Start
Antiplatelet

THE START-ANTIPLATELET REGISTER

A MULTICENTER OBSERVATIONAL PROSPECTIVE STUDY TO ASSESS THE RISK-BENEFITS OF ANTITHROMBOTIC THERAPY IN ACS PATIENTS

START–Register
SURVEY ON ANTICOAGULATED PATIENTS – REGISTER
Registro computerizzato per la raccolta dei dati di pazienti trattati cronicamente con anticoagulanti

Start
Antiplatelet

IL SETTING CLINICO

Perché un registro sugli antiaggreganti?

ACUTE CORONARY SYNDROME PATIENTS

DUAL ANTIPLATELET THERAPY

12 months

Recommendations for oral antiplatelet agents (1) NSTEMI 2011

Recommendations	Class	Level
Aspirin should be given to all patients without contraindications at an initial loading dose of 150-300 mg, and at a maintenance dose of 75-100 mg daily long-term regardless of treatment strategy.	I	A
A $P2Y_{12}$ inhibitor should be added to aspirin as soon as possible and maintained over 12 months, unless there are contraindications such as excessive risk of bleeding.	I	A
A proton pump inhibitor (preferably not omeprazole) in combination with DAPT is recommended in patients with a history of gastrointestinal haemorrhage or peptic ulcer, and appropriate for patients with multiple other risk factors *(H. elicobacter pylori* infection, age ≥ 65 years, concurrent use of anticoagulants or steroids).	I	A
Prolonged or permanent withdrawal of $P2Y_{12}$ inhibitors within 12 months after the index event is discouraged unless clinically indicated.	I	C
Ticagrelor (180 mg loading dose, 90 mg twice daily) is recommended for all patients at moderate-to-high risk of ischaemic events (e.g. elevated troponins), regardless of initial treatment strategy and including those pre-treated with clopidogrel (which should be discontinued when ticagrelor is commenced).	I	B
Prasugrel (60 mg loading dose, 10 mg daily dose) is recommended for $P2Y_{12}$-inhibitor-naïve patients (especially diabetics) in whom coronary anatomy is known and who are proceeding to PCI unless there is a high risk of life-threatening bleeding or other contraindications.	I	B

www.escardio.org/guidelines

European Heart Journal (2011) 32:2999–3054
doi:10.1093/eurheartj/ehr236

EUROPEAN SOCIETY OF CARDIOLOGY®

Recommendations for oral antiplatelet agents (2) NSTEMI 2011

Recommendations	Class	Level
Clopidogrel (300 mg loading dose, 75 mg daily dose) is recommended for patients who cannot receive ticagrelor or prasugrel.	I	A
A 600 mg loading dose of clopidogrel (or a supplementary 300 mg dose at PCI following an initial 300 mg loading dose) is recommended for patients scheduled for an invasive strategy when ticagrelor or prasugrel is not an option.	I	B
A higher maintenance dose of clopidogrel 150 mg daily should be considered for the first 7 days in patients managed with PCI and without increased risk of bleeding.	IIa	B
Increasing the maintenance dose of clopidogrel based on platelet function testing is not advised as routine, but may be considered in selected cases.	IIb	B
Genotyping and/or platelet function testing may be considered in selected cases when clopidogrel is used.	IIb	B
In patients pre-treated with $P2Y_{12}$ inhibitors who need to undergo non-emergent major surgery (including CABG), postponing surgery at least for 5 days after cessation of ticagrelor or clopidogrel, and 7 days for prasugrel, if clinically feasible and unless the patient is at high risk of ischaemic events should be considered.	IIa	C
Ticagrelor or clopidogrel should be considered to be (re-)started after CABG surgery as soon as considered safe.	IIa	B
The combination of aspirin with an NSAID (selective COX-2 inhibitors and non-selective NSAID) is not recommended.	III	C

www.escardio.org/guidelines

European Heart Journal (2011) 32:2999–3054
doi:10.1093/eurheartj/ehr236

EUROPEAN SOCIETY OF CARDIOLOGY®

ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation

2012

Recommendations	Class[a]	Level[b]	Ref[c]
Antiplatelet therapy			
Aspirin oral or i.v. (if unable to swallow) is recommended	I	B	133, 134
An ADP-receptor blocker is recommended in addition to aspirin. Options are:	I	A	135, 136
• Prasugrel in clopidogrel-naive patients, if no history of prior stroke/TIA, age <75 years.	I	B	109
• Ticagrelor.	I	B	110
• Clopidogrel, preferably when prasugrel or ticagrelor are either not available or contraindicated.	I	C	-
GP IIb/IIIa inhibitors should be considered for bailout therapy if there is angiographic evidence of massive thrombus, slow or no-reflow or a thrombotic complication.	IIa	C	-
Routine use of a GP IIb/IIIa inhibitor as an adjunct to primary PCI performed with unfractionated heparin may be considered in patients without contraindications.	IIb	B	137–141
Upstream use of a GP IIb/IIIa inhibitor (vs. in-lab use) may be considered in high-risk patients undergoing transfer for primary PCI.	IIb	B	127, 128, 137, 142
Options for GP IIb/IIIa inhibitors are (with LoE for each agent):			
• Abciximab		A	137
• Eptifibatide (with double bolus)		B	138, 139
• Tirofiban (with a high bolus dose)		B	140, 141
Anticoagulants			
An injectable anticoagulant must be used in primary PCI.	I	C	-
Bivalirudin (with use of GP IIb/IIIa blocker restricted to bailout) is recommended over unfractionated heparin and a GP IIb/IIIa blocker.	I	B	124
Enoxaparin (with or without routine GP IIb/IIIa blocker) may be preferred over unfractionated heparin.	IIb	B	122
Unfractionated heparin with or without routine GP IIb/IIIa blocker must be used in patients not receiving bivalirudin or enoxaparin.	I	C	1
Fondaparinux is not recommended for primary PCI.	III	B	118
The use of fibrinolysis before planned primary PCI is not recommended.	III	A	127, 143

….Did we need NEW antiplatelets?...

CLOPIDOGREL:

A MODEL FOR PERSONALIZED MEDICINE

High on-treatment platelet reactivity

Impact of Platelet Reactivity After Clopidogrel Administration on Drug-Eluting Stent Thrombosis

Buonamici P, JACC 2007 n=804

RECLOSE TRIAL

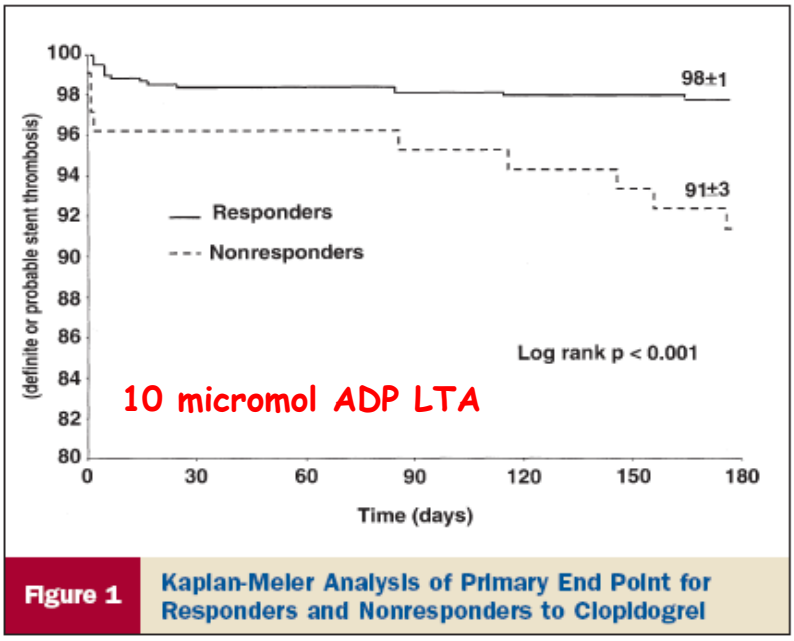

Figure 1 Kaplan-Meier Analysis of Primary End Point for Responders and Nonresponders to Clopidogrel

High Residual Platelet Reactivity After Clopidogrel Loading and Long-term Cardiovascular Events Among Patients With Acute Coronary Syndromes Undergoing PCI

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Angela Migliorini, MD
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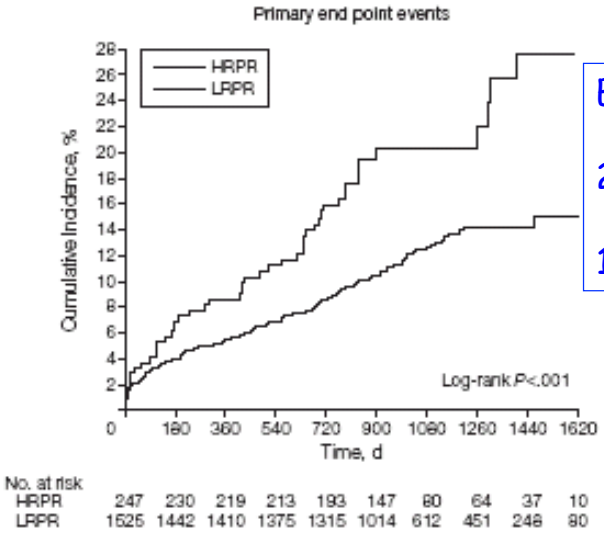
Piergiovanni Buonamici, MD
Gian Franco Gensini, MD
Rosanna Abbate, MD
David Antoniucci, MD

