Кардиопротективна терапия след Остър Коронарен Синдром- кои класове и за колко дълго?

Доц. Д-р Иван Груев д.м.

НМТБ”Цар Борис III”

Председател на работната група по епидемиология, превенция и рехабилитация на ССЗ към ДКБ

Въпреки огромният напредък на инвазивното и интензивно лечение, в дългосрочен план лечението на пациентите с ОКС си остава проблем!

- Вторичната профилактика е от огромно значение, защото исхемичните епизоди продължават да възникват при пациентите преживели ОКС (особено през първата година)

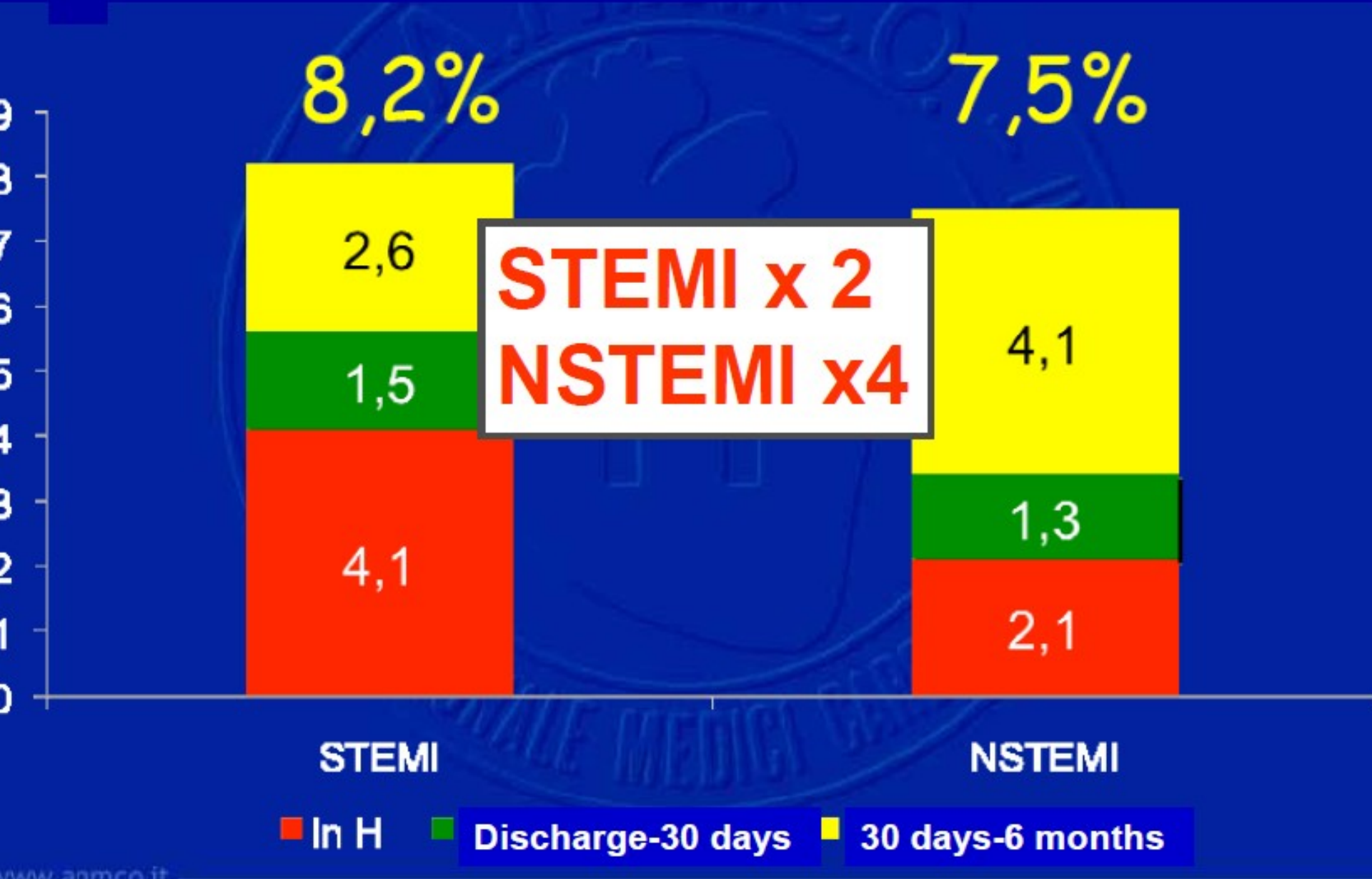
- Проучване на Menzin и сътрудници, обхващащо база данни от 16321 пациенти с ОКС показа, че 20% от пациентите са рехоспитализирани и 18% от мъжете и 23 % от жените на възраст над 40г са починали в рамките на първата година след първоначалното остро исхемично събитие!!!!

Menzin J, Wygant G, Hauch O, Jackel J, Friedman M. One-year costs of ischemic heart disease among patients with acute coronary syndromes: findings from amulti-employer claims database. Curr Med Res Opin 2008;24:461–468

Blitz 4 Qualità

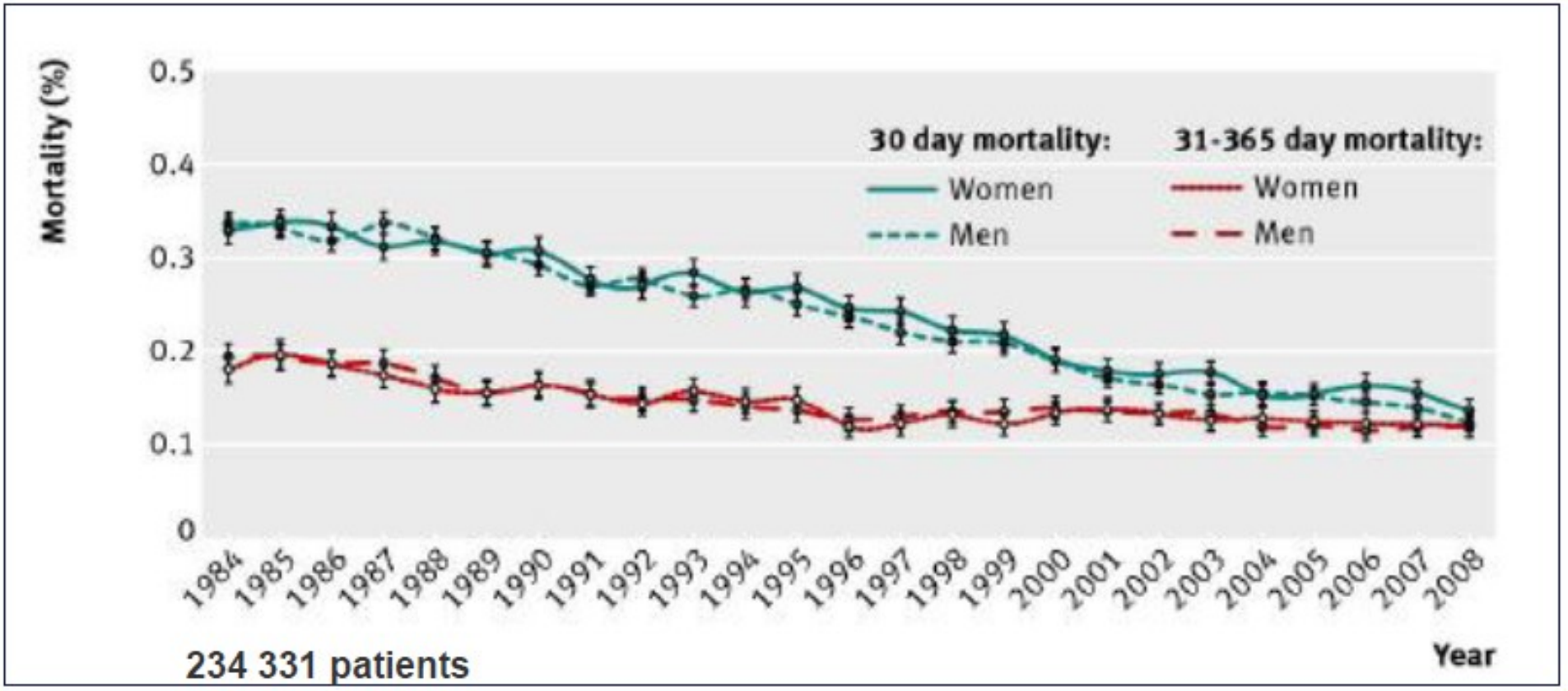
ADERENZA ALLE LINEE GUIDA NELLA GESTIONE DELLE SINDROMI CORONARICHE ACUTE

Total mortality at 6 months follow up



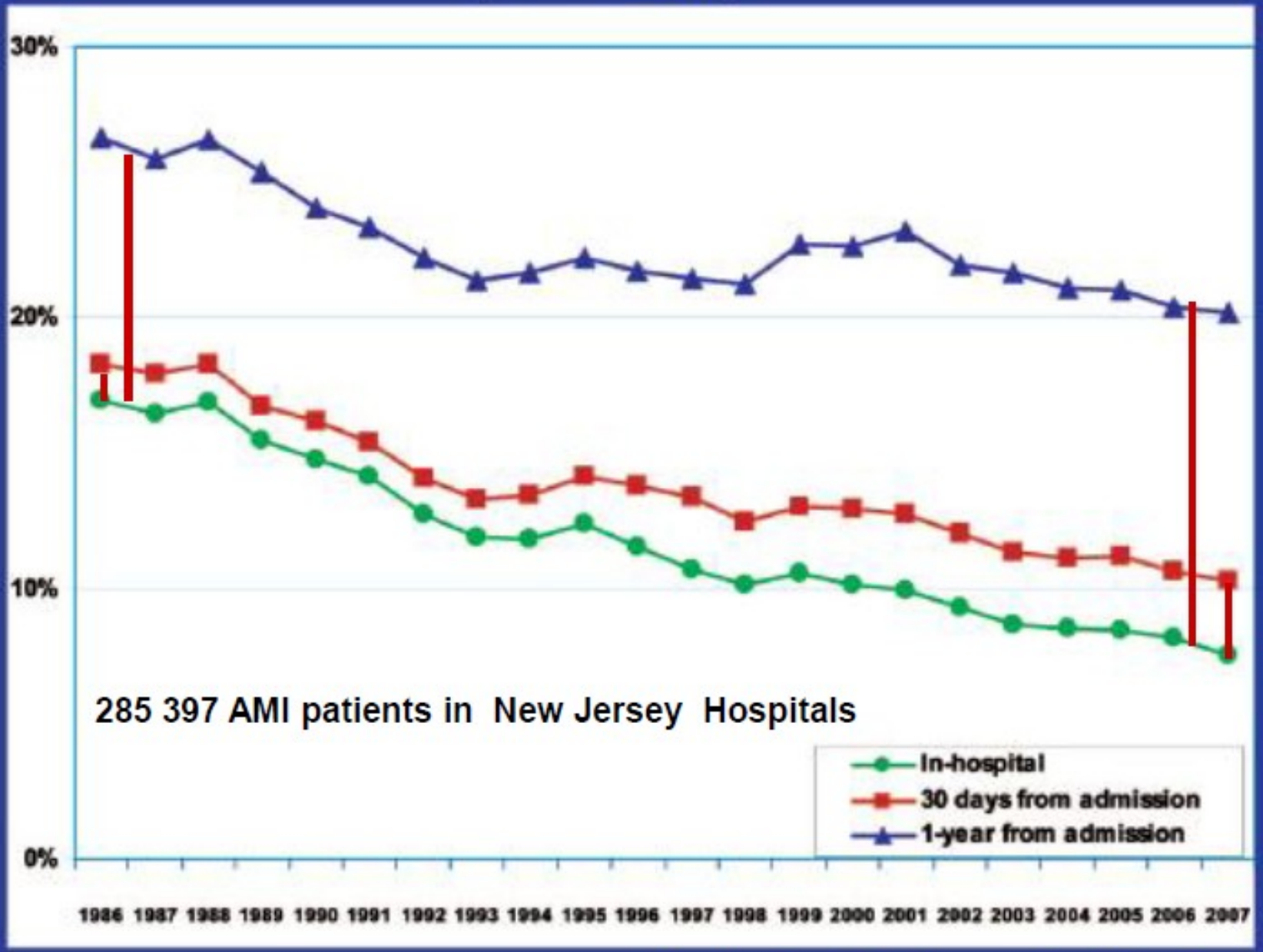
www.anmco.it

A Danish nationwide cohort study
Trends of 30 day and 31–365 day mortality after first AMI between 1984 and 2008



