XXIX CONGRESO NACIONAL
CACI2019
Pilar

Tratamiento antiagregante en el SCA
Resultados del Estudio ISAR REACT 5

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Sanatorio Otamendi.Sanatorio Las Lomas .Clinica IMA

Clopidogrel (Thienopyridine)

Absorption: Not affected by food or antacids

Prodrug – converted by liver to active metabolites

Elimination half life: 8 hours

Irreversible binding: biologic effects = platelet life

Prasugrel (Thienopyridine)

Absorption: may be taken with food/antacids, although absorption decreased after fatty meal

Prodrug: intestinal/liver conversion to active

Elimination half-life: 7hours

Irreversible binding to P2Y12 receptor:

biologic effects = platelet life (5-10days)

Ticagrelor
Cyclopentyltriazolopyrimidine pharmacology

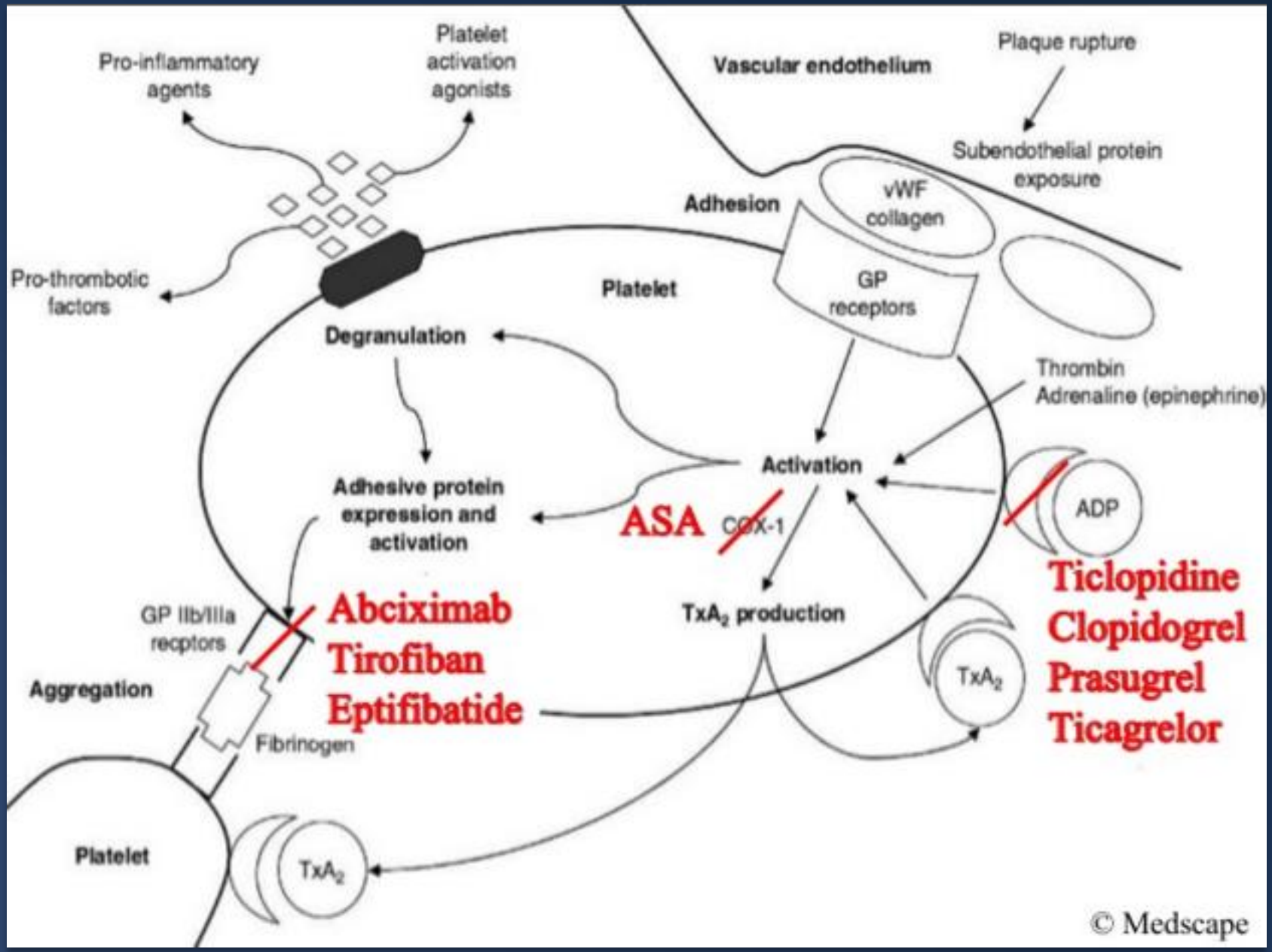
Absorption: not affected by food or antacids

