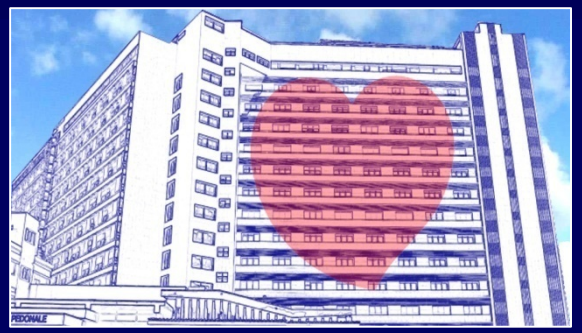
PREVENZIONE SECONDARIA DOPO IMA / SCA: LINEE GUIDA E MONDO REALE

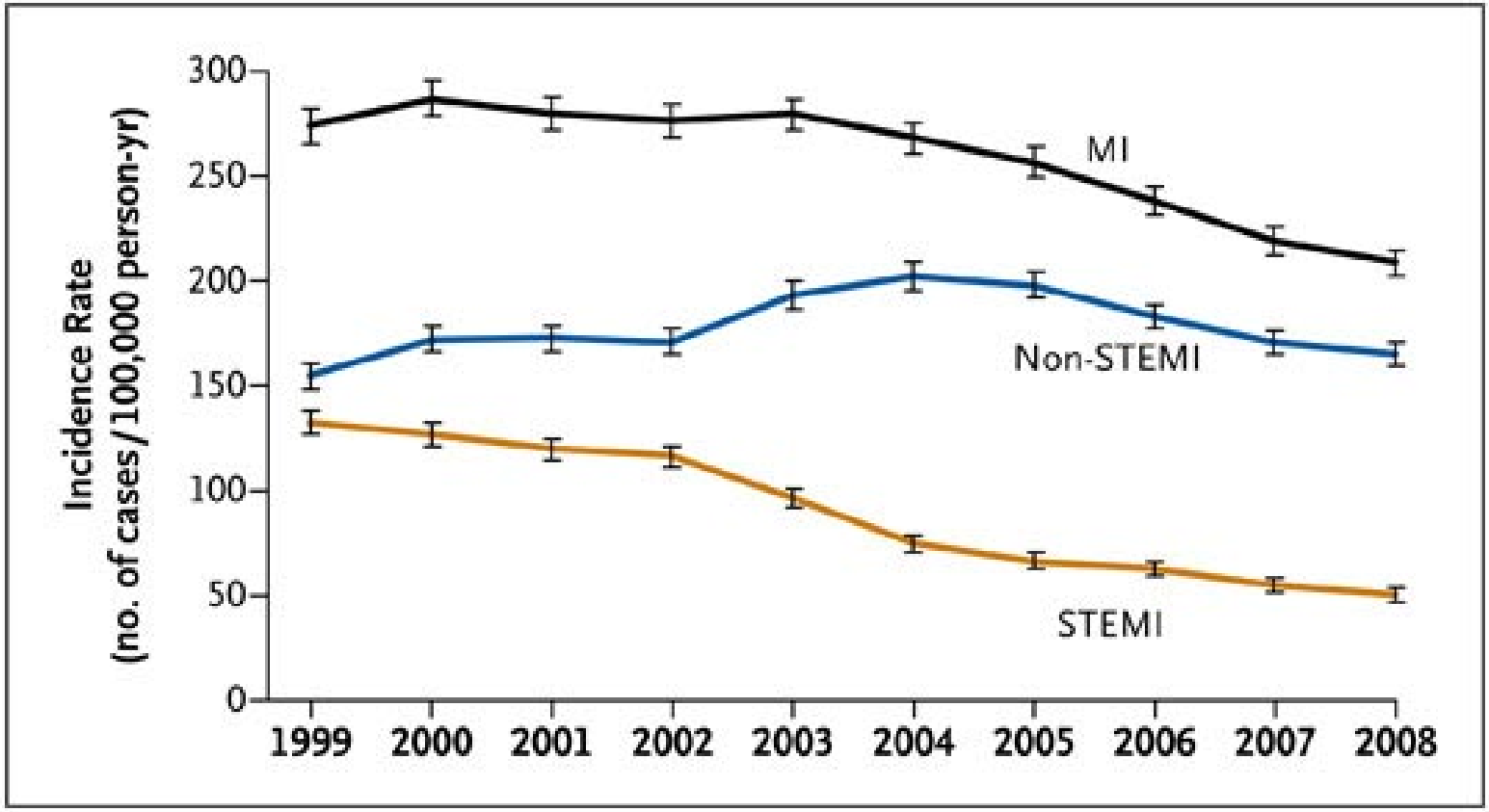
Seminario Regionale
“Prevenire le recidive cardiovascolari nelle persone che hanno avuto un infarto miocardico”

Bologna, 31 Gennaio 2014

Giuseppe Di Pasquale
Direttore Dipartimento Medico ASL Bologna
Direttore Unità Operativa Cardiologia
Ospedale Maggiore, Bologna



Age- and Sex-Adjusted Incidence Rates of Acute Myocardial Infarction, 1999 to 2008



Yeh RW et al. N Engl J Med 2010;362:2155-2165

European Heart Journal
Acute Cardiovascular Care
EUROPEAN SOCIETY OF CARDIOLOGY®

Original scientific paper

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DOI: 10.1177/2048872612471213
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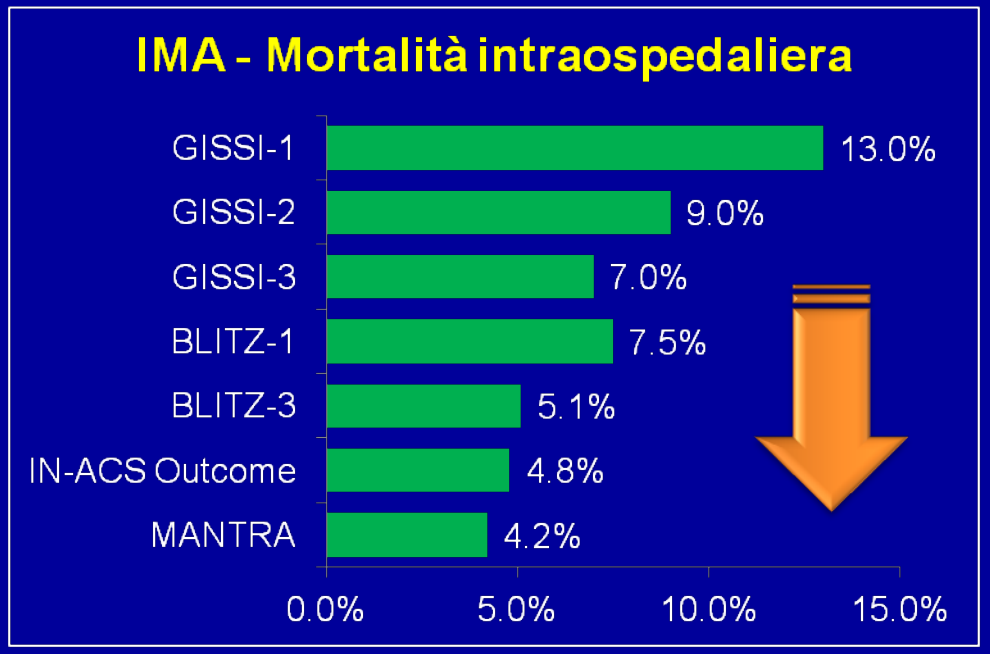
SAGE

Management of patients with acute coronary syndromes in real-world practice in Italy: an outcome research study focused on the use of ANTithRombotic Agents: the MANTRA registry

Gianni Casella[1], Giuseppe Di Pasquale[1], Luigi Oltrona Visconti[2], Maria Giovanna Pallotti[1], Donata Lucci[3], Pasquale Caldarola[4], Marino Scherillo[5] and Aldo P Maggioni[3]

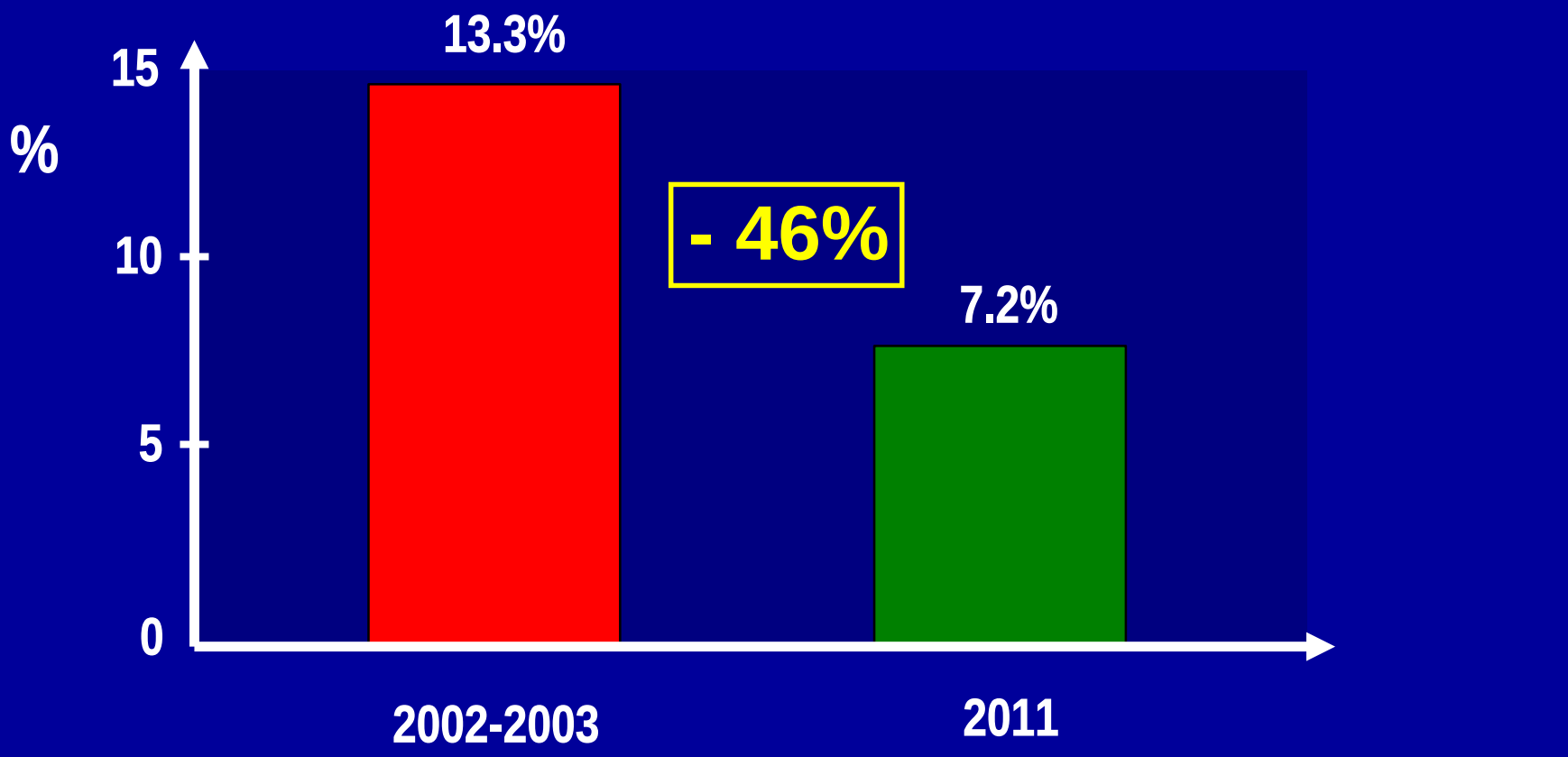
Acute Cardiovasc Care 2013;2(1):27-34

Mortalità dell'IMA



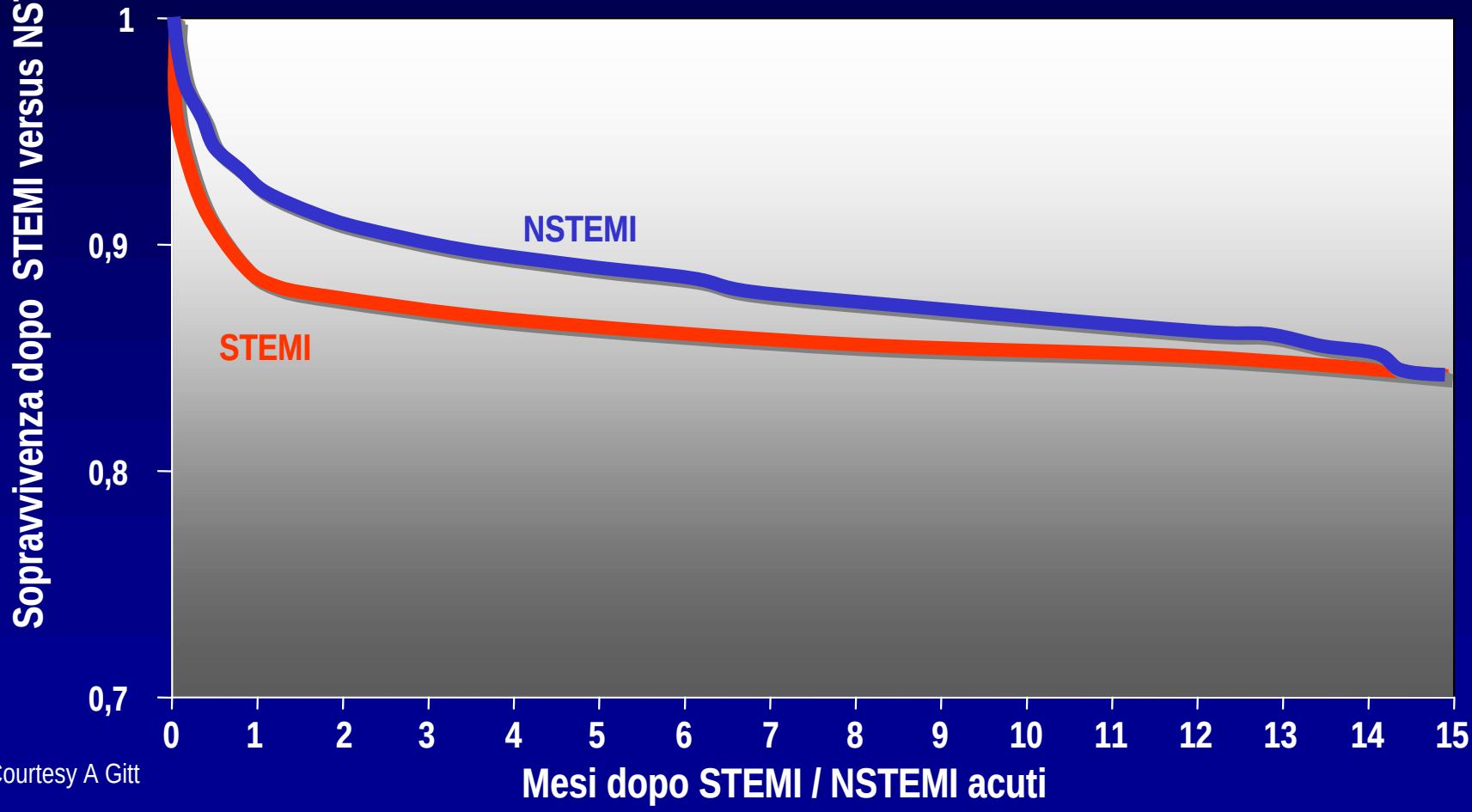
UTIC - Cardiologia Ospedale Maggiore Bologna
Azienda Unità Sanitaria Locale di Bologna

Infarto Miocardico Acuto STE
Mortalità intra-ospedaliera



Trends e Prognosi nell'Infarto

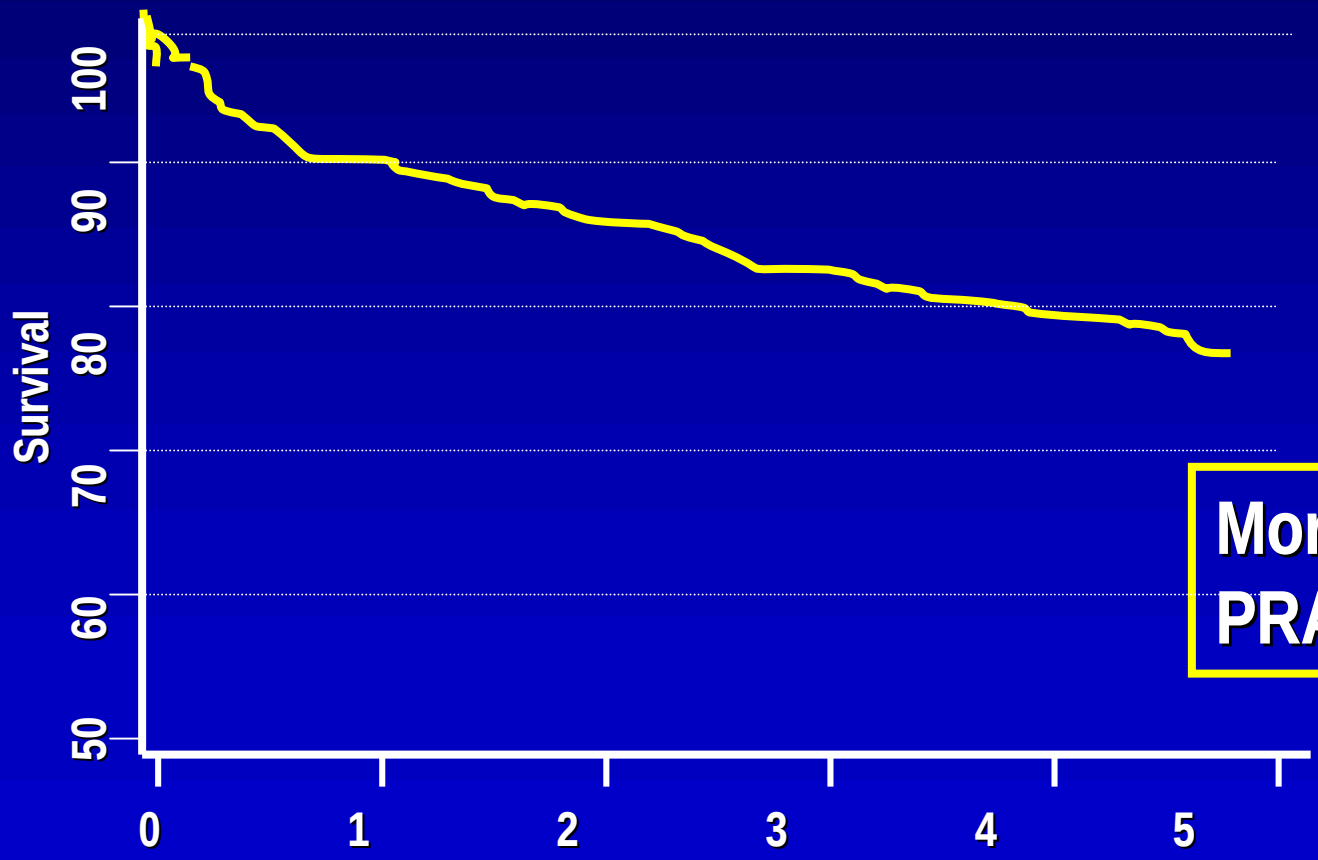
STEMI versus NSTEMI - Mortalità cumulativa a 1 anno