Prospective observational single center cohort study

1789 pts
14% of HPR by ADP
2 years of follow-up

JAMA 2011;306(11):1215-1223

Kaplan Meier survival curves for primary end point events



Estimate risk

27.5% (18.3-36.7) in HRPR group

14.5% (12.1-16.9) in LRPR group

JAMA 2011;306(11):1215-1223

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JACC White Paper

Consensus and Future Directions on the Definition of High On-Treatment Platelet Reactivity to Adenosine Diphosphate

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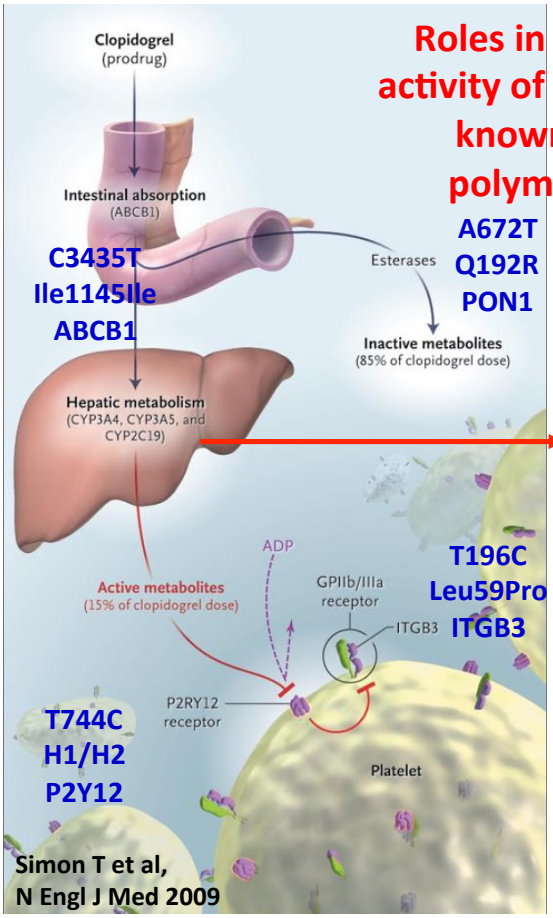
for the Working Group on High On-Treatment Platelet Reactivity



Roles in clopidogrel activity of proteins with known genetic polymorphisms

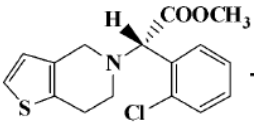
C3435T
Ile1145Ile
ABCB1

A672T
Q192R
PON1

T196C
Leu59Pro
ITGB3

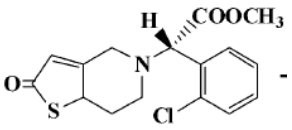
T744C
H1/H2
P2Y12

Simon T et al,
N Engl J Med 2009



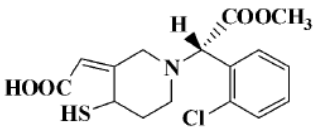
Clopidogrel

CYP1A2 (35.8%)
CYP2B6 (19.4%)
CYP2C19 (44.9%)



2-oxo-clopidogrel

CYP2B6 (32.9%)
CYP2C9 (6.8%)
CYP2C19 (20.6%)
CYP3A4 (39.8%)



pharmacologically active metabolite of clopidogrel

Kazui M et al,
Drug Metab Dispos 2009

Reduced-Function *CYP2C19* Genotype and Risk of Adverse Clinical Outcomes Among Patients Treated With Clopidogrel Predominantly for PCI

A Meta-analysis

Jessica L. Mega, MD, MPH
Tabassome Simon, MD, PhD
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Kevin Bliden, BS
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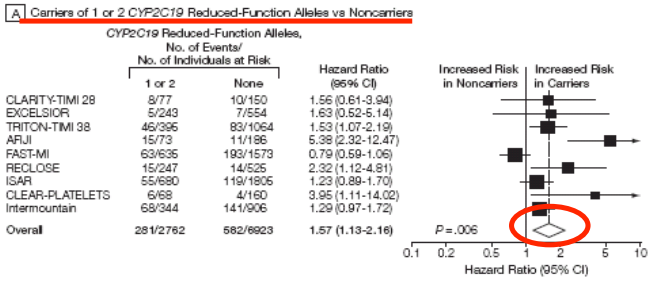

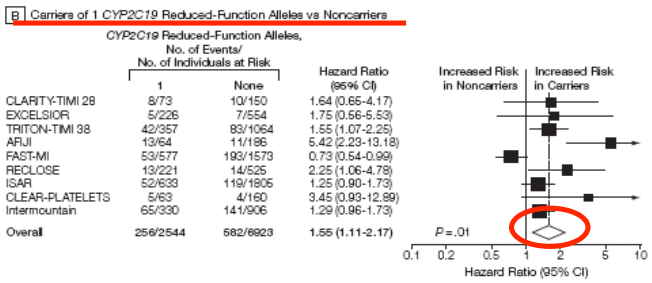

Cardiovascular death, MI or ischemic stroke

JAMA 2010

Reduced-Function *CYP2C19* Genotype and Risk of Adverse Clinical Outcomes Among Patients Treated With Clopidogrel Predominantly for PCI

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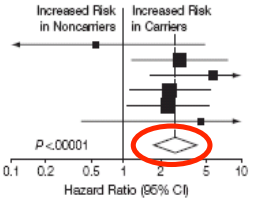
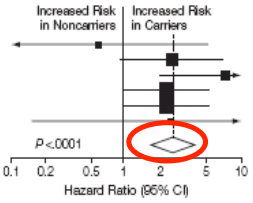
A Carriers of 1 or 2 *CYP2C19* Reduced-Function Alleles vs Noncarriers

	CYP2C19 Reduced-Function Alleles, No. of Events/ No. of Individuals at Risk		Hazard Ratio (95% CI)
	1 or 2	None	
EXCELSIOR	1/243	4/554	0.57 (0.06-5.09)
TRITON-TIMI 38	9/375	8/1014	3.09 (1.19-8.00)
ARIJI	8/61	4/162	6.04 (1.75-20.82)
RECLOSE	13/247	11/525	2.55 (1.14-5.70)
ISAR	11/680	12/1805	2.45 (1.08-5.55)
CLEAR-PLATELETS	2/68	1/160	4.78 (0.43-52.69)
Overall	44/1674	40/4420	2.81 (1.81-4.37)



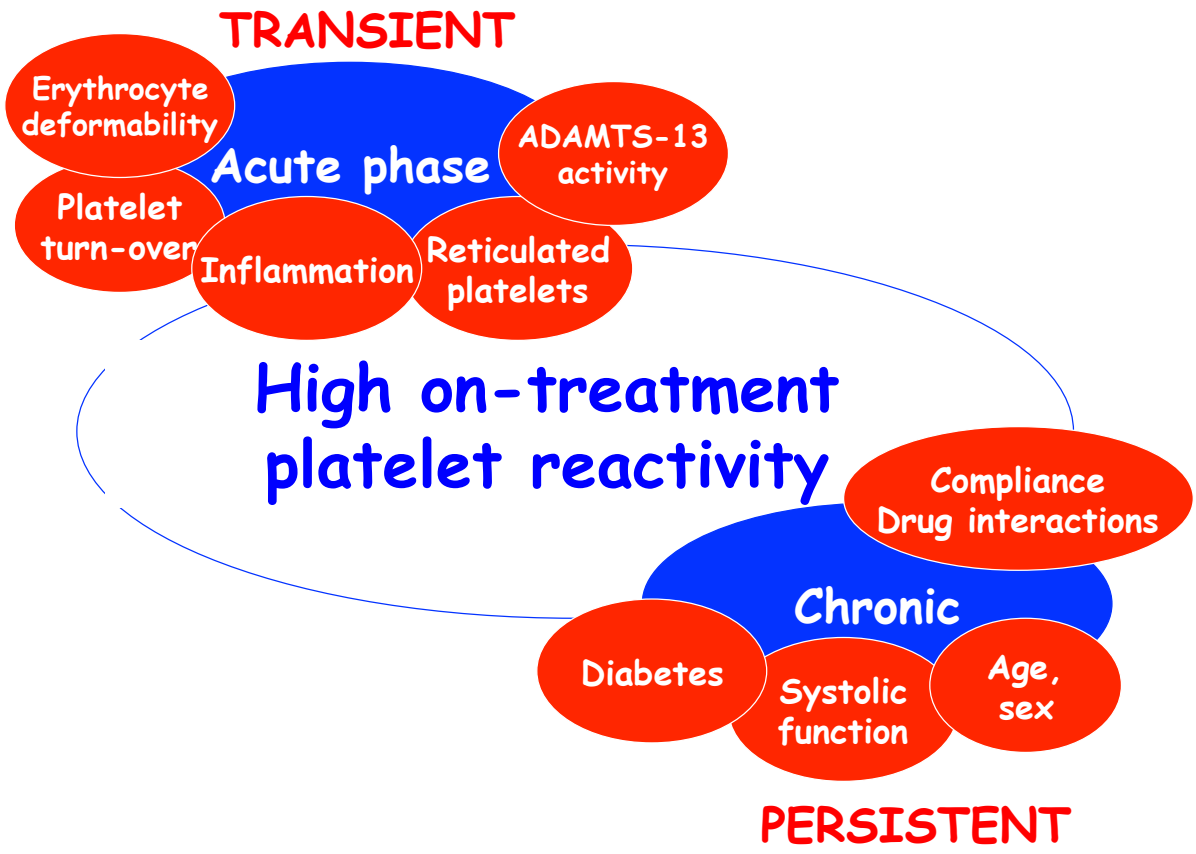
B Carriers of 1 *CYP2C19* Reduced-Function Alleles vs Noncarriers