Non-Prodrug: Onset of action within 1-2 hours

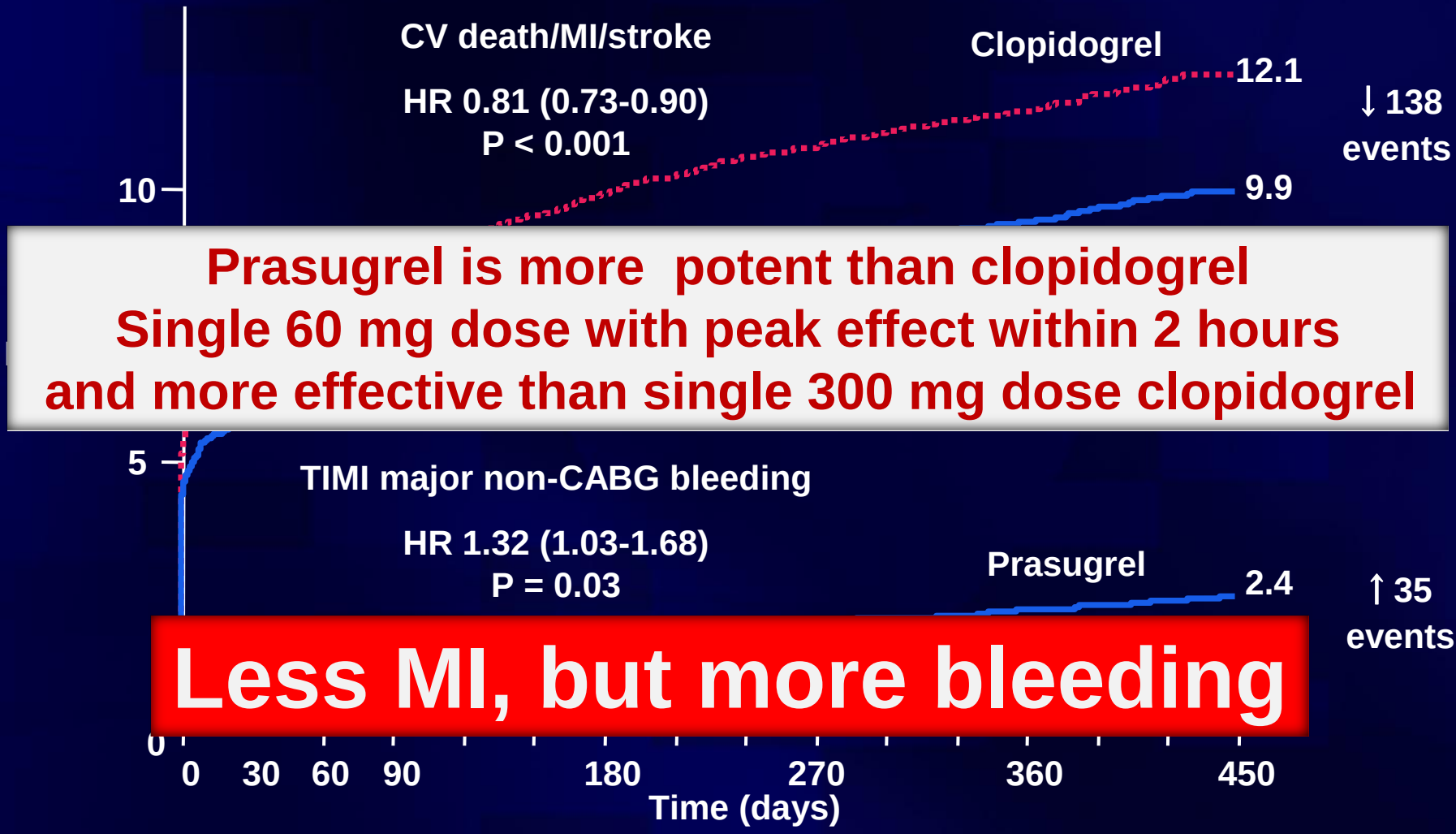
Elimination half-life = 8 hours

Reversible binding: biologic t1/2 = 6 hours
clinical effect 3-5 days

Mechanism of action



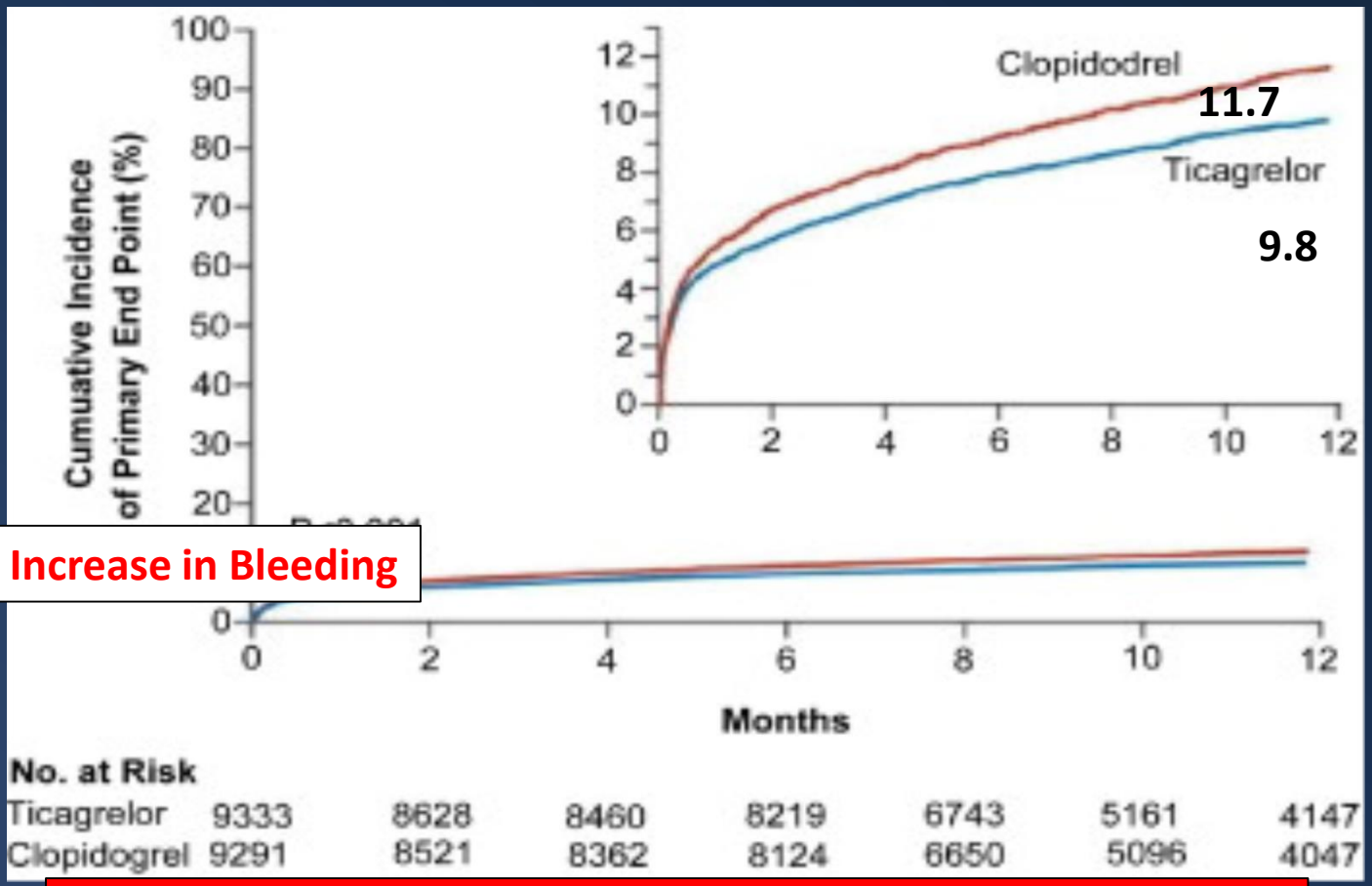
TRITON-TIMI 38: Treatment effects on primary efficacy and key safety endpoints



HR = hazard ratio

Wiviott SD et al. *N Engl J Med.* 2007;357:2001-15.

PLATO Trial (High Risk ACS) CV Death, MI or Stroke



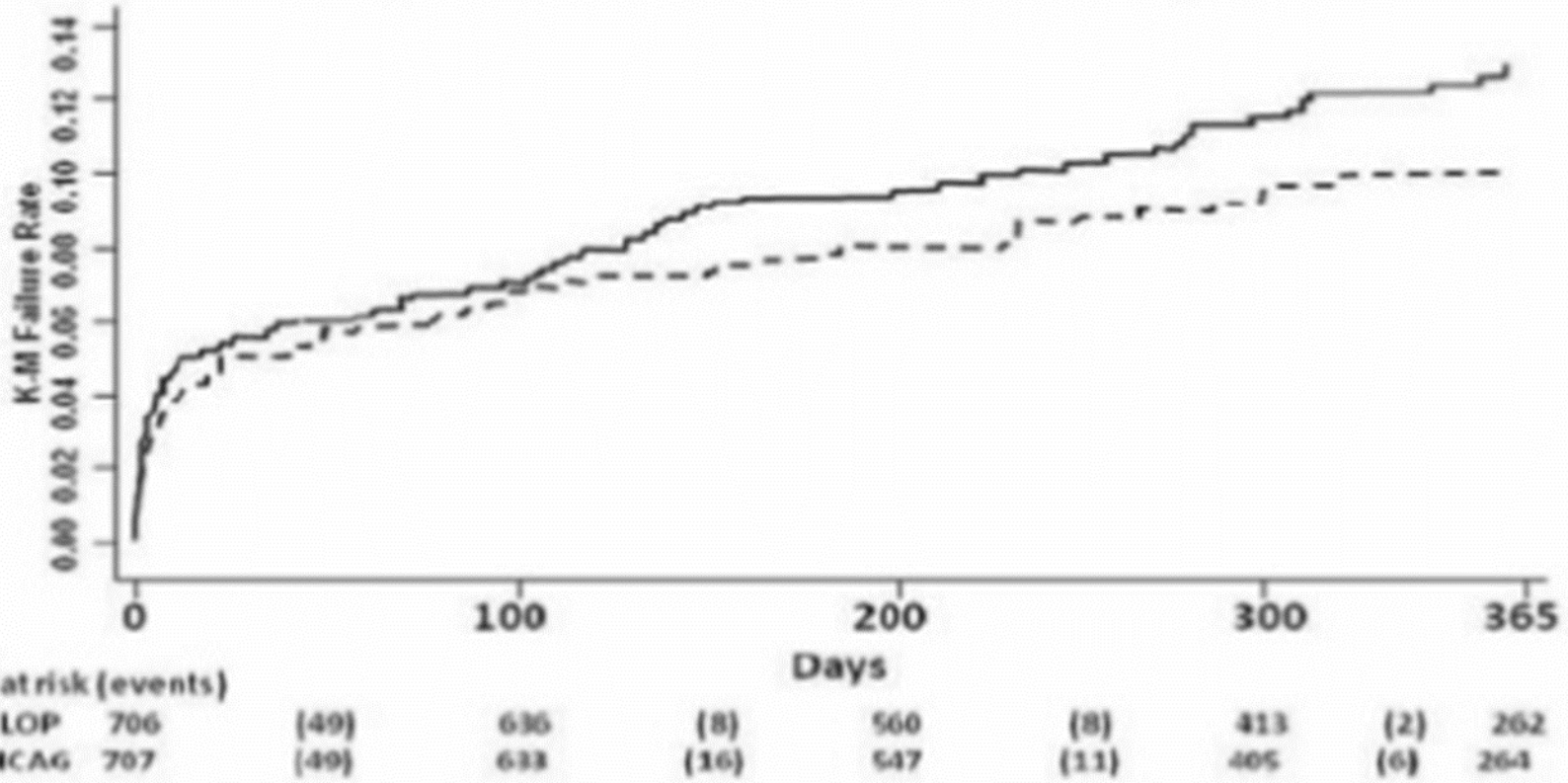
No Increase in Bleeding

Reductions in All Cause Mortality, CV Mortality, MI, Stent Thrombosis

JACC 2010

COUNTRY	N	ES (95% CI)	Weight %
Turkey	51	0.25 (0.05, 1.18)	0.27
Singapore	64	0.47 (0.04, 5.20)	0.34
Greece	90	0.57 (0.14, 2.40)	0.48
Hungary	1267	0.59 (0.40, 0.86)	6.81

U.S. Only: Primary Outcome
Composite or CV Death/MI (excl. silent MI) /Stroke



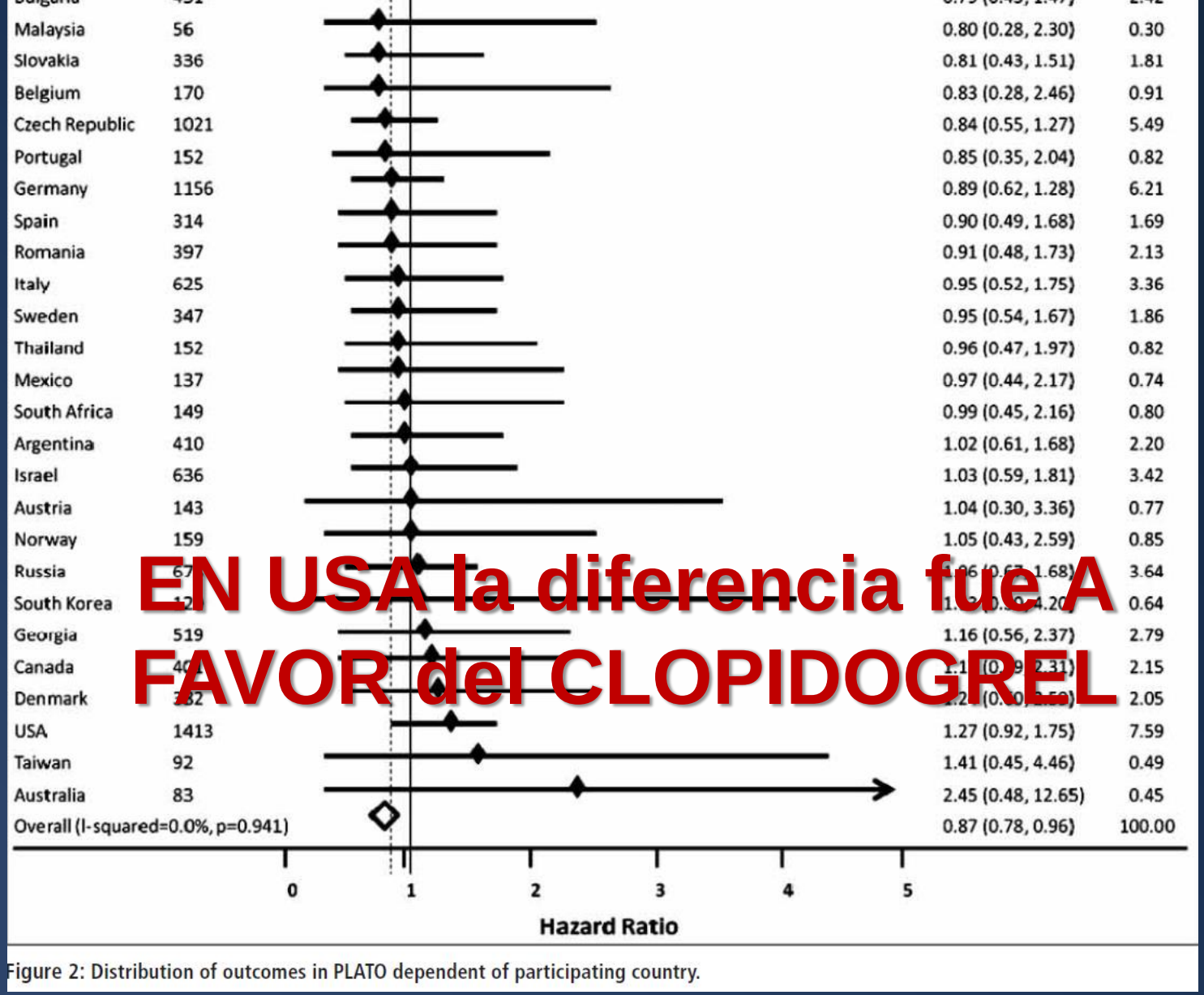
# at risk (events)									
CLOP	706	(49)	636	(8)	560	(8)	413	(2)	262
TICAG	707	(49)	633	(16)	547	(11)	405	(6)	264

Clopidogrel — Ticagrelor

Argentina	410	1.02 (0.61, 1.68)	2.20
Israel	636	1.03 (0.59, 1.81)	3.42
Austria	143	1.04 (0.30, 3.56)	0.77
Norway	159	1.05 (0.43, 2.59)	0.85
Russia	678	1.05 (0.67, 1.68)	3.64
South Korea	120	1.13 (0.30, 4.20)	0.64

Mahaffey et al. Circulation. 2011;124:00-00

Serebruany, V . Thrombosis and Haemostasis 105(5)/2011



EN USA la diferencia fue A FAVOR del CLOPIDOGREL

Figure 2: Distribution of outcomes in PLATO dependent of participating country.