Courtesy A Gitt

La mortalità tardiva dopo SCA
Necessità di un follow-up adeguato

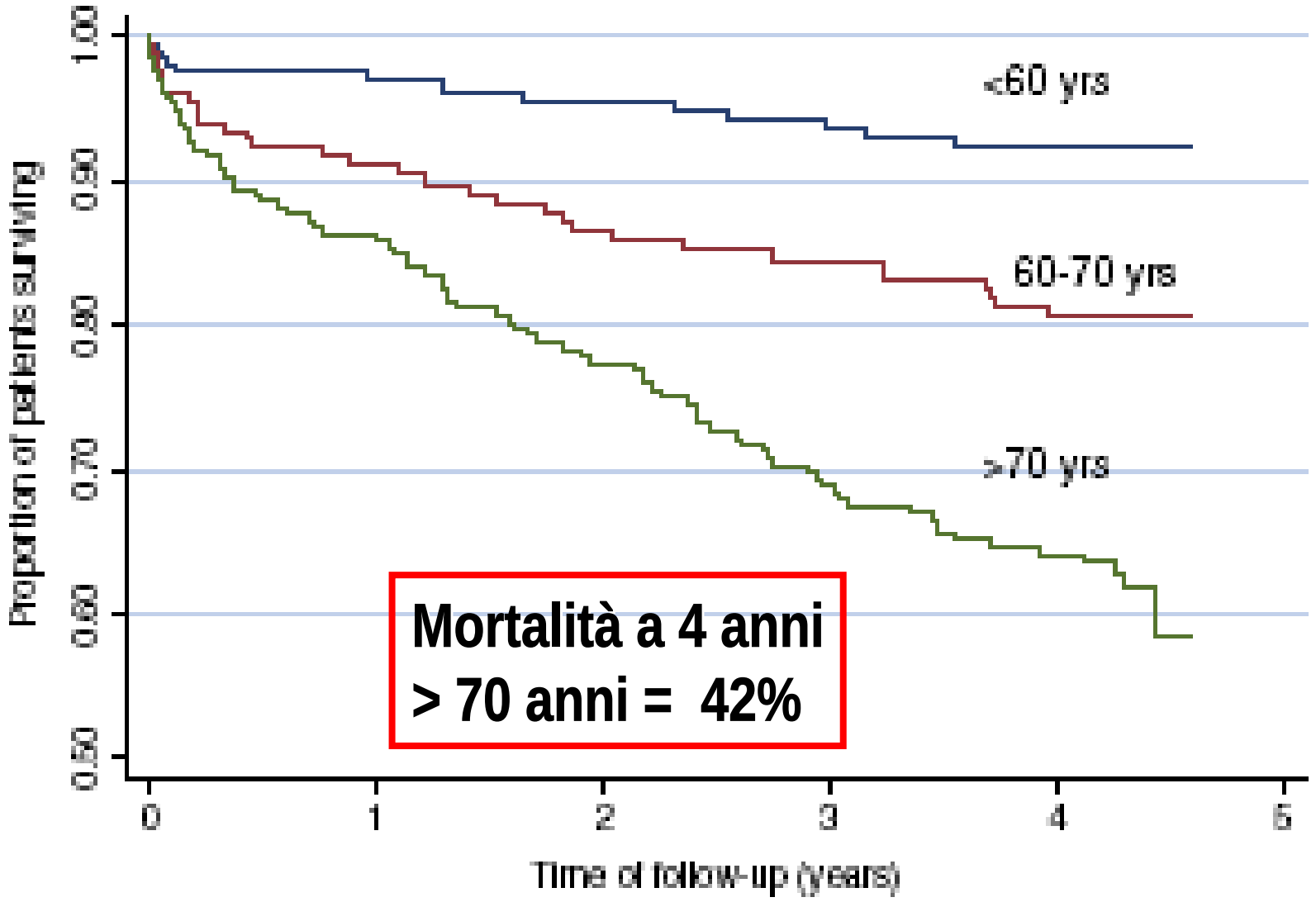
Mortalità Ospedaliera
PRAIS-UK 1.5% vs. BLITZ-2 1.3%



Mortalità a 4 anni
PRAIS-UK 23%

Taneja S, et al. PRAIS-UK Registry Eur Heart J 2004; 25: 2013-2018

Forte effetto dell'età sull'incidenza di eventi!



Taneja S, et al. PRAIS-UK Registry Eur Heart J 2004; 25: 2013-2018

Prevenzione Cardiovascolare

- Cosa dicono le linee guida
- Cosa avviene nel mondo reale

Prevenzione Secondaria dopo IMA / SCA

Obiettivi

1. Terapia ottimizzata
2. Stratificazione del rischio
3. Modifica dei fattori di rischio
4. Counseling e modifiche comportamentali
5. Follow-up

Prevenzione Secondaria: Linea Guida Alfabetica

A. Aspirina, ACE-inibitori

B. Beta-bloccanti

C. Colesterolo e Cigarettes

D. Dieta e Diabete

E. Educazione ed Esercizio

ACP Clinical Guidelines, Ann Intern Med 2004; 141: 562
ACC/AHA Guidelines, J Am Coll Cardiol, 2003; 41: 159

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

ESC GUIDELINES

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)

Recommended Drugs in Secondary Prevention for NSTEMI

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

Recommendations	Class [a]	Level [b]
β-Blockers are recommended in all patients with reduced LV systolic function (LVEF ≤40%).	I	A
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
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
ARBs are recommended for patients who are intolerant to ACE inhibitors, with preference given to agents and doses of proven efficacy.	I	B
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
Statin therapy with target LDL-C levels <1.8 mmol/L (<70 mg/dL) initiated early after admission is recommended.	I	B

Eur Heart J 2011;32:2999-3054

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 (ESC)

Recommended Therapies in the Long Term Phase of STEMI

Recommendations	Class [a]	Level [b]
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
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
If 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

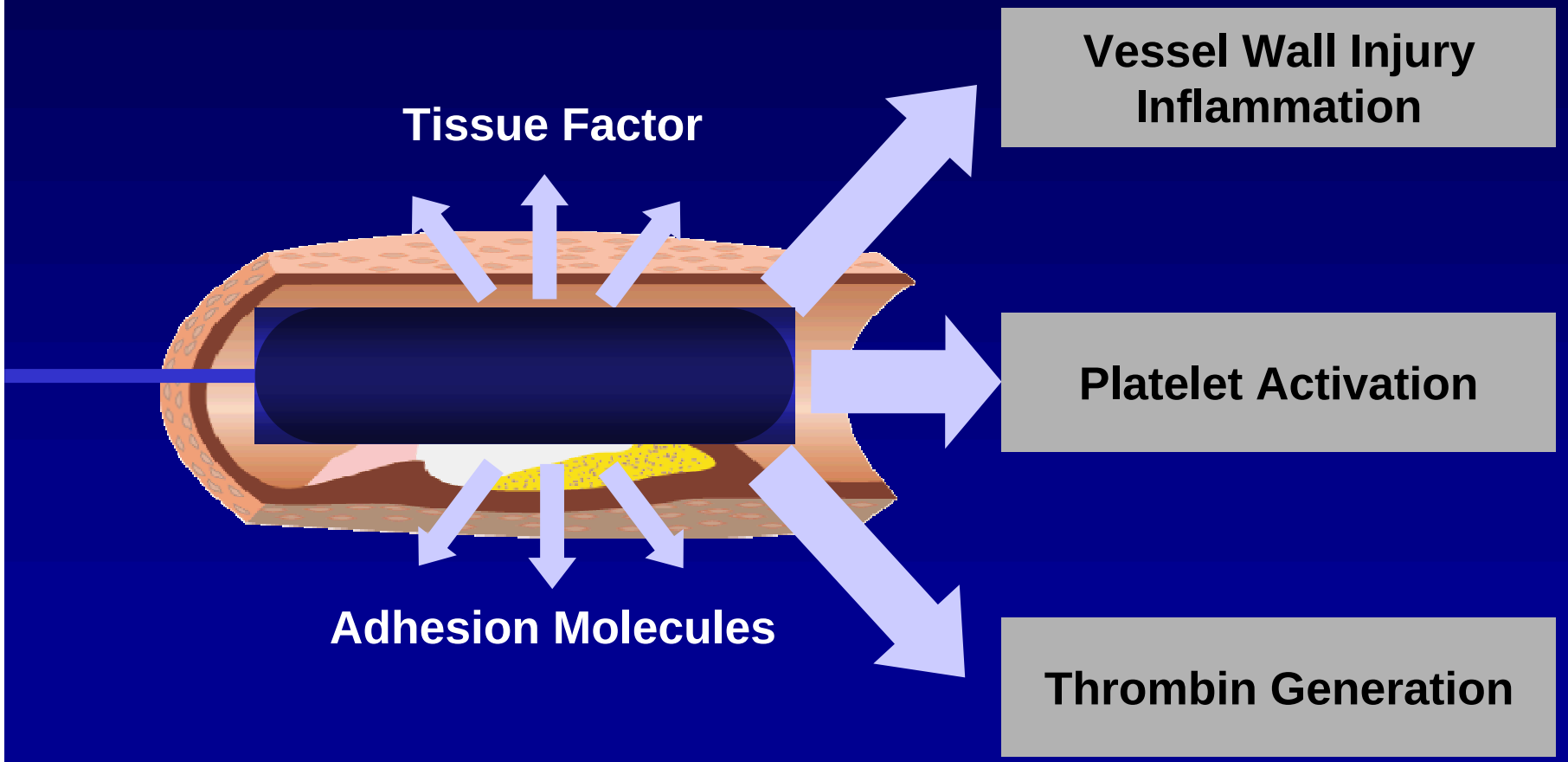
Eur Heart J 2012;33:2569-2619

Recommended Therapies in the Long Term Phase of STEMI

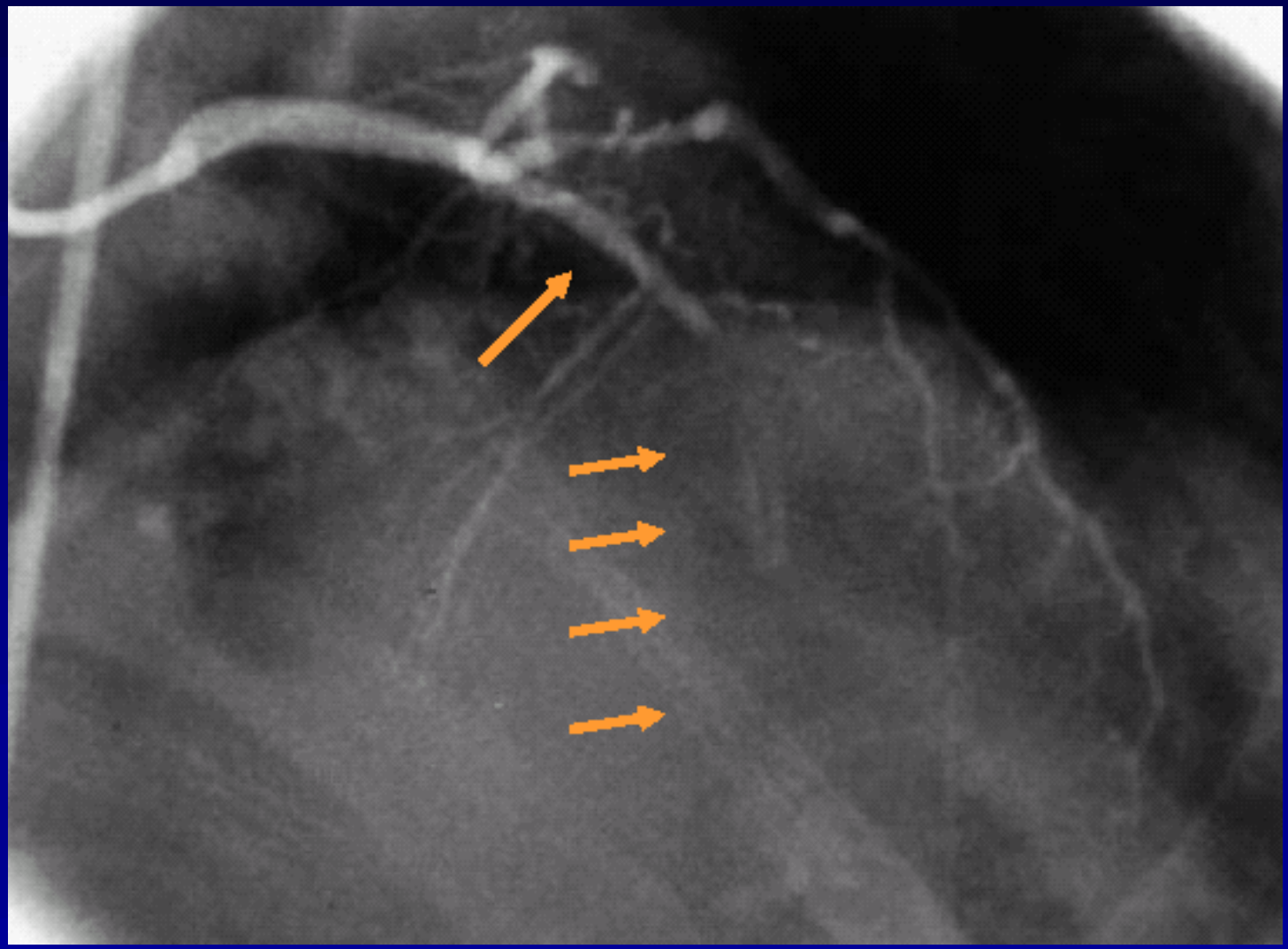
Oral treatment with beta-blockers should be considered during hospital stay and continued thereafter in all STEMI patients without contraindications.	IIa	B
Oral treatment with beta-blockers is indicated in patients with heart failure or LV dysfunction.	I	A
Intravenous beta-blockers must be avoided in patients with hypotension or heart failure.	III	B
Intravenous beta-blockers should be considered at 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 soon 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
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

Eur Heart J 2012;33:2569-2619

PCI is inherently thrombogenic

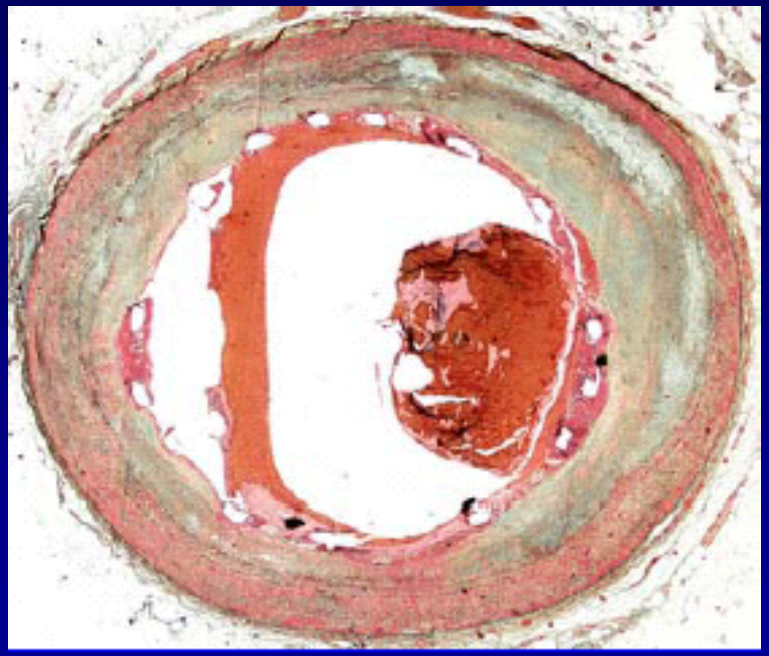


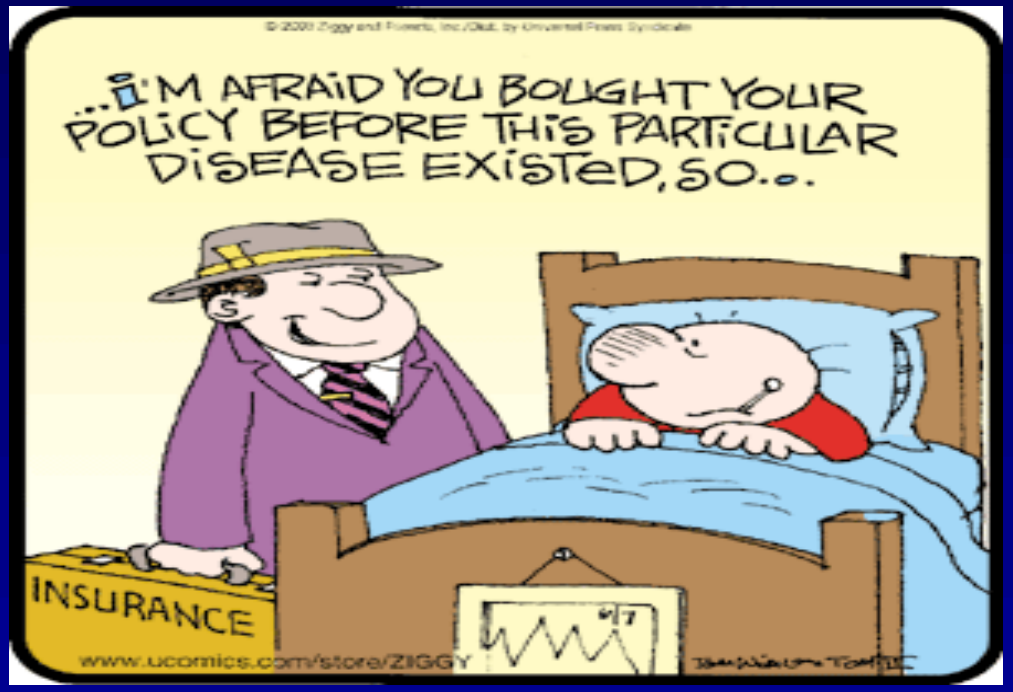
Sub-acute or Late Stent Thrombosis



La recidiva ischemica dopo SCA

Una nuova forma "iatrogena"





…la trombosi sub-acuta o tardiva di stent!

Prevenzione Secondaria dopo IMA / SCA

Obiettivi

1. Terapia ottimizzata
2. Stratificazione del rischio
3. Modifica dei fattori di rischio
4. Counseling e modifiche comportamentali
5. Follow-up

Il rischio (morte, scompenso, recidive ischemiche) dopo IMA è molto diverso da un paziente all'altro

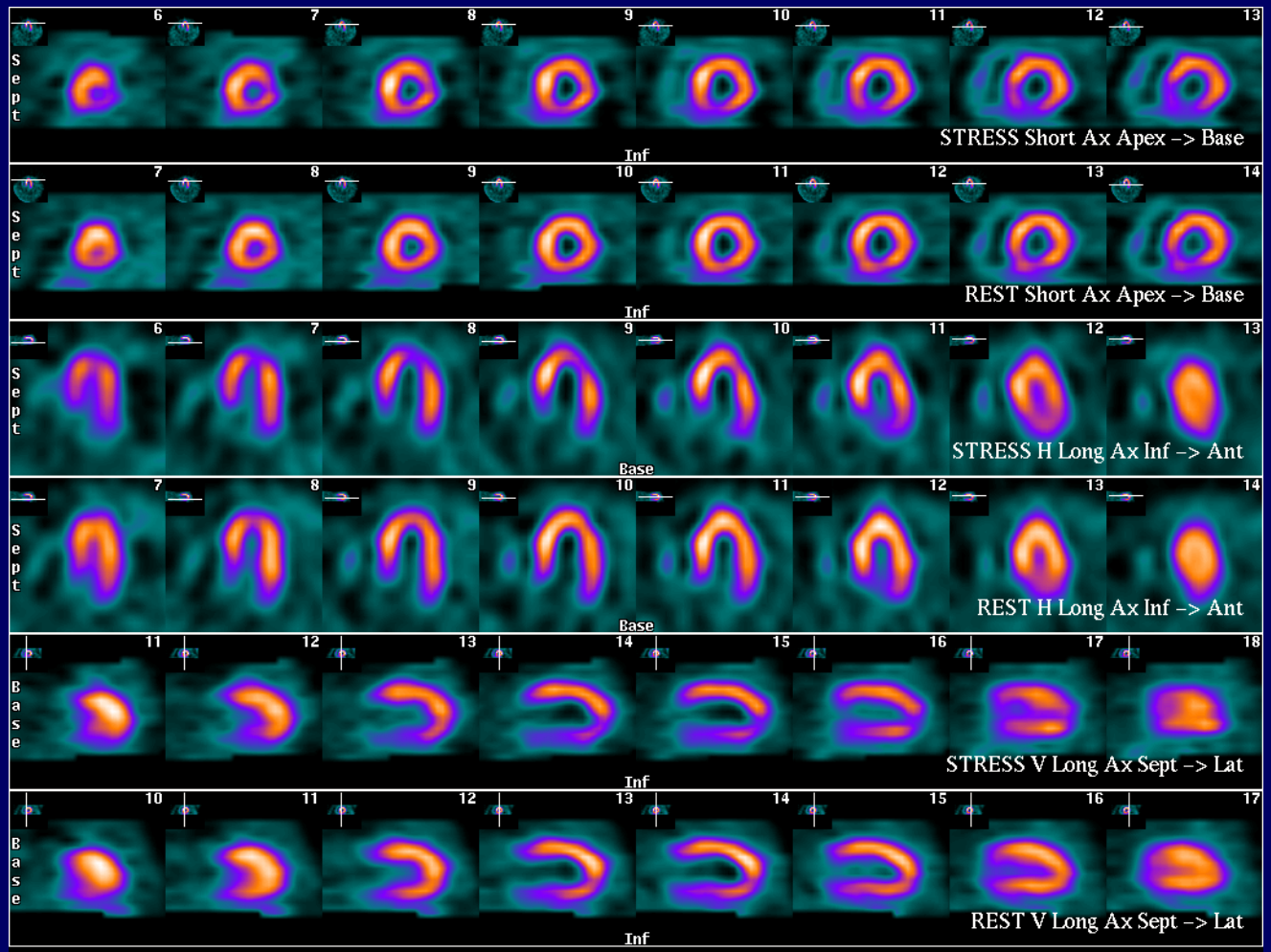
Stratificazione del rischio alla dimissione dopo SCA

