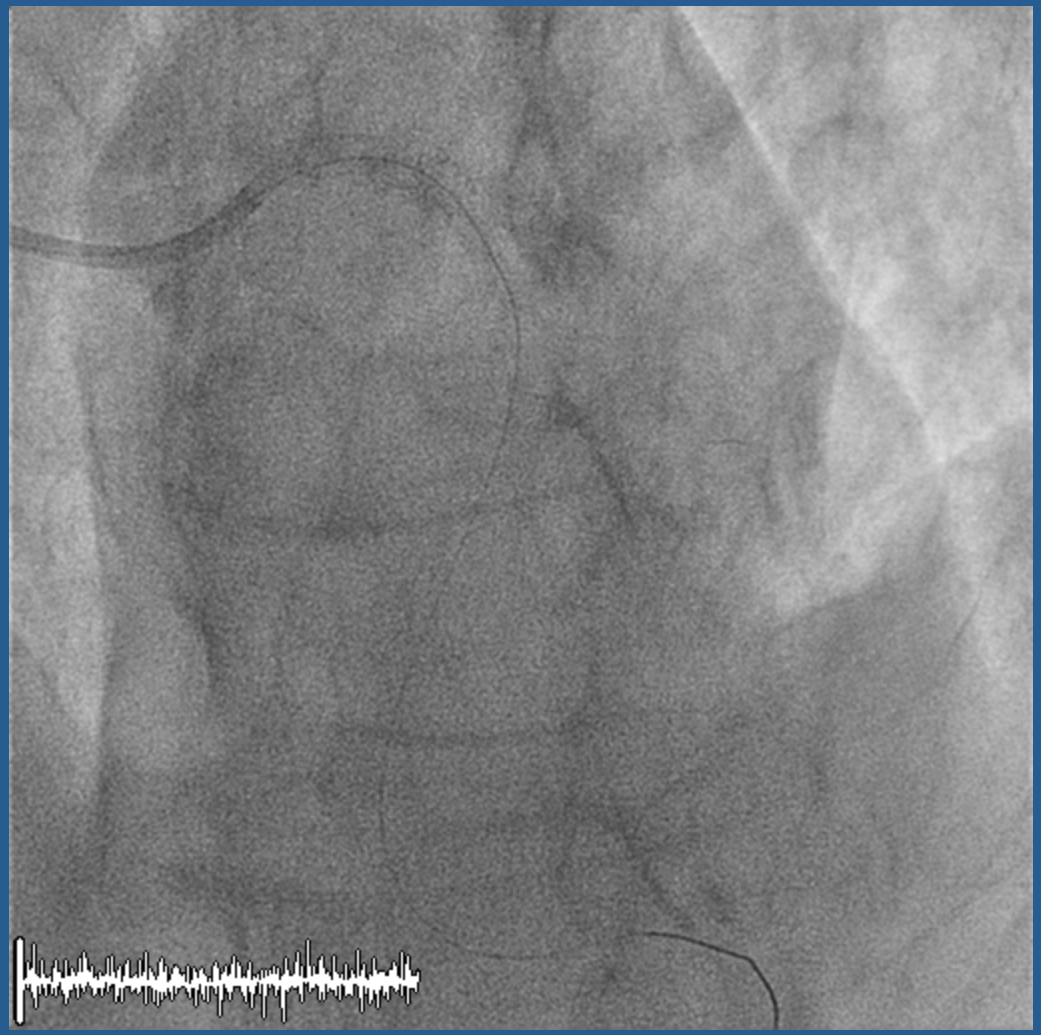


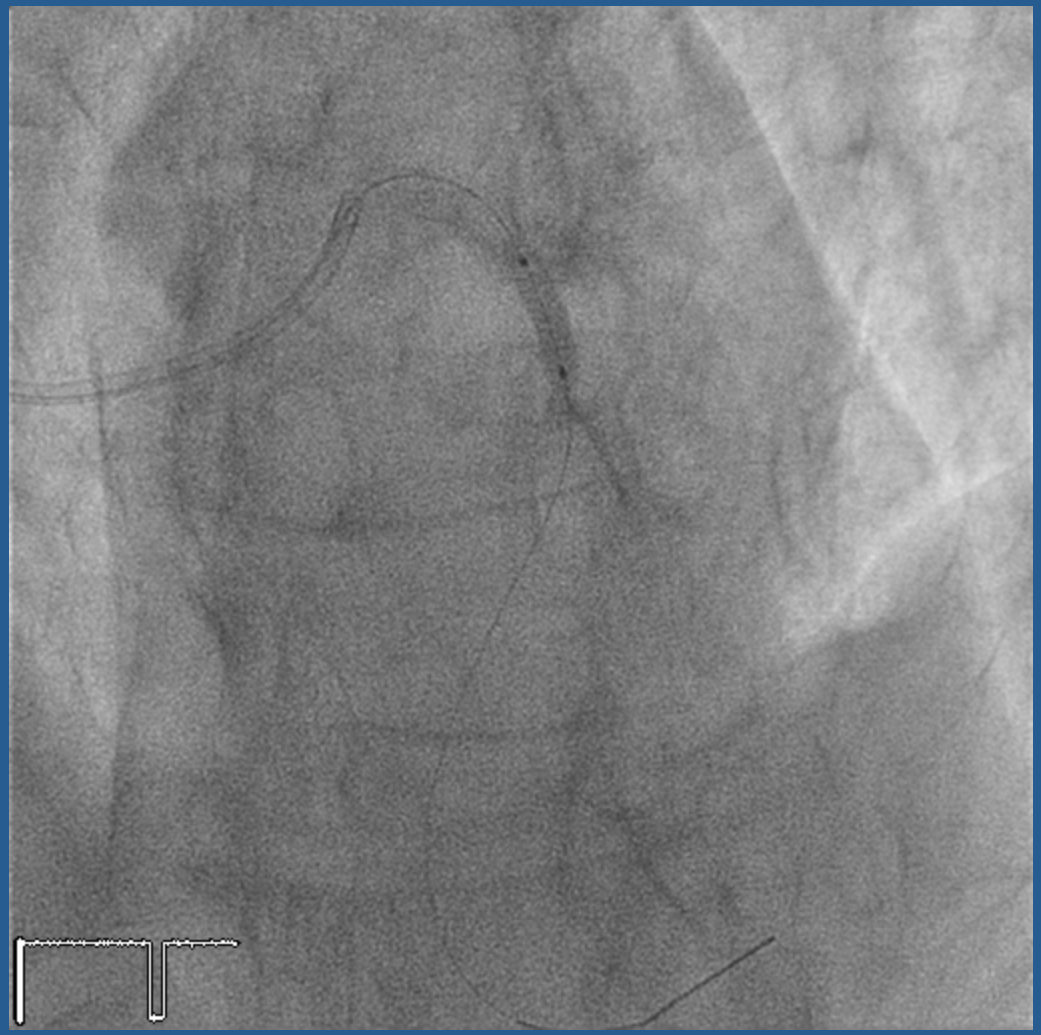


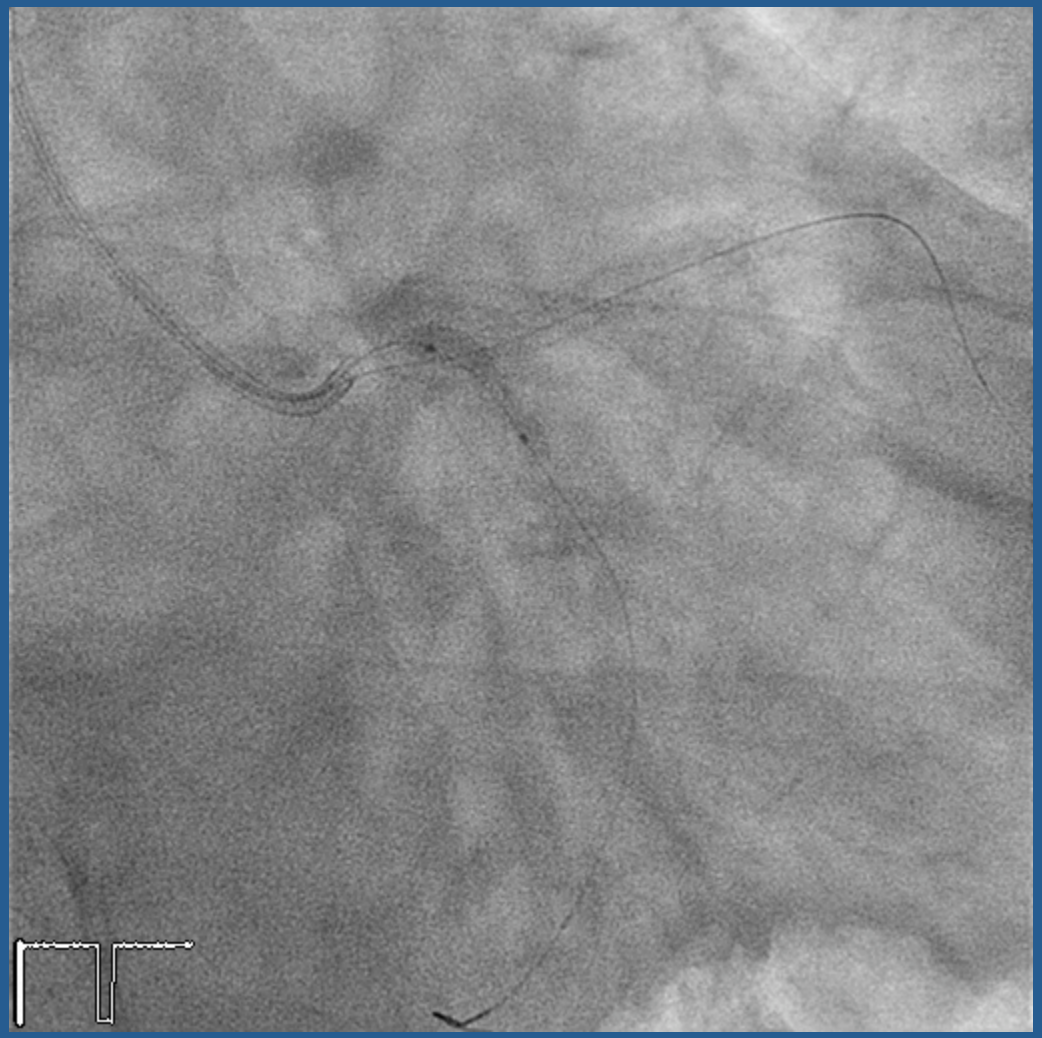


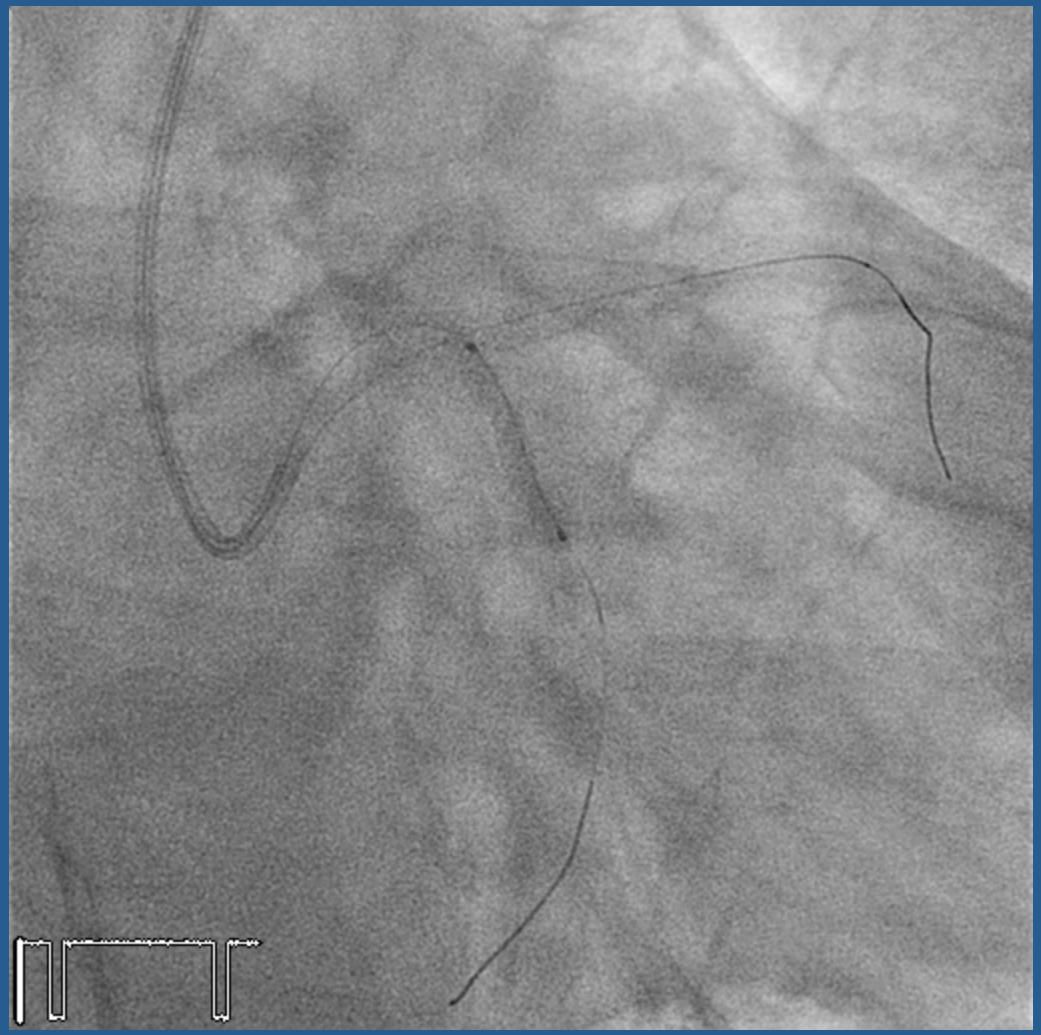


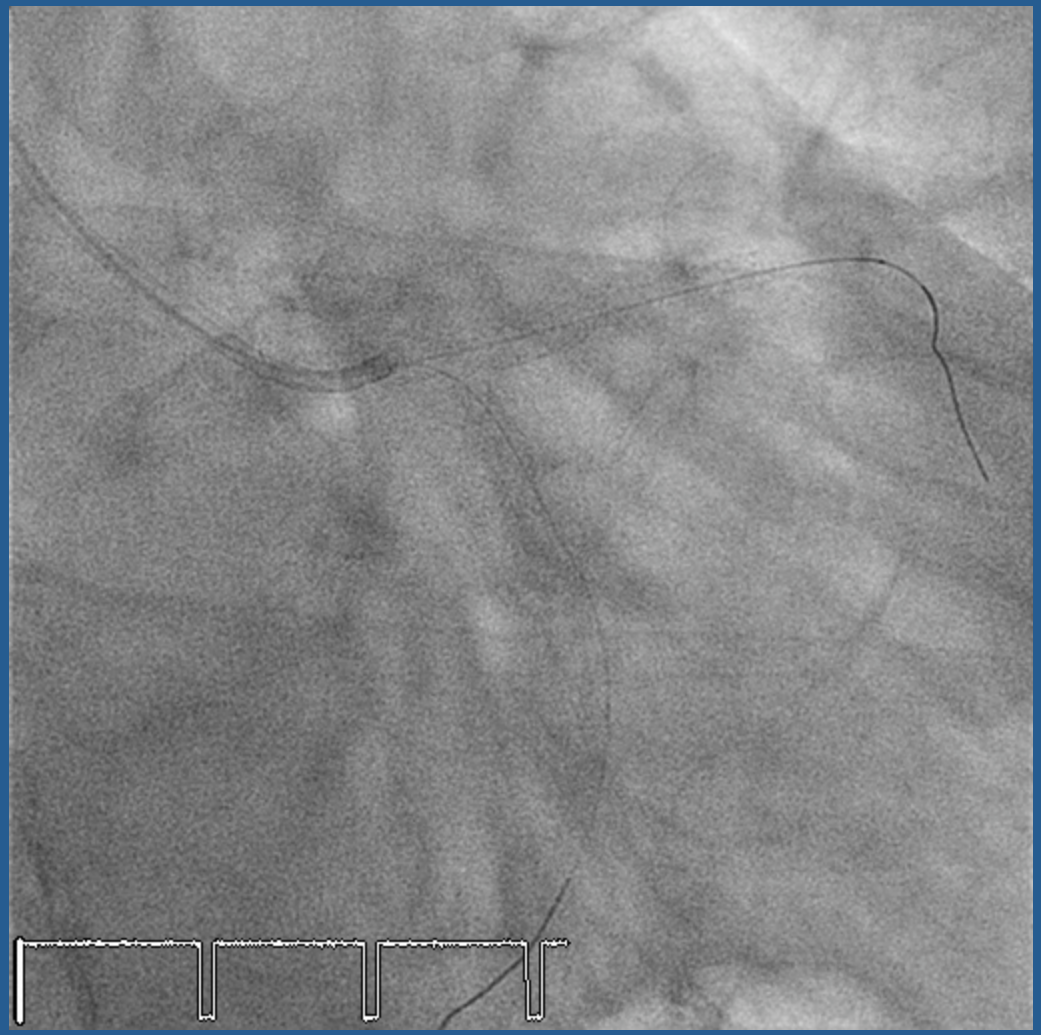


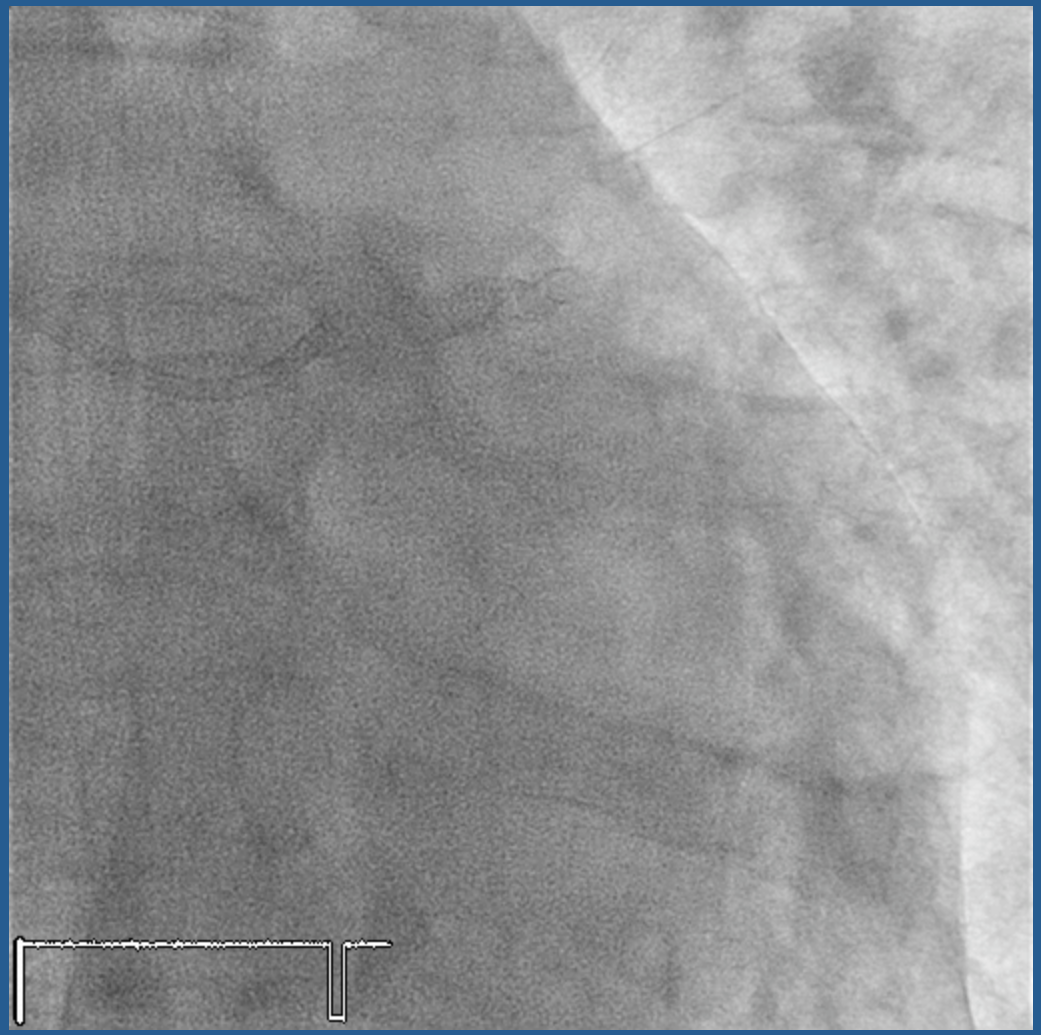




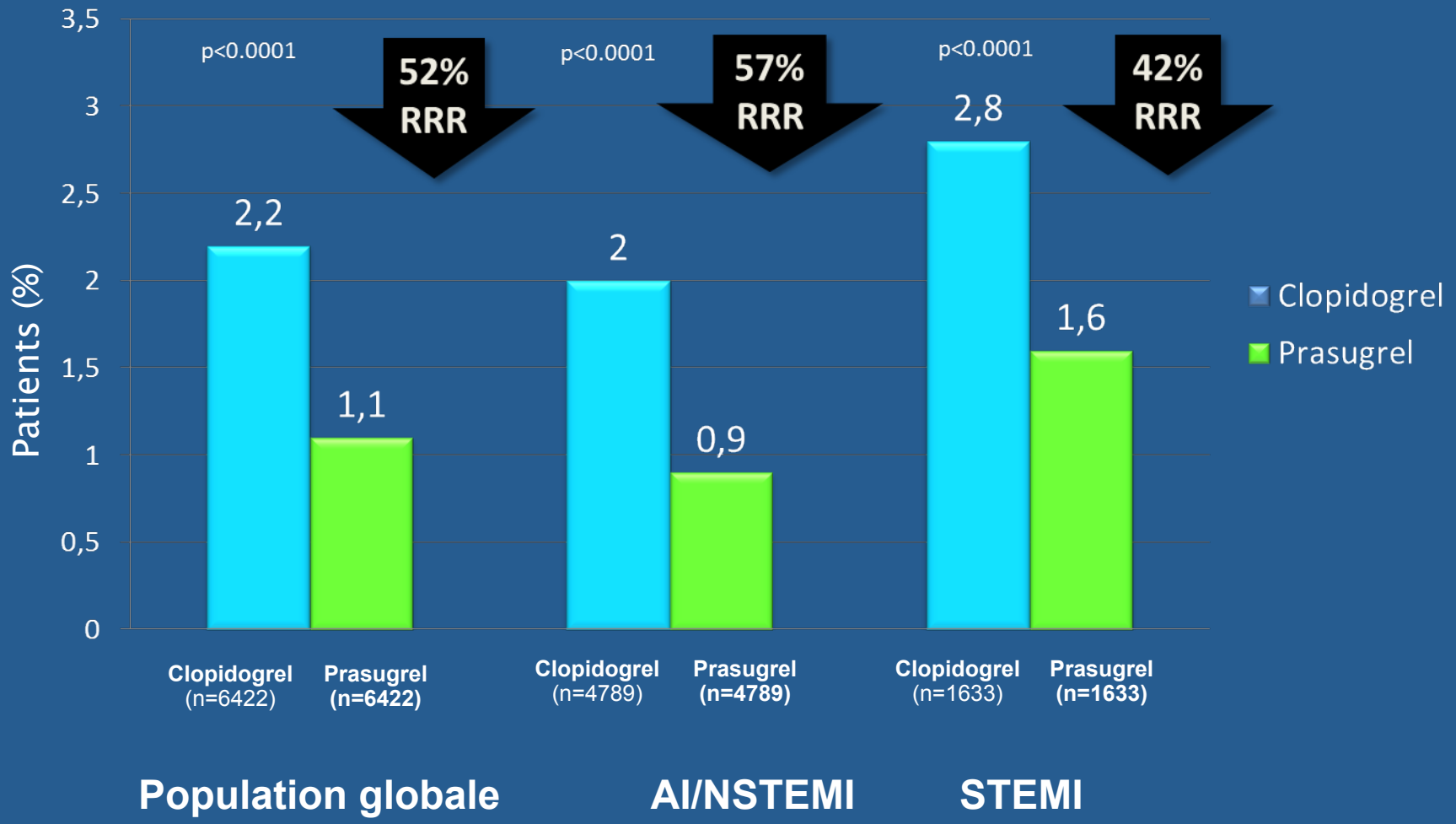








TRITON : thromboses de



Wiviott et al. Lancet 2008;371:1353–63

- Le patient a été hospitalisé 2 jours en USIC

- Ordonnance de sortie
  - Prasugrel 10 mg/j
  - Kardégic 75 mg 1/j
  - Tahor 40 1/j
  - Cardensiel 1.25 1/j

Qu'en pensez vous ?

