



Terapia con DOAC nel paziente con fibrillazione atriale e sindrome coronarica acuta

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DISCLOSURE INFORMATION

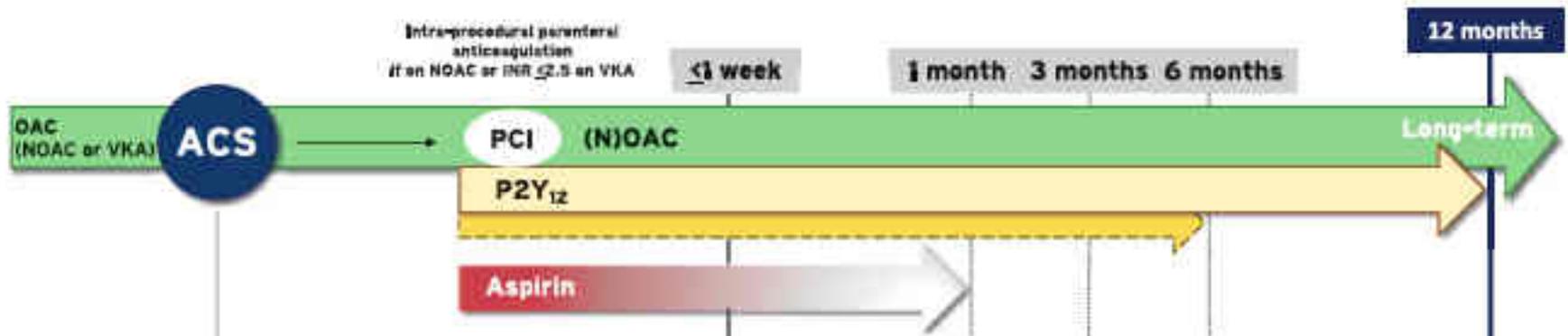
GIULIA ARENA

negli ultimi due anni ho avuto i seguenti rapporti anche di finanziamento con soggetti portatori di interessi commerciali in campo sanitario:

NESSUNO

Cosa ci dicono le linee guida

2020 ESC Guidelines for the diagnosis and management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS)



THROMBOTIC RISK FACTORS

- Diabetes mellitus requiring therapy
- Prior ACS/recurrent myocardial infarction
- Multivessel CAD
- Concomitant PAD
- Premature CAD (occurring at age of <45 y) or accelerated CAD (new lesion within 2 years)
- CKD (eGFR <60 mL/min)
- Clinical presentation (ACS)
- Multivessel stenting
- Complex revascularisation (left main stenting, bifurcation lesion stenting, chronic total occlusion intervention, last patent vessel stenting)
- Prior stent thrombosis on antiplatelet treatment
- Procedural factors (stent expansion, residual dissection, stent length, etc.)

BLEEDING RISK FACTORS

- Hypertension
- Abnormal renal or liver function
- Stroke or ICH history
- Bleeding history or bleeding diathesis (e.g., anaemia with haemoglobin <110 g/L)
- Labile INR (if on VKA)
- Elderly (>65 years)
- Drugs (concomitant OAC and antiplatelet therapy, NSAIDs), excessive alcohol consumption

Cosa ci dicono le linee guida

Recommendations for AF patients with ACS

In AF patients with ACS undergoing an uncomplicated PCI, early cessation (≤ 1 week) of aspirin and continuation of dual therapy with an OAC and a P2Y₁₂ inhibitor (preferably clopidogrel) for up to 12 months is recommended if the risk of stent thrombosis^d is low or if concerns about bleeding risk^e prevail over concerns about risk of stent thrombosis,^d irrespective of the type of stent used.^{1090,1092–1095}

I

A

Triple therapy with aspirin, clopidogrel, and an OAC^f for longer than 1 week after an ACS should be considered when risk of stent thrombosis^d outweighs the bleeding risk,^e with the total duration (≤ 1 month) decided according to assessment of these risks, and the treatment plan should be clearly specified at hospital discharge.

IIa

C

^dRisk of stent thrombosis encompasses: (i) risk of thrombosis occurring, and (ii) risk of death should stent thrombosis occur, both of which relate to anatomical, procedural, and clinical characteristics. Risk factors for CCS patients include: stenting of left main stem or last remaining patent artery; suboptimal stent deployment; stent length >60 mm; diabetes mellitus; CKD; bifurcation with two stents implanted; treatment of chronic total occlusion; and previous stent thrombosis on adequate antithrombotic therapy.

Background..

