Trattamento della cardiopatia ischemica del paziente diabetico

Pasquale Caldarola

Bari 27 Settembre 2017

Terapia della SCA

Controllo glicemico

2015 ES ent
of acute s
present ent
elevatio
Task Force ndromes
in Patients Elevation
of the Euro

Recommendations for the management of diabetic patients with non-ST-elevation acute coronary syndromes

Recommendations	Class[a]	Level[b]	Ref.[c]
Blood glucose control			
It is recommended to screen all patients with NSTE-ACS for diabetes and to monitor blood glucose levels frequently in patients with known diabetes or admission hyperglycaemia.	I	C	
Glucose-lowering therapy should be considered in ACS patients with blood glucose >10 mmol/L (>180 mg/dL), with the target adapted to comorbidities, while episodes of hypoglycaemia should be avoided.	IIa	C	
Less stringent glucose control should be considered both in the acute phase and at follow-up in patients with more advanced cardiovascular disease, older age, longer diabetes duration and more comorbidities.	IIa	C	

Terapia della SCA

Terapia antiaggregante

Diabetes and Antiplatelet Therapy in Acute Coronary Syndrome

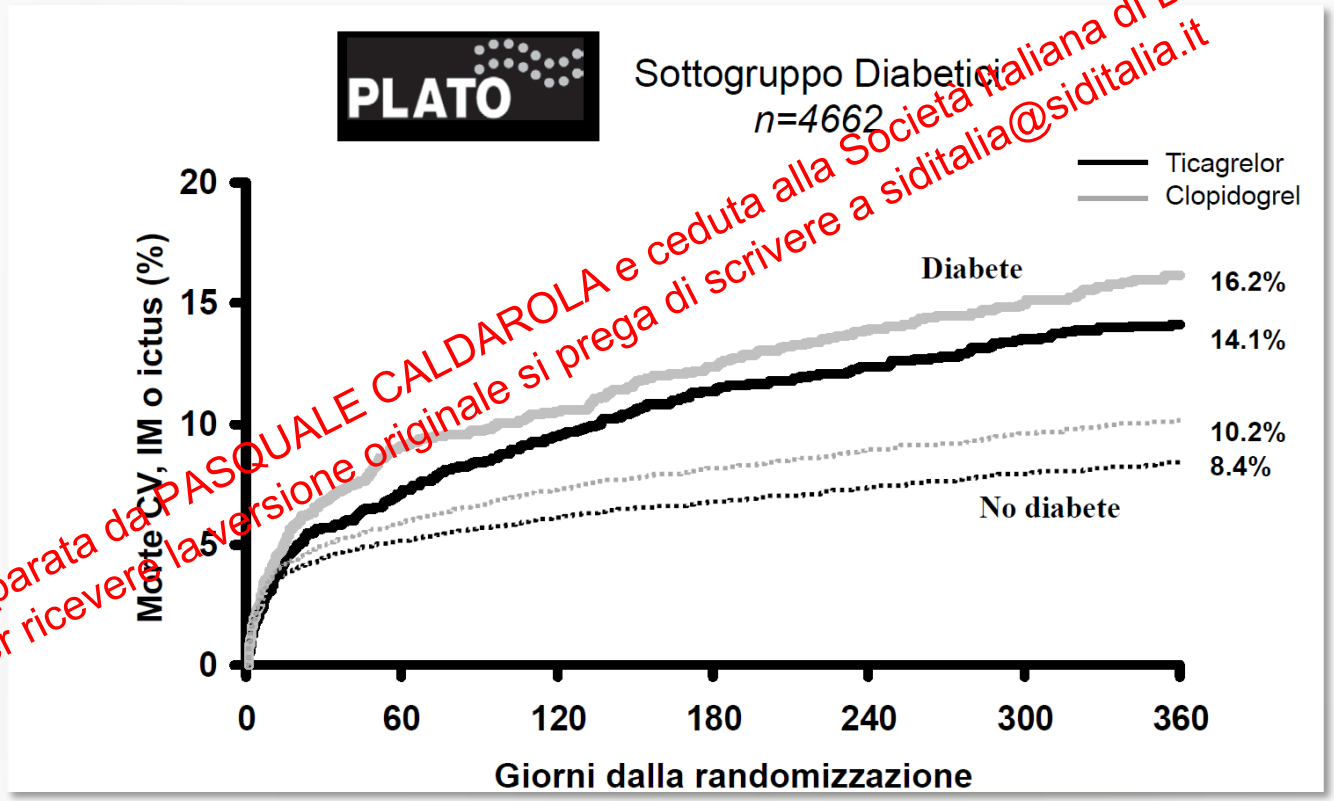
José Luis Ferreiro, MD; Dominick J. Angiolillo, MD, PhD

Table. Large-Scale Randomized Placebo-Controlled Clinical Trials Evaluating the Efficacy of Dual Antiplatelet Therapy With Aspirin and Clopidogrel Versus Aspirin Alone in ACS/PCI Patients in the Overall Study Population and in DM Patients

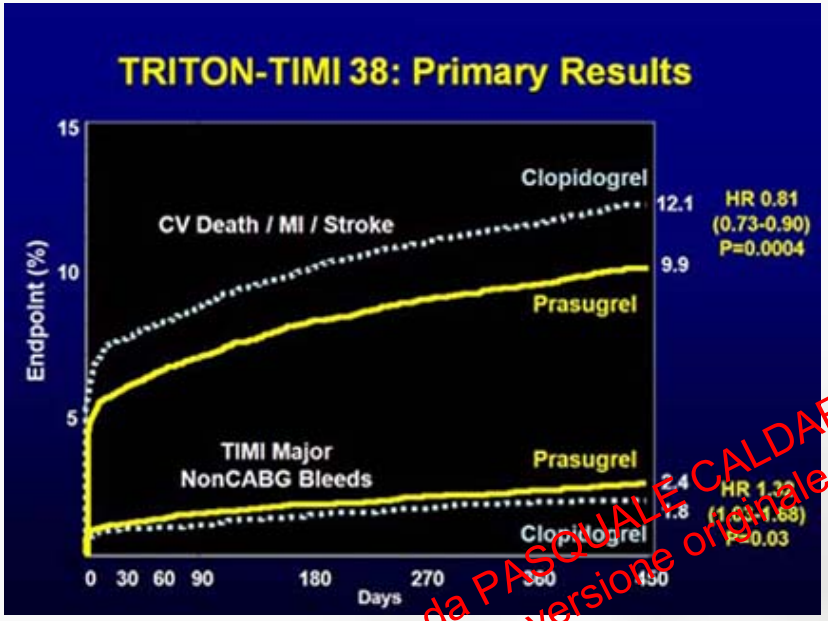
Study	n (Overall)	Scenario	Primary End Point	% of Events and Association Measure in the Overall Population	n (DM)	% of Events and Association Measure in DM
CURE[7]	12 562	UA/NSTEMI	Cardiovascular death, nonfatal MI or stroke at 1 y	9.3 vs 11.4	2840	14.2 vs 16.7
RR (95% CI)				0.80 (0.72–0.90)		0.84 (0.70–1.02)
PCI-CURE[111]	2658	CURE patients undergoing PCI	Cardiovascular death, MI, or urgent TVR at 30 d	4.5 vs 6.4	504	12.9 vs 16.5
RR (95% CI)				0.70 (0.50–0.97)		0.77 (0.48–1.22)
CREDO[112]	2116	Elective PCI	Death, MI, or stroke at 1 y	8.5 vs 11.5	560	NR
RRR (95% CI), %				26.9 (3.9–44.4)		11.2 (−46.8–46.2)
COMMIT[113]	45 852	Acute MI (93% STEMI)	Death, reinfarction, or stroke at discharge or 28 d	9.2 vs 10.1	NR	NR
OR (95% CI)				0.91 (0.86–0.97)		
CLARITY[114]	3491	STEMI with fibrinolysis	Occluded infarct-related artery on angiography or death or recurrent MI before angiography	15.0 vs 21.7	575	NR
OR (95% CI)				0.64 (0.53–0.76)		
PCI-CLARITY[115]	1863	CLARITY patients undergoing PCI	Cardiovascular death, recurrent MI, or stroke at 30 d	3.6 vs 6.2	282	6.0 vs 10.1
OR (95% CI)				0.54 (0.35–0.85)		0.61 (0.24–1.53)