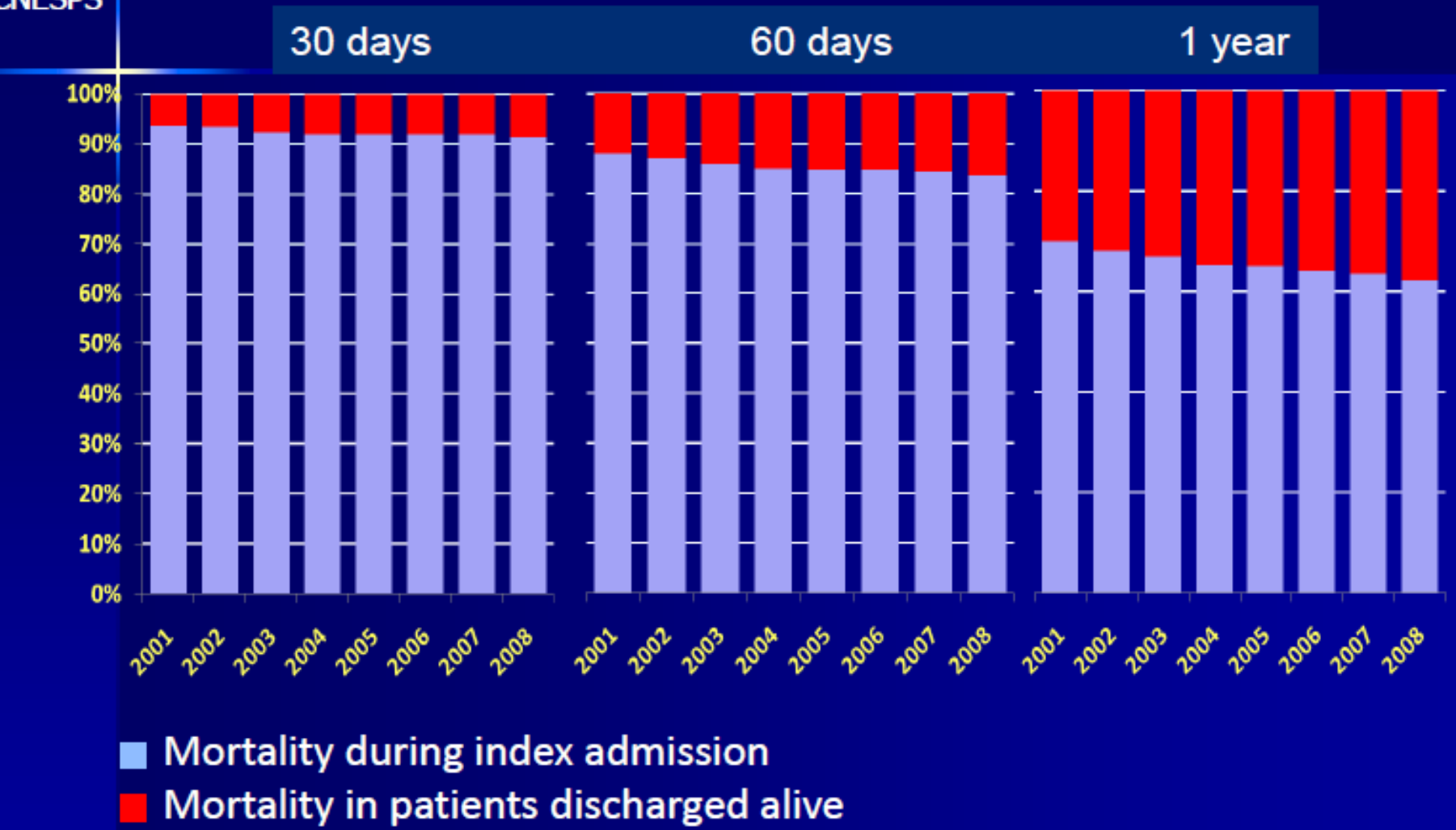
Schmidt et al. BMJ 2012

In-hospital, 30 days, 1 year mortality 1986-2007
285.397 AMI patients in New Jersey Hospitals



814.942 italian HDR for AMI Years 2001-2008
Index admission mortality and fatal readmissions

ISS
CNESPS



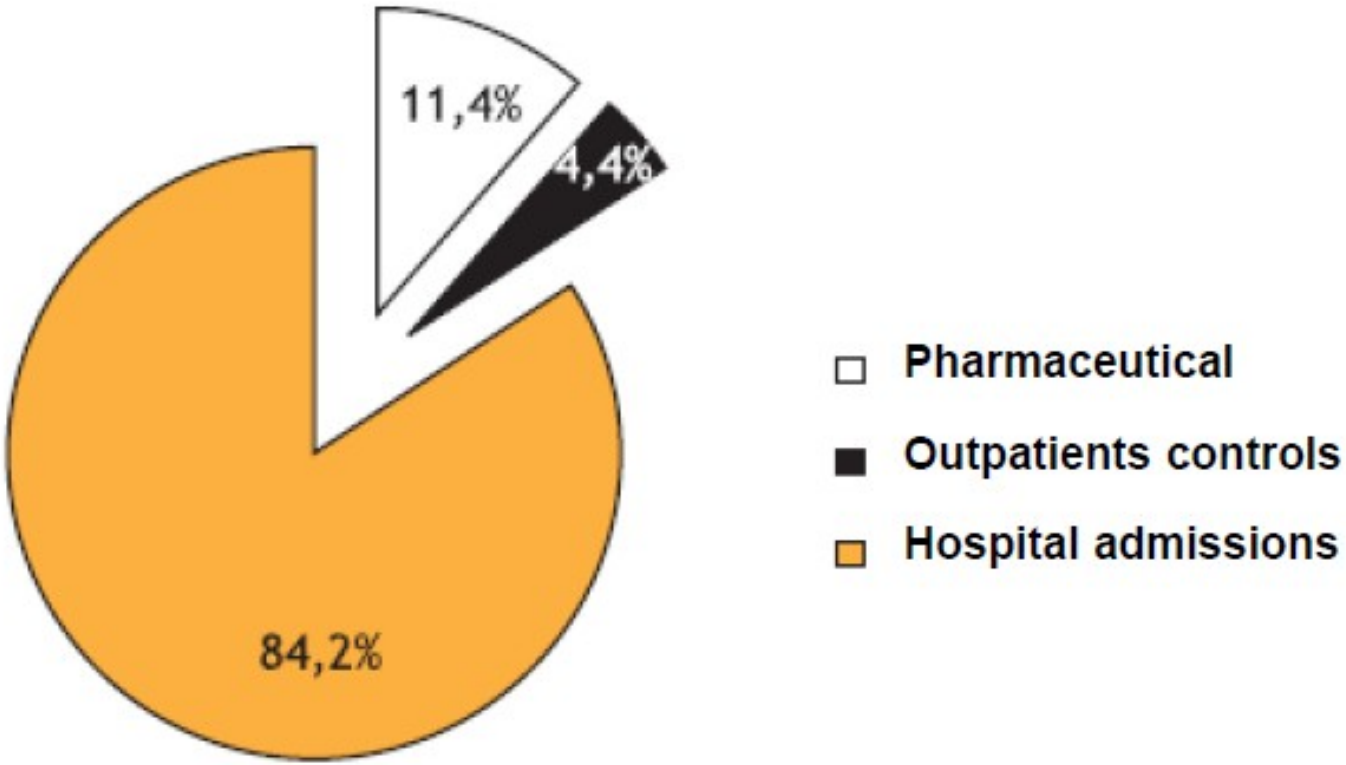
ISS Mattoni Project

Greco in press

Osservatorio ARNO Cardiovascolare

Analysis of 1 year cost of care composition

7.082 patients discharged after ACS in Tuscany Region

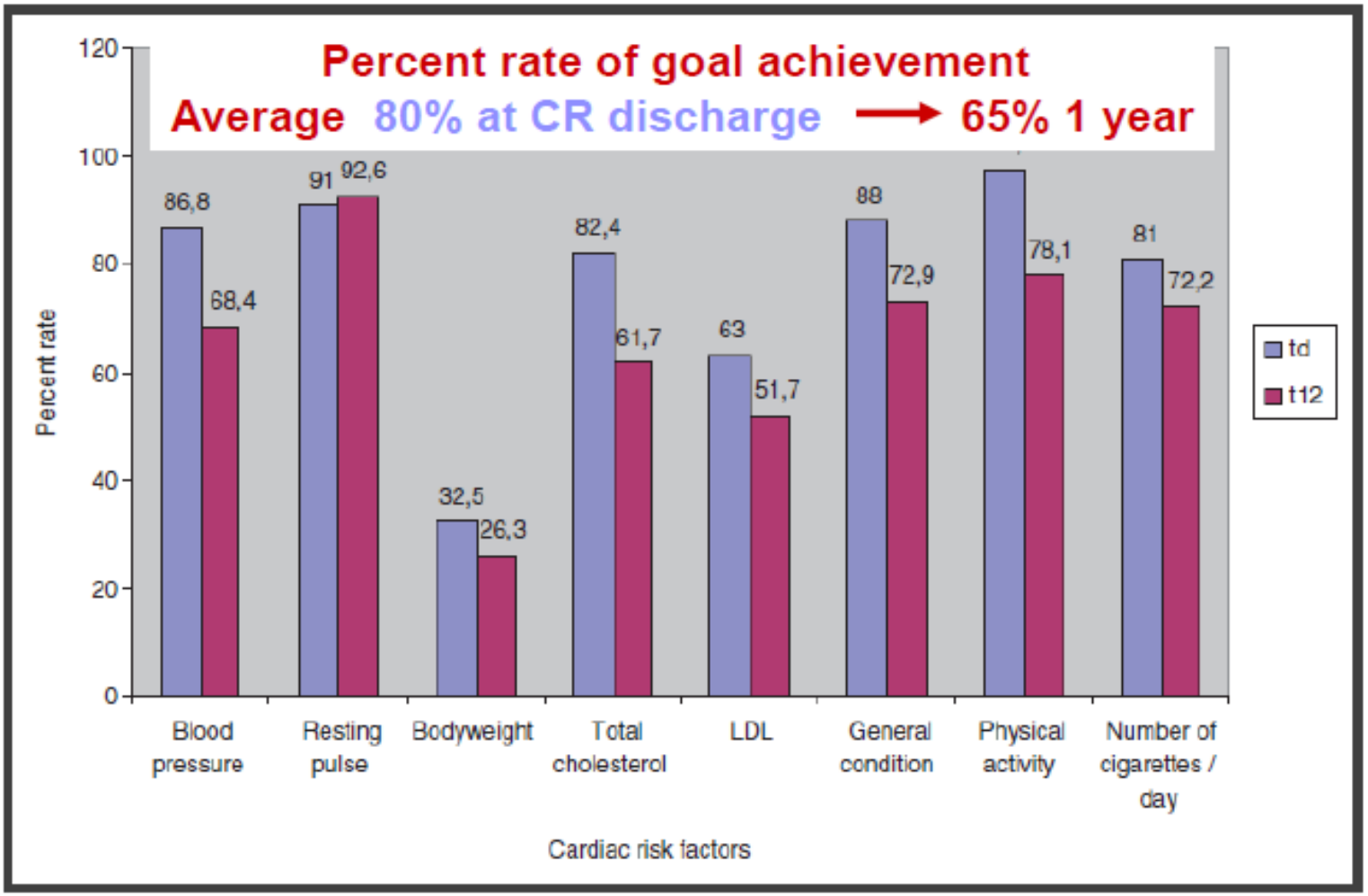


http://osservatorioarno.cineca.org

Long-term risk factor management after inpatient cardiac rehabilitation by means of a structured post-care programme

Observational study 2264 CHD patients after 3-4 CR/prevention .

Health Guide, written reminders, general pratictioner support every 3 months



Harb. Eur J Prev Cardiol 201

The 2012 European Guidelines on Cardiovascular Disease Prevention in Clinical Practice

Chairperson

Joep Perk

Linneaus University
Institute for Health and Caring Sciences
Campus Kalmar, Sweden

www.escardio.org/guidelines

European Heart Journal 2012:33;1635–1701
European Journal of Preventive Cardiology 2012;19: 4:585-667

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Защо е необходима превенция на ССЗ?

- Атеросклеротичните ССЗ, в частност ИБС остава водеща причина за преждевременна смъртност в цял свят
- ССЗ се срещат и при мъже, и при жени – смъртността преди 75 г. възраст поради ССЗ в Европа е
  - при мъжете 38%
  - при жените 42%

- Превенцията работи: над 50% от намаляването на смъртността от ИБС се свързва с промени в рисковите фактори и 40% от подобрено лечение

www.escardio.org/guidelines

European Heart Journal 2012:33;1635–1701
European Journal of Preventive Cardiology 2012;19: 4:585-667

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Very high risk

- **Subjects with any of the following:**
  - Documented CVD by invasive or non-invasive testing (such as coronary angiography, nuclear imaging, stress echocardiography, carotid plaque on ultrasound), previous myocardial infarction, ACS, coronary revascularization (PCI, CABG) and other arterial revascularization procedures, ischaemic stroke, peripheral artery disease.
  - Diabetes mellitus (type 1 or type 2) with one or more CV riskfactors and/or target organ damage (such as microalbuminuria: 30-300 mg/24 h).
  - Severe chronic kidney disease (CKD) (estimated glomerular filtration rate [eGFR] < 30 mL/min/1.73 m^2).
  - A calculated SCORE ≥10%.

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European Heart Journal 2012:33;1635–1701
European Journal of Preventive Cardiology 2012;19: 4:585-667

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Risk regions in Europe

- **Countries at low CVD risk:**
  - Based on age, sex, smoking, systolic blood pressure, total cholesterol:

    Andorra, Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, The Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland, United Kingdom.

- **High CVD risk countries** are all those not listed under the low risk chart.
  - Of these, some are at **very high risk**, and the high-risk chart may under-estimate risk in these:

    Albania, Algeria, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia,Czech Republic, Egypt, Estonia, Georgia, Hungary, Kosovo, Latvia, Lebanon, Libya, Lithuania, Macedonia F.Y.R., Moldova, Montenegro, Morocco, Poland, Romania, Russia, Serbia, Slovakia, Syria, Tunisia,Turkey, Ukraine.

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European Heart Journal 2012:33;1635–1701
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European Heart Journal (2012) 33, 2569–2619
doi:10.1093/eurheartj/ehs215

ESC GUIDELINES

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

The Task Force on the management of ST-segment elevation acute myocardial infarction of the European Society of Cardiology

Authors/Task Force Members: Ph. Gabriel Steg (Chairperson) (France)*, Stefan K. James (Chairperson) (Sweden)*, Dan Atar (Norway), Luigi P. Badano (Italy), Carina Blomstrom Lundqvist (Sweden), Michael A. Borger (Germany), Carlo Di Mario (United Kingdom), Kenneth Dickstein (Norway), Gregory Ducrocq (France), Francisco Fernandez-Aviles (Spain), Anthony H. Gershlick (United Kingdom), Pantaleo Giannuzzi (Italy), Sigrun Halvorsen (Norway), Kurt Huber (Austria), Peter Juni (Switzerland), Adnan Kastrati (Germany), Juhani Knuuti (Finland), Mattie J. Lenzen (Netherlands), Kenneth W. Mahaffey (USA), Marco Valgimigli (Italy), Arnoud van't Hof (Netherlands), Petr Widimsky (Czech Republic), Doron Zahger (Israel).