	CYP2C19 Reduced-Function Alleles, No. of Events/ No. of Individuals at Risk		Hazard Ratio (95% CI)
	1	None	
EXCELSIOR	1/226	4/554	0.61 (0.07-5.44)
TRITON-TIMI 38	7/339	8/1014	2.65 (0.96-7.30)
ARIJI	7/53	4/162	7.75 (2.10-28.60)
RECLOSE	11/221	11/525	2.41 (1.05-5.55)
ISAR	10/633	12/1805	2.39 (1.03-5.54)
CLEAR-PLATELETS	1/63	1/160	2.57 (0.16-40.99)
Overall	37/1535	40/4220	2.67 (1.69-4.22)

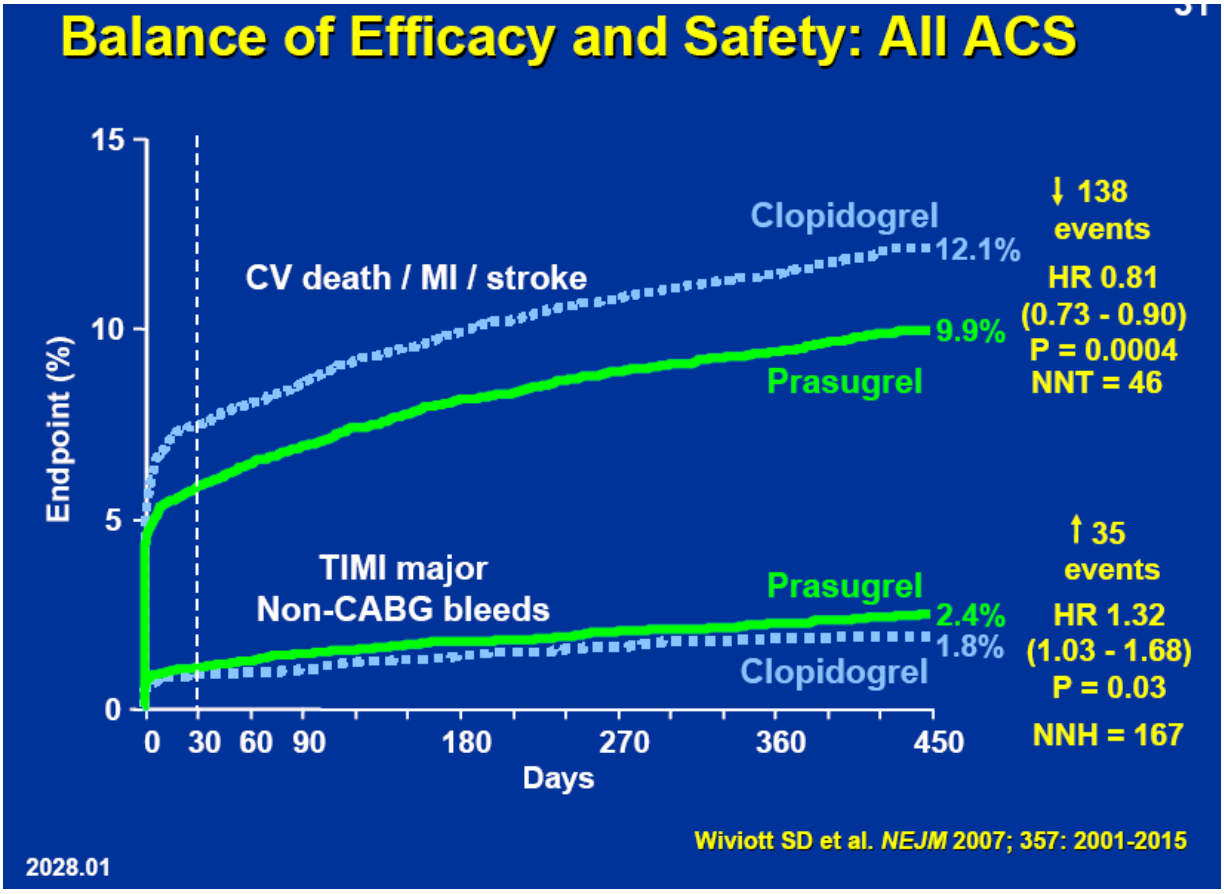


Stent Thrombosis

JAMA 2010



…. PRASUGREL:
TRITON-TIMI 38 study…..



…. TICAGRELOR: PLATO study…..

Ticagrelor versus Clopidogrel in Patients with Acute Coronary Syndromes

9,333 pts on TICAGRELOR vs 9,291 pts on CLOPIDOGREL

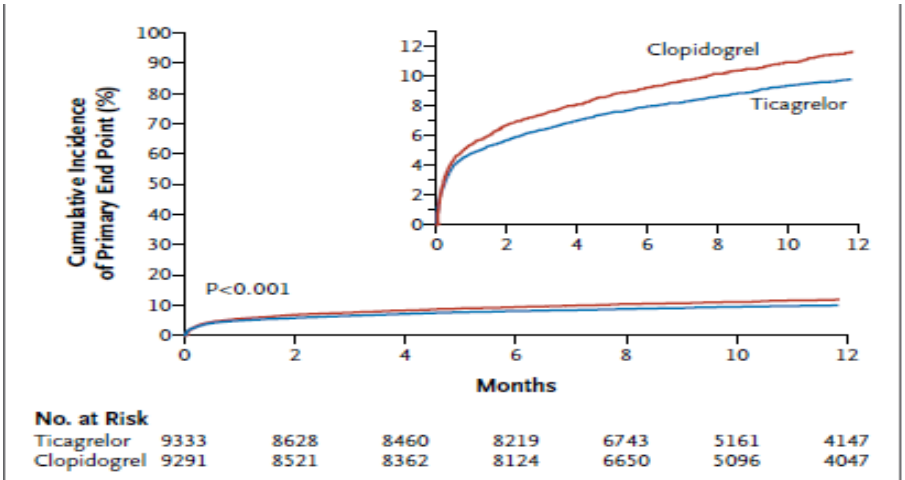


Figure 1. Cumulative Kaplan–Meier Estimates of the Time to the First Adjudicated Occurrence of the Primary Efficacy End Point.

The primary end point — a composite of death from vascular causes, myocardial infarction, or stroke — occurred significantly less often in the ticagrelor group than in the clopidogrel group (9.8% vs. 11.7% at 12 months; hazard ratio, 0.84; 95% confidence interval, 0.77 to 0.92; P<0.001).