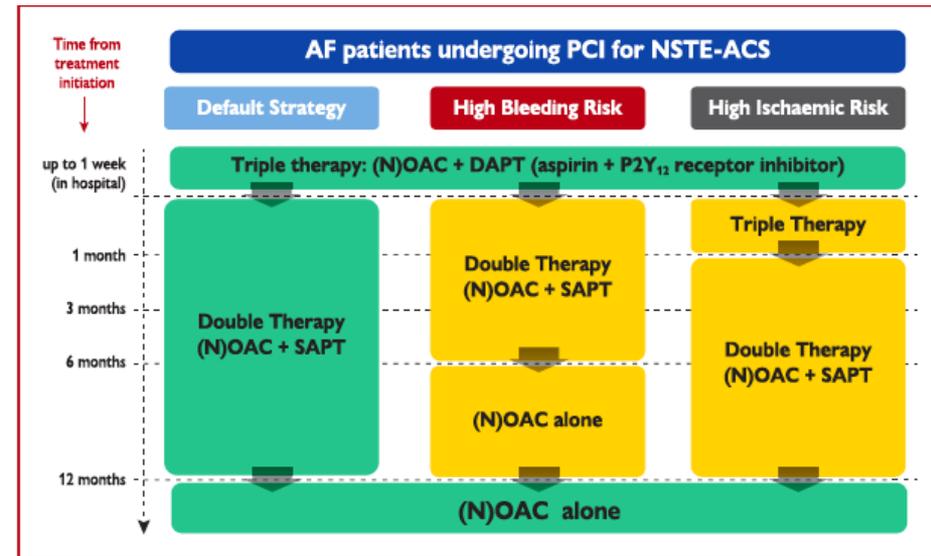
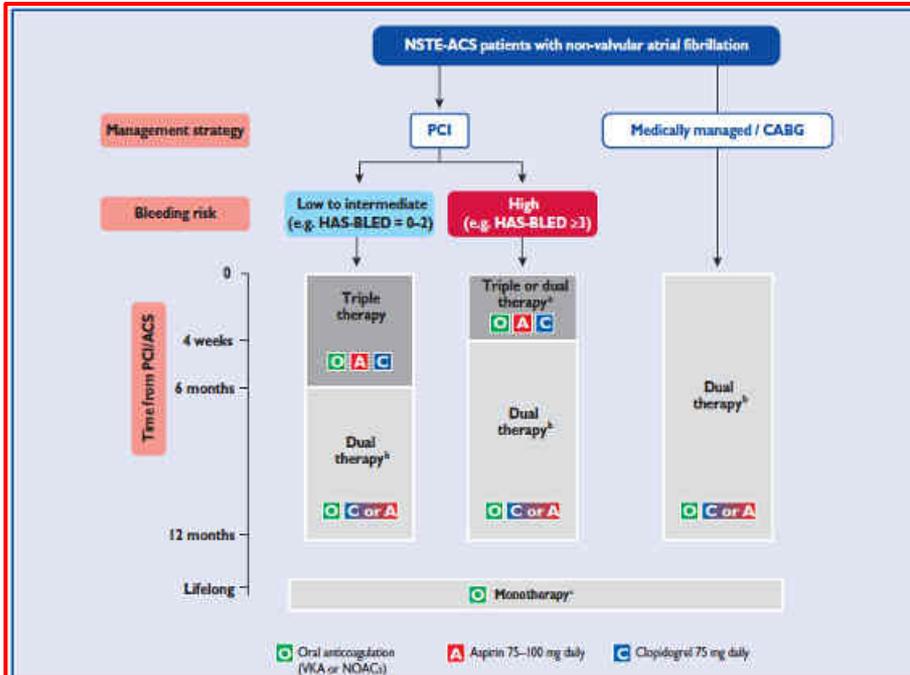
Trial clinici

RCT	n	Comparison	Primary Endpoint	Secondary endpoints
PIONEER AF-PCI ²⁴⁰	2124	DAT (rivaroxaban 15 mg/day + C) for 12 months) vs. modified TAT (rivaroxaban 2.5 mg b.i.d. + A + C for 1, 6, or 12 months) vs. TAT (VKA + A + C for 1, 6, or 12 months)	Clinically significant bleeding lower with DAT (HR 0.59, 95% CI 0.47–0.76) or modified TAT (HR 0.63, 95% CI 0.50–0.80) vs. TAT	Cardiovascular death + MI + stroke: no difference. All-cause death + rehospitalization lower with DAT (HR 0.79, CI 0.69–0.94) or modified TAT (HR 0.75, CI 0.62–0.90) vs. TAT
RE-DUAL PCI ²³⁸	2725	TAT (VKA + A + C) up to 3 months vs. DAT (dabigatran 110 or 150 mg b.i.d. + C or T)	Major or clinically relevant non-major bleeding lower in DAT 110 mg (HR 0.52, 95% CI 0.42–0.63) or DAT 150 mg (HR 0.72, 95% CI 0.58–0.88) vs. TAT	MI + stroke + systemic embolism, death, unplanned revascularization: no difference
AUGUSTUS ²⁴¹	4614	DAT1 (apixaban 5 mg b.i.d. + C or T or P) vs. DAT2 (VKA + C or T or P) vs. TAT1 (apixaban 5 mg b.i.d. + A + C or T or P) vs. TAT2 (VKA + A + C or T or P)	Major or clinically relevant non-major bleeds lower with DAT1 (HR 0.69, 95% CI 0.58–0.81) vs. other regimens	Death + hospitalization lower with apixaban (HR 0.83, 95% CI 0.74–0.93) No difference with aspirin
ENTRUST-AF PCI ²⁵¹	1506	DAT (edoxaban 60 mg + C or T or P) vs. TAT (VKA + A + C or T or P)	Major or clinically relevant non-major bleeds non-inferior between DAT or TAT (HR 0.83, 95% CI 0.65–1.05, P=0.0010 for non-inferiority)	Cardiovascular death + stroke + systemic embolism + MI + stent thrombosis not different between DAT and TAT