ESC Committee for Practice Guidelines (CPG): Jeroen J. Bax (Chairman) (Netherlands), Helmut Baumgartner (Germany), Claudio Ceconi (Italy), Veronica Dean (France), Christi Deaton (UK), Robert Fagard (Belgium), Christian Funck-Brentano (France), David Hasdai (Israel), Arno Hoes (Netherlands), Paulus Kirchhof (Germany/UK), Juhani Knuuti (Finland), Philippe Kolh (Belgium), Theresa McDonagh (UK), Cyril Moulin (France), Bogdan A. Popescu (Romania), Željko Reiner (Croatia), Udo Sechtem (Germany), Per Anton Sirnes (Norway), Michal Tendera (Poland), Adam Torbicki (Poland), Alec Vahanian (France), Stephan Windecker. (Switzerland)

Document Reviewers: David Hasdai (CPG Review Coordinator) (Israel), Felicity Astin (UK), Karin Åström-Olsson (Sweden), Andrzej Budaj (Poland), Peter Clemmensen (Denmark), Jean-Philippe Collet (France), Keith A. Fox (UK), Ahmet Fuat (UK), Olivija Gustiene (Lithuania), Christian W. Hamm (Germany), Petr Kala (Czech Replublic), Patrizio Lancellotti (Belgium), Aldo Pietro Maggioni (Italy), Béla Merkely (Hungary), Franz-Josef Neumann (Germany), Massimo F. Piepoli (Italy), Frans Van de Werf (Belgium), Freek Verheugt (Netherlands), Lars Wallentin (Sweden).

European Heart Journal (2012) 33, 2569–2619
doi:10.1093/eurheartj/ehs215

www.escardio.org/guidelines

Routine therapies in the acute, subacute and long term phase of STEMI

Recommendations	Class	Level
Active smokers with STEMI must receive counselling and be referred to a smoking cessation programme	I	B
Each hospital participating in the care of STEMI patients must have a smoking cessation protocol.	I	C
Exercise-based rehabilitation is recommended	I	B
Antiplatelet therapy with low dose aspirin (75-100 mg) is indicated indefinitely after STEMI.	I	A
In patients who are intolerant to aspirin, clopidogrel is indicated as an alternative to aspirin.	I	B
DAPT with a combination of aspirin and prasugrel or aspirin and ticagrelor is recommended (over aspirin and clopidogrel) in patients treated with PCI	I	A
DAPT with aspirin and an oral ADP receptor antagonist must be continued for up to 12 months after STEMI, with a strict minimum of:	I	C
• 1 month for patients receiving BMS;	I	C
• 6 months for patients receiving DES.	IIb	B

European Heart Journal (2012) 33, 2569–2619
doi:10.1093/eurheartj/ehs215

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Routine therapies in the acute, subacute and long term phase of STEMI

Recommendations	Class	Level
In patients with left ventricular thrombus, anticoagulation should be instituted for a minimum of 3 months.	IIa	B
In patients with a clear indication for oral anticoagulation (e.g. atrial fibrillation with CHA_2DS_2-VASc Score ≥ 2 or mechanical valve prosthesis), oral anticoagulation must be implemented in addition to antiplatelet therapy.	I	C
In patients require triple antithrombotic therapy, combining DAPT and OAC, e.g. because of stent placement and an obligatory indication for OAC, the duration of dual antiplatelet therapy should be minimized to reduce bleeding risk.	I	C
In selected patients who receive aspirin and clopidogrel, low-dose rivaroxaban (2.5 mg twice daily) may be considered if the patient is at low bleeding risk.	IIb	B
DAPT should be used up to 1 year in patients with STEMI who did not receive a stent.	IIa	C
Gastric protection with a proton pump inhibitor should be considered for the duration of DAPT therapy in patients at high risk of bleeding.	IIa	C

European Heart Journal (2012) 33, 2569–2619
doi:10.1093/eurheartj/ehs215

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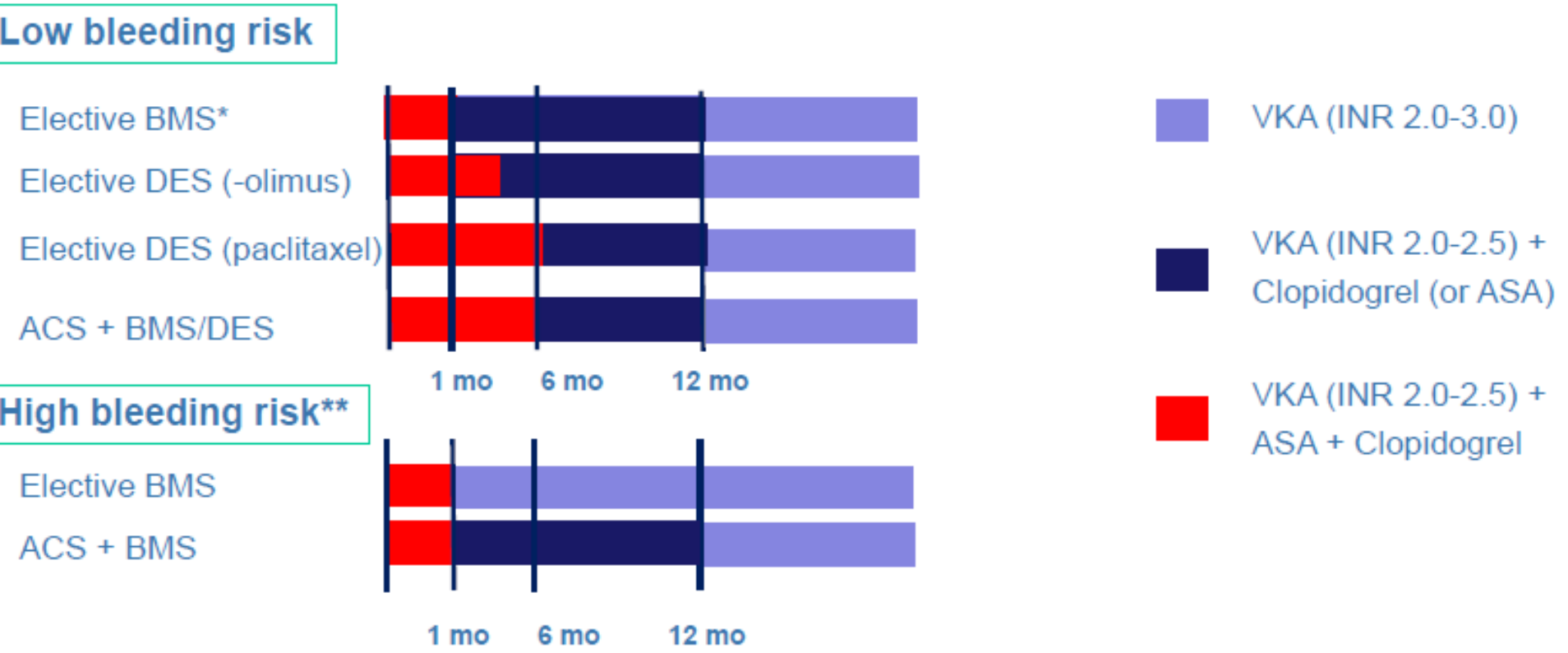
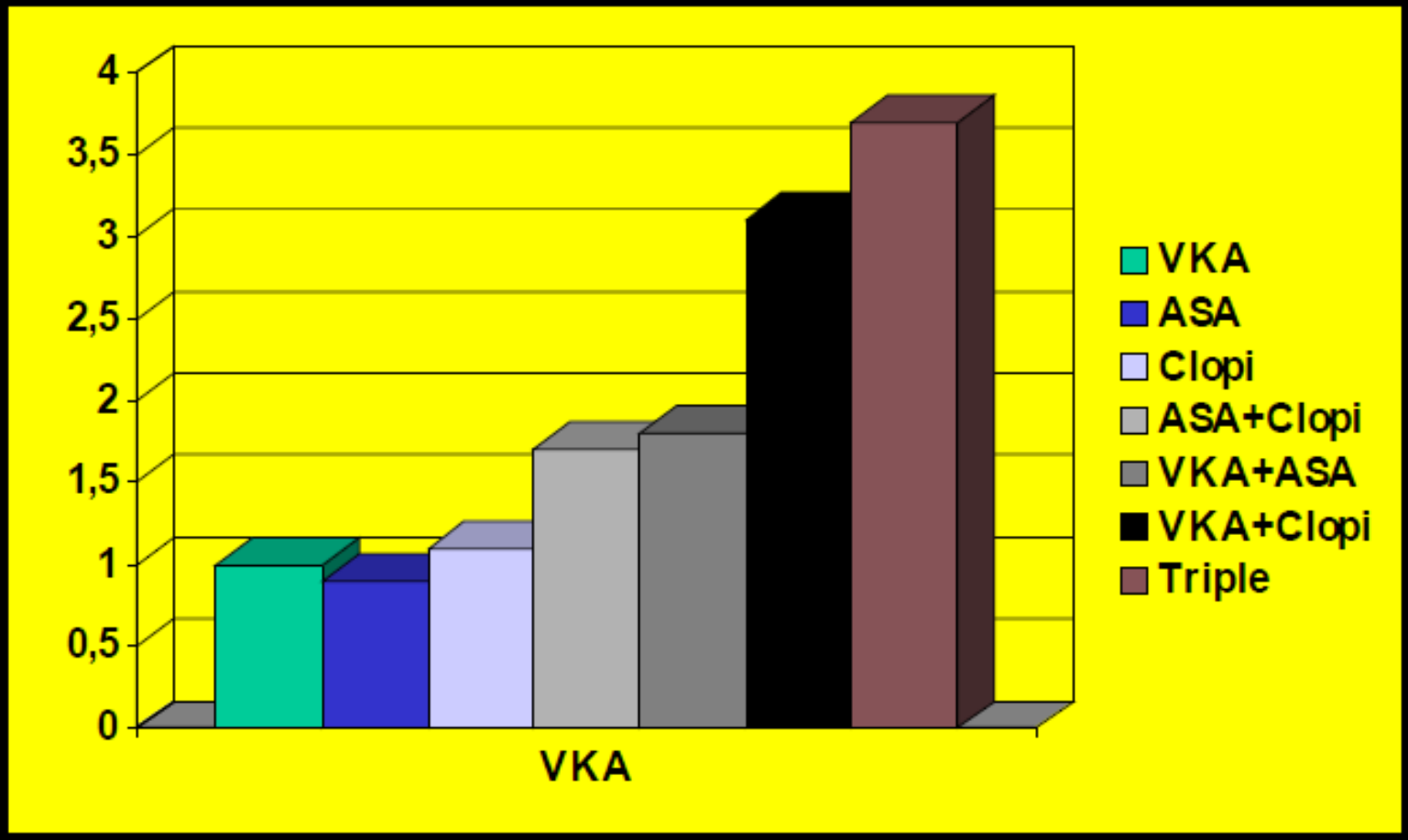
ESC Guidelines in AF patients at moderate to high thromboembolic risk in whom OAC is required



Adapted from *Camm J et al. Eur Heart J 2010;31:2369-2429*

Major Bleeding* per Year

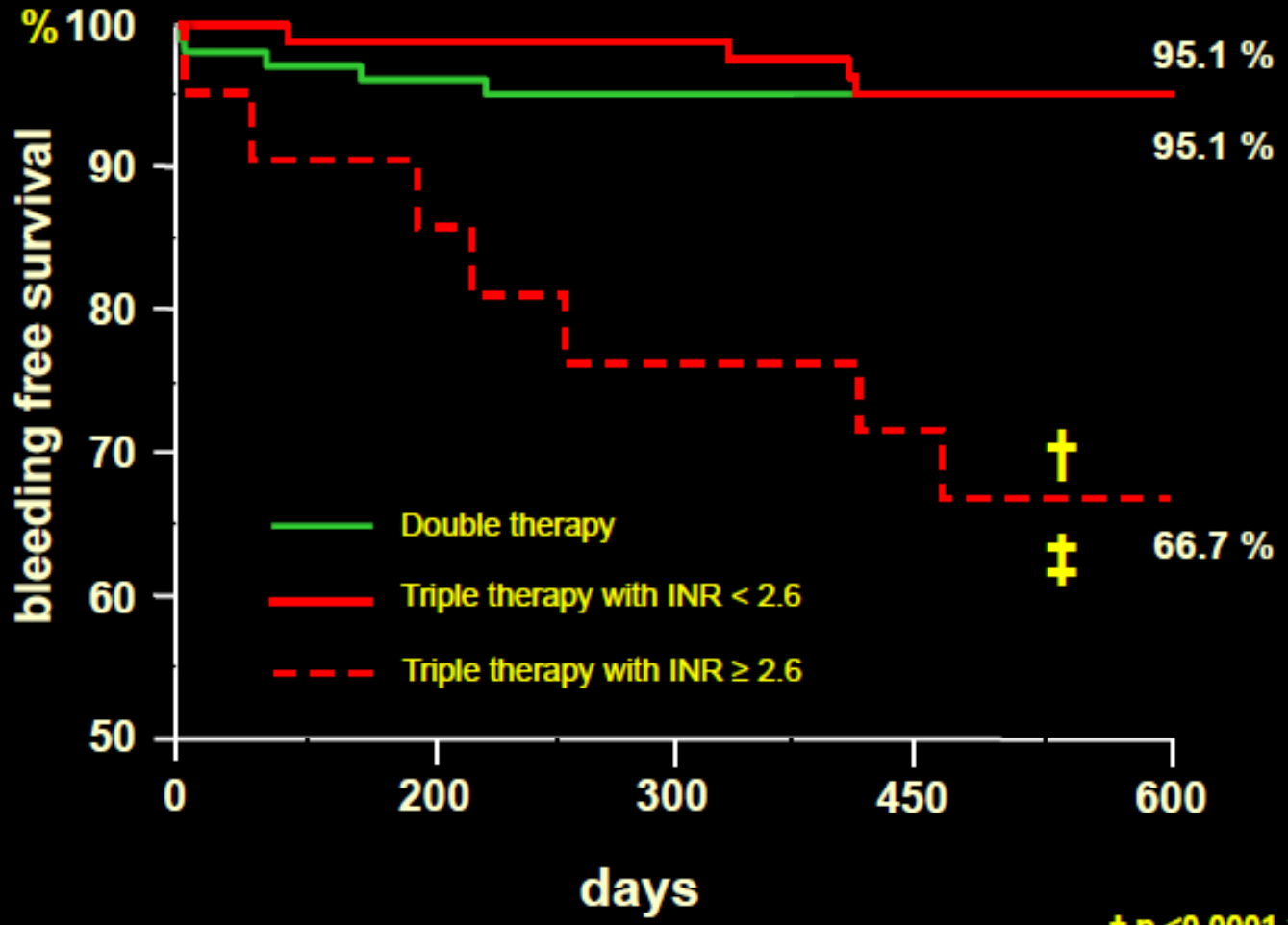
Odds Ratios



* non-fatal and fatal

Hansen et al. Arch Intern Med 2010;170:1433-144

Bleeding over time



† p <0.0001 vs double therapy

‡ p <0.0001 vs triple with INR <2.6

Rossini R. Am J Cardiol 2008; 102: 1618-1623

WOEST Trial - Study Design

1:1 Randomisation:

Double therapy group:	Triple therapy group
OAC + 75mg Clopidogrel qd	**OAC + 75mg Clopidogrel qd + 80mg Aspirin qd**
1 month minimum after BMS	1 month minimum after BMS
1 year after DES	1 year after DES

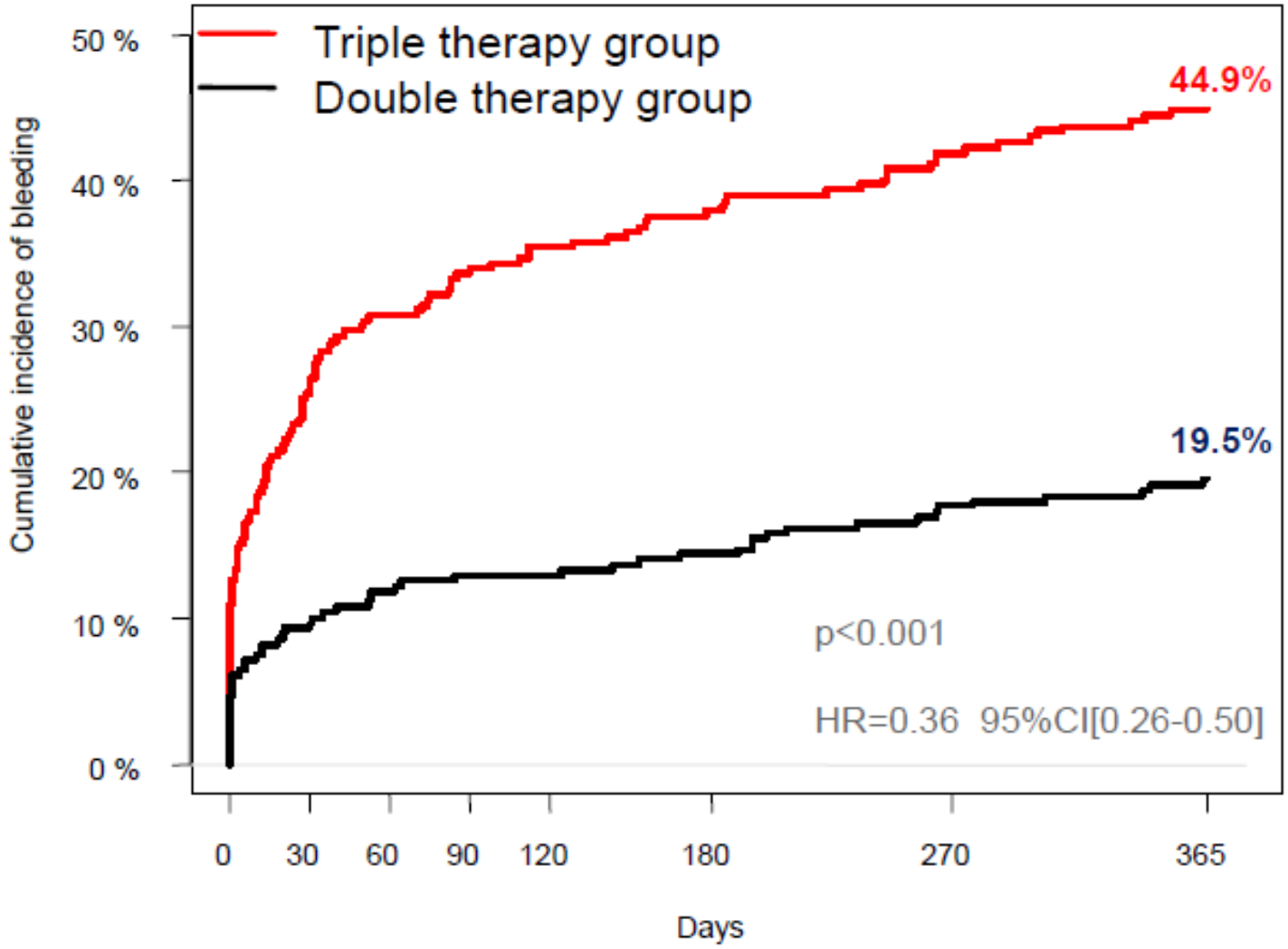
Follow up: **1 year**

Primary Endpoint: **The occurence of all bleeding events (TIMI criteria)**

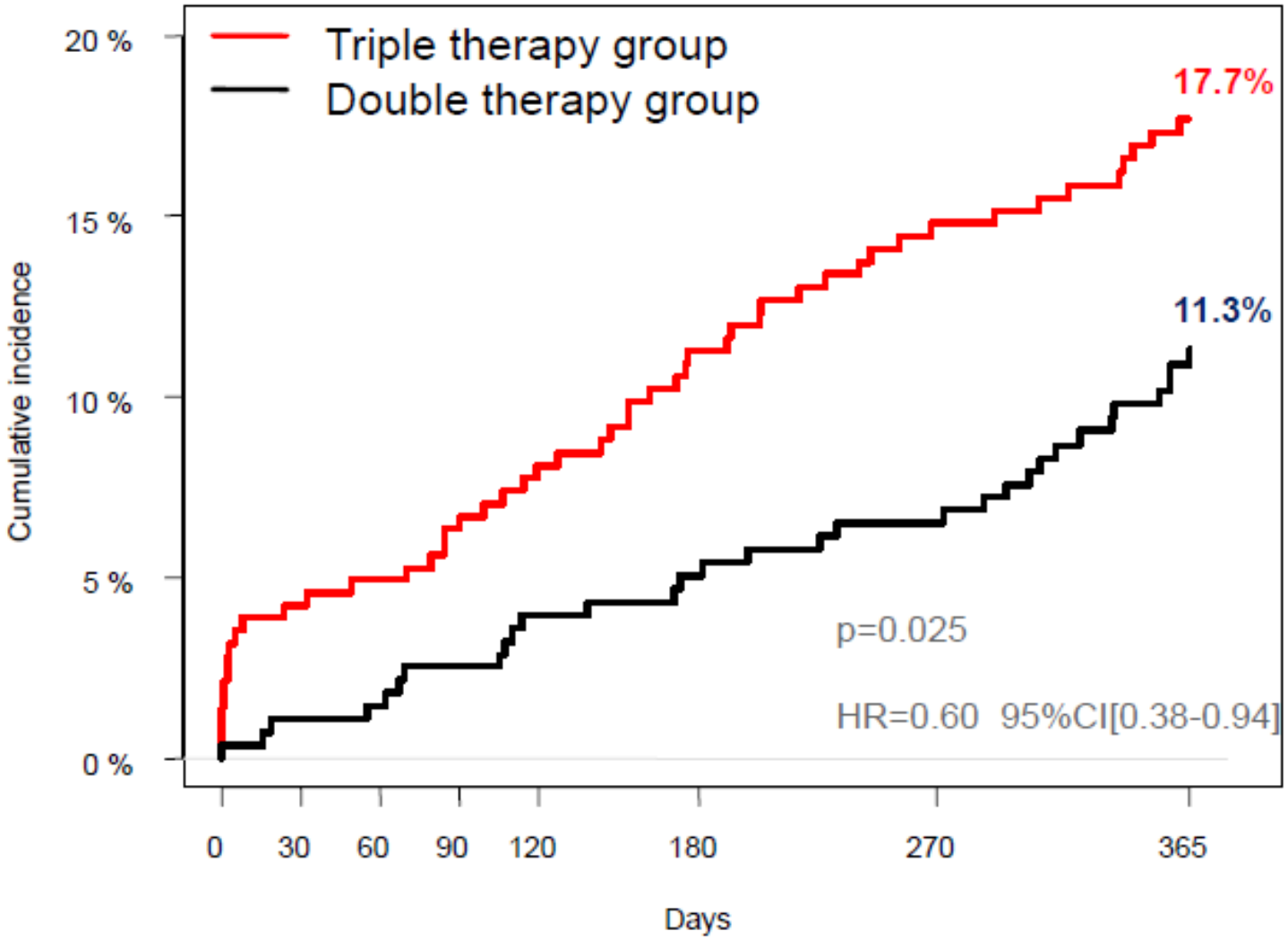
Secondary Endpoints:

- **Combination of stroke, death, myocardial infarction, stent thrombosis and target vessel revascularisation**
- **All individual components of primary and secondary endpoints**

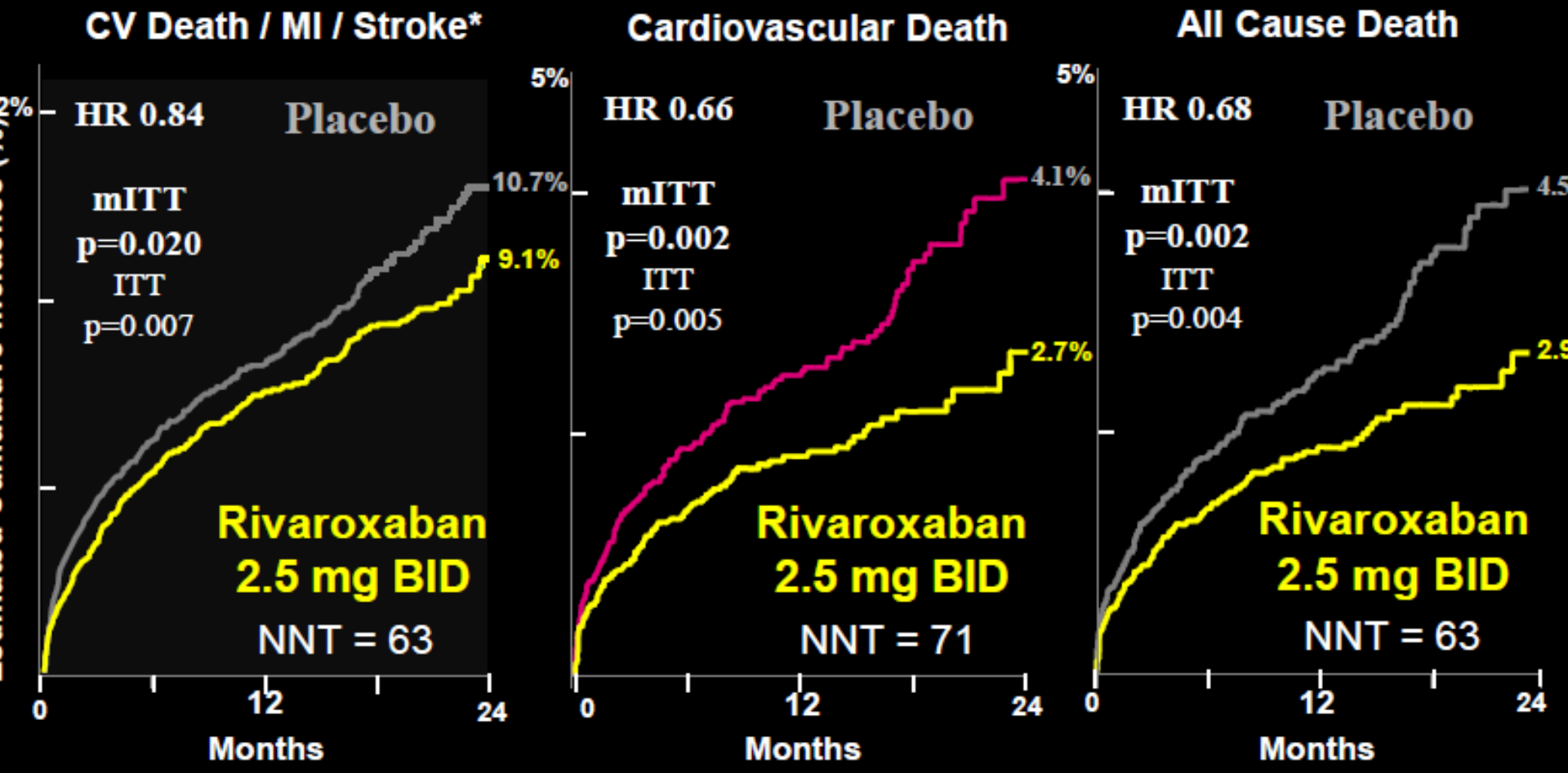
Primary Endpoint: Total number of bleeding events (TIMI criteria)



Secondary Endpoint (Death, MI,TVR, Stroke, ST)