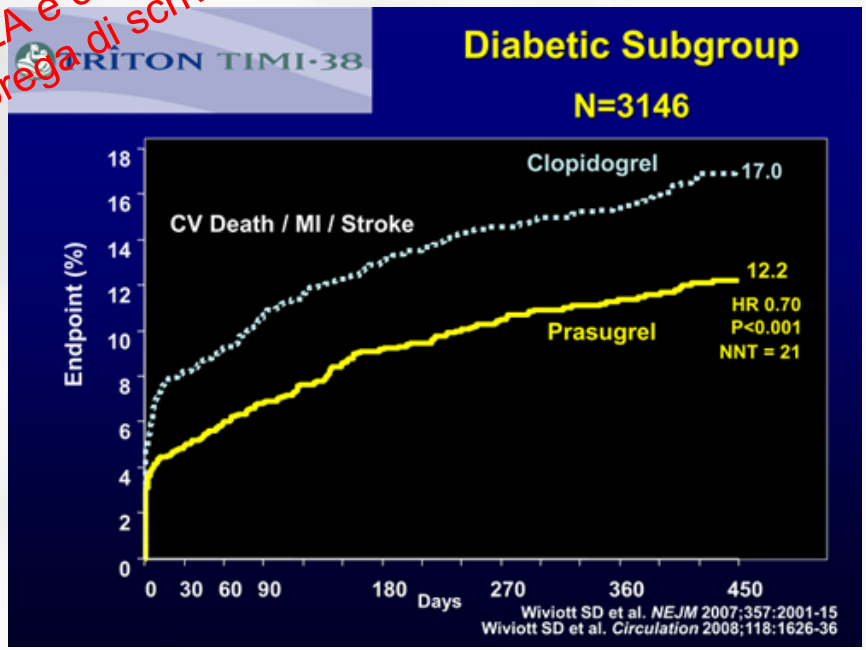
Circulation 2011; 123:798-813

Beneficiano di terapia antiaggregante più aggressiva



Beneficiano di terapia antiaggregante più aggressiva





Terapia della SCA

Strategia invasiva

Table 13 Risk criteria mandating invasive strategy in NSTE-ACS

Very-high-risk criteria
• Haemodynamic instability or cardiogenic shock
• Recurrent or ongoing chest pain refractory to medical treatment
• Life-threatening arrhythmias or cardiac arrest
• Mechanical complications of MI
• Acute heart failure
• Recurrent dynamic ST-T wave changes, particularly with intermittent ST-elevation
High-risk criteria
• Rise or fall in cardiac troponin compatible with MI
• Dynamic ST- or T-wave changes (symptomatic or silent)
• GRACE score >140
Intermediate-risk criteria
• Diabetes mellitus
• Renal insufficiency (eGFR <60 mL/min/1.73 m²)
• LVEF <40% or congestive heart failure
• Early post-infarction angina
• Prior PCI
• Prior CABG
• GRACE risk score >109 and <140
Low-risk criteria
• Any characteristics not mentioned above

for the management
ndromes in patients
ersistent ST-segment

An invasive strategy (<72 h) is recommended in patients with at least one of the following intermediate-risk criteria:

- diabetes mellitus
- renal insufficiency (eGFR <60 mL/min/1.73 m^2)
- LVEF $<40\%$ or congestive heart failure
- early post-infarction angina
- recent PCI
- prior CABG
- GRACE risk score >109 and <140,

or recurrent symptoms or known ischaemia on non-invasive testing.

I | A

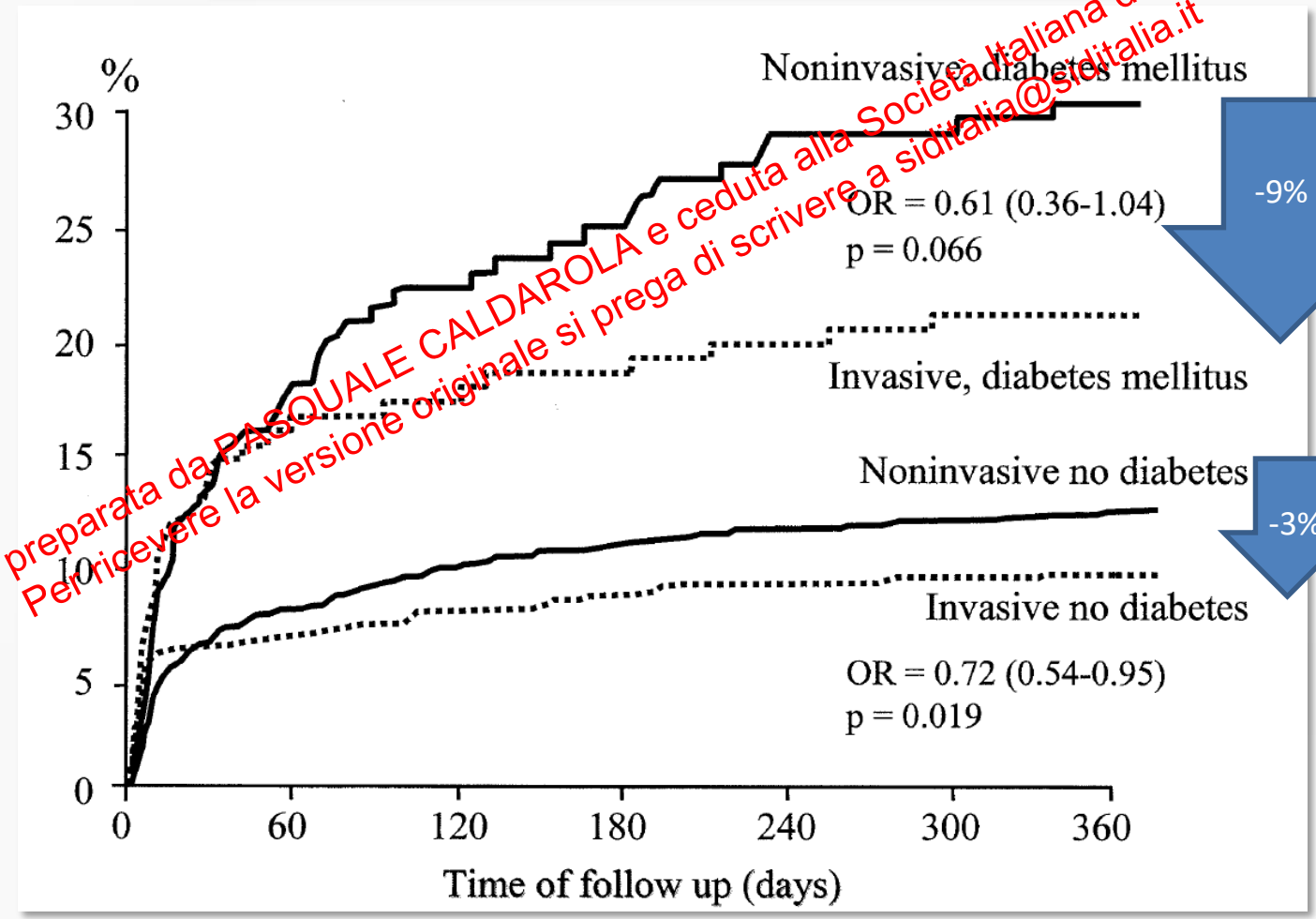
Journal of the American College of Cardiology
© 2004 by the American College of Cardiology Foundation
Published by Elsevier Inc.