Wallentin et al, N Engl J Med 2009

Ticagrelor versus Clopidogrel in Patients with Acute Coronary Syndromes

9,333 pts on TICAGRELOR vs 9,291 pts on CLOPIDOGREL

PLATO- definition of bleeding:
Life-threatening b.
Decline in Hb >3g/dl
Transfusion of 2 units of red blood cells

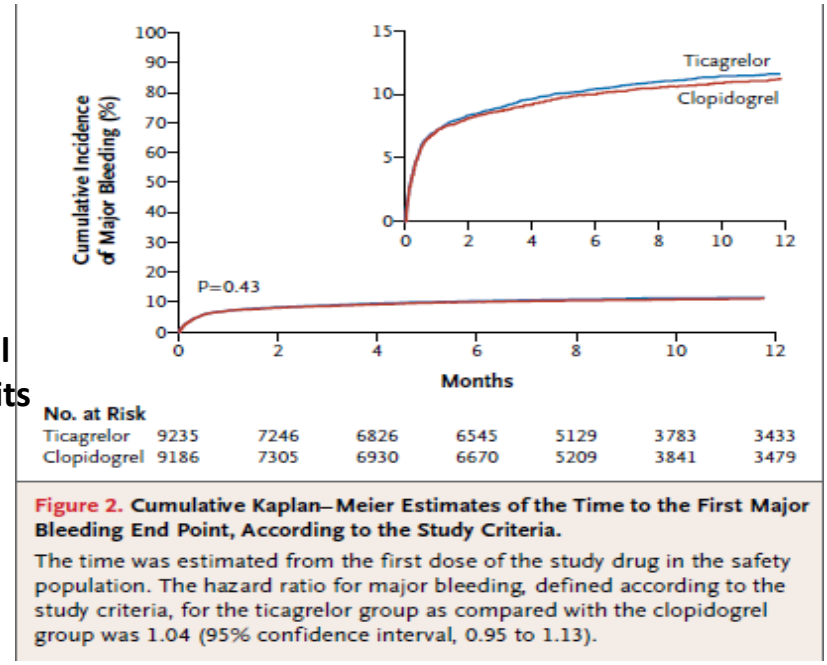


Figure 2. Cumulative Kaplan–Meier Estimates of the Time to the First Major Bleeding End Point, According to the Study Criteria.

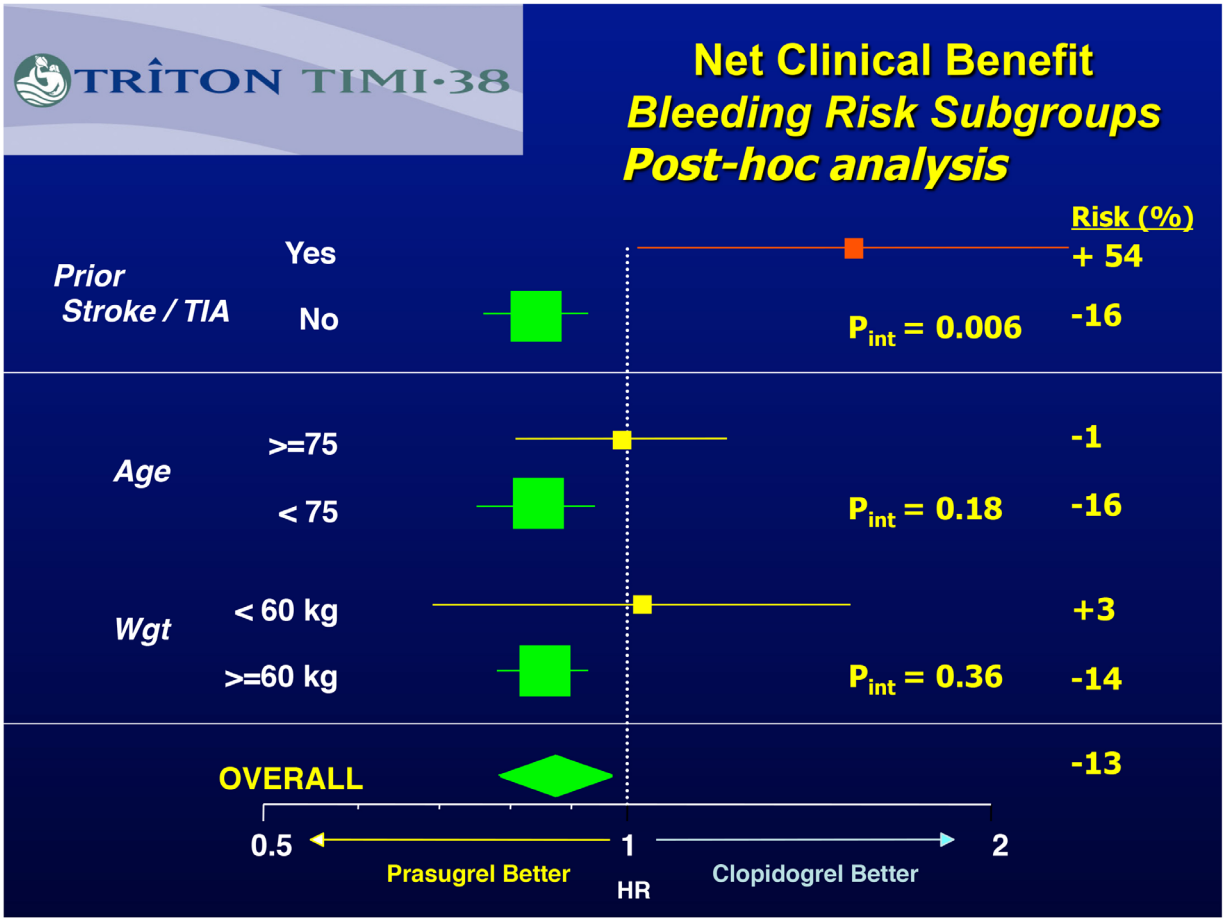
The time was estimated from the first dose of the study drug in the safety population. The hazard ratio for major bleeding, defined according to the study criteria, for the ticagrelor group as compared with the clopidogrel group was 1.04 (95% confidence interval, 0.95 to 1.13).

Wallentin et al, N Engl J Med 2009

Bleeding complications with the P_2Y_{12} receptor antagonists clopidogrel and ticagrelor in the PLATelet inhibition and patient Outcomes (PLATO) trial

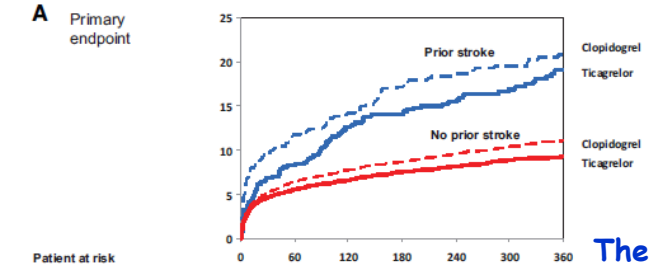
	Ticagrelor (n = 9235), n (%)	Clopidogrel (n = 9186), n (%)	Hazard ratio (95% CI)	P-value
TIMI bleeding				
Major	657 (7.9)	638 (7.7)	1.032 (0.926–1.151)	0.57
Major non-CABG related	221 (2.8)	177 (2.2)	1.254 (1.029–1.529)	0.02
Major CABG related	446 (5.3)	476 (5.8)	0.937 (0.824–1.066)	0.32
Major or minor	946 (11.4)	906 (10.9)	1.047 (0.955–1.146)	0.33
Minor	314 (3.9)	288 (3.5)	1.092 (0.931–1.282)	0.28
GUSTO bleeding				
Severe	253 (2.9)	264 (3.1)	0.923 (0.773–1.102)	0.37
Moderate	388 (4.6)	338 (4.0)	1.145 (0.987–1.329)	0.07
Mild	929 (10.6)	820 (9.5)	1.139 (1.034–1.255)	0.01
Transfusion				
PRBC or whole blood	705 (8.5)	697 (8.3)	1.013 (0.912–1.124)	0.81

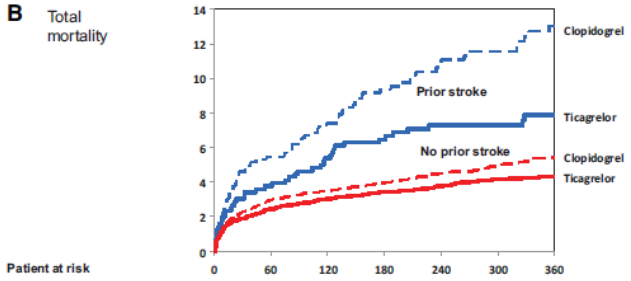
Becker RC, Eur Heart J 2011



Ticagrelor Versus Clopidogrel in Patients With Acute Coronary Syndromes and a History of Stroke or Transient Ischemic Attack

From PLATO: 1152 patients had a history of TIA/stroke

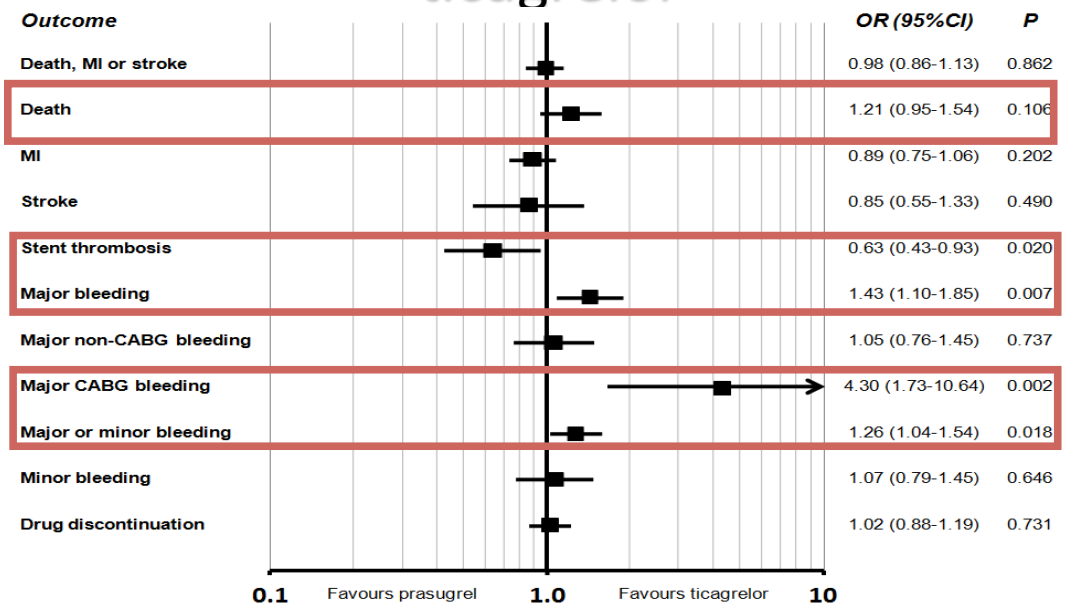




The reduction of primary end-point and Total mortality was consistent with the overall population……..