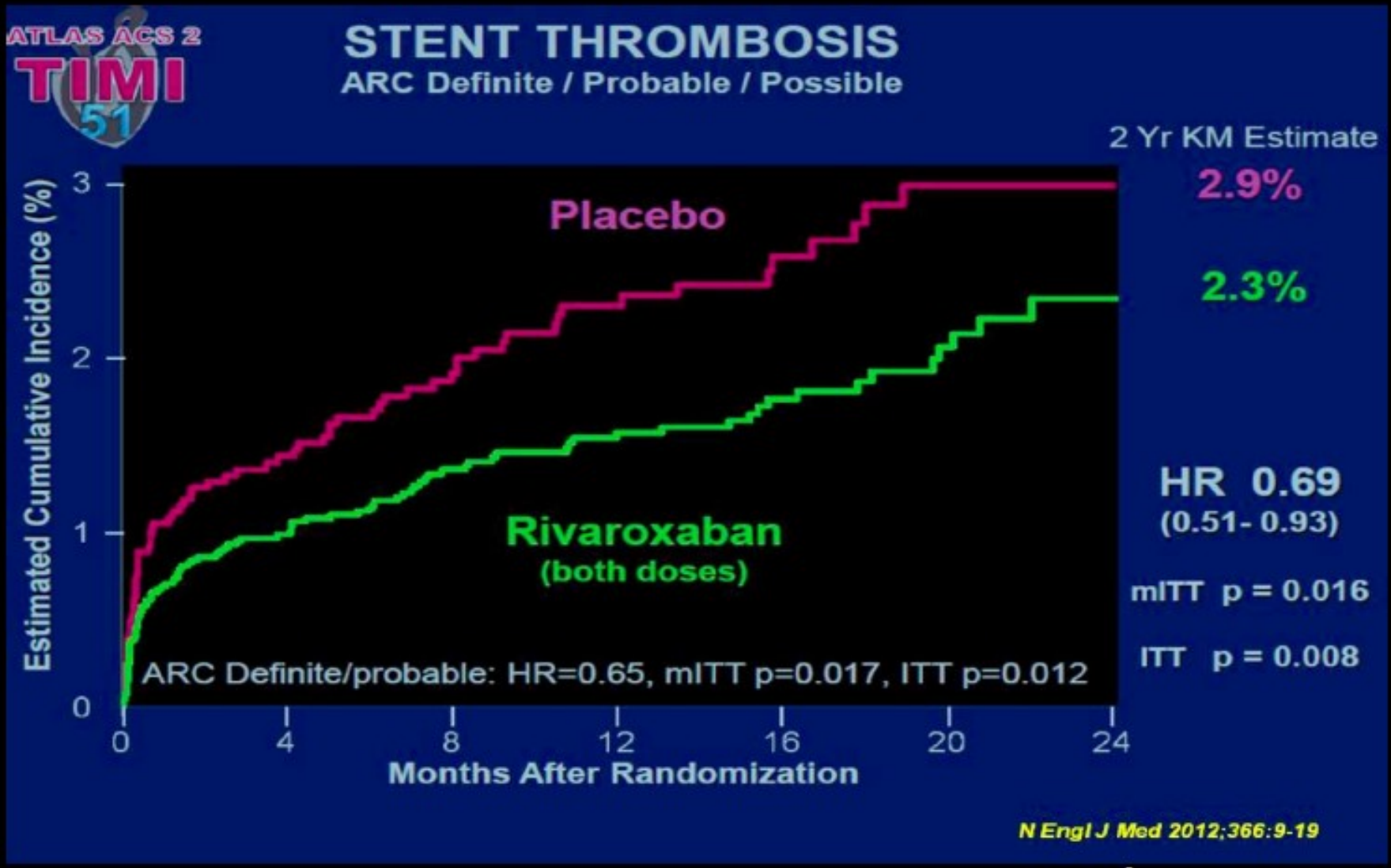
PRIMARY EFFICACY ENDPOINT*: 2.5 mg PO BID



* First occurrence of cardiovascular death, MI, stroke (ischemic, hemorrhagic, and uncertain) as adjudicated by the CEC across thienopyridine use strata
Two year Kaplan-Meier estimates, HR and 95% confidence interval estimates from Cox model stratified by thienopyridine use are provided per mITT approach; Stratified log-rank p-values are provided for both mITT and ITT approaches; NNT=Number needed to treat.

ATLAS-2 Studie

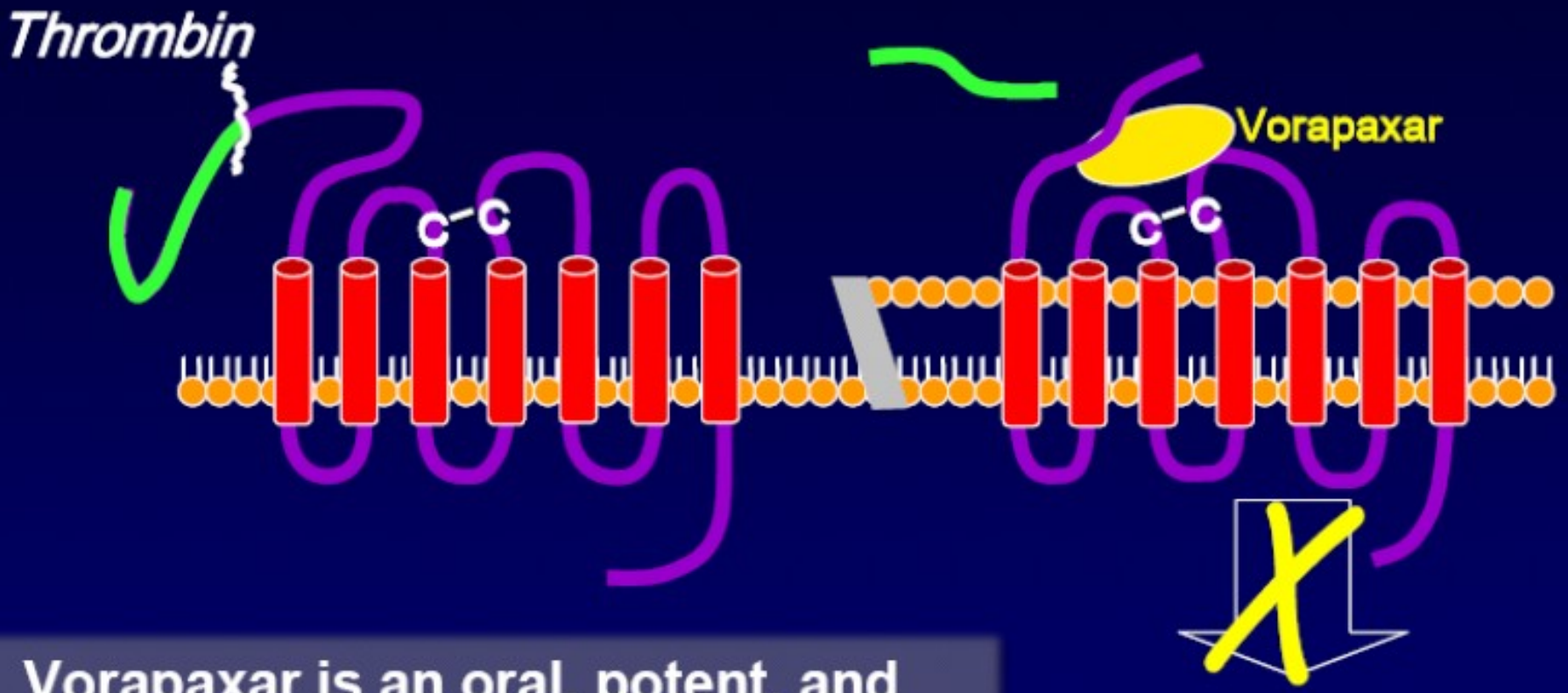
(Rivaroxaban)



Mega JL *et al*. Lancet 2009;374:29

TRA 2°P TIMI 50

Protease-activated receptor (PAR)-1



- Vorapaxar is an oral, potent, and selective antagonist of PAR-1
- Metabolism by CYP3A4 enzymes
- No meaningful renal clearance
- Long half-life (T1/2 > 100 hrs)

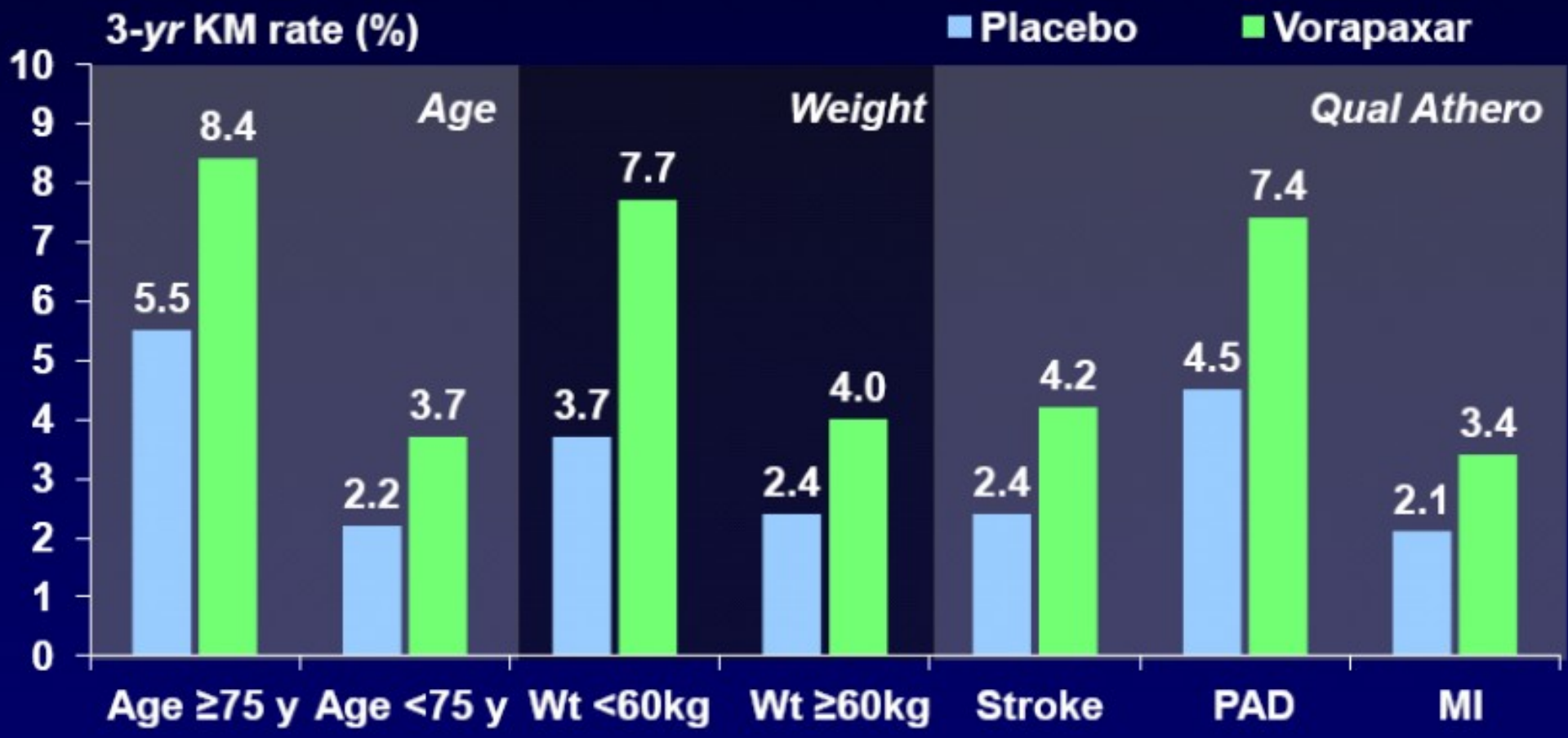
Adapted from Vu TH et al. *Cell* 1991;64:1057–66

CV Death, MI, or Stroke in Major Subgroups

Subgroup	*total no.*	CV Death, MI, or Stroke	Hazard Ratio (95% CI)	Interaction p-value
Overall	26449		0.87 (0.80, 0.94)	
Age				*0.54*
<75	23429		0.86 (0.78, 0.94)	
>=75	3020		0.91 (0.75, 1.10)	
Body weight				*0.033*
>=60kg	24546		0.85 (0.78, 0.92)	
<60kg	1852		1.22 (0.88, 1.69)	
Qualifying Athero				*0.058*
MI	17779		0.80 (0.72, 0.89)	
PAD	3787		0.94 (0.78, 1.14)	
Stroke	4883		1.03 (0.85, 1.25)	
History of Stroke				*0.22*
No	20699		0.84 (0.76, 0.93)	
Yes	5746		0.95 (0.80, 1.11)	
Thienopyridine at Rando				*0.76*
Yes	16442		0.88 (0.79, 0.98)	
No	10007		0.85 (0.74, 0.98)	

No interaction by sex, or region.