Mahaffey et al. Circulation. 2011;124:00-00

Serenbruany, V . Thrombosis and Haemostasis 105.5/2011

Circulation Journal
Official Journal of the Japanese Circulation Society
http://www.j-circ.or.jp

ORIGINAL ARTICLE
Ischemic Heart Disease

Ticagrelor vs. Clopidogrel in Japanese, Korean and Taiwanese Patients With Acute Coronary Syndrome

– Randomized, Double-Blind, Phase III PHILO Study –

Shinya Goto, MD, PhD; Chien-Hua Huang, MD, PhD; Seung-Jung Park, MD, PhD; Håkan Emanuelsson, MD, PhD; Takeshi Kimura, MD, PhD

Background: Few data on the relative efficacy and safety of new $P2Y_{12}$ inhibitors such as prasugrel and ticagrelor in Japanese, Taiwanese and South Korean patients with acute coronary syndromes (ACS) exist.

Methods and Results: The multicenter, double-blind, randomized PHILO trial compared the safety and efficacy of ticagrelor vs. clopidogrel in 801 patients with ACS (Japanese, n=721; Taiwanese, n=35; South Korean, n=44; unknown ethnicity, n=1). All were planned to undergo percutaneous coronary intervention and randomized within 24 h of symptom onset. Primary safety and efficacy endpoints were time to first occurrence of any major bleeding event and to any event from the composite of myocardial infarction, stroke or death from vascular causes, respectively. At 12 months, overall major bleeding occurred in 10.3% of ticagrelor-treated patients and in 6.8% of clopidogrel-treated patients (hazard ratio (HR), 1.54; 95% confidence interval (CI): 0.94–2.53); the composite primary efficacy endpoint occurred in 9.0% and in 6.3% of ticagrelor- and clopidogrel-treated patients, respectively (HR, 1.47; 95% CI: 0.88–2.44). For both analyses, the difference between groups was not statistically significant.

Conclusions: In ACS patients from Japan, Taiwan and South Korea, event rates of primary safety and efficacy endpoints were higher, albeit not significantly, in ticagrelor-treated patients compared with clopidogrel-treated patients. This observation could be explained by the small sample size, imbalance in clinical characteristics and low number of events in the PHILO population. (*Circ J* 2015; **79:** 2452–2460)

Key Words: Acute coronary syndrome; Clopidogrel; East Asia; Japan; Ticagrelor

Table 4. Primary and Secondary Efficacy Endpoints

	Ticagrelor 90 mg b.i.d. (n=401)	Clopidogrel 75 mg o.d. (n=400)	HR (95% CI)
Primary			
Composite of CV death/MI (excluding silent MI)/stroke	36 (9.0)	25 (6.3)	1.47 (0.88–2.44)
Post-hoc			
Composite of CV death/spontaneous MI/stroke	18 (4.5)	13 (3.3)	1.39 (0.68–2.85)
Secondary			
Composite of all-cause mortality/MI (excluding silent MI)/stroke	37 (9.2)	25 (6.3)	1.51 (0.91–2.50)
Composite of CV death/total MI/stroke/RI (including SRI)/TIA/Other ATE	38 (9.5)	32 (8.0)	1.20 (0.75–1.93)
MI (excluding silent MI)	24 (6.0)	15 (3.8)	1.63 (0.85–3.11)
Peri-procedural MI	18	12	–
Spontaneous MI	6	3	–
CV death	9 (2.2)	7 (1.8)	1.28 (0.48–3.45)
Stroke	9 (2.2)	6 (1.5)	1.50 (0.54–4.23)
All-cause mortality	10 (2.5)	7 (1.8)	1.42 (0.54–3.74)

Data given as n (%). ATE, arterial thromboembolic event; RI, recurrent cardiac ischemia; SRI, serious recurrent ischemia. Other abbreviations as in Tables 1,3.

Increase in serum uric acid from baseline to end of treatment (μmol/L)	34±87	9±80
Any uric acid adverse event†	26 (6.7)	20 (5.3)

Goto S et al Circulation J 2015

REVIEW ARTICLE

Did Prasugrel and Ticagrelor Offer the Same Benefit in Patients with Acute Coronary Syndromes after Percutaneous Coronary Interventions Compared to Clopidogrel? Insights from Randomized Clinical Trials, Registries and Meta-analysis

Alfredo E. Rodríguez*, Alfredo M. Rodriguez-Granillo, Sergio D. Ascarrunz, Francisco Peralta-Bazan and Mi Young Cho

Cardiac Unit Otamendi Hospital, Buenos Aires School of Medicine Cardiovascular Research Center (CECI) Buenos Aires Argentina

Abstract: ***Background***: According to ACC/ AHA guidelines, a minimum of 1 year of dual anti- platelet therapy (DAPT) consisting of aspirin and a platelet ADP-receptor antagonist (P2Y12 inhibitor) is recommended for patients presenting acute coronary syndromes (ACS), regardless of which type of revascularization is performed during the acute event.

Methods: The purpose of this presentation was to review the present data either from a direct randomized comparison among the three compounds and also large prospective observational registries and meta-analysis were analyzed in detail. With this aim, we performed an extensive large search from PubMed/Medline Journals identifying studies comparing fashion the new P2Y12 inhibitors in patients with ACS including ST elevation myocardial infarction (STEMI) in direct and indirect manner.

Results: Pivotal large randomized clinical trials (RCT) in patients with ACS including STEMI, comparing clopidogrel, a first generation P2Y12 inhibitor against the newer prasugrel and ticagrelor showed major efficacy advantages of the latters although both drugs had more bleeding risk than clopidogrel. Direct comparisons of prasugrel and ticagrelor from large RCT are not yet available, however, several observational registries and meta-analysis reported results from an indirect comparison between both compounds. Major findings and limitations of each of these studies were identified, highlighted and discussed.

Conclusion: Prasugrel and ticagrelor are both more effective than clopidogrel to prevent adverse cardiac events in patients with ACS. Compared to ticagrelor, prasugrel appears to be more effective in patients with STEMI, although lack of randomized data didn't allow to draw definitive conclusions.

ARTICLE HISTORY

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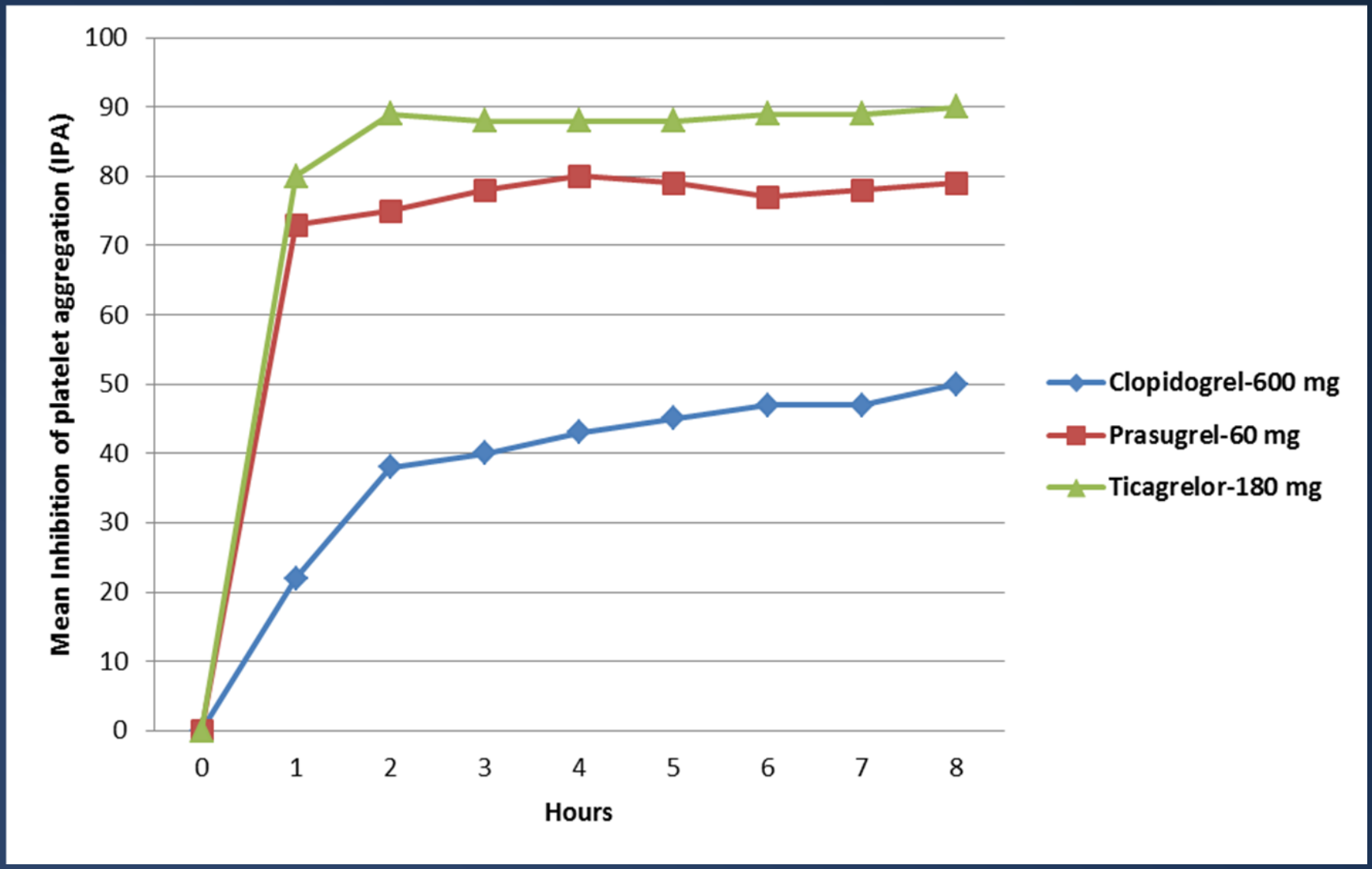
DOI:
10.2174/1381612824666180108121834