James SK et al, Circulation 2012

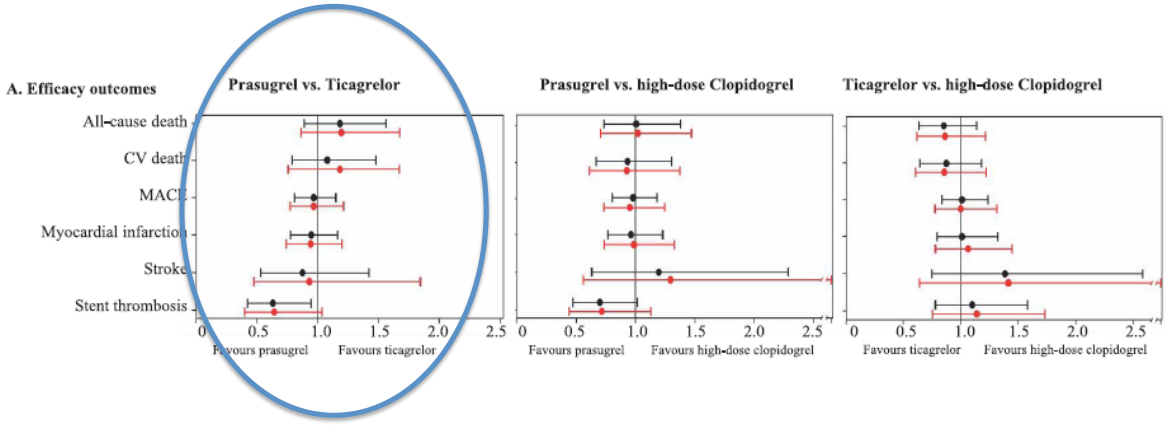
Indirect comparison of prasugrel vs. ticagrelor



Funnel plots comparing prasugrel vs. ticagrelor for the risk of key clinical events. Odds ratios (OR) <1.0 favor prasugrel, whereas odds ratios>1.0 favor ticagrelor.

Biondi Zoccai, 2010

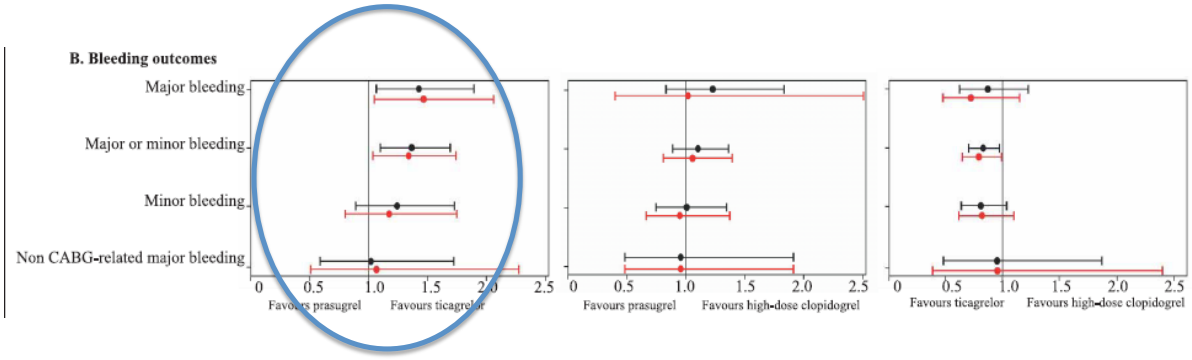
Network meta-analysis of prasugrel, ticagrelor, high- and standard-dose clopidogrel in patients scheduled for percutaneous coronary interventions



Network meta-analysis. Forest plots comparing prasugrel, ticagrelor and high-dose clopidogrel for all included studies (black) and subgroup analysis in ACS patients (red). Data are given as OR (95%CI).

Steiner S, , Thromb Haemost 2012

Network meta-analysis of prasugrel, ticagrelor, high- and standard-dose clopidogrel in patients scheduled for percutaneous coronary interventions



Network meta-analysis. Forest plots comparing prasugrel, ticagrelor and high-dose clopidogrel for all included studies (black) and subgroup analysis in ACS patients (red). Data are given as OR (95%CI).

Steiner S, , Thromb Haemost 2012

Ruolo della doppia antiaggregazione nella riduzione degli eventi post PCI:

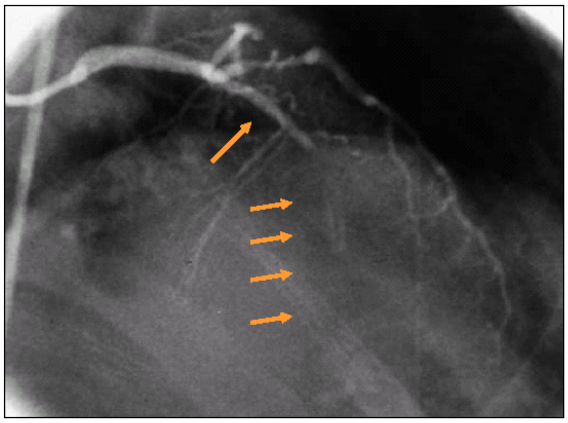
1. Trombosi di stent
2. Nuovi eventi aterotrombotici

Trombosi di Stent

- **Mortalità – 15-40%**
- **Infarto – 60-70%**

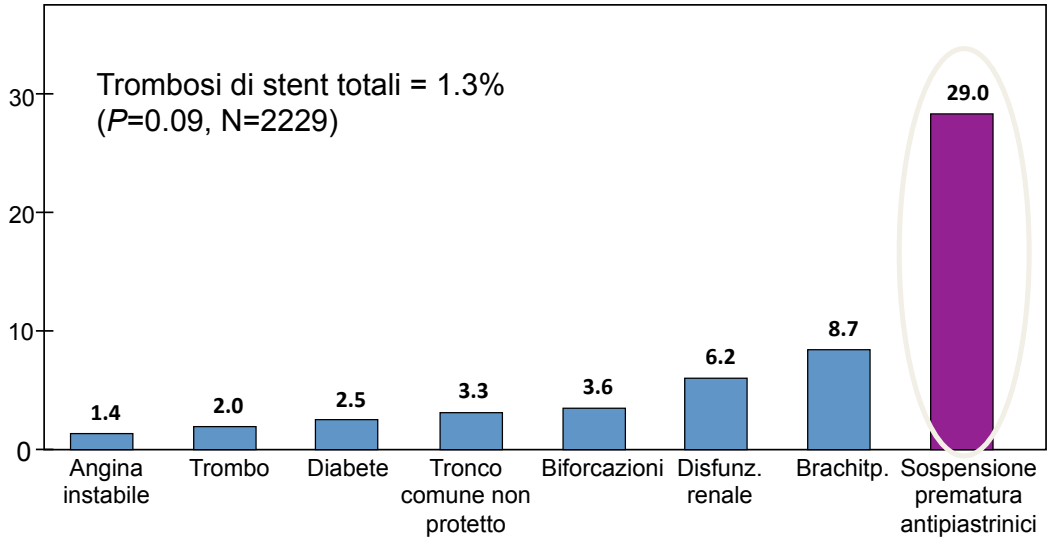
Aumentato rischio di:

- Shock
- Scompenso cardiaco
- TV/FV



Goodman SG, et al. Circulation 1998;97:444

Predittori di Trombosi di Stent



Iakovou I,et al. JAMA 2005; 293: 2126

Frequency of and Risk Factors for Stent Thrombosis After Drug-Eluting Stent Implantation During Long-Term Follow-Up