Vol. 43, No. 4, 2004
ISSN 0735-1097/04/$30.00
doi:10.1016/j.jacc.2003.08.050

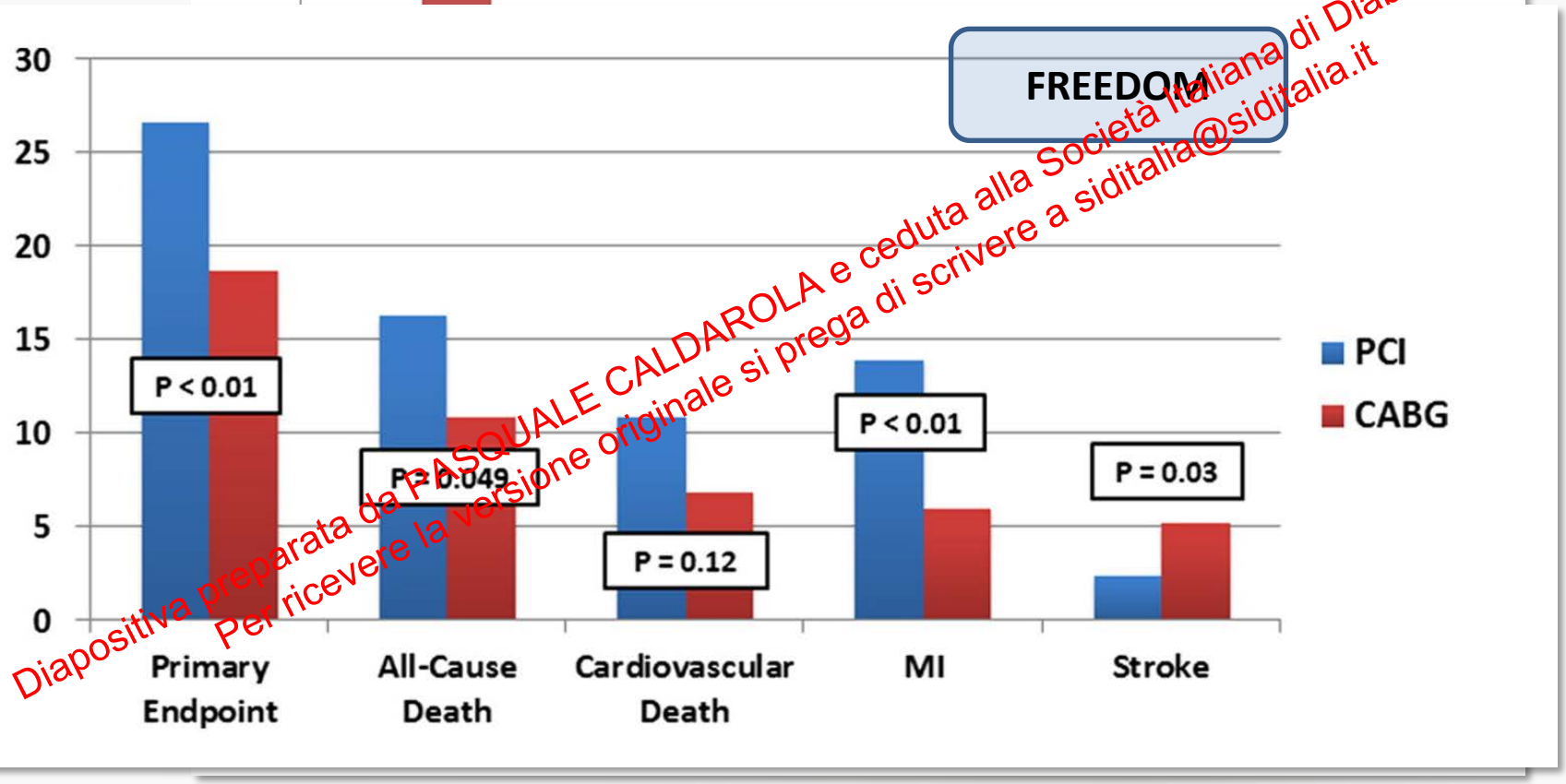
Diabetes Mellitus: The Major Risk Factor in Unstable Coronary Artery Disease Even After Consideration of the Extent of Coronary Artery Disease and Benefits of Revascularization

Anna Norhammar, MD, PHD,* Klas Malmberg, MD, PHD,* Erik Diderholm, MD, PHD,† Bo Lagerqvist, MD, PHD,† Bertil Lindahl, MD, PHD,† Lars Rydén, MD, PHD, FACC,* Lars Wallentin, MD, PHD†

Stockholm and Uppsala, Sweden

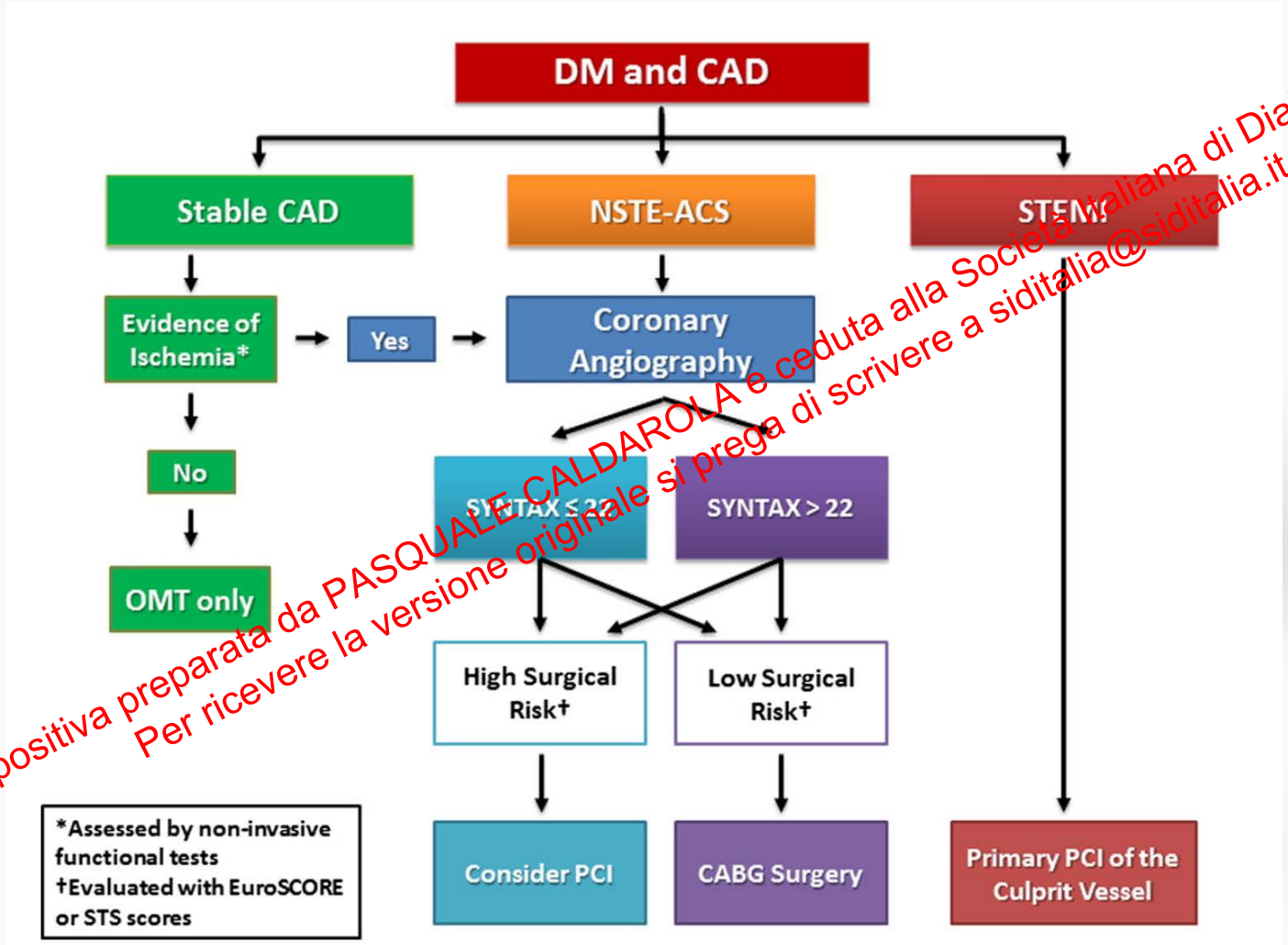


PCI vs CABG nei diabetici



Article *in* Progress in Cardiovascular Diseases · August 2015

PCI vs CABG nei diabetici



Article *in* Progress in Cardiovascular Diseases · August 2015

SYNTAX SCORE

Characterize lesions

SYNTAX SCORE

CARDIOLYSIS Boston Scientific

Score: 2 Dominance: right Current lesion: 1/1 Calculator version 2.0

		Lesion	1
	Segments:		
RCA	RCA proximal	1	
	RCA mid	2	v
	RCA distal	3	
	Posterior descending	4	
	Posterolateral from RCA	16	
	Posterolateral from RCA	16a	
	Posterolateral from RCA	16b	
	Posterolateral from RCA	16c	
LM	Left main	5	
LAD	LAD proximal	6	
	LAD mid	7	
	LAD apical	8	
	First diagonal	9	
	Add. first diagonal	9a	
	Second diagonal	10	
	Add. second diagonal	10a	
LCX	Proximal circumflex	11	
	Intermediate/anterolateral	12	
	Obtuse marginal	12a	
	Obtuse marginal	12b	
	Distal circumflex	13	
	Left posterolateral	14	
	Left posterolateral	14a	
	Left posterolateral	14b	

Please fill in the following variables :