La balance bénéfice/risque

Traitement antiagrégant plaquettaire

Problématique actuelle de la bithérapie

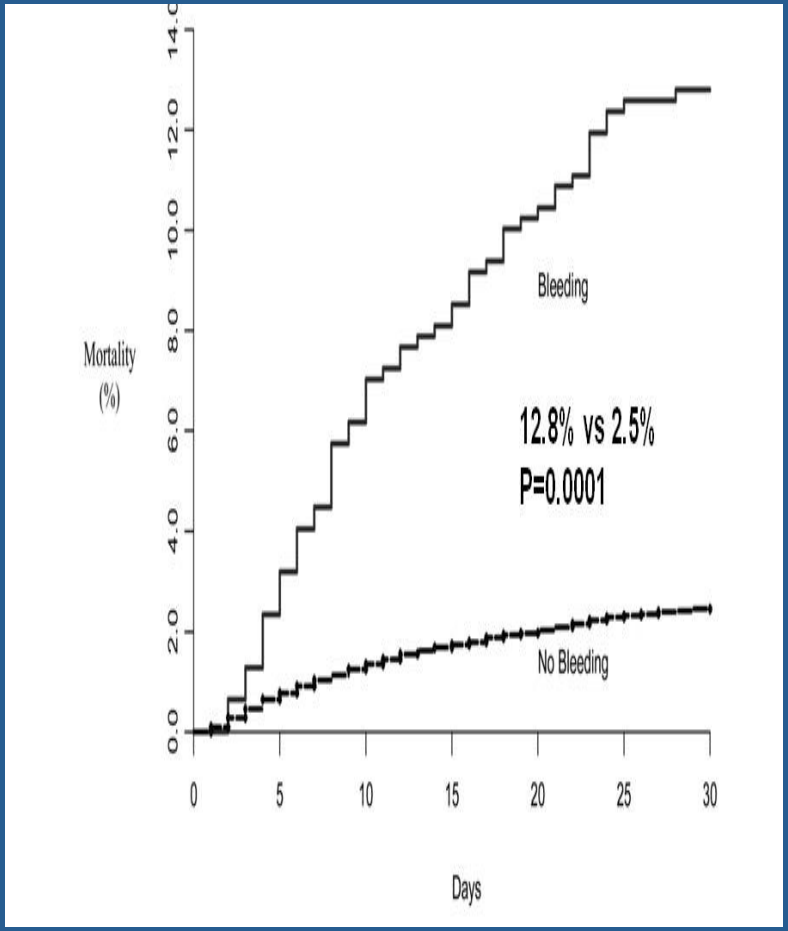
Risque ischémique

Risque hémorragique

le risque hémorragique

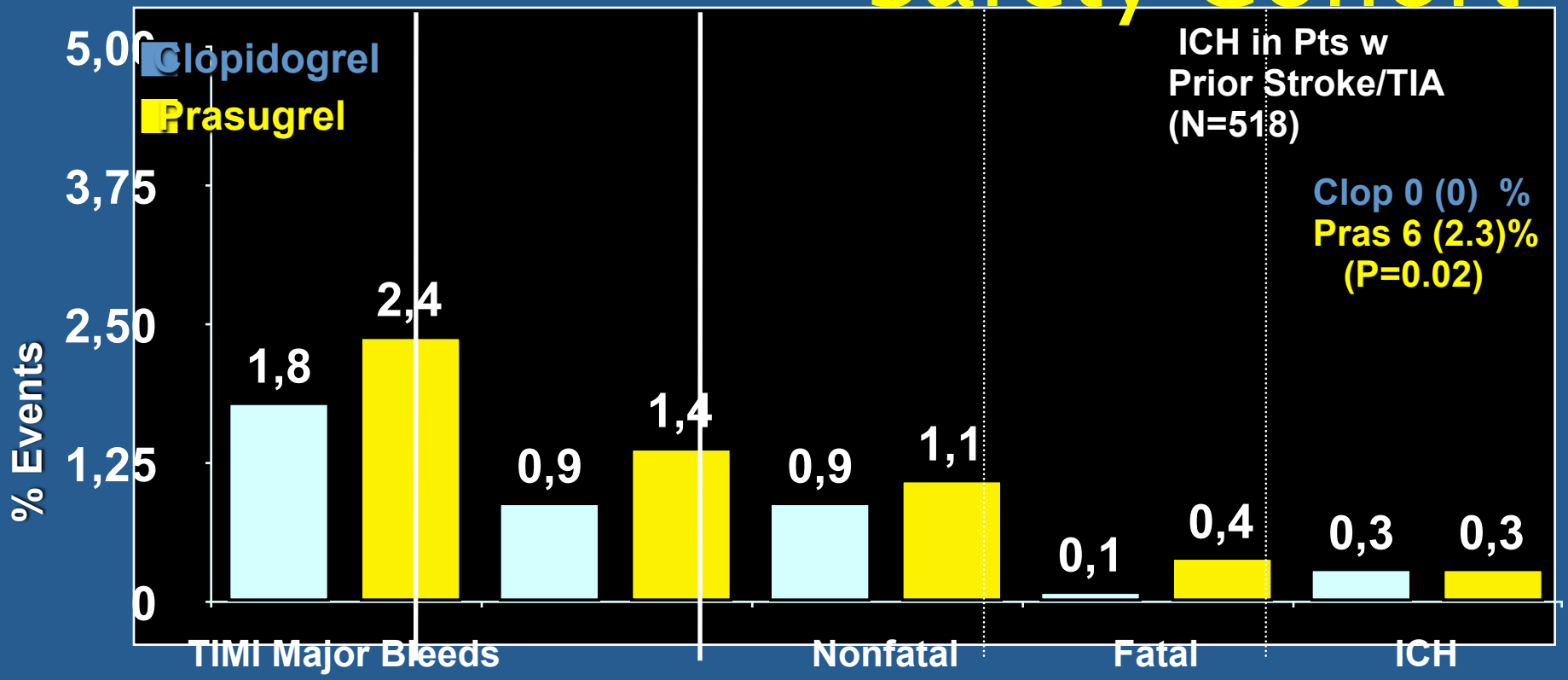
Impact pronostique des Saignements majeurs (GUSTO) sur la mortalité à J30

Méta-analyse OASIS, OASIS-2, CURE
(34 146 patients)



Eikelboom. *Circulation* 2006;114:774

TRITON-TIMI 38 Bleeding Events Safety Cohort



ARD 0.6%
HR 1.32
P=0.03
NNH=167

ARD 0.5%
HR 1.52
P=0.01

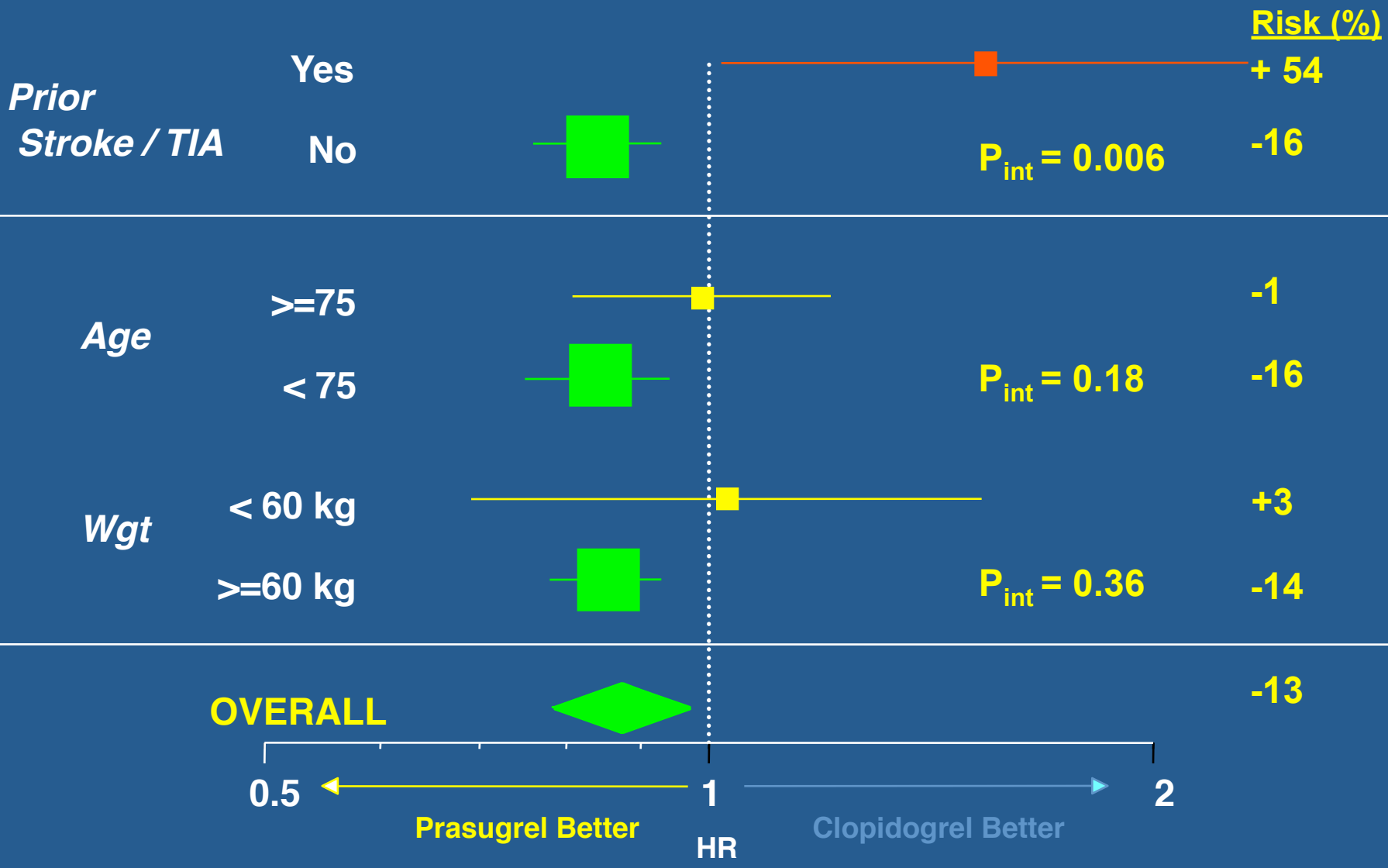
ARD 0.2%
P=0.23

ARD 0.3%
P=0.002

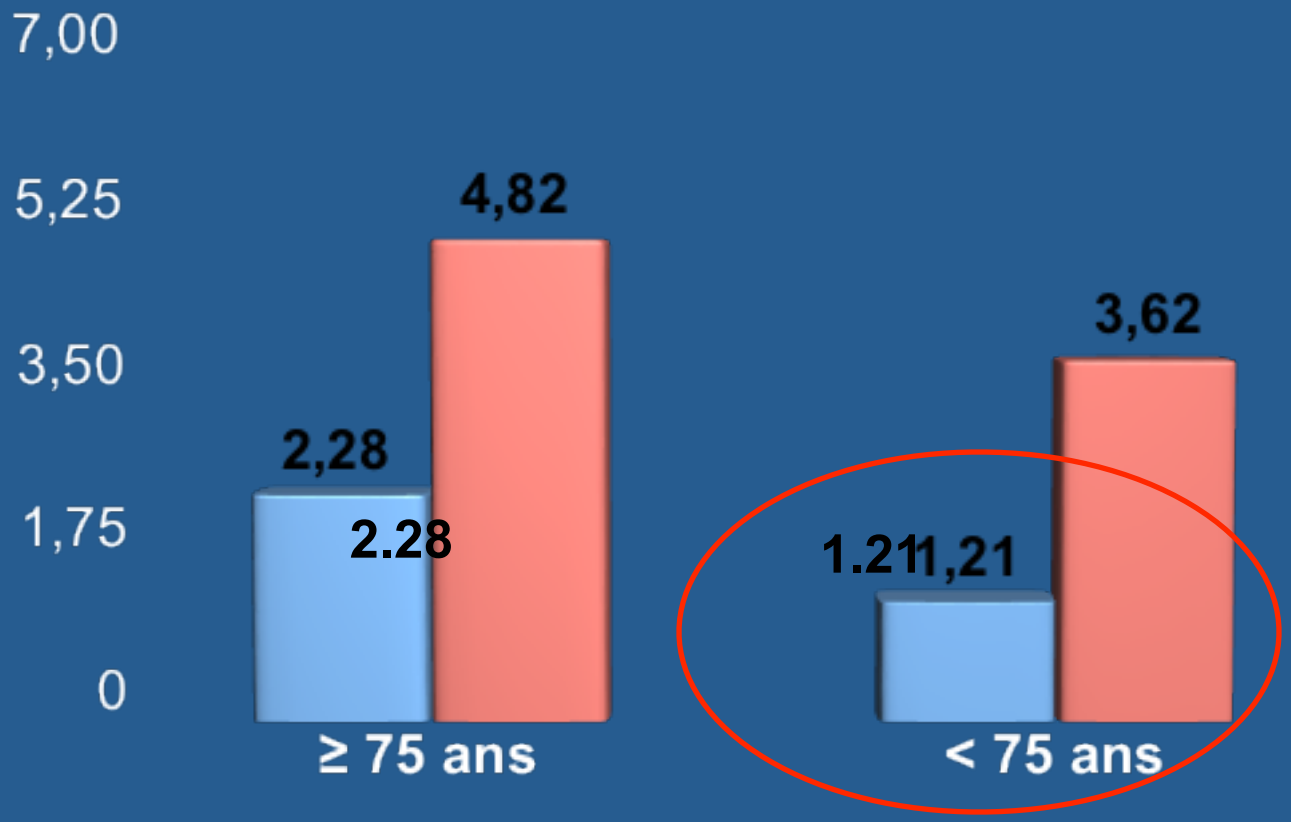
ARD 0%
P=0.74

TRITON-TIMI 38

Net Clinical Benefit
Bleeding Risk Subgroups
Post-hoc analysis



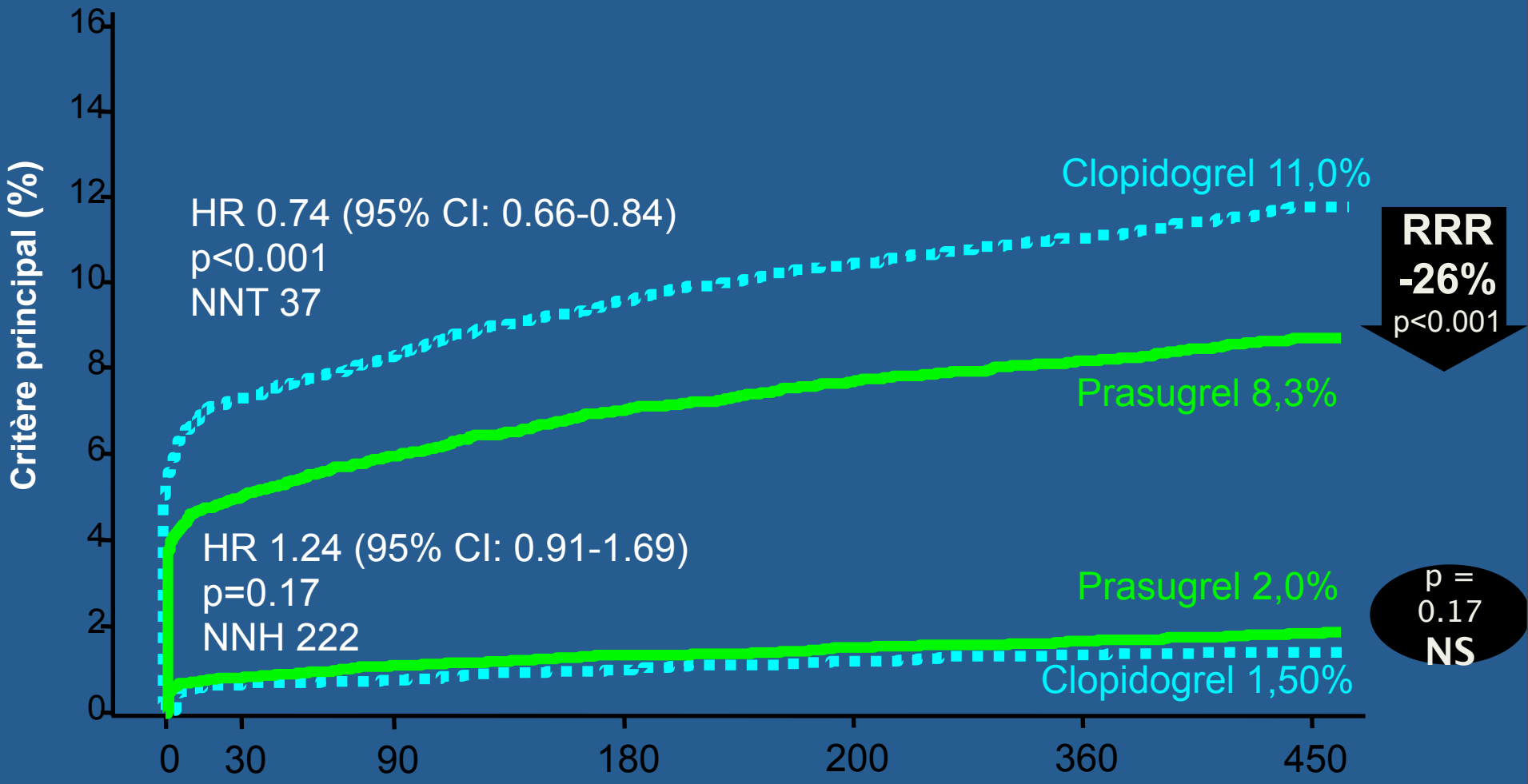
TRITON-TIMI 38 : Saignements majeurs TIMI*
Impact de l'âge et du poids



* Non liés à un PAC

TRITON-TIMI 38 : cohorte optimale

Patients < 75 ans, ≥ 60 kg, sans antécédent AVC/AIT



80% de la population de TRITON

Wiviott SD et al. *Circulation 2010;122:394-403*

A 3 mois

- Notre patient va bien
- Pas de récidive ischémique
- Pas d'accident hémorragique

SCA ST- tt par angioplastie	RISQUE ISCHEMIQUE FAIBLE ECG normal ou onde T négative Pas d'élevation de troponine	RISQUE ISCHEMIQUE ELEVE Sous décalage ST Diabétiques Elevation de troponine
RISQUE HEMORRAGIQUE FAIBLE Poids >60 kg, Age < 75 ans	Clopidogrel	Prasugrel
RISQUE		