Prima domanda

**Considerando che la SCA di per sé
rappresenta un fattore di rischio trombotico,
quanto si sente confidente nel sospendere la
triplice dopo una settimana?**

La scelta del P2Y12



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

2020 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation

La scelta del P2Y12

2020 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation

Recommendations for combining antiplatelet agents and anticoagulants in non-ST-segment elevation acute coronary syndrome patients requiring chronic oral anticoagulation

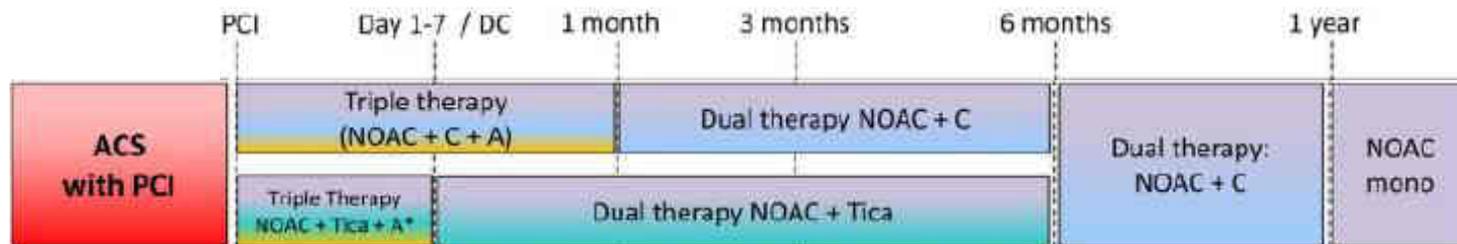
Recommendations	Class ^a	Level ^b
Antiplatelet treatment		
In patients with AF and CHA ₂ DS ₂ -VASc score ≥ 1 in men and ≥ 2 in women, after a short period of TAT (up to 1 week from the acute event), DAT is recommended as the default strategy using a NOAC at the recommended dose for stroke prevention and a single oral antiplatelet agent (preferably clopidogrel). ^{238–241,244,245}	I	A
Periprocedural DAPT administration consisting of aspirin and clopidogrel up to 1 week is recommended. ^{238–241,244,245}	I	A
DAT (with an OAC and either ticagrelor or prasugrel) may be considered as an alternative to TAT (with an OAC, aspirin, and clopidogrel) in patients with a moderate or high risk of stent thrombosis, irrespective of the type of stent used.	IIb	C
The use of ticagrelor or prasugrel as part of TAT is not recommended.	III	C

La scelta del P2Y12



Europace (2021) 00, 1–65
doi:10.1093/europace/euab065

POSITION PAPER EHRA PRACTICAL GUIDE



Factors to shorten / de-intensify combination therapy

- (Uncorrectable) high bleeding risk
- Low atherothrombotic risk (by REACH or SYNTAX score if elective; GRACE < 140 if ACS)

Factors to lengthen / intensify combination therapy

- High atherothrombotic risk (scores as above; stenting of left main, proximal LAD, proximal bifurcation; recurrent MIs; stent thrombosis etc.) and low bleeding risk