4. Total occlusion (TO)
a. No
b. Yes

5. Trifurcation
a. No
b. Yes

6. Bifurcation
a. No
b. Yes

8. Severe Tortuosity
a. No
b. Yes

9. Length >20 mm
a. No
b. Yes

10. Heavy calcification
a. No
b. Yes

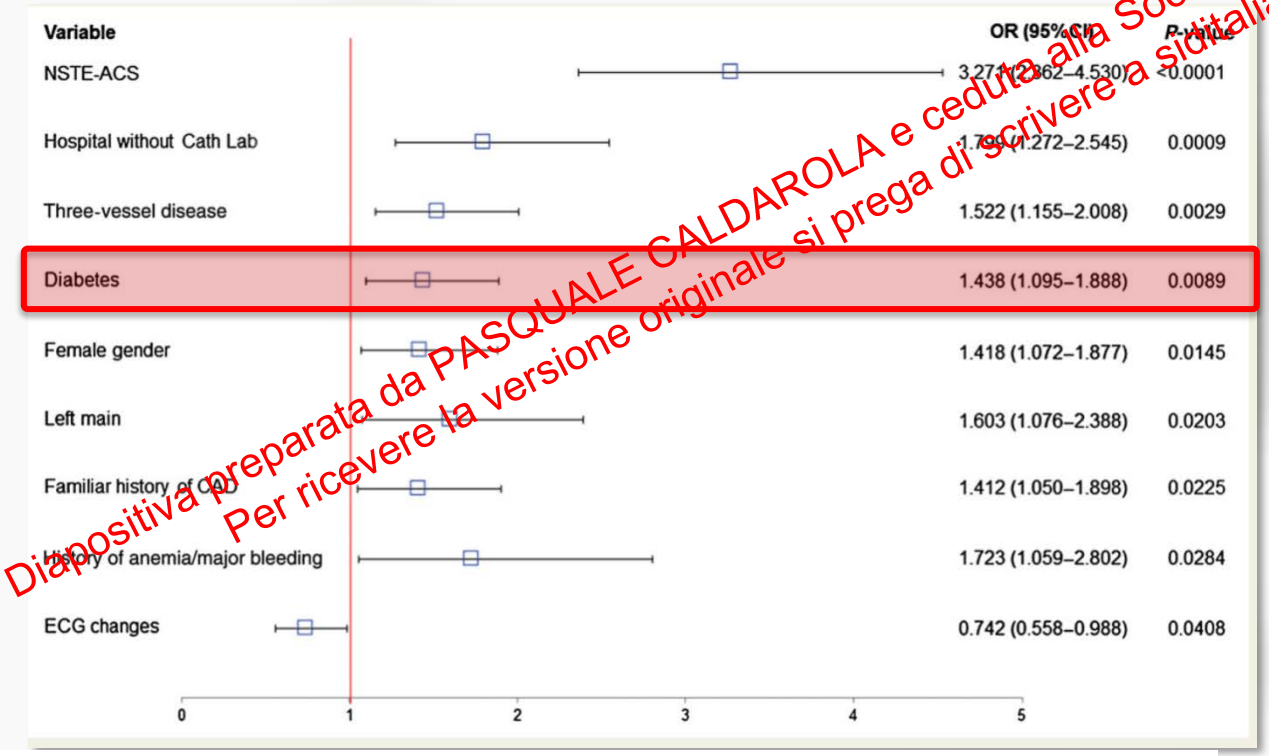
11. Thrombus
a. No
b. Yes

Comment

continue

EYESHOT REGISTRY: rivascolarizzazione incompleta

Oltre 2500 SCA
1/3 non effettuano procedure di rivascolarizzazione



European Heart Journal – Cardiovascular Pharmacotherapy (2015) **1**, 168–178

Terapia nel paziente con CAD:

Raggiungimento dei target

European Heart Journal (2016) **37**, 2315–2381
doi:10.1093/eurheartj/ehw106

JOINT ESC GUIDELINES

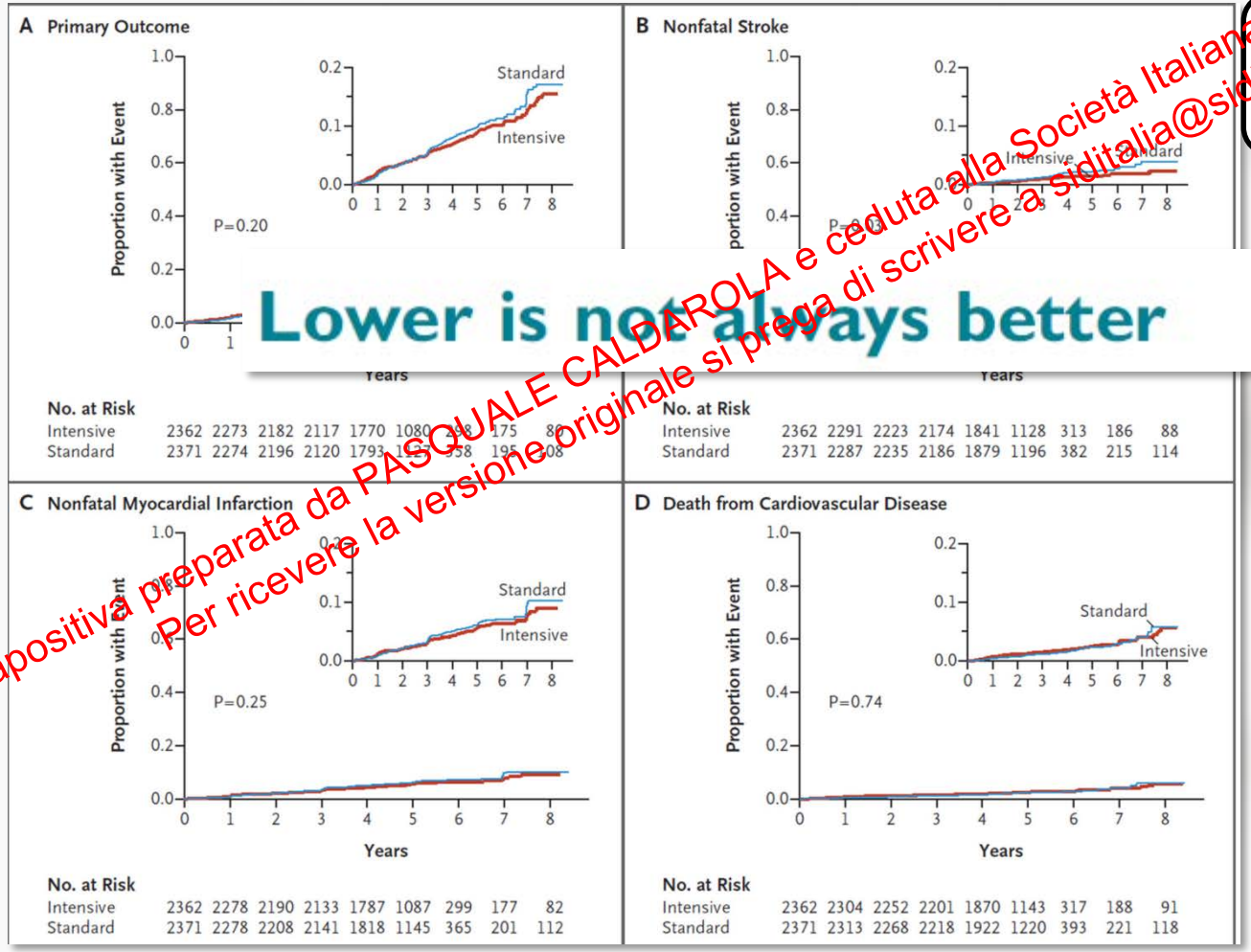
2016 European Guidelines on cardiovascular disease prevention in clinical practice

Lipid lowering agents (principally statins) are recommended to reduce CV risk in all patients with type 2 or type 1 DM above the age of 40 years.	I	A	371, 372
Lipid lowering agents (principally statins) may be considered also in individuals below 40 years of age if at significantly elevated risk, based on the presence of micro-vascular complications or of multiple CV risk factors.	IIb	A	371, 372
In DM patients at very high-risk (see table 5), a LDL-C target <1.8 mmol/L (<70 mg/dL), or a reduction of at least 50% if the baseline LDL-C is between 1.8 and 3.5 mmol/L (70 and 135 mg/dL), is recommended.[d] In DM patients with high-risk (see table 5), LDL-C target <2.6 mmol/L (<100mg/dL) or a reduction of at least 50% if the baseline LDL-C is between 2.6 and 5.1 mmol/L (100 and 200 mg/dL) is recommended.[d]	I	B	395
BP targets in type 2 DM are generally recommended to be <140/85 mmHg, but a lower target of <130/80 mmHg is recommended in selected patients (e.g. younger patients at elevated risk for specific complications) for additional gains on stroke, retinopathy and albuminuria risk. Renin-angiotensin-aldosterone system blocker is recommended in the treatment of hypertension in DM, particularly in the presence of proteinuria or micro- albuminuria. Recommended BP target in patients with type 1 DM is <130/80 mmHg.	I	B	396, 397
The use of drugs that increase HDL-C to prevent CVD in type 2 DM is not recommended.	III	A	386
Antiplatelet therapy (e.g. with aspirin) is not recommended for people with DM who do not have CVD.	III	A	398

Published in final edited form as:
N Engl J Med. 2010 April 29; 362(17): 1575–1585. doi:10.1056/NEJMoa1001286.