1 seule CI formelle au prasugrel: L'AVC

Développement clinique ST-

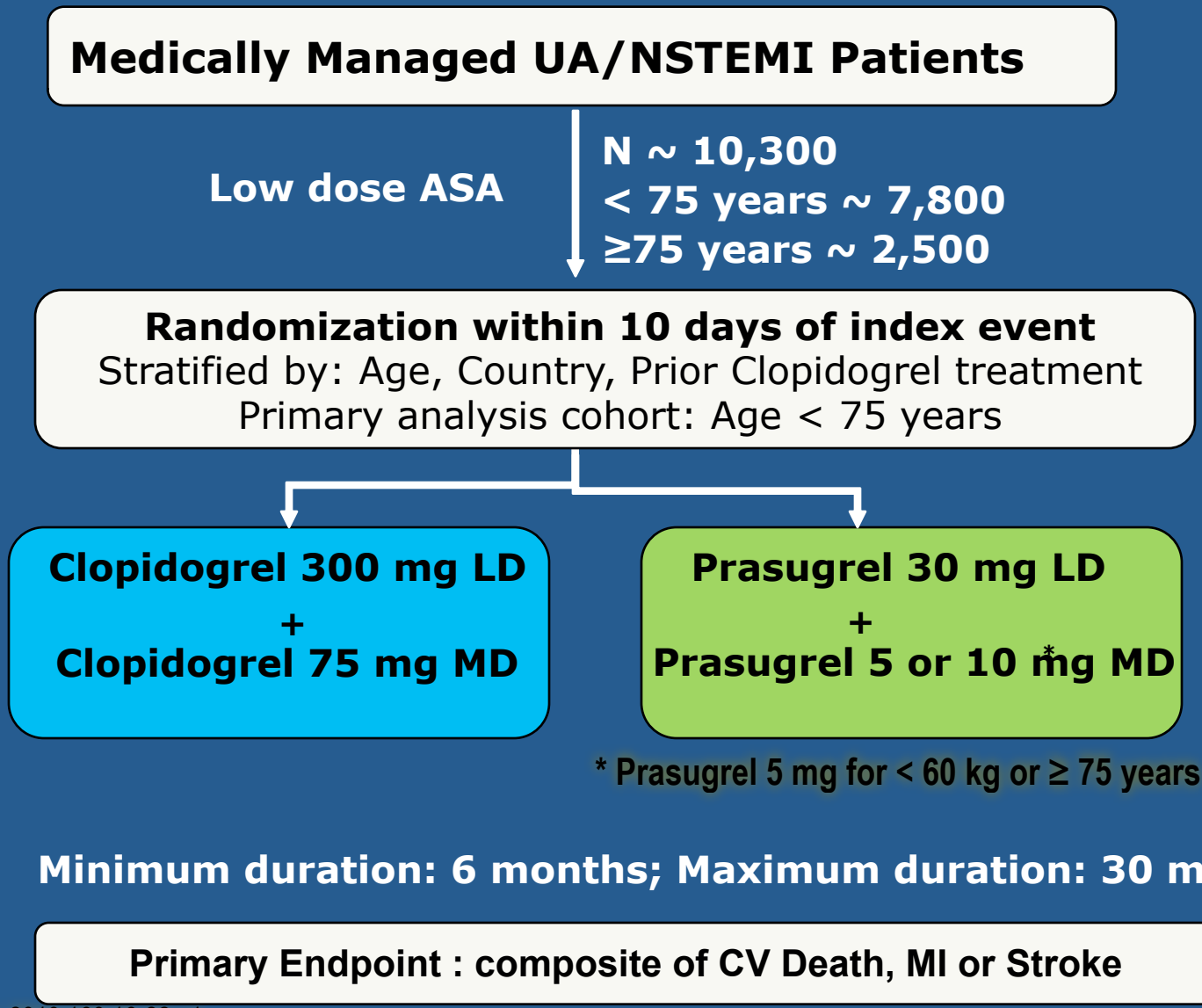
AI/NSTEMI

traités médicalement

NSTEMI & Angioplastie

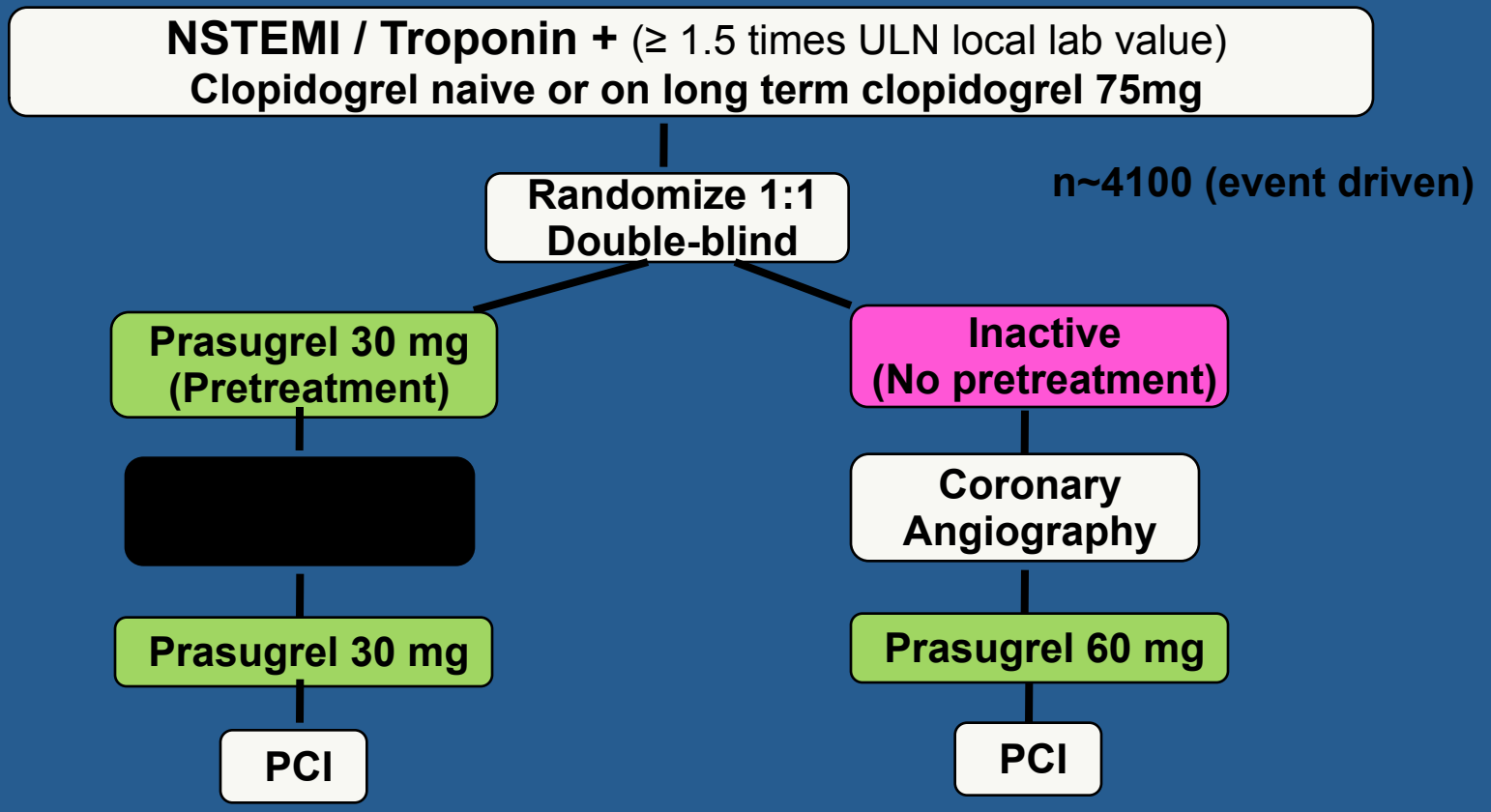
Pré-traitement

TRILOGY



Chin CT et al. *Am Heart J*. 2010;160:16-22.e1

ACCOAST Trial Design

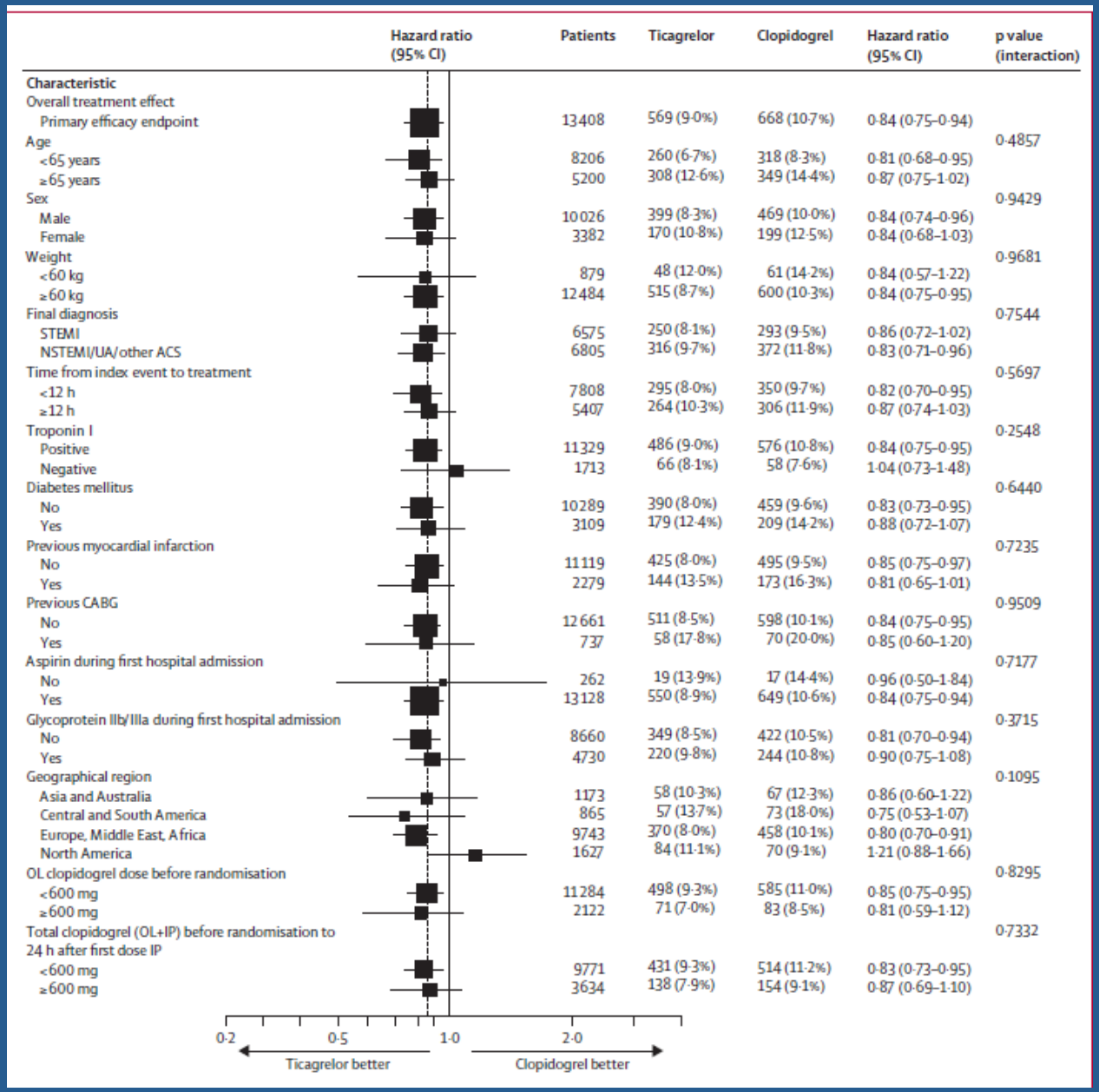


Primary Endpoint

CV Death, MI, Stroke, Urgent Revascularization, GP IIb/IIIa inhibitor bailout at 7 days

PLATO

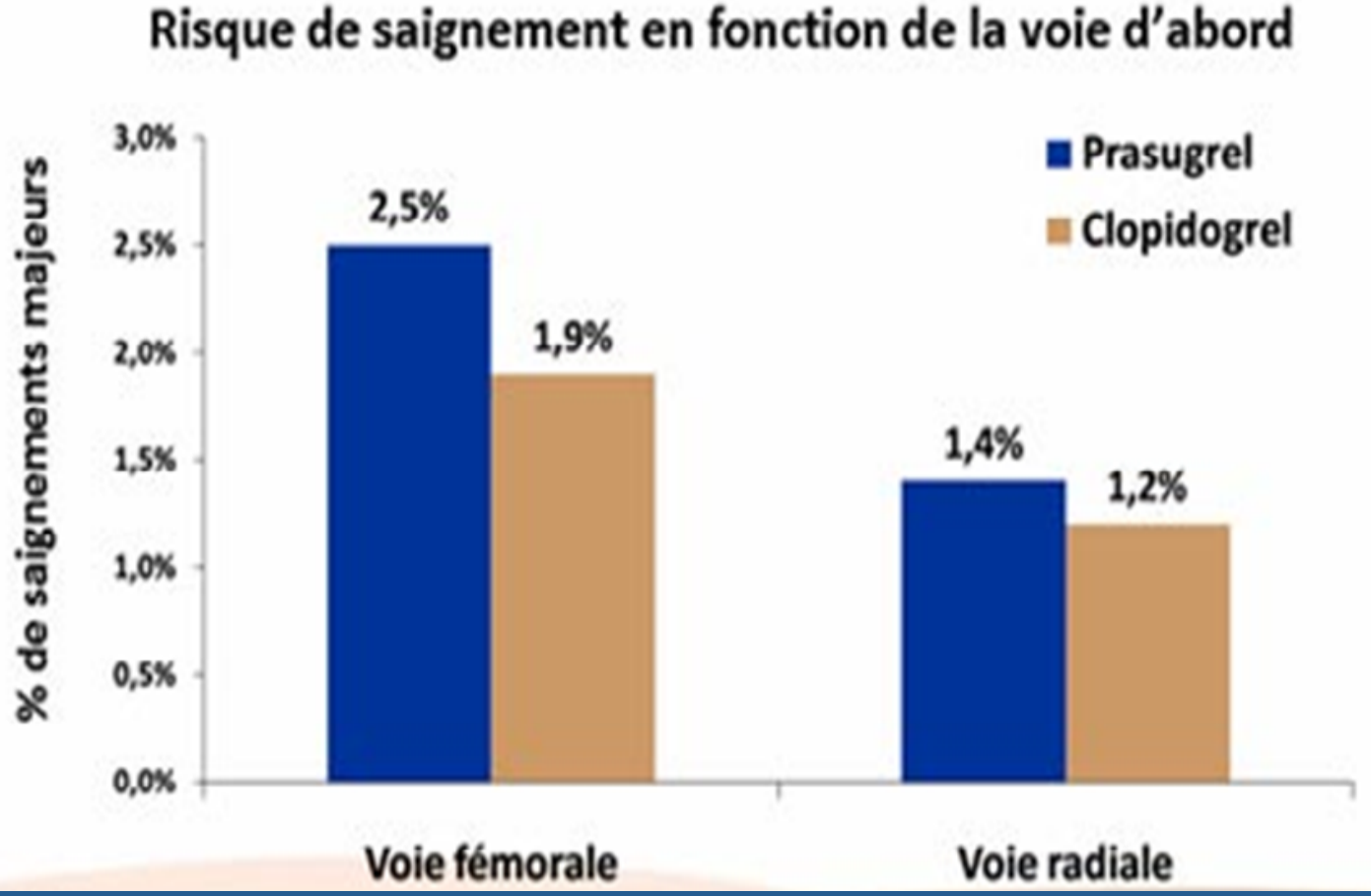
SUB GROUP ANALYSIS



Characteristic	Patients	Ticagrelor	Clopidogrel	Hazard ratio (95% CI)	p value (interaction)
Overall treatment effect					
Primary efficacy endpoint	13408	569 (9·0%)	668 (10·7%)	0·84 (0·75–0·94)	
Age					0·4857
<65 years	8206	260 (6·7%)	318 (8·3%)	0·81 (0·68–0·95)	
≥65 years	5200	308 (12·6%)	349 (14·4%)	0·87 (0·75–1·02)	
Sex					0·9429
Male	10026	399 (8·3%)	469 (10·0%)	0·84 (0·74–0·96)	
Female	3382	170 (10·8%)	199 (12·5%)	0·84 (0·68–1·03)	
Weight					0·9681
<60 kg	879	48 (12·0%)	61 (14·2%)	0·84 (0·57–1·22)	
≥60 kg	12484	515 (8·7%)	600 (10·3%)	0·84 (0·75–0·95)	
Final diagnosis					0·7544
STEMI	6575	250 (8·1%)	293 (9·5%)	0·86 (0·72–1·02)	
NSTEMI/UA/other ACS	6805	316 (9·7%)	372 (11·8%)	0·83 (0·71–0·96)	
Time from index event to treatment					0·5697
<12 h	7808	295 (8·0%)	350 (9·7%)	0·82 (0·70–0·95)	
≥12 h	5407	264 (10·3%)	306 (11·9%)	0·87 (0·74–1·03)	
Troponin I					0·2548
Positive	11329	486 (9·0%)	576 (10·8%)	0·84 (0·75–0·95)	
Negative	1713	66 (8·1%)	58 (7·6%)	1·04 (0·73–1·48)	
Diabetes mellitus					0·6440
No	10289	390 (8·0%)	459 (9·6%)	0·83 (0·73–0·95)	
Yes	3109	179 (12·4%)	209 (14·2%)	0·88 (0·72–1·07)	
Previous myocardial infarction					0·7235
No	11119	425 (8·0%)	495 (9·5%)	0·85 (0·75–0·97)	
Yes	2279	144 (13·5%)	173 (16·3%)	0·81 (0·65–1·01)	
Previous CABG					0·9509
No	12661	511 (8·5%)	598 (10·1%)	0·84 (0·75–0·95)	
Yes	737	58 (17·8%)	70 (20·0%)	0·85 (0·60–1·20)	
Aspirin during first hospital admission					0·7177
No	262	19 (13·9%)	17 (14·4%)	0·96 (0·50–1·84)	
Yes	13128	550 (8·9%)	649 (10·6%)	0·84 (0·75–0·94)	
Glycoprotein IIb/IIIa during first hospital admission					0·3715
No	8660	349 (8·5%)	422 (10·5%)	0·81 (0·70–0·94)	
Yes	4730	220 (9·8%)	244 (10·8%)	0·90 (0·75–1·08)	
Geographical region					0·1095
Asia and Australia	1173	58 (10·3%)	67 (12·3%)	0·86 (0·60–1·22)	
Central and South America	865	57 (13·7%)	73 (18·0%)	0·75 (0·53–1·07)	
Europe, Middle East, Africa	9743	370 (8·0%)	458 (10·1%)	0·80 (0·70–0·91)	
North America	1627	84 (11·1%)	70 (9·1%)	1·21 (0·88–1·66)	
OL clopidogrel dose before randomisation					0·8295
<600 mg	11284	498 (9·3%)	585 (11·0%)	0·85 (0·75–0·95)	
≥600 mg	2122	71 (7·0%)	83 (8·5%)	0·81 (0·59–1·12)	
Total clopidogrel (OL+IP) before randomisation to 24 h after first dose IP					0·7332
<600 mg	9771	431 (9·3%)	514 (11·2%)	0·83 (0·73–0·95)	
≥600 mg	3634	138 (7·9%)	154 (9·1%)	0·87 (0·69–1·10)	

Lancet. 2010;375:283-93

Minimisation du risque de saignement au point de ponction: intérêt de la voie radiale



suite

- Finalement le patient est sorti sous prasugrel
- .....

Non STEMI ACS

prévu pour coro +/- ATC

Aspirine 75 mg à 160 mg/j

FONDAPARINUX (ARIXSTRA) SC 2.5 mg /j SC

RISQUE ISCHEMIQUE ELEVE

Sous décalage ST

Diabétiques

Elevation de troponine

RISQUE HEMORRAGIQUE FAIBLE

Poids >60 kg

Age < 75 ans

Absence d'atcd d'AVC

RISQUE ISCHEMIQUE FAIBLE

ECG normal ou onde T négative

Pas d'élevation de troponine

RISQUE HEMORRAGIQUE ELEVE

Poids <60 kg

Age > 75 ans

Atcd AVC

Indication ttt anticoagulant

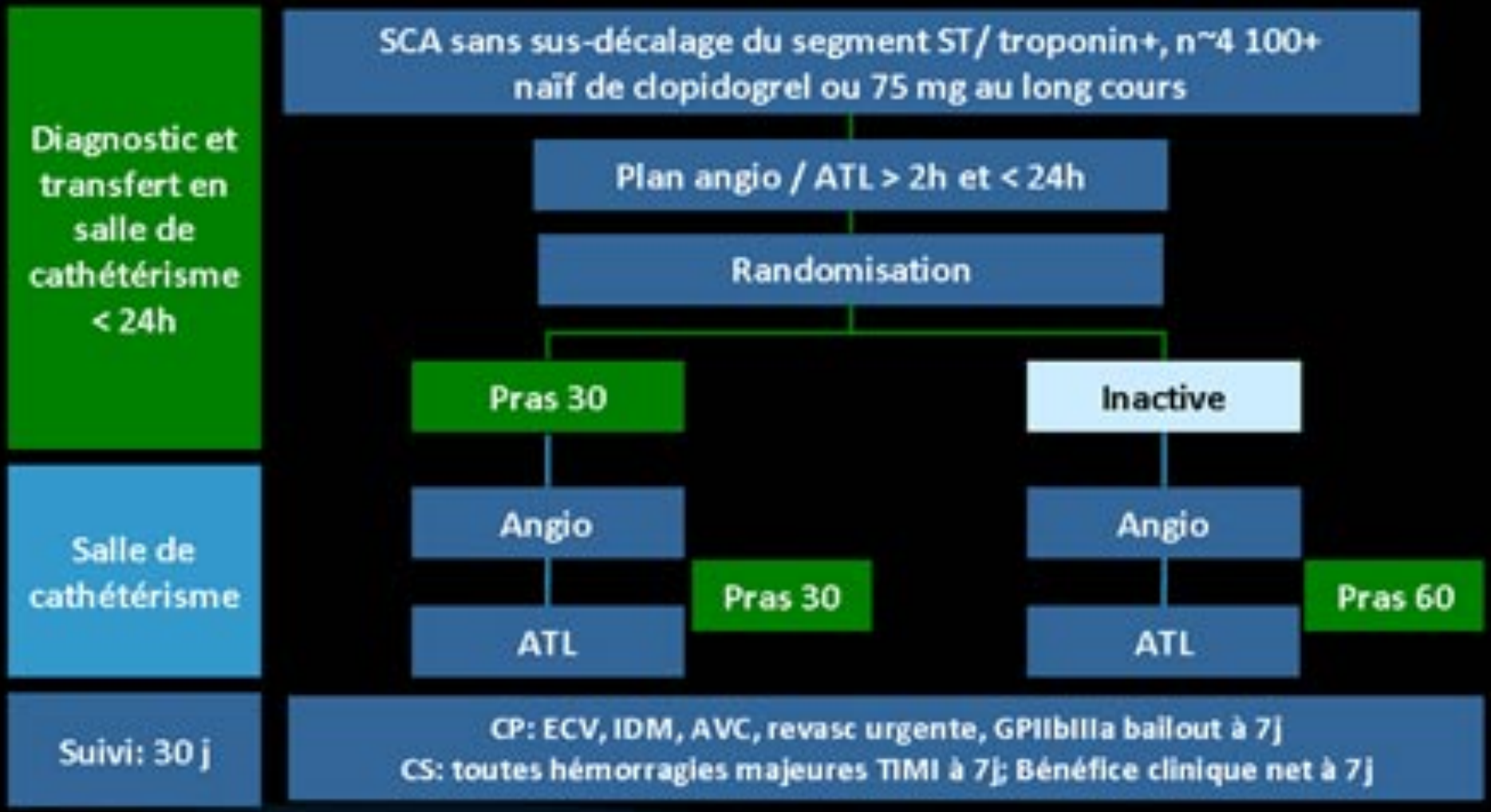
Thrombopenie/Anémie

PRASUGREL

CLOPIDOGREL

Etude accoast

dessin de l'étude ACCOAST



Pras 10(5) pour 30j

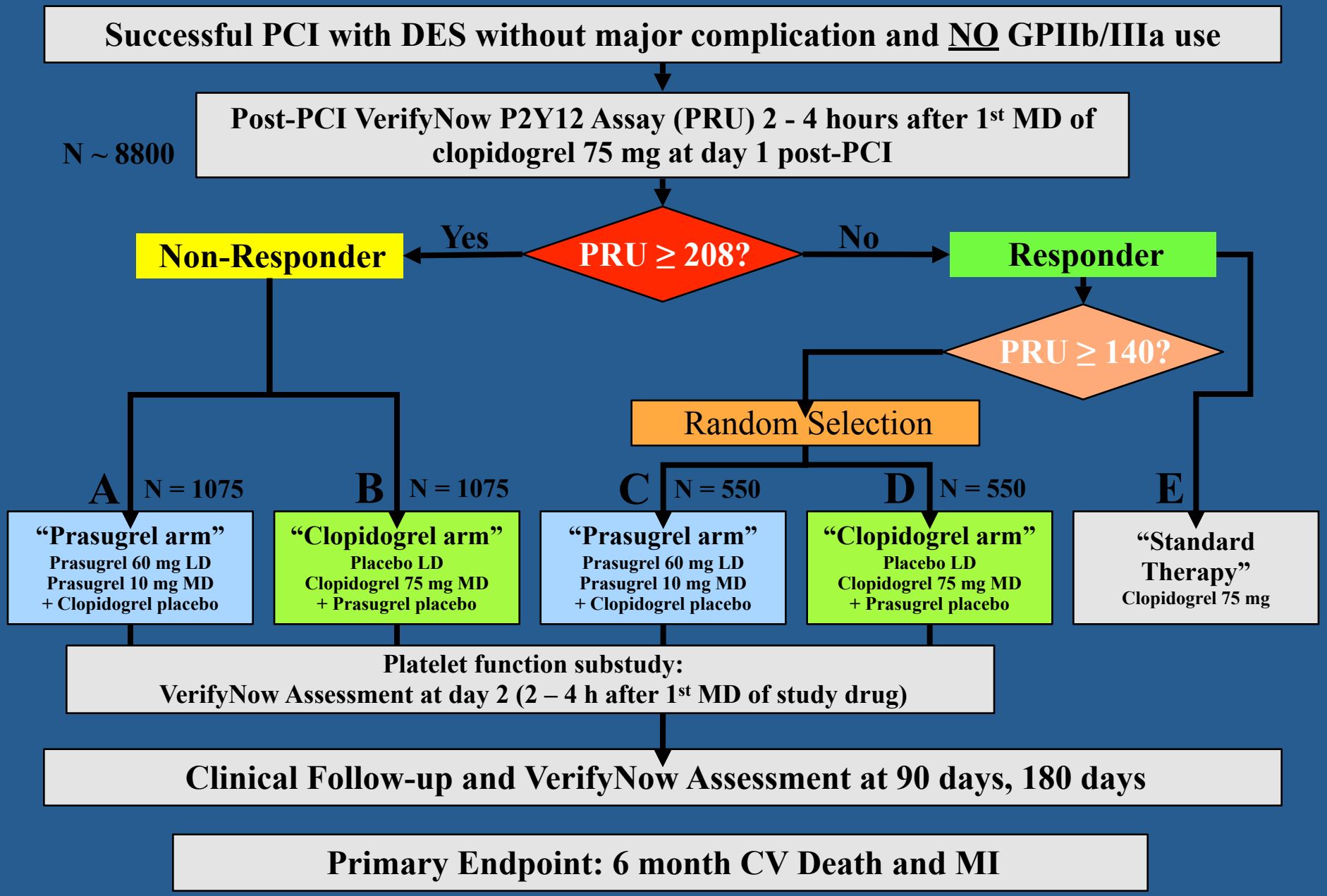
http://clinicaltrials.gov/ct2/show/NCT01015287