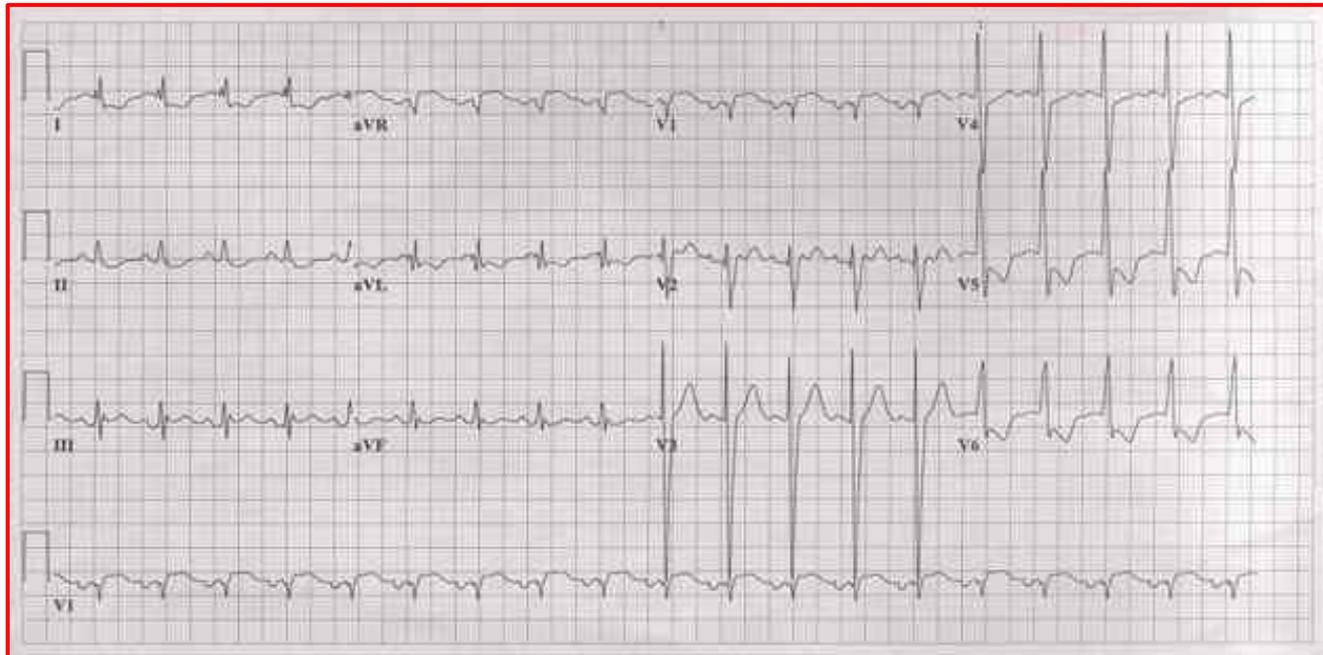


Seconda domanda

**A cosa attribuisce la contraddittorietà
delle linee guida?**

CASO CLINICO

- ✓ Giovanna C., di anni 66, si reca in PS per dolore precordiale intenso
- ✓ Storia clinica: Diabete, ipercolesterolemia, ipertensione, pregresso TIA, episodi di FA parossistica
- ✓ Terapia all'ingresso: Aspirina 100 mg, Atorvastatina 40 mg, Ramipril 10 mg, Amlodipina 5 mg
- ✓ Laboratorio: Tn I = 14.7 ng/ml



In UTIC

- ✓ Paziente agitata, confusa, sudorazione algida
- ✓ PA 80/40 mmHg, FC 115 bpm
- ✓ GRACE SCORE: **55% Mortalità Intraospedaliera**
- ✓ Coronarografia "Fast Track" (2 ore dall'ingresso)
- ✓ Terapia (prima dell'ingresso in emodinamica):
ASA 300 mg, Ticagrelor 180 mg, UFH 70 UI/kg

In emodinamica



In emodinamica



In emodinamica



In UTIC

- ✓ Paziente asintomatica, decorso regolare
- ✓ PA 120/80, FC 80 b/min
- ✓ FE 50%

- ✓ In seconda giornata insorgenza di FA ben tollerata

Risk assessment

CHA₂DS₂-VASc score

Risk Factor	Score
C - Congestive heart failure	1
H - Hypertension	1
A - Age ≥ 75 yrs	2
D - Diabetes mellitus	1
S₂ - Prior stroke or TIA	2
V - Vascular disease	1
A - Age 65-74 years old	1
Sc - Sex category (female)	1

HAS-BLED score

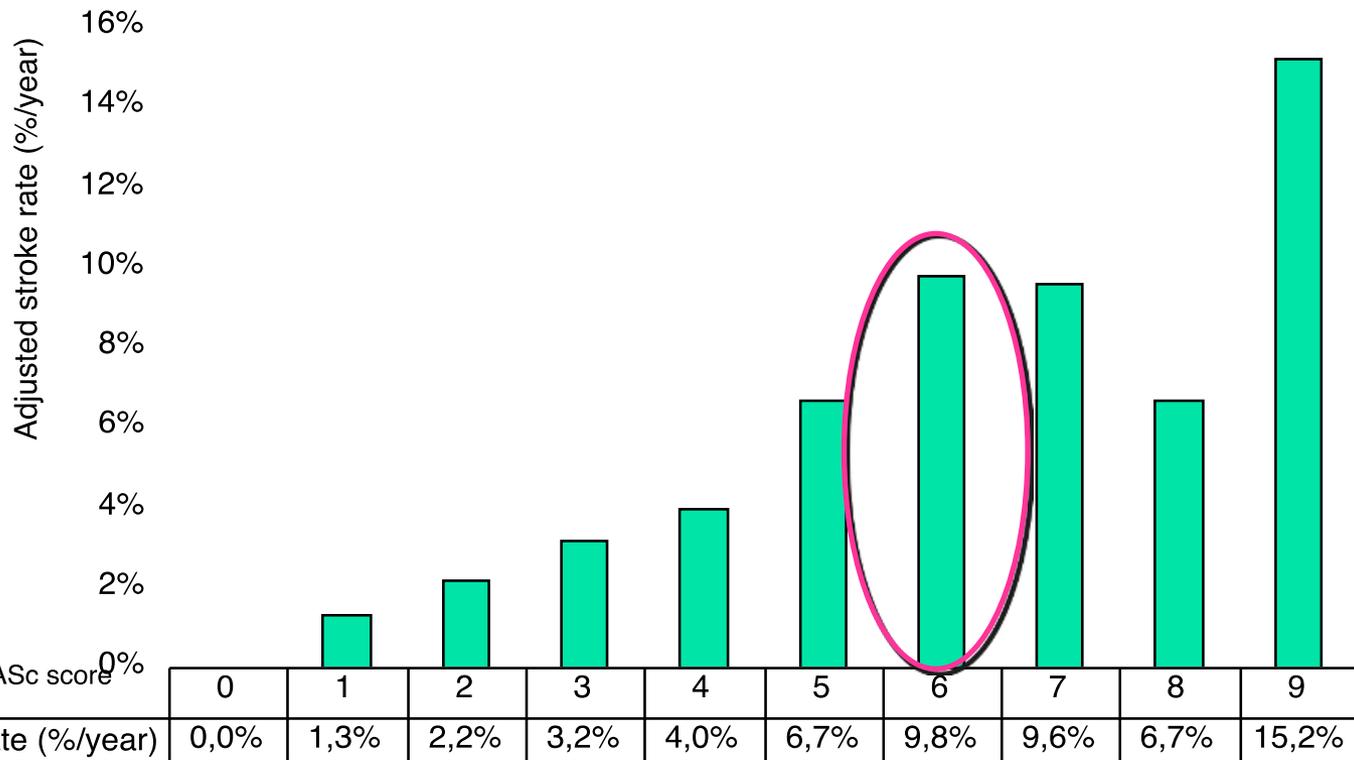
Condition	Points
H - Hypertension	1
A - Abnormal renal or liver function (1 point each)	1 or 2
S - Stroke	1
B - Bleeding	1
L - Labile INRs	1
E - Elderly (> 65 years)	1
D - Drugs or alcohol (1 point each)	1 or 2