Effects of Intensive Blood-Pressure Control in Type 2 Diabetes Mellitus

The ACCORD Study Group*



Lower is not always better

4733 zp diabetici

European Heart Journal (2016) 37, 2315–2381
doi:10.1093/eurheartj/ehw106

JOINT ESC GUIDELINES

2016 European Guidelines on cardiovascular disease prevention in clinical practice

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The use of drugs that increase HDL-C to prevent CVD in type 2 DM is not recommended.	III	A	386
Antiplatelet therapy (e.g. with aspirin) is not recommended for people with DM who do not have CVD.	III	A	398

Linee guida ESC 2016 sulle dislipidemie

Table 11 Recommendations for treatment goals for low-density lipoprotein-cholesterol

Recommendations	Class[a]	Level[b]	Ref[c]
In patients at VERY HIGH CV risk[d], an LDL-C goal of <1.8 mmol/L (70 mg/dL) or a reduction of at least 50% if the baseline LDL-C[e] is between 1.8 and 3.5 mmol/L (70 and 135 mg/dL) is recommended.	I	B	61, 62, 65, 68, 69, 128
In patients at HIGH CV risk[d], an LDL-C goal of <2.6 mmol/L (100 mg/dL), or a reduction of at least 50% if the baseline LDL-C[e] is between 2.6 and 5.2 mmol/L (100 and 200 mg/dL) is recommended.	I	B	65, 129
In subjects at LOW or MODERATE risk[d] an LDL-C goal of <3.0 mmol/L (<115 mg/dL) should be considered.	IIa	C	-

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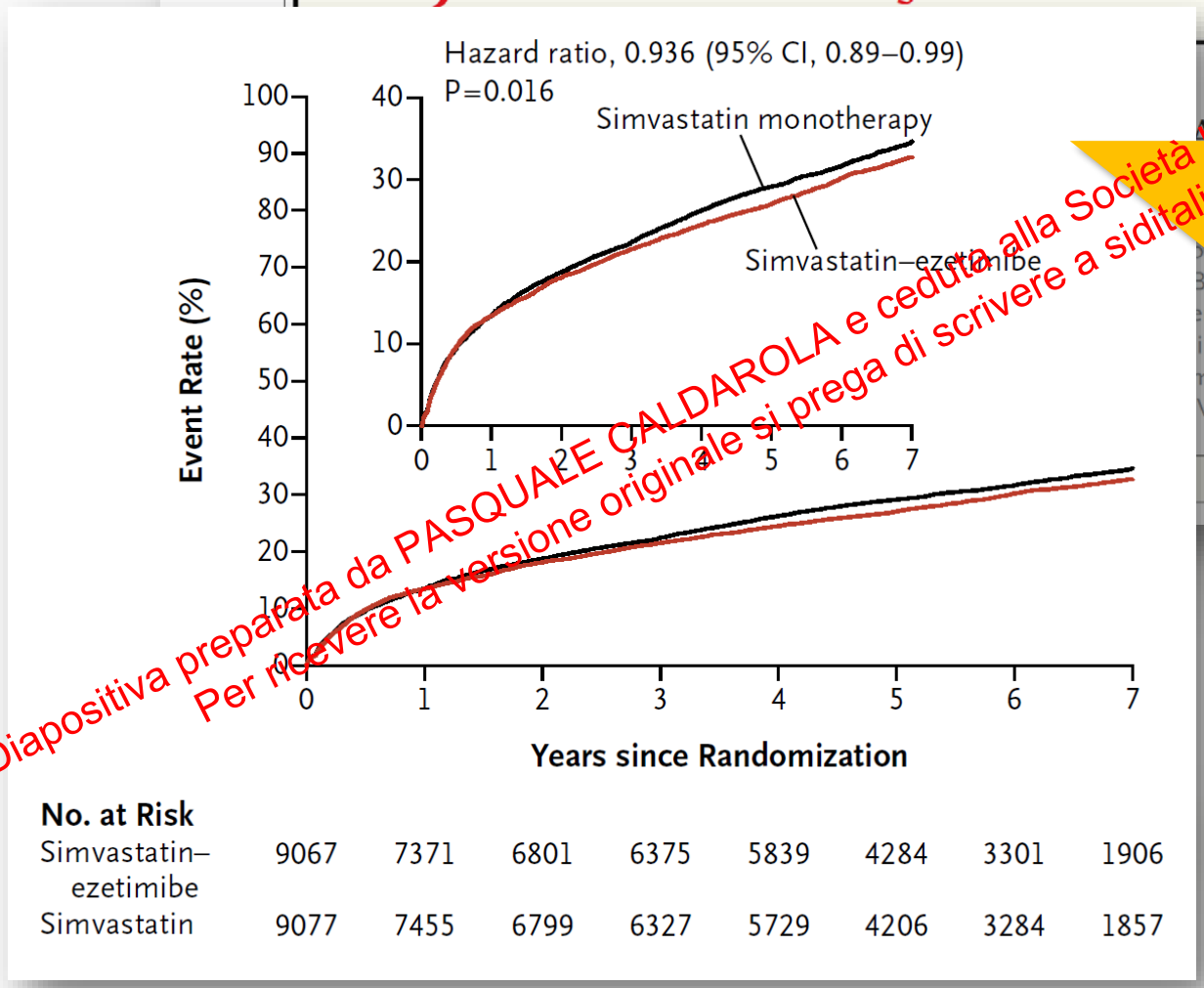
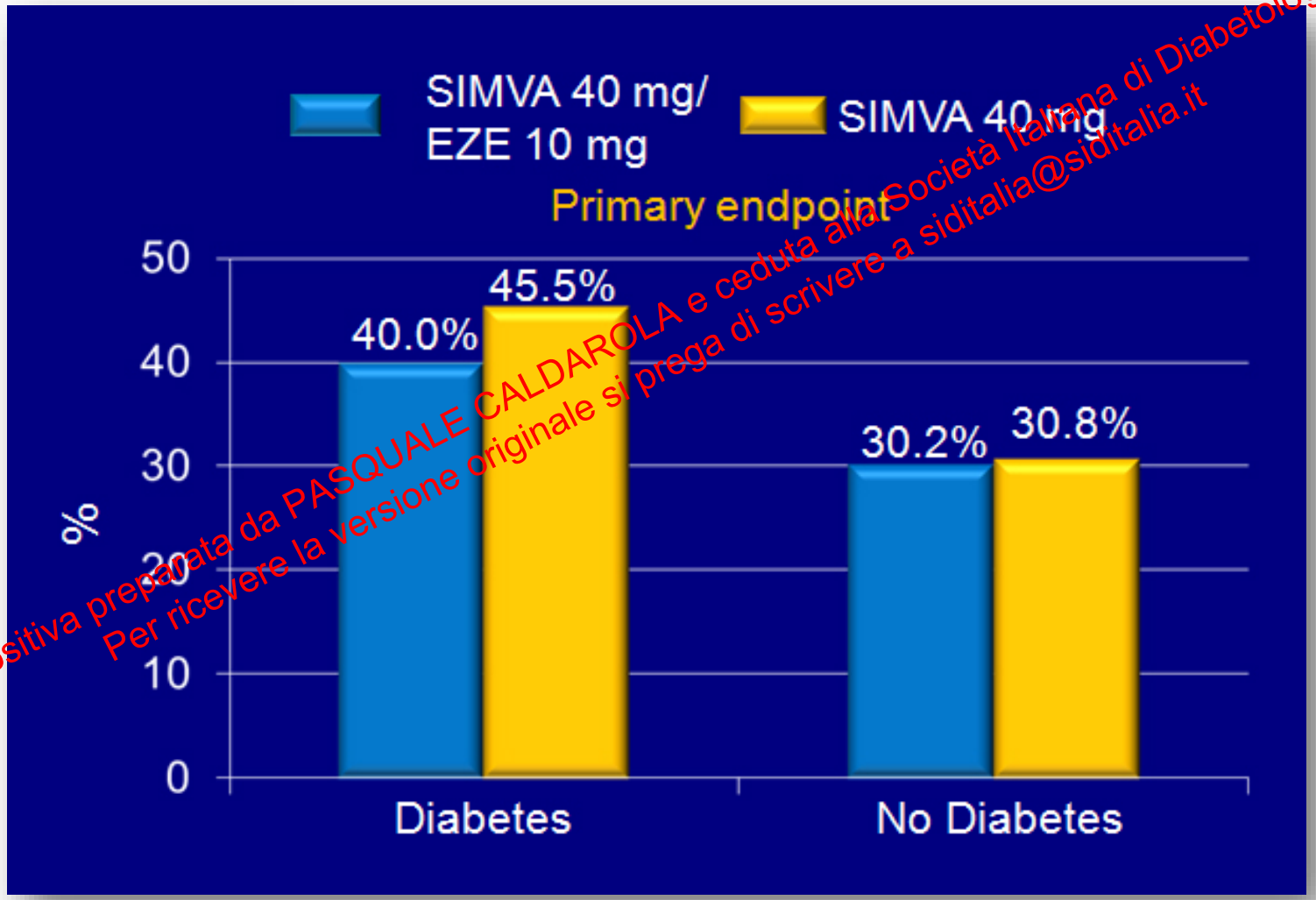


