

Akut koroner sendromda pratik antiagregan kullanımı

Dr. Ahmet Temizhan
Türkiye Yüksek İhtisas SUAM Kardiyoloji Kliniği

Akut Koroner Sendrom

STEMİ



Zamana karşı yarış

Semptom

İlk temas

Teşhis

Reperfüzyon

≤10 dk

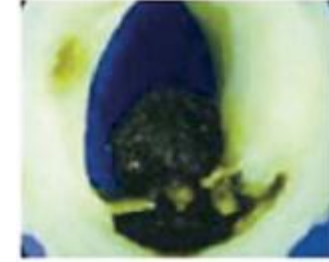
PKG için zaman= İdeali 60 -120 dk

PKG'in faydası azalır

PKG'in faydası artar

Reperfüzyona kadar geçen zaman

NSTEMİ



Zaman kazançtır?!

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doi:10.1016/j.jacc.2008.07.011

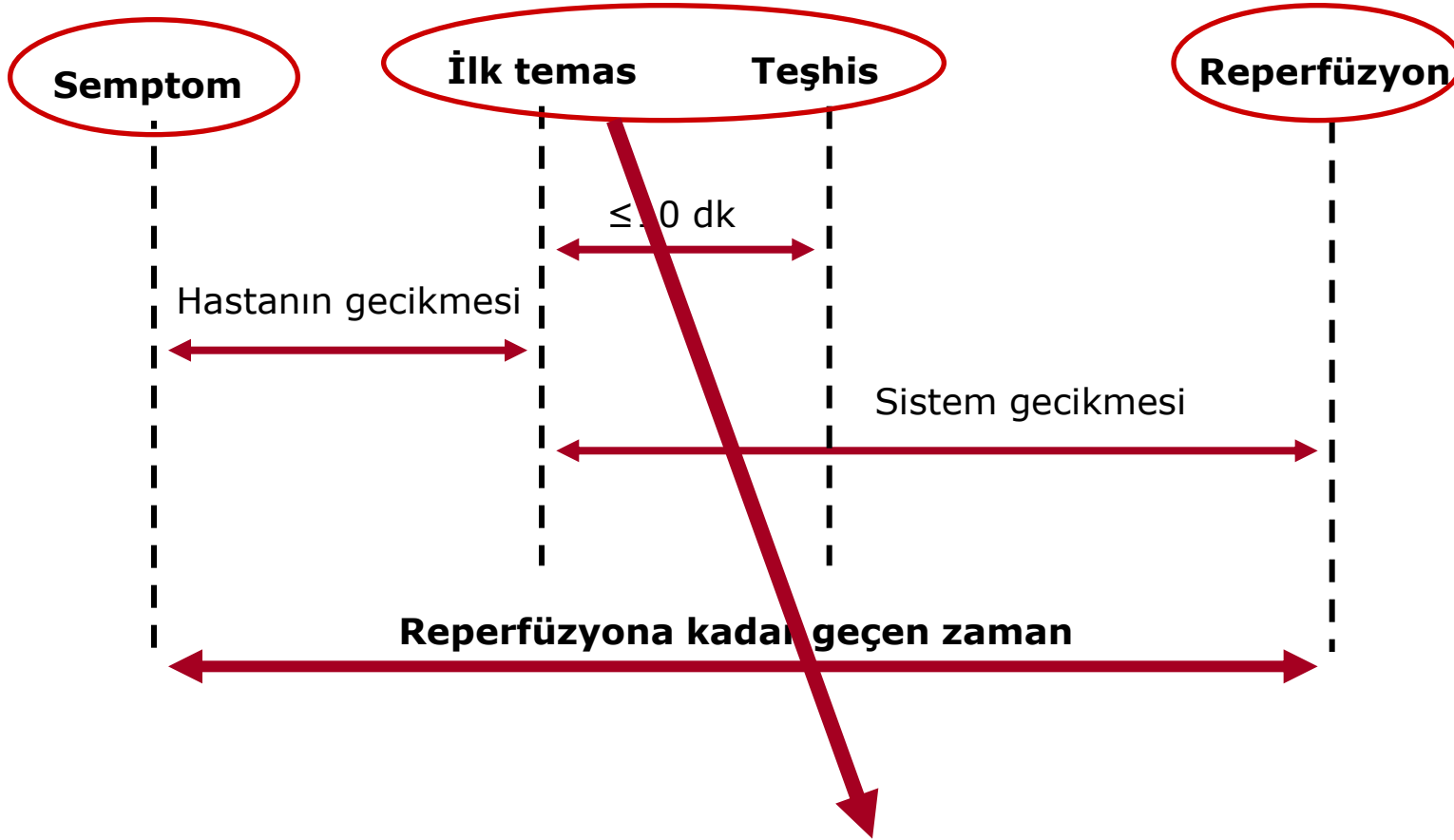
Time Is Muscle

Translation Into Practice

Elliott M. Antman, MD, FACC
Boston, Massachusetts

In the future, advances in the care of patients with ST-segment elevation myocardial infarction (STEMI) will not come from the analysis of trials that do not reflect current practice in an effort to rationalize extending the percutaneous coronary intervention (PCI)-related delay time. We must move beyond such arguments and find ways to shorten total ischemic time. With the launching of the American College of Cardiology's D2B Alliance and the American Heart Association's Mission: Lifeline programs, the focus is now on systems improvement for reperfusion in patients with STEMI. The D2B Alliance was developed to focus on improvement in door-to-balloon times for patients with STEMI who are undergoing primary PCI. The American Heart Association Mission: Lifeline program is a broad, comprehensive national initiative to improve the quality of care and outcomes of patients with STEMI by improving health care system readiness and response to STEMI. Improvements in access to timely care for patients with STEMI will require a multifaceted approach involving patient education, improvements in the Emergency Medical Services and emergency department components of care, the establishment of networks of STEMI-referral hospitals (not PCI capable) and STEMI-receiving hospitals (PCI capable), as well as coordinated advocacy efforts to work with payers and policy makers to implement a much-needed health care system redesign. By focusing now on system efforts for improvements in timely care for STEMI, we will complete the cycle of research initiated by Reimer and Jennings 30 years ago. Time is muscle . . . we must translate that into practice. (J Am Coll Cardiol 2008;52:1216-21) © 2008 by the American College of Cardiology Foundation

Zamana karşı yarış



Acil hekimleri

Reperfüzyona giden süreyi kısaltmak yetmiyor!

Primer PKG başarısı

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Time Is Muscle

Translation Into Practice

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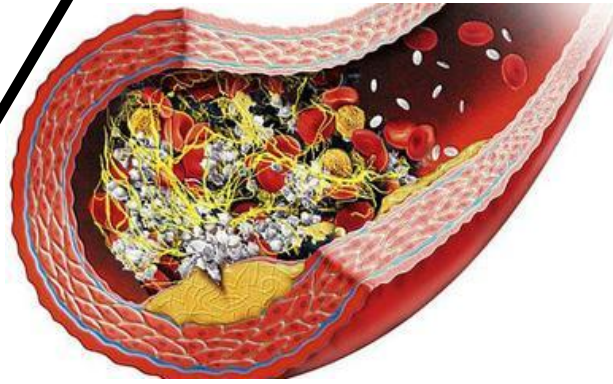
Uygulanması gereken ilaçlar da var

Damar duvarı

Trombüs

Prokoagülan
faktörler

Plateletler

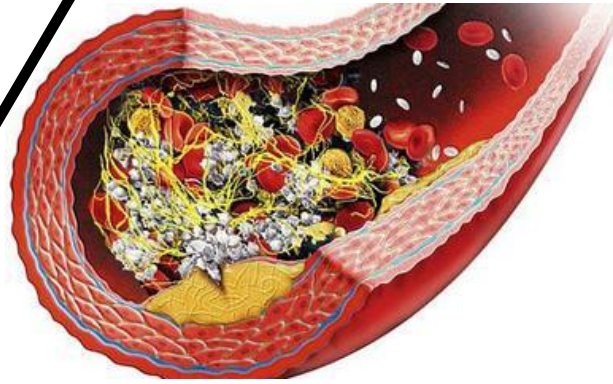


Damar duvarı

Trombüs

Prokoagülan
faktörler

Plateletler



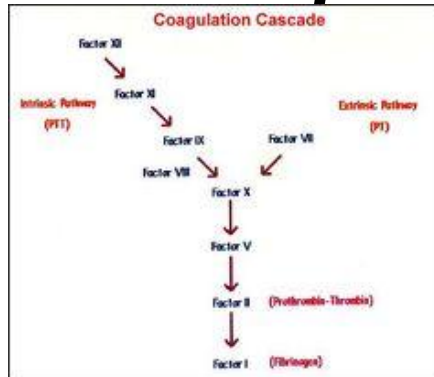
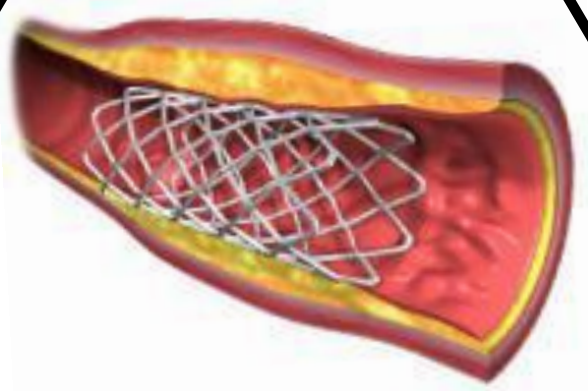
ÖZDEMİR ASAF
yuvarlağın köşeleri

evakitap

Damar duvarı



Stent



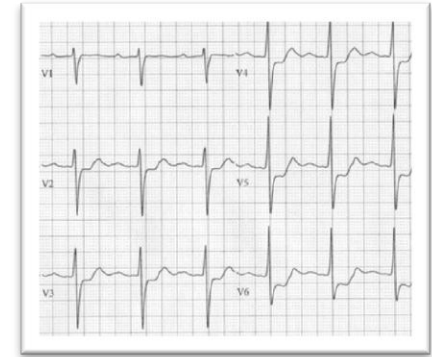
Prokoagulan
faktörler

Plateletler

UF Heparin

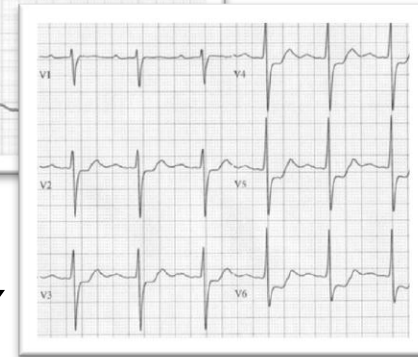
ASA

BMJ 1974; 1: 436-40

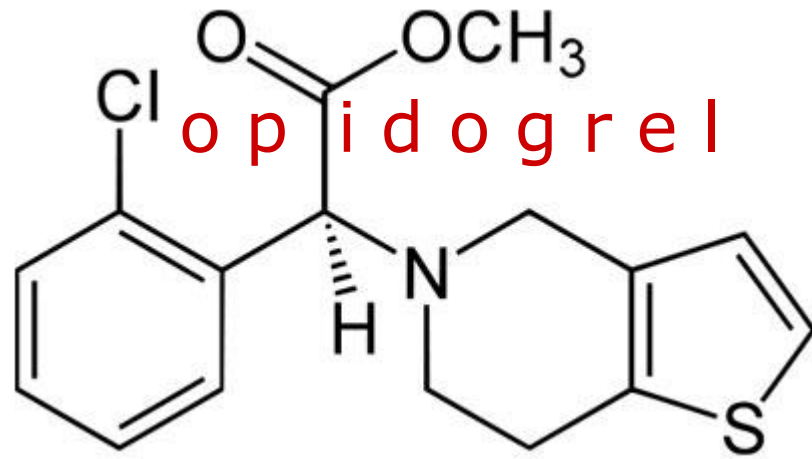


+ Klopidogrel

Circulation 2004;110:1202-1208 ,
J Am Coll Cardiol 2005;46:761-769
N Engl J Med 2005;352:1179-1189



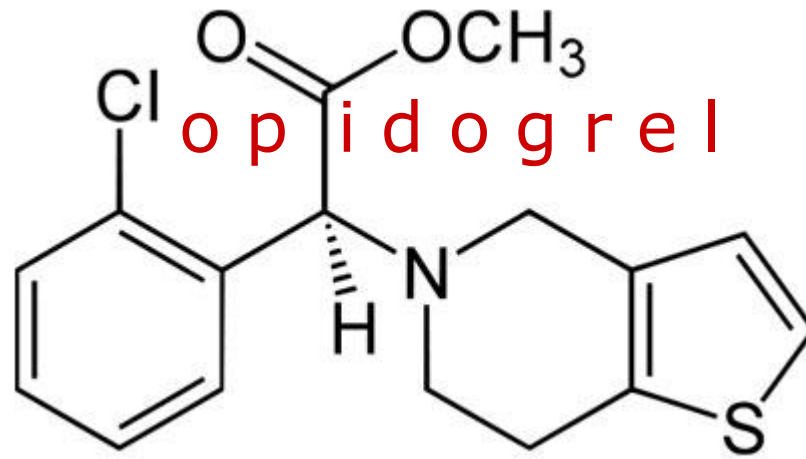
"optimal platelet inhibisyonu"



AKS olgularında artıları kadar eksileri de var;

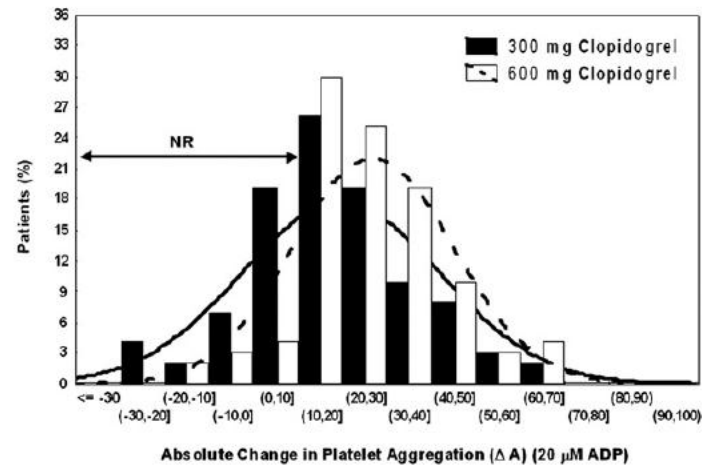
-İstenilen antiplatelet etkinliğin zaman alması

-Time is muscle



AKS olgularında artıları kadar eksileri de var;

-Bireysel cevap değişken olabiliyor



ASA + ??