Trilogy acs

Arms	Assigned Interventions
1: Experimental Prasugrel and Low-dose Commercially-available Aspirin	Drug: Prasugrel 30mg, oral, once as loading dose (in those subjects who initiate study drug with a loading dose); and either 5mg or 10mg (based upon weight and age), oral, once daily as maintenance dose through end of study

TRIGGER-PCI

Courtesy of F.J. Neumann



Observance des traitements

- Registre APTOR étude observationnelle internationale prospective de patients souffrant de sca et bénéficiant d'une ATC en 2007-2008
- But recceuillir des infos sur les pratiques des soins les traitements, l'utilisation des ressources à 12 mois
- Les cardiologues interventionnels receuillaient les données initiales et les MT ou cardiologues de ville recceuillaient les traitement s ulterieurs
- Resultats francais CFCI 483 pts; age 61 ans, 80 Kg 18% de femmes 47 % souffraient d'un STEMI, 53 % d'un AI-non STEMI
- Tx d'observance du clopidogrel 94 % sortie de l'H, 94% à J30, 80% à 6 mois, 75 % à 12 mois soit 48 %

COMMENT SAVOIR

- rappeler QUE LE SCA ST – qui est un problème fréquent est également un problème grave qui mérite la même attention thérapeutique
- Utiliser les connaissances issues des études sur le monitoring plaquettaire
- Regarder ce qui se passe avec les

Prise en charge de la réponse insuffisante au clopidogrel

ACS (STEMI or UA/NSTEMI) & Planned PCI

ASA ↓ **N= 13,600**

TRITON

Double-blind

CLOPIDOGREL	PRASUGREL
300 mg LD/ 75 mg MD	60 mg LD/ 10 mg MD

Median duration of therapy - 12 months

1º endpoint:	CV death, MI, Stroke
2º endpoints:	CV death, MI, Stroke, Rehosp-Rec Isch CV death, MI, UTVR
	Stent Thrombosis (ARC definite/prob.)
Safety endpoints:	TIMI major bleeds, Life-threatening bleeds
Key Substudies:	Pharmacokinetic, Genomic

NEJM 2007: 357: 2001-2015.

Finalement la balance bénéfice risque ischémique

Un algorithme

PLATO study design

NSTE-ACS (moderate-to-high risk) STEMI (if primary PCI)
Clopidogrel-treated or -naive;
randomised within 24 hours of index event
(N=18,624)

Clopidogrel
If pre-treated, no additional loading dose;
if naive, standard 300 mg loading dose,
then 75 mg qd maintenance;
(additional 300 mg allowed pre PCI)

Ticagrelor
180 mg loading dose, then
90 mg bid maintenance;
(additional 90 mg pre-PCI)

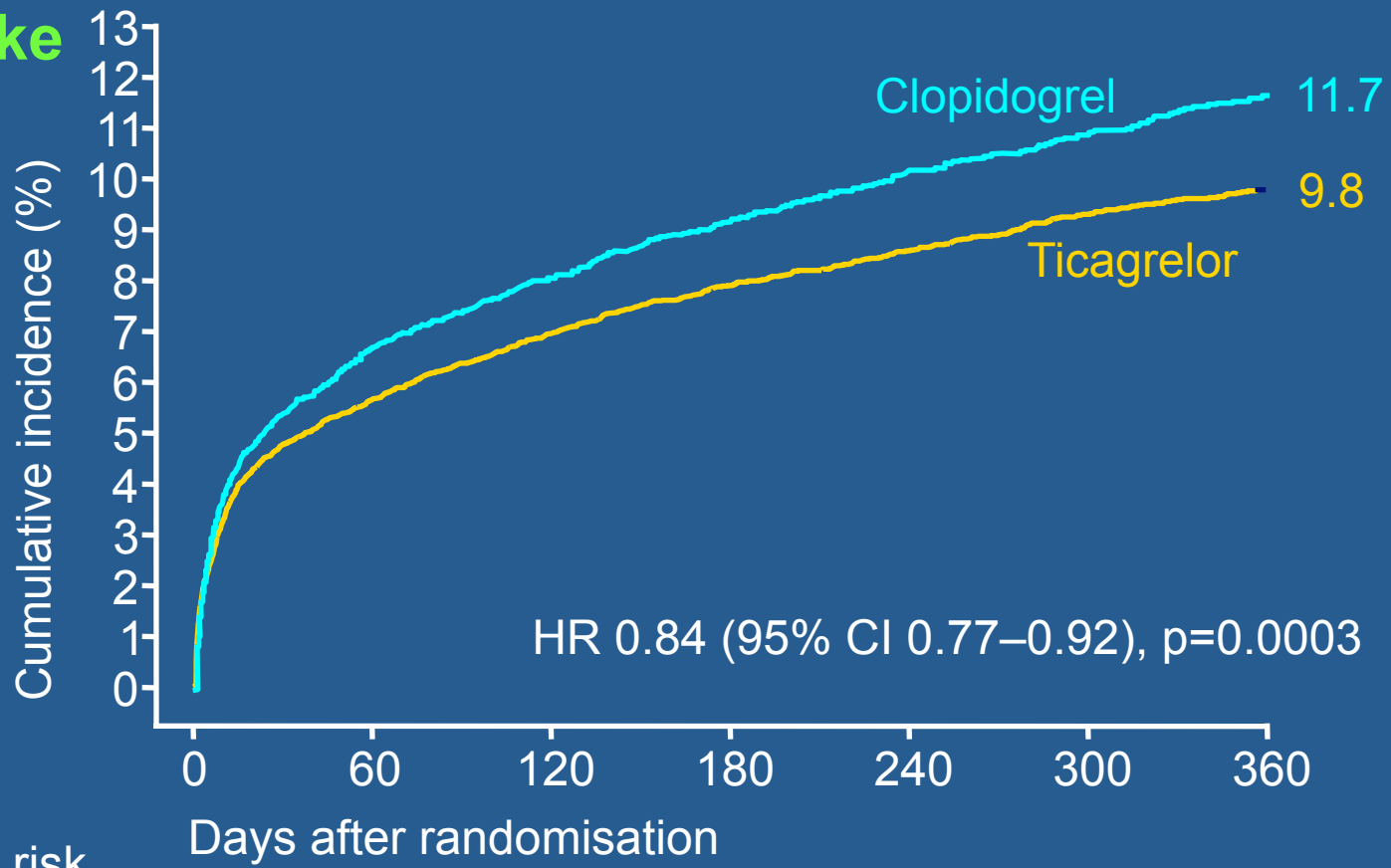
6–12-month exposure

Primary endpoint: CV death + MI + Stroke
Primary safety endpint: Total major bleeding

Lancet. 2010;375:283-93

primary efficacy event

IEP: CV death, MI or stroke



No. at risk							
Ticagrelor	9,333	8,628	8,460	8,219	6,743	5,161	4,147
Clopidogrel	9,291	8,521	8,362	8,124	6,743	5,096	4,047

K-M = Kaplan-Meier; HR = hazard ratio; CI = confidence interval

Lancet. 2010;375:283-93

Recomandations européennes pour la stratégie invasive dans les SCA non ST

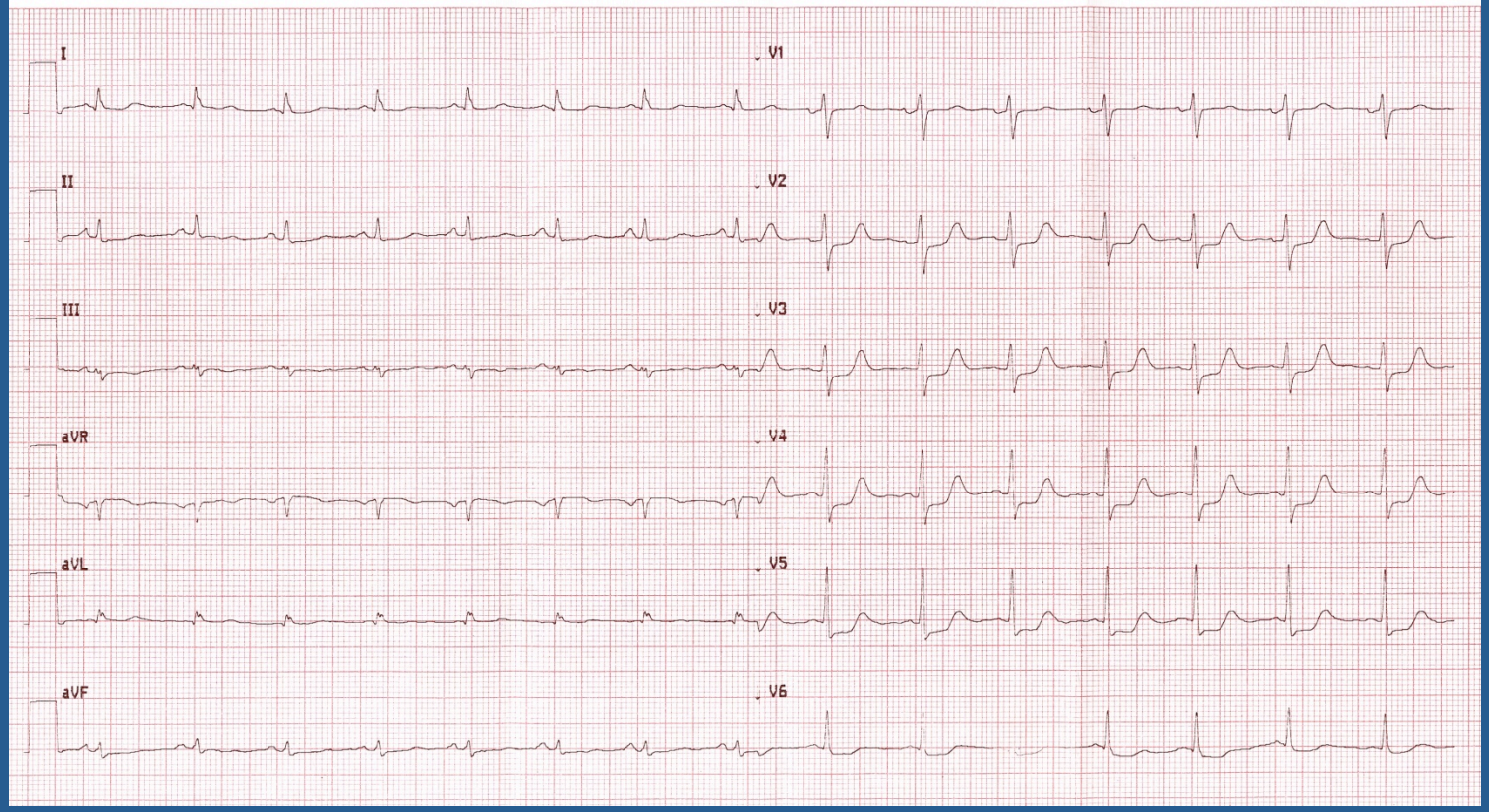
Specification	Class[a]	Level[b]	Ref.[c]
An invasive strategy is indicated in patients with: • GRACE score >140 or at least one high-risk criterion. • recurrent symptoms. • inducible ischaemia at stress test.	I	A	64, 68–70
An early invasive strategy (<24 h) is indicated in patients with GRACE score >140 or multiple other high-risk criteria.	I	A	63, 64, 66, 70–72
A late invasive strategy (within 72 h) is indicated in patients with GRACE score <140 or absence of multiple other high-risk criteria but with recurrent symptoms or stress-inducible ischaemia.	I	A	59, 66, 68
Patients at very high ischaemic risk (refractory angina, with associated heart failure, arrhythmias or haemodynamic instability) should be considered for emergent coronary angiography (<2 h).	IIa	C	—
An invasive strategy should not be performed in patients: • at low overall risk. • at a particular high-risk for invasive diagnosis or intervention.	III	A	59, 68

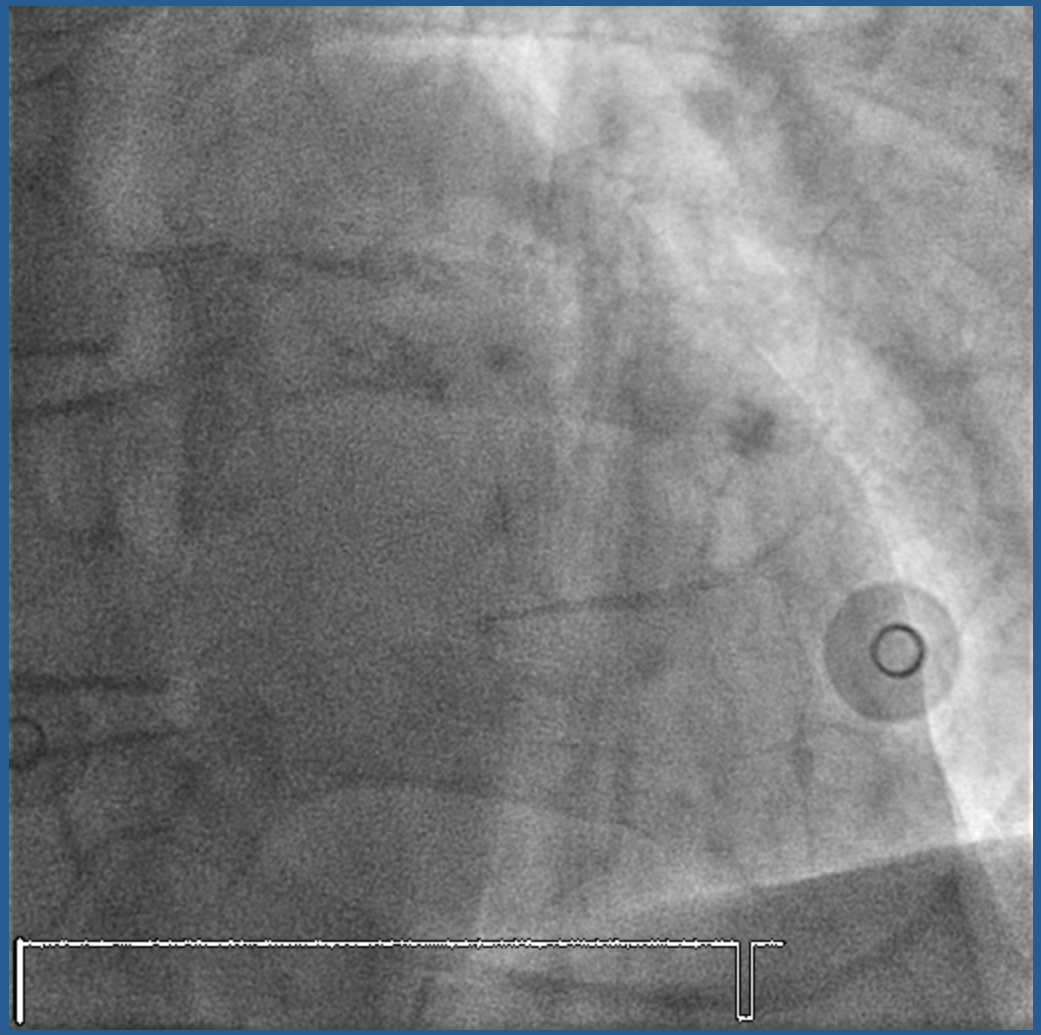
European Heart J 2010;31:2501–55

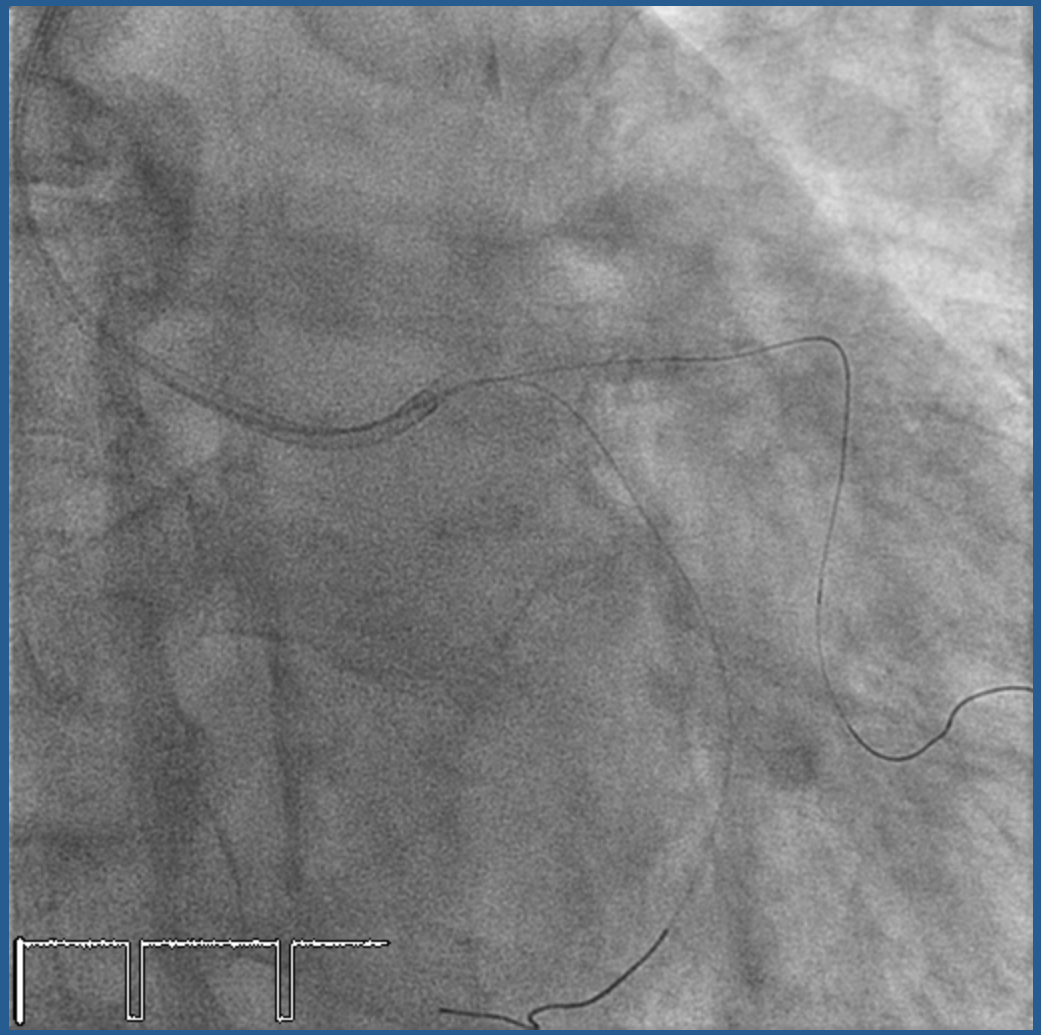
ans cm 735kg

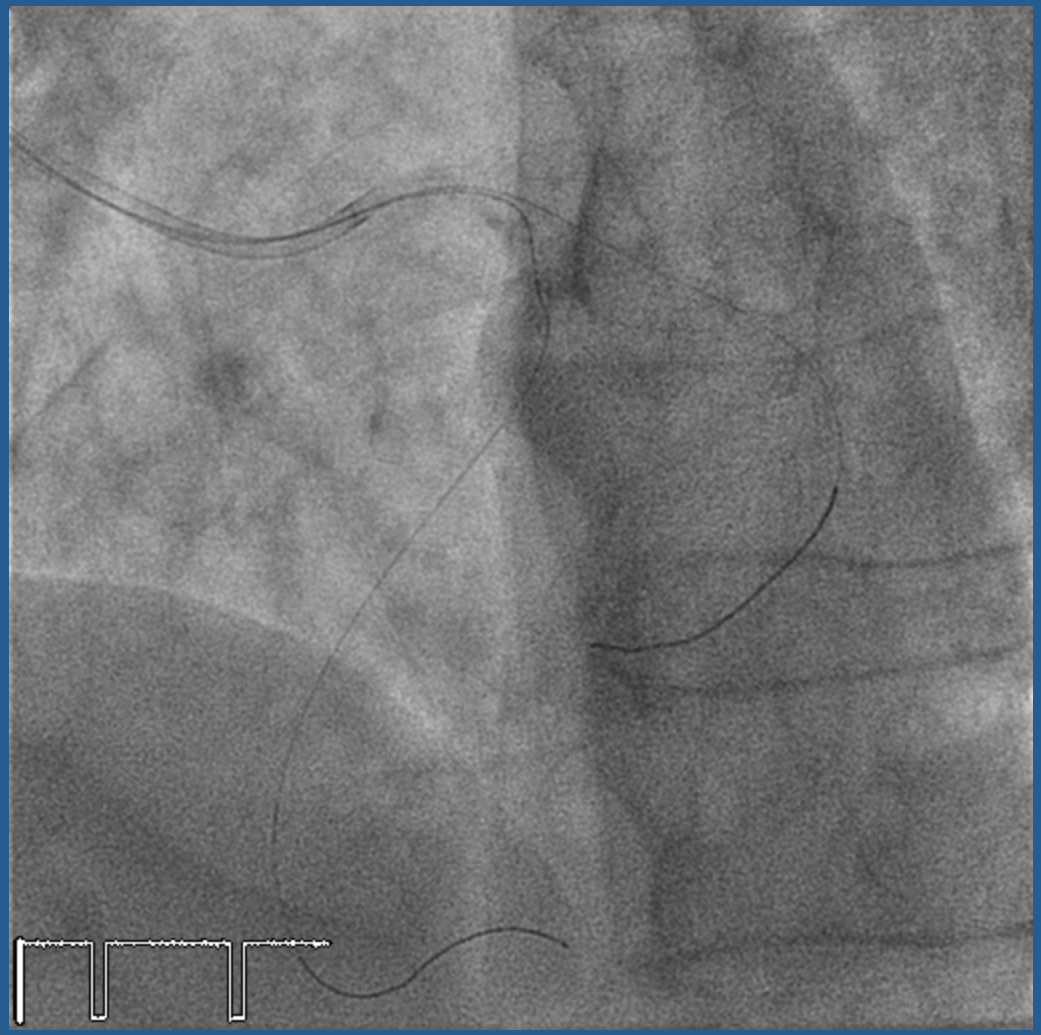
Méd: ,
Endroit:

Fréq.Vent.:	91 BPM:
Int PR:	125 ms
Dur.QRS:	91 ms
QT/QTc:	372/420 ms
Axes P-R-T:	62 24 48
RR moyen:	659 ms
QTcB:	458 ms
QTcF:	427 ms



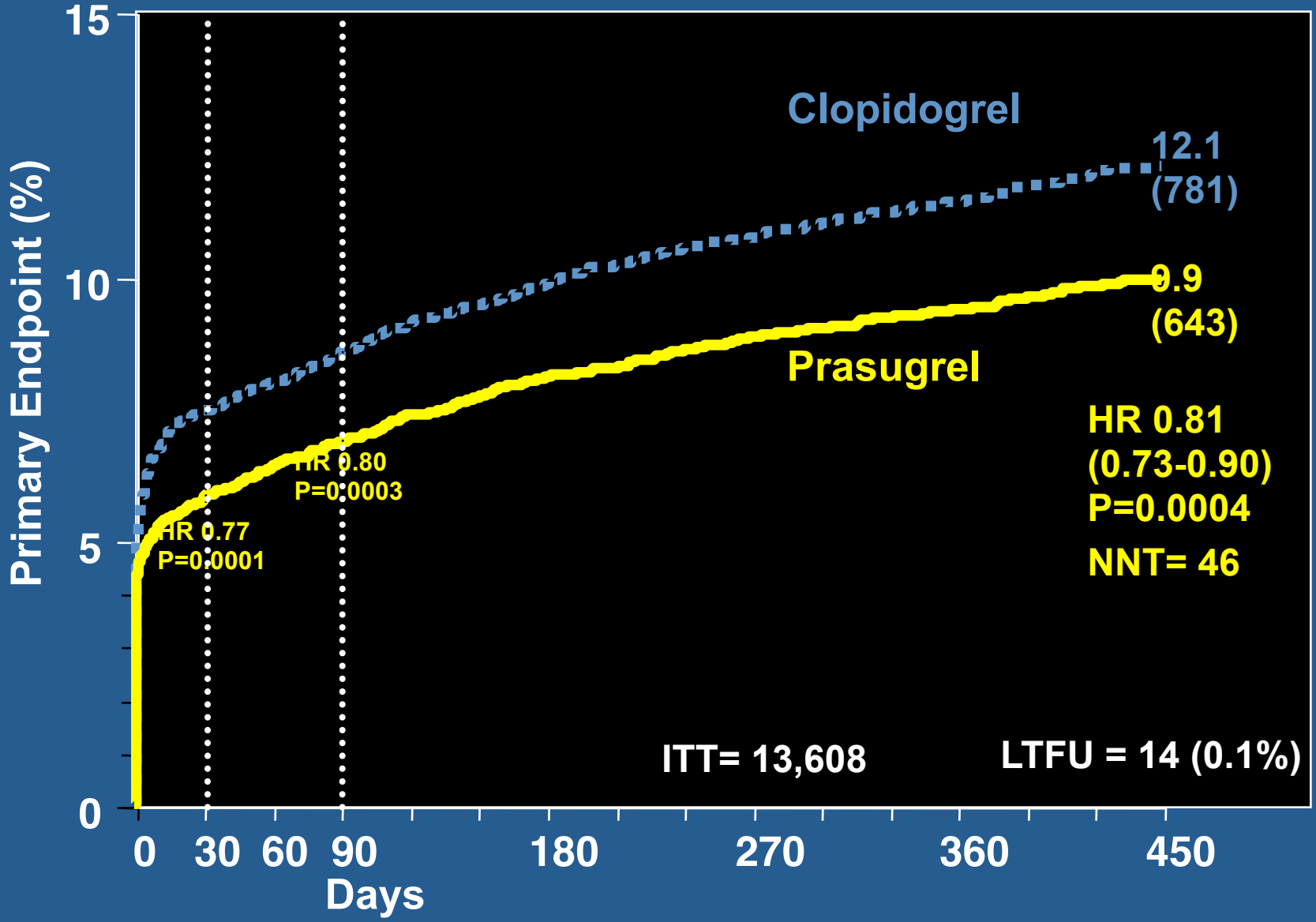






TRITON-TIMI 38

Primary Endpoint
CV Death,MI,Stroke



TRITON–TIMI 38

SCA (STEMI ou AI/NSTEMI) avec angioplastie programmée

Aspirine

N = 13 608

Double aveugle

Clopidogrel
DC **300** mg / DE **75 mg**

Prasugrel
DC **60 mg** / DE **10 mg**

Durée moyenne du traitement = 12 mois ; médiane = **14,5 mois**

Critère principal d'efficacité : Décès CV, IDM, AVC non fatals
Critère principal de tolérance : Saignements majeurs TIMI*

*** Non liés à un PAC**

Wiviott et al. *N Engl J Med* 2007;357:2001-2015

TRITON : 74% de patients ST–

Répartition des 13 608 patents de l'étude TRITON (avant randomisation)

N = 10 074 SCA ST–
(angor instable / NSTEMI)
à risque modéré à élevé

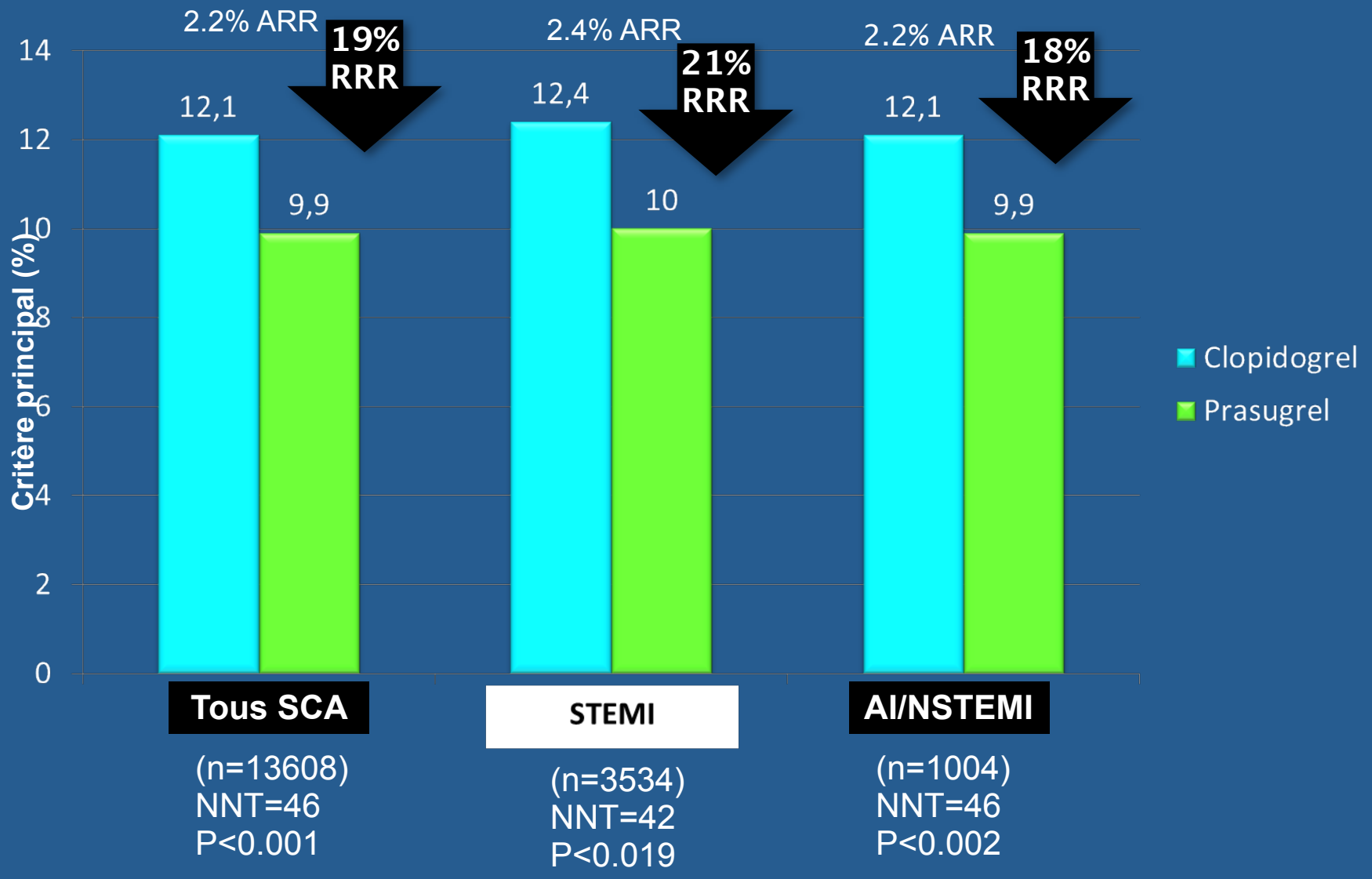
- Symptômes d'ischémie ≥ 10 minutes et survenant dans les 72 heures avant la randomisation
- Score de risque TIMI ≥ 3 et
- Déviation du segment ST ≥ 1 mm ou élévation des biomarqueurs cardiaques de nécrose

N = 3534 SCA ST+

- IDM avec sus-décalage du segment ST

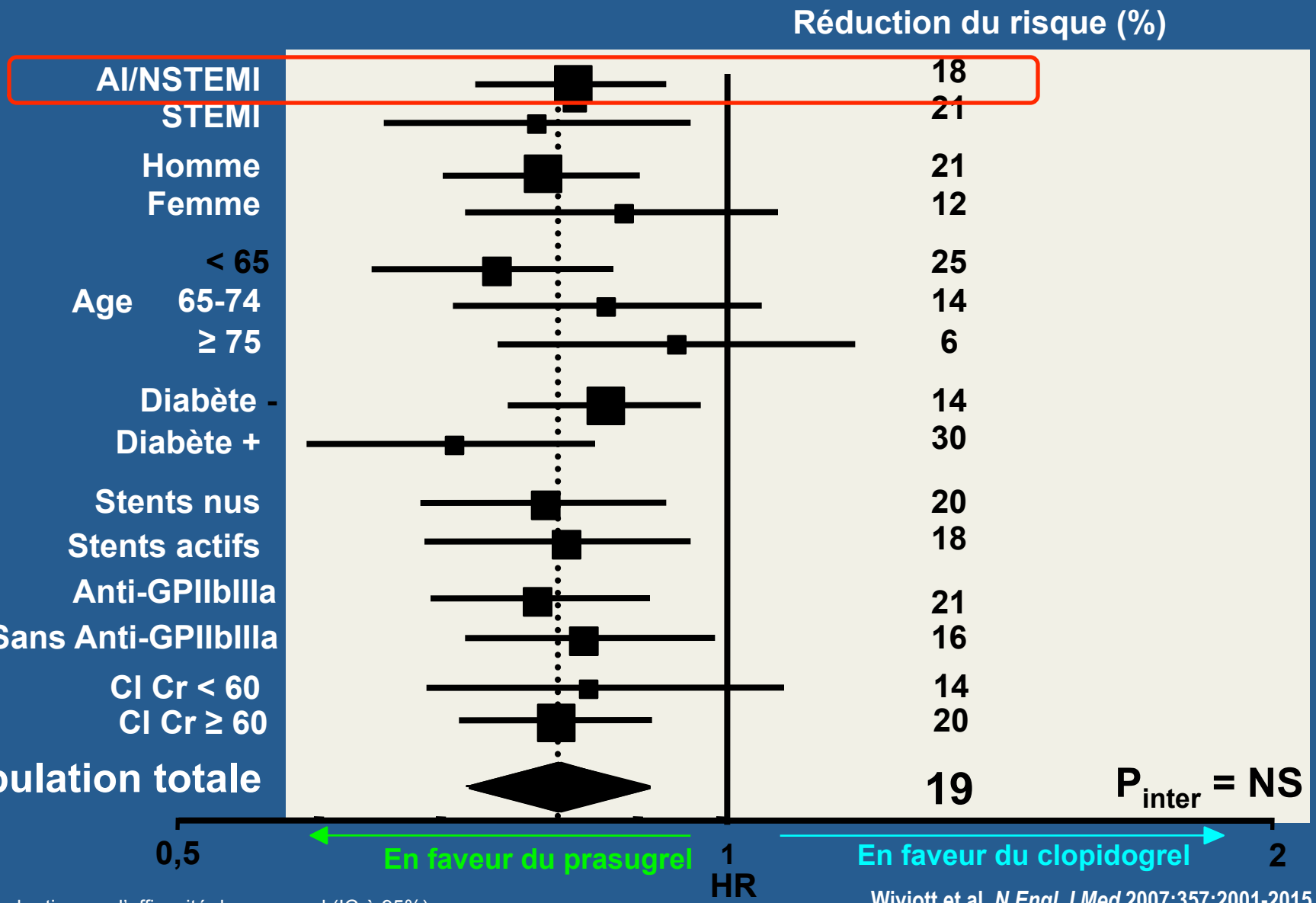
Wiviott et al. *Am Heart J* 2006;152:627-635

TRITON : critère principal



Wiviott et al. *N Engl J Med* 2007;357:2001-2015

TRITON-TIMI 38 : Critère principal d'efficacité
Principaux sous-groupes

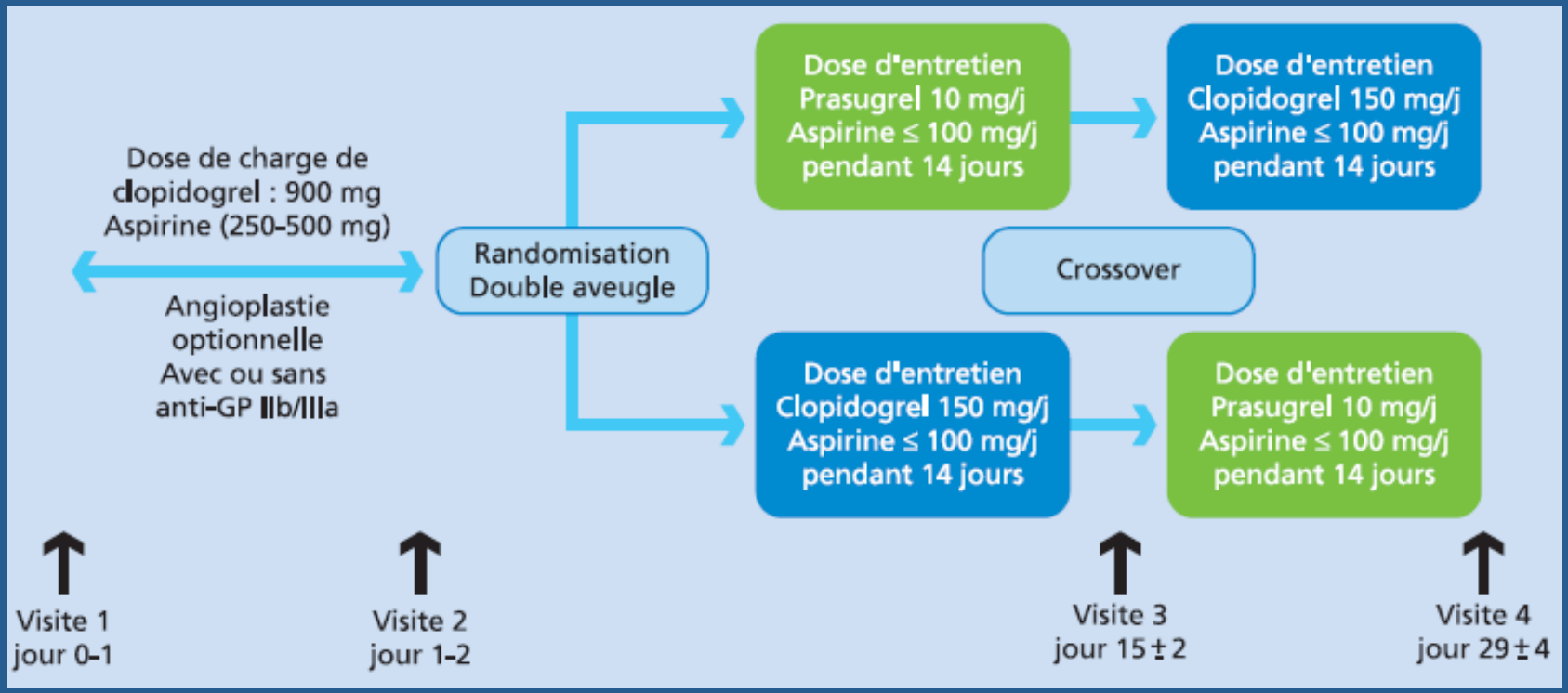


HR = Hazard ratio pour l'efficacité du prasugrel (IC à 95%)