GUSTO Moderate or Severe Bleeding in Major Subgroups



ARD	2.9%	1.5%	4.0%	1.6%	1.8%	2.9%	1.3%
HR	1.69	1.65	1.95	1.64	1.93	1.62	1.61
P-interact		0.87		0.50		0.69	

Routine therapies in the acute, subacute and long term phase of STEMI

Recommendations	Class	Level
Oral treatment with beta-blockers should be considered during hospital stay and continued thereafter in all STEMI patients without contra-indications.	IIa	B
Oral treatment with beta-blockers is indicated in patients with heart failure or LV dysfunction.	I	A
Intravenous beta-blockers must be avoided in patients with hypotention or heart failure.	III	B
Intravenous beta-blockers should be considered as the time of presentation in patients without contraindications, with high blood pressure, tachycardia and no signs of heart failure.	IIa	B
A fasting lipid profile must be obtained in all STEMI patients, as soos as possible after presentation.	I	C
It is recommended to initiate or continue high dose statins early after admission in all STEMI patients without contraindication or history of intolerance, regardless of initial cholesterol values.	I	A

European Heart Journal (2012) 33, 2569–2619
doi:10.1093/eurheartj/ehs215

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Routine therapies in the acute, subacute and long term phase of STEMI

Recommendations	Class	Level
Reassessment of LDL-cholesterol should be considered after 4-6 weeks to ensure that a target value of ≤1.8 mmol/L (70 mg/dL) has been reached.	IIa	C
Verapamil may be considered for secondary prevention in patients with absolute contraindications to beta-blockers and no heart failure.	IIb	B
ACE Inhibitors are indicated starting within the first 24 h of STEMI in patients with evidence of heart failure, LV systolic dysfunction, diabetes or an anterior infarct.	I	A
An ARB, preferably valsartan, is an alternative to ACE inhibitors in patients with heart failure or LV systolic dysfunction, particularly those who are intolerant to ACE inhibitors.	I	B
ACE inhibitors should be considered in all patients in the absence of contraindications.	IIa	A
Aldosterone antagonists, e.g. eplerenone, are indicated in patients with an ejection fraction ≤ 40% and heart failure or diabetes, provided no renal failure or hyperkalaemia.	I	B

European Heart Journal (2012) 33, 2569–2619
doi:10.1093/eurheartj/ehs215

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

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

The Task Force for the management of acute coronary syndromes (ACS) in patients presenting without persistent ST-segment elevation of the European Society of Cardiology (ESC)

Authors/Task Force Members: Christian W. Hamm (Chairperson) (Germany)*, Jean-Pierre Bassand (Co-Chairperson)*, (France), Stefan Agewall (Norway), Jeroen Bax (The Netherlands), Eric Boersma (The Netherlands), Hector Bueno (Spain), Pio Caso (Italy), Dariusz Dudek (Poland), Stephan Gielen (Germany), Kurt Huber (Austria), Magnus Ohman (USA), Mark C. Petrie (UK), Frank Sonntag (Germany), Miguel Sousa Uva (Portugal), Robert F. Storey (UK), William Wijns (Belgium), Doron Zahger (Israel).

ESC Committee for Practice Guidelines: Jeroen J. Bax (Chairperson) (The Netherlands), Angelo Auricchio (Switzerland), Helmut Baumgartner (Germany), Claudio Ceconi (Italy), Veronica Dean (France), Christi Deaton (UK), Robert Fagard (Belgium), Christian Funck-Brentano (France), David Hasdai (Israel), Arno Hoes (The Netherlands), Juhani Knuuti (Finland), Philippe Kolh (Belgium), Theresa McDonagh (UK), Cyril Moulin (France), Don Poldermans (The Netherlands), Bogdan A. Popescu (Romania), Željko Reiner (Croatia), Udo Sechtem (Germany), Per Anton Sirnes (Norway), Adam Torbicki (Poland), Alec Vahanian (France), Stephan Windecker (Switzerland).

Document Reviewers: Stephan Windecker (CPG Review Coordinator) (Switzerland), Stephan Achenbach (Germany), Lina Badimon (Spain), Michel Bertrand (France), Hans Erik Bøtker (Denmark), Jean-Philippe Collet (France), Filippo Crea, (Italy), Nicolas Danchin (France), Erling Falk (Denmark), John Goudevenos (Greece), Dietrich Gulba (Germany), Rainer Hambrecht (Germany), Joerg Herrmann (USA), Adnan Kastrati (Germany), Keld Kjeldsen (Denmark), Steen Dalby Kristensen (Denmark), Patrizio Lancellotti (Belgium), Julinda Mehilli (Germany), Béla Merkely (Hungary), Gilles Montalescot (France), Franz-Josef Neumann (Germany), Ludwig Neyses (UK), Joep Perk (Sweden), Marco Roffi (Switzerland), Francesco Romeo (Italy), Mikhail Ruda (Russia), Eva Swahn (Sweden), Marco Valgimigli (Italy), Christiaan JM Vrints (Belgium), Petr Widimsky (Czech Republic).

Recommendations for drugs in secondary prevention (see separate recommendations for antithrombotic treatment)

Recommendations	Class [a]	Level [b]	Ref [c]
β-Blockers are recommended in all patients with reduced LV systolic function (LVEF ≤40%).	I	A	314
ACE inhibitors are indicated within 24 h in all patients with LVEF ≤40% and in patients with heart failure, diabetes, hypertension, or CKD, unless contraindicated	I	A	315, 316
ACE inhibitors are recommended for all other patients to prevent recurrence of ischaemic events, with preference given to agents and doses of proven efficacy.	I	B	309, 310
ARBs are recommended for patients who are intolerant to ACE inhibitors, with preference given to agents and doses of proven efficacy.	I	B	311, 317
Aldosterone blockade with eplerenone is indicated in patients after MI who are already being treated with ACE inhibitors and β-blockers and who have an LVEF ≤35% and either diabetes or heart failure, without significant renal dysfunction [serum creatinine >221 μmol/L (>2.5 mg/dL) for men and >177 μmol/L (>2.0 mg/dL) for women] or hyperkalaemia.	I	A	276, 277
Statin therapy with target LDL-C levels <1.8 mmol/L (<70 mg/dL) initiated early after admission is recommended.	I	B	313

Table 15 Measures checked at discharge

Aspirin	Continue life long
$P2Y_{12}$ inhibitor	Continue for 12 months (unless at high risk of bleeding)
β-Blocker	If LV function depressed
ACE inhibitor/ ARB	If LV function depressed Consider for patients devoid of depressed LV function
Aldosterone antagonist/ eplerenone	If depressed LV function (LVEF ≤35%) and either diabetes or heart failure, without significant renal dysfunction
Statin	Titrate to achieve target LDL-C levels <1.8 mmol/L (<70 mg/dL)
Lifestyle	Risk-factor counselling, referral to cardiac rehabilitation / secondary prevention programme

Patients' adherence

	Class	Level	GRADE
Physicians must assess adherence to medication, and identify reasons for non-adherence in order to tailor further interventions to the individual needs of the patient or person at risk.	I	A	Strong
In clinical practice, reducing dosage demands to the lowest acceptable level is recommended. In addition, repetitive monitoring and feedback should be implemented. If feasible, multisession or combined behavioural interventions should be offered in case of persistent non-adherence.	IIa	A	Strong

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European Heart Journal 2012:33;1635–1701
European Journal of Preventive Cardiology 2012;19: 4:585-667

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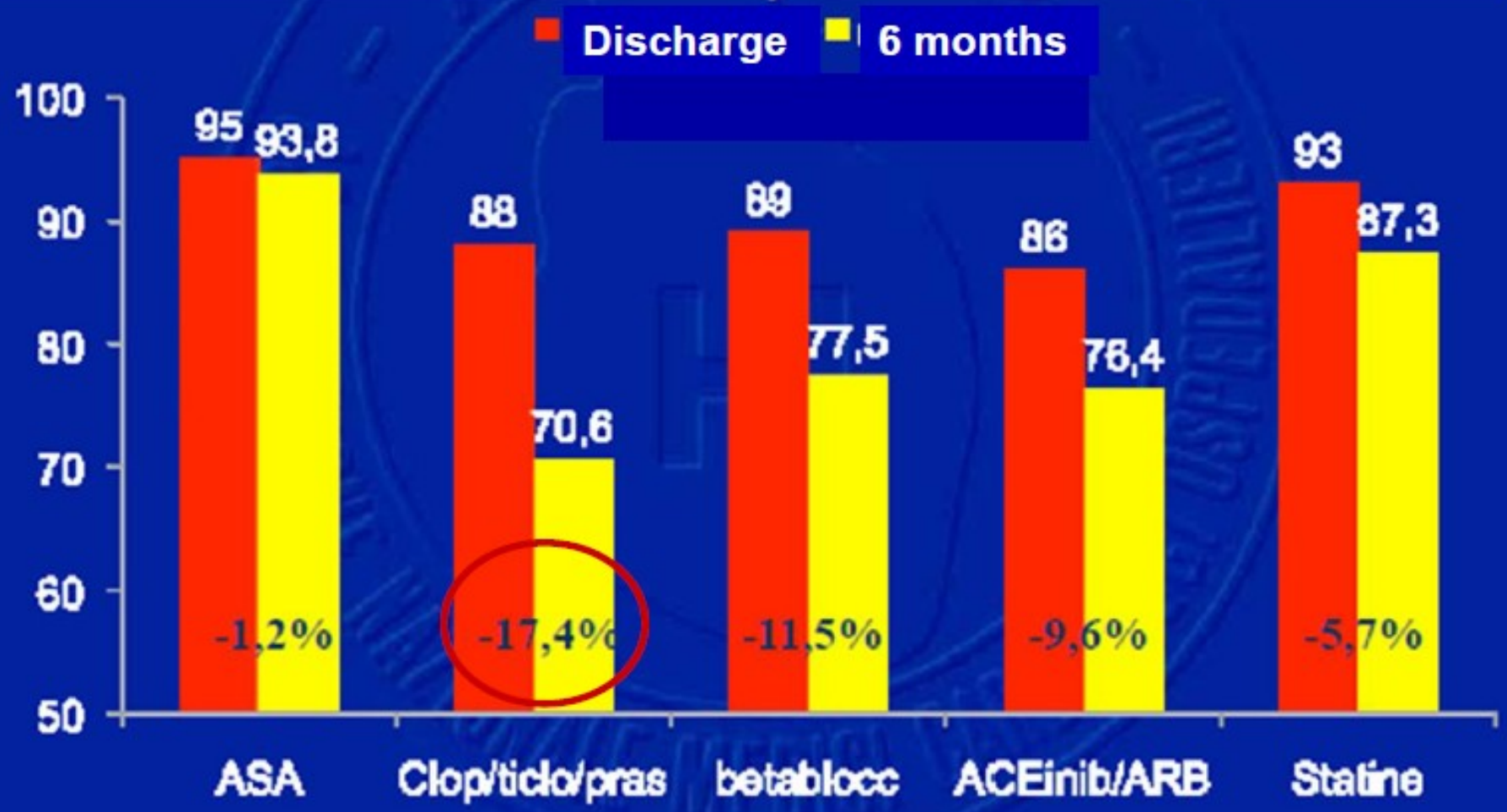
Blitz 4 Qualità

ADERENZA ALLE LINEE GUIDA NELLA GESTIONE DELLE SINDROMI CORONARICHE ACUTE

BLITZ4 Performance of CCU

Adherence to pharmacological therapy



11.706 AMI patients from 163 Coronary Units

Major gaps in evidence

- Defining the optimal combination and duration of antithrombotic therapies.
- Defining the optimal glucose-management goals and strategy in patients with known diabetes or acute hyperglycaemia.
- Developming percutaneous techniques for managing ventricular septal defects.
- Effective and safe of cell therapy to replace myocardium or minimize the consequences of myocardial injury.
- Strategy to minimize risk of sudden death in patients with ventricular tachycardia or ventricular fibrillation during or after STEMI.
- Effective strategies to achieve and maintain long-term effective risk factor control.

European Heart Journal (2012) 33, 2569–2619
doi:10.1093/eurheartj/ehs215

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The 'Five A's' for smoking cessation strategy for routine practice

A - ASK	Systematically inquire about smoking status at every opportunity.
A - ADVISE	Unequivocally urge all smokers to quit.
A - ASSESS	Determine the person's degree of addiction and readiness to quit.
A - ASSIST	Agree on a smoking-cessation strategy, including setting a quit date, behavioural counselling and pharmacological support.
A - ARRANGE	Arrange a schedule for follow-up.

www.escardio.org/guidelines

European Heart Journal 2012:33;1635–1701
European Journal of Preventive Cardiology 2012;19: 4:585-667

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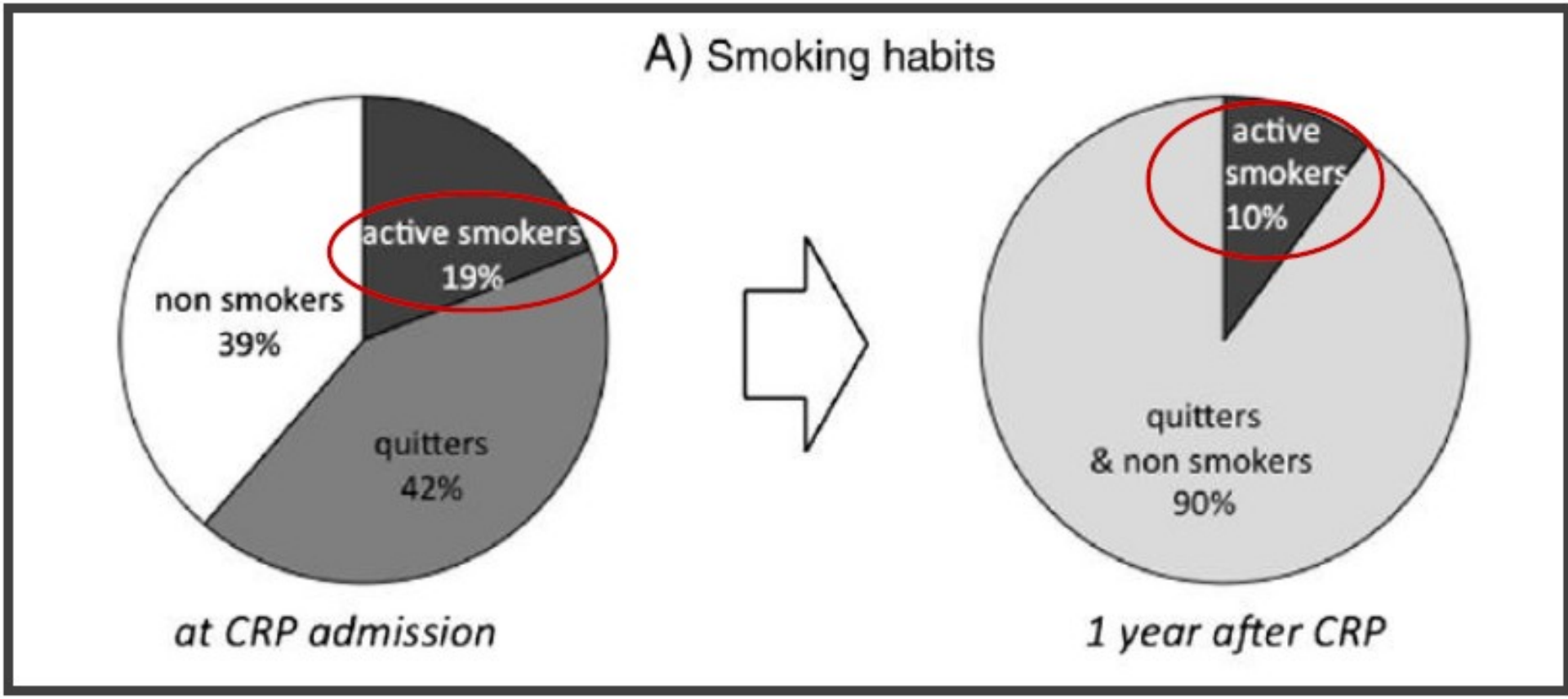
ffective secondary prevention through cardiac rehabilitation after coronary
evascularization and predictors of poor adherence to lifestyle modification and
nedication. Results of the ICAROS Survey☆