Yeni Oral AntiaGregan YOAG

Yeni Oral AntiKoagülan YOAK

Y O A K ihtiyacı vs Varfarin

Kullanımı kolay olsun

Hastadan hastaya ve aynı hastada yanıt değişmesin

Sık ölçümlerle kontrolü gerekmesin

En az onun kadar etkili

İlaçlardan ve yiyeceklerden daha az etkilensin

En az onun kadar ve hatta daha güvenli olsun

En az onun kadar ucuz olsun

Y O A G ihtiyacı vs Klopidoğrel

Kullanımı kolay olsun

Hastadan hastaya ve aynı hastada yanıt değişmesin

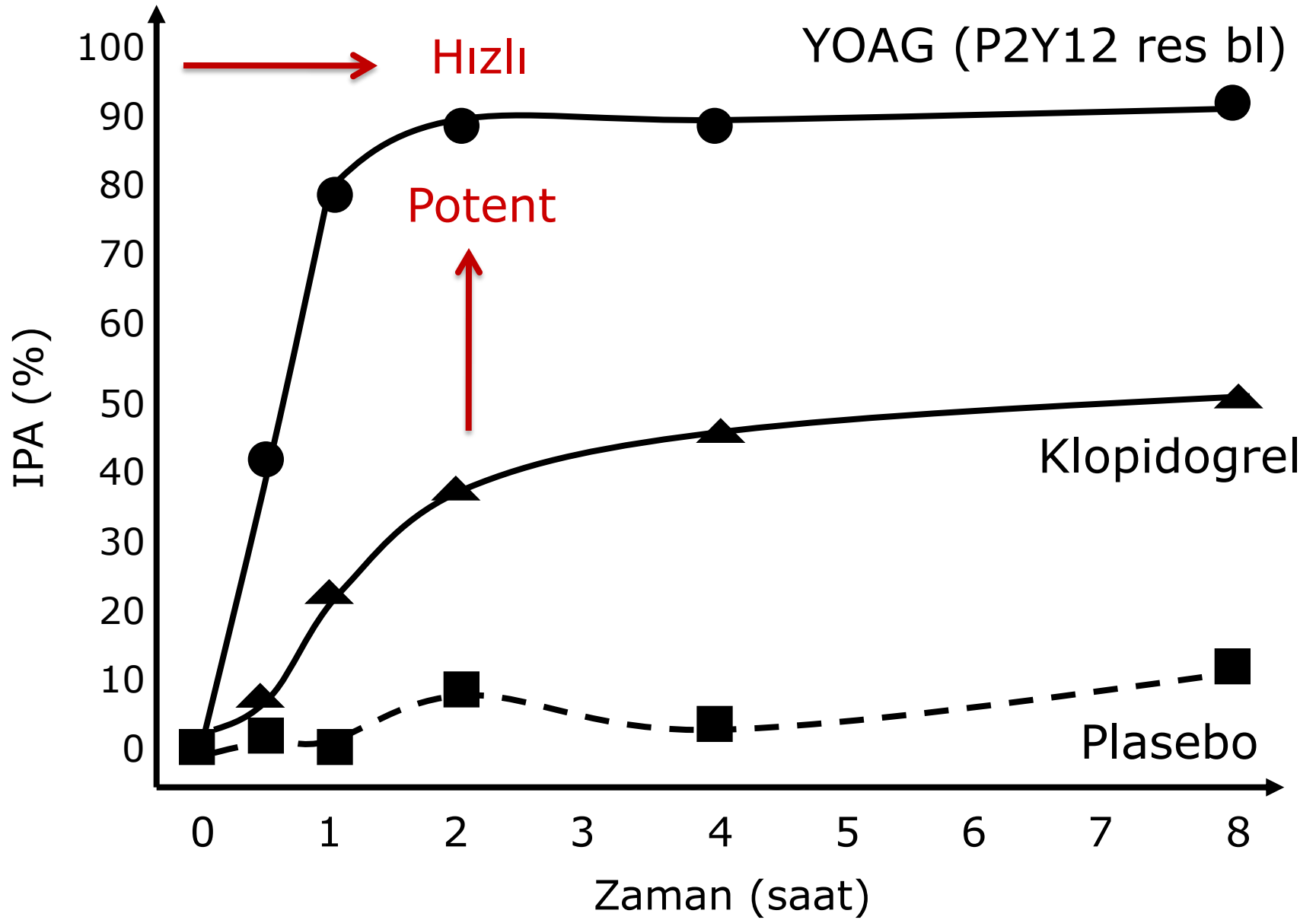
Etkisi daha hızlı başlasın

Daha etkili olsun

İlaçlardan ve yiyeceklerden daha az etkilensin

En az onun kadar ve hatta daha güvenli olsun

En az onun kadar ucuz olsun



Y O A G

Prasugrel -Tienopridin

TRITON-TIMI38 çalışması

Ticagrelor -Triazoloprimidin

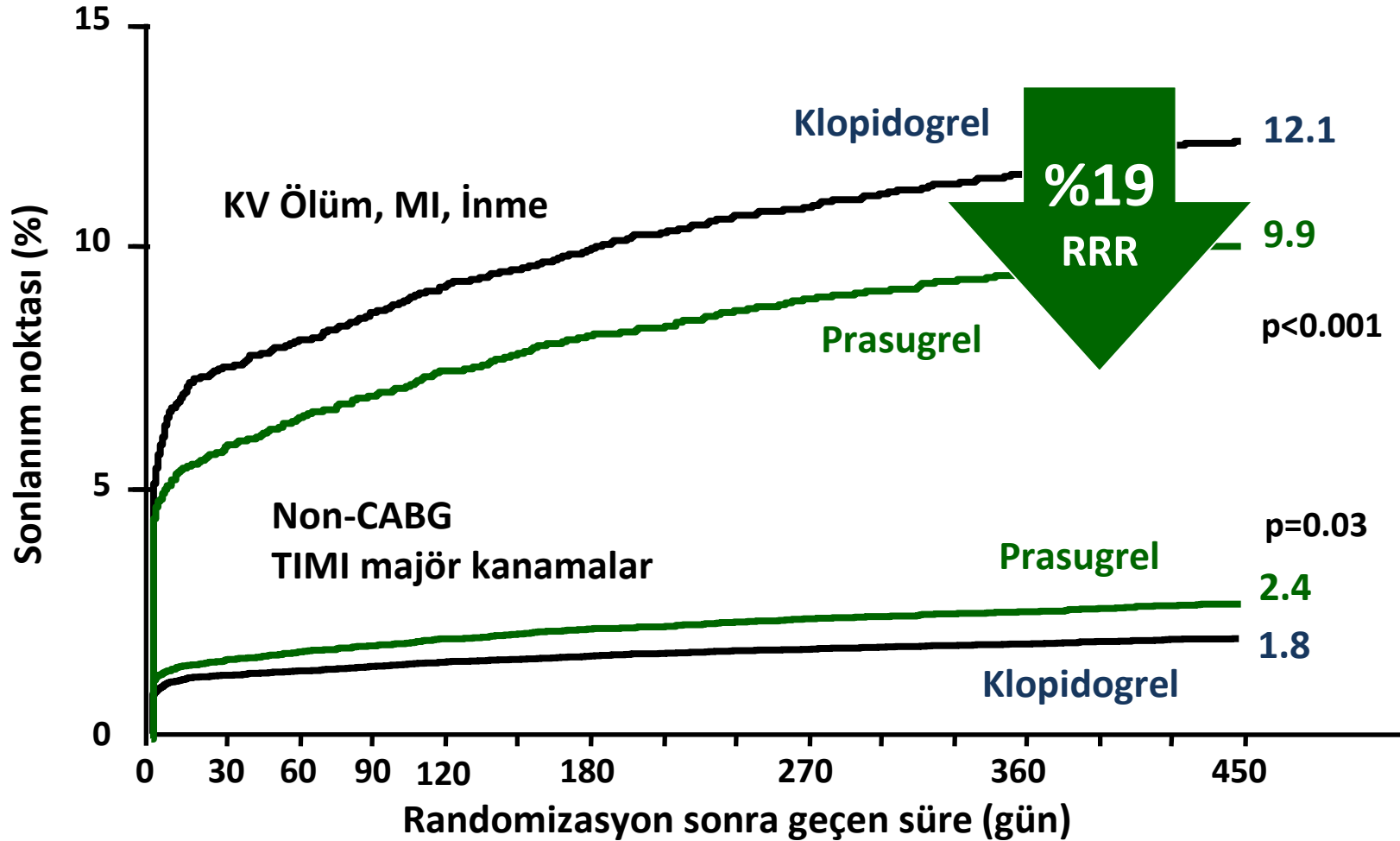
PLATO çalışması



P2Y₁₂

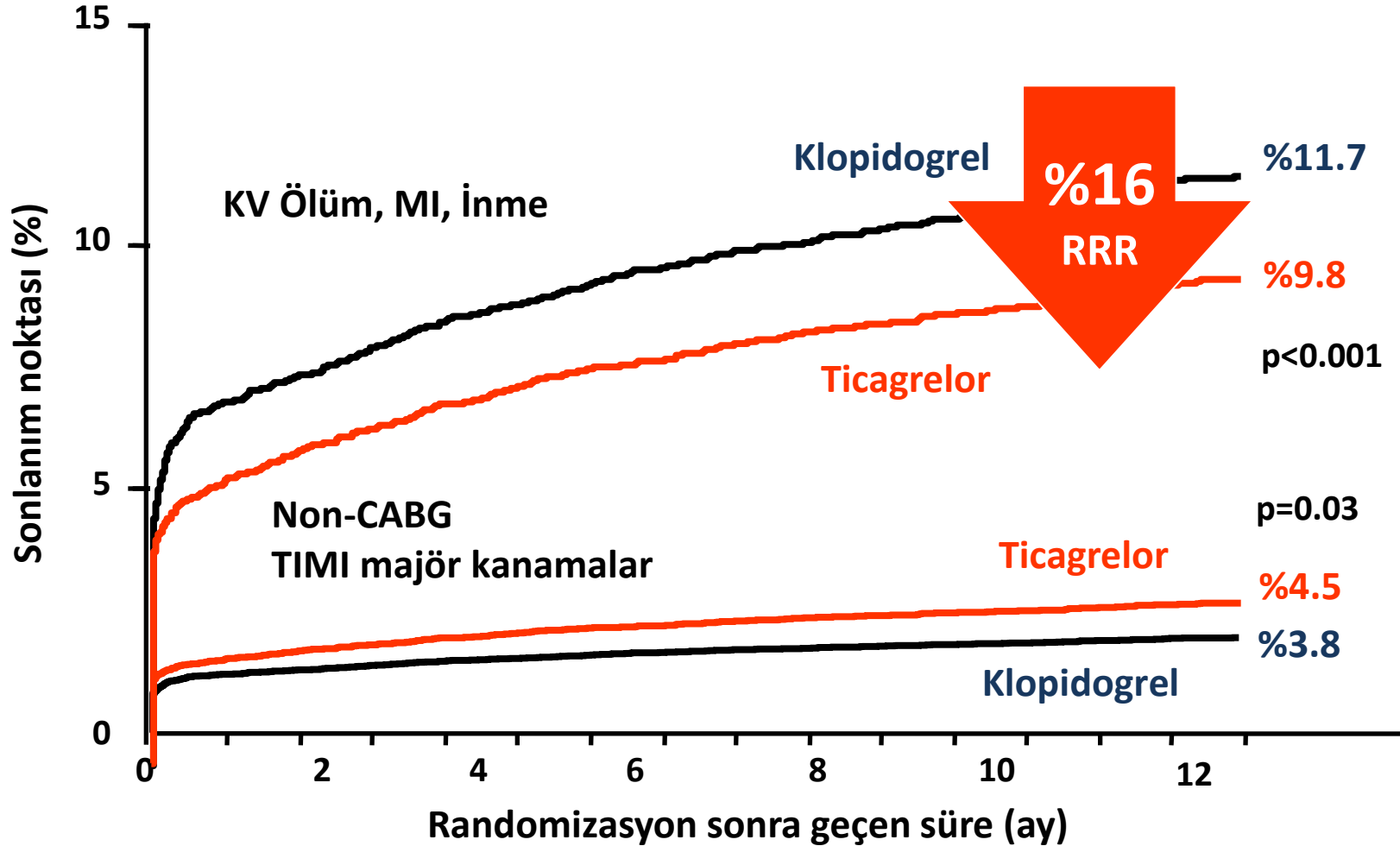
TRITON-TIMI 38:

Primer sonlanım noktasında %19 azalma



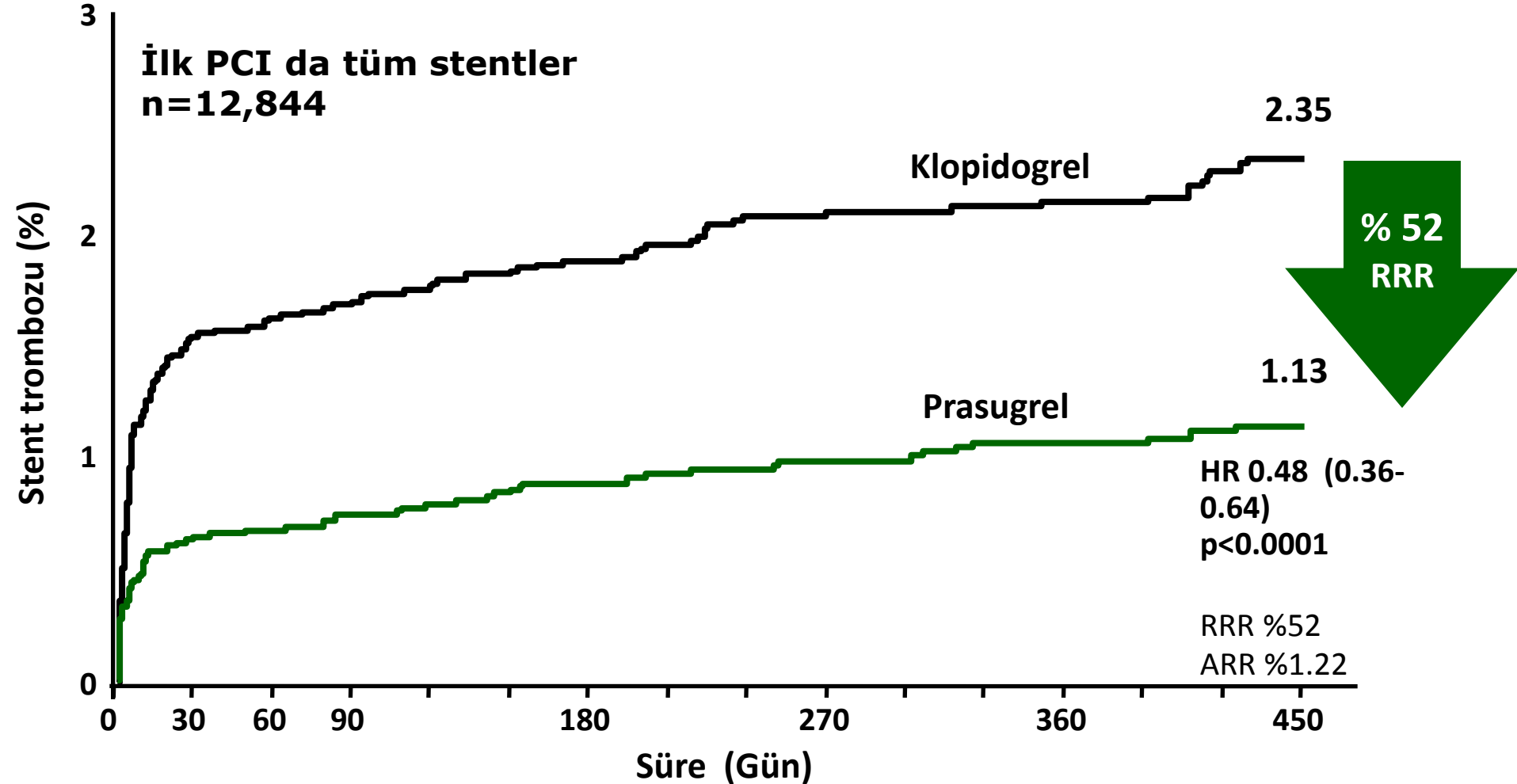
PLATO:

Primer sonlanım noktasında %16 azalma



TRITON-TIMI 38:

Stent tipinden bağımsız stent trombozunda %52 azalma



**2013 ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction:
A Report of the American College of Cardiology Foundation/American Heart Association
Task Force on Practice Guidelines**

WRITING COMMITTEE MEMBERS*, Patrick T. O'Gara, Frederick G. Kushner, Deborah D. Ascheim, Donald E. Casey, Jr, Mina K. Chung, James A. de Lemos, Steven M. Ettinger, James C. Fang, Francis M. Fesmire, Barry A. Franklin, Christopher B. Granger, Harlan M. Krumholz, Jane A. Linderbaum, David A. Morrow, L. Kristin Newby, Joseph P. Ornato, Narith Ou, Martha J. Radford, Jacqueline E. Tamis-Holland, Carl L. Tommaso, Cynthia M. Tracy, Y. Joseph Woo

**2014 AHA/ACC Guideline for the Management of Patients With Non-ST-Elevation Acute
Coronary Syndromes: A Report of the American College of Cardiology/American Heart
Association Task Force on Practice Guidelines**

Ezra A. Amsterdam, Nanette K. Wenger, Ralph G. Brindis, Donald E. Casey, Jr., Theodore G. Ganiats, David R. Holmes, Jr., Allan S. Jaffe, Hani Jneid, Rosemary F. Kelly, Michael C. Kontos, Glenn N. Levine, Philip R. Liebson, Debabrata Mukherjee, Eric D. Peterson, Marc S. Sabatine, Richard W. Smalling and Susan J. Zieman

European Heart Journal Advance Access published August 29, 2014



European Heart Journal
doi:10.1093/eurheartj/ehu278

ESC/EACTS GUIDELINES



**2014 ESC/EACTS Guidelines on myocardial
revascularization**

**2015 ESC guidelines for the management
of acute coronary syndromes in patients
presenting without persistent ST-segment
elevation**

STEMİ; Hangisini tercih edeceğiz?