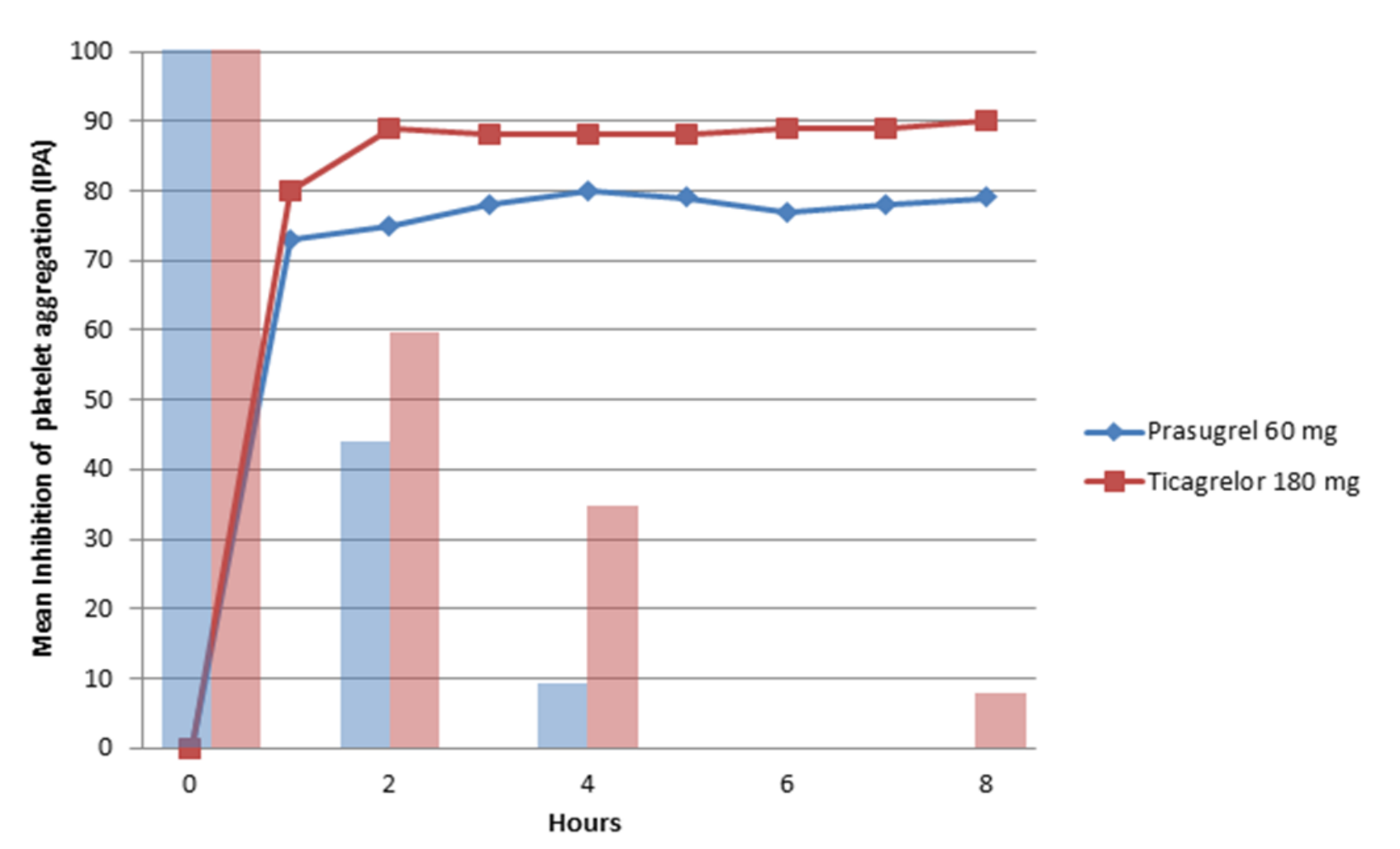
Keywords: Prasugrel, ticagrelol, clopidogrel, dual antiplatelet therapy, stent thrombosis.

Mean Inhibition of platelet aggregation (IPA) after 2PY12 inhibitors loading dose in healthy voluntaries



Rodriguez AE et al. Curr Pharm Des. 2018 January

Mean Inhibition of Platelet aggregation (IPA) and percentage of high residual platelet reactivity (HRPR) following single oral dose of 60 mg Prasugrel and 180 mg Ticagrelor (STEMI).



Rodriguez AE et al. Curr Pharm Des. 2018]

Original Studies

"Real-World" Comparison of Prasugrel With Ticagrelor in Patients With Acute Coronary Syndrome Treated With Percutaneous Coronary Intervention in the United States

Cynthia Larmore,[1*] MSN, Mark B. Effron,[1] MD, Cliff Molife,[1] PhD, Mitch DeKoven,[2] MHSA, Yajun Zhu,[1] Jingsong Lu,[2] MS, Swapna Karkare,[2] MS, Hsiao D. Lieu,[1] MD, Won Chan Lee,[2] PhD, and George W. Vetrovec,[3] MD

Objectives: The 30-day clinical outcomes with prasugrel or ticagrelor were compared using a US payer database in patients with acute coronary syndrome (ACS) undergoing percutaneous coronary intervention (PCI). Background: Prasugrel and ticagrelor demonstrated superior efficacy with increased non-coronary artery bypass graft major bleeding compared with clopidogrel in randomized clinical trials. No direct randomized or observational studies have compared clinical outcomes between prasugrel and ticagrelor. Methods: Patients hospitalized for ACS-PCI between August 1, 2011 and April 30, 2013 and prescribed prasugrel or ticagrelor were selected. Drug treatment cohorts were propensity matched based upon demographic and clinical characteristics. The primary objective compared 30-day net adverse clinical events (NACE) in prasugrel- and ticagrelor-treated patients using a prespecified 20% noninferiority margin. Secondary objectives included comparisons of major adverse cardiovascular events (MACE) and major bleeding. Results: Data were available for 16,098 patients (prasugrel, $n = 13{,}134$; ticagrelor, $n = 2{,}964$). In unmatched cohorts, prasugrel-treated patients were younger with fewer comorbidities than ticagrelor-treated patients, and 30-day NACE rates were 5.6 and 9.3%, respectively ($P < 0.001$). Following propensity matching, NACE was noninferior ($P < 0.001$) and 22% lower in prasugrel-treated than in ticagrelor-treated patients (RR, 0.78; 95% CI, 0.64–0.94). A 30-day adjusted MACE (RR, 0.80; 95% CI, 0.64–0.98) and major bleeding (RR, 0.65; 95% CI, 0.45–0.95) were also lower in prasugrel-treated patients compared with ticagrelor-treated patients. Conclusions: In this "real-world," retrospective, observational study, physicians appear to preferentially use prasugrel in younger patients with lower risk of bleeding or comorbidities

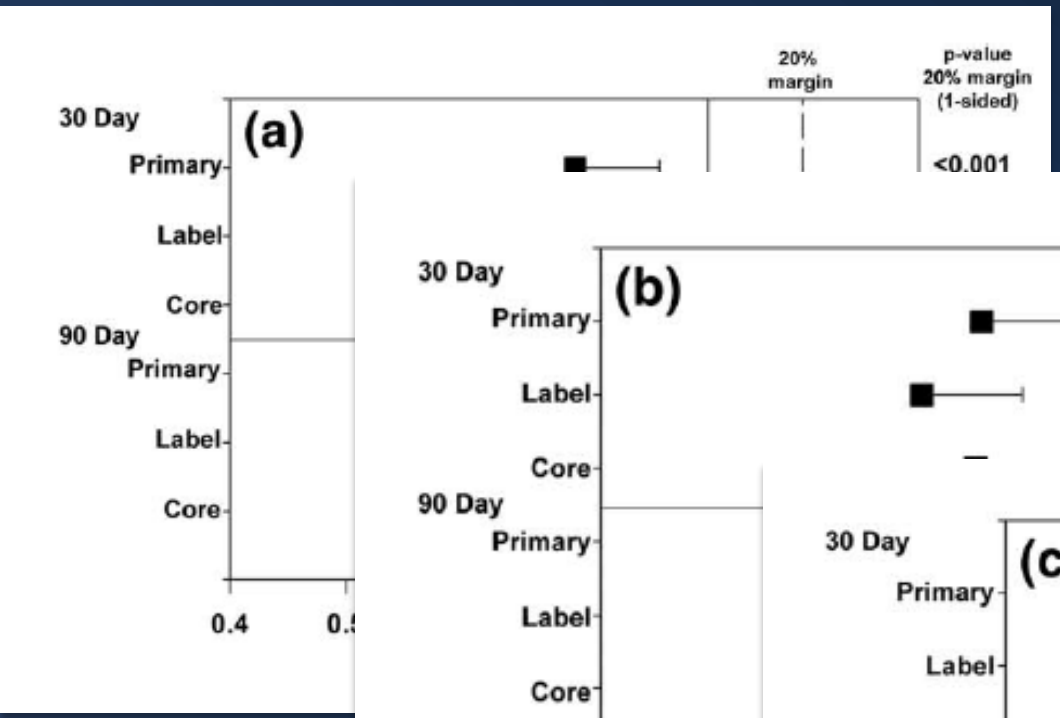
Larmore C et al. Catheter Cardiovasc Interv. 2015 Nov 18.