Griffo Int J Cardiol 201

Regarding nutrition

	Class	Level	GRADE
A healthy diet is recommended as being the cornerstone of CVD prevention.	I	B	Strong

- Saturated fatty acids to account for <10% of total energy intake, through replacement by polyunsaturated fatty acids.
- Trans unsaturated fatty acids: as little as possible, preferably no intake from processed food, and <1% of total energy intake from natural origin.
- <5 g of salt per day.
- 30–45 g of fibre per day, from wholegrain products, fruits and vegetables.
- 200 g of fruit per day (2-3 servings).
- 200 g of vegetables per day (2-3 servings).
- Fish at least twice a week, one of which to be oily fish.
- Consumption of alcoholic beverages should be limited to 2 glasses per day (20 g/d of alcohol) for men and 1 glass per day (10 g/d of alcohol) for women.

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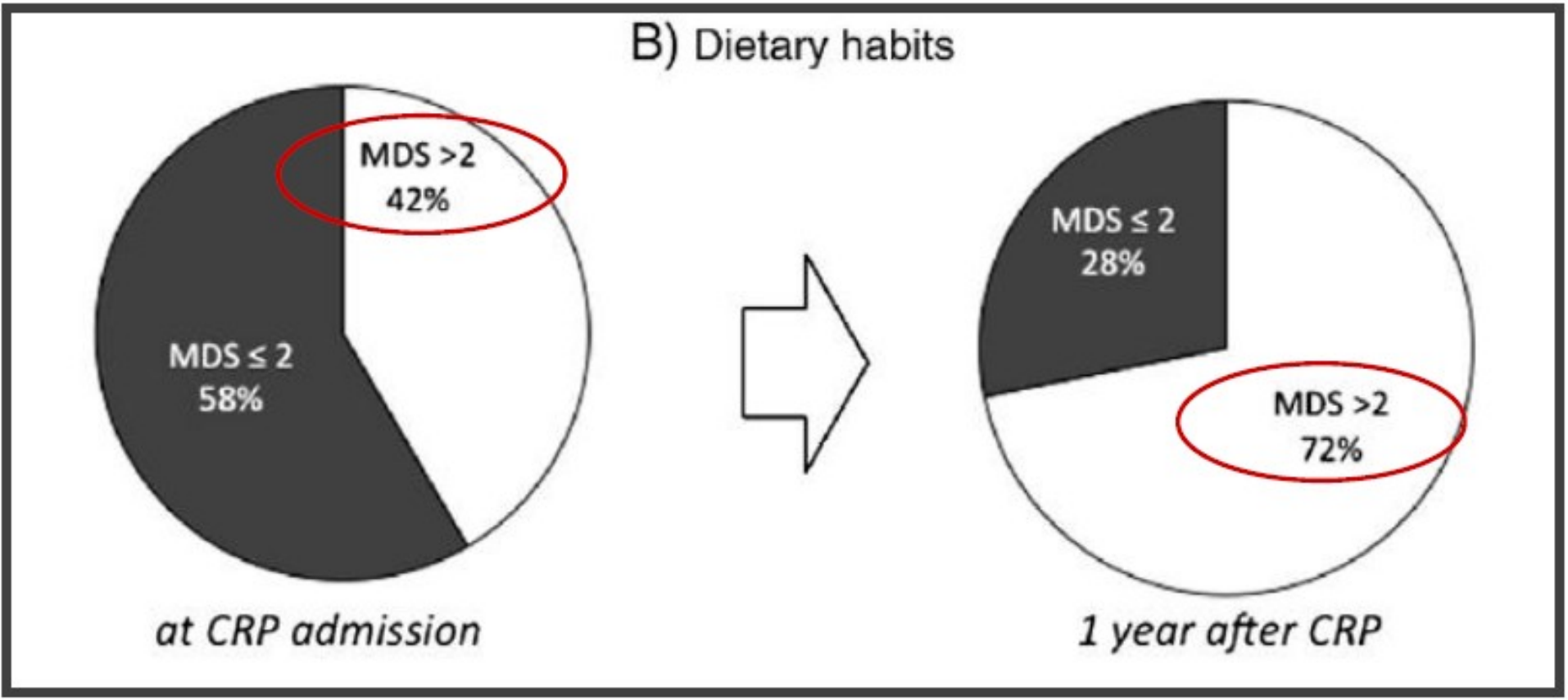

MDS Mediterranean Diet Score

Griffo, Int J Cardiol 2012

Regarding body weight

	Class	Level	GRADE
Weight reduction in overweight and obese people is recommended as this is associated with favourable effects on blood pressure and dyslipidaemia, which may lead to less CVD.	I	A	Strong

Key messages body weight

- Both overweight and obesity are associated with a risk of death in CVD.
- There is a positive linear association of BMI with all-cause mortality.
- All-cause mortality is lowest with a BMI of 20 to 25 kg/m^2.
- Further weight reduction cannot be considered protective against CVD.

European Heart Journal 2012:33;1635–1701
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Physical activity

	Class	Level	GRADE
Healthy adults should spend 2.5-5 hours a week on physical activity or aerobic exercise training of at least moderate intensity, or 1-2.5 hours a week on intense exercise. Sedentary subjects should be strongly encouraged to start light-intensity exercise programmes.	I	A	Strong
Physical activity/aerobic exercise training should be performed in multiple bouts lasting ≥10 minutes and spread throughout the week.	IIa	A	Strong
Patients with previous acute myocardial infarction, CABG, PCI, stable angina pectoris or stable chronic heart failure should undergo moderate-to-vigorous intensity aerobic exercise training ≥ 3 times a week and 30 min per session. Sedentary patients should be strongly encouraged to start light-intensity exercise programmes after adequate exercise-related risk stratification.	I	A	Strong

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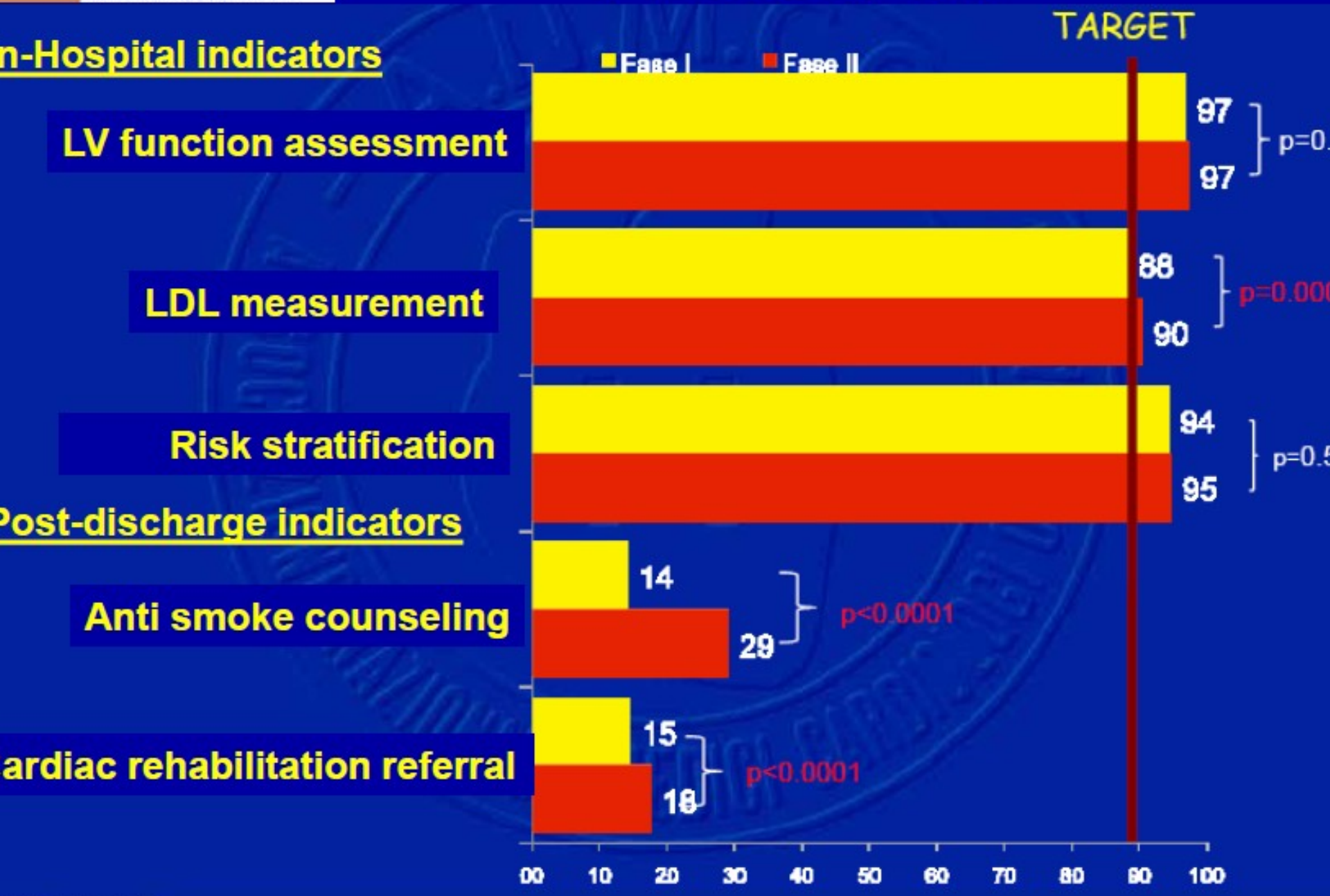
Blitz 4 Qualità