Hangisi olursa olsun

İlk tıbbi temasta
Hemen yüklenmeli

-Prasugrel 60 mg

-Ticagrelor 180 mg

Bir an önce potent
antiagregan etki

Y O A G ihtiyacı vs Klopidogrel

Kullanımı kolay olsun

Hastadan hastaya ve aynı hastada yanıt değişmesin

Etkisi daha hızlı başlasın

Daha etkili olsun

İlaçlardan ve yiyeceklerden daha az etkilensin

En az onun kadar ve hatta daha güvenli olsun

En az onun kadar ucuz olsun

Zaman kas
demektir



2014 ESC/EACTS Guidelines on myocardial revascularization

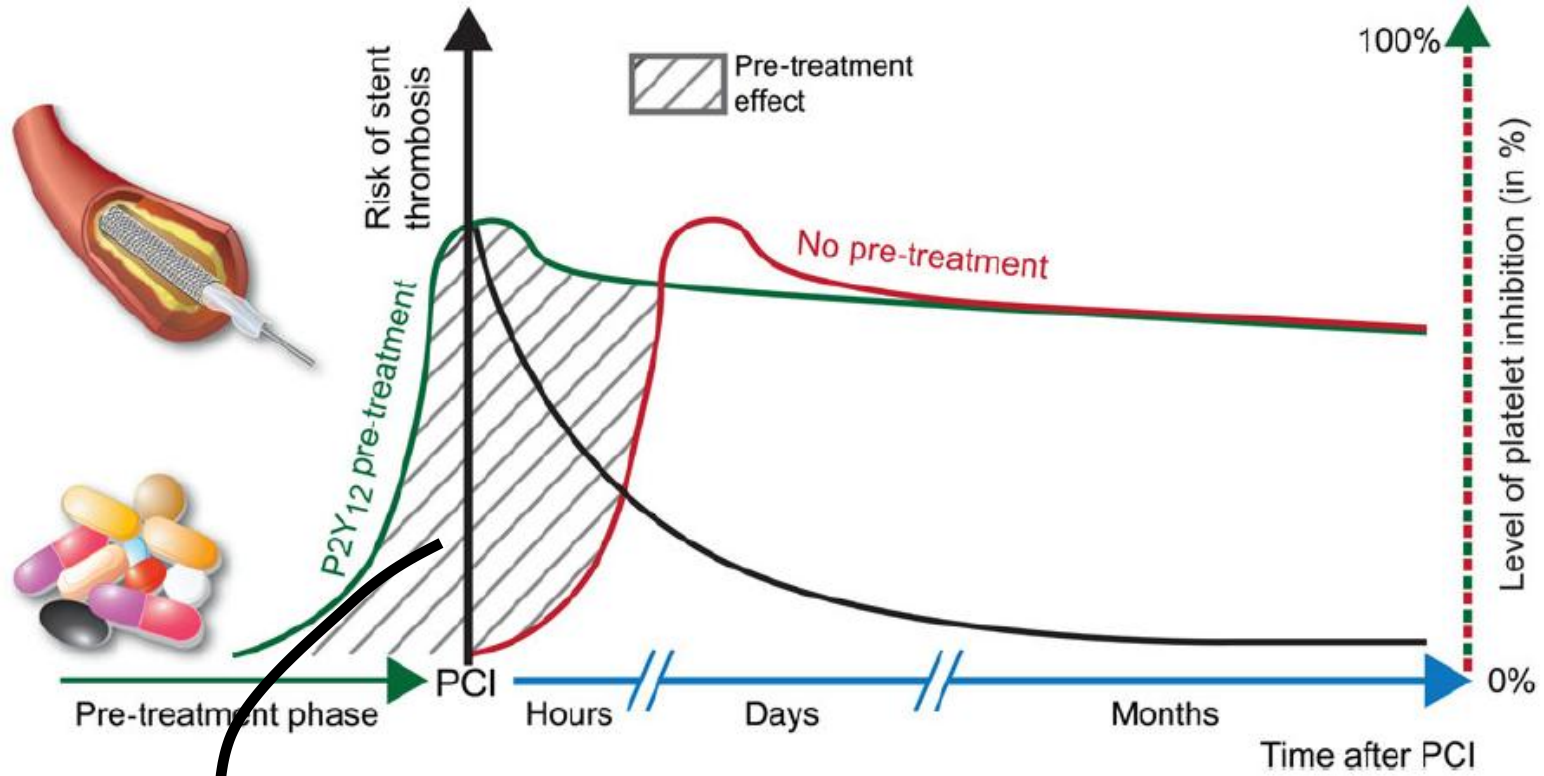
The Task Force on Myocardial Revascularization of the European Society of Cardiology (ESC) and the European Association for Cardio-Thoracic Surgery (EACTS)

Recommendations for antithrombotic treatment in patients with STEMI undergoing primary PCI

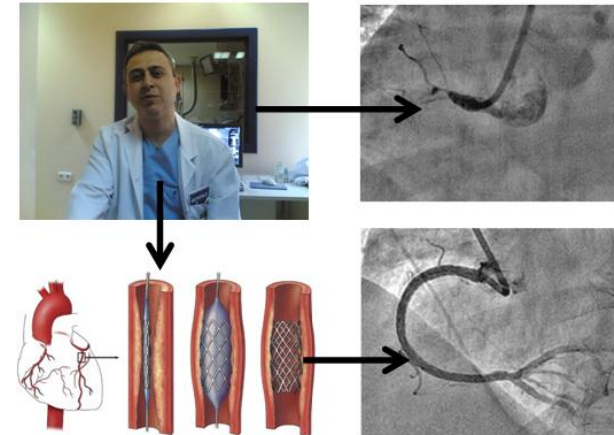
Recommendations	Class ^a	Level ^b
Antiplatelet therapy		
ASA is recommended for all patients without contraindications at an initial oral loading dose of 150–300 mg (or 80–150 mg i.v.) and at a maintenance dose of 75–100 mg daily long-term regardless of treatment strategy.	I	A
A P2Y ₁₂ inhibitor is recommended in addition to ASA and maintained over 12 months unless there are contraindications such as excessive risk of bleeding. Options are:	I	A
• Prasugrel (60 mg loading dose, 10 mg daily dose) if no contraindication	I	B
• Ticagrelor (180 mg loading dose, 90 mg twice daily) if no contraindication	I	B
• Clopidogrel (600 mg loading dose, 75 mg daily dose), only when prasugrel or ticagrelor are not available or are contraindicated.	I	B
<u>It is recommended to give P2Y₁₂ inhibitors at the time of first medical contact.</u>	I	B

P2Y₁₂ inhibitörleri ilk tıbbi temasta yüklenmelidir

Antiagregan etkinlik hemen sağlanmalıdır



YOAG ile ~ 30-60 dk



CRUSH Çalışması: Prasugrel ezilerek kullanıldığında daha hızlı antitrombosit etki sağlar

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<http://dx.doi.org/10.1016/j.jacc.2016.02.045>

Crushed Prasugrel Tablets in Patients With STEMI Undergoing Primary Percutaneous Coronary Intervention

The CRUSH Study

Fabiana Rollini, MD, Francesco Franchi, MD, Jenny Hu, MD, Megha Kureti, MD, Niti Aggarwal, MD, Ashwin Durairaj, MD, Yongwhi Park, MD, Michael Seawell, MD, Pedro Cox-Alomar, MD, Martin M. Zenni, MD, Luis A. Guzman, MD, Siva Suryadevara, MD, Patrick Antoun, MD, Theodore A. Bass, MD, Dominick J. Angiolillo, MD, PhD

RESULTS Compared with whole tablets, crushed prasugrel led to reduced P2Y₁₂ reaction units by 30 min post-LD, which persisted at 1, 2 (164 vs. 95; least square mean difference = 68; 95% confidence interval: 10 to 126; primary endpoint), and 4 h post-LD. Significant differences were no longer present at 6 h post-LD. Parallel findings were shown with platelet reactivity index. Accordingly, high on-treatment platelet reactivity rates were reduced with crushed prasugrel. PK analyses showed a >3-fold faster absorption with crushed compared with whole prasugrel.

CONCLUSIONS In STEMI patients undergoing PPCI, crushed prasugrel leads to faster drug absorption, and consequently, more prompt and potent antiplatelet effects compared with whole tablet ingestion. (Pharmacological Effects of Crushing Prasugrel in STEMI Patients; [NCT02212028](#)) (J Am Coll Cardiol 2016;■:■-■) © 2016 by the American College of Cardiology Foundation.

Seçilecek ilaç önemli,
acilde ne başlanırsa ona devam edilir...