DAPT duration – "Real world" Ticagrelor vs Prasugrel

Variable	Unmatched			Matched		
	Prasugrel; $N = 13,134$	Ticagrelor; $N = 2,964$	P value	Prasugrel; $N = 2,661$	Ticagrelor; $N = 2,661$	P value
Age, years (mean ± SD)	58.6 ± 10.8	64.1 ± 12.4	<0.001	62.5 ± 11.5	62.4 ± 11.7	0.761
Female gender (%)	26.7	33.4	<0.001	32.4	32.0	0.792
Hospital type (%)			<0.001			0.833
Teaching	42.6	54.2		54.1	53.9	
Non-teaching	46.5	38.3		39.4	39.2	
Index ACS event (%)			<0.001			0.707
STEMI	38.6	39.6	0.313	40.6	39.3	0.327
NSTEMI	36.4	37.2	0.471	35.9	36.9	0.425
UA	21.6	18.5	<0.001	19.0	18.9	0.916
Unspecified ACS	3.4	4.8	NE	4.5	4.9	NE
Prior history/comorbidities (%)						
Anemia	8.9	13.0	<0.001	11.4	12.1	0.443
Cerebrovascular disease	4.8	9.7	<0.001	8.2	8.3	0.842
CHF	6.9	10.2	<0.001	9.4	9.6	0.852
CKD	8.4	12.9	<0.001	10.8	11.7	0.259
COPD	12.9	15.8	<0.001	16.7	15.3	0.156
Diabetes	37.3	35.9	0.149	35.5	35.9	0.775
Dyslipidemia	77.9	74.3	<0.001	74.3	74.4	0.950
Dyspnea	8.3	10.5	<0.001	9.9	10.1	0.749
Hypertension	35.4	41.1	<0.001	39.2	39.6	0.736
Ischemic heart disease	26.2	30.0	<0.001	28.5	28.6	0.952
Peripheral vascular disease	11.4	16.3	<0.001	14.9	14.7	0.787
Prior CABG	1.5	1.6	0.700	1.8	1.8	1.00
Prior MI	7.7	8.4	0.220	8.3	8.1	0.727
Prior PCI	10.2	10.0	0.666	10.0	9.8	0.819
Prior TIA or stroke	2.0	5.4	<0.001	4.2	4.6	0.547
Pre-Index medication use (%)						
ACE inhibitor	15.6	19.0	<0.001	17.7	18.4	0.545
ADP receptor inhibitor	16.0	17.7	0.023	17.2	17.0	0.856
Diabetes medication	12.2	15.1	<0.001	13.8	14.3	0.608
CCI score (mean)	1.4	1.7	<0.001	1.6	1.7	0.703

Larmore C et al. Catheter Cardiovasc Interv. 2015 Nov 18.

DAPT duration – “Real world” Ticagrelor vs Prasugrel



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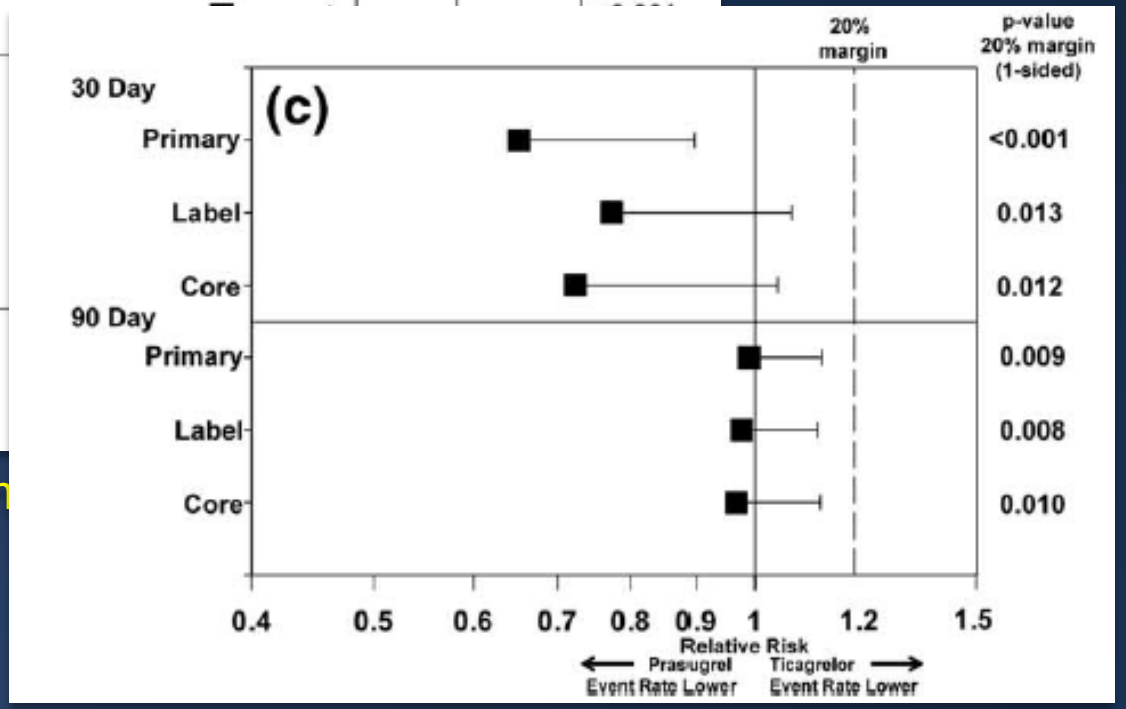

30-day matched comparisons: Bleeding.

Larmore C et al. Catheter Cardiovasc Interv. 2015 Nov 18.

JACC: CARDIOVASCULAR INTERVENTIONS
VOL. 9, NO. 10, 2016

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http://dx.doi.org/10.1016/j.jcin.2016.02.013

Optimal $P2Y_{12}$ Inhibitor in Patients With ST-Segment Elevation Myocardial Infarction Undergoing Primary

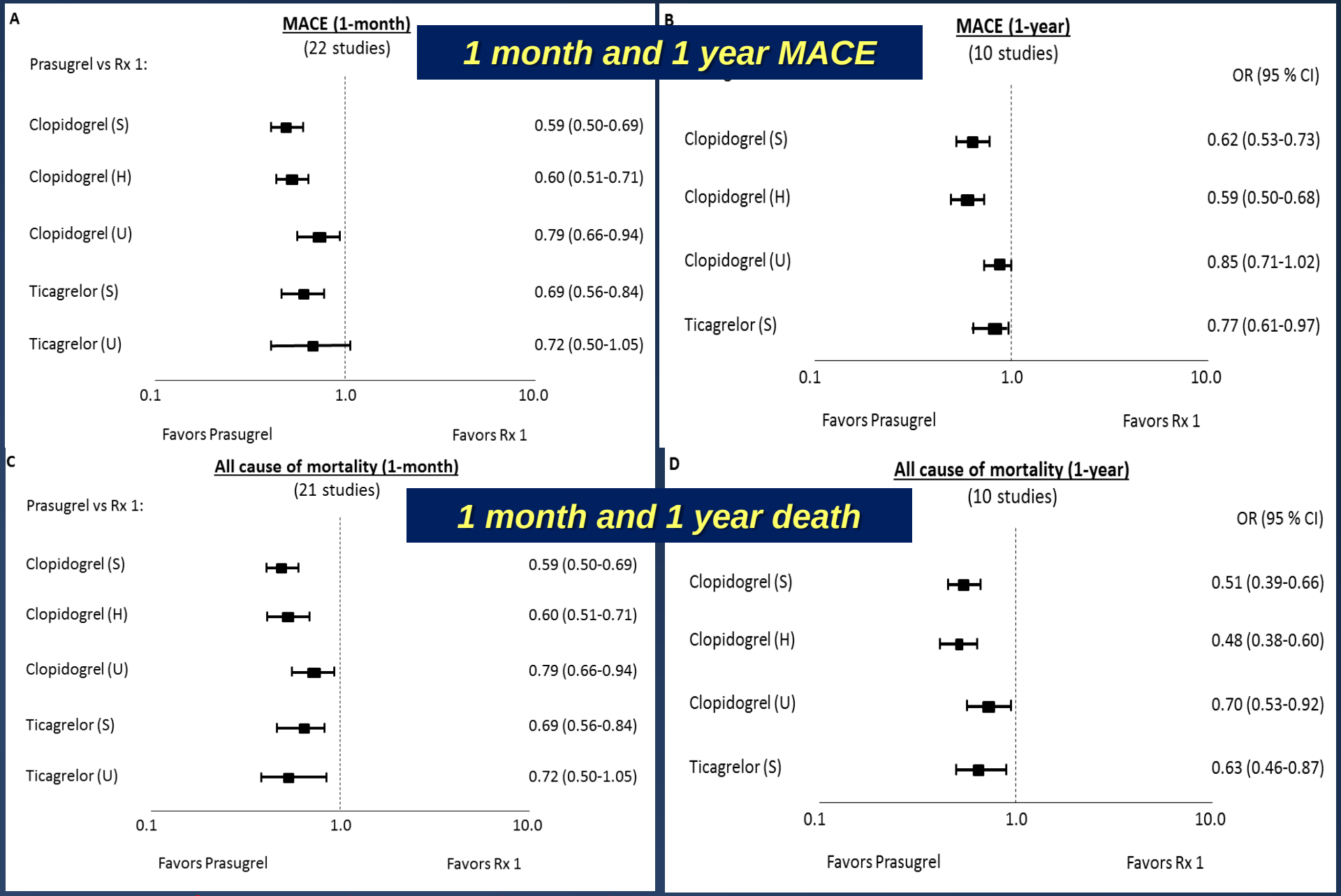
CONCLUSIONS

This network meta-analysis suggests that in STEMI patients undergoing PPCI, prasugrel is associated with better clinical outcomes than standard or high-dose clopidogrel at both 1-month and 1-year follow-up; ticagrelor is associated with better outcomes than standard or high-dose clopidogrel at 1-year; and prasugrel appears superior to standard ticagrelor at both 1 month and 1 year. Prasugrel is particularly more effective in patients receiving bivalirudin and DES.

with prasugrel in studies where patients received bivalirudin, drug-eluting stents, and but not glycoprotein IIb/IIIa inhibitor.