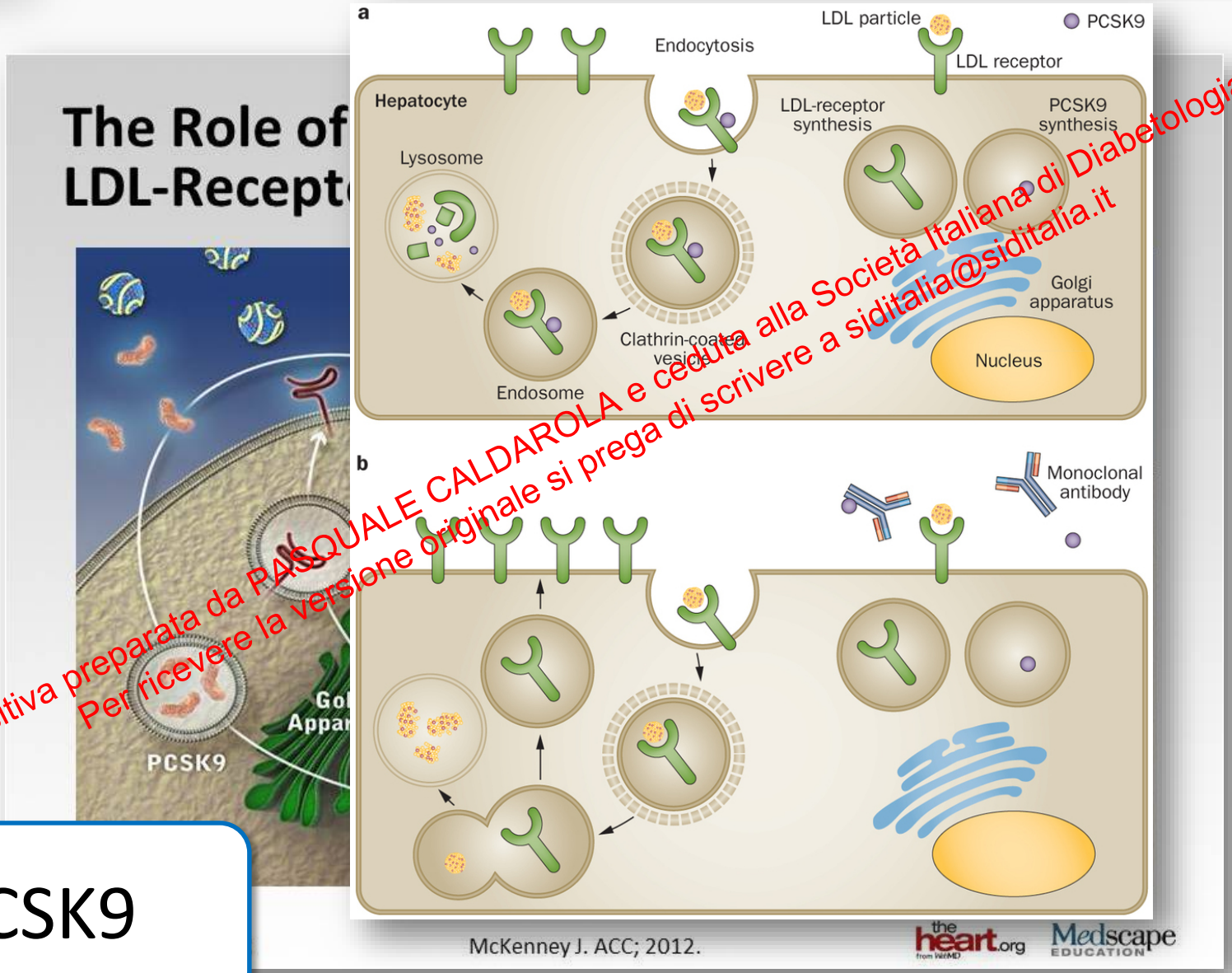
RRR - 6.4%
NNT 50

7-year event rates

Even lower even better!



Proprotein convertase subtilisin/kexin type 9



PCSK9

Nature Reviews Cardiology 11, 563–575 (2014)

ASLBA

RRR -20 %

RRR -15 %

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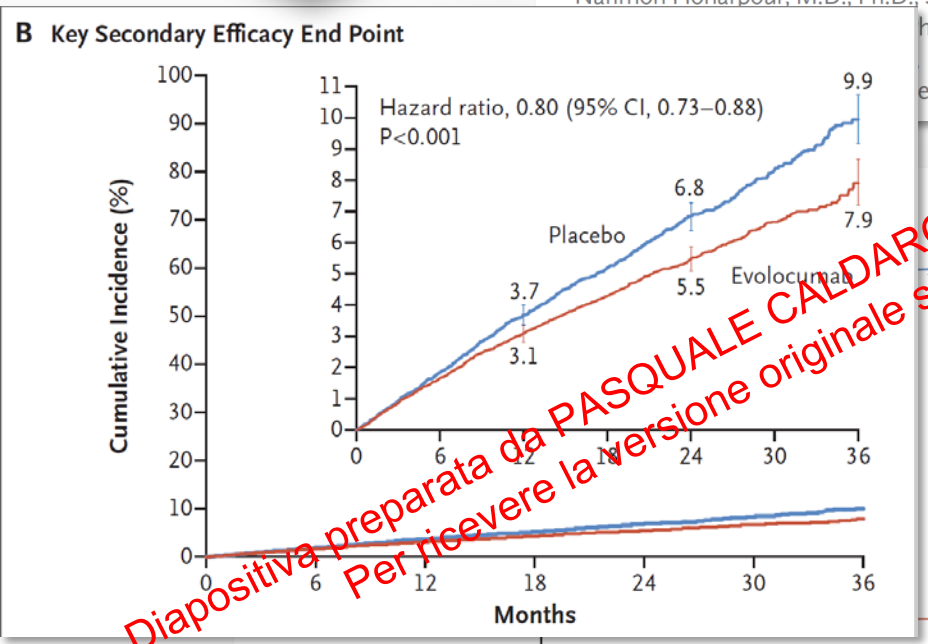
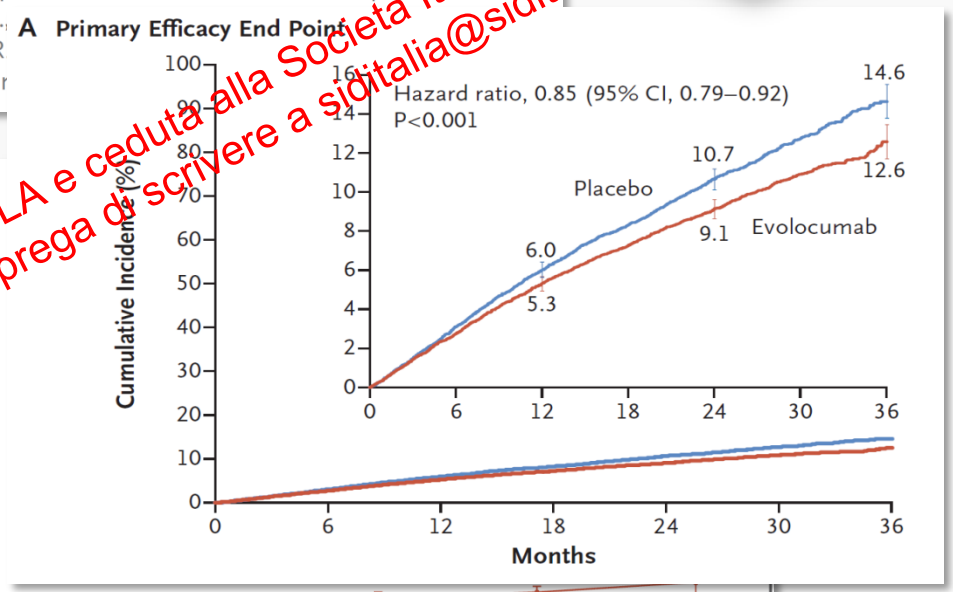
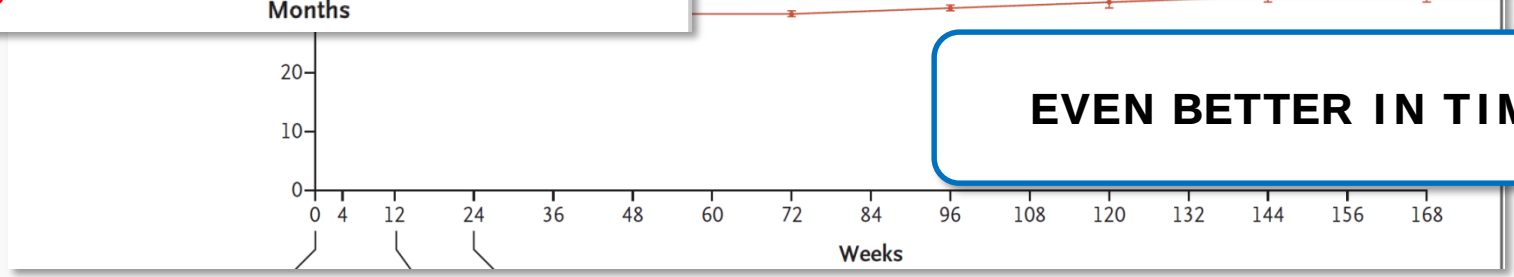
ORIGINAL ARTICLE