ADERENZA ALLE LINEE GUIDA NELLA GESTIONE DELLE SINDROMI CORONARICHE ACUTE

BLITZ4 - Performance of Centers
Process of care



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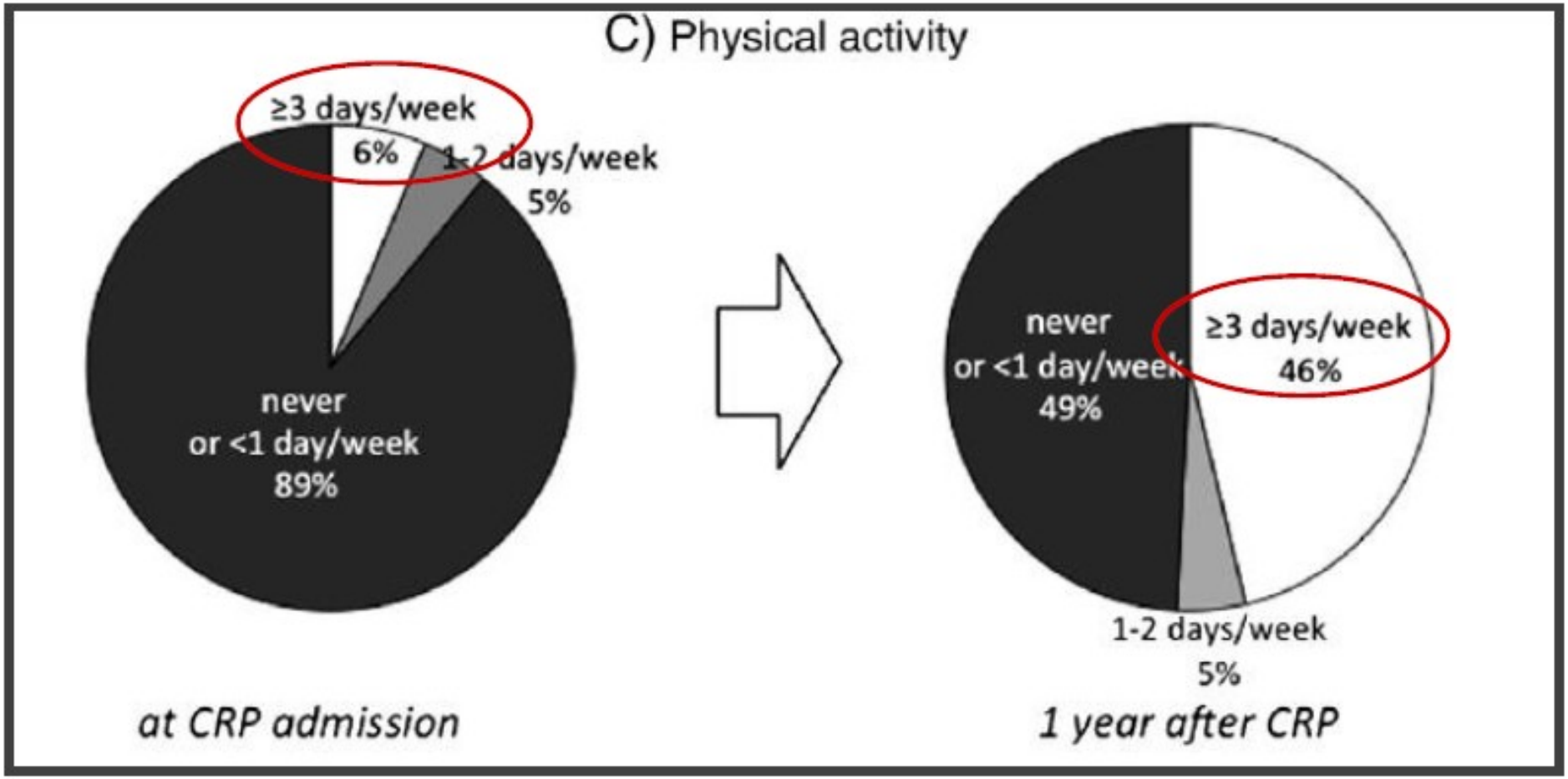
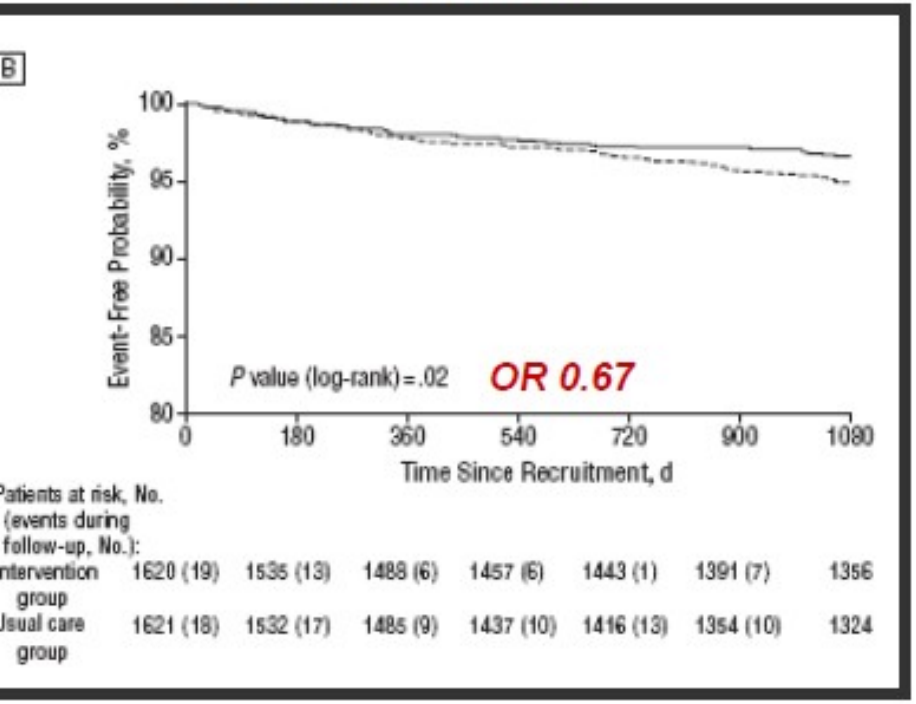


Global Secondary Prevention Strategies to Limit Event Recurrence After Myocardial Infarction

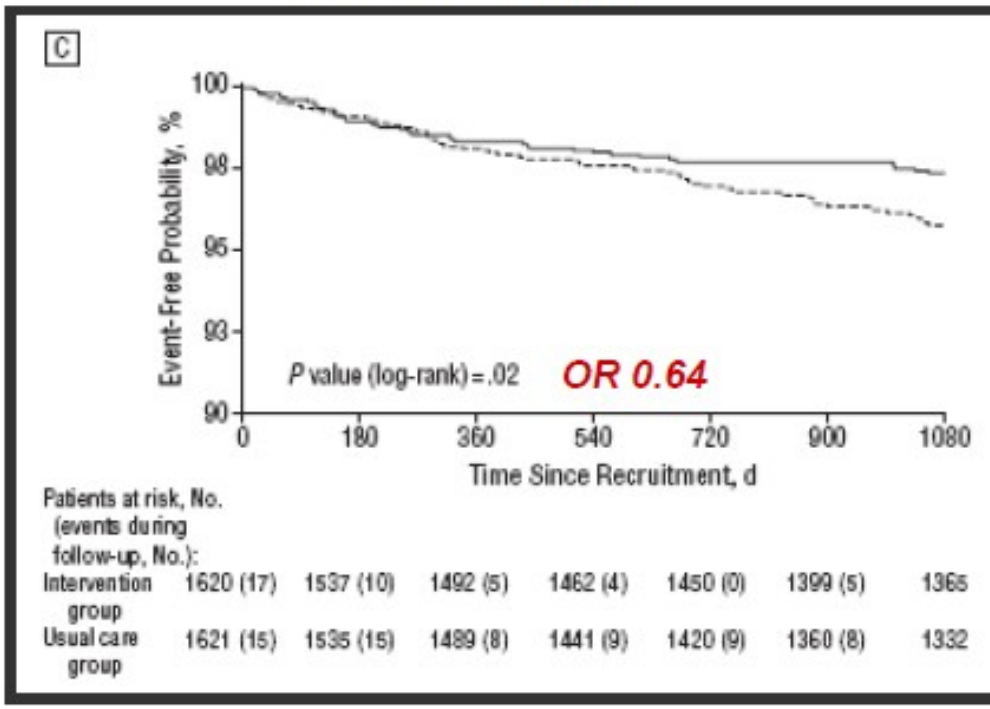
Results of the GOSPEL Study, a Multicenter, Randomized Controlled Trial From the Italian Cardiac Rehabilitation Network

Secondary end points

CV Death, MI, stroke



Cardiac Death, MI



48% MI risk reduction

Giannuzzi Arch Intern Med 200

Meta-Analysis: Secondary Prevention Programmes for Patients with CAD

Risk reductive with different program structures

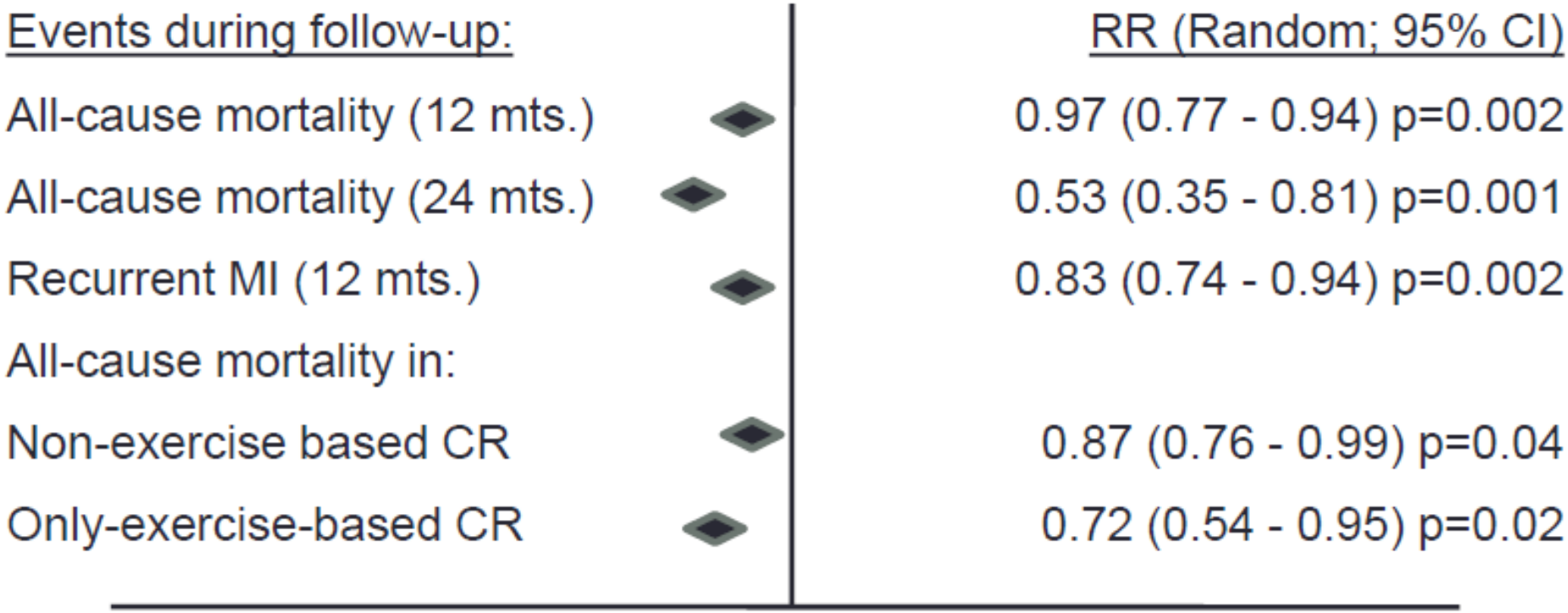
Type of program	effects at 12 month	
	mortality	recurrent MI
risk factor education counseling with exercise	12%	38% *
risk factor education counseling without exercise	13%	14%
solely exercise-based	28% **	24%

* risk ratio 0.62 (CI 0.44-0.87)
** risk ratio 0.72 (CI 0.54-0.95)

A.M. Clark et al. Ann Intern Med. 2005;143:659-672

Exercise-based Rehabilitation for Patients With Coronary Heart Disease

Systematic review and meta-analysis of RCT's



- AM Clark. Meta-analysis: secondary prevention programs for patients with coronary artery disease. Ann Intern Med 2005;143:659-672

Management of psychosocial factors

	Class	Level	GRADE
Multimodal behavioural interventions, integrating health education, physical exercise and psychological therapy for psychosocial risk factors and coping with illness, should be prescribed.	I	A	Strong
In case of clinically significant symptoms of depression, anxiety and hostility, psychotherapy, medication or collaborative care should be considered. This approach can reduce mood symptoms and enhance health related quality of life, although evidence for a definite beneficial effect on cardiac endpoints is inconclusive.	IIa	A	Strong

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Заключение

- Въпреки намалената болнична смъртност, пациентите преживели ОКС продължават да имат висок процент на смъртност и рехоспитализации.
- Аспиринът, статините АСЕ- инхибиторите(при нетолерантност АРБ) и бета- блокерите си остават основните компоненти на дългосрочната терапия на пациентите с ОКС.
- Двойната антитромбоцитна (ДАТ) терапия е задължителна за 1 година след ОКС.
- Тройната терапия , включваща ОАК и ДАТ трябва да се прилага при строги индикации, с повишено внимание и за възможно най-кратки срокове.
- При селектирани високорискови пациенти тройна терапия включваща ДАТ и ниски дози Ривароксабан беше одобрена за вторична профилактика на ОКС от ЕМА.
- Тройната антитромбоцитна терапия включваща ДАТ плюс вароксапар очаква одобрение.

Заключение

- Немедикаментозните мерки, включващи спиране на пушенето, промяна в диетата, физическа и психологическа рехабилитация крият огромни резерви за подобряване на вторичната профилактика след ОКС.
- Много важно е и стриктното проследяване на пациентите за спазване на предписания медикаментозен и немедикаментозен режим след дехоспитализацията.
- Необходим екипен и интердисциплинарен подход за създаване на индивидуална терапевтична и рехабилитационна програма още при изписването на пациента и за проследяването му след това , за да се редуцира броя на нежеланите сърдечно-съдови събития след преживян ОКС.

Благодаря за вниманието!

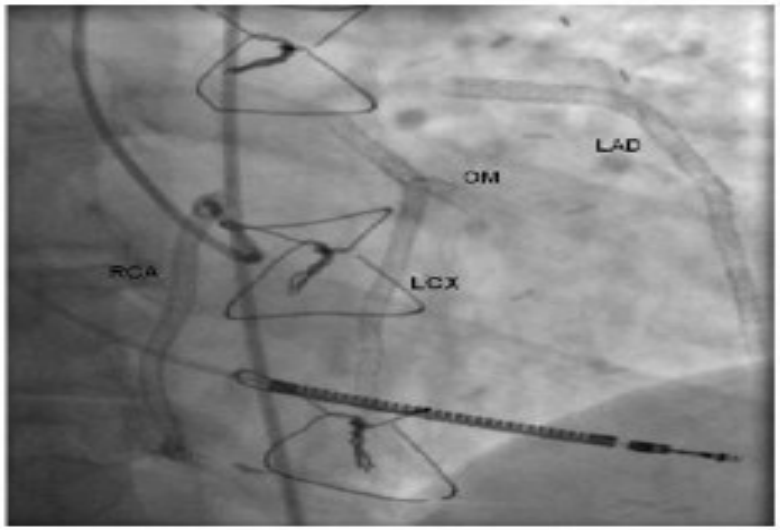
Journal of the American College of Cardiology
© 2010 by the American College of Cardiology Foundation
Published by Elsevier Inc.

Vol. 56, No. 19, 2010
ISSN 0735-1097/$36.00
doi:10.1016/j.jacc.2010.02.077

IMAGES IN CARDIOLOGY

A Heart With 67 Stents

Rami N. Khouzam, MD, Rajvir Dahiya, MD, Richard Schwartz, MD
Mineola, New York



From Winthrop University Hospital, Mineola, New York.
Manuscript received January 29, 2010; accepted February 16, 2010.

A 56-year-old male with coronary artery disease presented with angina, nonspecific electrocardiographic changes, and elevated troponins. Coronary angiography revealed total occlusion of a stent in the circumflex artery, where another was deployed—his 67th stent. The patient had 28 catheterizations over 10 years, with stents placed in his native coronary arteries as well as in 3 bypass grafts. All stents were placed to relieve his angina, refractory