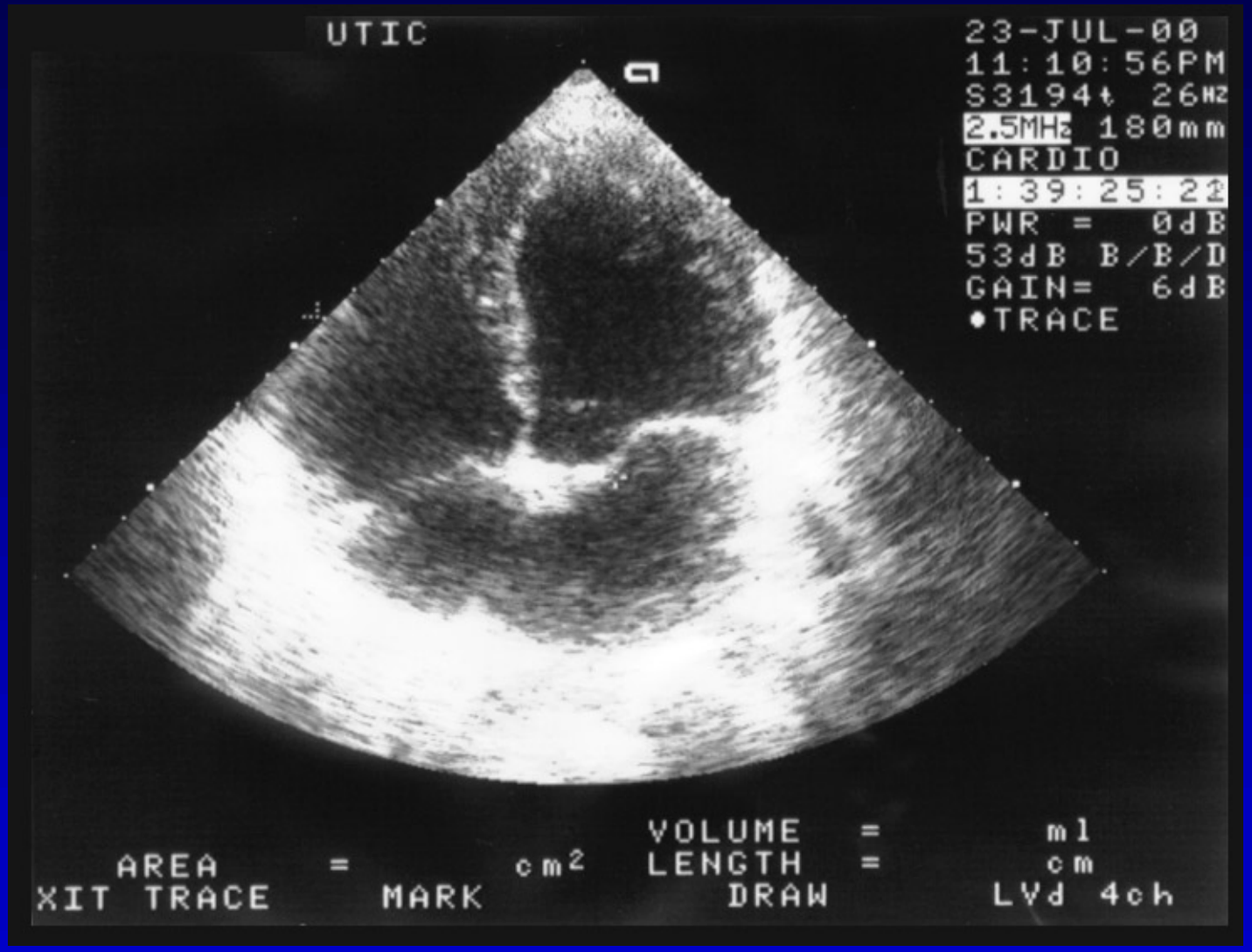
Fattori di rischio "convenzionali"

- Clinici
- Bioumorali
- Comportamentali

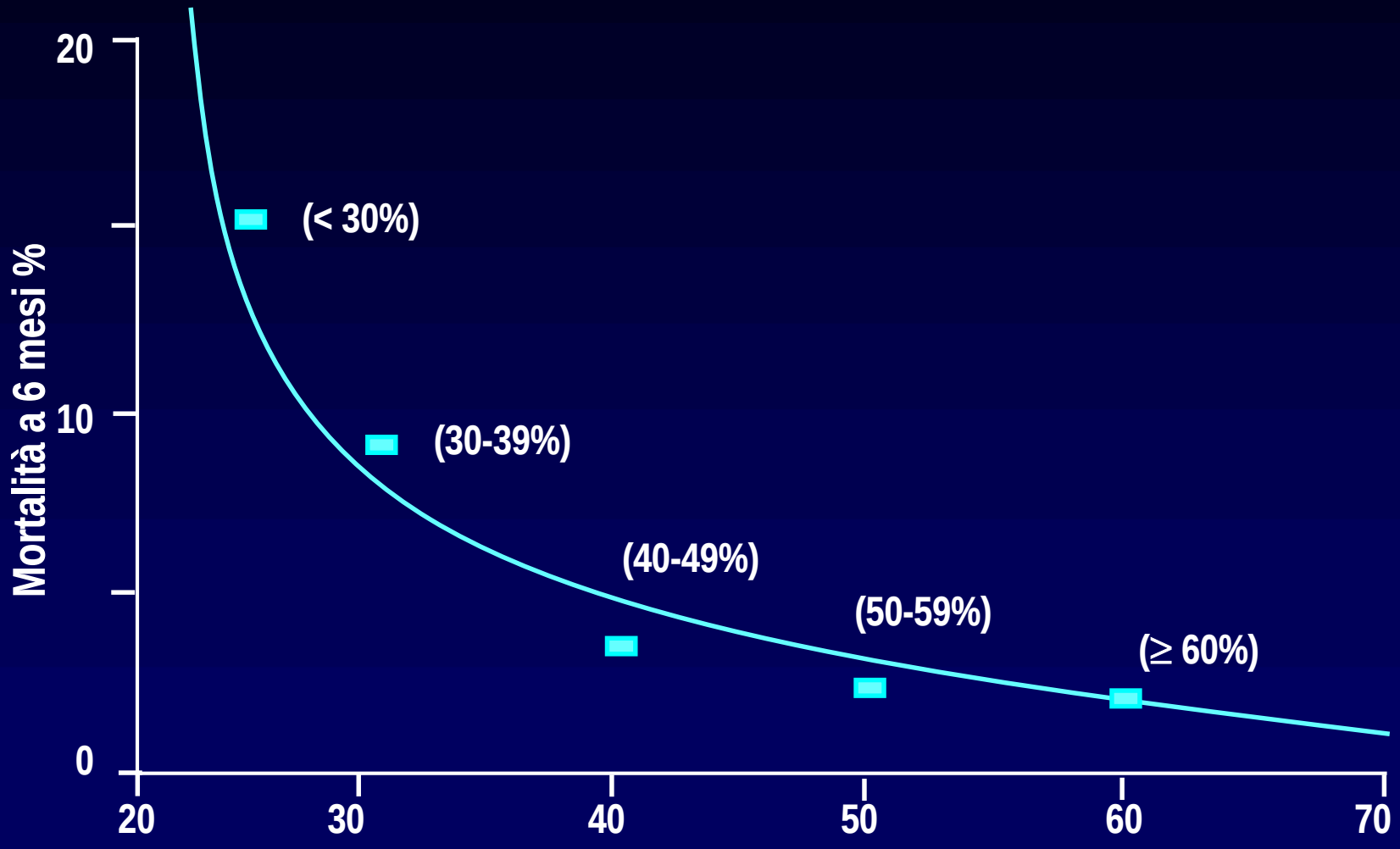
Fattori di rischio "SCA correlati"

- Ischemia miocardica
- Disfunzione VS
- Instabilità elettrica

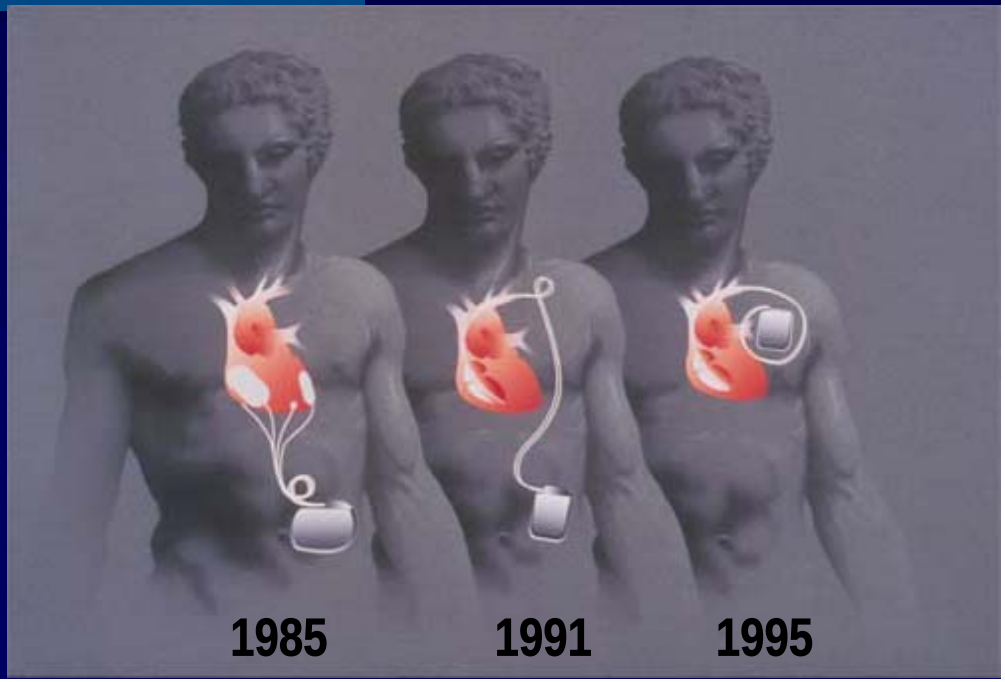

6 7 8 9 10 11 12 13
Sept
Inf
STRESS Short Ax Apex -> Base
7 8 9 10 11 12 13 14
Sept
Inf
REST Short Ax Apex -> Base
6 7 8 9 10 11 12 13
Sept
Base
STRESS H Long Ax Inf -> Ant
7 8 9 10 11 12 13 14
Sept
Base
REST H Long Ax Inf -> Ant
11 12 13 14 15 16 17 18
Base
Inf
STRESS V Long Ax Sept -> Lat
10 11 12 13 14 15 16 17
Base
Inf
REST V Long Ax Sept -> Lat
USAN ALDO, 406321, 8/6/2004, HEART TOMO

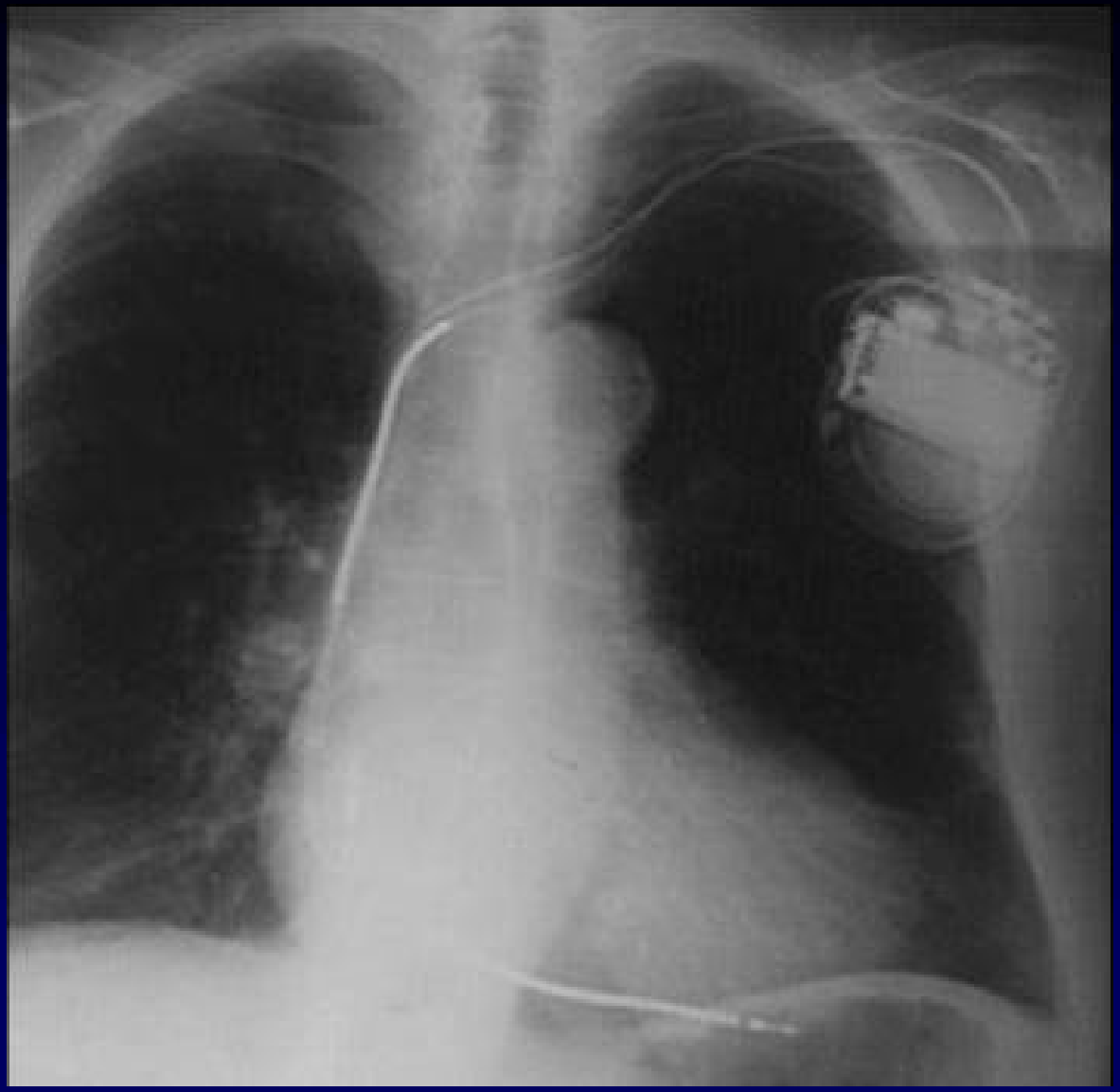

UTIC
23-JUL-00
11:10:56PM
S3194t 26Hz
2.5MHz 180mm
CARDIO
1:39:25:21
PWR = 0dB
53dB B/B/D
GAIN= 6dB
•TRACE
VOLUME = ml
AREA = cm²
LENGTH = cm
XIT TRACE MARK DRAW LVd 4ch

Correlazione tra Funzione VS e Mortalità dopo IMA



Implantable Defibrillatators (1985-2000)





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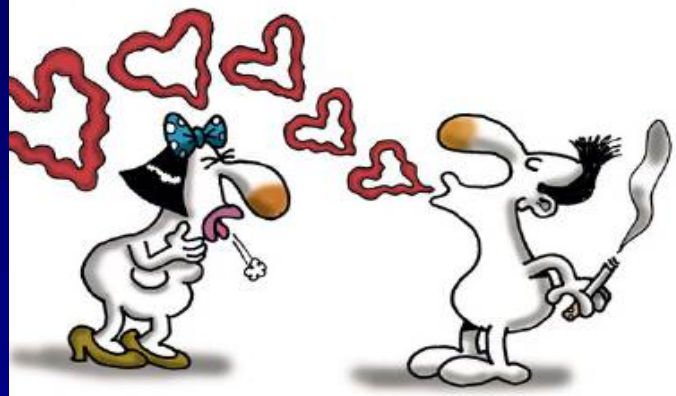
D. Dieta e Diabete

E. Educazione ed Esercizio

ACP Clinical Guidelines, Ann Intern Med 2004; 141: 562
ACC/AHA Guidelines, J Am Coll Cardiol, 2003; 41: 159

“Parliamo di fumo”

Non è mai troppo tardi per smettere!



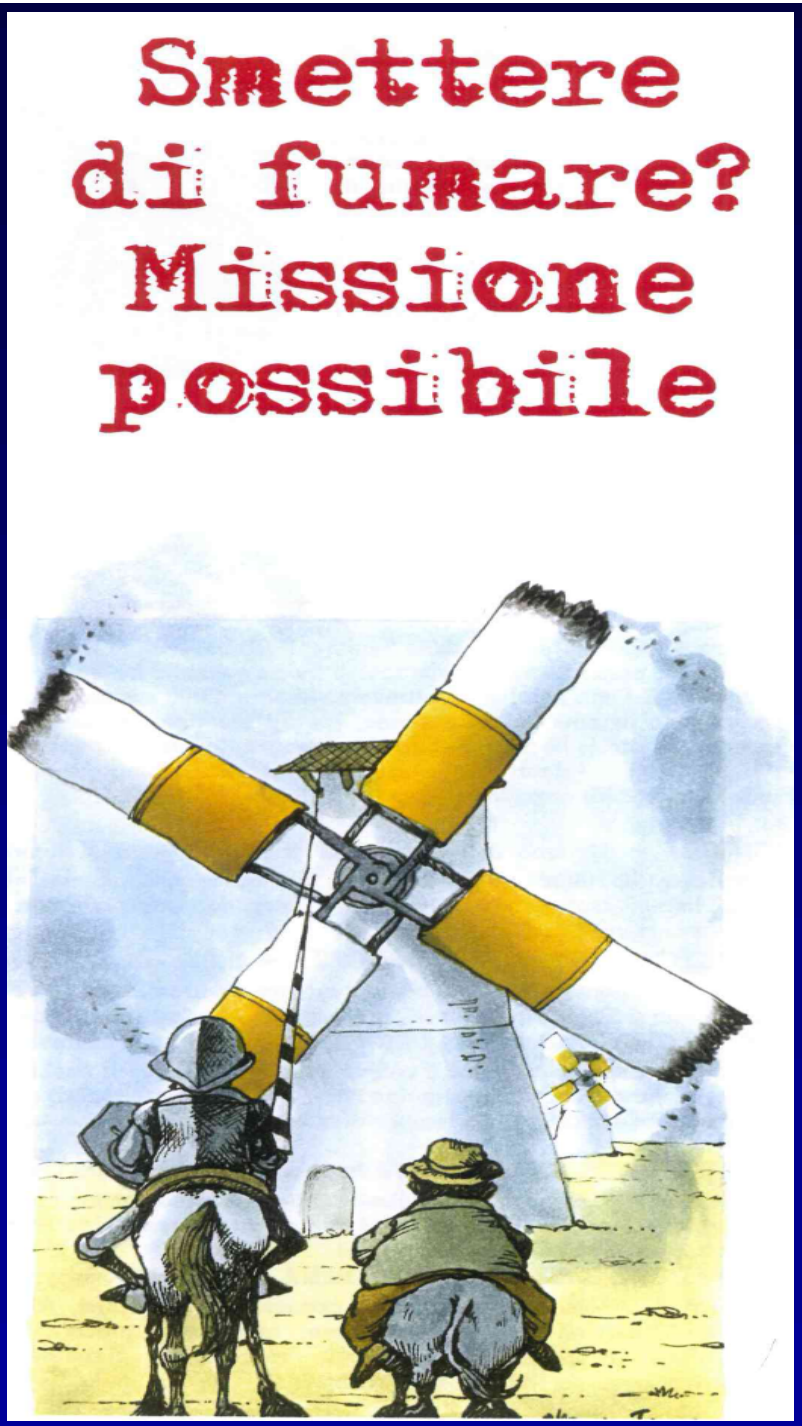
Molti vantaggi si ottengono già dopo pochi giorni-settimane dalla sospensione del fumo!

progetto Tuttocuore.