Giovanna 6

2

CHA₂DS₂-VASc score and stroke rate

Adjusted Stroke Rate according to CHA₂DS₂-VASc score



Terapia



Strategia terapeutica secondo le evidenze più forti

ASA+ Clopidogrel+ NOAC per 1 mese

poi

Clopidogrel + NOAC fino a 12 mesi

Tuttavia...

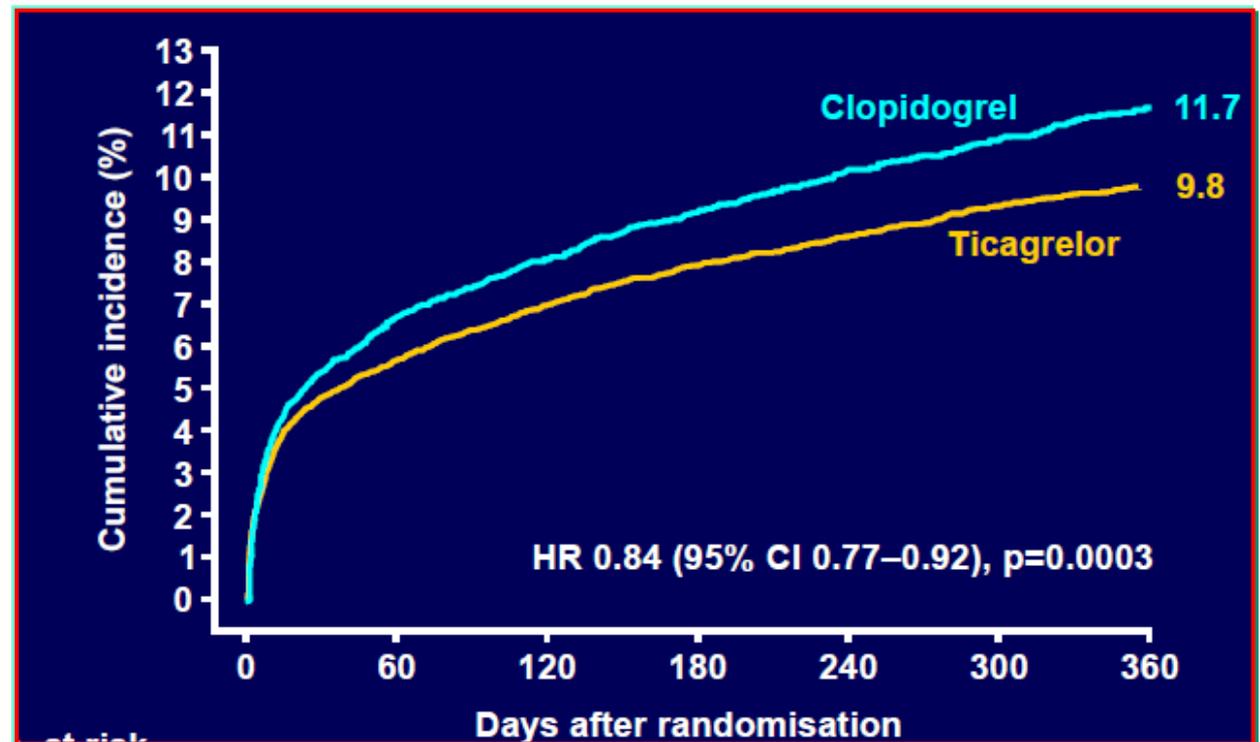
- ✓ Lo switch da Ticagrelor a Clopidogrel esporrebbe la paziente ad un aumento degli eventi trombotici coronarici pari a circa il 20%

PLATO
Ticagrelor compared with clopidogrel in patients with acute coronary syndromes – the PLATO trial