CONCLUSIONS In STEMI patients undergoing PPCI, prasugrel and ticagrelor are more efficacious than clopidogrel; in addition, prasugrel was superior to ticagrelor particularly in conjunction with bivalirudin and drug-eluting stents.
(J Am Coll Cardiol Intv 2016;9:1036–46)

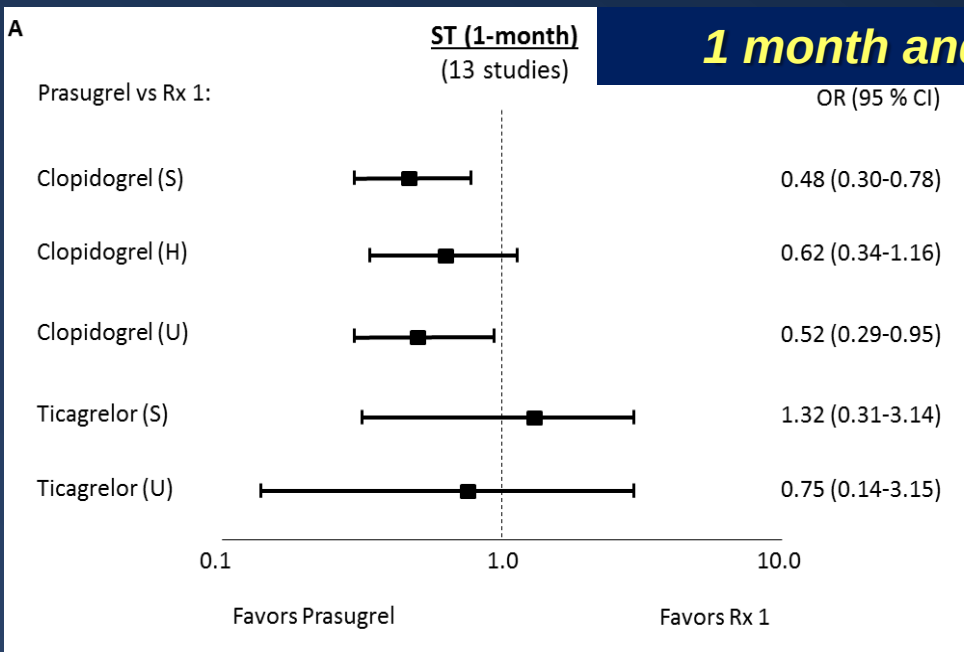
Pooled OR and CI comparing prasugrel with other P2Y12 inhibitors

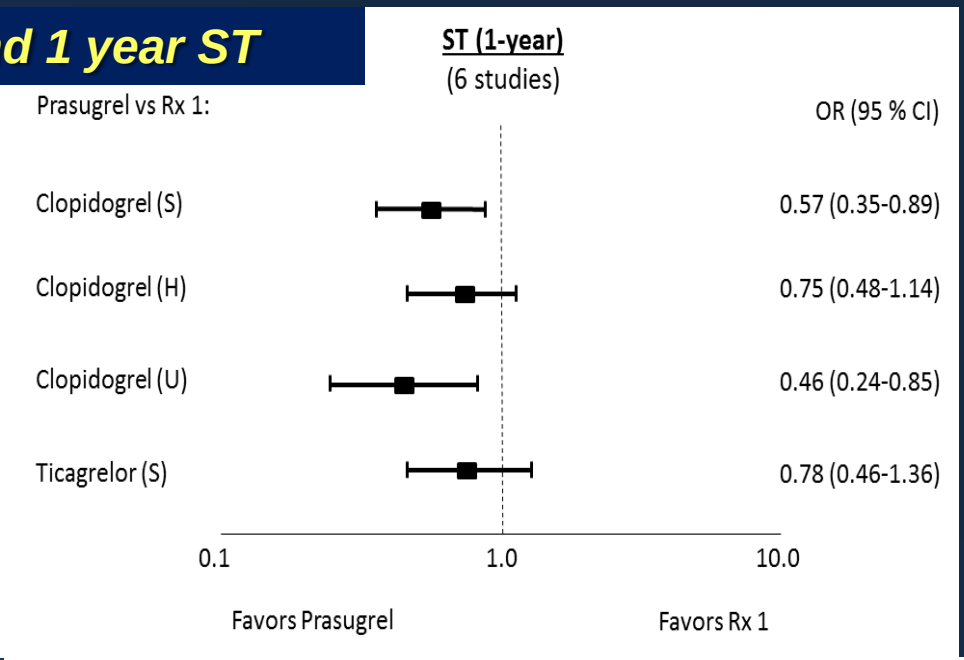


Rafique A et al JACC: Cardiovascular Interventions. 2016;9

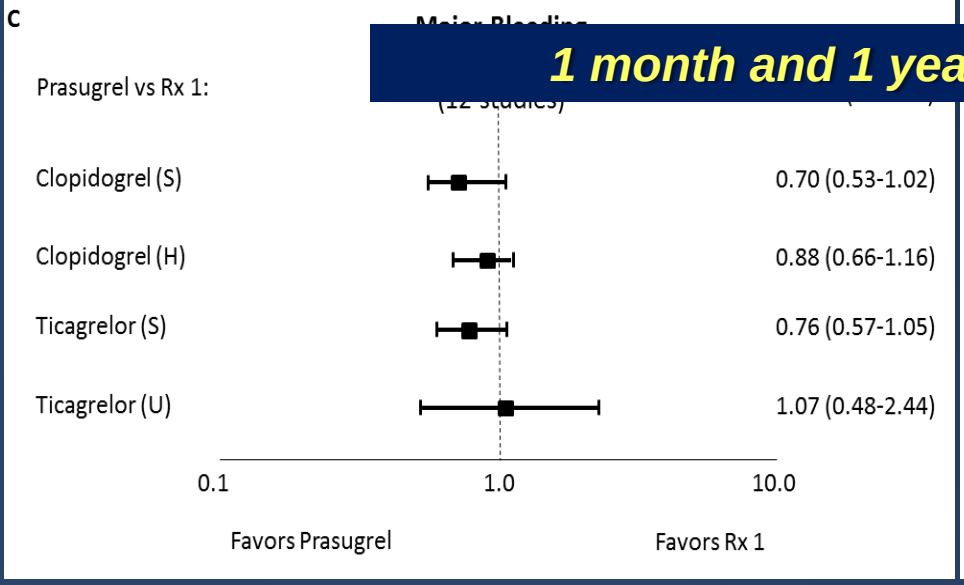
Pooled OR and CI comparing prasugrel with other P2Y12 inhibitors