TRITON TIMI-38

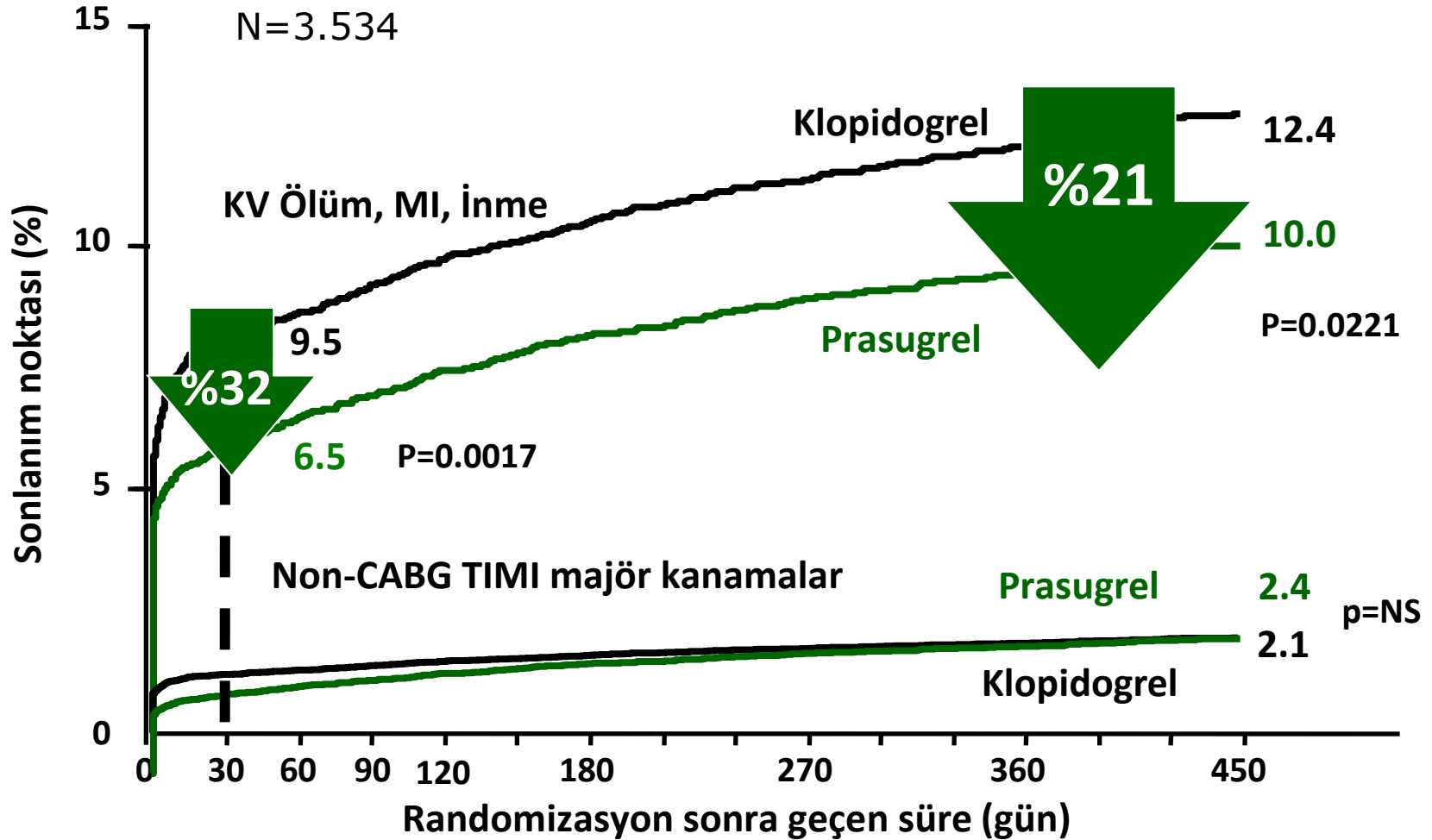
Prasugrel

PLATO

Ticagrelor

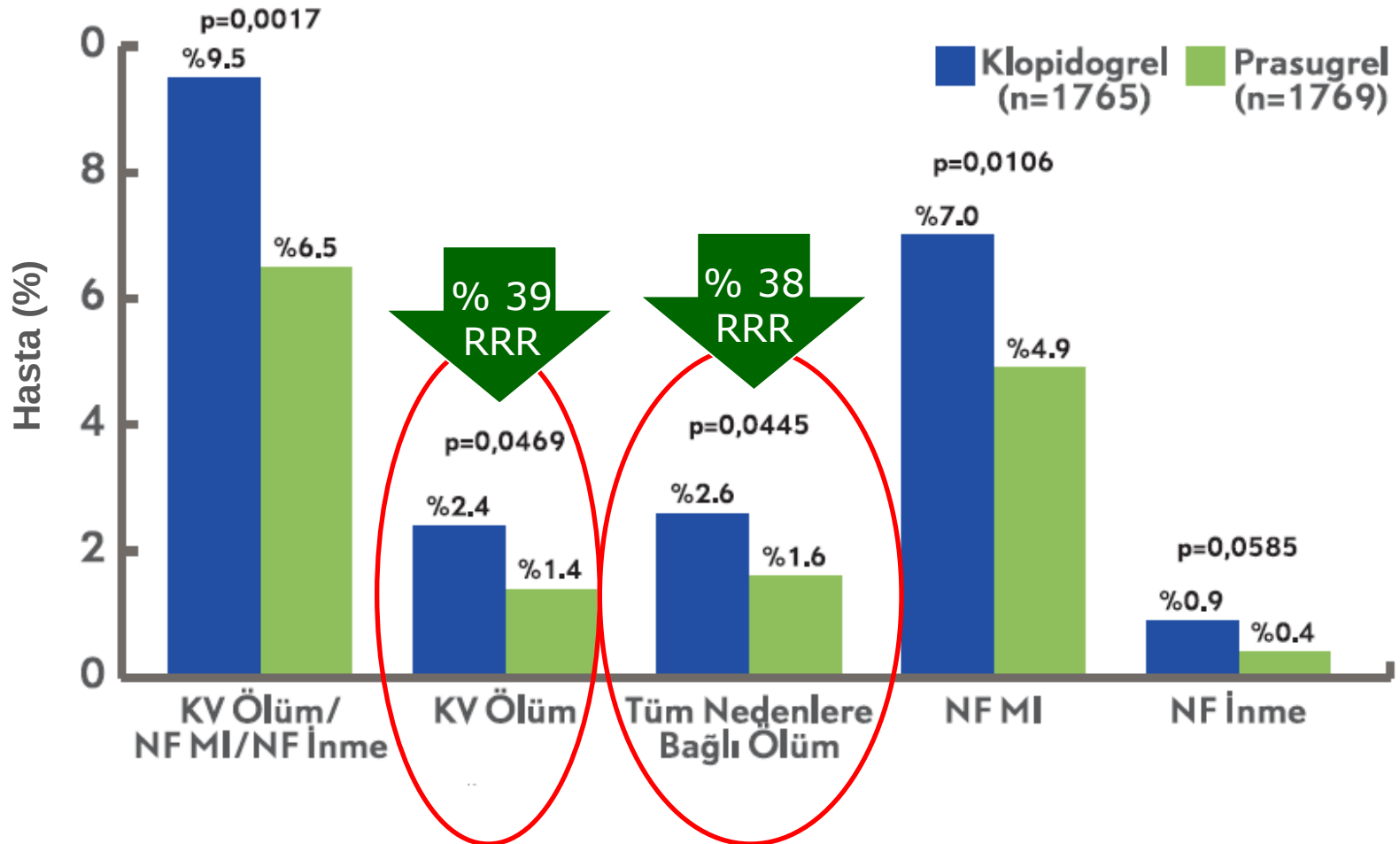
TRITON-TIMI 38: STEMİ

Primer sonlanım noktasında %21 azalma

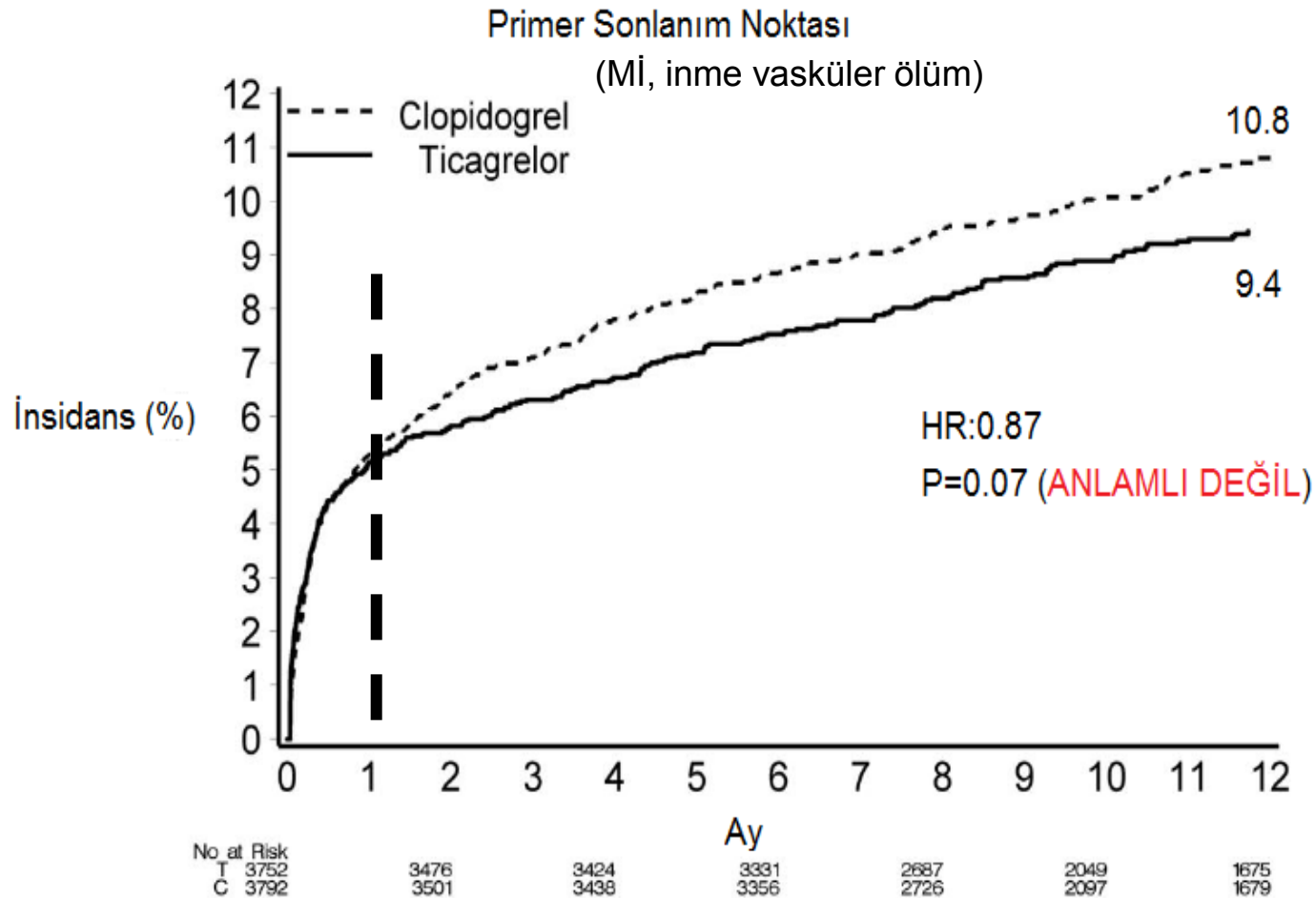


TRITON-TIMI 38

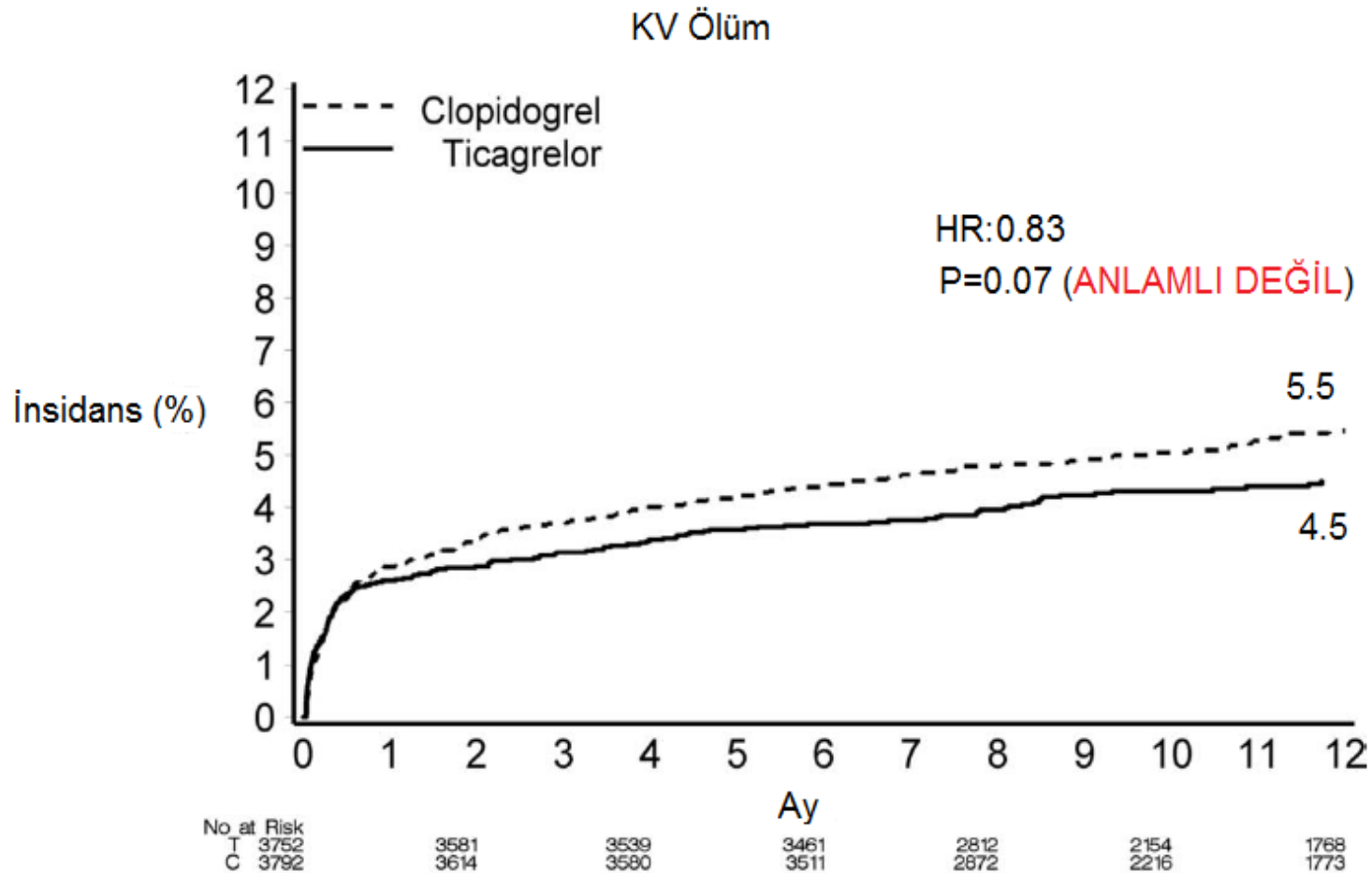
30.günde KV ölüm ve toplam ölüm anlamlı olarak azaldı



PLATO; STEMI'li hastalar primer sonlanımdaki azalma anlamlı değil



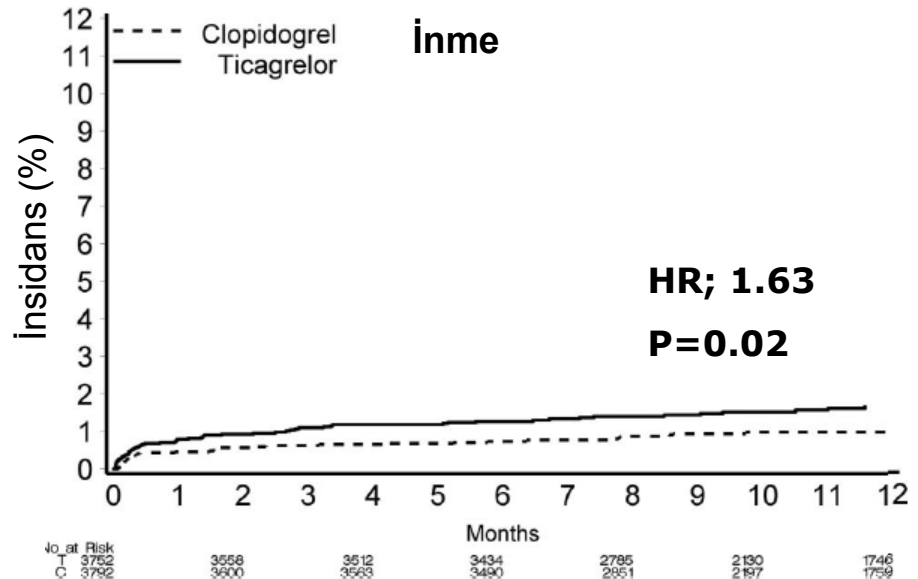
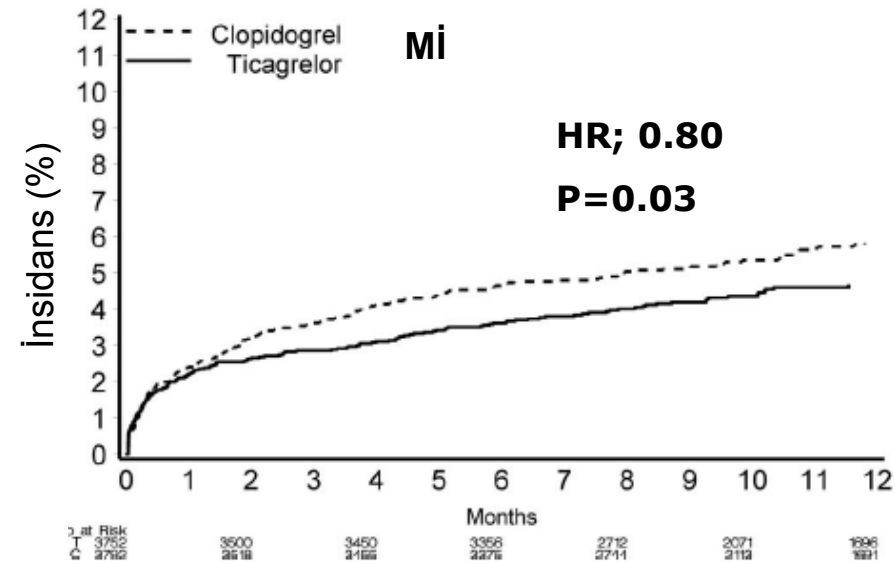
PLATO; STEMI'li hastalar KV ölümdeki azalma anlamlı değil



PLATO; Ticagrelor

Mİ'de anlamlı azalma

İnmede anlamlı artış



2014 ESC/EACTS Guidelines on myocardial revascularization

The Task Force on Myocardial Revascularization of the European Society of Cardiology (ESC) and the European Association for Cardio-Thoracic Surgery (EACTS)

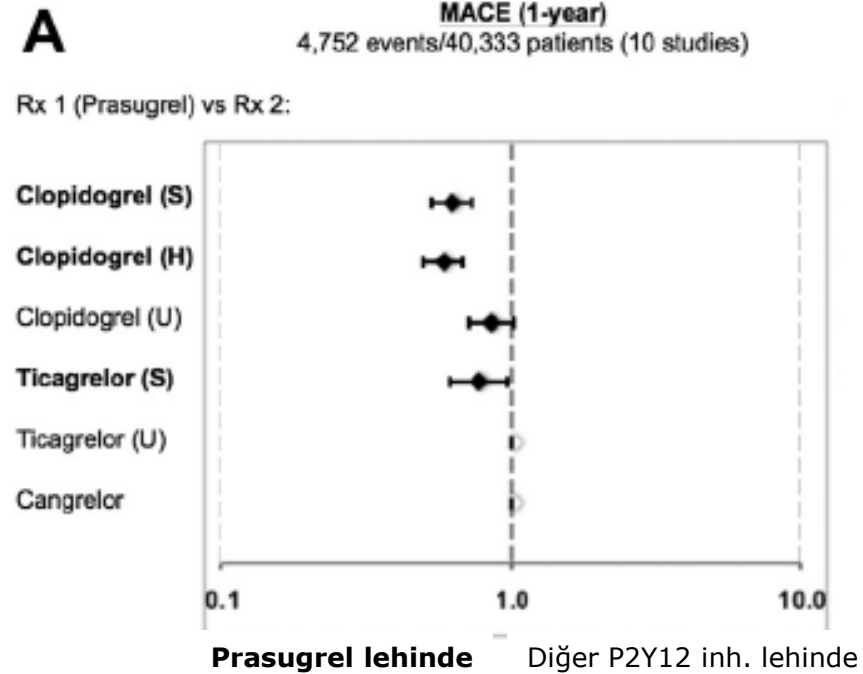
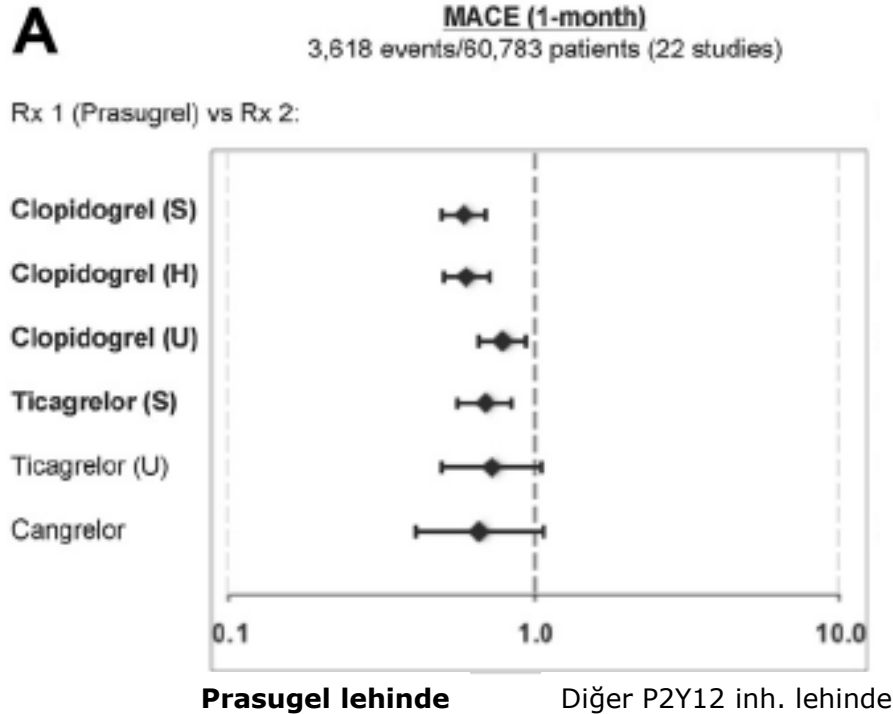
STEMI hastalarında Prasugrel'in KV mortaliteyi azalttığı vurgulandı

The preferred P2Y₁₂ inhibitors are prasugrel (60 mg p.o. loading dose; 10 mg maintenance dose) and ticagrelor (180 mg p.o. loading dose; 90 mg maintenance dose b.i.d.).^{341,518} In the pre-specified subgroups of patients with STEMI undergoing PCI in the TRITON–TIMI 38 trial, the benefit of prasugrel was consistent for the primary end-point at 15 months (prasugrel 10.0% vs. ticagrelor 12.4%; HR 0.79; 95% CI 0.65–0.97; $P = 0.02$), without a significant increase in non-CABG-related bleeding risk (2.4% vs. 2.1%, respectively; HR 1.11; 95% CI 0.70–1.77; $P = 0.65$). There was a lower risk of stent thrombosis (1.6% vs. 2.8%, respectively; HR 0.58; 95% CI 0.36–0.93; $P = 0.02$), as well as of cardiovascular mortality (1.4% vs. 2.4%, respectively; HR 0.61; 95% CI 0.37–1.00; $P = 0.047$)⁸²⁸ in favour of prasugrel at 30-day and 15-month follow-up (2.4% vs. 3.4%, respectively; HR 0.74; 95% CI 0.50–1.09; $P = 0.129$).

Optimal P2Y₁₂ Inhibitor in Patients With ST-Segment Elevation Myocardial Infarction Undergoing Primary Percutaneous Coronary Intervention

A Network Meta-Analysis JACC Cardiovasc Interv. 2016 May 23;9(10):1036-46

37 çalışma, 88.402 STEMI hastası



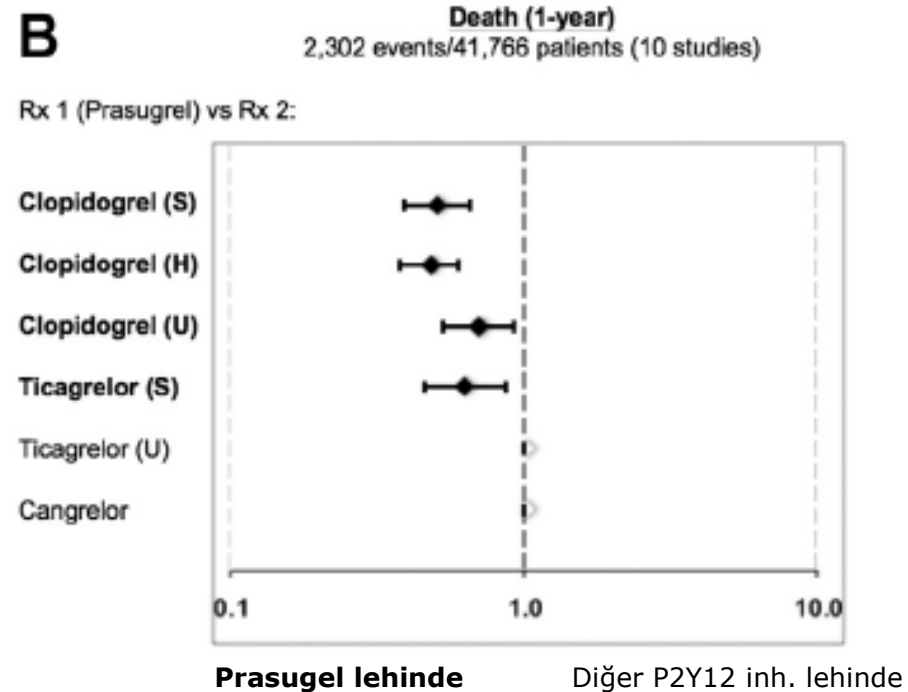
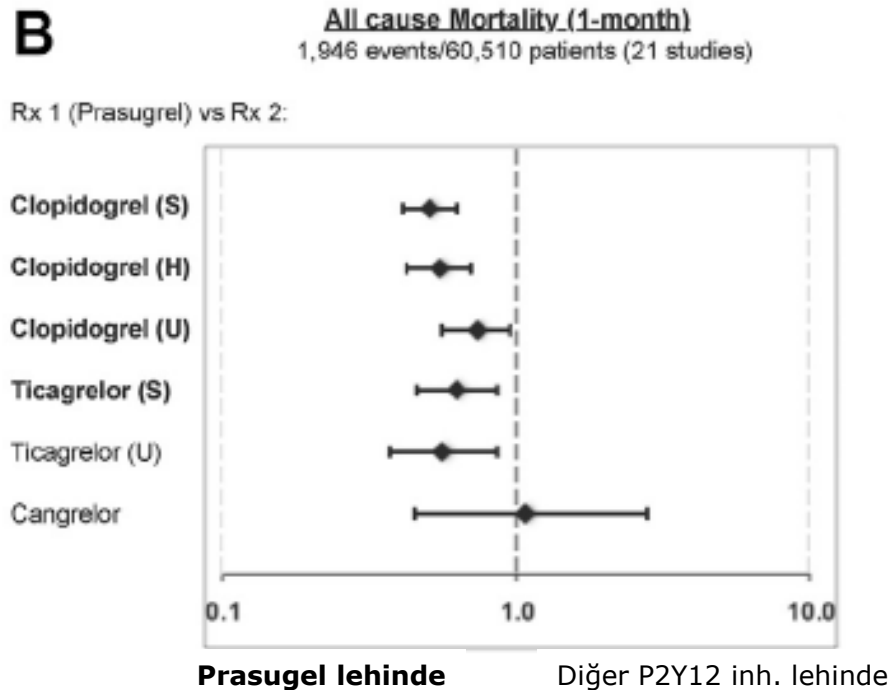
*MACE: Tüm nedenli ölümler, MI ve hedef damar revaskülarizasyonu