The NEW ENGLAND JOURNAL of MEDICINE

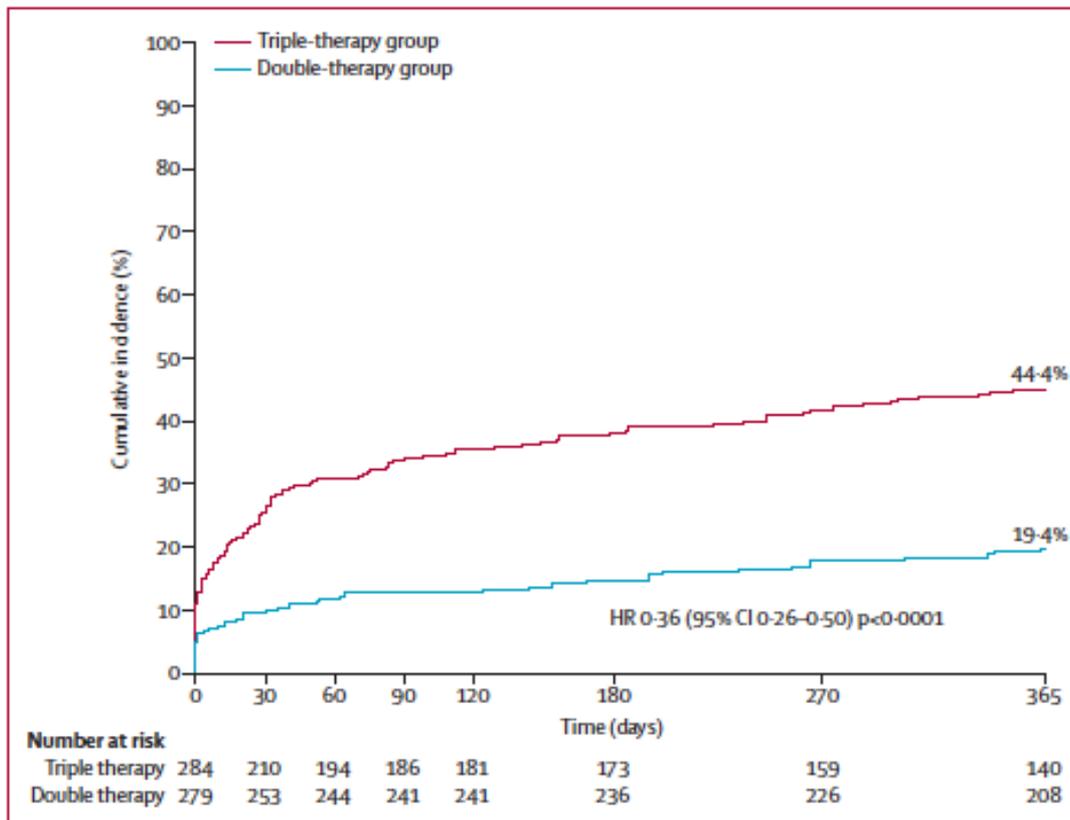
Ticagrelor versus Clopidogrel in Patients with Acute Coronary Syndromes

Lery Wolpert, M.D., Ph.D., Richard C. Becker, M.D., Andrew Braun, M.D., Ph.D., Christopher A. Cannon, M.D., Hilken Emanuelson, M.D., Ph.D., Greg Hecht, M.D., Ph.D., Jay Hermon, M.D., Steen Huusku, M.D., D.Sc., Stefan James, M.D., Ph.D., Hugo Katus, M.D., Kenneth W. Mahaffey, M.D., Benjamin W. Scirica, M.D., M.P.H., Alan Shiels, Ph.D., Philippe Gabriel Steg, M.D., Robert F. Storey, M.D., D.M., and Robert A. Harrington, M.D., for the PLATO Investigators*



Inoltre...

- ✓ La triplice terapia comporta un rischio di emorragie maggiori e minori fino al 44%/aa



Use of dopedogrel with or without aspirin in patients taking oral anticoagulant therapy and undergoing percutaneous coronary intervention: an open-label, randomised, controlled trial

Waller J, Moulton L, Tom D, Hens F, Park B, Vittinghoff E, Johnson C, Kibbe B, et al. De Groot J, van der Meer P, van der Wal A, et al. JAMA. 2015;314(10):1175-84. doi:10.1001/jama.2015.1175