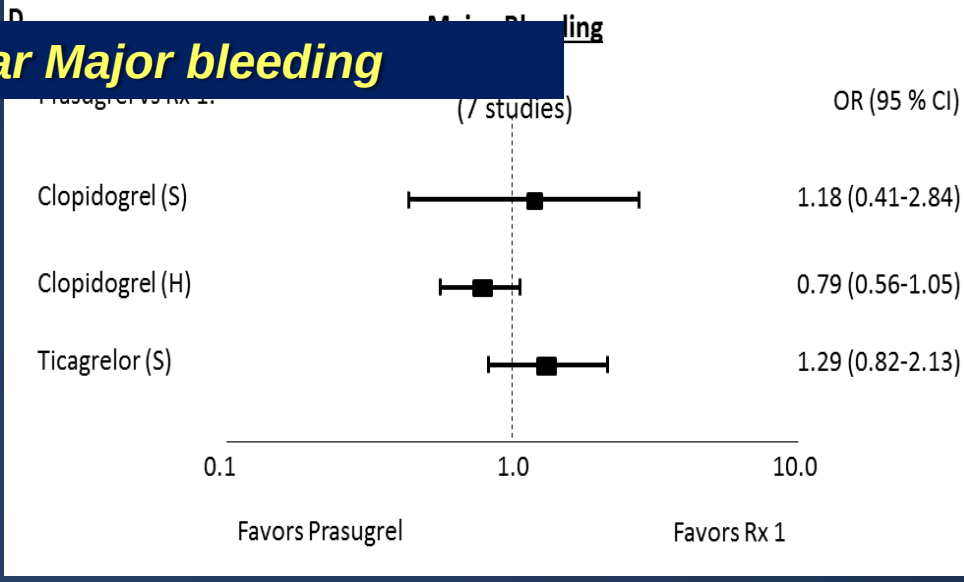
1 month and 1 year ST





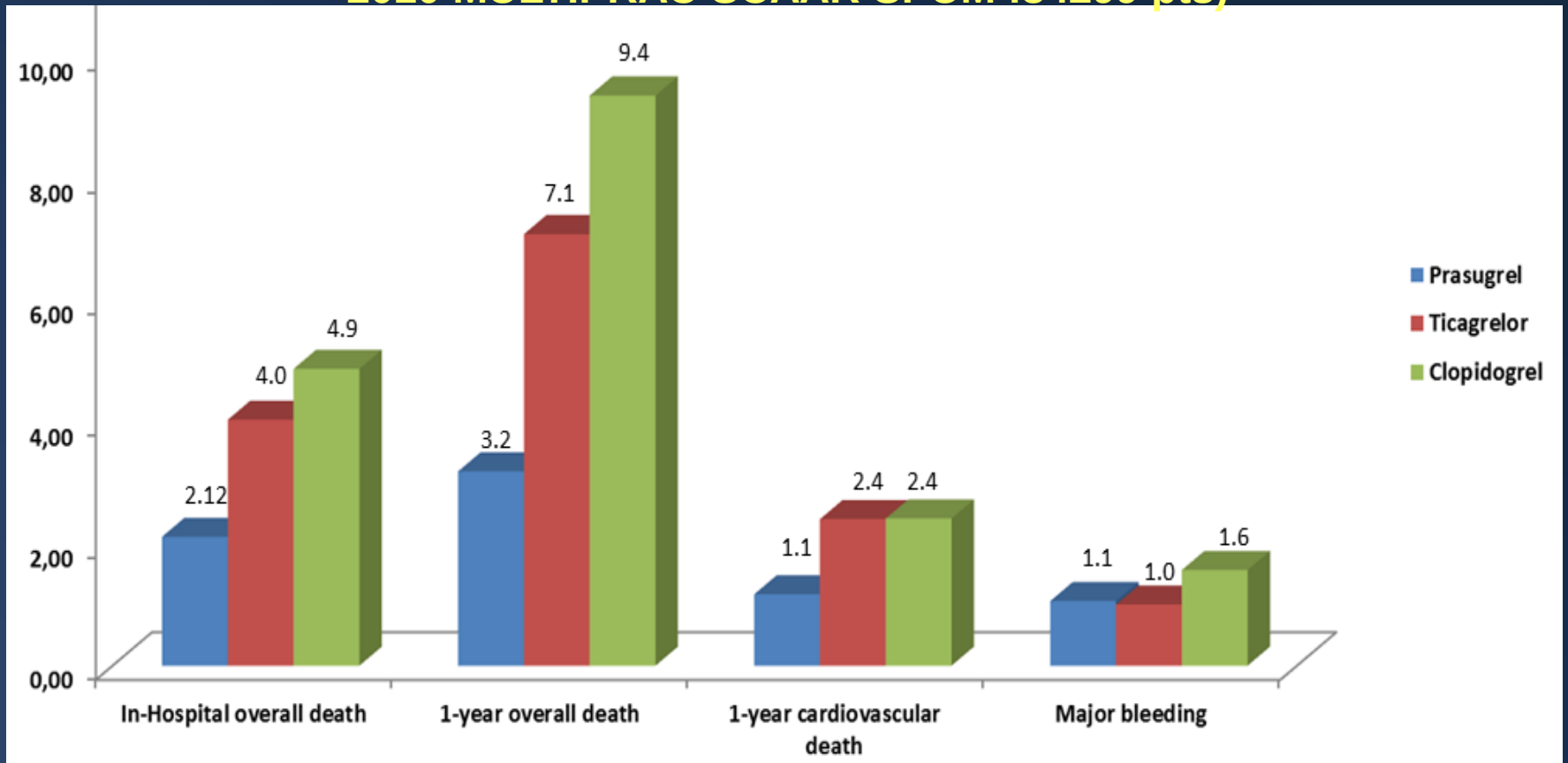
1 month and 1 year Major bleeding





Rafique A et al JACC: Cardiovascular Interventions. 2016;9

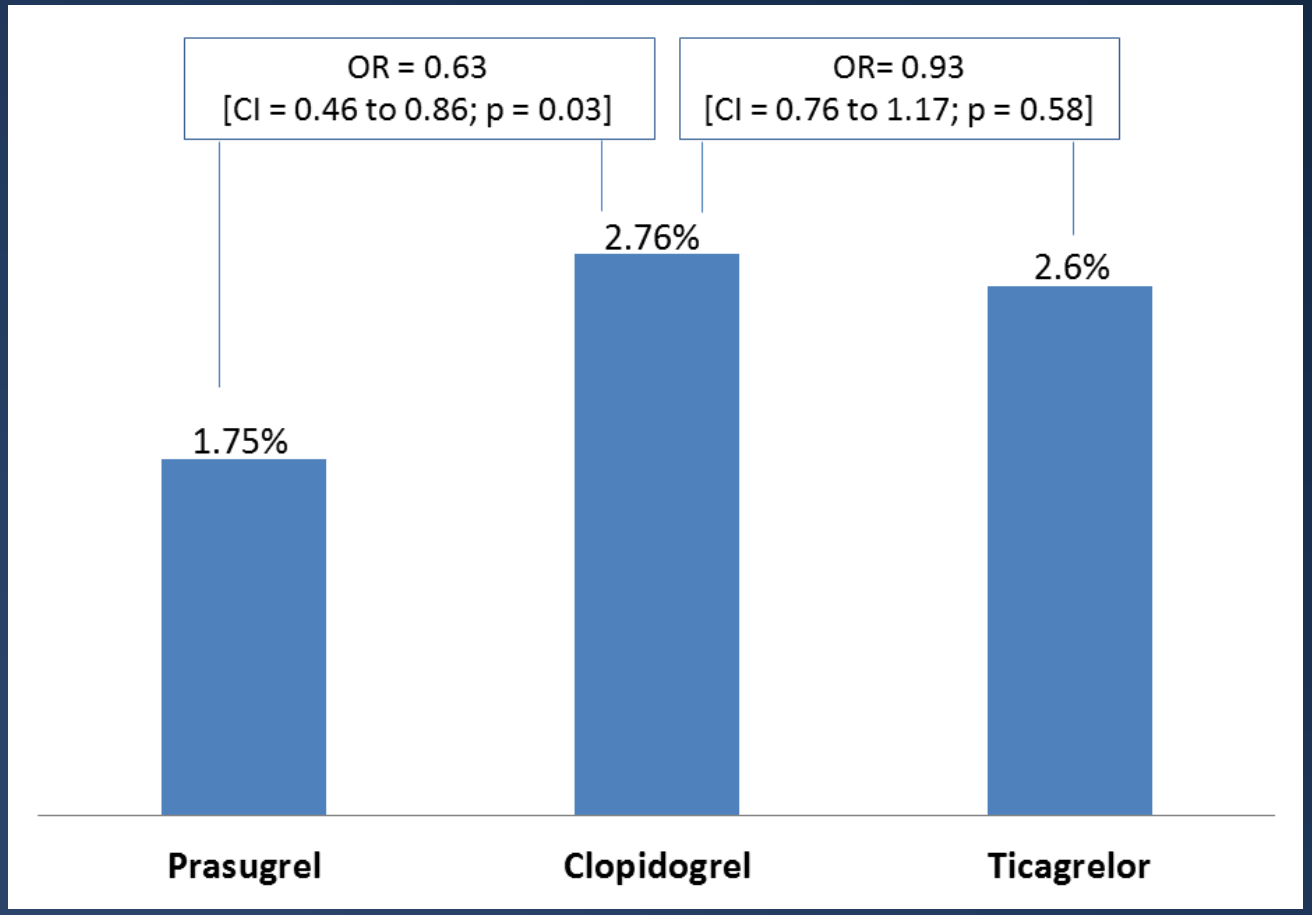
Unadjusted Comparison between P2Y12 inhibitors in 12 contemporary European Registries on STEMI patients (AAPCI/ADAPT AMIS-Plus ATACS DIOCLES FAST-MI 2010 MULTIPRAC SCAAR SPUM :84299 pts)



	P value (chi2)		
Event	**Prasugrel vs Ticagrelor**	**Prasugrel vs Clopidogrel**	**Ticagrelor vs Clopidogrel**
In-Hospital overall death	<0.001	<0.001	<0.01
1-year overall death	<0.001	<0.001	<0.001
1-year cardiovascular death	<0.001	<0.001	0.98
Major bleeding	0.71	<0.002	<0.001

Rodriguez AE et al. Curr Pharm Des. 2018

30-day STEMI mortality comparing different P2Y12 inhibitors from meta-analysis (10 RCT,1 Registry 26658 pts)



Rodriguez AE et al. Curr Pharm Des. 2018

Association of different antiplatelet therapies with mortality after primary percutaneous coronary intervention

Heart: first publishe

CONCLUSIONS

In a cohort of just over 89 000 patients undergoing primary PCI for STEMI in clinical practice in the UK, prasugrel is associated with a lower 30-day and 1-year mortality than clopidogrel and ticagrelor. Give that it is unlikely that an adequately powered randomised trial will be undertaken to compare them in the future, these data may have implications for routine clinical care.

Table 2 Results of multivariate logistic regression models

Outcome	Cohort	OR (95% CI)	P value
30-Day mortality	Prasugrel versus clopidogrel	0.870 (0.777 to 0.973)	0.014
	Ticagrelor versus clopidogrel	1.074 (0.954 to 1.208)	0.237
	Ticagrelor versus prasugrel	1.216 (1.031 to 1.435)	0.020
1-Year mortality	Prasugrel versus clopidogrel	0.891 (0.815 to 0.974)	0.011
	Ticagrelor versus clopidogrel	1.058 (0.962 to 1.163)	0.247
	Ticagrelor versus prasugrel	1.188 (1.042 to 1.354)	0.010

ORs, CIs (in brackets) and P values represent the pooled results over 10 multiple imputed dataset instances.
MACE, major adverse cardiovascular events.

Real-world comparison of clopidogrel, prasugrel and ticagrelor in patients undergoing primary percutaneous coronary intervention Arvindra

- A total of 1648 (44.5%) patients received clopidogrel, 1244 (33.6%) patients received prasugrel and 811 (21.9%) patients received ticagrelor as their P2Y12-receptor inhibitor.

	PRASUGREL (n=1244)		TICAGRELOR (n=811)
30-d	40 (3.2)*	*P value≤0.05	56 (6.9)
1-Y	26 (3.2)		47 (3.8)

Krishnamurthy et al. Open Heart 2019

BACKGROUND

The relative merits of ticagrelor as compared with prasugrel in patients with acute coronary syndromes for whom invasive evaluation is planned are uncertain.

METHODS

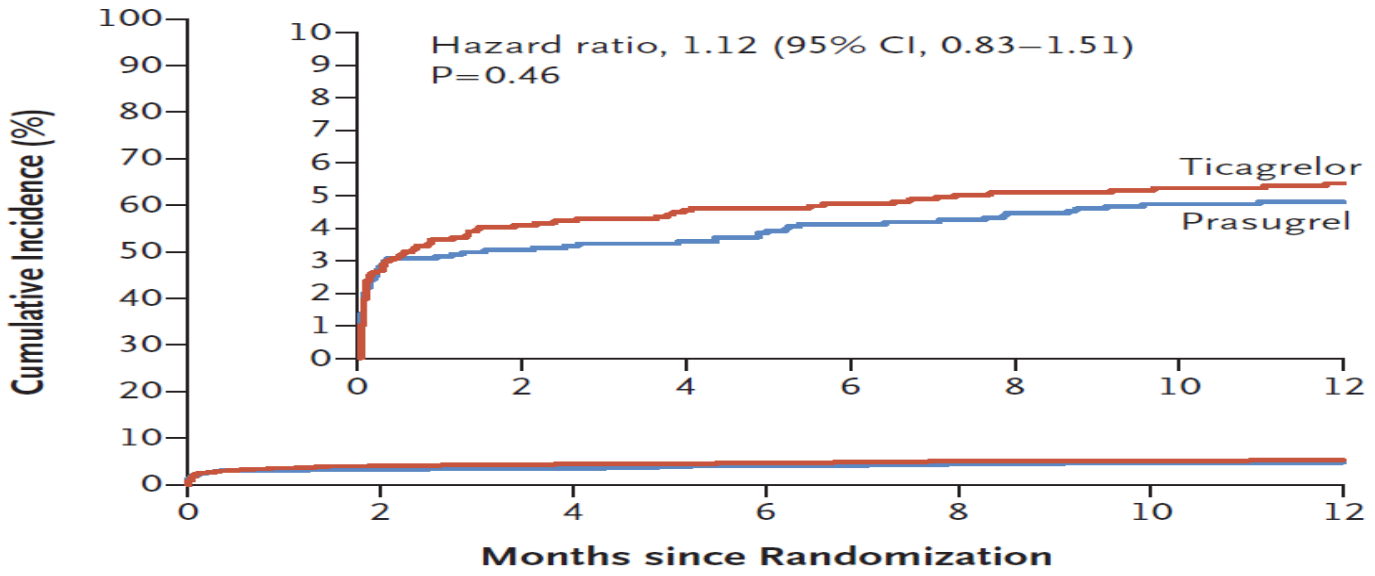
In this multicenter, randomized, open-label trial, we randomly assigned patients who presented with acute coronary syndromes and for whom invasive evaluation was planned to receive either ticagrelor or prasugrel. The primary end point was the composite of death, myocardial infarction, or stroke at 1 year. A major secondary end point (the safety end point) was bleeding.