Heart Care Foundation

O.N.L.U.S.

Campagna Antifumo



SITAB Italy

SERVIZIO SANITARIO REGIONALE
EMILIA - ROMAGNA
Azienda Unità Sanitaria Locale di Bologna

Istituto delle Scienze Neurologiche
Istituto di Ricovero e Cura a Carattere Scientifico

CENTRI ANTIFUMO
CORSI PER SMETTERE DI FUMARE

FUNGO VELENOSO

BOLOGNA

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e Terapia Intensiva Respiratoria
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Centro Antifumo
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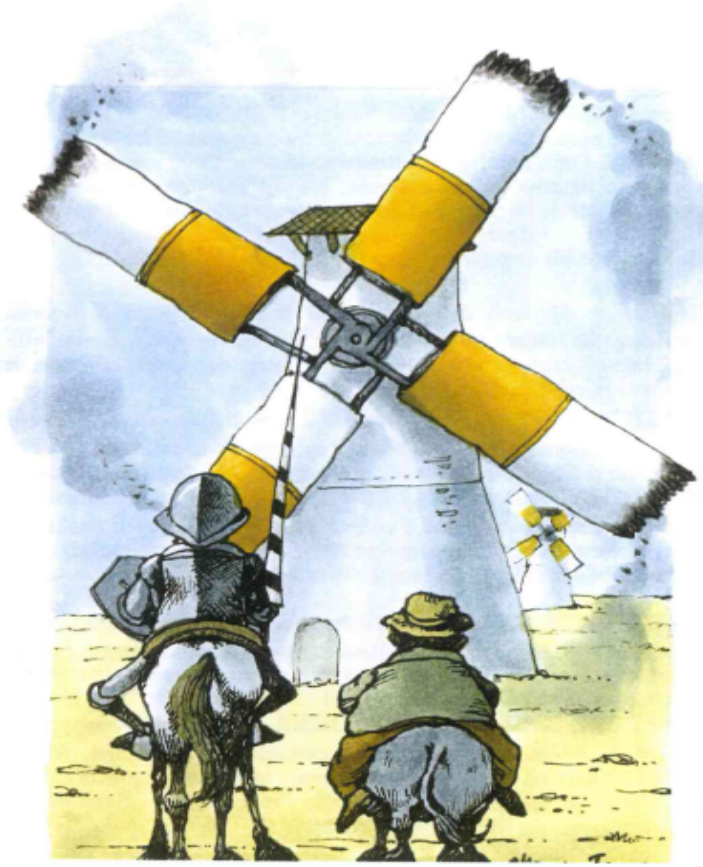
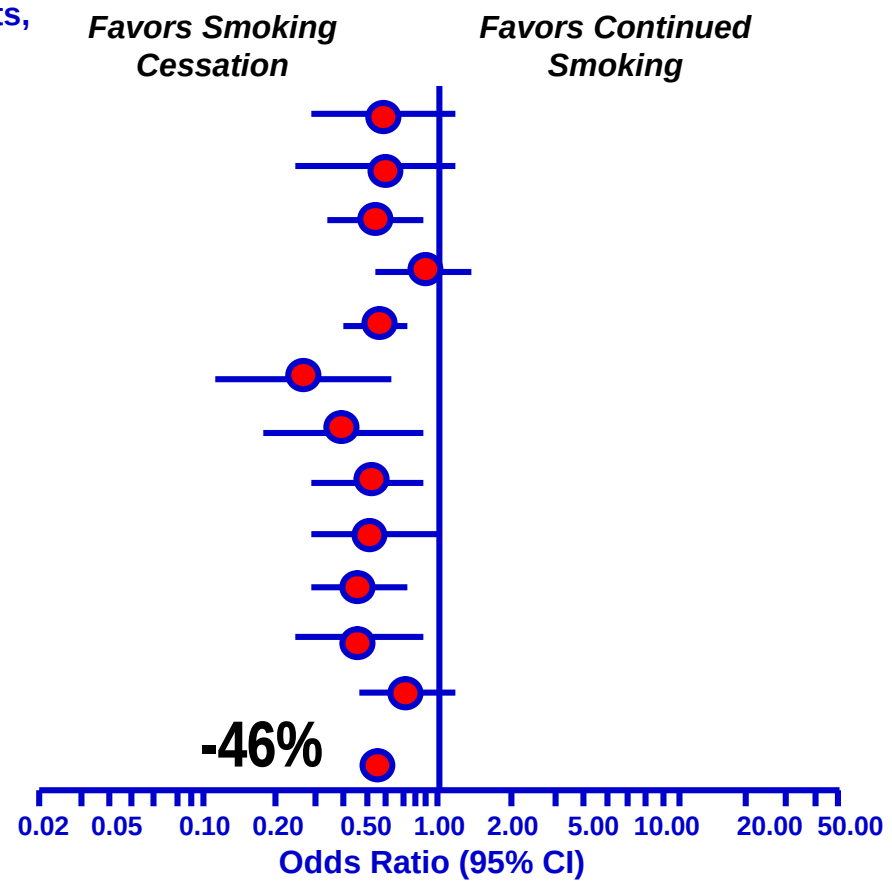
LISITAB Italy

Smettere di fumare? Missione possibile



Sospensione del fumo e mortalità nel postinfarto

Study	Year	Patients, No.
Mulcahy et al.	1977	190
Sparrow et al.	1978	195
Salonen	1980	523
Rodda	1983	918
Aberg et al.	1983	983
Perkins and Dick	1985	119
Johannson et al.	1985	156
Burr et al.	1992	1186
Hedback et al.	1993	157
Tofler et al.	1993	702
Herlitz et al.	1995	217
Greenwood et al.	1995	532
Overall		5878



Wilson K- Arch Intern Med 2000;160:939-944

Legge Sirchia, 10 Gennaio 2005

Divieto di fumo in tutti i luoghi chiusi (locali pubblici e posti di lavoro)

Impatto delle Leggi antifumo Nazionali sull'incidenza dei ricoveri ospedalieri per attacco cardiaco

Alcune evidenze

- **Impact of the Irish smoking ban on the rate of admission to hospital with ACS**

  Cronin E, ESC 2007 Congress

  - 11% reduction

- **Effect of the Italian smoking ban on population rates of acute coronary events**

  Cesaroni G et al, Circulation 2008

  - 11.2% reduction

“Mangiare sano”

per ridurre il rischio di malattie cardiovascolari

Una giusta alimentazione aiuta a migliorare lo stato di salute generale e a prevenire il rischio di malattie cronico-degenerative.

progetto Tuttocuore.

Heart Care Foundation
O.N.L.U.S.

GISSI-Prevenzione - Intervento dietetico

European Journal of Clinical Nutrition (2003) 57, 604–611
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0954–3007/03 $25.00
www.nature.com/ejcn

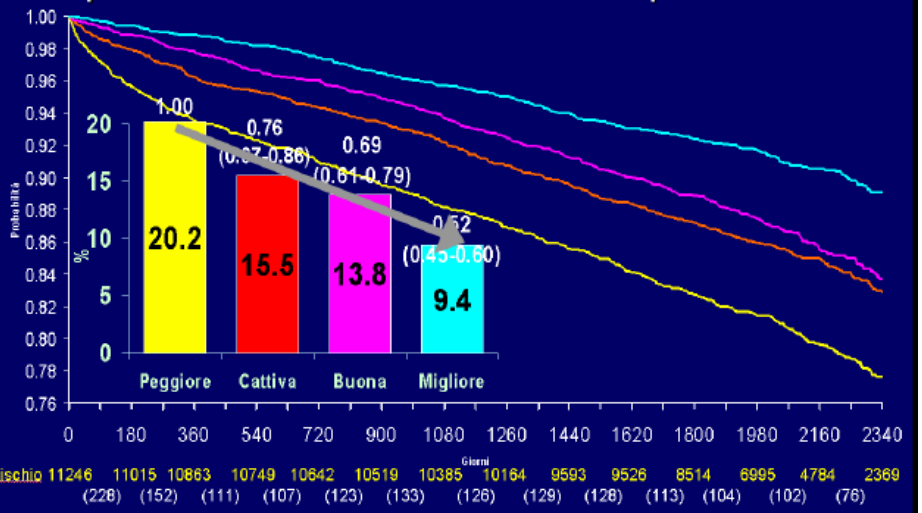
ORIGINAL COMMUNICATION

Mediterranean diet and all-causes mortality after myocardial infarction: results from the GISSI-Prevenzione trial

F Barzi[1,2]*, M Woodward[2], RM Marfisi[1], L Tavazzi[3], F Valagussa[4] and R Marchioli[1] on behalf of GISSI-Prevenzione Investigators†

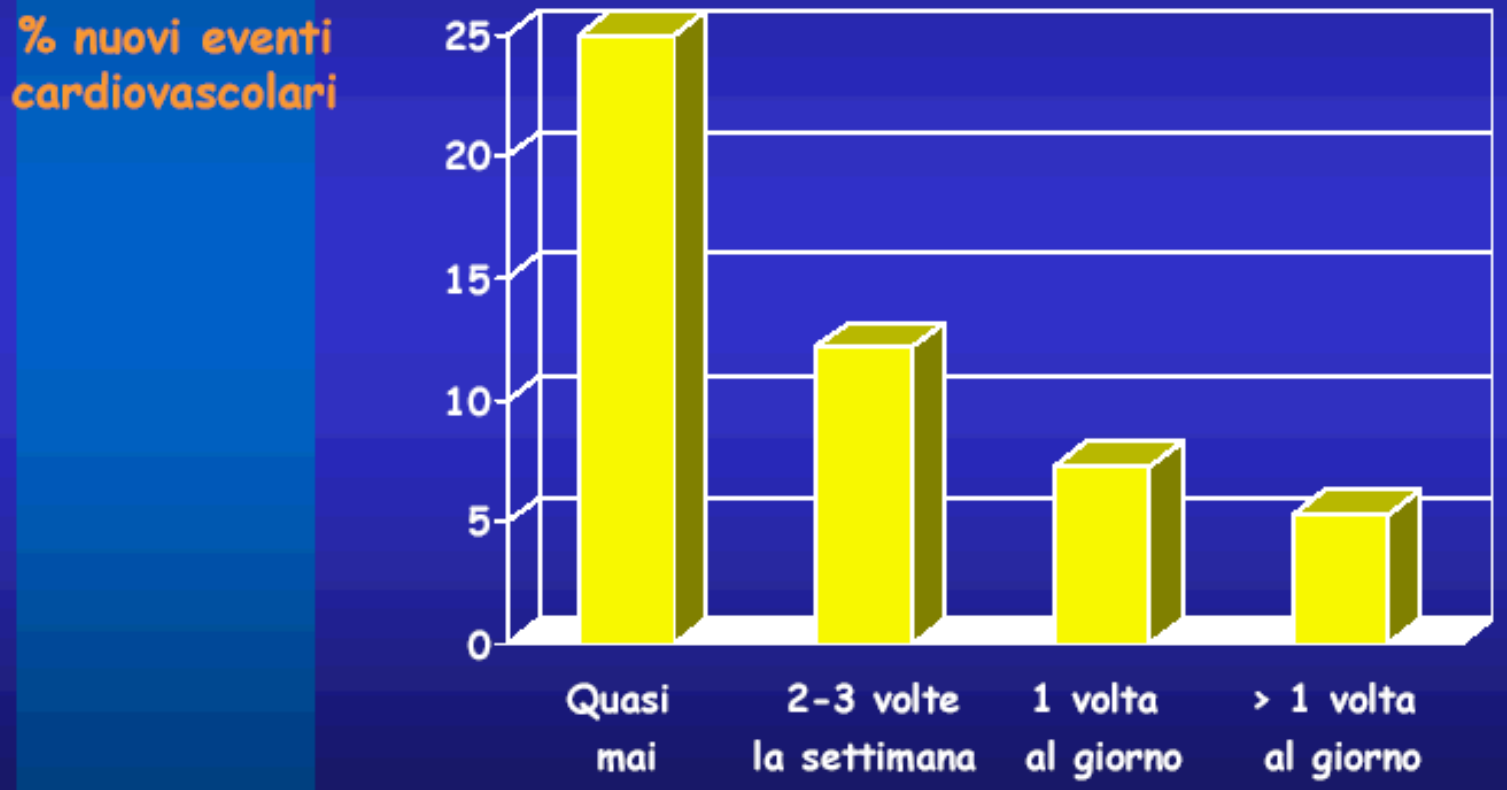
Quartili dello Score Dietetico

Sopravvivenza a 6.5 anni dopo l'IMA

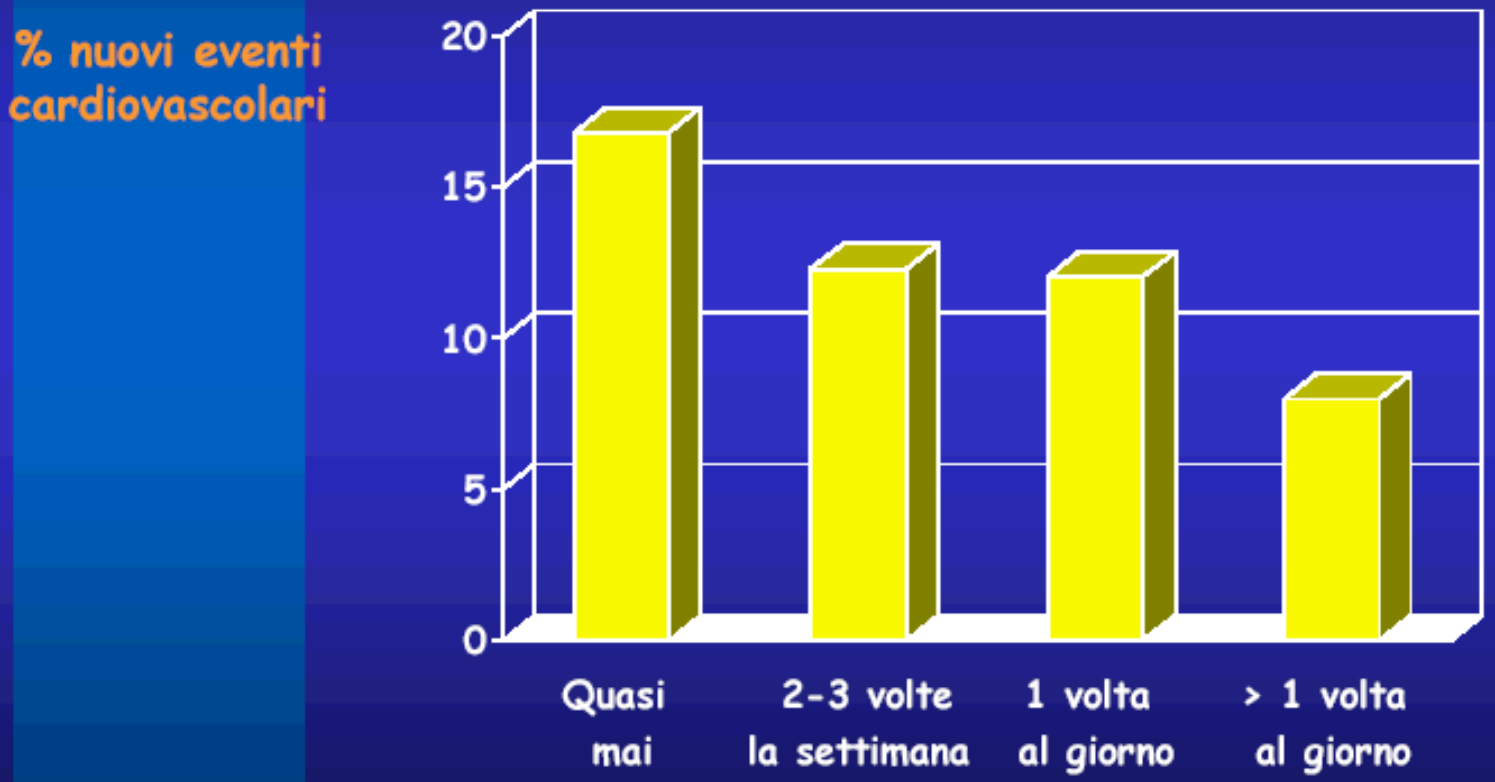


Analisi multivariata corretta per i trattamenti sperimentali, la loro interazione ed i maggiori fattori di confondimento