Klopidogrel S:300 mg, Klopidogrel H: 600 mg, Klopidogrel U: düşük doz başlayarak yüksek doza geçiş, Tikagrelor S: 90 mg, Tikagrelor U: Hastane öncesi başlama

Optimal P2Y₁₂ Inhibitor in Patients With ST-Segment Elevation Myocardial Infarction Undergoing Primary Percutaneous Coronary Intervention

A Network Meta-Analysis JACC Cardiovasc Interv. 2016 May 23;9(10):1036-46

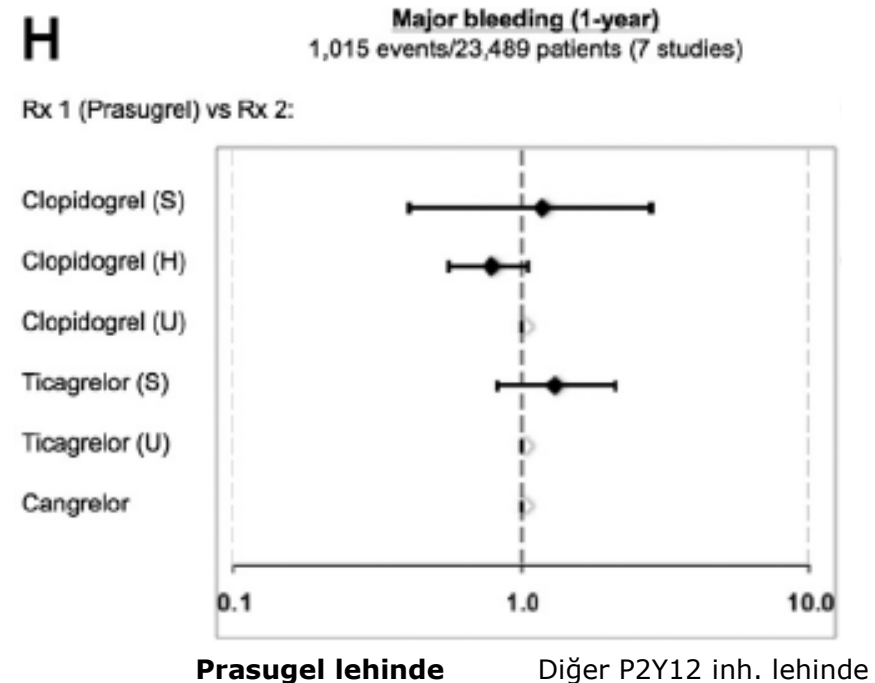
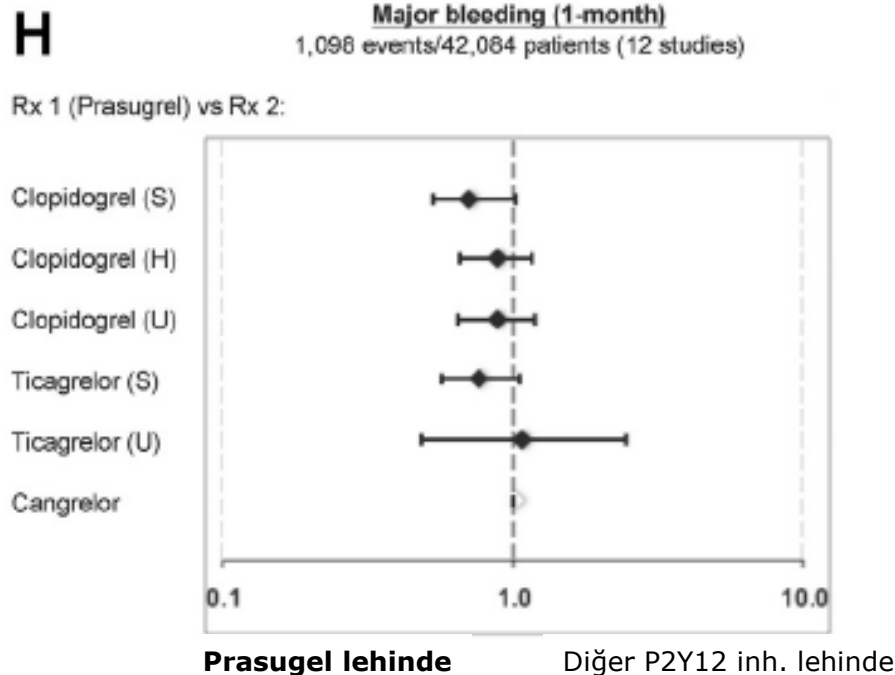
37 çalışma, 88.402 STEMI hastası



Optimal P2Y₁₂ Inhibitor in Patients With ST-Segment Elevation Myocardial Infarction Undergoing Primary Percutaneous Coronary Intervention

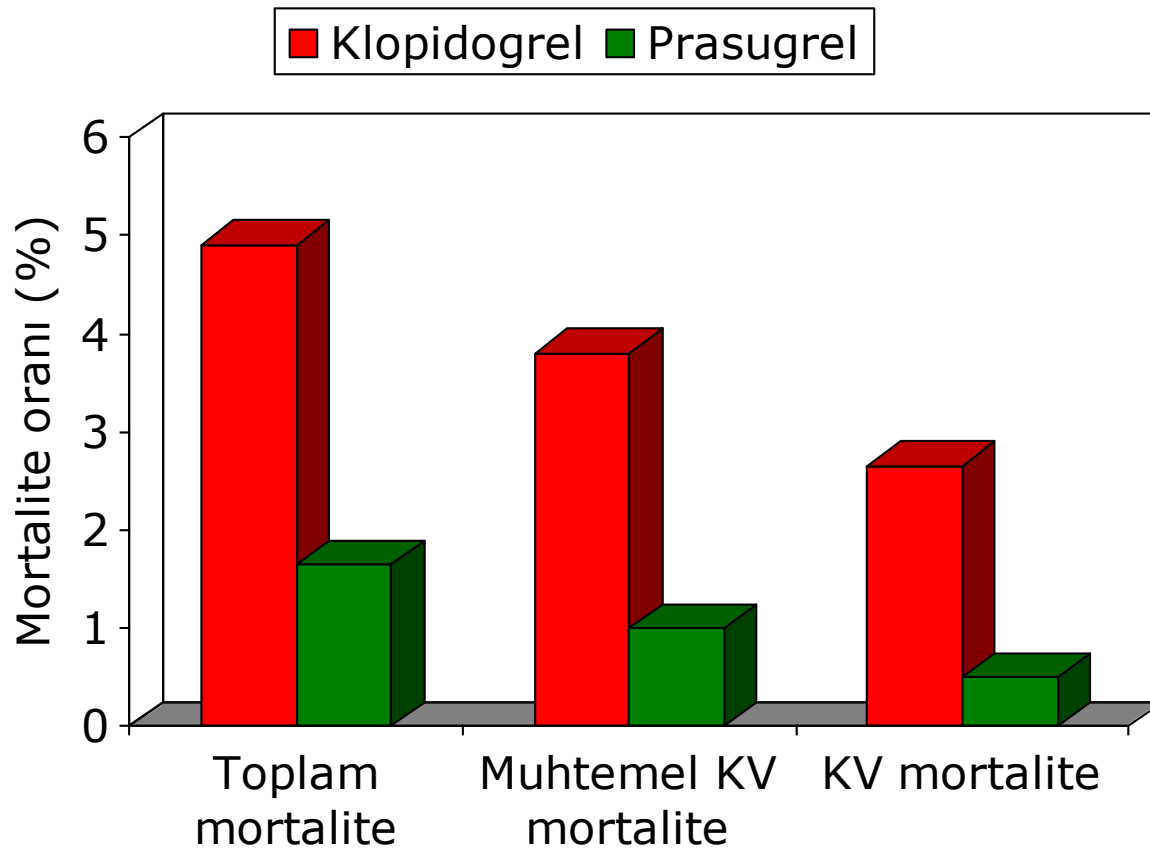
A Network Meta-Analysis JACC Cardiovasc Interv. 2016 May 23;9(10):1036-46

37 çalışma, 88.402 STEMI hastası



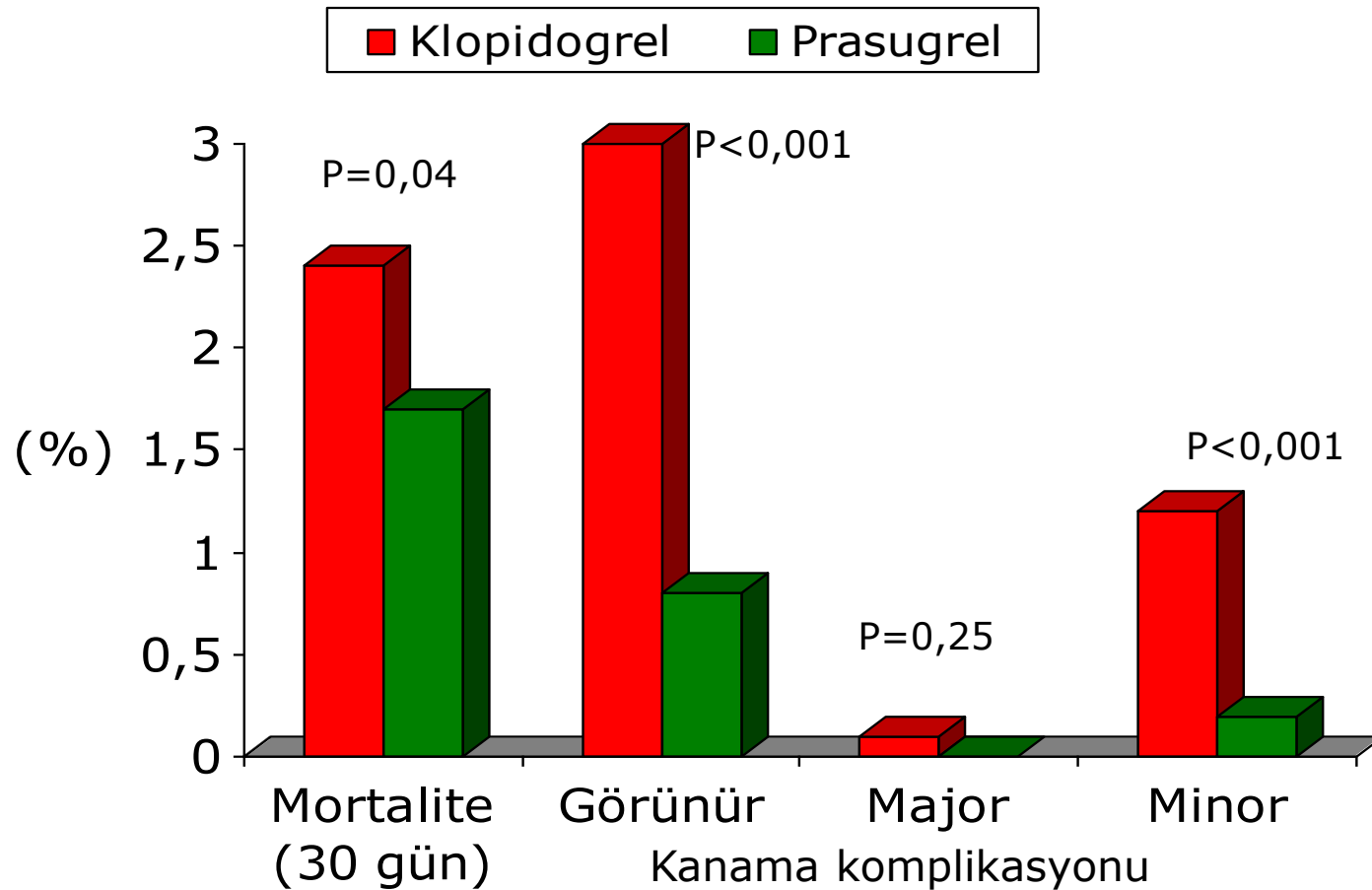
Mortality in primary angioplasty patients starting antiplatelet therapy with prehospital prasugrel or clopidogrel: a 1-year follow-up from the European MULTIPRAC Registry

Gerçek hayat verisi (n:2036, ortalama yaş 60.8)



Treatment Patterns and Outcomes in Patients Undergoing Percutaneous Coronary Intervention Treated With *Prasugrel* or *Clopidogrel* (from the Swedish Coronary Angiography and Angioplasty Registry [SCAAR])

Gerçek hayat verisi (n:28720, ortalama yaş 67)



SCAAR ve MULTIPRAC çalışmaları

Gerçek hayatta kanama riski yüksek hastalara klopidoğrel daha çok tercih edilmiş;

Kanama riski yüksek hastalar;

Yaşlı

Kronik böbrek hastası

Düşük VKI

DM

Kanama öyküsü

Anemik

Geçirilmiş inme

Üçlü antitrombotik tedavi

Use, patient selection and outcomes of P2Y₁₂ receptor inhibitor treatment in patients with STEMI based on contemporary European registries (N=84.299 hasta)

Nicolas Danchin^{1,2*}, Maddalena Lettino³, Uwe Zeymer⁴, Petr Widimsky⁵, Alfredo Bardaji⁶, Jose A. Barrabes⁷, Angel Cequier⁸, Marc J. Claeys⁹, Leonardo De Luca¹⁰, Jakob Dörler¹¹, David Erlinge¹², Paul Erne¹³, Patrick Goldstein¹⁴, Sasha M. Koul¹⁵, Gilles Lemesle¹⁶, Thomas F. Lüscher¹⁷, Christian M. Matter¹⁷, Gilles Montalescot¹⁸, Dragana Radovanovic¹⁹, Jose Lopez Sendón²⁰, Petr Tousek⁵, Franz Weidinger²¹, Clive F. M. Weston²², Azfar Zaman²³, Pontus Andell¹⁵, Jin Li¹⁷ and J. Wouter Jukema²⁴, on behalf of the PIRAEUS group

Aims

Among acute coronary syndromes (ACS), ST-segment elevation myocardial infarction (STEMI) has the most severe early clinical course. We aimed to describe the effectiveness and safety of P2Y₁₂ receptor inhibitors in patients with STEMI based on the data from contemporary European ACS registries.