1,911 consecutive patients with DES implantation
median follow-up of 19.4 months

Independent predictors of stent thrombosis (ST)

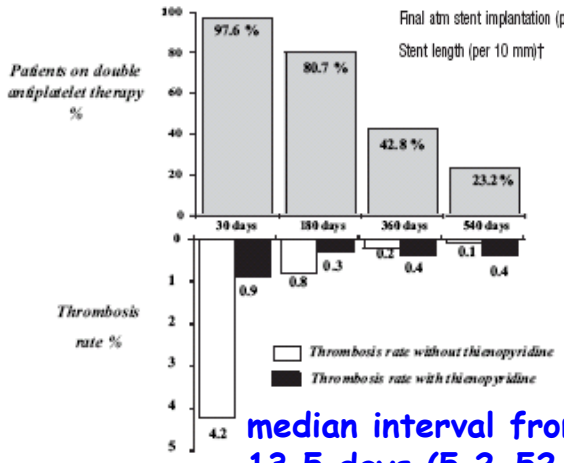
Variable	Hazard Ratio	95% CI	p Value
Total ST			
Premature interruption of antiplatelet therapy	19.21	5.63–65.51	<0.001
Primary stenting in acute MI	12.24	1.67–89.71	0.014
Total stent length (mm)	1.02	1.001–1.04	0.037
Acute/subacute stent thrombosis			
Primary stenting in acute MI	74.22	5.89–861.45	0.001
Total stent length (mm)	1.04	1.01–1.08	0.048
Late stent thrombosis			
Premature interruption of antiplatelet therapy	24.79	7.51–81.84	<0.001
Renal failure	8.40	1.81–39.09	0.007

Park et al, Am J Cardiol 2006

Incidence and Predictors of Drug-Eluting Stent Thrombosis During and After Discontinuation of Thienopyridine Treatment

Airoldi et al, Circulation 2007

Variable	No. of Patients	HR	95% Lower Confidence Limit	95% Upper Confidence Limit	P
Discontinuation of thienopyridine (0–6 months)*	583	13.74	4.04	46.68	<0.001
Discontinuation of thienopyridine (6–18 months)*	1737	0.94	0.30	2.98	0.92
LVEF (≤30%)	96	3.72	1.50	9.27	0.005
Prior brachytherapy	31	9.70	2.99	31.44	<0.001
Reference vessel diameter (per 1 mm)†	…	0.27	0.06	1.13	0.07
Final atm stent implantation (per 1 atm)†	…	0.39	0.18	0.85	0.02
Stent length (per 10 mm)†	…	2.75	1.55	4.88	<0.001



n=3021 patients treated with DES
18 months of follow-up

58 patients (1.9%) with ST:
42 within the first 6 months

median interval from discontinuation of clopidogrel to ST
13.5 days (5.2-52.7) in the first 6 months
90 days (30-365) between 6 and 18 months

Temporal Relation Between *Clopidogrel* Cessation and Stent Thrombosis After Drug-Eluting Stent Implantation

Independent predictors of cumulative stent thrombosis at 1, 6 and 12 months

n=2,889 patients with DES 12 months of f-up

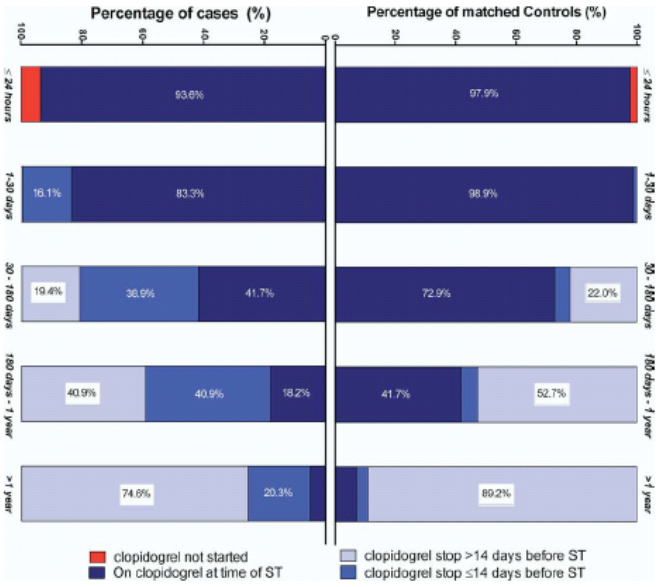
Variable	Odds Ratio	Confidence Interval	p Value
1 mo			
Acute MI	2.5	1.1–5.6	0.03
Diabetes mellitus	2.6	1.4–4.8	<0.01
In-stent restenosis	5.6	2.3–13.7	<0.01
No. of stents implanted	1.5	1.1–2.1	<0.01
Clopidogrel cessation	4.5	2.0–10.4	<0.01
6 mos			
Diabetes mellitus	1.8	1.0–3.1	0.05
Chronic renal insufficiency	1.5	0.7–3.1	0.3
In-stent restenosis	3.5	1.7–7.5	<0.01
No. of stents implanted	1.6	1.3–2.2	<0.01
Clopidogrel cessation	2.4	1.2–4.9	0.01
12 mos			
Diabetes mellitus	1.5	0.9–2.6	0.2
Chronic renal insufficiency	1.4	0.7–2.9	0.4
In-stent restenosis	2.7	1.3–5.6	<0.01
No. of stents implanted	1.7	1.3–2.2	<0.01
Clopidogrel cessation	1.7	0.9–3.1	0.1

Roy et al, Am J Cardiol 2009

Predictors of Coronary Stent Thrombosis

The Dutch Stent Thrombosis Registry

n= 437 patients with a definite ST undergoing BMS or DES implantation



Lack of clopidogrel and risk of ST

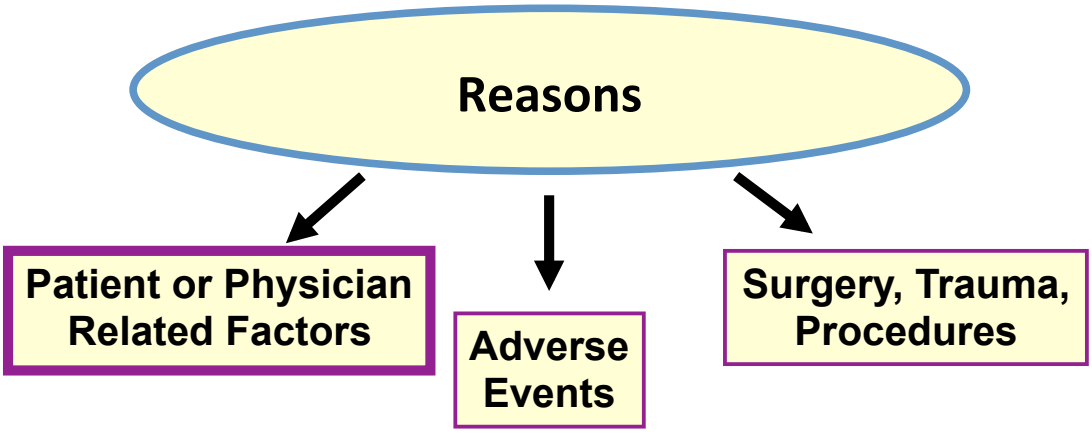
First 30days:
HR 36.5 (8.0-167.8)

Between 30 days and 6 months:
HR 4.6 (1.4-15.3)

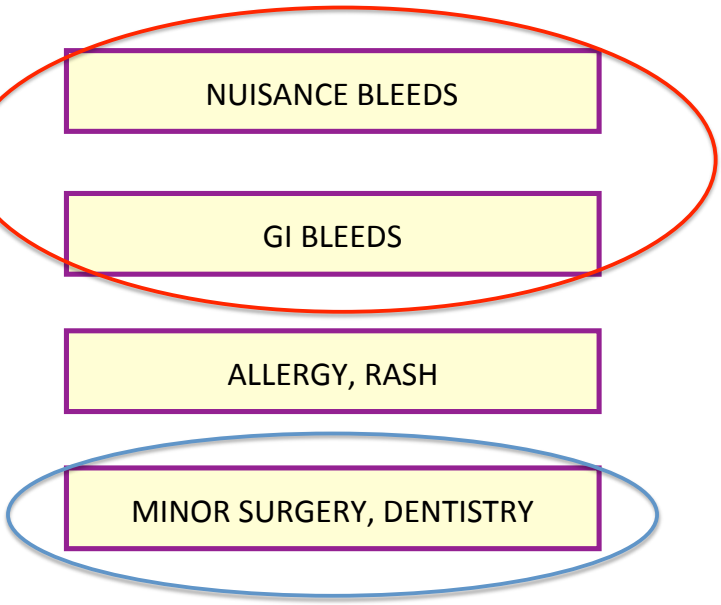
After 6 months:
HR 5.9 (1.7-19.8)