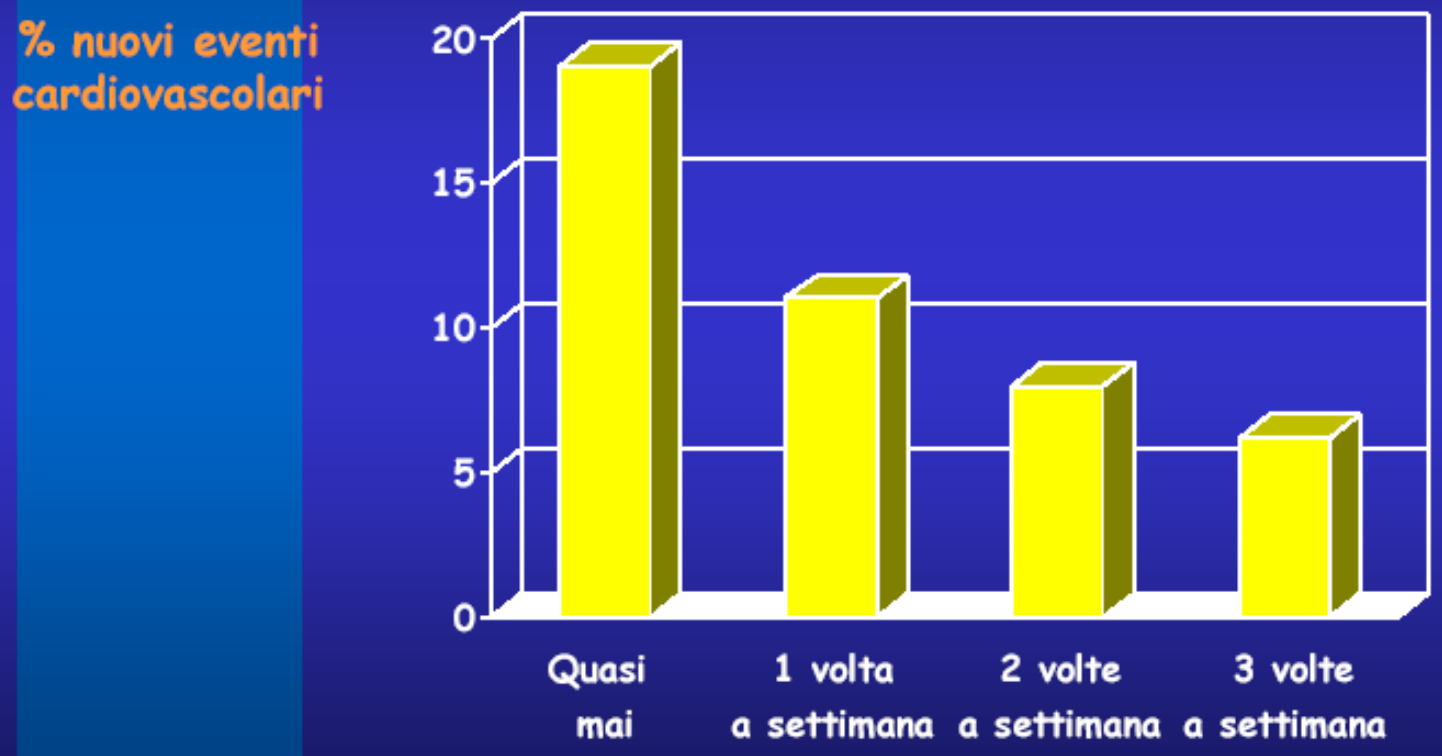
GISSI-P: CONSUMO DI VERDURA FRESCA



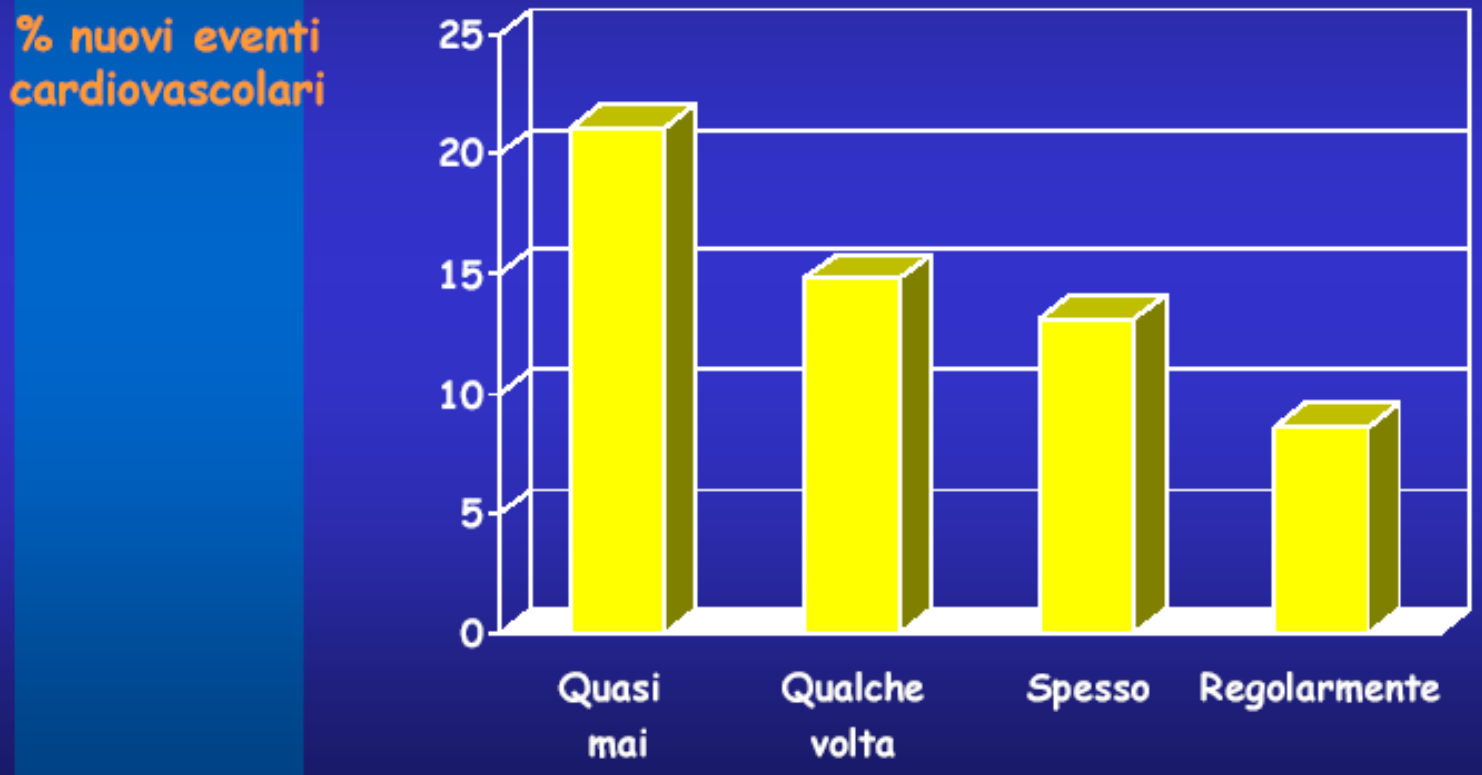
GISSI-P: CONSUMO DI FRUTTA



GISSI-P: CONSUMO DI PESCE



GISSI-P: CONSUMO DI OLIO D'OLIVA



“Muoviamoci di più”

Il movimento genera benessere

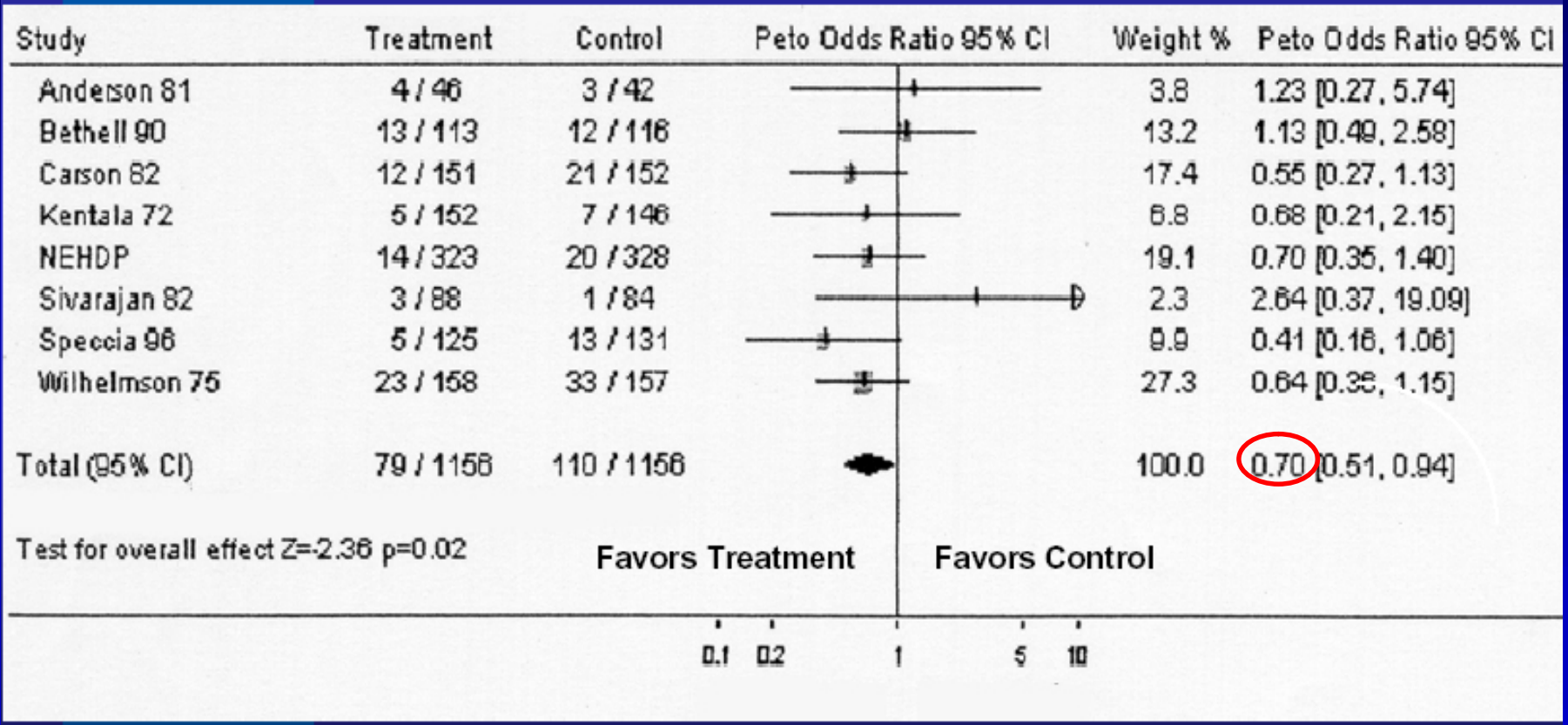
Un’attività fisica regolare aiuta a sentirsi meglio, a lavorare meglio e a migliorare anche il proprio aspetto!

progetto Tuttocuore

Heart Care Foundation
O.N.L.U.S.

Exercise-based rehabilitation for coronary heart disease
(Cochrane Review, 2003)

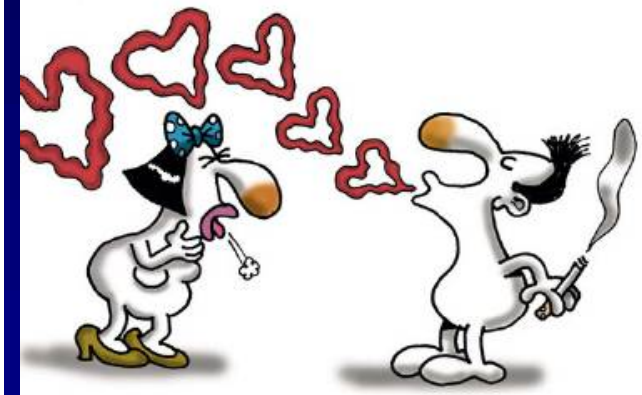
Total Cardiac Mortality



Joliffe JA et al, Cochrane Library, Issue 1, 2003

“Parliamo di fumo”

Non è mai troppo tardi per smettere!



Molti vantaggi si ottengono già dopo pochi giorni-settimane dalla sospensione del fumo!

progetto Tuttocuore.

Heart Care Foundation
O.N.L.U.S. Fondazione Italiana per la Lotta alle Malattie Cardiovascolari

“Mangiare sano”

per ridurre il rischio di malattie cardiovascolari

Una giusta alimentazione aiuta a migliorare lo stato di salute generale e a prevenire il rischio di malattie cronico-degenerative.

progetto Tuttocuore.

Heart Care Foundation
O.N.L.U.S. Fondazione Italiana per la Lotta alle Malattie Cardiovascolari

“Muoviamoci di più”

Il movimento genera benessere

Un’attività fisica regolare aiuta a sentirsi meglio, a lavorare meglio e a migliorare anche il proprio aspetto!

progetto Tuttocuore.

Heart Care Foundation
O.N.L.U.S. Fondazione Italiana per la Lotta alle Malattie Cardiovascolari

SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA
Azienda Unità Sanitaria Locale di Bologna
SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA
Azienda Ospedaliero-Universitaria di Bologna
Scacco al rischio
Mantenere il cuore in salute dipende anche da te!
Piano Regionale della Prevenzione
Gruppo per la prevenzione delle malattie cardiovascolari dell'Azienda USL di Bologna
e dell'Azienda Ospedaliero-Universitaria S.Orsola-Malpighi

L’importante è crederci……

Prevenzione Secondaria dopo IMA / SCA

Obiettivi

1. Terapia ottimizzata
2. Stratificazione del rischio
3. Modifica dei fattori di rischio
4. Counseling e modifiche comportamentali
5. Follow-up

ORIGINAL INVESTIGATION

Acute Coronary Syndrome

What Do Patients Know?

Kathleen Dracup, DNSc; Sharon McKinley, RN, PhD; Lynn V. Doering, RN, DNSc; Barbara Riegel, RN, DNSc; Hendrika Meischke, PhD; Debra K. Moser, RN, DNSc; Michele Pelter, RN, PhD; Beverly Carlson, RN, MS; Leanne Aitken, RN, PhD; Andrea Marshall, RN, MS; Rebecca Cross, RN, PhD; Steven M. Paul, PhD

Background: The effectiveness of therapy for an acute coronary syndrome (ACS) is dependent on patients' quick decision to seek treatment. We surveyed patients' level of knowledge about heart disease and self-perceived risk for a future acute myocardial infarction (AMI) in patients with documented ischemic heart disease.

Methods: Patients (N = 3522) had a mean age of 67 years, 68% were male, and all had a history of AMI or invasive cardiac procedure for ischemic heart disease. Data were gathered using a 26-item instrument focusing on ACS symptoms and appropriate steps to seeking treatment. Patients were asked to identify their level of perceived risk for a future AMI.

Results: Forty-six percent of patients had low knowledge levels (ie, <70% of answers were correct). The mean score was 71%. Higher knowledge scores were significantly related to female sex ($P = .001$), younger age ($P = .001$), higher education ($P = .001$), participation in cardiac rehabilitation ($P = .001$), and receiving care by a cardiologist rather than an internist or general practitioner ($P = .005$). Clinical history (eg, AMI [$P = .24$] and cardiac surgery [$P = .38$]) were not significant predictors of knowledge. Most (57%) identified themselves as being at higher risk for a future AMI compared with an age-matched individual without heart disease with 1 exception. Namely, patients who had undergone coronary artery bypass surgery felt significantly less vulnerable for a future AMI than other individuals of the same age.

Conclusions: Even following diagnosis of ACS and numerous interactions with physicians and other health care professionals, knowledge about ACS symptoms and treatment on the part of patients with cardiac disease remains poor. Patients require continued reinforcement about the nature of cardiac symptoms, the benefits of early treatment, and their risk status.

Arch Intern Med. 2008;168(10):1049-1054

Acute Coronary Syndrome: What Do Patients Know?

Table 2. Patient Characteristics Associated With High Levels of Knowledge About ACS[a]

Characteristic	OR (95% CI)	*P* Value
Female	1.77 (1.50-2.09)	<.001
Education[b]		
High school graduate	1.39 (1.08-1.77)	.01
Some college/technical	1.21 (0.97-1.50)	.09
College graduate	1.78 (1.41-2.24)	<.001
Age, y[c]		
<60	2.62 (2.01-3.41)	<.001
60-69	2.31 (1.79-2.98)	<.001
70-79	1.69 (1.31-2.16)	<.001
Medical history		
Care by a cardiologist	1.34 (1.10-1.64)	.004
CR	1.49 (1.28-1.73)	<.001
PTCA	1.11 (0.95-1.30)	.20
CABG	1.08 (0.92-1.26)	.38
MI	1.09 (0.94-1.27)	.24
Hypercholesterolemia	1.03 (0.88-1.20)	.70
Current smoker	1.05 (0.77-1.43)	.76

Abbreviations: ACS, acute coronary syndrome; CABG, coronary artery bypass grafting; CI, confidence interval; CR, cardiac rehabilitation; MI, myocardial infarction; OR, odds ratio; PTCA, percutaneous transluminal coronary angioplasty.

[a] A score of at least 70%; N = 3176.

[b] All levels of education compared with "less than a high school diploma."

[c] All age categories compared with those 80 years or older.

Dracup K et al. Arch Intern Med 2008; 168 (10):1049-1054

Patient's knowledge about hospital medications

Journal of HOSPITAL MEDICINE www.journalofhospitalmedicine.com

BRIEF REPORT

Lack of Patient Knowledge Regarding Hospital Medications

Ethan Cumbler, MD
Heidi Wald, MD, MSPH
Jean Kutner, MD, MSPH

Department of Medicine, University of Colorado Denver School of Medicine, Denver, Colorado.

Supported by a University of Colorado Hospital Clinical Excellence Grant.

Dr. Cumbler has no commercial interest relevant to this manuscript, has full access to all of the data in the study, and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Disclosure: Dr. Cumbler, Dr. Kutner, and Dr. Wald have no relevant conflicts of interest for this manuscript.

BACKGROUND: Patient involvement in preventing inpatient medication errors is predicated upon patient knowledge of their medications. However, there is little published on the accuracy of patient knowledge or understanding of their hospital medications.

OBJECTIVE: To assess hospitalized patients' knowledge of their hospital medications and attitudes towards involvement in the medication safety process while hospitalized.

METHODS: A cross-sectional study of 50 adult internal medicine inpatients at the University of Colorado Hospital. Patients completed a list of the hospital medications they believed were prescribed to them and a survey of attitudes toward involvement in the medication safety process. The patient-completed hospital medication list was compared to the hospital medication administration record.

RESULTS: Ninety-six percent of study patients omitted at least one prescribed hospital medication. On average, patients omitted 6.8 hospital medications. Forty-four percent of patients believed they were receiving at least one hospital medication that was not actually prescribed. Patients < 65 years old omitted 60% of their as needed (PRN) medications whereas patients ≥ 65 years old omitted 88% ($P = 0.01$). Only 28% reported having seen their hospital medication list, although 81% reported this would improve their satisfaction with hospital care. Ninety percent wanted to review their hospital medication list for accuracy and 94% felt patient review of the hospital medication list had the potential to reduce errors.

CONCLUSIONS: Our findings suggest that, in contrast to patient preferences, there are significant deficits in patients' knowledge of hospital medications. These results are a call to reexamine how we educate patients regarding their hospital medications. *Journal of Hospital Medicine* 2010;5:83–86. © *2010 Society of Hospital Medicine.*

KEYWORDS: medical error, medication reconciliation, patient education, patient safety.

Cumbler et al. J Hospital Med 2010; 5 (2): 83-86

Lack of patient knowledge regarding hospital medication

50 adult internal medicine inpatients

TABLE 1. Patient Knowledge of Their Hospital Medications List

	Total Medications	Scheduled Medications	PRN Medications
Percent of patients with at least 1 hospital medication they could not name (95% CI)	96% (90-100%)	94% (87-100%)	80% (69-92%)
Average number of hospital medications omitted by patient (range)	6.8 (0-22)	5.2 (0-15)	1.6 (0-7)
Percentage of hospital medications omitted by patient (95% CI)	60% (52-67%)	60% (52-67%)	68% (57-78%)

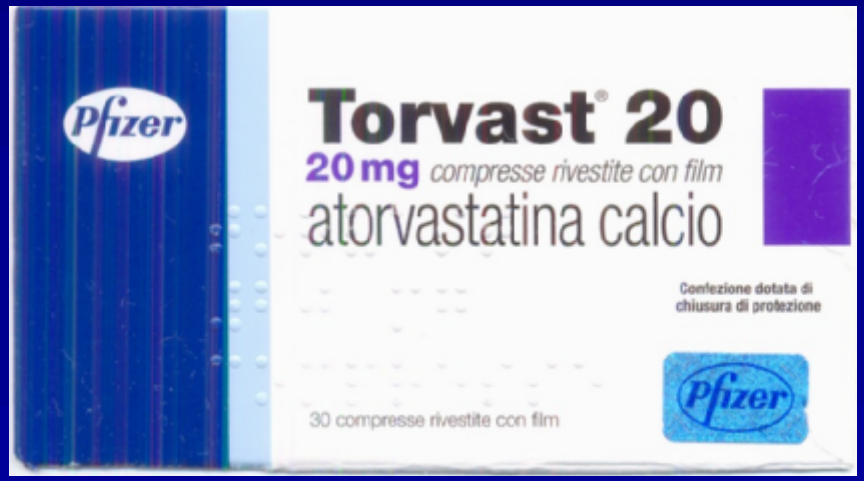
NOTE: n = 50 patients.
Abbreviations: CI, confidence interval; PRN, as needed.