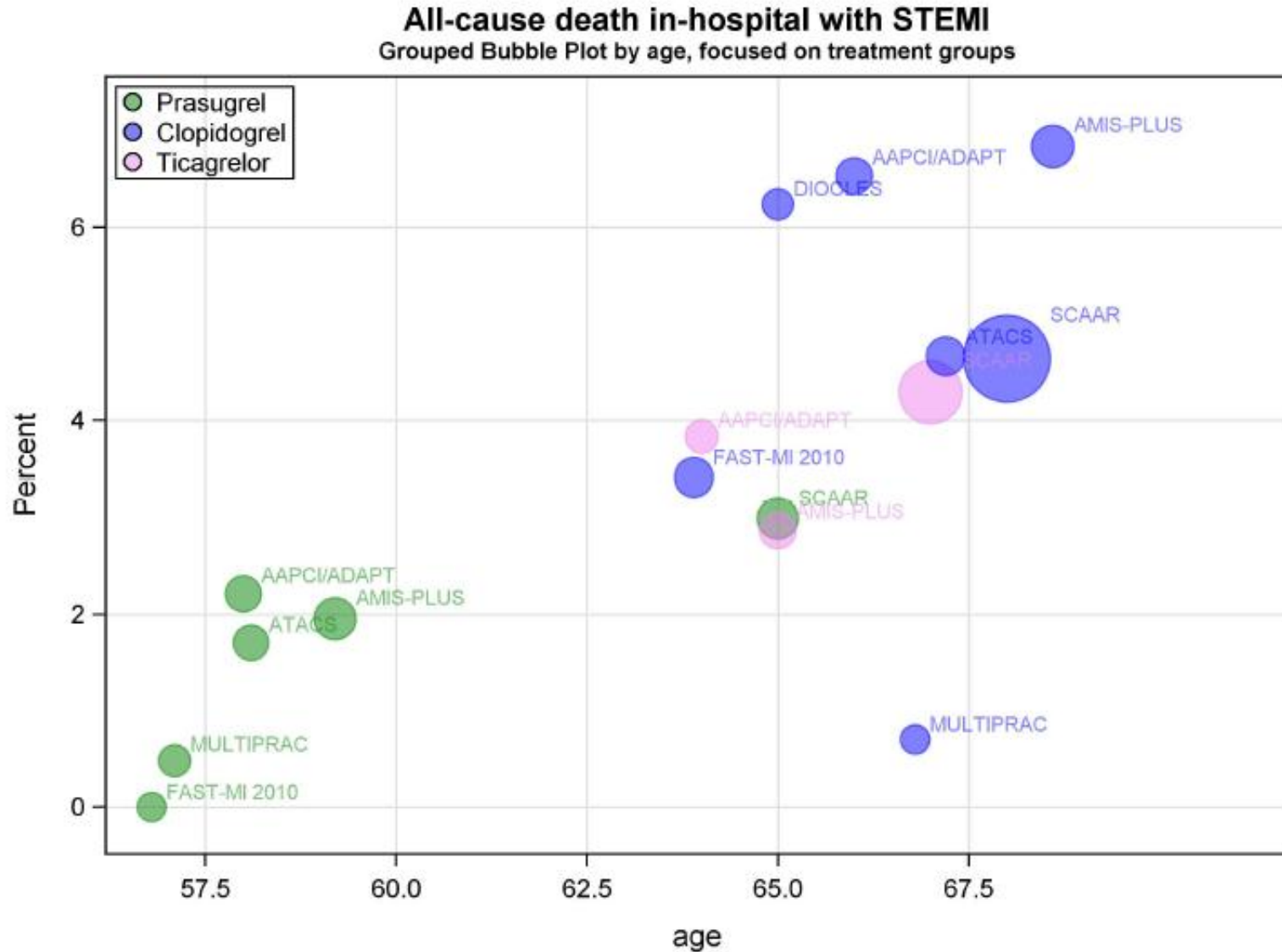
Methods and results

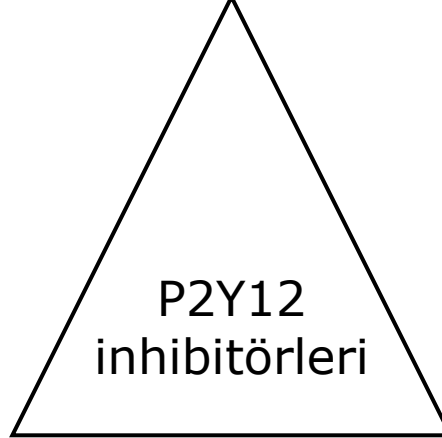
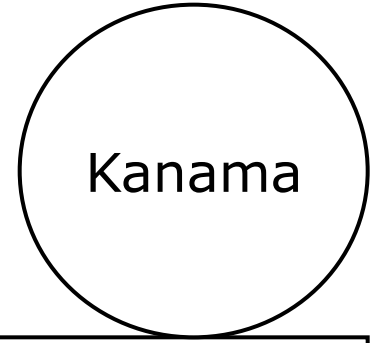
Twelve registries provided data in a systematic manner on outcomes in STEMI patients overall, and seven of these also provided data for P2Y₁₂ receptor inhibitor-based dual antiplatelet therapy. The registries were heterogeneous in terms of site, patient, and treatment selection, as well as in definition of endpoints (e.g. bleeding events). All-cause death rates based on the data from 84 299 patients (9612 patients on prasugrel, 11 492 on ticagrelor, and 27 824 on clopidogrel) ranged between 0.49 and 6.68% in-hospital, between 3.07 and 7.95% at 30 days (reported in 6 registries), between 8.15 and 9.13% at 180 days, and between 2.41 and 9.58% at 1 year (5 registries). Major bleeding rates were 0.09–3.55% in-hospital (8 registries), 0.09–1.65% at 30 days, and 1.96% at 1 year (only 1 registry). Fatal/life-threatening bleeding was rare occurring between 0.08 and 0.13% in-hospital (4 registries) and 1.96% at 1 year (1 registry).

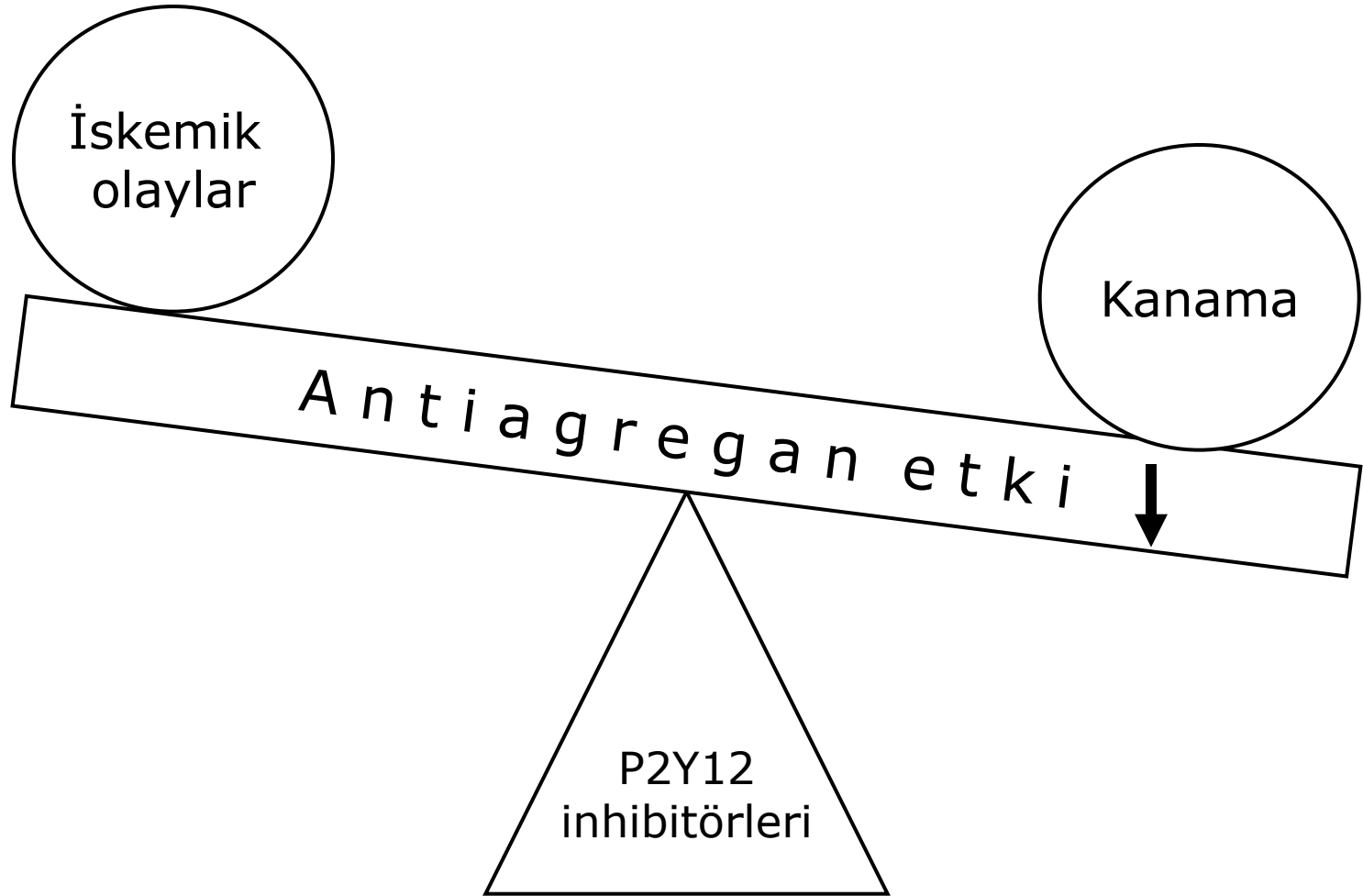
Conclusions

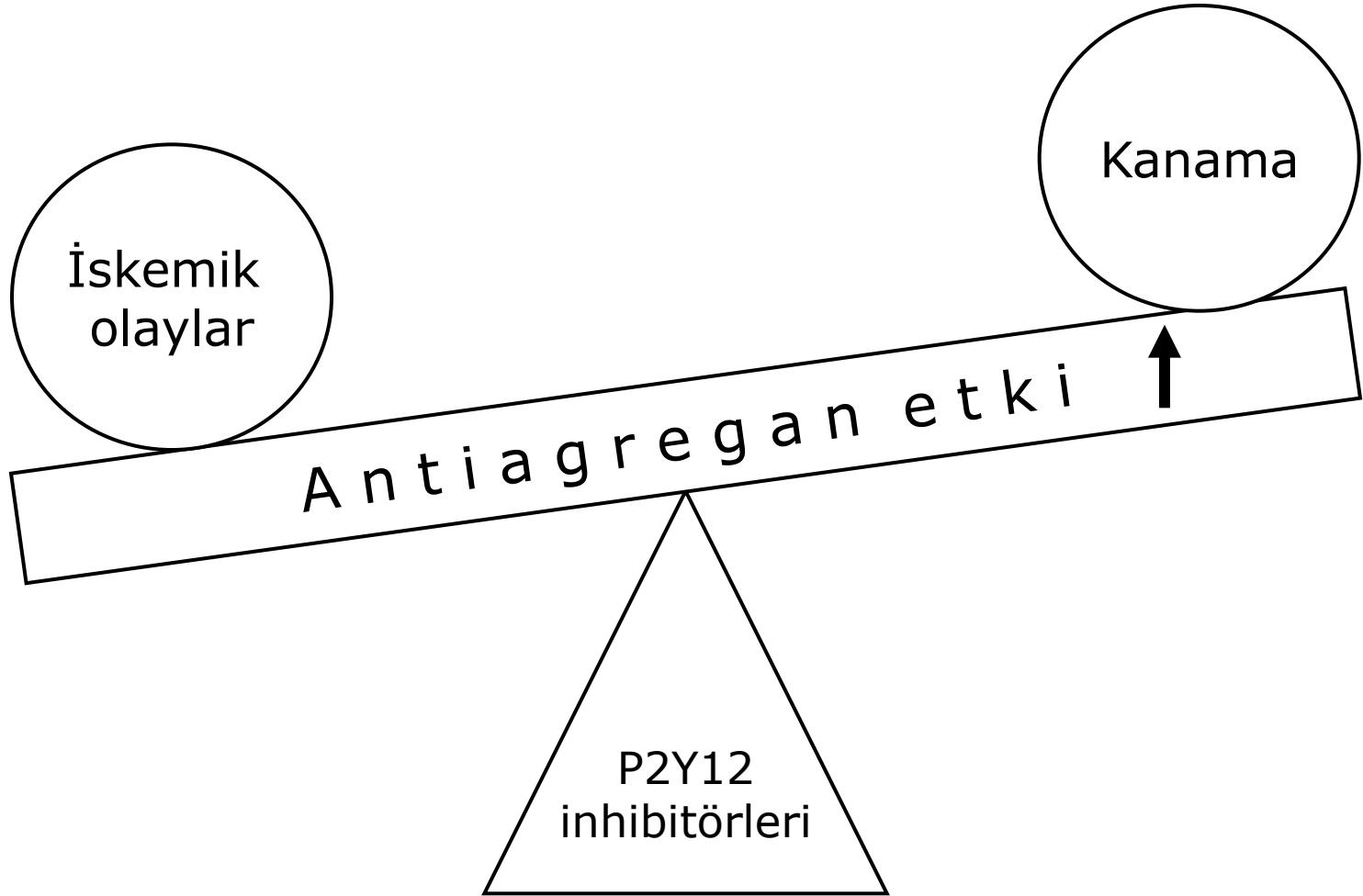
Real-world evidence from European contemporary registries shows that death, ischaemic events, and bleeding rates are lower than those reported in Phase III studies of P2Y₁₂ inhibitors. Regarding individual P2Y₁₂ inhibitors, patients on prasugrel, and, to a lesser degree, ticagrelor, had fewer ischaemic and bleeding events at all time points than clopidogrel-treated patients. These findings are partly related to the fact that the newer agents are used in younger and less ill patients.