RESULTS

A total of 4018 patients underwent randomization. A primary-end point event occurred in 184 of 2012 patients (9.3%) in the ticagrelor group and in 137 of 2006 patients (6.9%) in the prasugrel group (hazard ratio, 1.36; 95% confidence interval [CI], 1.09 to 1.70; P=0.006). The respective incidences of the individual components of the primary end point in the ticagrelor group and the prasugrel group were as follows: death, 4.5% and 3.7%; myocardial infarction, 4.8% and 3.0%; and stroke, 1.1% and 1.0%. Definite or probable stent thrombosis occurred in 1.3% of patients assigned to ticagrelor and 1.0% of patients assigned to prasugrel, and definite stent thrombosis occurred in 1.1% and 0.6%, respectively. Major bleeding (as defined by the Bleeding Academic Research Consortium scale) was observed in 5.4% of patients in the ticagrelor group and in 4.8% of patients in the prasugrel group (hazard ratio, 1.12; 95% CI, 0.83 to 1.51; P=0.46).

CONCLUSIONS

Among patients who presented with acute coronary syndromes with or without ST-segment elevation, the incidence of death, myocardial infarction, or stroke was significantly lower among those who received prasugrel than among those who received ticagrelor, and the incidence of major bleeding was not significantly different between the two groups.



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

Figure 3. Cumulative Incidence of the Safety End Point at 1 Year.

The Kaplan–Meier curves show the cumulative incidence of the safety end point, which was the incidence of BARC type 3, 4, or 5 bleeding at 1 year. The analysis was performed in a modified intention-to-treat population, which included all patients who received at least one dose of the randomly assigned trial drug and were assessed for bleeding events up to 7 days after discontinuation of the trial drug. The inset shows the same data on an enlarged y axis.

ISAR REACT 5

	Ticagrelor (n=2012)	Prasugrel (n=2006)	HR [95% CI]
Death	90 (4.5)	73 (3.7)	**1.23 [0.91-1.68]**
– Cardiovascular	63 (3.2)	59 (3.0)	
– Non-cardiovascular	27 (1.4)	14 (0.7)	
Myocardial infarction	96 (4.8)	60 (3.0)	**1.63 [1.18-2.25]**
– STEMI	31	14	
Stroke	22 (1.1)	19 (1.0)	**1.17 [0.63-2.15]**
– Ischemic	16	17	
– Hemorrhagic	6	2	
Definite or probable stent thrombosis	26 (1.3)	20 (1.0)	**1.30 [0.72-2.33]**
Definite stent thrombosis	22 (1.1)	12 (0.6)	

Organizational Structure

Steering Committee

- A. Kastrati, S. Schüpke, D.J. Angiolillo, D. Antoniucci, C. Hamm, K.-L. Laugwitz, F.-J. Neumann, G. Richardt, H. Schühlen, H. Schunkert

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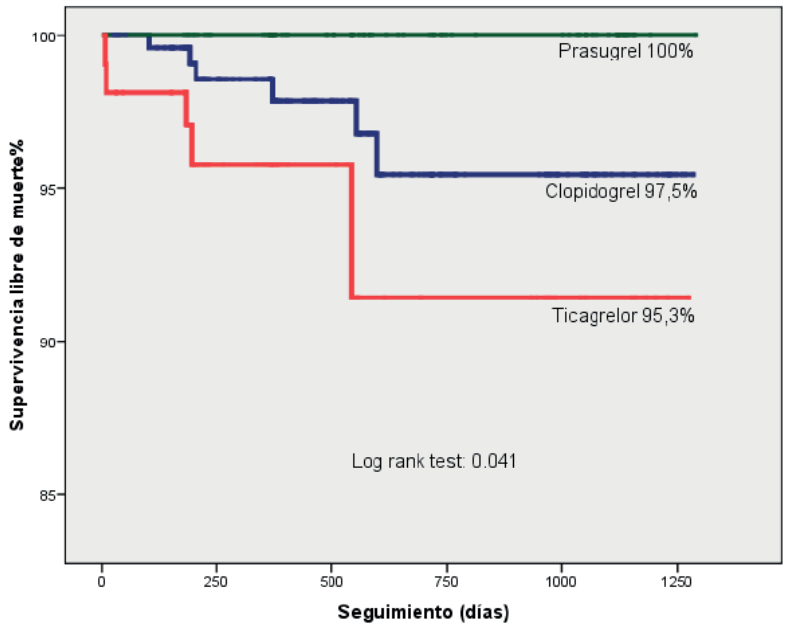
Event Adjudication Committee

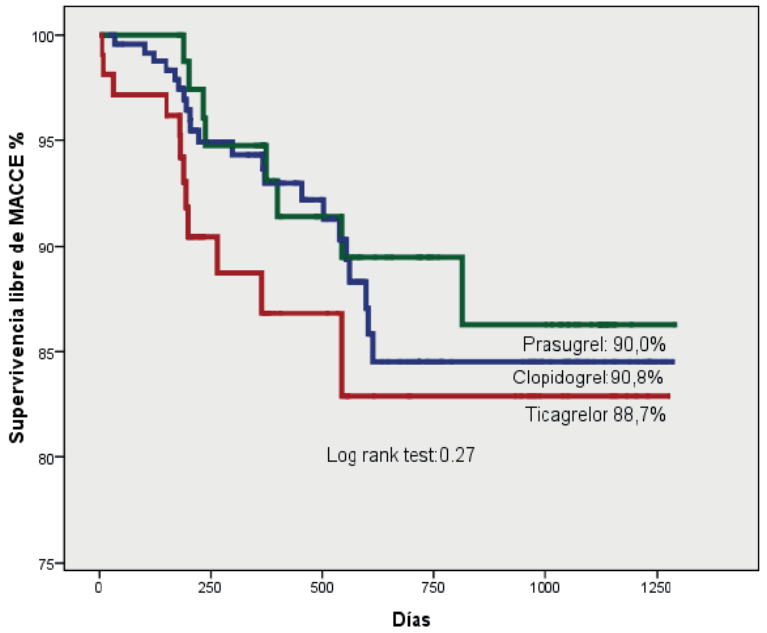
- K. Tiroch, C. Jilek, D. Keta, A. Nusca, S. Paul, N. Sarafoff, C. Volmer

Data Coordinating Center

- ISAResearch Center, Munich, Germany

Uso de drogas inhibidoras de P2Y12, clopidogrel, prasugrel y ticagrelor, en pacientes sometidos a intervenciones coronarias percutáneas en el mundo real en la Argentina. Resultados de los Registros ERACI IV y WALTZ





Infarto de miocardio previo; Revasc pre: revascularización previa; CRM: cirugía de by-pass previa; EVP: enfermedad vascular periférica; IRC: insuficiencia renal crónica; EPOC: enfermedad pulmonar obstructiva crónica; SS: sistema de salud privado; DAPT: doble antiagregación plaquetaria previamente; SCA: síndrome coronario agudo; SCACEST: SCA con elevación del segmento ST-T.

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Los autores declaran no tener conflictos de intereses

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Letter to the Editor

Switching from ticagrelor to prasugrel: A warning ☆

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dication to prasugrel). However, the Switching AntiPlatelet-2 (SWAP-2) trial suggested a pharmacodynamic interaction when switching from ticagrelor to prasugrel that is only partially mitigated when a prasugrel loading dose was used. In fact, during the early switching phase and up to 7 days of the new treatment, prasugrel was associated with significantly higher platelet reactivity as compared with ticagrelor, with a peak after 48 h [4], just the time after switching at which sudden death for a probable ST occurred in our patient. It is possible that occu-

from the receptor. Ticagrelor may also induce a change in receptor conformation that temporarily precludes prasugrel active metabolite binding. It is easy to anticipate a greater increase in platelet reactivity when switching from ticagrelor to clopidogrel, since the later is able to induce a lower active metabolite production as compared with prasugrel. More

1) Both prasugrel and ticagrelor provide a significant reduction of adverse events compared to clopidogrel in patients with ACS, at expense of a significant increase of bleeding risk.

2) In patients with STEMI undergoing PCI, indirect data from multicenter registries and meta-analysis, *prasugrel and ticagrelor show that both are superior to clopidogrel in reducing cardiac adverse events, however, prasugrel was also more effective in reduced MACE, overall mortality and cardiovascular death at 1-month and one year compared to ticagrelor.*

" In summary, ISAR REACT 5 add the piece of information that we are waiting to change our current guidelines of DAPT therapy in patients undergoing PCI in ACS"

Mieres J,Fernandez-Pereira, Rodriguez AE NEJM submitted

Why Results of ISAR REACT 5 Should not be a Surprise

now we would like to make a statement about the superiority of prasugrel over ticagrelor, we would only be able to use two of them, making it clearly scientific inappropriate.

Rodriguez AE et al. Curr Pharm Des. Jan 2018, 24 (4)

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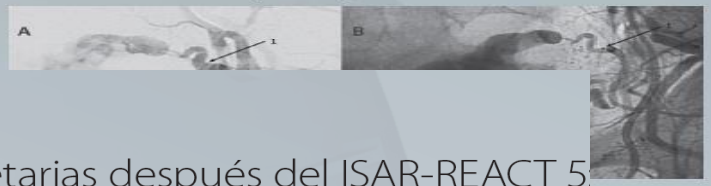

Editoriales

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GRACIAS !!!

- to change DAPT