- Patients < 65 years omitted 60% PRN whereas patients • 65 years omitted 88% PRN (P=0,01)
- Only 28% reported having seen their hospital medication list, although 81% reported this would improve their satisfaction with hospital care
- 94% felt patient review of the hospital medication list had the potential to reduce errors

Cumbler E et al, Journal of Hospital Medicine 2010; 5 (2): 83-86

Farmaci LASA e Sicurezza dei Pazienti

Look - Alike / Sound - Alike



Plavix

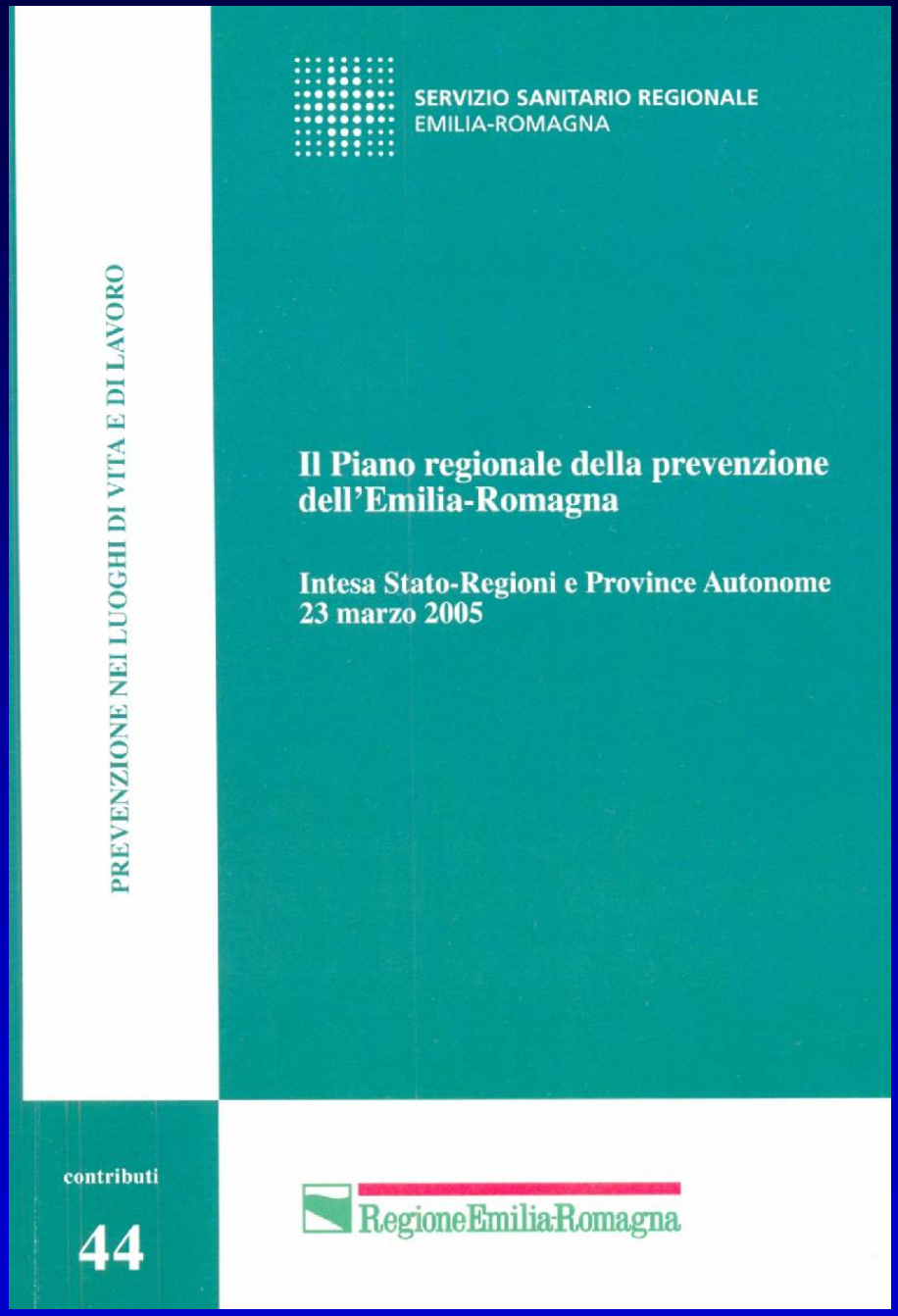
Lasix

Lansox

Prevenzione Secondaria dopo IMA / SCA

Obiettivi

1. Terapia ottimizzata
2. Stratificazione del rischio
3. Modifica dei fattori di rischio
4. Counseling e modifiche comportamentali
5. Follow-up


SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA
PREVENZIONE NEI LUOGHI DI VITA E DI LAVORO
Il Piano regionale della prevenzione dell'Emilia-Romagna
Intesa Stato-Regioni e Province Autonome 23 marzo 2005
contributi
44
RegioneEmilia-Romagna

Prevenzione delle recidive nei soggetti che già hanno avuto accidenti cardiovascolari

Obiettivi del Progetto

1. Sviluppo del sistema informativo sugli eventi cardiovascolari acuti e sulle recidive
2. Definizione di percorsi integrati o facilitati ospedale-territorio
3. Counseling
4. Formazione del personale sanitario
5. Informazione ed educazione sulle malattie cardiovascolari
6. Riduzione degli errori di terapia

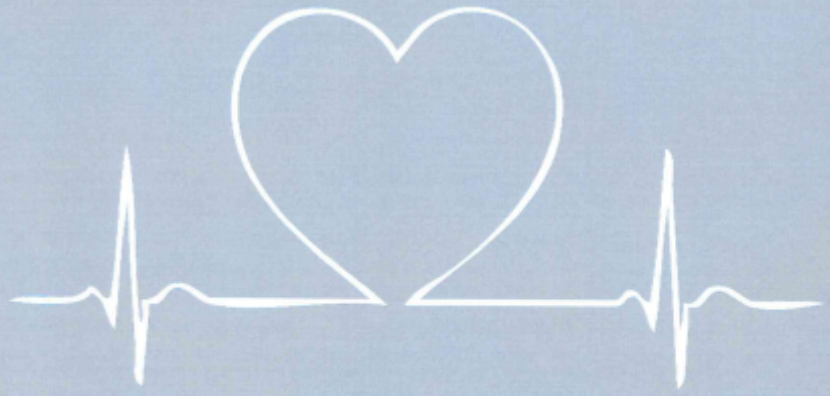
Definizione di percorsi integrati e facilitati Ospedale - Territorio

Azione A	Lettera di dimissione del paziente con evento cardiovascolare acuto
Azione B	Stratificazione del rischio
Azione C	Percorso del paziente dimesso dopo evento cardiovascolare acuto

Regione Emilia-Romagna

SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA

IL TUO CUORE TI STA A CUORE ??

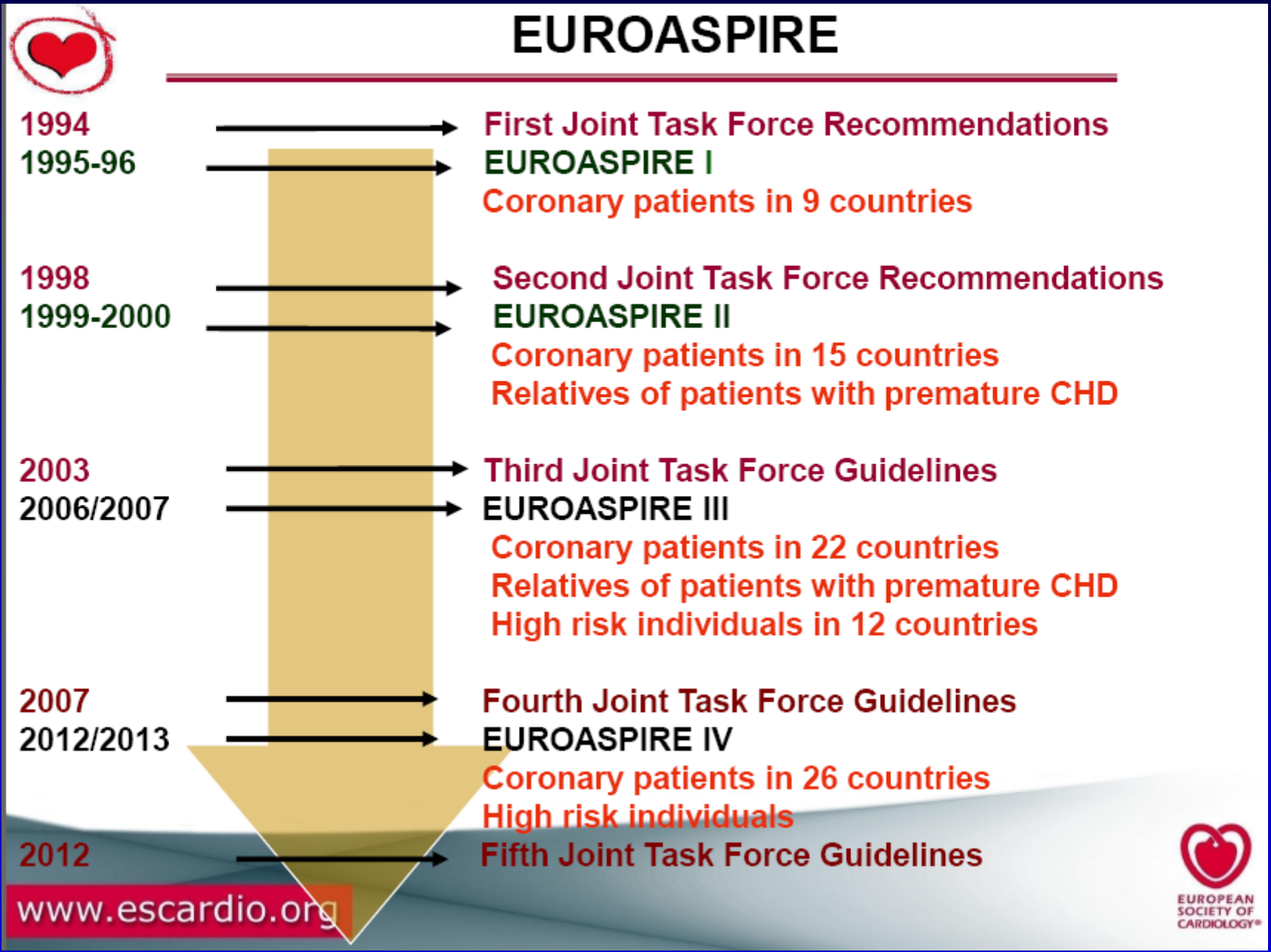


DOPO UN INFARTO RICOMINCIA UNA VITA NORMALE

Prevenzione Cardiovascolare

- Cosa dicono le linee guida
- Cosa avviene nel mondo reale

EUROASPIRE


1994
First Joint Task Force Recommendations
1995-96
EUROASPIRE I
Coronary patients in 9 countries
1998
Second Joint Task Force Recommendations
1999-2000
EUROASPIRE II
Coronary patients in 15 countries
Relatives of patients with premature CHD
2003
Third Joint Task Force Guidelines
2006/2007
EUROASPIRE III
Coronary patients in 22 countries
Relatives of patients with premature CHD
High risk individuals in 12 countries
2007
Fourth Joint Task Force Guidelines
2012/2013
EUROASPIRE IV
Coronary patients in 26 countries
High risk individuals
2012
Fifth Joint Task Force Guidelines
www.escardio.org
EUROPEAN SOCIETY OF CARDIOLOGY®

Cardiovascular prevention guidelines in daily practice: a comparison of EUROASPIRE I, II, and III surveys in eight European countries

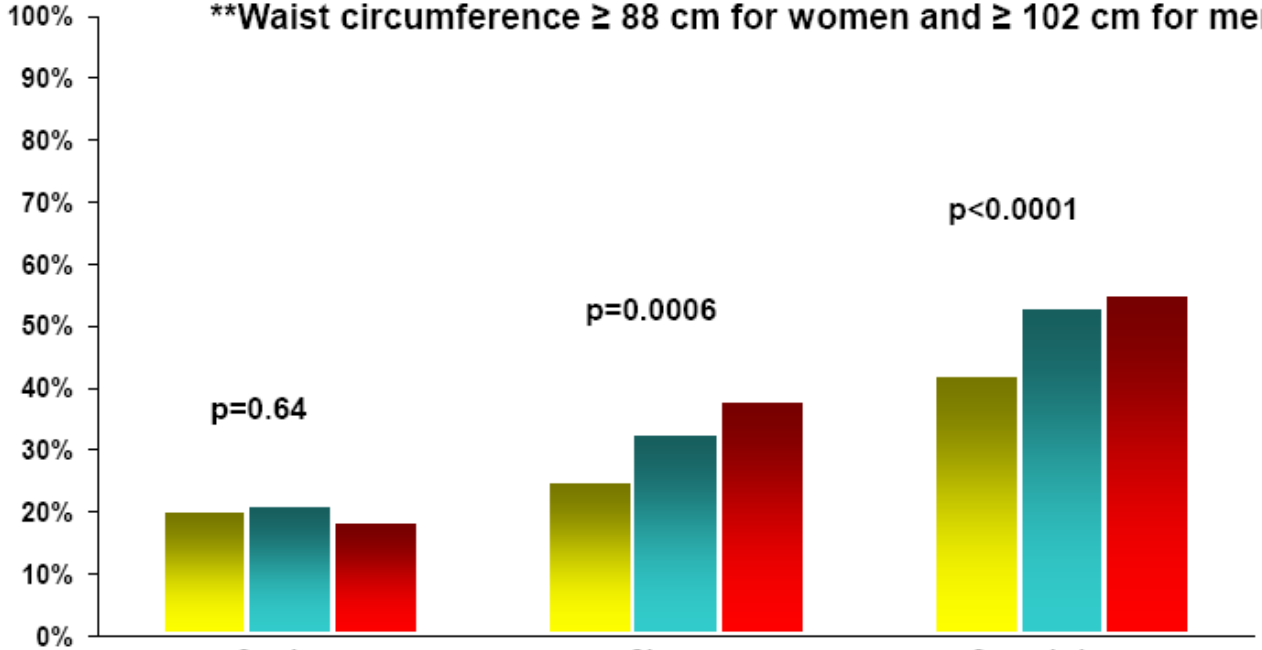
*Kornelia Kotseva, David Wood, Guy De Backer, Dirk De Bacquer, Kalevi Pyörälä, Ulrich Keil, for the EUROASPIRE Study Group**

Lancet 2009; 373: 929-40

EUROASPIRE III

Prevalence of smoking, obesity* and central obesity**

*Body mass index ≥ 30 kg/m²
**Waist circumference ≥ 88 cm for women and ≥ 102 cm for men



	Smoking	Obesity	Central obesity
EUROASPIRE I	20.3%	25.0%	42.2%
EUROASPIRE II	21.2%	32.6%	53.0%
EUROASPIRE III	18.2%	38.0%	54.9%

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K Kotseva et al Lancet 2009; 373; 929-940

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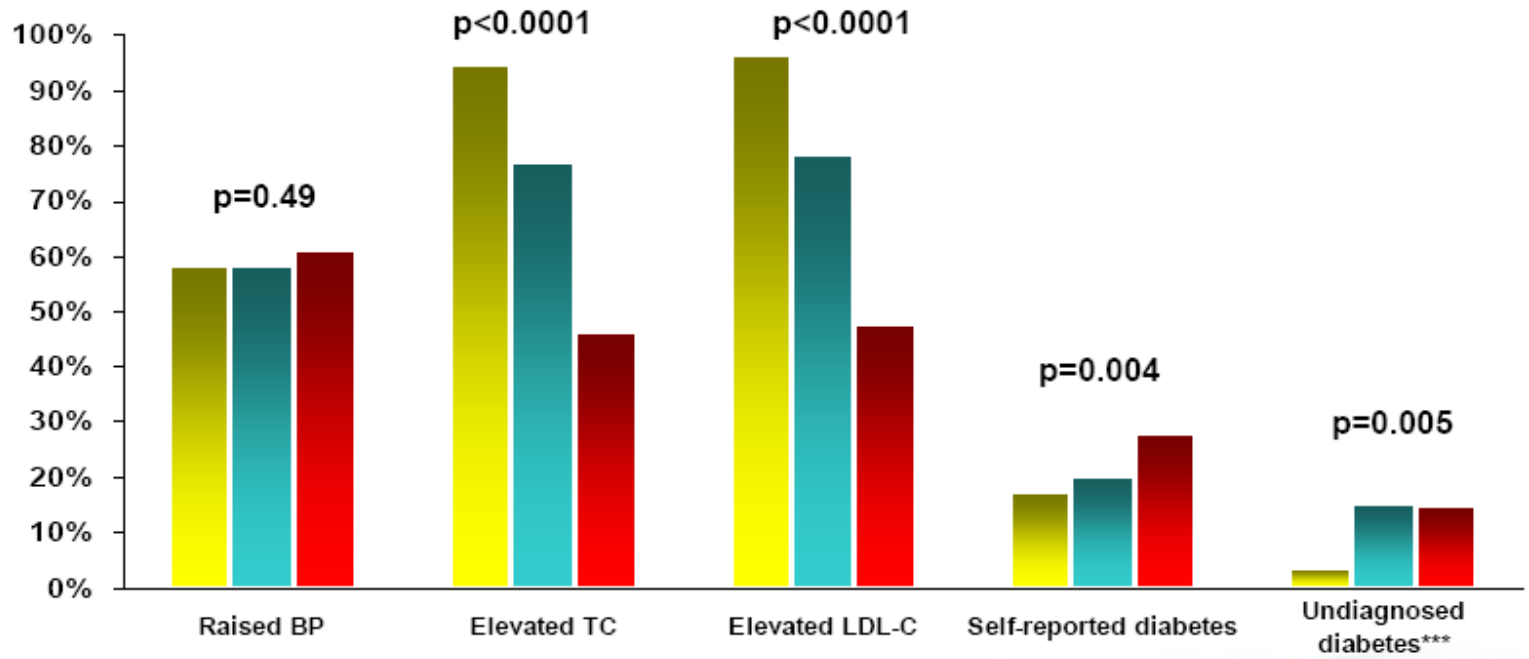
EUROASPIRE III

Prevalence of elevated blood pressure*, TC** and LDL-C***, and diabetes mellitus

*SBP/DBP ≥ 140/90 mmHg for non-diabetics or ≥ 130/80 mmHg diabetics
** TC ≥4.5 mmol/l; *** LDL-C ≥2.5 mmol/l; *** Fasting plasma glucose ≥ 7 mmol/l in patient without history of diabetes



	Raised BP	Elevated TC	Elevated LDL-C	Self-reported diabetes	Undiagnosed diabetes***
EUROASPIRE I	58.1%	94.5%	96.4%	17.4%	3.8%
EUROASPIREII	58.3%	76.7%	78.1%	20.1%	15.3%
EUROASPIREIII	60.9%	46.2%	47.5%	28.0%	14.8%

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European Heart Journal
doi:10.1093/eurheartj/ehs092

European Guidelines on cardiovascular disease prevention in clinical practice (version 2012)

Table 4 Guideline recommendations vs. achievements in patients with established coronary heart disease in EUROASPIRE III

Guideline recommendations	Proportions at goal
Smoking cessation among smokers	48
Regular physical activity	34
BMI <25 kg/m^2	18
Waist circumference <94 cm (men) <80 cm (women)	 25 12
Blood pressure <140/90 mmHg	50
Total cholesterol <4.5 mmol/L (175 mg/dL)	49
LDL cholesterol <2.5 mmol/L (100 mg/dL)	55
Among patients with type 2 diabetes: Fasting glycaemia <7.0 mmol/L (125 mg/dL) HbA_{1c} <6.5%	 27 35

EUROASPIRE IV

EUROPEAN SURVEY OF CARDIOVASCULAR DISEASE PREVENTION AND DIABETES

EUROASPIRE IV

ESC Congress 2013, Amsterdam

Terapia farmacologica alla dimissione

	IN-ACS outcome NSTEMI/STEMI (%)	BLITZ-3 NSTEMI/STEMI (%)	BLITZ-4 NSTEMI (%)	BLITZ-4 STEMI (%)
ASA	94/96	90/94	91.6	96.1
Clopidogrel	66/62	72/79	78.6	90.3
Ticlopidina	17/6	-	2.5	1.3
ACEi/ATII	73/57	72/69	78.2	79.9
betabloccanti	77/64	69/69	78.8	81.3
statine	76/50	77/80	89.8	92.8
TAO	-	-	4	3.2
Antidiabetici/ insulina	-	17/13	10.2 13.2	7.7 10.0

Pianificazione post-dimissione

	NSTEMI (n=2912)	STEMI (n=2833)
Counseling medico o infermieristico	710 (26.4%)	741 (28.5%)
Percorso prevenzione	388 (14.5%)	562 (21.6%)
Riabilitazione cardiologica	213 (7.3%)	325 (12%)
Percorso fumo	95 (3.3%)	174 (6.1%)
Percorso obesi	94 (3.3%)	106 (3.7%)
Percorso diabete	93 (3.2%)	86 (3.0%)

Progetto RER post-SCA – anno 2009

Prescrizione dei farmaci entro 30 gg sulla base del reparto di dimissione

	Dimissione Cardiologia	Dimissione non specialistica
ASA	85%	73%
Betabloccanti	79%	60%
Statine	78%	50%
Ace-i	58%	41%
Clopidogrel	60%	28%

Urbinati S et al, dati non pubblicati

Adherence as

"the key mediator between medical practice and patient outcomes"

Kravitz RL, Melnikow J, Med Care 2004;42:197-199

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

www.escardio.org/guidelines

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

EUROPEAN SOCIETY OF CARDIOLOGY®

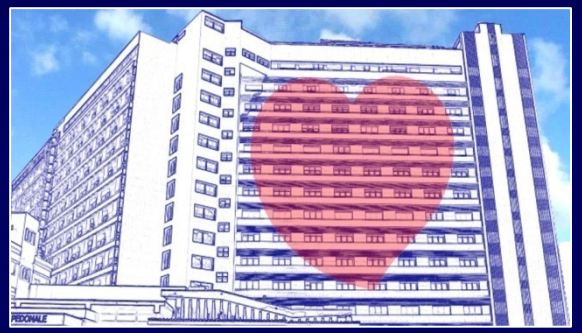
OSPEDALE - TERRITORIO:
UNA RETE DI ALLEANZE PER IL TRATTAMENTO DEL PAZIENTE CHE HA AVUTO UN IMA

Convegno CCMR

"La possibile sinergia tra ospedale e territorio per prevenire le recidive cardiovascolari"