Wiviott et al. *N Engl J Med* 2007;357:2001-2015

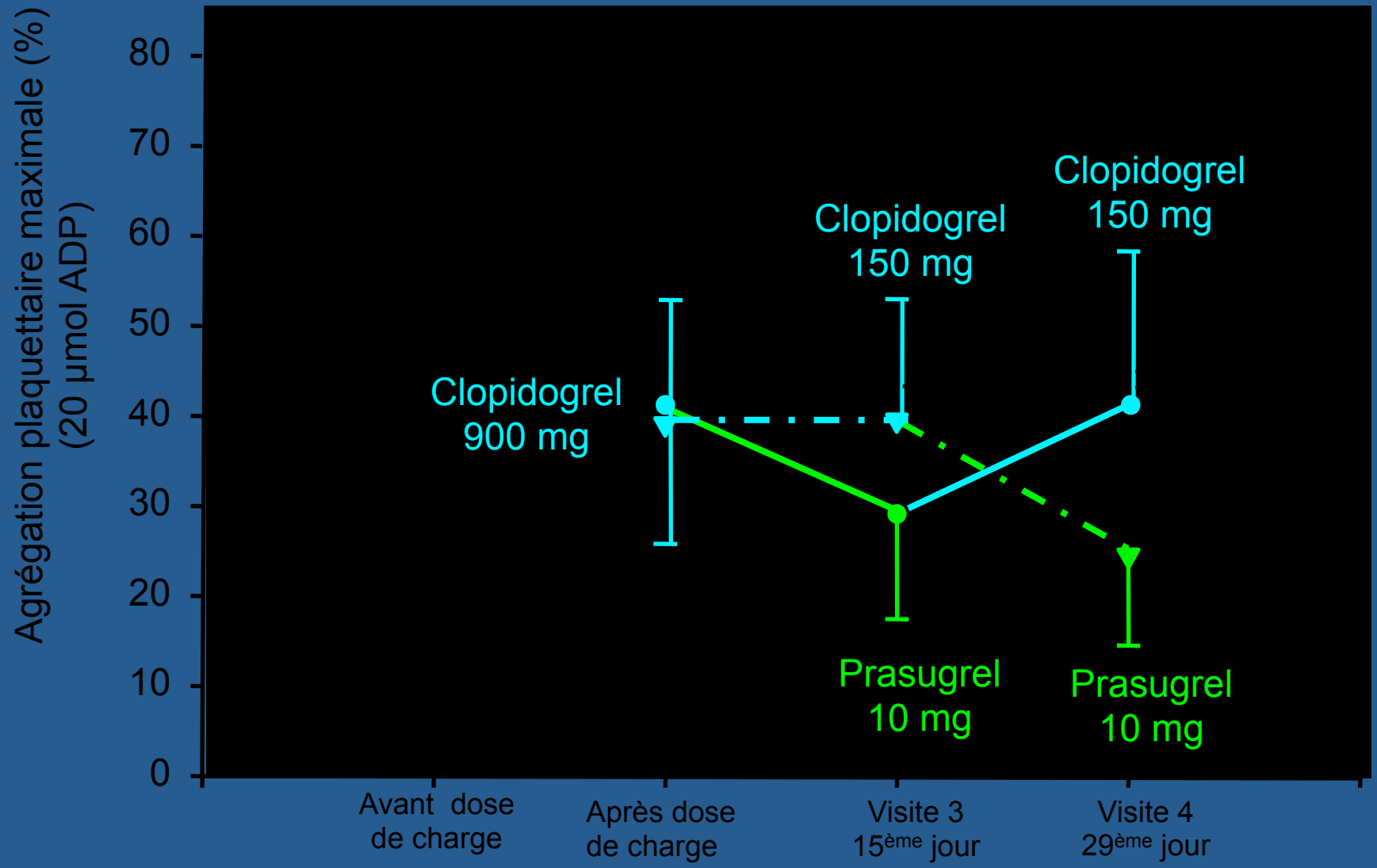
Design ACAPULCO SCA ST-

N= 56 patients SCA ST- dont 37 traités par ICP



Montalescot et al. *Thromb Haemost 2010; 103: 213–23*

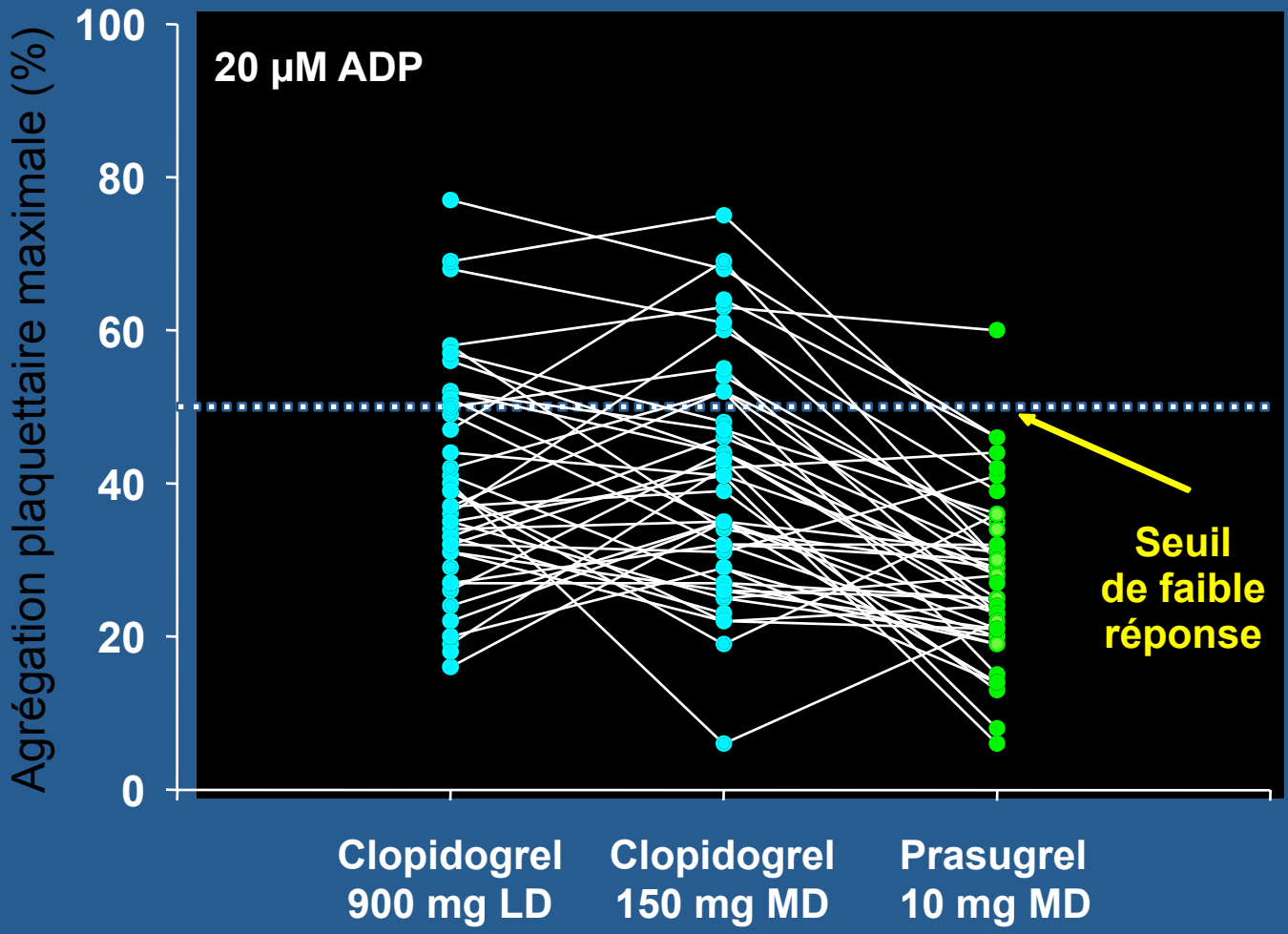
ACAPULCO



N= 56 patients SCA ST- dont 37 traités par ICP

Montalescot et al. *Thromb Haemost 2010; 103: 213–23*

ACAPULCO : Résistance



Montalescot et al. *Thromb Haemost 2010; 103: 213–23*

European Heart Journal
doi:10.1093/eurheartj/ehq277
ESC/EACTS GUIDELINES
Guidelines on myocardial revascularization

Reco ESC 2010 – SCA ST–

NSTE-ACS		Class	Level
Antiplatelet therapy			
	ASA	I	C
	Clopidogrel (with 600 mg loading dose as soon as possible)	I	C
	Clopidogrel (for 9–12 months after PCI)	I	B
	Prasugrel[d]	IIa	B
	Ticagrelor[d]	I	B
	+ GPIIb–IIIa antagonists (in patients with evidence of high intracoronary thrombus burden)		
	Abciximab (with DAPT)	I	B
	Tirofiban, Eptifibatide	IIa	B
	Upstream GPIIb–IIIa antagonists	III	B

[redacted] Excluding patients with a higher bleeding risk, prasugrel offers significant benefit over clopidogrel with respect to cardiovascular events without increasing severe bleeding. [redacted]

[redacted] In diabetic patients presenting with ACS, prasugrel confers a significant advantage over clopidogrel without increased bleeding.[247] Prasugrel should be used in patients who present with stent thrombosis whilst taking clopidogrel.

Reco ACC/AHA 2011 – SCA ST–

More shades of gray: AHA/ACC 2011 NSTEMI guidelines

NSTE-ACS

Recommendation		LOE
DAP when medium/h… strategy planned, at presentation		A
- Clopidogrel before PCI	I	B
- Clopidogrel at the time of PCI	I	A
- Prasugrel at the time of PCI	I	B
GP IIb/IIIa at the time of PCI	I	A

Prasugrel† 60 mg may be considered for administration promptly upon presentation in patients with UA/NSTEMI for whom PCI is planned, before definition of coronary anatomy if both the risk for bleeding is low and the need for CABG is considered unlikely (22,35,36). *(Level of Evidence: C)*

Wright RS, et al. Circulation 2011;123:DOI: 10.1161/CIR.0b013e31820f2f3e

Reco ACC/AHA 2011 – SCA ST–

- **Reco Classe I**

. Prasugrel† 60 mg should be given promptly and no later than 1 hour after PCI once coronary anatomy is defined and a decision is made to proceed with PCI (22). *(Level of Evidence: B)*

- **Reco Classe IIb**

. Prasugrel† 60 mg may be considered for administration promptly upon presentation in patients with UA/NSTEMI for whom PCI is planned, before definition of coronary anatomy if both the risk for bleeding is low and the need for CABG is considered unlikely (22,35,36). *(Level of Evidence: C)*

Développement clinique ST-

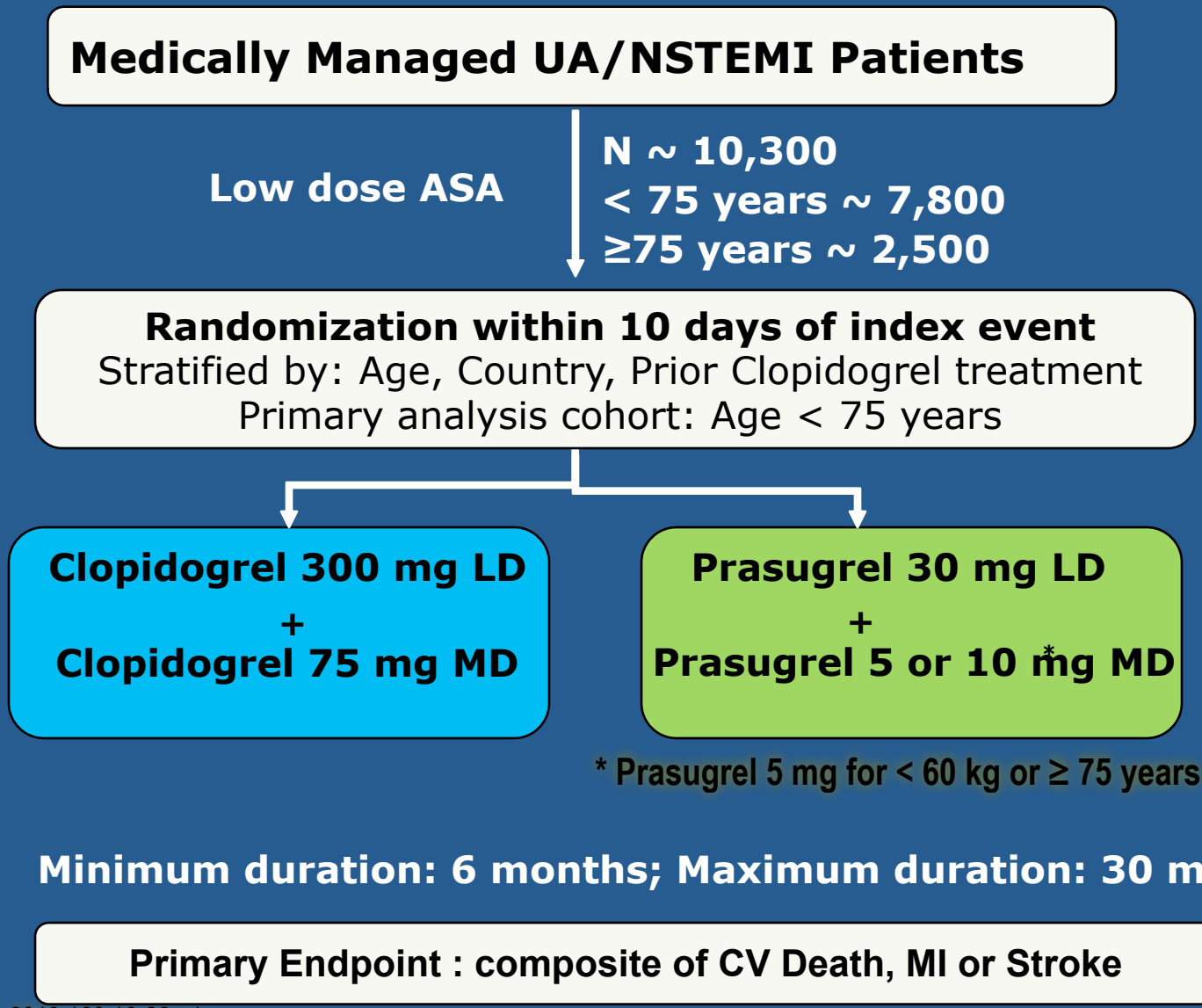
AI/NSTEMI

traités médicalement

NSTEMI & Angioplastie

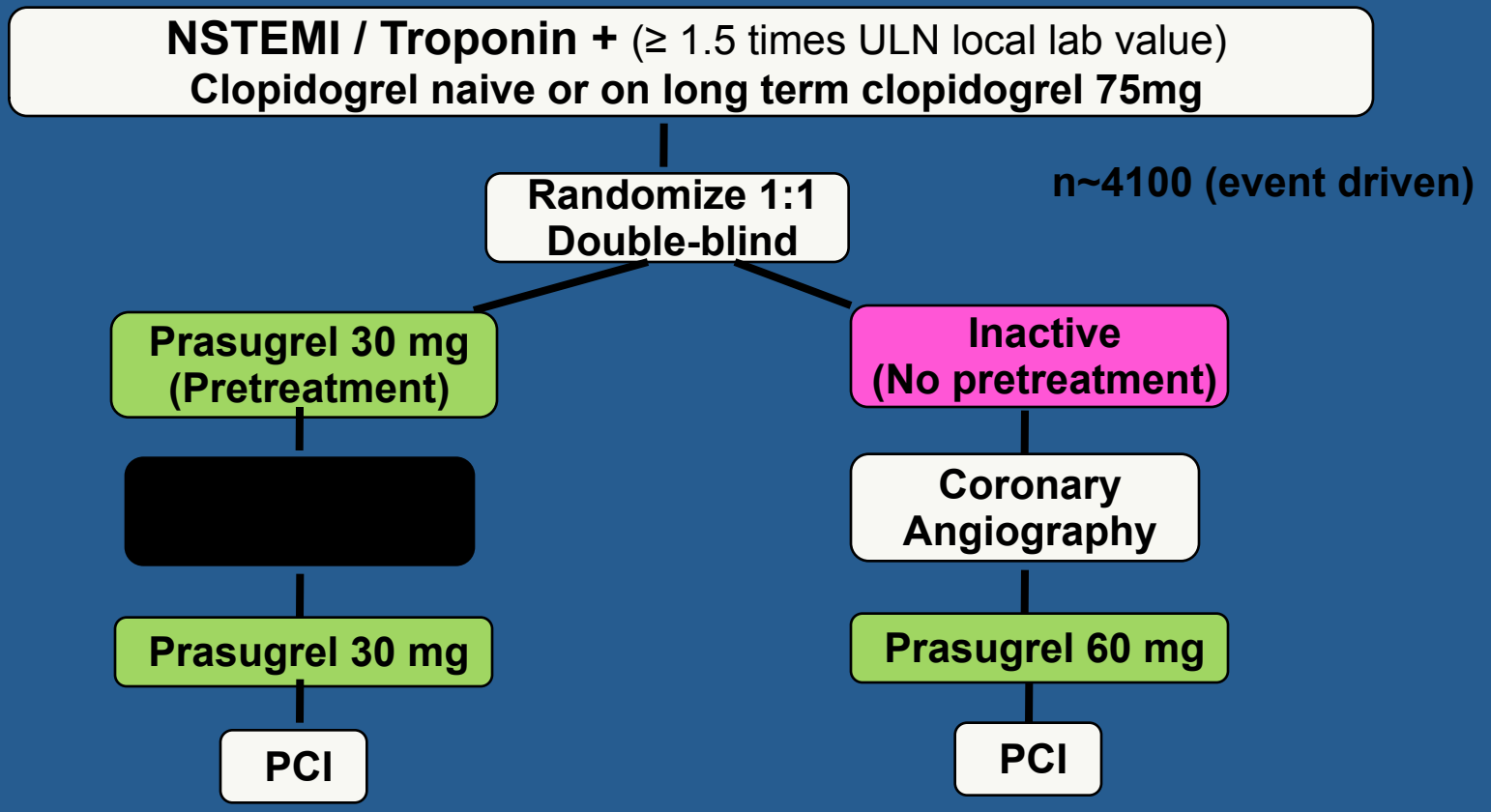
Pré-traitement

TRILOGY



Chin CT et al. *Am Heart J*. 2010;160:16-22.e1

ACCOAST Trial Design



Primary Endpoint

CV Death, MI, Stroke, Urgent Revascularization, GP IIb/IIIa inhibitor bailout at 7 days

TRITON : 74% de patients ST–

Répartition des 13 608 patents de l'étude TRITON (avant randomisation)

N = 10 074 SCA ST–
(angor instable / NSTEMI)
à risque modéré à élevé

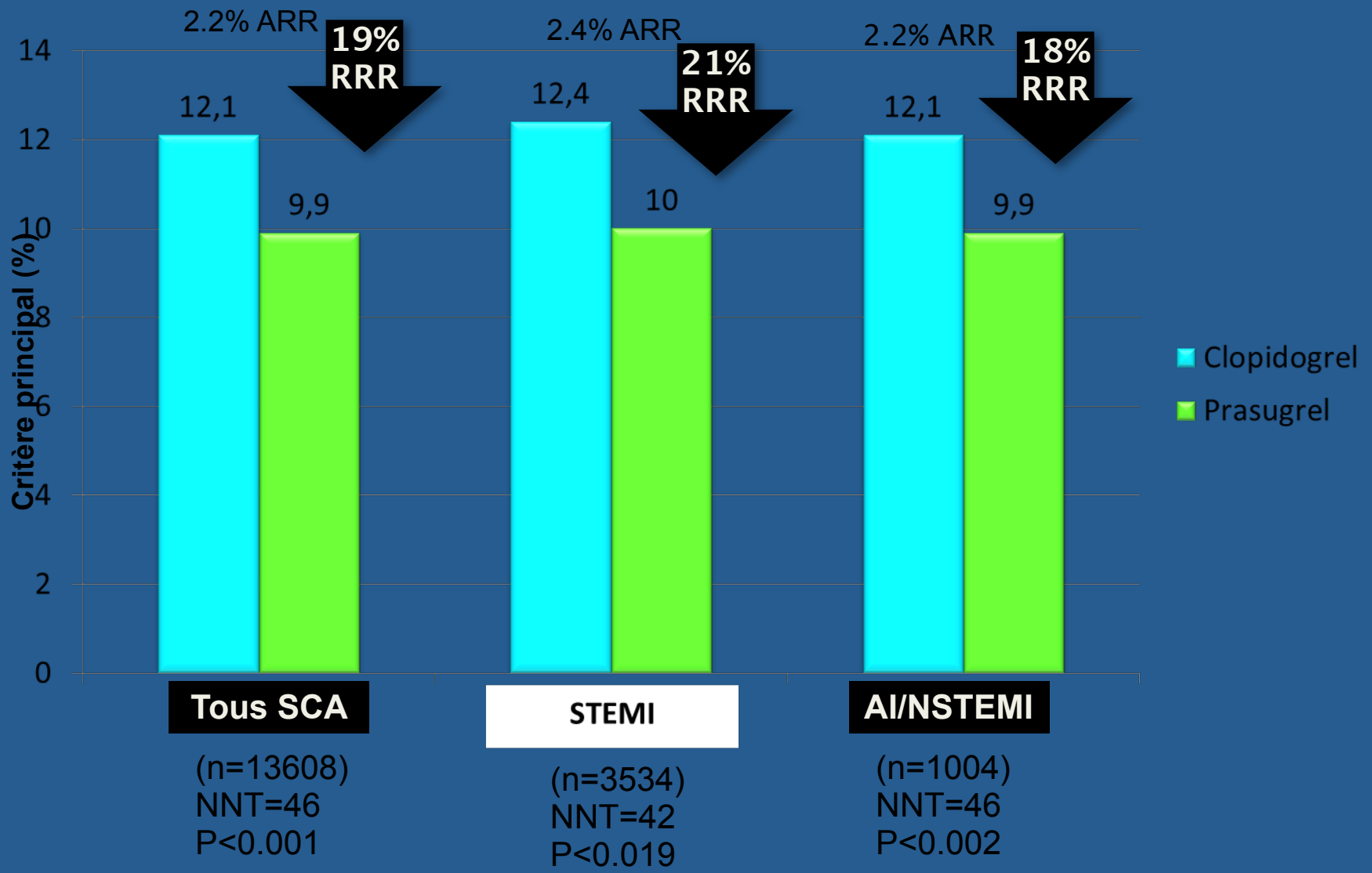
- Symptômes d'ischémie ≥ 10 minutes et survenant dans les 72 heures avant la randomisation
- Score de risque TIMI ≥ 3 et
- Déviation du segment ST ≥ 1 mm ou élévation des biomarqueurs cardiaques de nécrose

N = 3534 SCA ST+

- IDM avec sus-décalage du segment ST

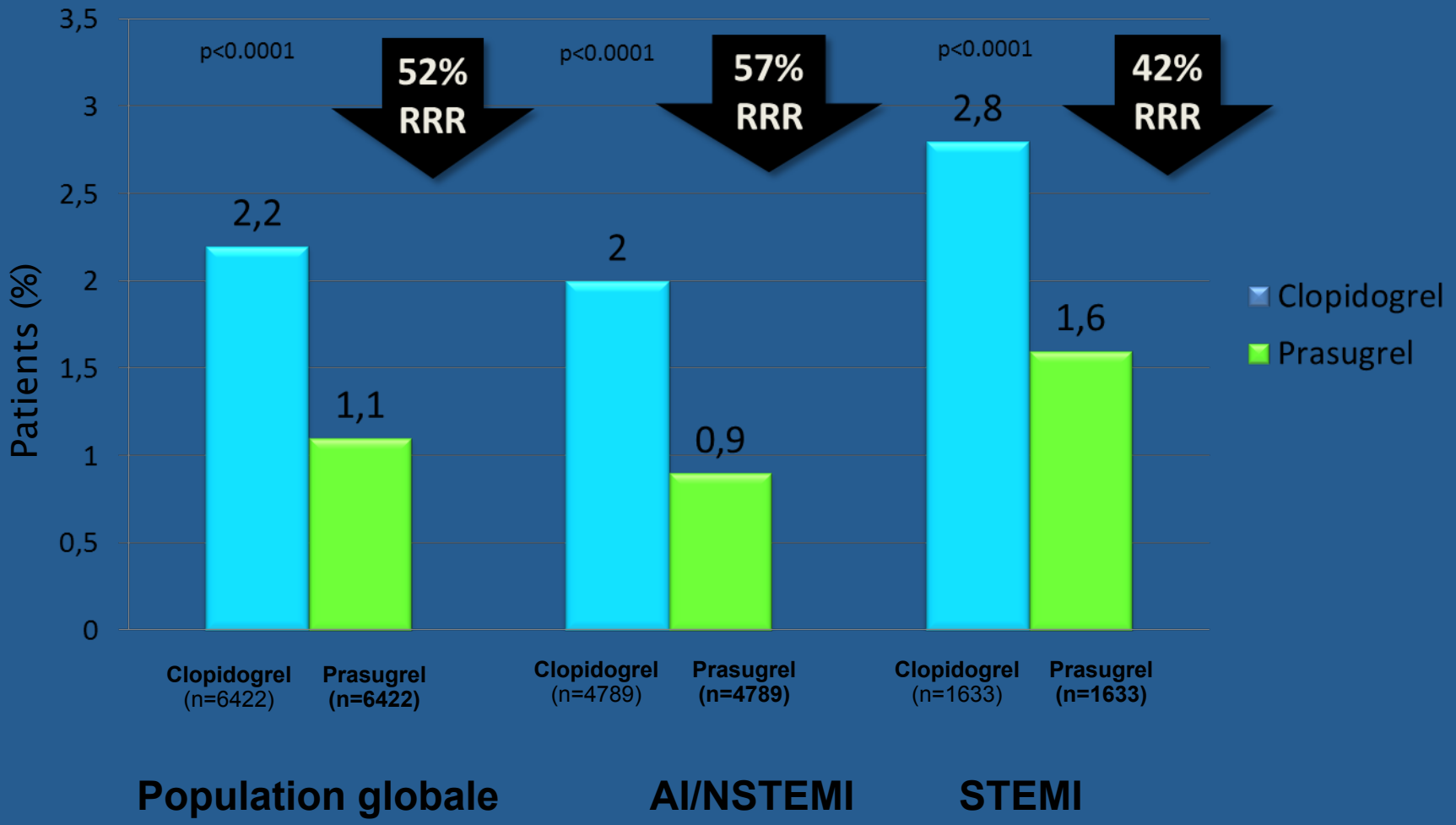
Wiviott et al. *Am Heart J* 2006;152:627-635