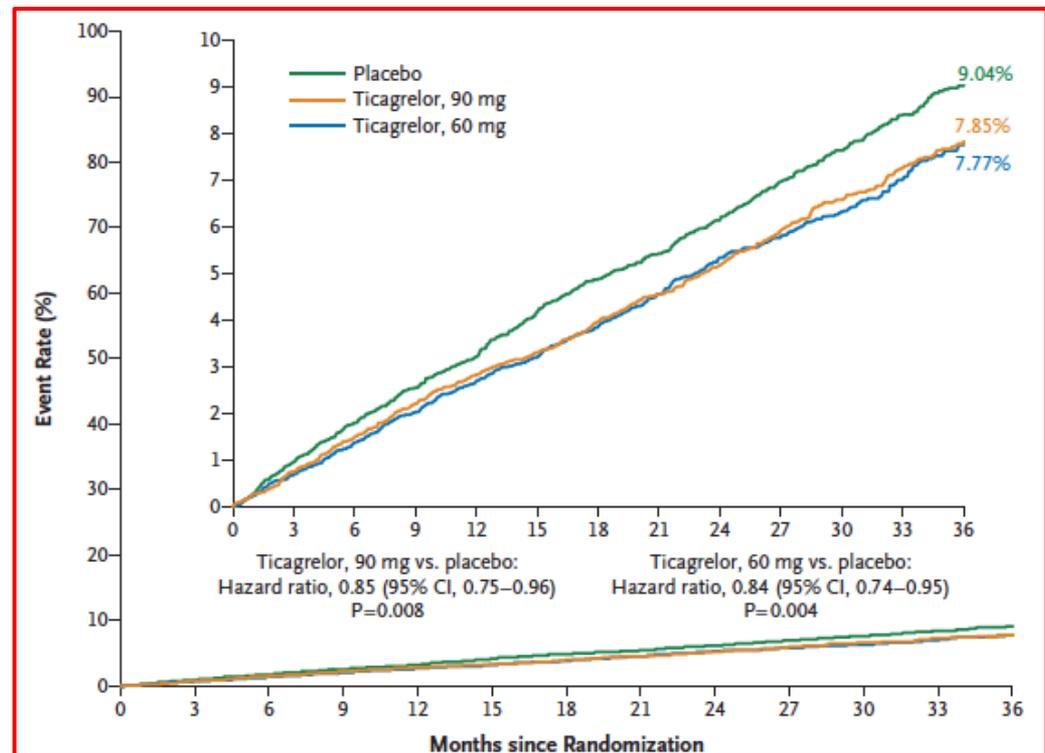
Infine...

- ✓ In pazienti selezionati ad elevato rischio di trombosi intracoronarica, è indicato un prolungamento della DAPT oltre 12 mesi

ORIGINAL ARTICLE

Long-Term Use of Ticagrelor in Patients with Prior Myocardial Infarction

Marc P. Bonaca, M.D., M.P.H., Deepak L. Bhatt, M.D., M.P.H., Marc Cohen, M.D., Philippe Gabriel Steg, M.D., Robert F. Storey, M.D., Eva C. Jensen, M.D., Ph.D., Giulia Magnani, M.D., Sameer Bansilal, M.D., M. Polly Fish, B.A., Kyungah Im, Ph.D., Olof Bengtsson, Ph.Lic., Ton Oude Ophuis, M.D., Ph.D., Andrzej Budaj, M.D., Ph.D., Pierre Theroux, M.D., Mikhail Ruda, M.D., Christian Hamm, M.D., Shinya Goto, M.D., Jindrich Spinar, M.D., José Carlos Nicolau, M.D., Ph.D., Robert G. Kiss, M.D., Ph.D., Sabina A. Murphy, M.P.H., Stephen D. Wiviott, M.D., Peter Held, M.D., Ph.D., Eugene Braunwald, M.D., and Marc S. Sabatine, M.D., M.P.H., for the PEGASUS-TIMI 54 Steering Committee and Investigators*



Veramente non ci sono alternative?

- ✓ Rischio emorragico moderato
- ✓ Alto rischio trombotico
- ✓ Necessità di TAT prolungata
- ✓ Uso Clopidogrel vs ticagrelor
- ✓ Counseling

Chiusura auricola

Raccomandazioni chiusura auricola

ESC 2020

Recommendations for occlusion or exclusion of the LAA

LAA occlusion may be considered for stroke prevention in patients with AF and contraindications for long-term anticoagulant treatment (e.g. intracranial bleeding without a reversible cause).^{449,449,481,482}

IIb

B



Indications for left atrial appendage occlusion

Patients with an indication for stroke prevention due to atrial fibrillation

Suitable for OAC

Elevated bleeding risk

- 1. HAS-BLED ≥ 3
- 2. Elevated bleeding risk outside HAS-BLED-Score, e.g., tumour, thrombocytopenia
- 3. Need for prolonged or repetitive triple therapy, e.g., severe CAD and stenting
- 4. Renal failure (severe) as contraindication to NOAC

Patients with individual and specific risk constellation for stroke

- 1. Inefficient OAC: "stroke on warfarin"
- 2. Electrically isolated LAA post ablation (indication for LAA occlusion controversial)

Patient unwilling or unable to take OAC

Contraindication to oral anticoagulation

Advise NOAC

NOAC

Individual risk-benefit analysis of OAC vs LAA occlusion

OAC
(NOACs/Vit-K-antagonists)

LAA occlusion*
(may require antiplatelet therapy)

*Note: In case of strict contraindication to antiplatelet therapy, patient may not be eligible for LAA occluder implantation but for epicardial LAA occlusion or thoracoscopic LAA clipping.



Efficacia della chiusura dell'auricola

Percutaneous closure of the left atrial appendage versus warfarin therapy for prevention of stroke in patients with atrial fibrillation: a randomised non-inferiority trial

David R Holmes, Vivek Y Reddy, Zoltan G Turi, Shephal K Doshi, Horst Sievert, Maurice Buchbinder, Christopher M Mullin, Peter Sick, for the PROTECT AF Investigators*

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Long-Term Safety and Efficacy in Continued Access Left Atrial Appendage Closure Registries

David R. Holmes, Jr, MD,* Vivek Y. Reddy, MD,[†] Nicole T. Gordon, BSEE,[‡] David Delurgio, MD,[§] Shephal K. Doshi, MD,* Amish J. Desai, MD,[¶] James E. Stone, Jr, MD,[¶] Saibal Kar, MD[‡]