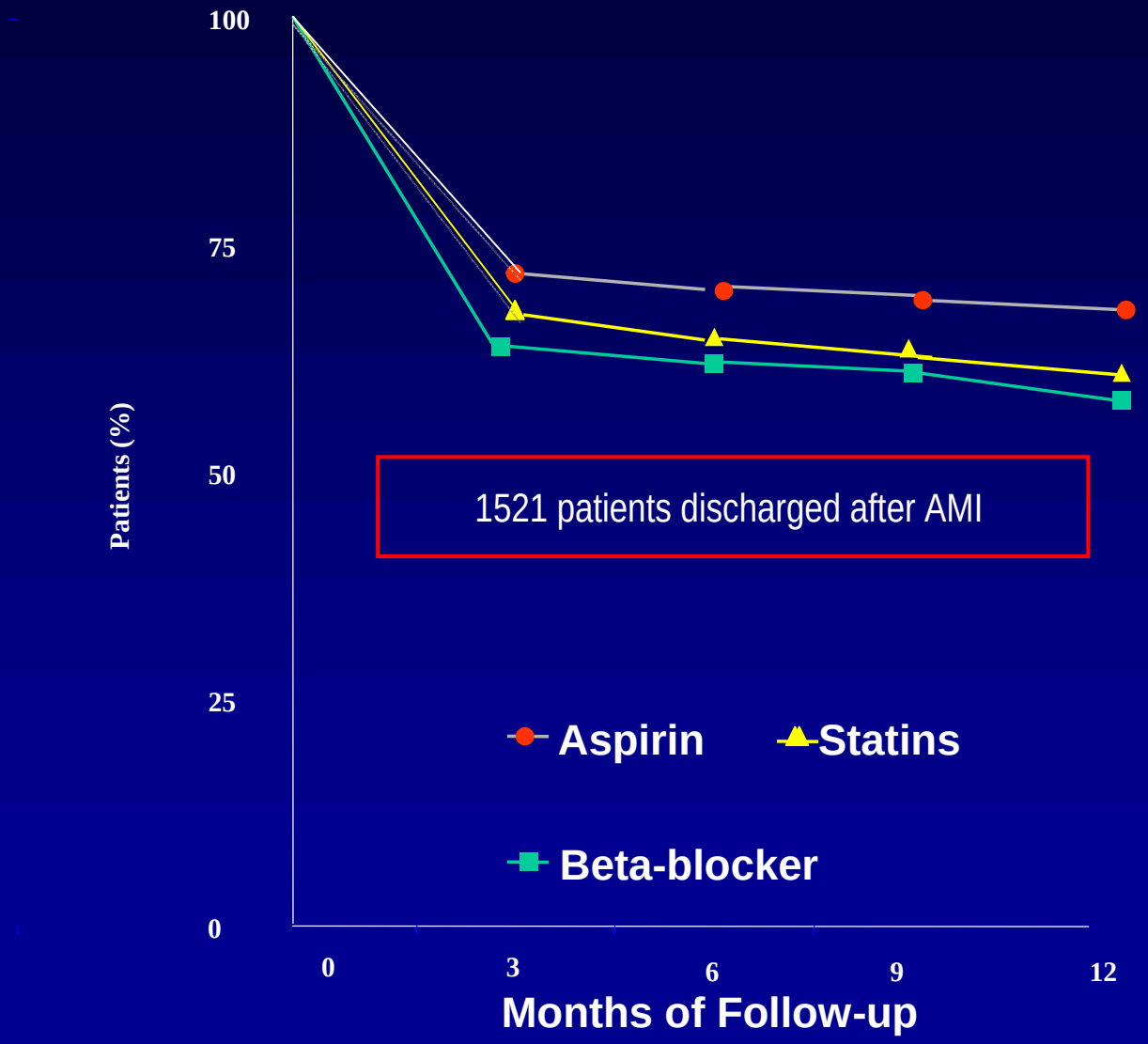
Venezia, 27 Settembre 2013

Giuseppe Di Pasquale
Direttore Dipartimento Medico ASL Bologna
Direttore Unità Operativa Cardiologia
Ospedale Maggiore, Bologna



L’alleanza ospedale - territorio per l’obiettivo dell’aderenza terapeutica

Discontinuation of Evidence-Based therapies after Acute Myocardial Infarction: PREMIER Registry

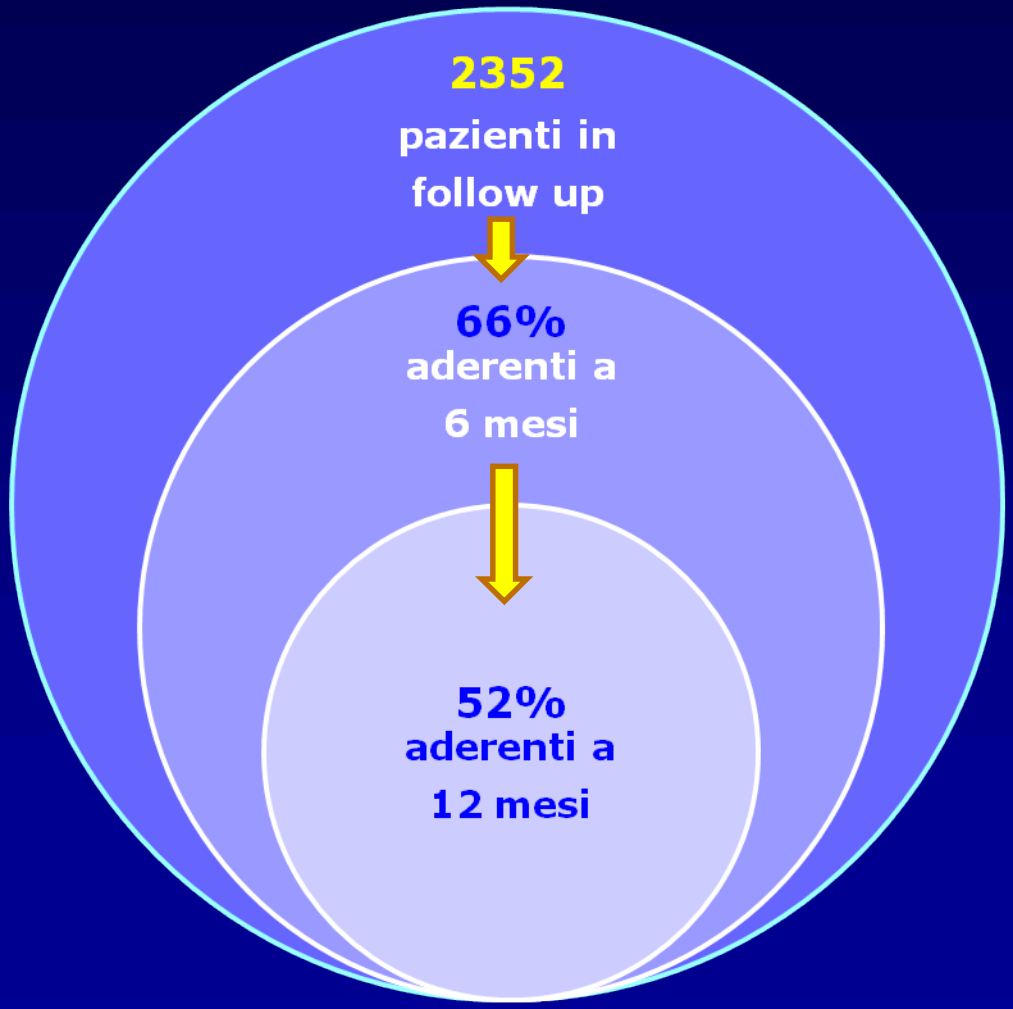


Ho PM,et al Arch. Int. Med. 2006; 166:1842-1846

Il passaggio dalla ricerca (e dalle linee guida) alla pratica clinica rimane fortemente problematico

- Quanti pazienti dopo una SCA ricevono farmaci antiaggreganti ?
- Quale è aderenza terapeutica in questi pazienti ?

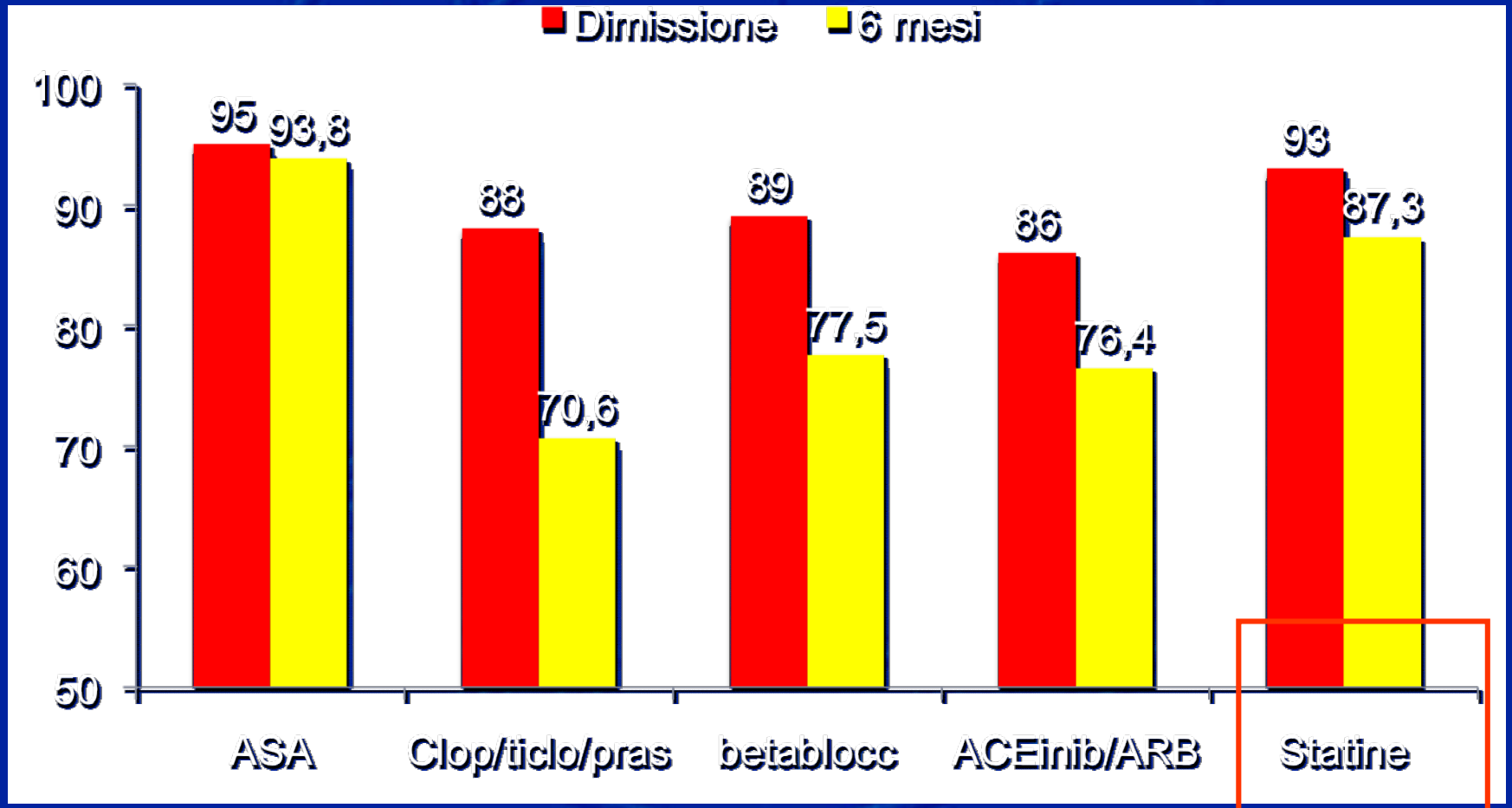
Non tutti i pazienti hanno una aderenza ottimale alla terapia



Blitz 4 Qualità

ADERENZA ALLE LINEE GUIDA NELLA GESTIONE DELLE SINDROMI CORONARICHE ACUTE

Trattamenti alla dimissione e a 6 mesi (STEMI e NSTEMI)



SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA
Azienda Unità Sanitaria Locale di Bologna

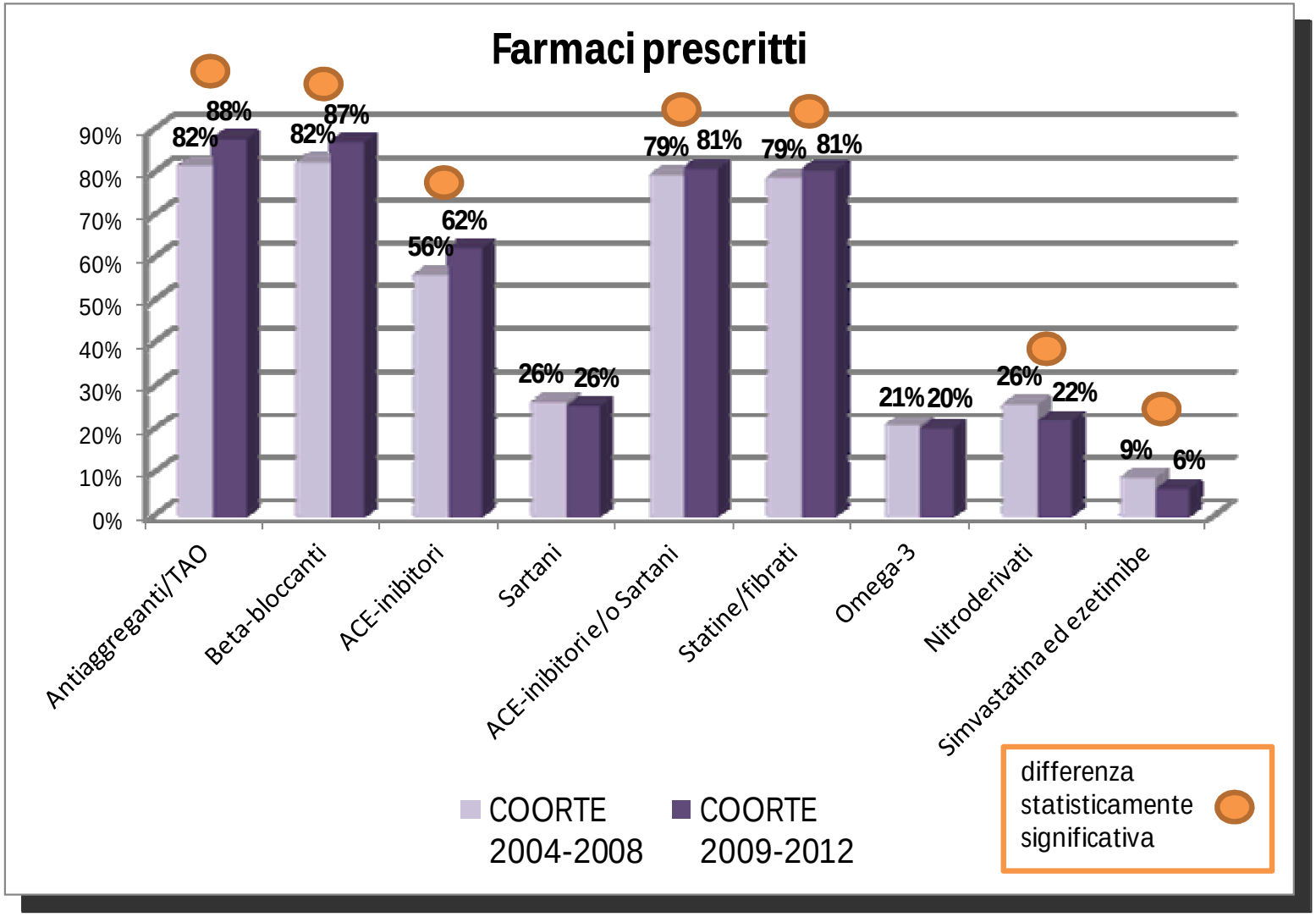
Audit post-IMA/SCA nelle cure primarie dell'AUSL Bologna

osservatorio 2013

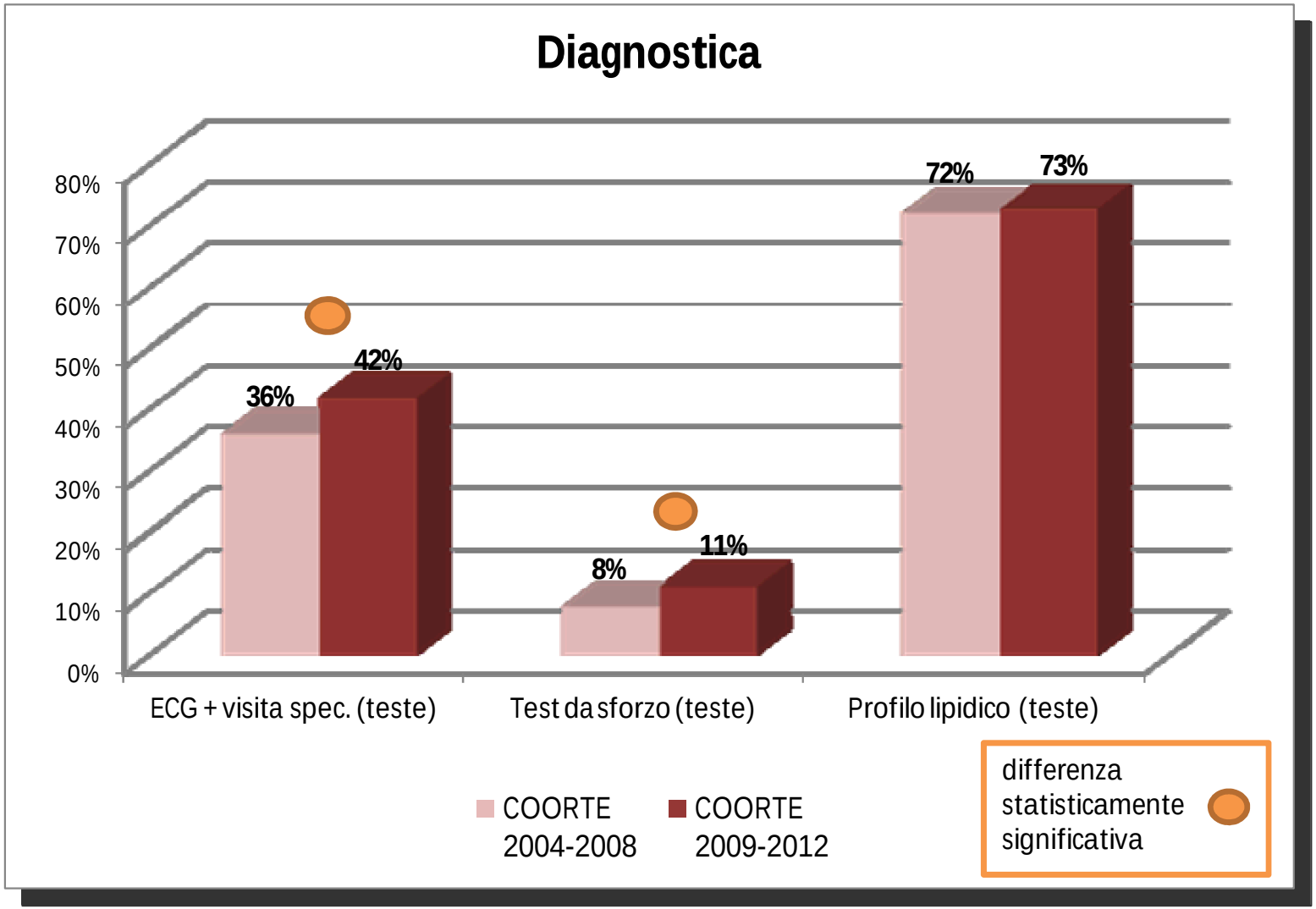
Osservatorio 2013 – RISULTATI (1)

	COORTE 2004-2008	COORTE 2009-2012
Pz ricoverati per IMA-SCA (teste) viventi al 31/12/2012	6.281	4.717
% pz ricoverati per IMA-SCA sul totale assistiti-residenti	1,1%	0,8%
Numero assistiti-residenti al 31/12/2012 (età >= 18 anni)	566.039	566.039
Età media pz ricoverati per IMA-SCA	67,0	70,1

Osservatorio 2013 – RISULTATI (2)



Osservatorio 2013 – RISULTATI (3)



Osservatorio 2013 – Conclusioni

- La popolazione osservata che ha avuto un evento IMA/SCA nel periodo 2009-2012 è più anziana della coorte iniziale dell'audit (70 anni vs 67,1 anni)

- Gli indicatori di processo sono migliorati in maniera statisticamente significativa, sia in termini di prescrizioni di farmaci di provata efficacia che come controlli cardiologici

Regione Emilia-Romagna

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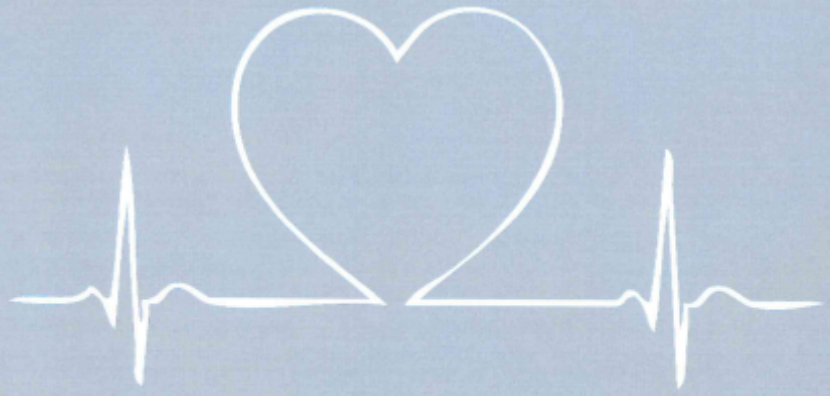
EMILIA-ROMAGNA

IL TUO CUORE TI STA A CUORE ??