TRITON : critère principal



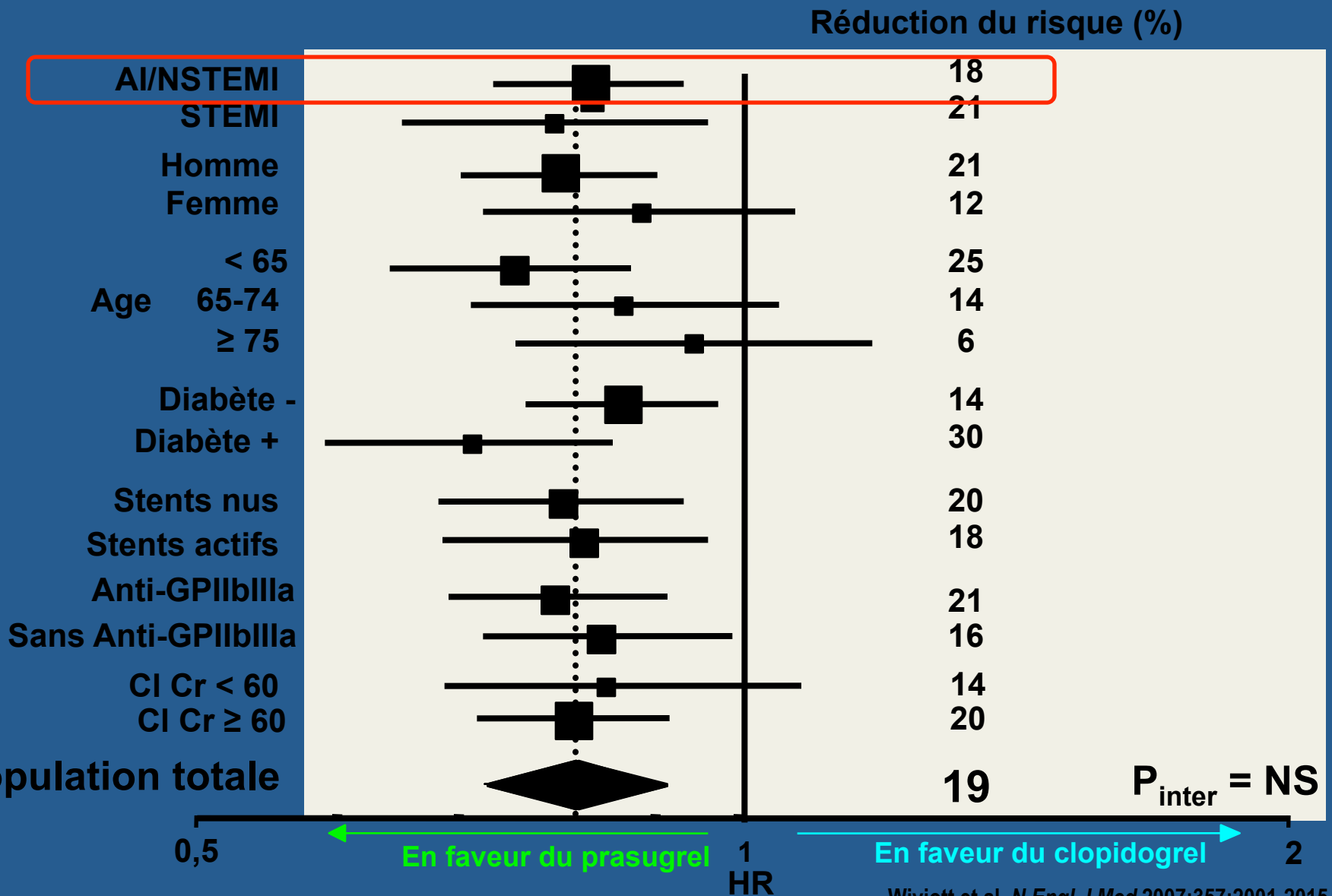
Wiviott et al. *N Engl J Med* 2007;357:2001-2015

TRITON : thromboses de



Wiviott et al. Lancet 2008;371:1353–63

TRITON-TIMI 38 : Critère principal d'efficacité
Principaux sous-groupes

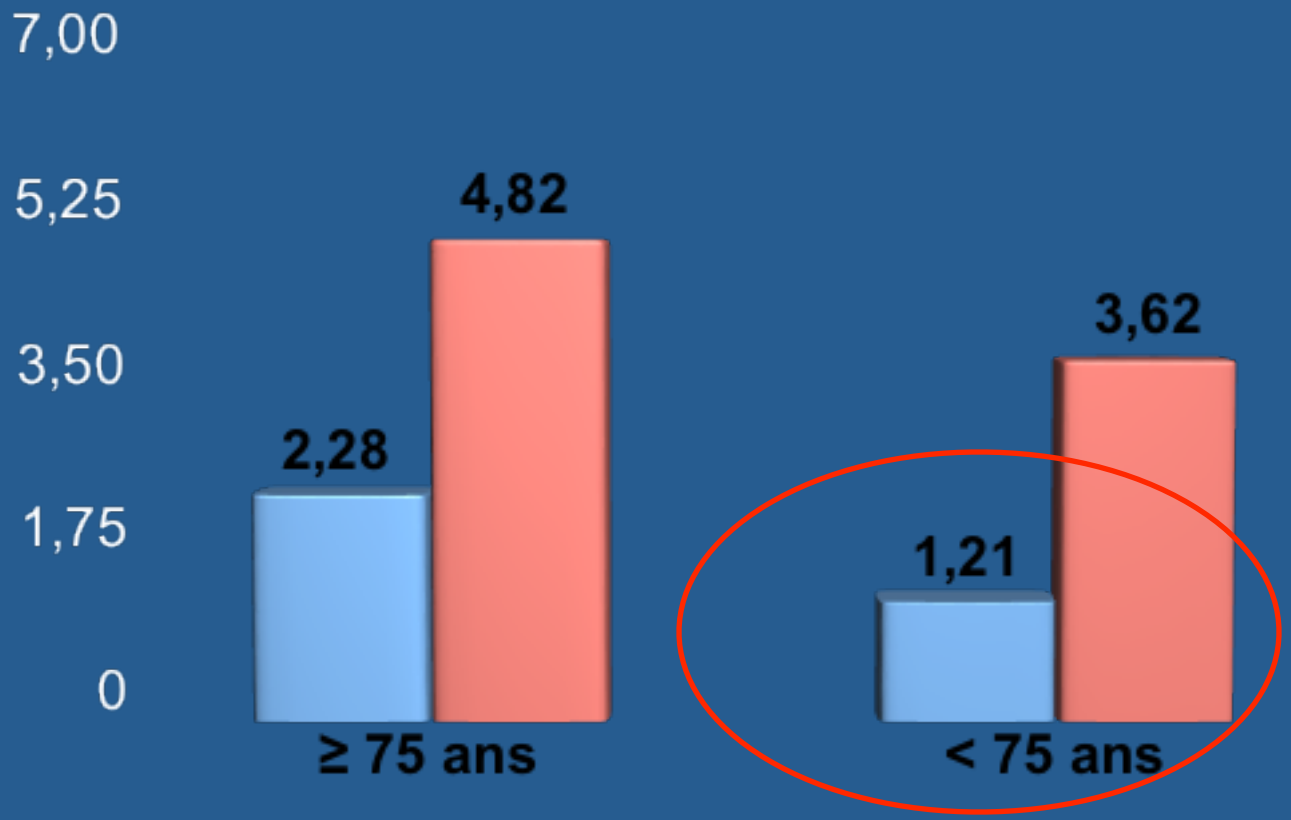


HR = Hazard ratio pour l'efficacité du prasugrel (IC à 95%)

Wiviott et al. *N Engl J Med* 2007;357:2001-2015

TRITON-TIMI 38 : Saignements majeurs TIMI*

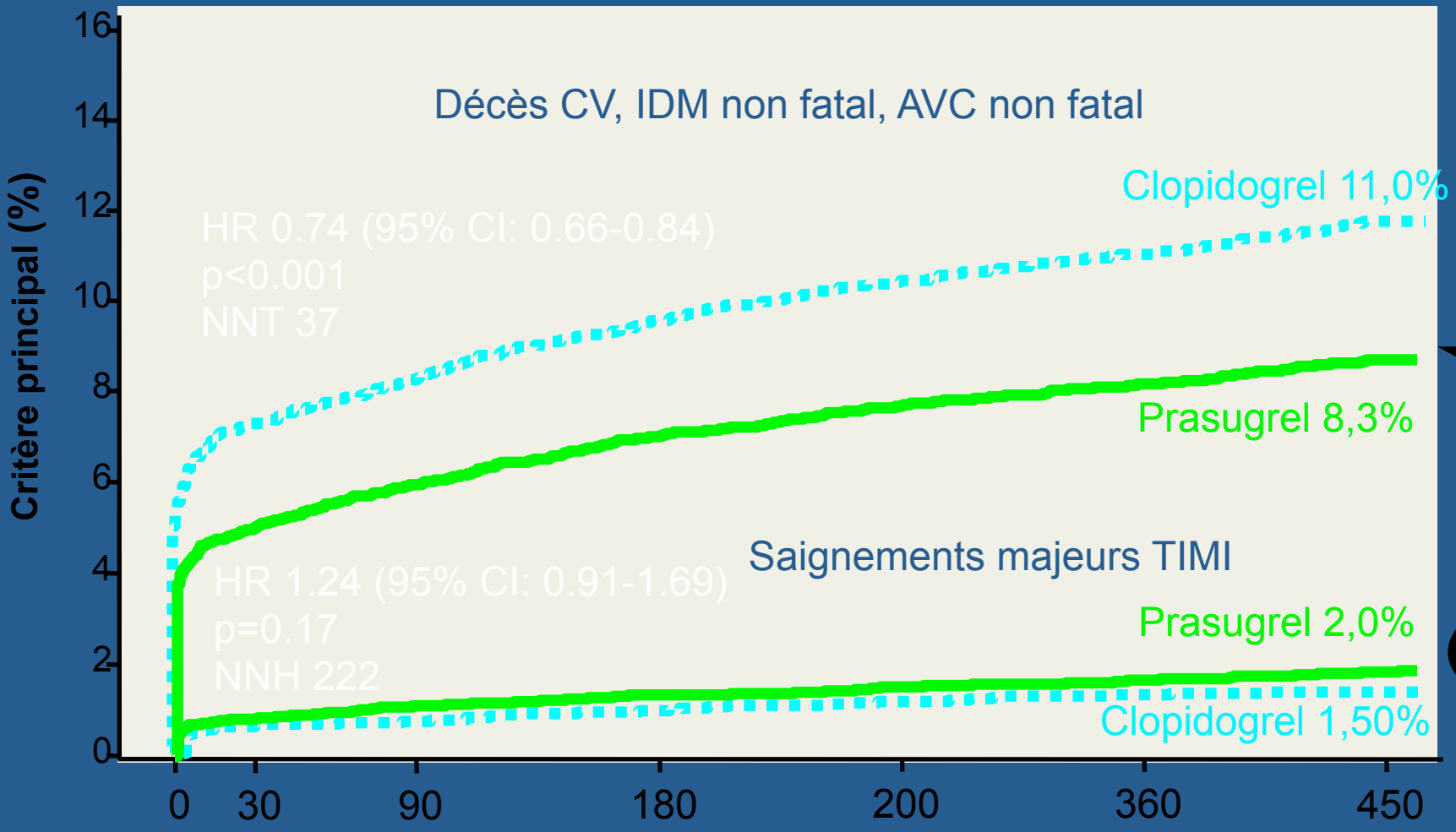
Impact de l'âge et du poids



*** Non liés à un PAC**

TRITON-TIMI 38 : cohorte optimale

Patients < 75 ans, ≥ 60 kg, sans antécédent AVC/AIT

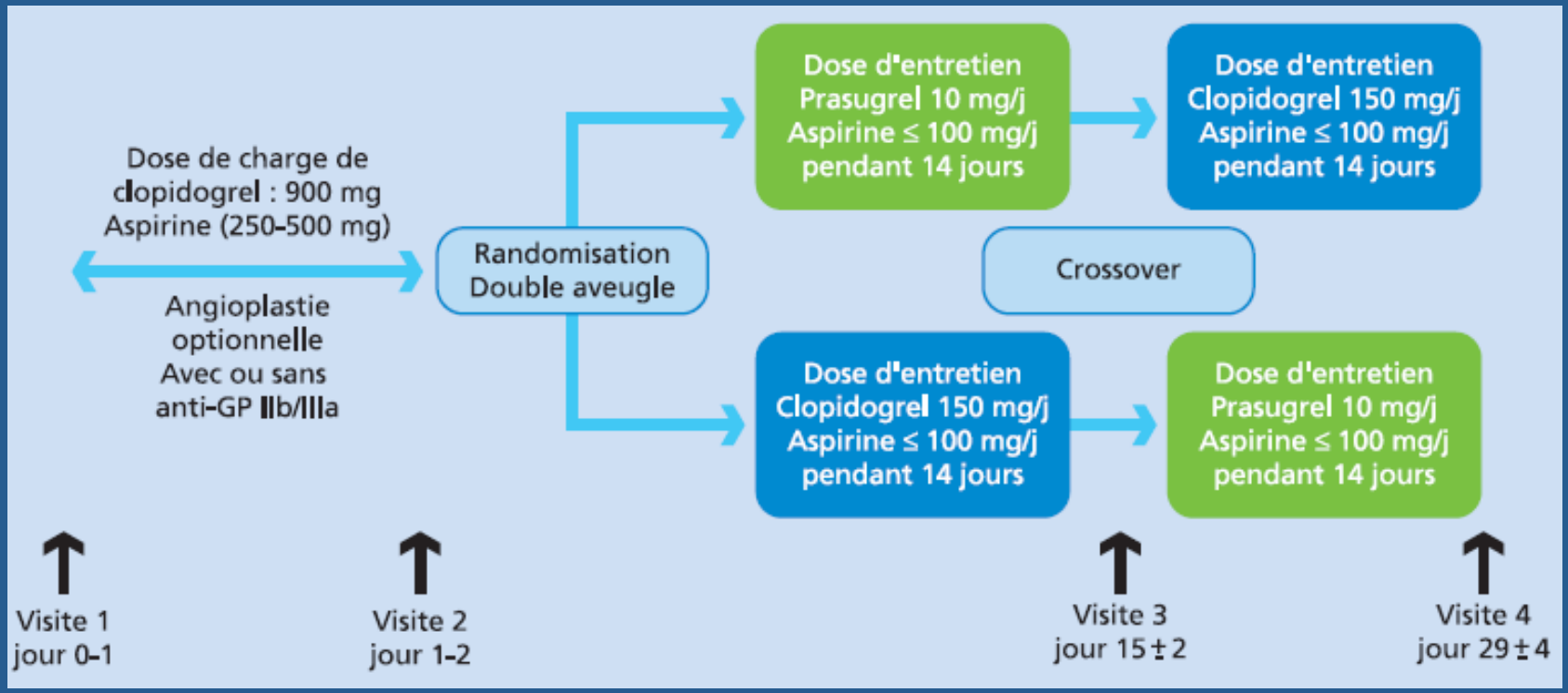


80% de la population de TRITON

Wiviott SD et al. *Circulation 2010;122:394-403*

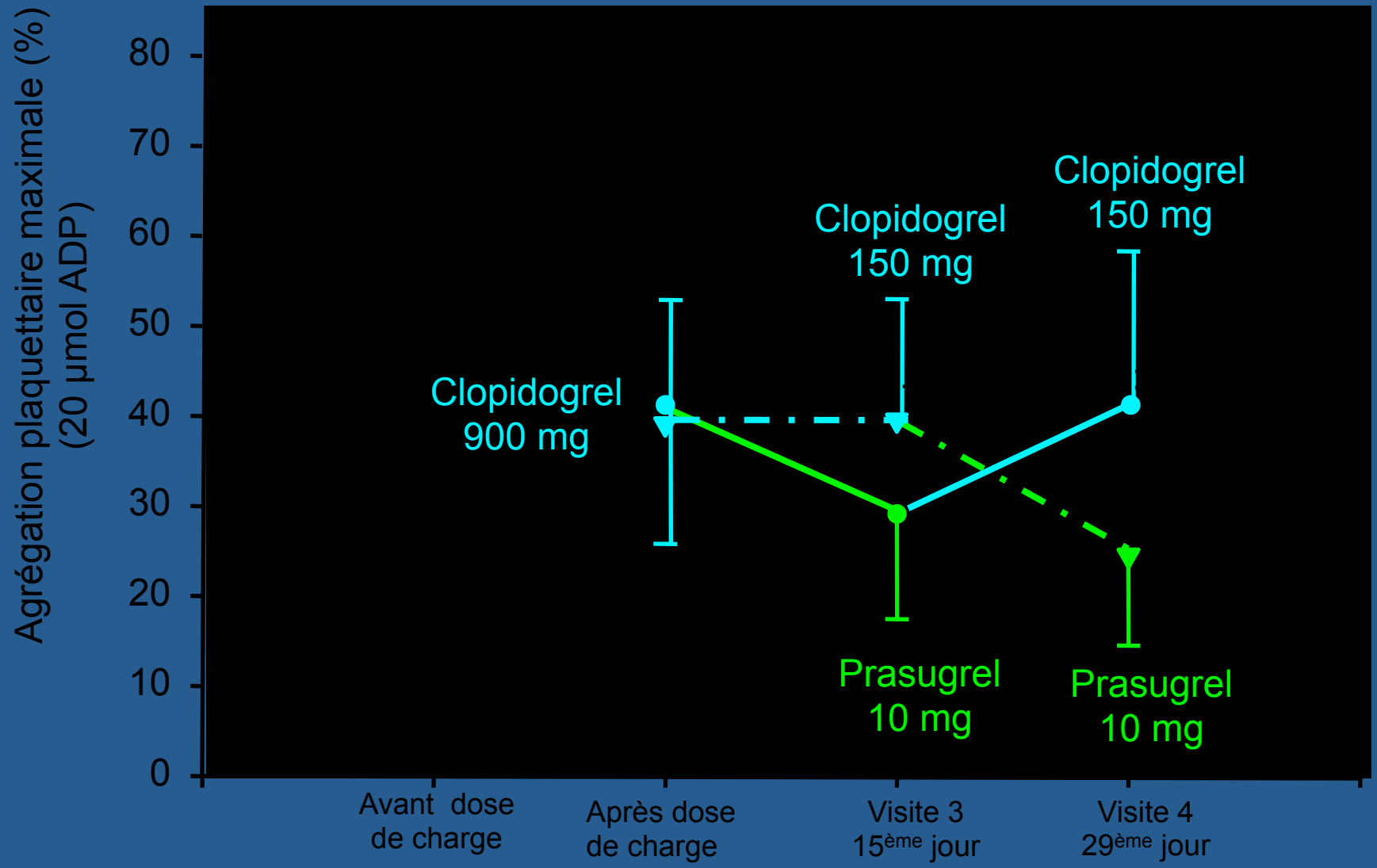
Design ACAPULCO SCA ST-

N= 56 patients SCA ST- dont 37 traités par ICP



Montalescot et al. *Thromb Haemost 2010; 103: 213–23*

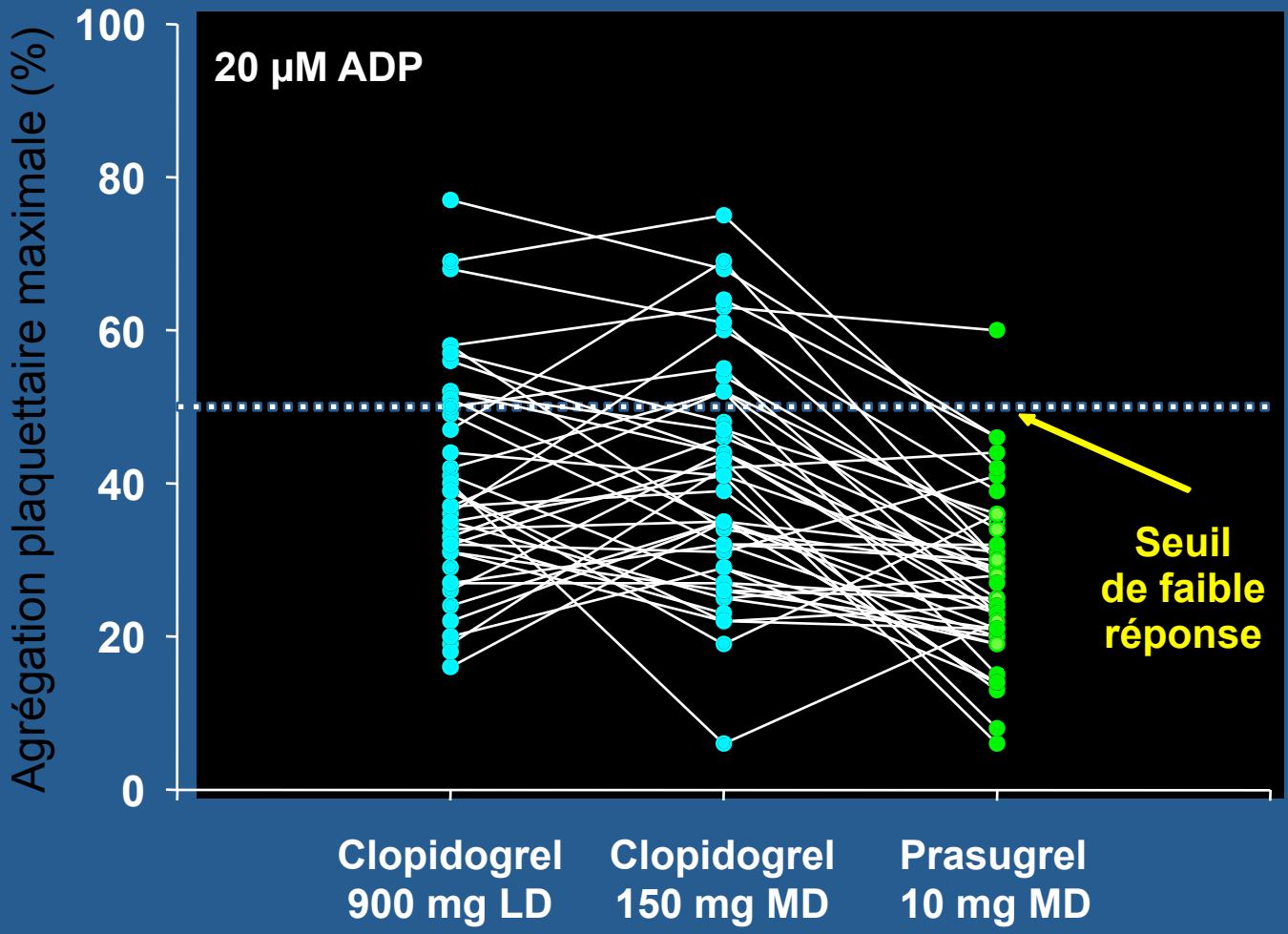
ACAPULCO



N= 56 patients SCA ST- dont 37 traités par ICP

Montalescot et al. *Thromb Haemost 2010; 103: 213–23*

ACAPULCO : Résistance



Montalescot et al. *Thromb Haemost 2010; 103: 213–23*

European Heart Journal
doi:10.1093/eurheartj/ehq277
ESC/EACTS GUIDELINES
Guidelines on myocardial revascularization

Reco ESC 2010 – SCA ST–

NSTE-ACS		Class	Level
Antiplatelet therapy			
	ASA	I	C
	Clopidogrel (with 600 mg loading dose as soon as possible)	I	C
	Clopidogrel (for 9–12 months after PCI)	I	B
	Prasugrel[d]	IIa	B
	Ticagrelor[d]	I	B
	+ GPIIb–IIIa antagonists (in patients with evidence of high intracoronary thrombus burden)		
	Abciximab (with DAPT)	I	B
	Tirofiban, Eptifibatide	IIa	B
	Upstream GPIIb–IIIa antagonists	III	B

[redacted] Excluding patients with a higher bleeding risk, prasugrel offers significant benefit over clopidogrel with respect to cardiovascular events without increasing severe bleeding. [redacted]

[redacted] In diabetic patients presenting with ACS, prasugrel confers a significant advantage over clopidogrel without increased bleeding.[247] Prasugrel should be used in patients who present with stent thrombosis whilst taking clopidogrel.