Van Werkum et al, JACC 2009

DAPT discontinuation after stent



Patient / Physician may discontinue DAPT for



Grines C et al. JACC 2007;49:734-739

DAPT Discontinuation

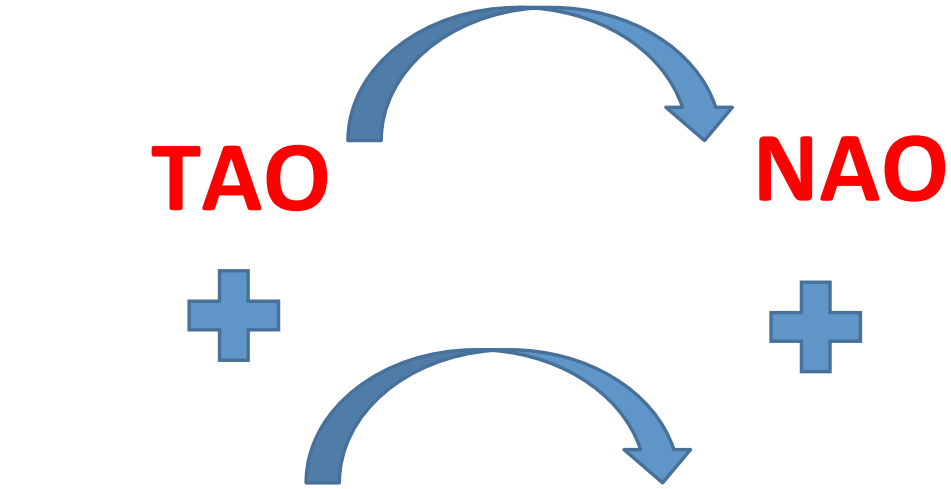
- **Poor Compliance: 50 - 70%**
- **Noncardiac Surgery-Procedure : 10 - 30%**
- **Side Effects : 10 – 20 %**

Catheterization and Cardiovascular Interventions 74:1047-1054 (2009)

Un problema clinico emergente

- La TRIPLICE terapia antitrombotica
DOPPIA antiaggregazione + ANTICOAGULANTE

- La DOPPIA terapia antitrombotica
con i NUOVI antiaggreganti e/o anticoagulanti



Emergency Hospitalizations for Adverse Drug Events in Older Americans

DS Budnitz, n engl j med, 2011

Medication	Annual National Estimate of Hospitalizations (N = 99,628)		Proportion of Emergency Department Visits Resulting in Hospitalization
	no.	*% (95% CI)*	%
Most commonly implicated medications†			
Warfarin	33,171	33.3 (28.0–38.5)	46.2
Insulins	13,854	13.9 (9.8–18.0)	40.6
Oral antiplatelet agents	13,263‡	13.3 (7.5–19.1)	41.5
Oral hypoglycemic agents	10,656	10.7 (8.1–13.3)	51.8
Opioid analgesics	4,778	4.8 (3.5–6.1)	32.4
Antibiotics	4,205	4.2 (2.9–5.5)	18.3
Digoxin	3,465	3.5 (1.9–5.0)	80.5
Antineoplastic agents	3,329‡	3.3 (0.9–5.8)‡	51.5
Antiadrenergic agents	2,899	2.9 (2.1–3.7)	35.7
Renin–angiotensin inhibitors	2,870	2.9 (1.7–4.1)	32.6
Sedative or hypnotic agents	2,469	2.5 (1.6–3.3)	35.2
Anticonvulsants	1,653	1.7 (0.9–2.4)	40.0
Diuretics	1,071‡	1.1 (0.4–1.8)‡	42.4
High-risk or potentially inappropriate medications§			
HEDIS high-risk medications	1,207	1.2 (0.7–1.7)	20.7
Beers-criteria potentially inappropriate medications	6,607	6.6 (4.4–8.9)	42.0
Beers-criteria potentially inappropriate medications, excluding digoxin	3,170	3.2 (2.3–4.1)	27.6

Start
Antiplatelet

Gruppi attualmente attivi nel registro:

Rossella MARCUCCI, Serafina VALENTE; Firenze
Vittorio PENGO; Padova
Giuseppe PATTI; Roma
Paolo GRESELE; Perugia
Paolo CALABRO'; Napoli
Plinio CIRILLO; Napoli

Prossimo ingresso:

Raffaele DE CATERINA; Chieti
Pasquale PIGNATELLI, Francesco VIOLI; Roma

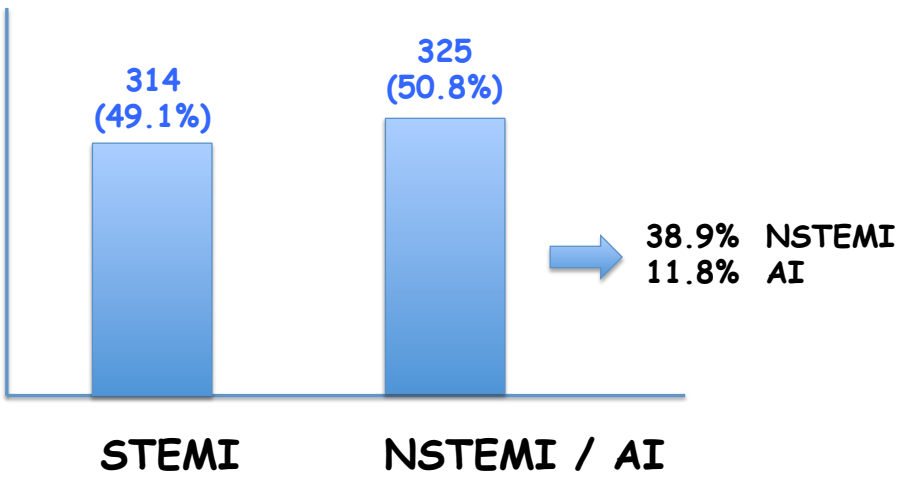
Start
Antiplatelet

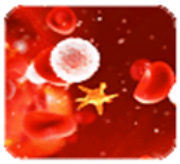
N = 639 pazienti con SCA

478 M/ 161 F

Età: 66,7± 12,6

Analisi a dicembre 2014





Start Antiplatelet

n=639

Analisi a dicembre 2014

ANAMNESI….

Pregresso IMA 132/639 (20,7%)

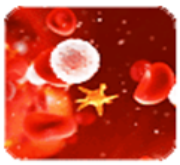
Pregressa PCI 128/639 (20%)

Pregresso TIA 26/639 (4,1%)
Pregresso stroke 18/639 (2,8%)

PAD 53/639 (8,3%)

Pregressa emorragia maggiore 9/639 (1,4%)
3 cerebrale
4 gastrointestinale
1 metrorragia

Pregressa emorragia minore 3/639 (0.4%)

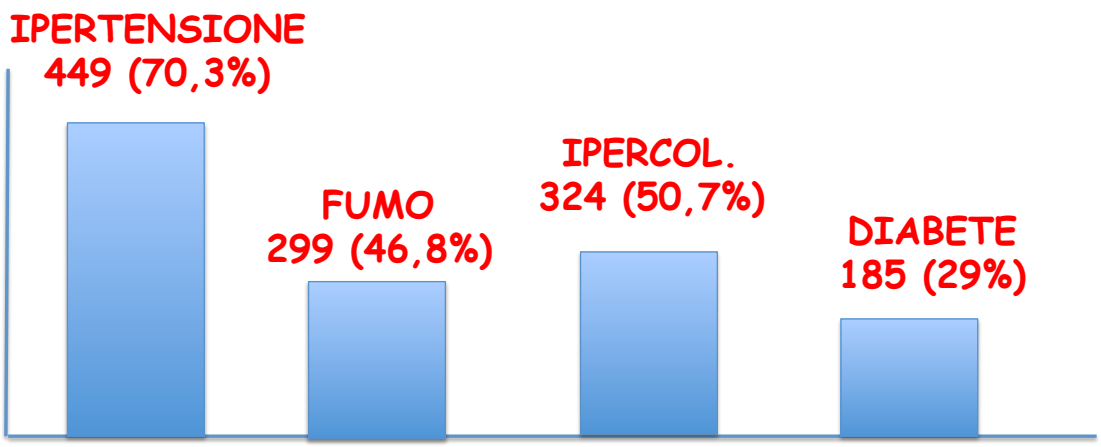


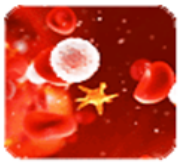
Start Antiplatelet

n=639

Analisi a dicembre 2014

FANV	35/ 639 (5,5%)
FAV	11/639 (1,7%)
Protesi Valvolari Meccaniche	4/639 (0,6%)
TEV	6/639 (0,9%)