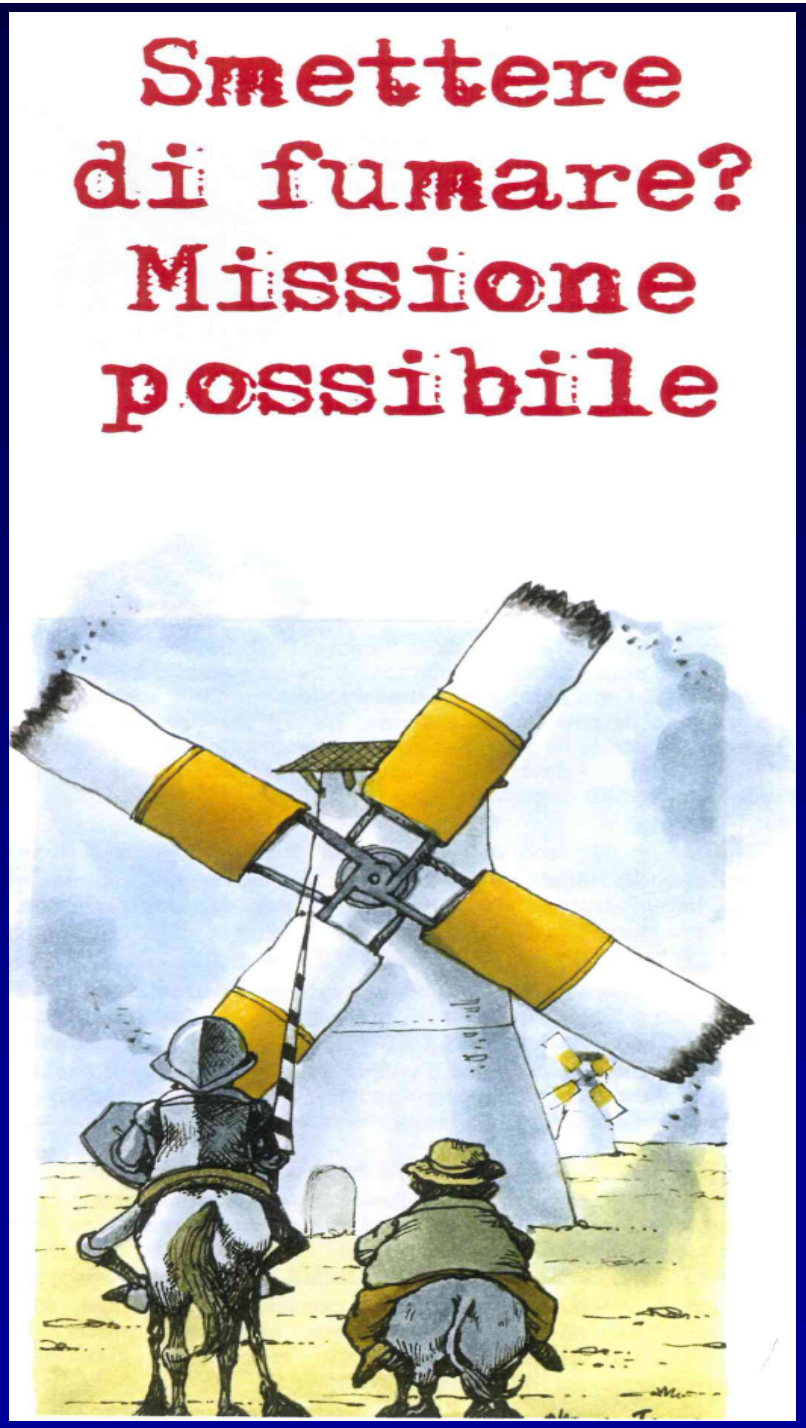


DOPO UN INFARTO RICOMINCIA UNA VITA NORMALE

Questa pubblicazione ha lo scopo di fornire alle persone che hanno avuto un infarto alcune informazioni utili a condurre la vita di ogni giorno con serenità e consapevolezza.
Viene consegnata al momento della dimissione dall'ospedale, quando la persona che ha avuto un attacco di cuore è forse ancora un po' stordita e incerta sul che fare e sul come condurre la propria vita al ritorno a casa.
Il medico, al momento della dimissione, avrà spiegato al paziente cosa gli è capitato, come è stato curato e come dovrà comportarsi, crediamo però che avere con sé anche un piccolo opuscolo informativo possa essere un buon supporto.
Nelle pagine che seguono, dunque, illustriamo quali comportamenti adottare per prevenire ricadute: dopo un infarto, infatti, si può tornare normalmente alla propria vita, al proprio lavoro, ai propri interessi..., ma non si può fare finta di nulla e continuare ad avere comportamenti rischiosi per la salute come consumare grassi, fumare o condurre una vita sedentaria.
Questo opuscolo, tuttavia, rappresenta solo uno strumento informativo: centrale, nel processo di cura, rimane il rapporto con gli operatori sanitari, in questo caso gli specialisti cardiologi e i medici di medicina generale. A loro ci si può rivolgere con la fiducia di trovare interlocutori competenti, disponibili e rispettosi.

Carlo Lusenti
Assessore alle politiche per la salute
della Regione Emilia-Romagna

Campagna Antifumo



SITAB Italy

SERVIZIO SANITARIO REGIONALE
EMILIA - ROMAGNA
Azienda Unità Sanitaria Locale di Bologna

Istituto delle Scienze Neurologiche
Istituto di Ricovero e Cura a Carattere Scientifico

Cardiovascular prevention guidelines in daily practice: a comparison of EUROASPIRE I, II, and III surveys in eight European countries

Kornelia Kotseva, David Wood, Guy De Backer, Dirk De Bacquer, Kalevi Pyörälä, Ulrich Keil, for the EUROASPIRE Study Group*

Lancet 2009; 373: 929–40

Osservatorio 2013 – Conclusioni

• L'effetto di "trascinamento" delle buone pratiche cliniche promosse nei diversi incontri di audit ha permesso di ottenere un **miglioramento della gestione dei nuovi pazienti incidenti**

EUROASPIRE IV

- **Antihypertensive drugs : 78% of patients**
  (58% well controlled blood pressure , <140/90mmHg)

- **Lipid lowering drugs : 87% of patients**
  (58% LDL-C level < 100 mg/dL, 21% LDL-C target < 70mg/dL)

- **Antiplatelet drugs : 94% of patients**

- **Beta Blockers : 83% of patients**

ESC Congress 2013, Amsterdam

Cardiovascular prevention guidelines in daily practice: a comparison of EUROASPIRE I, II, and III surveys in eight European countries

*Kornelia Kotseva, David Wood, Guy De Backer, Dirk De Bacquer, Kalevi Pyörälä, Ulrich Keil, for the EUROASPIRE Study Group**

Summary

Background The first and second EUROASPIRE surveys showed high rates of modifiable cardiovascular risk factors in patients with coronary heart disease. The third EUROASPIRE survey was done in 2006–07 in 22 countries to see whether preventive cardiology had improved and if the Joint European Societies' recommendations on cardiovascular disease prevention are being followed in clinical practice.

Methods EUROASPIRE I, II, and III were designed as cross-sectional studies and included the same selected geographical areas and hospitals in the Czech Republic, Finland, France, Germany, Hungary, Italy, the Netherlands, and Slovenia. Consecutive patients (men and women ≤70 years) were identified after coronary artery bypass graft or percutaneous coronary intervention, or a hospital admission with acute myocardial infarction or ischaemia, and were interviewed at least 6 months later.

Findings 3180 patients were interviewed in the first survey, 2975 in the second, and 2392 in the third. Overall, the proportion of patients who smoke has remained nearly the same (20·3% in EUROASPIRE I, 21·2% in II, and 18·2% in III; comparison of all surveys p=0·64), but the proportion of women smokers aged less than 50 years has increased. The frequency of obesity (body-mass index ≥30 kg/m²) increased from 25·0% in EUROASPIRE I, to 32·6% in II, and 38·0% in III (p=0·0006). The proportion of patients with raised blood pressure (≥140/90 mm Hg in patients without diabetes or ≥130/80 mm Hg in patients with diabetes) was similar (58·1% in EUROASPIRE I, 58·3% in II, and 60·9% in III; p=0·49), whereas the proportion with raised total cholesterol (≥4·5 mmol/L) decreased, from 94·5% in EUROASPIRE I to 76·7% in II, and 46·2% in III (p<0·0001). The frequency of self-reported diabetes mellitus increased, from 17·4%, to 20·1%, and 28·0% (p=0·004).

Interpretation These time trends show a compelling need for more effective lifestyle management of patients with coronary heart disease. Despite a substantial increase in antihypertensive and lipid-lowering drugs, blood pressure management remained unchanged, and almost half of all patients remain above the recommended lipid targets. To salvage the acutely ischaemic myocardium without addressing the underlying causes of the disease is futile; we need to invest in prevention.

Lancet 2009; 373: 929–40

See Editorial page 867

See Comment page 873

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Definizione di percorsi integrati e facilitati Ospedale - Territorio

Azione A	**Lettera di dimissione del paziente con evento cardiovascolare acuto**
Azione B	**Stratificazione del rischio**
Azione C	**Percorso del paziente dimesso dopo evento cardiovascolare acuto**

Contenuto della lettera di dimissione dopo SCA

- Diagnosi precisa e sintesi storia clinica del paziente, iter diagnostico-terapeutico espletato, patologie concomitanti
- Descrizione chiara del rischio del paziente dimesso dopo SCA e riaffidato al MMG
- Evidenziazione sintetica dei fattori di rischio identificati
- Terapia farmacologica alla dimissione ed indicazioni comportamentali
- Programmazione primo controllo cardiologico post-dimissione (ad 1 mese) ed indicazioni per il follow-up

Documentazione minima da allegare alla lettera di dimissione

- ECG pre-dimissione
- Referto eventuale coronarografia
- Eventuale piano terapeutico (es. clopidogrel)
- Materiale educazionale condiviso e predefinito

Definizione di percorsi integrati e facilitati Ospedale - Territorio

Azione A	Lettera di dimissione del paziente con evento cardiovascolare acuto
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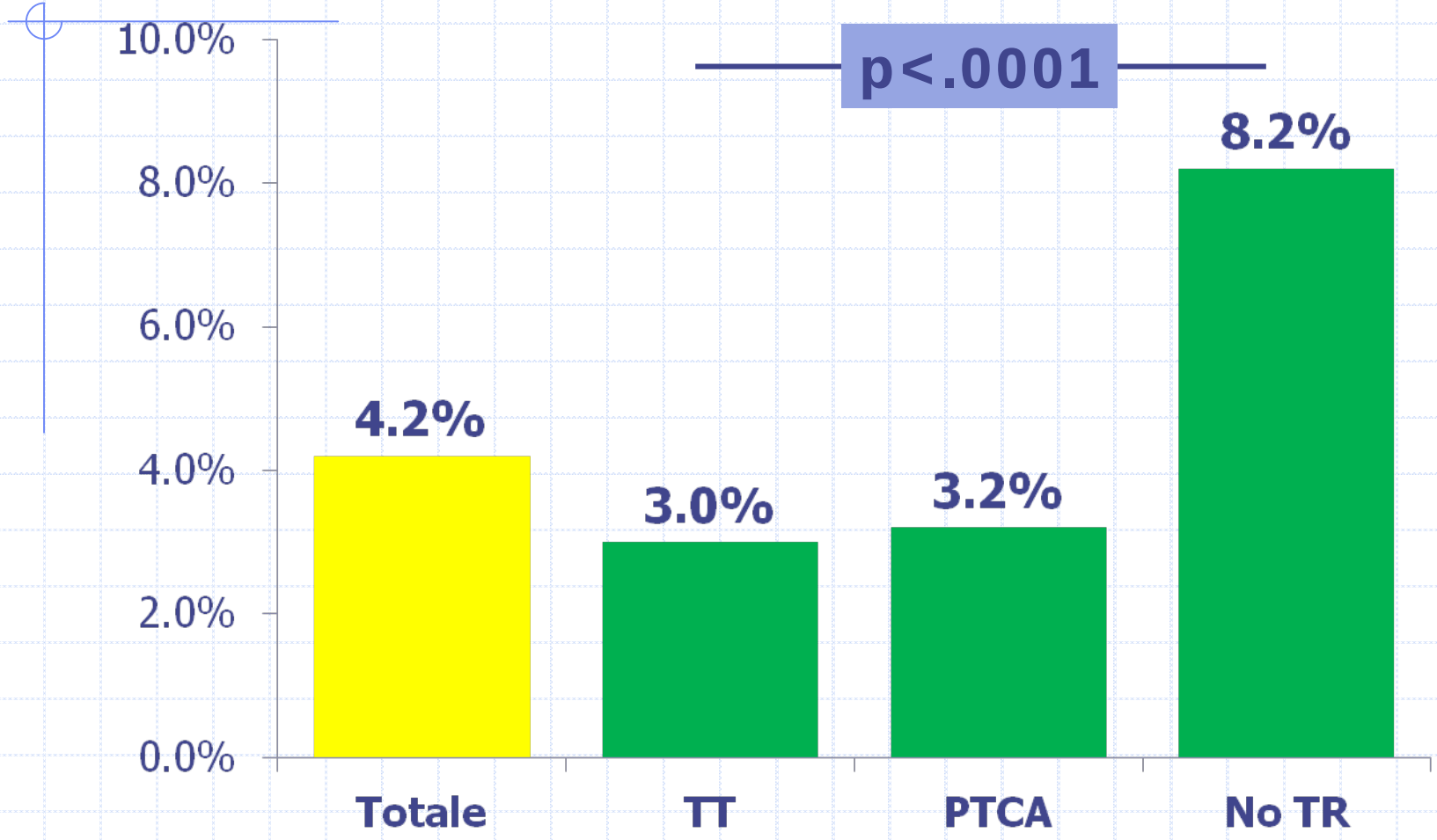
Azione C	Percorso del paziente dimesso dopo evento cardiovascolare acuto

Percorso del paziente dimesso dopo evento cardiovascolare acuto

- Informazione al MMG pre-dimissione
- Programmazione del primo controllo cardiologico ad 1 mese dalla dimissione
- Programma di ripresa dell'attività fisica e lavorativa post-dimissione
- Pianificazione follow-up del paziente dopo il primo controllo cardiologico
    - cadenze dei controlli dopo il 1° mese
    - indicazioni per l'eventuale ripetizione di esami di laboratorio ed esami strumentali nel follow-up

STEMI/BBS: Mortalità intraospedaliera

per procedura (120/2858, 4.2%)



Di Pasquale G et al, Acute Cardiovasc Care 2013;2(1):27-34

MANTRA Results

Raccomandazioni relative alla Dieta

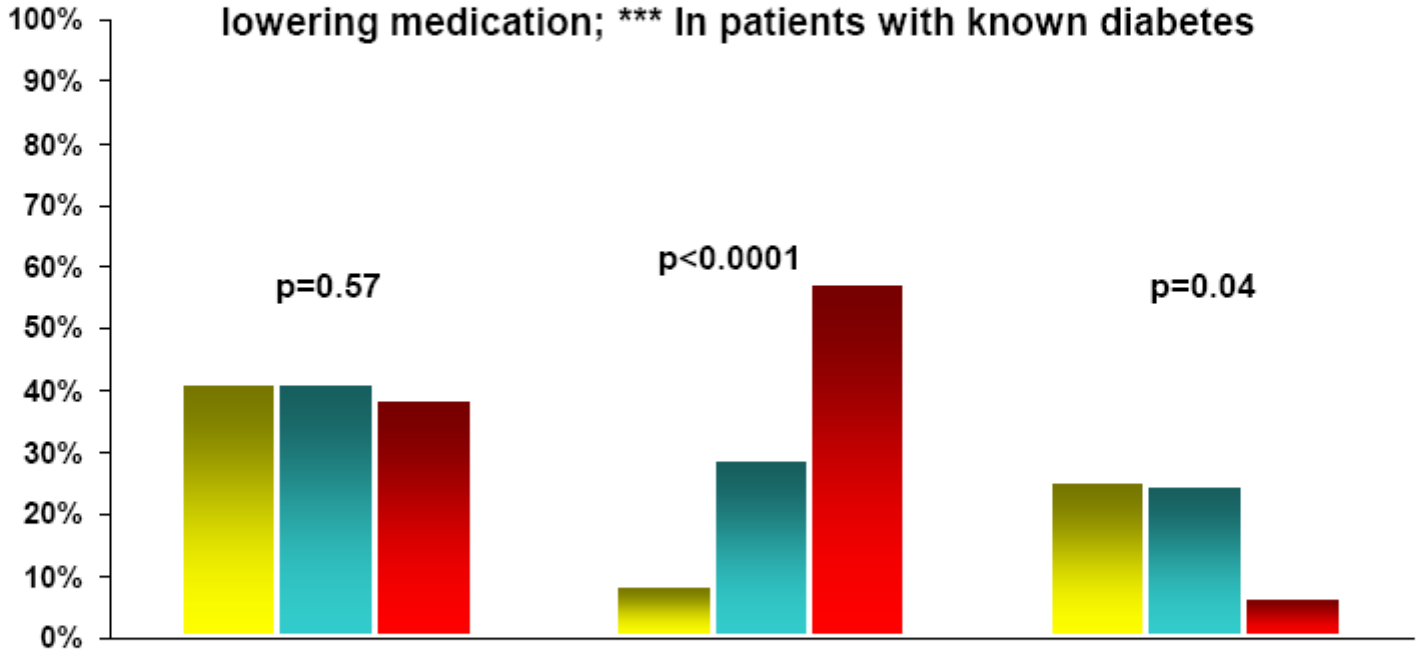
European Guidelines on cardiovascular disease in clinical practice
Eur J Cardiov Prev Rehab 2003; 10:S1-S78

- Riduzione del peso corporeo
- Incoraggiare in tutti i casi il consumo di frutta, verdure, cereali, pesce
- Grassi nella dieta < 30% delle calorie totali
- Grassi saturi > 30% del totale dei grassi
- Colesterolo con la dieta < 300 mg/die
- Consigliabile una consulenza specifica dietologica per i pazienti diabetici ed obesi

EUROASPIRE III

Therapeutic control of blood pressure*, total cholesterol** and diabetes***

*In patients on BP lowering medication; **In patients on lipid-lowering medication; *** In patients with known diabetes



	BP <140/90 mmHg (<130/80mmHg in diabetics)*	TC < 4.5 mmol/L**	Plasma glucose < 6.1` mmol/L***
EUROASPIRE I	41.0%	8.4%	25.1%
EUROASPIRE II	41.2%	28.7%	24.5%
EUROASPIRE III	38.7%	57.3%	6.7%

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EUROPEAN SOCIETY OF CARDIOLOGY®

EUROASPIRE IV

7.998 patients < 80 years with established CHD
(25% women, mean age 64 years, one-third <60 years old)

- Obesity (BMI >30kg/m2) prevalence = 38%
  (36% of men, 44% of women)
- Diabetes prevalence = 40%
- Smoking prevalence = 16%
  (18% of men, 11% of women, 34% of <50 years old)
- Elevated blood pressure prevalence = 39%

ESC Congress 2013, Amsterdam