Reco ACC/AHA 2011 – SCA ST–

More shades of gray: AHA/ACC 2011 NSTEMI guidelines

NSTE-ACS

Recommendation		LOE
DAP when medium/h… strategy planned, at presentation		A
- Clopidogrel before PCI	I	B
- Clopidogrel at the time of PCI	I	A
- Prasugrel at the time of PCI	I	B
GP IIb/IIIa at the time of PCI	I	A

Prasugrel† 60 mg may be considered for administration promptly upon presentation in patients with UA/NSTEMI for whom PCI is planned, before definition of coronary anatomy if both the risk for bleeding is low and the need for CABG is considered unlikely (22,35,36). *(Level of Evidence: C)*

Wright RS, et al. Circulation 2011;123:DOI: 10.1161/CIR.0b013e31820f2f3e

Reco ACC/AHA 2011 – SCA ST–

- **Reco Classe I**

. Prasugrel† 60 mg should be given promptly and no later than 1 hour after PCI once coronary anatomy is defined and a decision is made to proceed with PCI (22). *(Level of Evidence: B)*

- **Reco Classe IIb**

. Prasugrel† 60 mg may be considered for administration promptly upon presentation in patients with UA/NSTEMI for whom PCI is planned, before definition of coronary anatomy if both the risk for bleeding is low and the need for CABG is considered unlikely (22,35,36). *(Level of Evidence: C)*

Développement clinique ST-

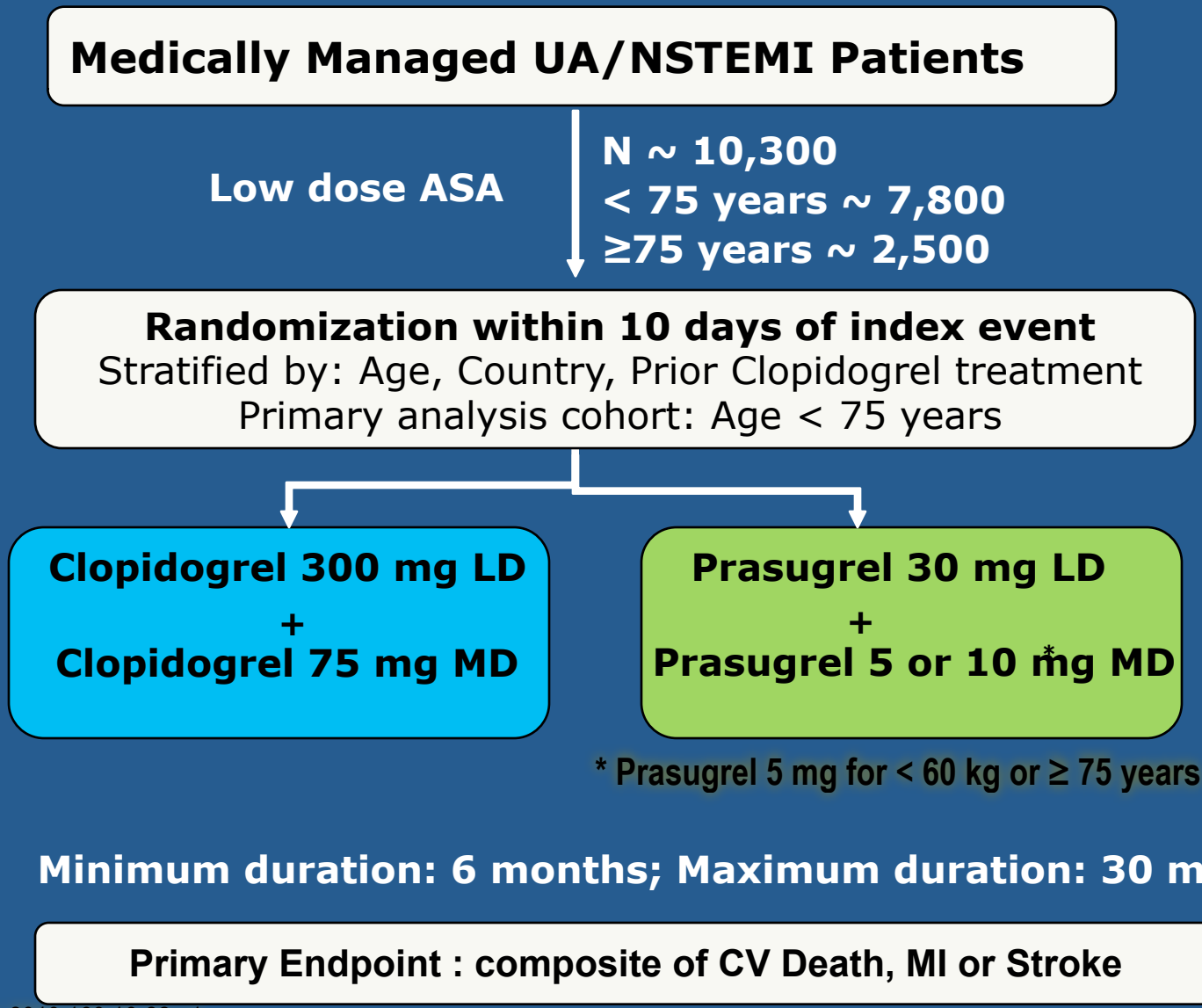
AI/NSTEMI

traités médicalement

NSTEMI & Angioplastie

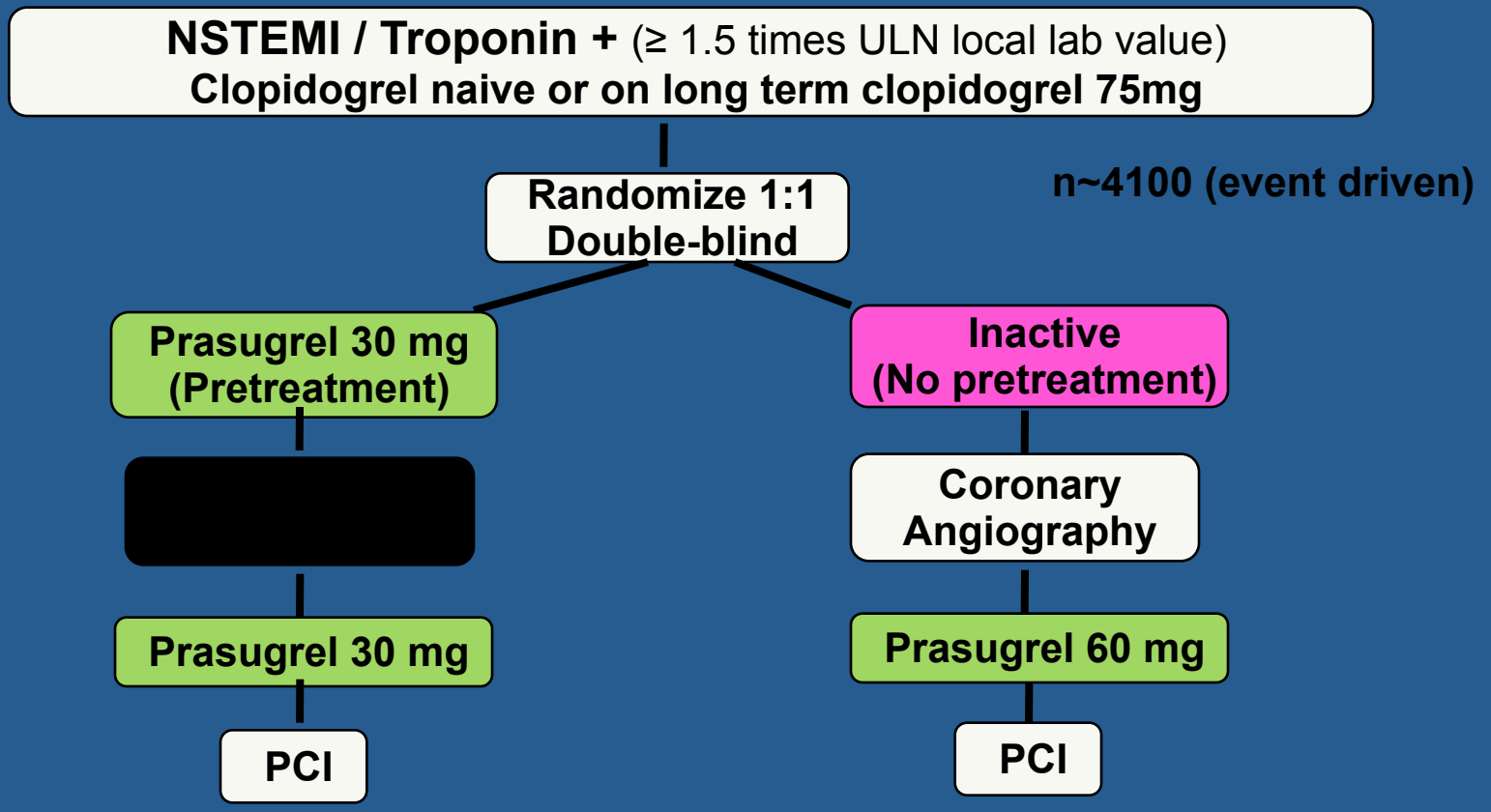
Pré-traitement

TRILOGY



Chin CT et al. *Am Heart J*. 2010;160:16-22.e1

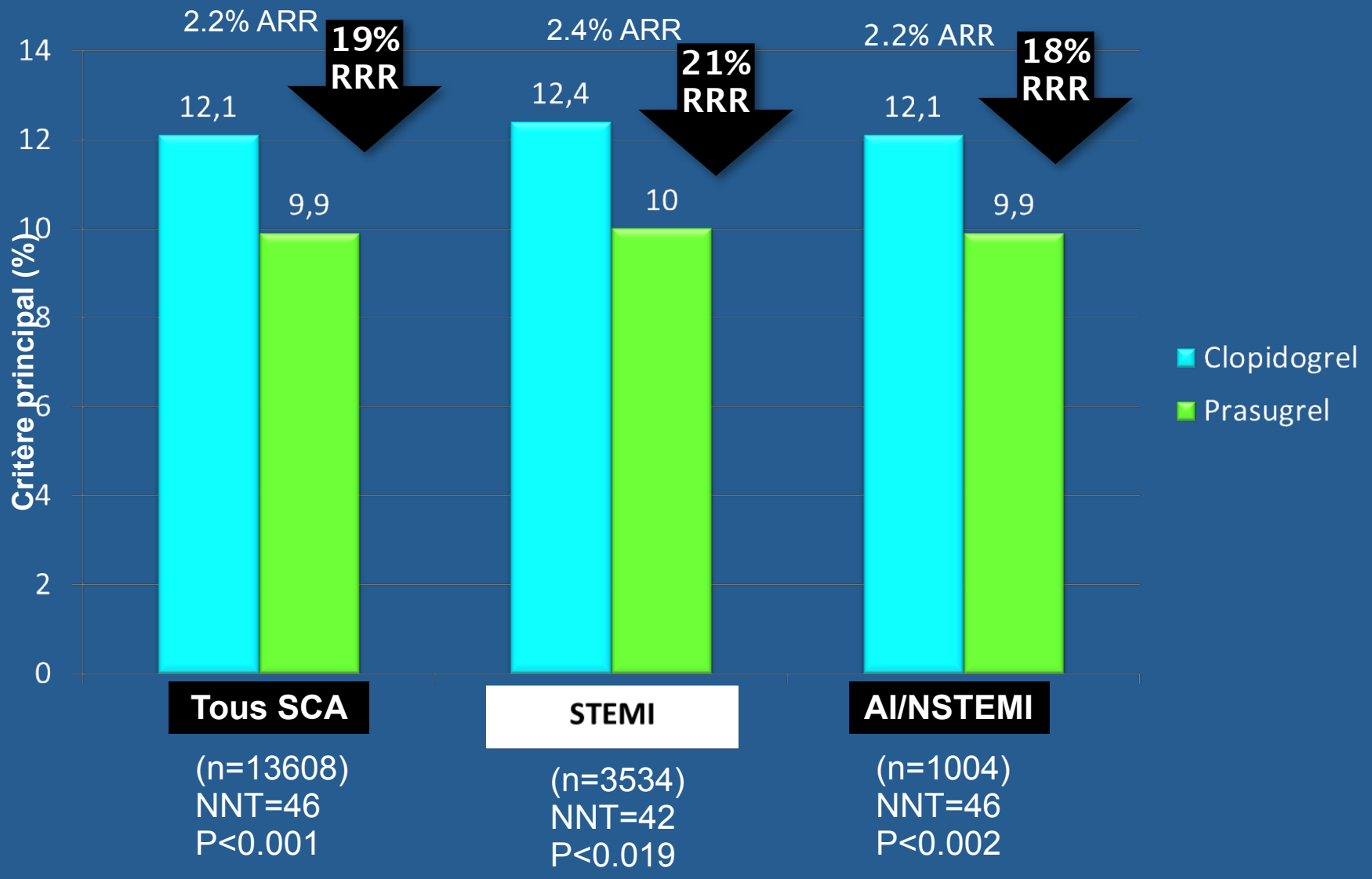
ACCOAST Trial Design



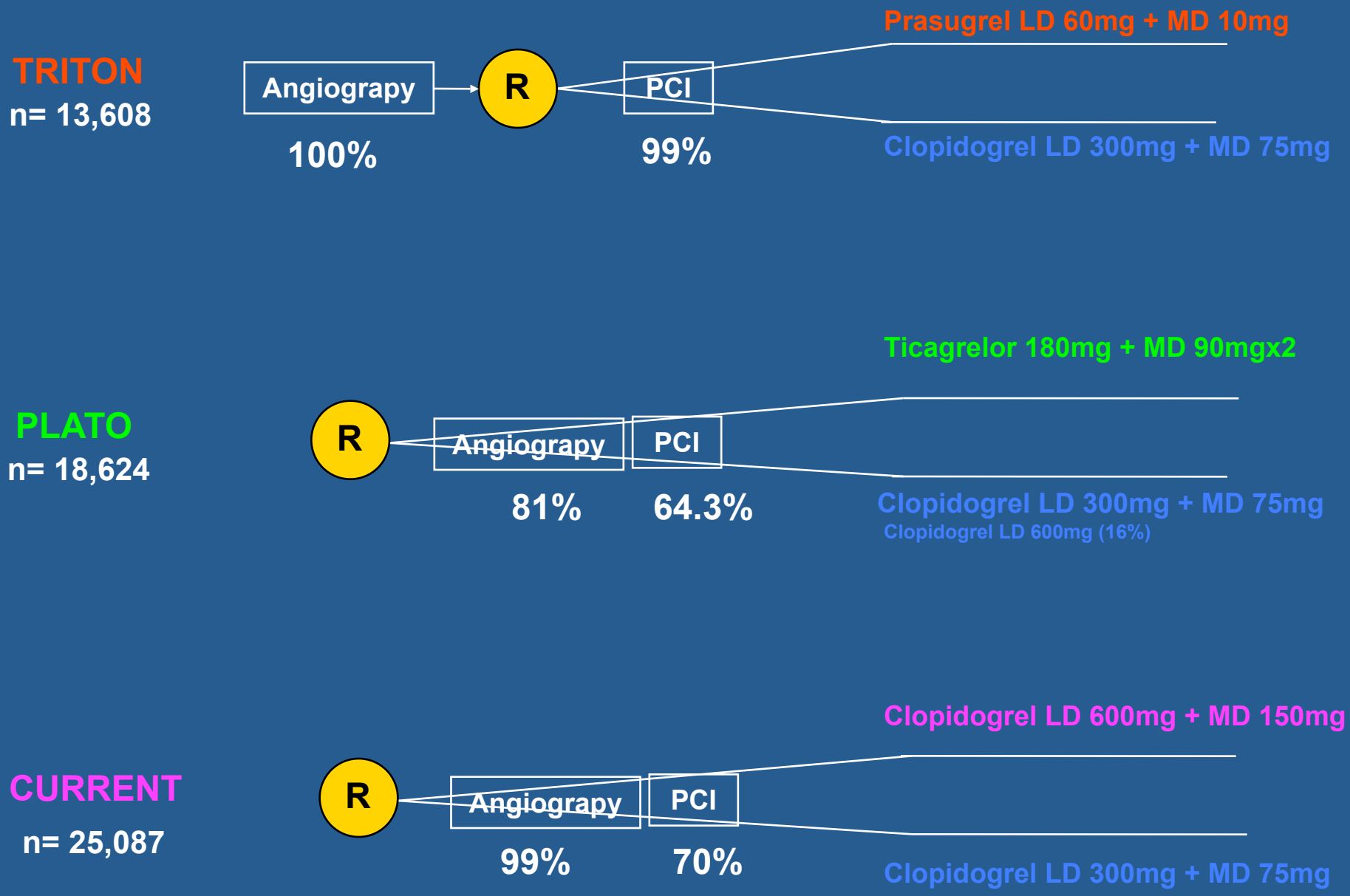
Primary Endpoint

CV Death, MI, Stroke, Urgent Revascularization, GP IIb/IIIa inhibitor bailout at 7 days

TRITON : critère principal



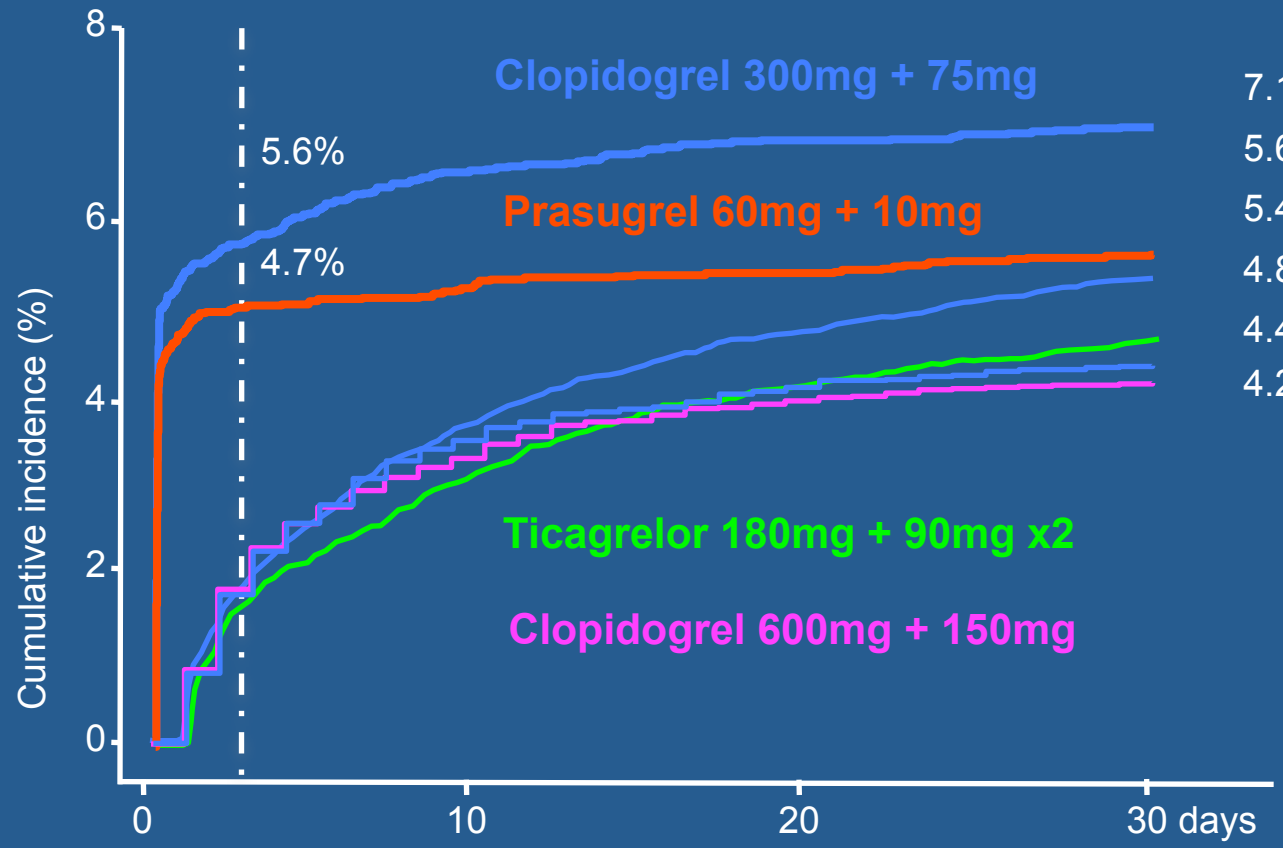
Wiviott et al. *N Engl J Med* 2007;357:2001-2015



With courtesy of JPh Collet

TRITON, PLATO and CURRENT

EARLY CV Death / MI / Stroke (30days)



7.1% (Clopidogrel 75 TRITON)
5.6% (Prasugrel TRITON)
5.4 % (Clopidogrel 75 PLATO)
4.8 % (Ticagrelor PLATO)
4.4 % (Clopidogrel 75 CURRENT)
4.2 % (Clopidogrel 150 CURRENT)

Clopidogrel 75mg vs Prasugrel 10mg	HR 0.77 (95% CI 0.67–0.88), p<0.001*	- 23%
Clopidogrel 75mg vs Ticagrelor 90mg x2	HR 0.88 (95% CI 0.77–0.95), p=0.045*	- 12%
Clopidogrel 75mg vs Clopidogrel 150mg	HR 0.96 (95% CI 0.85-1.08), p=0.47	- 4%

With courtesy of JPh Collet