Gerçek hayatta yaşlı hastalarda klopidoğrel tercih edilmiş









Y O A G ihtiyacı vs Klopidoğrel

Kullanımı kolay olsun

Hastadan hastaya ve aynı hastada yanıt değişmesin

Etkisi daha hızlı başlasın

Daha etkili olsun

İlaçlardan ve yiyeceklerden daha az etkilensin

En az onun kadar ve hatta daha güvenli olsun

En az onun kadar ucuz olsun

Y O A G ihtiyacı vs Klopidoğrel

Kullanımı kolay olsun

Hastadan hastaya ve aynı hastada yanıt değişmesin

Etkisi daha hızlı başlasın

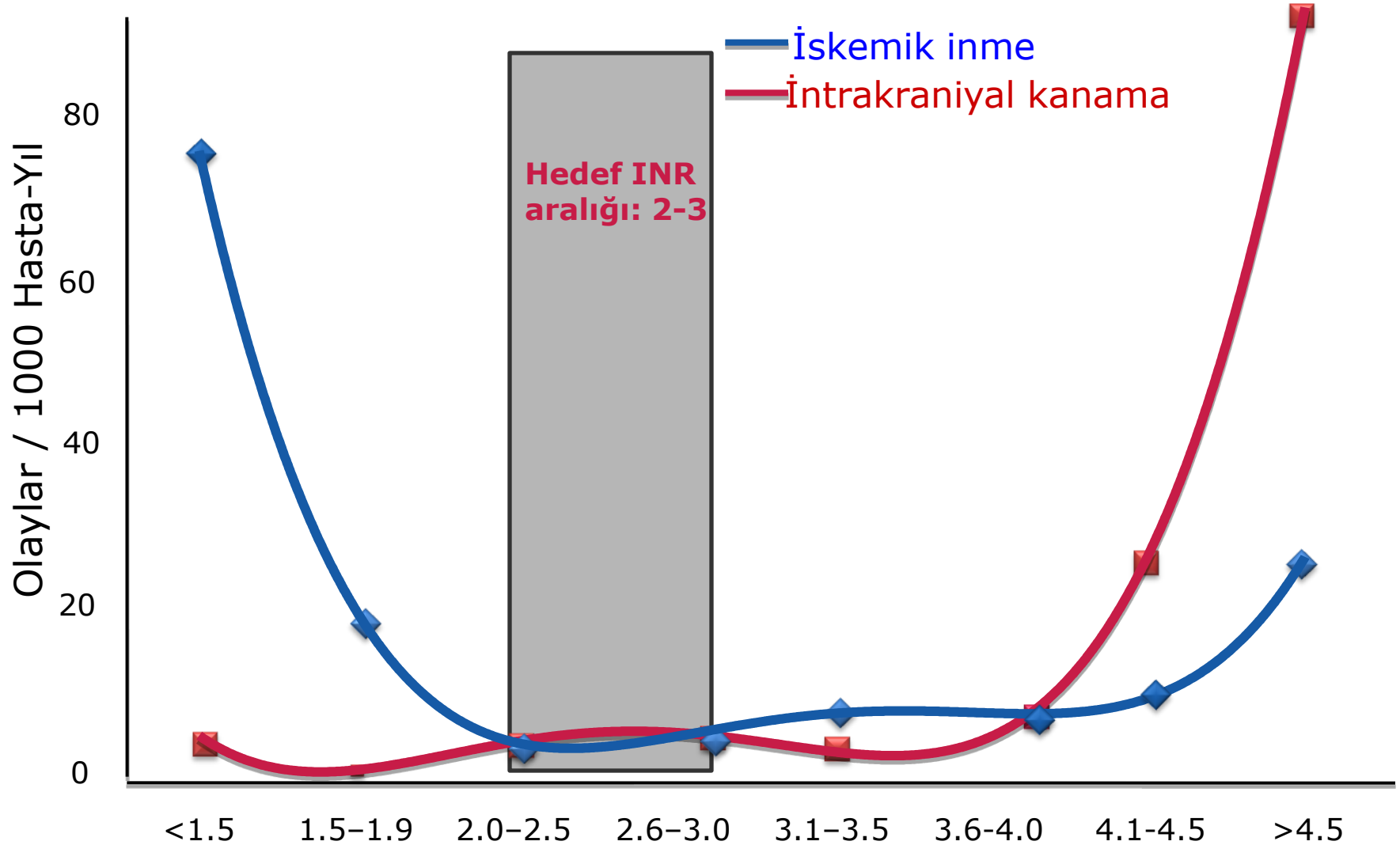
Daha etkili olsun

İlaçlardan ve yiyeceklerden daha az etkilensin

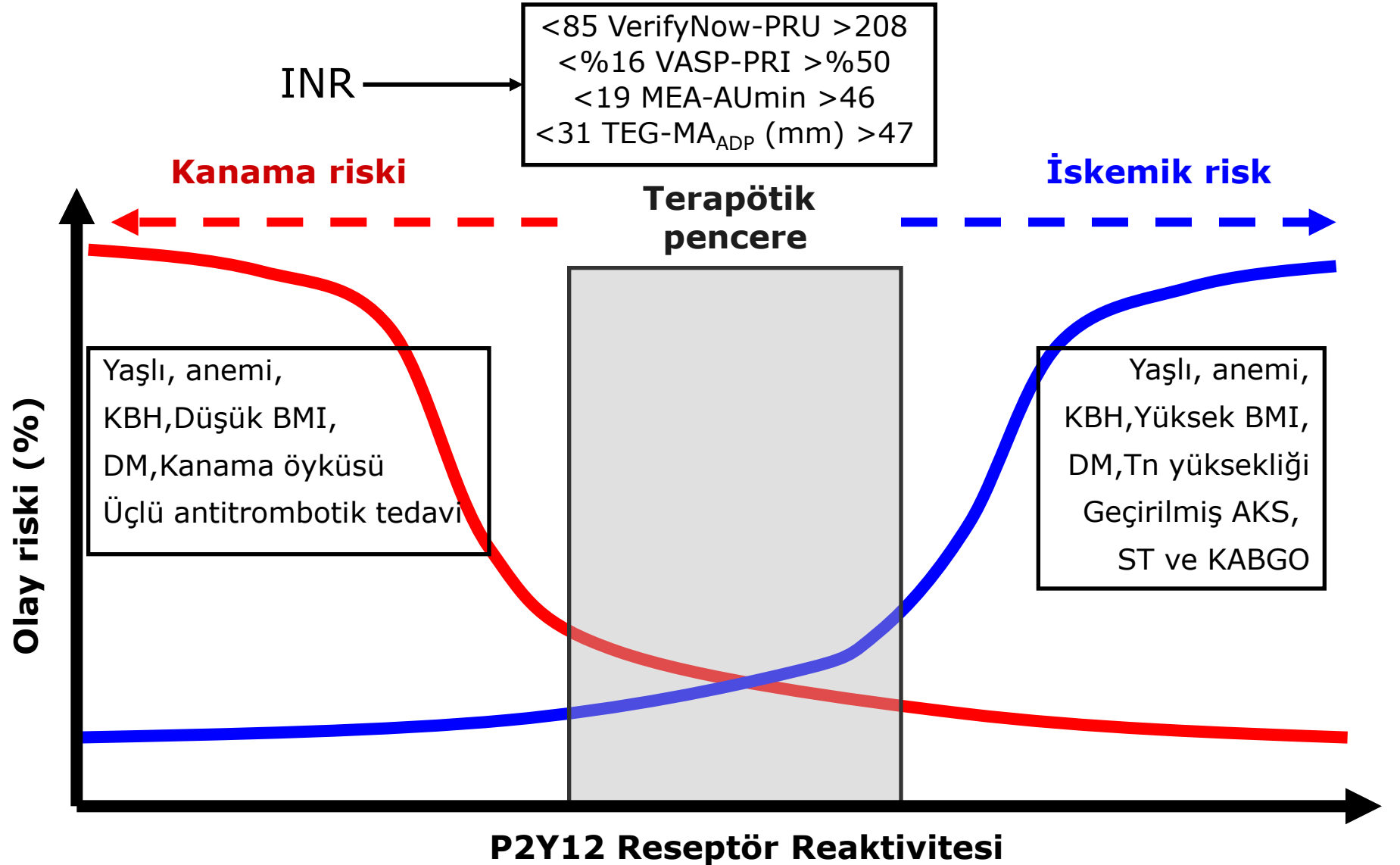
En az onun kadar ve hatta daha güvenli olsun

En az onun kadar ucuz olsun

Varfarinin terapötik aralığı



Platelet inhibisyonunun terapötik aralığı



Acil servise gelen bir STEMI vakası;

- Yaşlı (>75 yaş)
- Dört sene önce inme geçirmiş
- Çok zayıf düşkün bir hasta

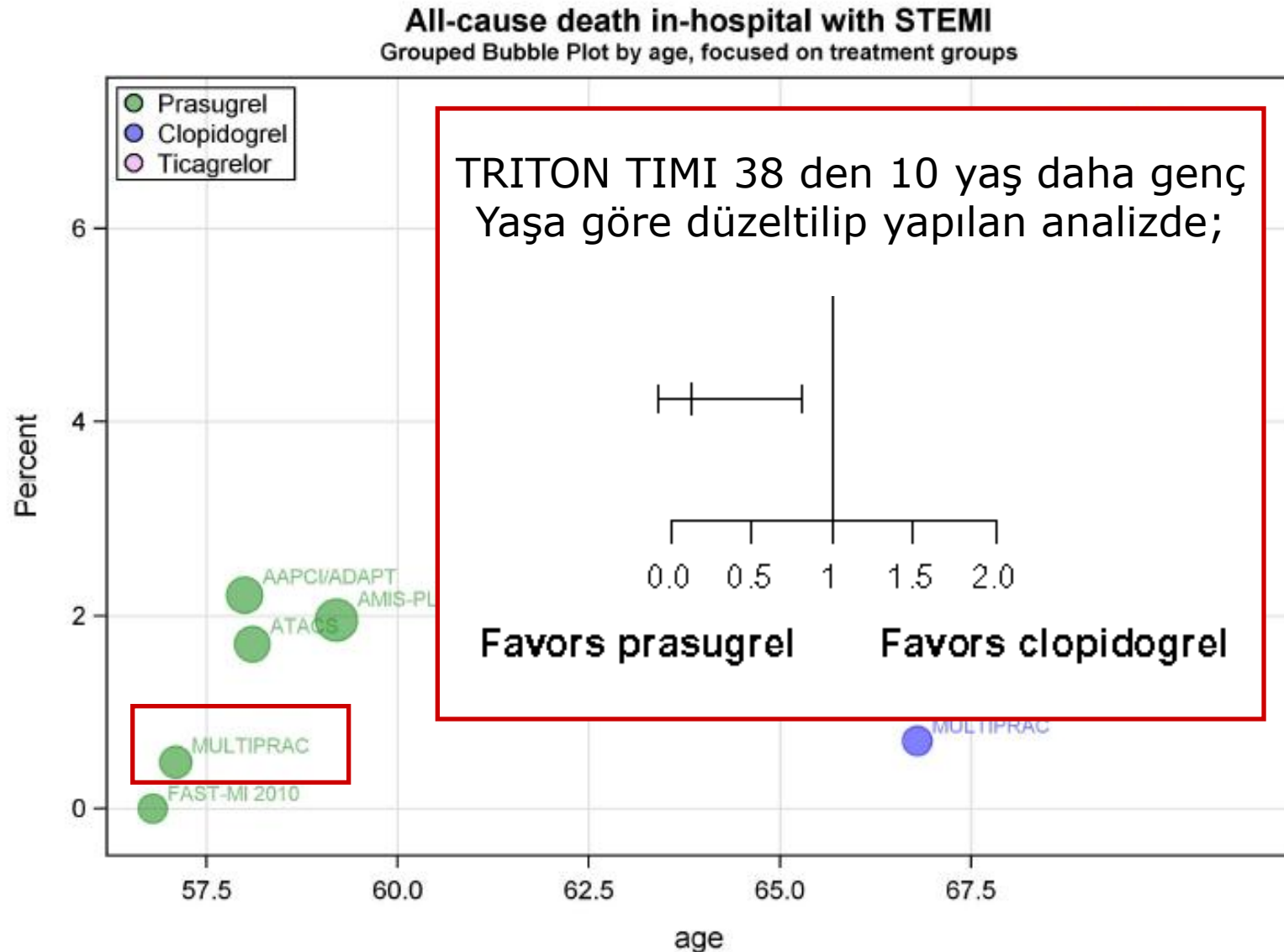
Hangi P2Y12 inhibitörünü tercih etmek lazım?

Güvenli tarafta kalmak (klopidogrel)

Tercihan klopidoğrel (AKS);

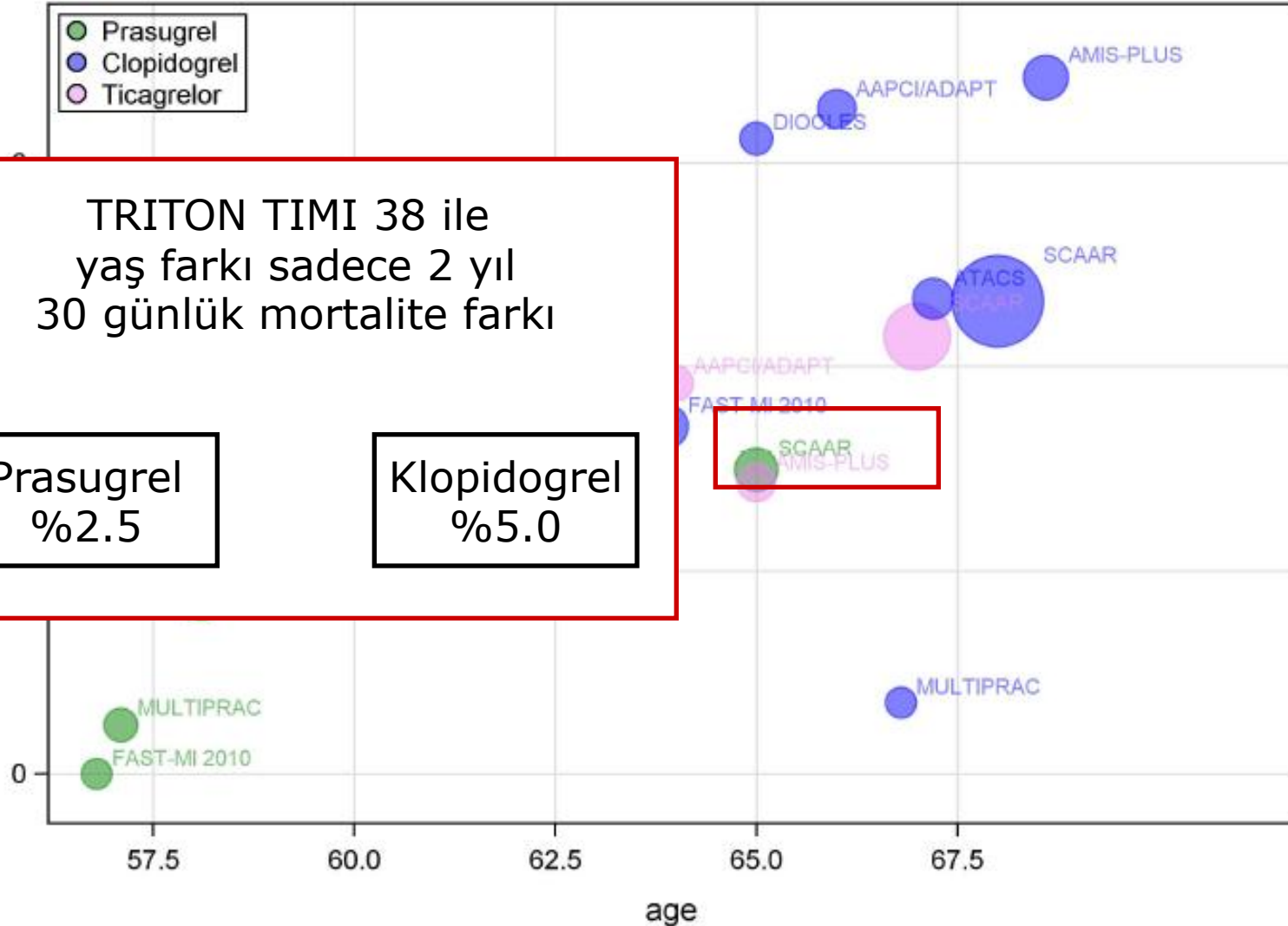
- Kanama riski yüksek olan
 - 75 yaş üstü
 - GIS kanama geçirmiş
 - Trombositopenisi olan
 - Anemisi olan
- Daha önce inme/TIA geçirmiş
- AF-VKA kullanan (üçlü tedavi)
- YOAK kullanan

STEMİ;Yaş farkı düzelterek bakıldığında prasugrel üstün



STEMİ;Yaş farkı düzelterek bakıldığında prasugrel üstün

All-cause death in-hospital with STEMI
Grouped Bubble Plot by age, focused on treatment groups



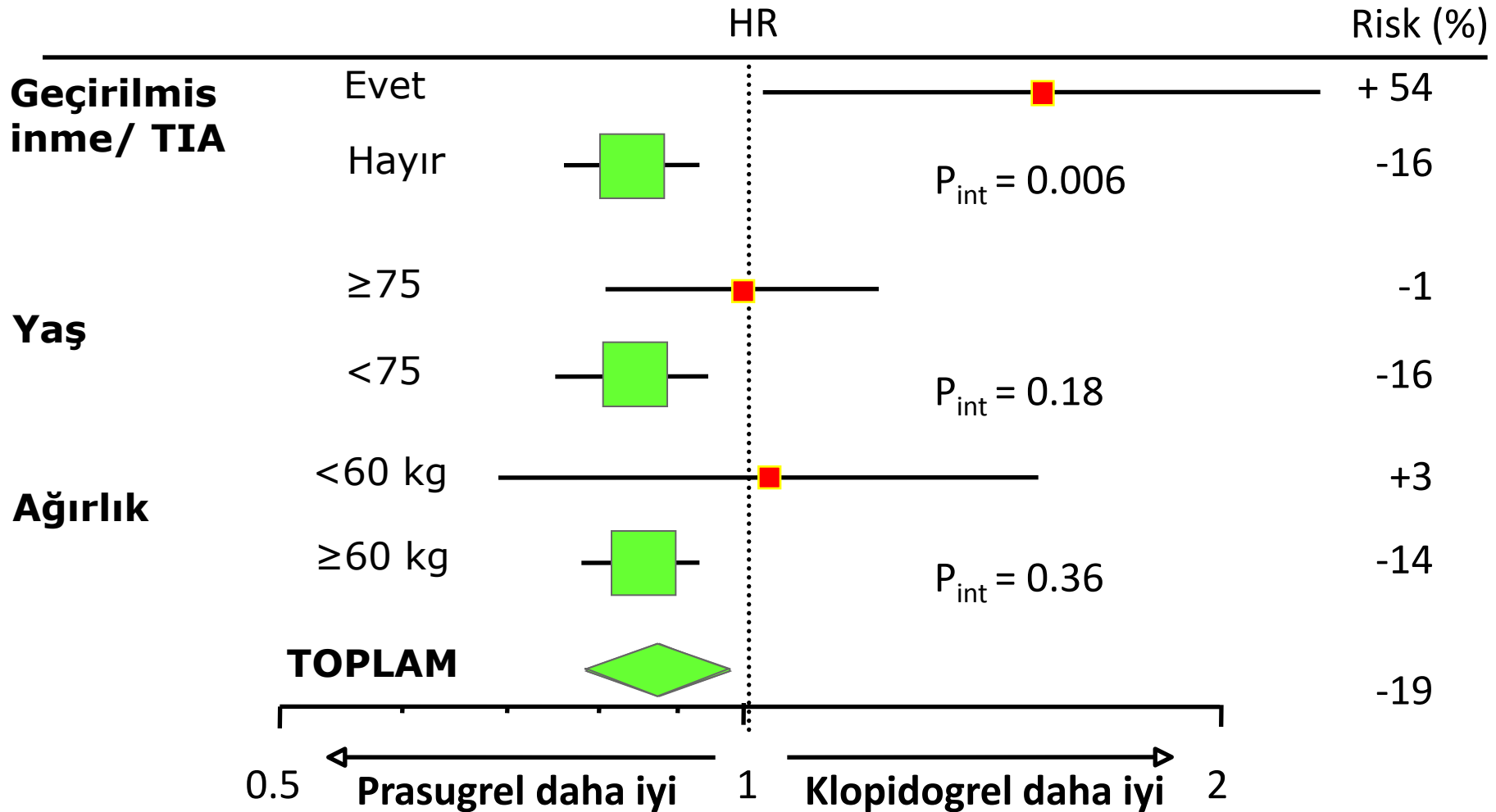
Use, patient selection and outcomes of P2Y₁₂ receptor inhibitor treatment in patients with STEMI based on contemporary European registries (N=84.299 hasta)

Conclusions

In this overview on contemporary registries on STEMI patients in various European countries, the event rates for death, bleeding, and various clinical outcomes were lower than those observed in Phase III studies of the various P2Y₁₂ inhibitors probably due to selection bias. When looking at individual P2Y₁₂ inhibitors, patients on prasugrel and, to a lesser degree, ticagrelor, had substantially low event rates (ischaemic events, bleeding, and mortality) at all time points analysed. However, the newer agents are used in younger and less ill patients, which could account for the lower event rates, but on the other hand might lead to an underestimation of their antithrombotic potential. In future, ACS registries should be further aligned and standardized in terms of endpoints and (bleeding) definitions to facilitate pooled analyses.