Evolocumab and Clinical Outcomes in Patients with Cardiovascular Disease

Marc S. Sabatine, M.D., M.P.H., Robert P. Giugliano, M.D., Anthony C. Keech, M.D.,
Narimon Honarpour, M.D., Ph.D., Stephen D. Wiviott, M.D., Sabina A. Murphy, M.P.H.,

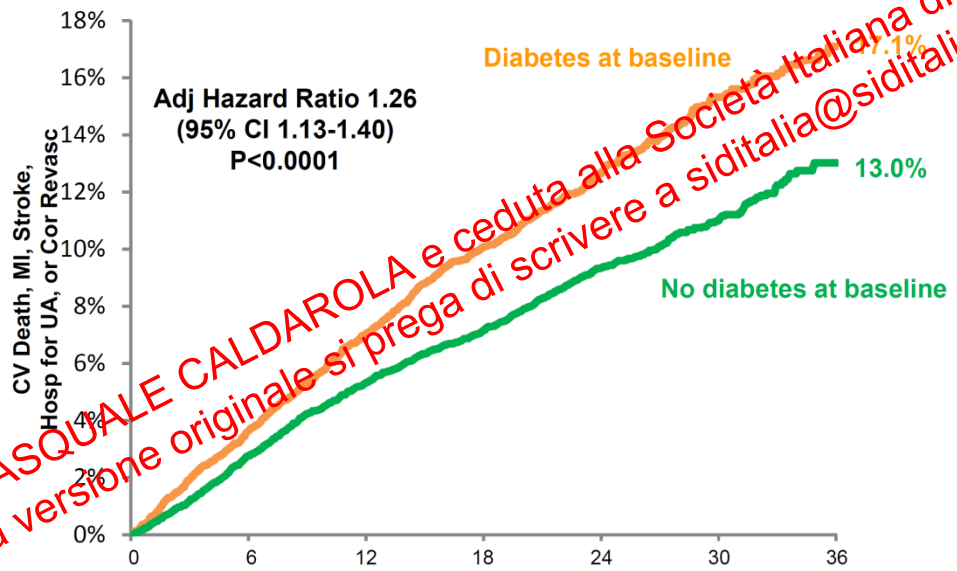






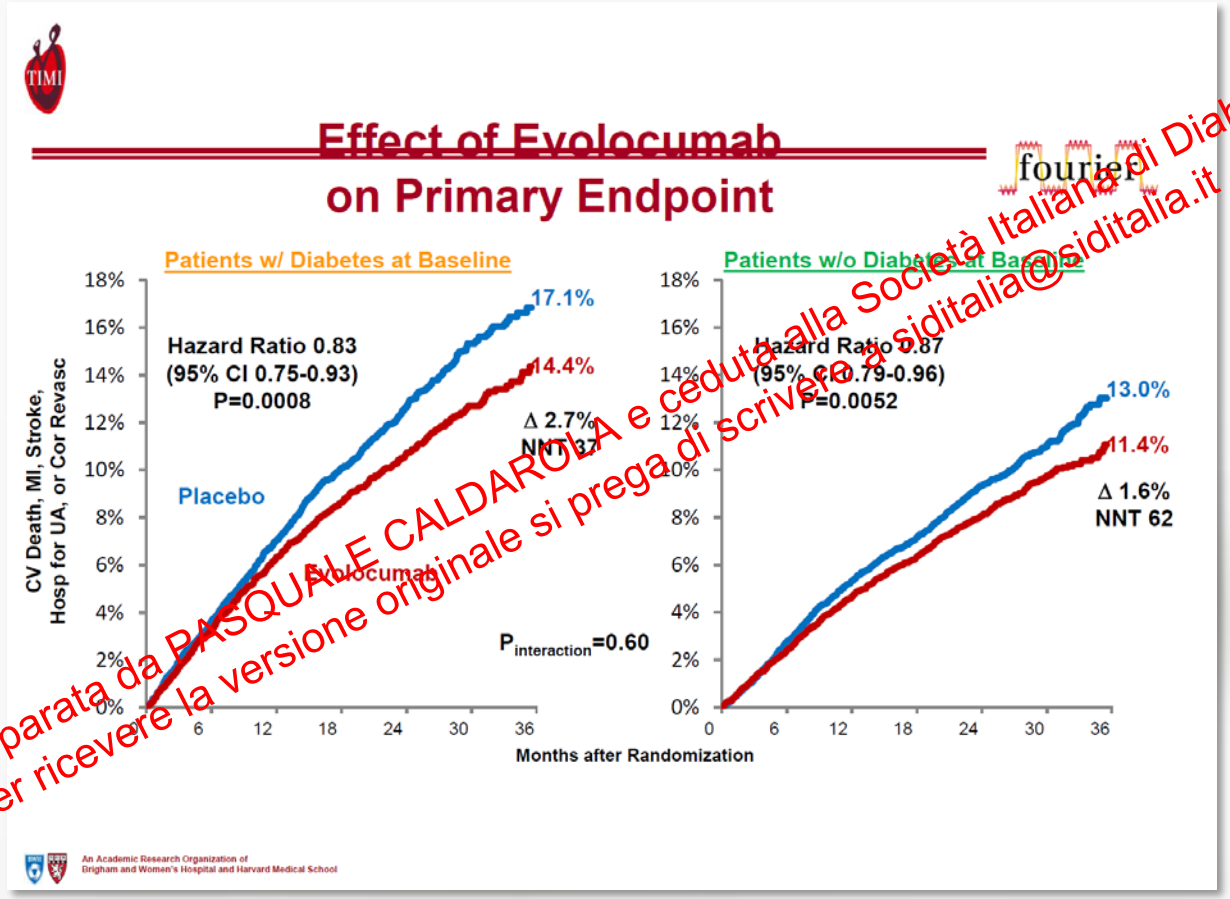
EVEN BETTER IN TIME

Risk of Primary Endpoint with Diabetes



Analyses in placebo arm and adj for age, sex, BMI, race, region, history of MI, stroke, PAD, HTN, smoking, HF, eGFR, lipids, statin.

An Academic Research Organization of
Brigham and Women's Hospital and Harvard Medical School



AACE 2017 Guidelines

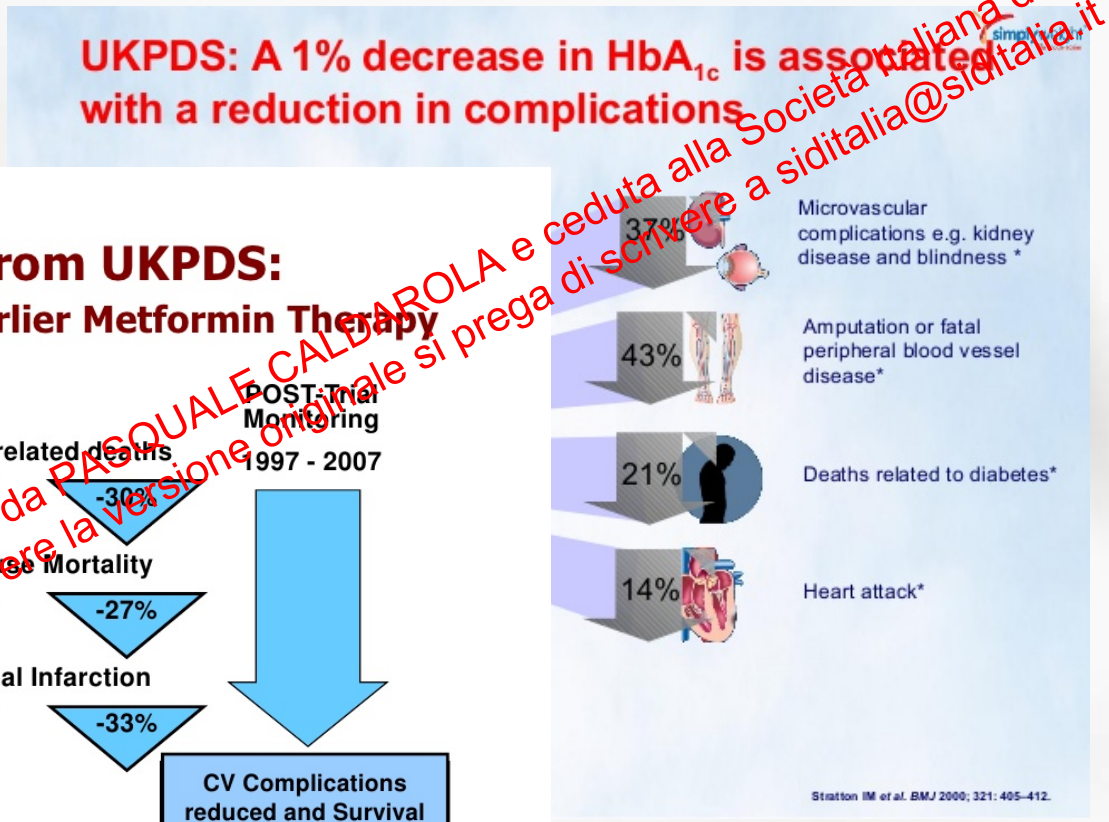
AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS AND AMERICAN COLLEGE OF ENDOCRINOLOGY GUIDELINES FOR MANAGEMENT OF DYSLIPIDEMIA AND PREVENTION OF CARDIOVASCULAR DISEASE