Prospective Randomized Evaluation of the Watchman Left Atrial Appendage Closure Device in Patients With Atrial Fibrillation Versus Long-Term Warfarin Therapy

The PREVAIL Trial

David R. Holmes Jr, MD,* Saibal Kar, MD,[†] Matthew J. Price, MD,[‡] Brian Whisenant, MD,[§] Horst Sievert, MD, Shephal K. Doshi, MD,[¶] Kenneth Huber, MD,[‡] Vivek Y. Reddy, MD**

5-Year Outcomes After Left Atrial Appendage Closure

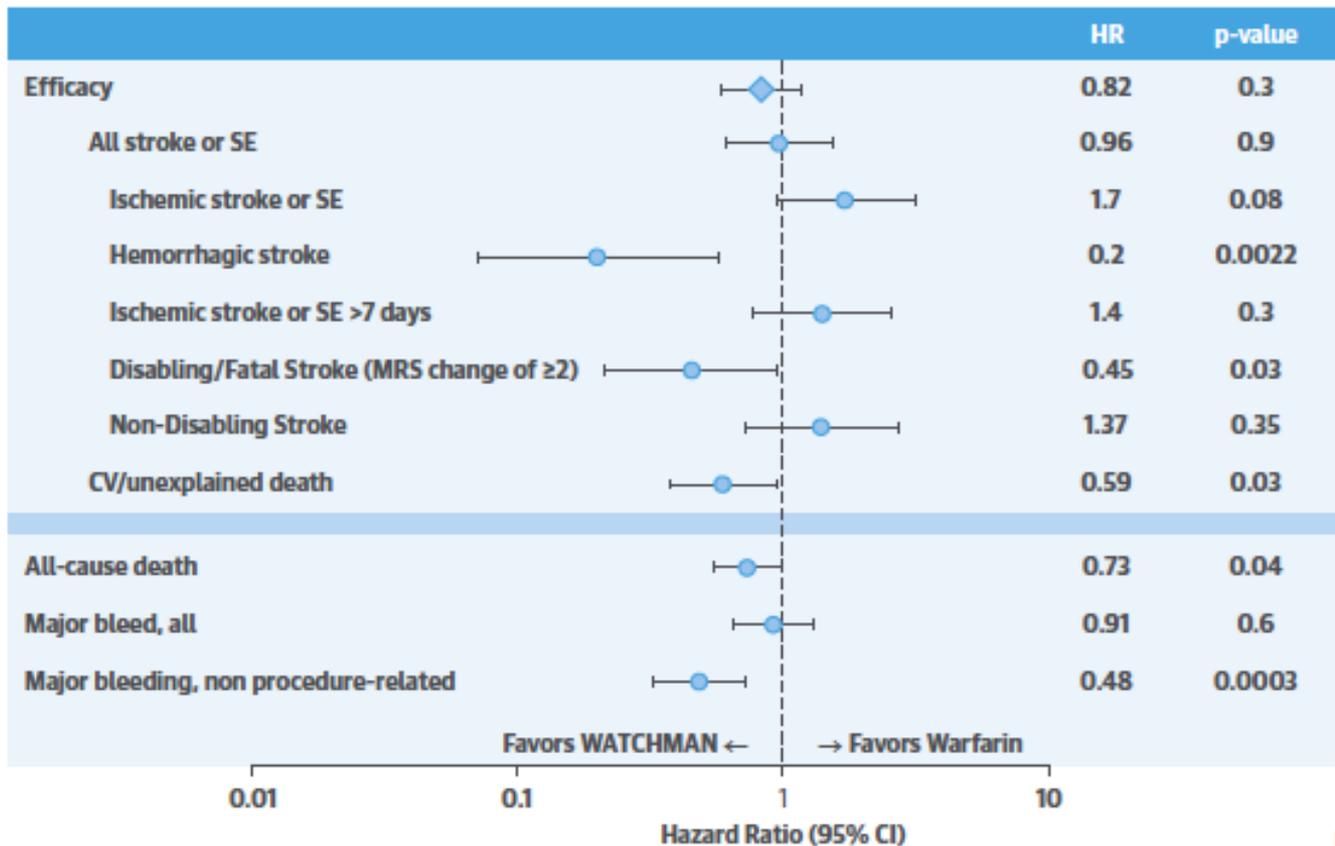
From the PREVAIL and PROTECT AF Trials

Vivek Y. Reddy, MD,*[†] Shephal K. Doshi, MD,* Saibal Kar, MD,[‡] Douglas N. Gibson, MD,* Matthew J. Price, MD,* Kenneth Huber, MD,[‡] Rodney P. Horton, MD,* Maurice Buchbinder, MD,[‡] Petr Neuzil, MD, PhD,[‡] Nicole T. Gordon, BSEE,[‡] David R. Holmes, Jr, MD,[‡] on behalf of the PREVAIL and PROTECT AF Investigators



From the PREVAIL and PROTECT AF trials

Stroke Prevention in Nonvalvular Atrial Fibrillation With LAA Closure



Terza domanda



Non crede che l'intervento di chiusura dell'auricola possa rappresentare una valida alternativa in questo setting di pazienti?

Grazie per l'attenzione