Start
Antiplatelet

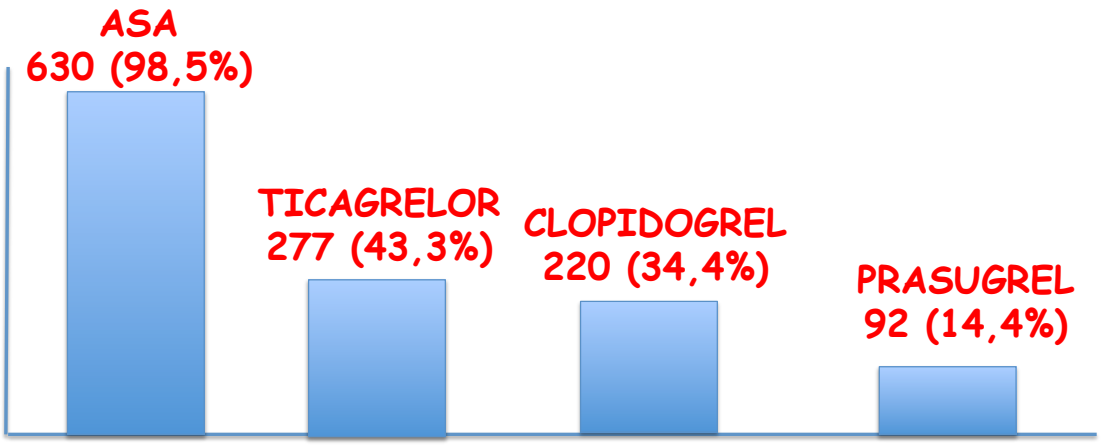
639

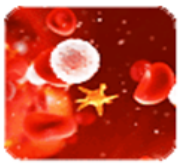
Analisi a dicembre 2014

PCI
n= 515

Bypass AoC
n= 20

Terapia Medica
n= 104





Start
Antiplatelet

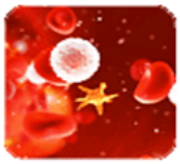
Analisi a dicembre 2014

TERAPIA ANTIAGGREGANTE

DOPPIA
ASA + tienopiridina
593 (92,8%)

MONO
46 (7,2%)

6 solo ASA
40 solo tienopiridina



Start
Antiplatelet

Analisi a dicembre 2014

TERAPIA ANTIAGGREGANTE

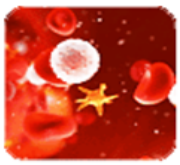
TRIPLICE TERAPIA ANTITROMBOTICA

46/639 7.2%

35: WARFARIN + ASA + CLOPIDOGREL

10: DABIGATRAN + ASA + CLOPIDOGREL

1: APIXABAN + ASA + CLOPIDOGREL



Start
Antiplatelet

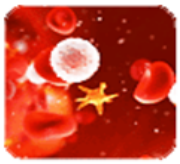
Analisi a dicembre 2014

FATTORI PREDITTIVI SOMMINISTRAZIONE CLOPIDOGREL

Variabili nell'equazione

		B	E.S.	Wald	df	Sig.	Exp(B)	95% CI per EXP(B)	
								Inferiore	Superiore
Passo 1[a]	Sesso	,104	,261	,159	1	,690	1,110	,665	1,852
	età	,048	,011	20,292	1	,000	1,049	1,027	1,071
	nstemistemiVAR00001	-,879	,223	15,485	1	,000	,415	,268	,643
	tiastroke	,894	,458	3,812	1	,051	2,444	,997	5,996
	Arteriopatiaobliteranteperif erica	-,342	,434	,622	1	,430	,710	,304	1,662
	BMI	-,004	,008	,175	1	,675	,997	,980	1,013
	Stent	-,432	,391	1,218	1	,270	,649	,302	1,398
	Ipertensione	-,656	,262	6,289	1	,012	,519	,311	,866
	Fumo	-,278	,237	1,373	1	,241	,757	,475	1,206
	Ipercolesterolemia	,212	,227	,871	1	,351	1,236	,792	1,930
	Diabete	,271	,244	1,234	1	,267	1,311	,813	2,113
	anticoagulante	3,127	,629	24,682	1	,000	22,809	6,642	78,324
	Costante	-2,921	,859	11,568	1	,001	,054		

a. Variabili immesse al passo 1: Sesso, età, nstemistemiVAR00001, tiastroke, Arteriopatiaobliteranteperiferica, BMI, Stent, Ipertensione, Fumo, Ipercolesterolemia, Diabete, anticoagulante.



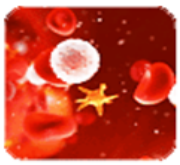
Analisi a dicembre 2014

FATTORI PREDITTIVI SOMMINISTRAZIONE PRASUGREL

Variabili nell'equazione

		B	E.S.	Wald	df	Sig.	Exp(B)	95% CI per EXP(B)	
								Inferiore	Superiore
Passo 1[a]	Sesso	-,523	,361	2,100	1	,147	,593	,292	1,202
	età	-,048	,012	16,426	1	,000	,953	,932	,976
	nstemistemiVAR00001	1,603	,320	25,124	1	,000	4,968	2,654	9,297
	tiastroke	-1,115	,788	2,004	1	,157	,328	,070	1,535
	Arteriopatiaobliteranteperiferica	-,550	,658	,697	1	,404	,577	,159	2,097
	BMI	,013	,008	2,550	1	,110	1,013	,997	1,030
	Stent	1,658	1,039	2,547	1	,110	5,248	,685	40,203
	Ipertensione	,626	,303	4,278	1	,039	1,870	1,033	3,385
	Fumo	-,051	,280	,034	1	,854	,950	,549	1,644
	Ipercolesterolemia	-,016	,264	,003	1	,953	,985	,587	1,651
	Diabete	,225	,302	,557	1	,455	1,253	,693	2,262
	anticoagulante	-1,510	1,045	2,091	1	,148	,221	,029	1,710
	Costante	-1,878	1,320	2,026	1	,155	,153		

a. Variabili immesse al passo 1: Sesso, età, nstemistemiVAR00001, tiastroke, Arteriopatiaobliteranteperiferica, BMI, Stent, Ipertensione, Fumo, Ipercolesterolemia, Diabete, anticoagulante.



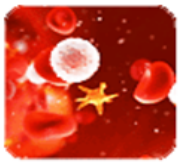
Analisi a dicembre 2014

FATTORI PREDITTIVI SOMMINISTRAZIONE TICAGRELOR

Variabili nell'equazione

		B	E.S.	Wald	df	Sig.	Exp(B)	95% CI per EXP(B)	
								Inferiore	Superiore
Passo 1[a]	Sesso	-,054	,228	,055	1	,814	,948	,606	1,482
	età	-,010	,008	1,456	1	,228	,990	,974	1,006
	nstemistemiVAR00001	-,168	,189	,783	1	,376	,846	,584	1,226
	tiastroke	-,081	,412	,039	1	,844	,922	,411	2,067
	Arteriopatiaobliteranteperiferica	,128	,370	,119	1	,730	1,136	,550	2,348
	BMI	-,009	,010	,842	1	,359	,991	,972	1,010
	Stent	,246	,363	,462	1	,497	1,279	,629	2,604
	Ipertensione	,090	,216	,173	1	,677	1,094	,717	1,670
	Fumo	,179	,201	,790	1	,374	1,195	,806	1,772
	Ipercolesterolemia	-,076	,190	,158	1	,691	,927	,639	1,345
	Diabete	-,187	,213	,772	1	,380	,829	,547	1,259
	anticoagulante	-2,814	,740	14,473	1	,000	,060	,014	,256
	Costante	,831	,734	1,280	1	,258	2,295		

a. Variabili immesse al passo 1: Sesso, età, nstemistemiVAR00001, tiastroke, Arteriopatiaobliteranteperiferica, BMI, Stent, Ipertensione, Fumo, Ipercolesterolemia, Diabete, anticoagulante.



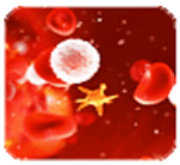
Start Antiplatelet

FOLLOW-UP 12 MESI

Analisi a dicembre 2014

n= 202

MORTE	11 (5,4%)
MORTE CARDIOVASCOLARE	10 (5%)
TVR	9 (4,5%)
IMA	5 (2,4%)
SANGUINAMENTI	
TIMI maggiori	2 (0.9%)
TIMI minori	10 (5%)
ISTH maggiori	2 (0.9%)
ISTH minori	10 (5%)



Start Antiplatelet

FOLLOW-UP 12 MESI

Analisi a dicembre 2014

n= 202

COMPLICANZA EMORRAGICA

6/10 (60%) pazienti in TRIPLICE TERAPIA (13% dei pz in triplice ha fatto sanguinamento)

4/10 (40%) pazienti in DOPPIA TERAPIA (2.5% dei pazienti in doppia antiaggregazione)

COMPLICANZA ISCHEMICA

6 Clopidogrel (10% dei pazienti in clopidogrel)
3 Ticagrelor (5% dei pazienti in ticagrelor)
1 Prasugrel (5% dei pazienti in prasugrel)