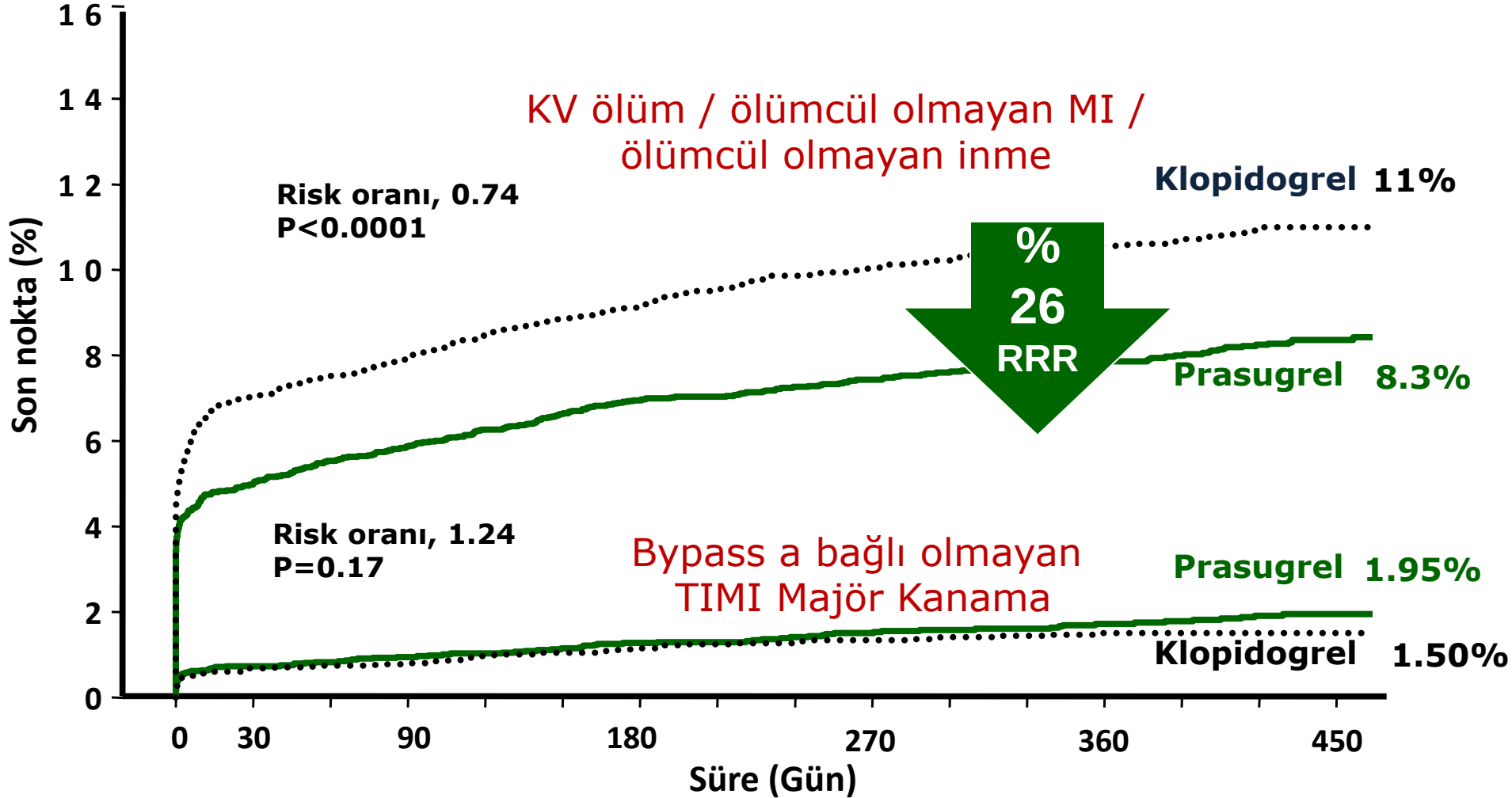
TRITON-TIMI 38

Net klinik yarar alt grup analizi



TRITON-TIMI 38

<75 Yaş, ≥ 60 kg ve inme/GİA öyküsü olmayan hastalarda



NNT: number needed to treat

Prasugrel

Geçirilmiş inme/TIA olanlarda kontrendike
 ≥ 75 yaş + < 60 kg hastalarda 5 mg/gün

Efient(R) Summary of Product Characteristics. <http://www.ema.europa.eu>
(16 February 2016).

Ticagrelor

Astma ve/veya KOAH

- Dispne yakınması fazla

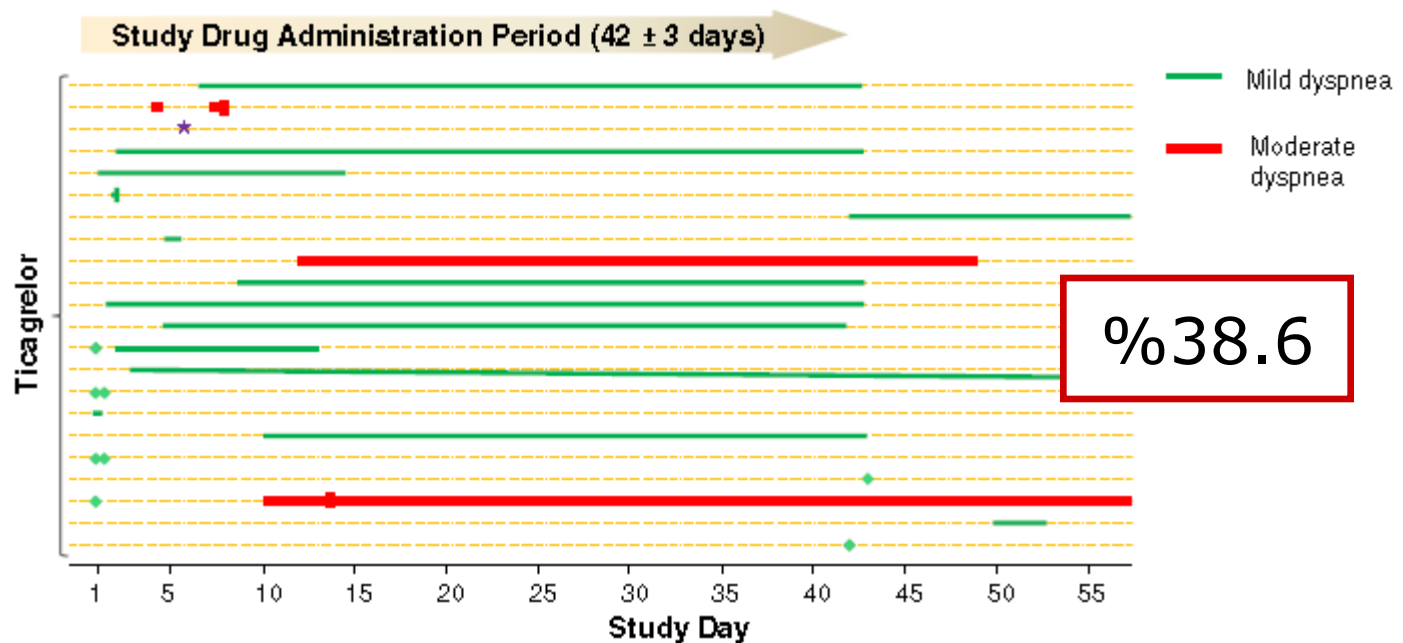
Böbrek fonksiyonları bozuk olanlar

- Kretinin düzeylerini arttırır

European Medicines Agency (EMA). Brillique(R). Ticagrelor Summary of Product Characteristics and Package Leaflet. <http://www.emea.europa.eu>
(16 February 2016).

Dyspnea and Antiplatelet Agents

Incidence of Dyspnea and Assessment of Cardiac and Pulmonary Function in Patients With Stable Coronary Artery Disease Receiving Ticagrelor, Clopidogrel, or Placebo in the ONSET/OFFSET Study



Effect of ticagrelor-related dyspnea on compliance with therapy in acute coronary syndrome patients ☆

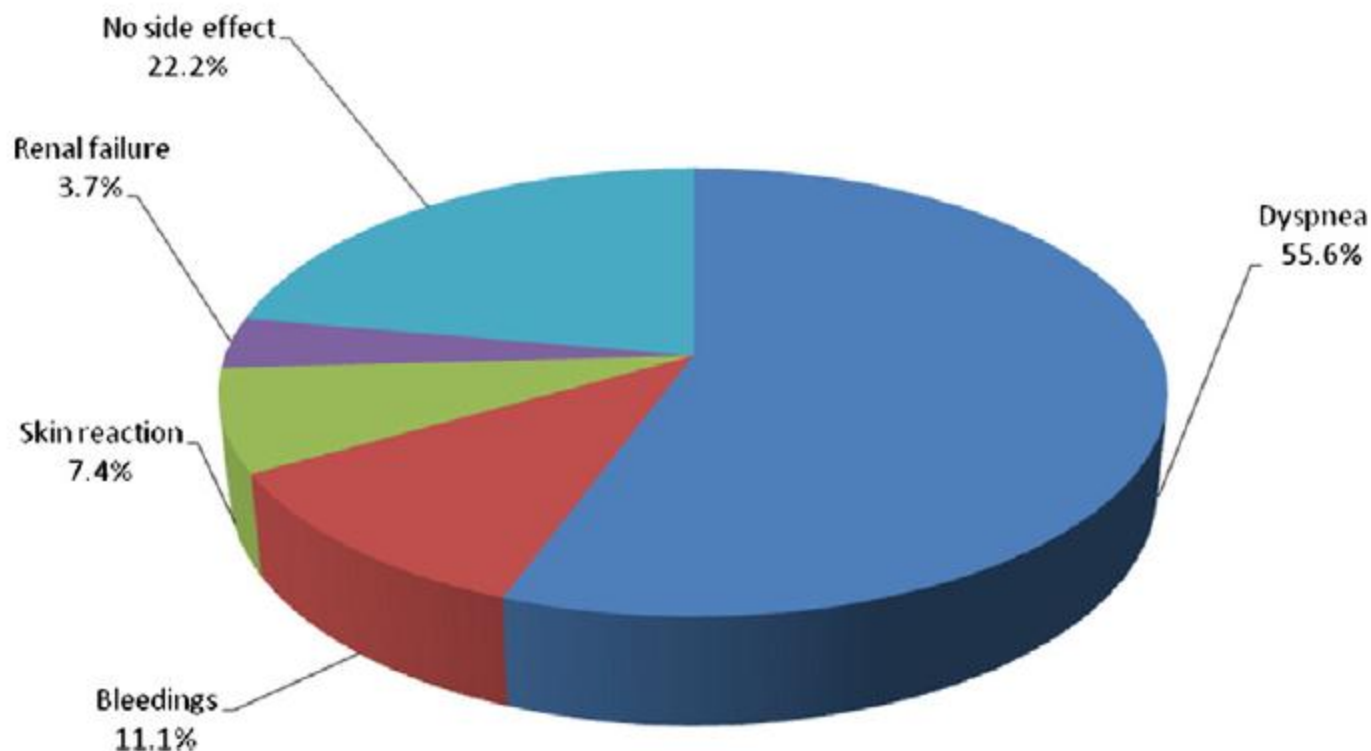


Fig. 1. Reasons for ticagrelor withdrawal.



Contents lists available at [ScienceDirect](http://www.sciencedirect.com)

International Journal of Cardiology

journal homepage: www.elsevier.com/locate/ijcard

Letter to the Editor

First report of stent thrombosis after a switch therapy resulting from ticagrelor-related dyspnea[☆]

Dyspnoea management in acute coronary syndrome patients treated with ticagrelor

European Heart Journal
**Acute
Cardiovascular
Care**



European Heart Journal: Acute Cardiovascular Care
2015, Vol. 4(6) 555–560

Design and rationale of TROCADERO: A TRIal Of Caffeine to Alleviate DyspnEa Related to ticagrelOr

(Am Heart J 2015;170:465-70.)

Y O A G ihtiyacı vs Klopidoğrel

Kullanımı kolay olsun

Hastadan hastaya ve aynı hastada yanıt değişmesin

Etkisi daha hızlı başlasın

Daha etkili olsun

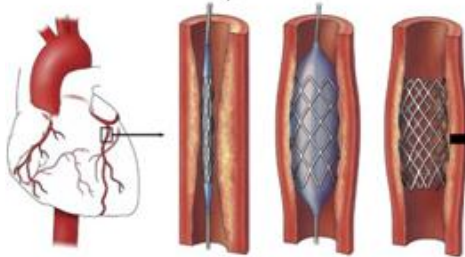
İlaçlardan ve yiyeceklerden daha az etkilensin

En az onun kadar ve hatta daha güvenli olsun

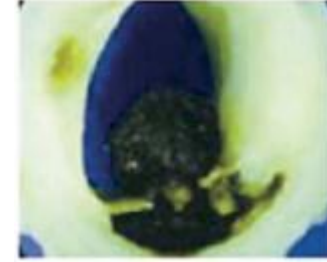
En az onun kadar ucuz olsun

Akut Koroner Sendrom

STEMİ



NSTEMİ



Zaman kazançtır?!

Journal of the American College of Cardiology
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Published by Elsevier Inc.

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ISSN 0735-1097/08/\$34.00
doi:10.1016/j.jacc.2008.07.011

Time Is Muscle

Translation Into Practice

Elliott M. Antman, MD, FACC
Boston, Massachusetts

In the future, advances in the care of patients with ST-segment elevation myocardial infarction (STEMI) will not come from the analysis of trials that do not reflect current practice in an effort to rationalize extending the percutaneous coronary intervention (PCI)-related delay time. We must move beyond such arguments and find ways to shorten total ischemic time. With the launching of the American College of Cardiology's D2B Alliance and the American Heart Association's Mission: Lifeline programs, the focus is now on systems improvement for reperfusion in patients with STEMI. The D2B Alliance was developed to focus on improvement in door-to-balloon times for patients with STEMI who are undergoing primary PCI. The American Heart Association Mission: Lifeline program is a broad, comprehensive national initiative to improve the quality of care and outcomes of patients with STEMI by improving health care system readiness and response to STEMI. Improvements in access to timely care for patients with STEMI will require a multifaceted approach involving patient education, improvements in the Emergency Medical Services and emergency department components of care, the establishment of networks of STEMI-referral hospitals (not PCI capable) and STEMI-receiving hospitals (PCI capable), as well as coordinated advocacy efforts to work with payers and policy makers to implement a much-needed health care system redesign. By focusing now on system efforts for improvements in timely care for STEMI, we will complete the cycle of research initiated by Reimer and Jennings 30 years ago. Time is muscle . . . we must translate that into practice. (J Am Coll Cardiol 2008;52:1216-21) © 2008 by the American College of Cardiology Foundation

Antiagregan ne zaman verilmeli?

STEMİ



HEMEN

Prasugrel;

60 mg YD, 10 mg 1x1 idame

Ticagrelor;

180 mg YD, 90 mg 2x1 idame

NSTEMİ



?

Medikal

PKG

KABGO

NSTEMI'de ne zaman verilmeli?

5.1.2. PCI—Antiplatelet and Anticoagulant Therapy

5.1.2.1. Oral Reco

CLASS I

1. Patients al

81 mg to
(26,368-

2. Patients i

coated a
(26,368-

3. After PCI

of 81 mg

Approximately half of all PCI procedures are performed in patients with UA or NSTEMI, and approximately 32% to 40% of patients with NSTEMI-ACS will undergo PCI (365).

In-hospital CABG is performed in 7% to 13% of patients hospitalized with NSTEMI-ACS (420-422). Approximately one third of patients with NSTEMI undergo CABG within 48 hours of hospital admission (421). In these patients, CABG was performed at a median time of 73 hours after admission (interquartile

4. A loading dose of a P2Y₁₂ receptor inhibitor should be given before the procedure in patients undergoing PCI with stenting (26,293,302,331,372-375). (Level of Evidence: A)
Options include:

- a. Clopidogrel: 600 mg (331,372-374,376-378) (Level of Evidence: B) or
- b. Prasugrel#: 60 mg (302) (Level of Evidence: B) or
- c. Ticagrelor||: 180 mg (293) (Level of Evidence: B)

2015 ESC guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation

Step 3: Antithrombotic treatment

The choice of the antithrombotic regimen in NSTEMI-ACS should be based on the selected management strategy (i.e. conservative vs. invasive) as well as the chosen revascularization modality (PCI vs. CABG). Dosing of antithrombotic agents (*Tables 8, 10 and 11*) should take into account patient age and renal function. Aspirin and parenteral anticoagulation are recommended. In patients intended for a conservative treatment and not at high bleeding risk, ticagrelor (preferred over clopidogrel) is recommended once the NSTEMI diagnosis is established. In patients intended for an invasive strategy, the optimal timing of the administration of ticagrelor (preferred over clopidogrel) has not been adequately investigated, while prasugrel is recommended only after coronary angiography prior to PCI.

2015 ESC guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation

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2015 ESC guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Pretreatment with Prasugrel in Non-ST-Segment Elevation Acute Coronary Syndromes

ACCOAST

8. Gaps in evidence

- The optimal timing of ticagrelor administration in patients intended for an invasive strategy needs to be defined.

Türkiye Yüksek İhtisas EAH Kardiyoloji kliniği nasıl yapıyor?

NSTEMİ gelince 3 saat içerisinde katater
laboratuvarına alınıyorsa (%90'ı) antiagregan
yüklemiyoruz