Paul S. Jellinger, MD, MACE, Chair[1]; Yehuda Handelsman MD, FACP, FACE, FNLA, Co-Chair[2]; Paul D. Rosenblit, MD, PhD, FNLA, FACE[14]; Zachary T. Bloomgarden, MD, MACE[4]; Vivian A. Fonseca, MD, FACE[8]; Alan J. Garber, MD, PhD, FACE[9]; George Grunberger, MD, FACP, FACE[10]; Chris K. Guerin, MD, FNLA, FACE[11];

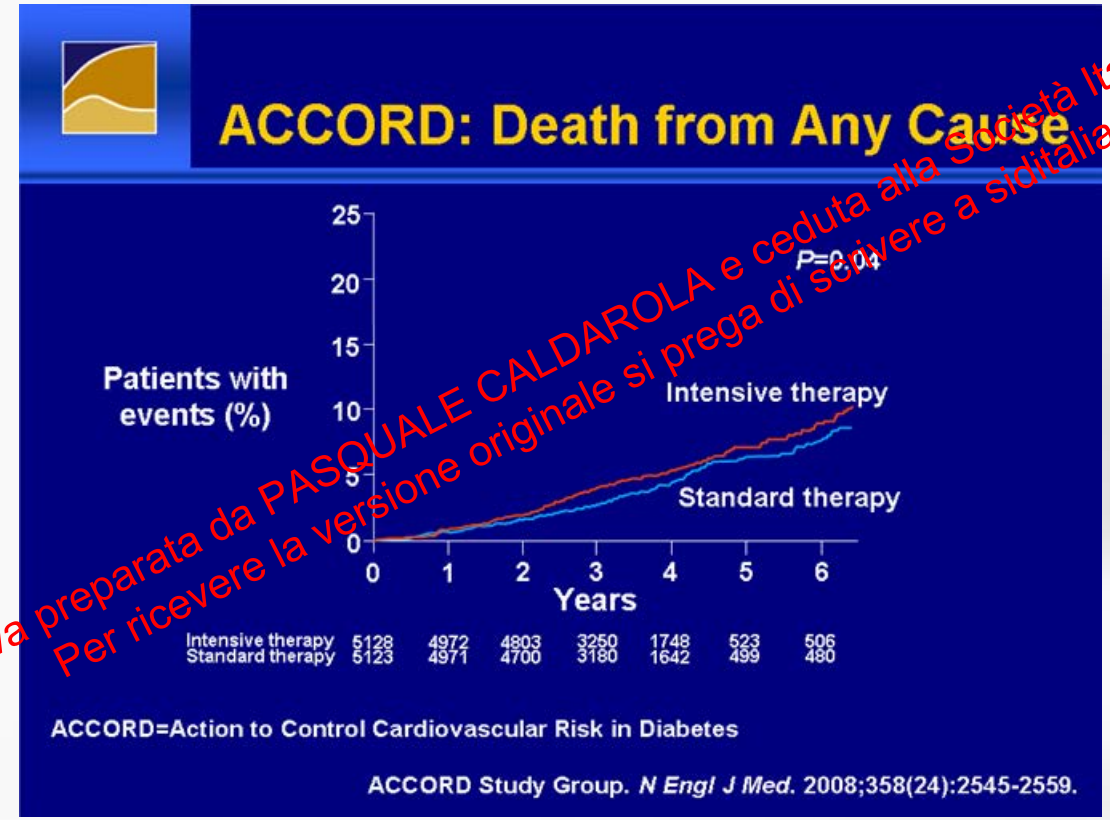
Table 6
Atherosclerotic Cardiovascular Disease Risk Categories and LDL-C Treatment Goals

Risk category	Risk factors[a]/10-year risk[b]	Treatment goals		
		LDL-C (mg/dL)	Non-HDL-C (mg/dL)	Apo B (mg/dL)
Extreme risk	– Progressive ASCVD including unstable angina in patients after achieving an LDL-C <70 mg/dL – Established clinical cardiovascular disease in patients with DM, CKD 3/4, or HeFH – History of premature ASCVD (<55 male, <65 female)	<55	<80	<70
Very high risk	– Established or recent hospitalization for ACS, coronary, carotid or peripheral vascular disease, 10-year risk >20% – Diabetes or CKD 3/4 with 1 or more risk factor(s) – HeFH	<70	<100	<80
High risk	– ≥2 risk factors and 10-year risk 10-20% – Diabetes or CKD 3/4 with no other risk factors	<100	<130	<90
Moderate risk	≤2 risk factors and 10-year risk <10%	<100	<130	<90
Low risk	0 risk factors	<130	<160	NR

Target HbA1c



La prognosi non migliora: ACCORD ADVANCE



ADAPT-DES

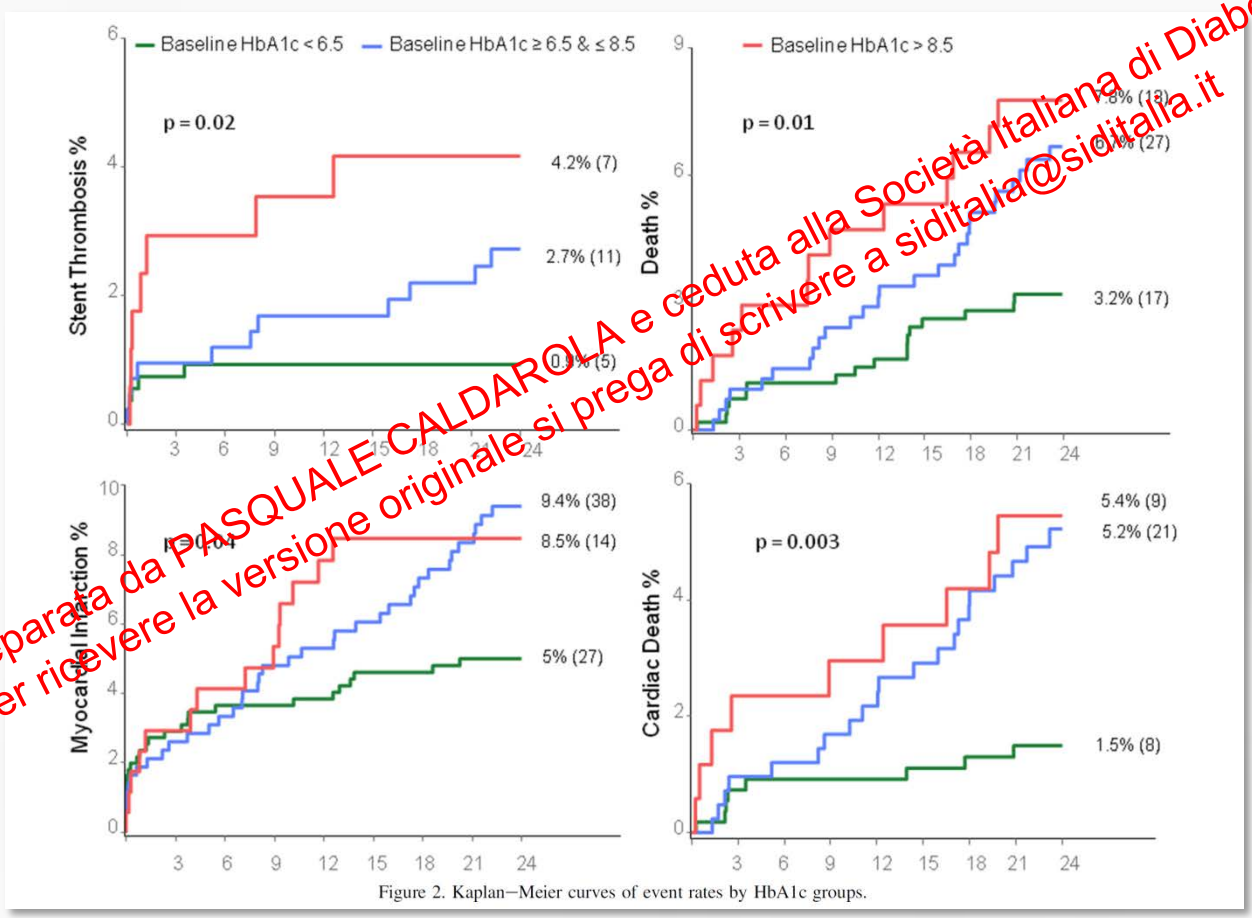


Figure 2. Kaplan–Meier curves of event rates by HbA1c groups.

Am J 2016; 117:192-200

European Heart Journal (2016) **37**, 2315–2381
doi:10.1093/eurheartj/ehw106

JOINT ESC GUIDELINES

2016 European Guidelines on cardiovascular disease prevention in clinical practice

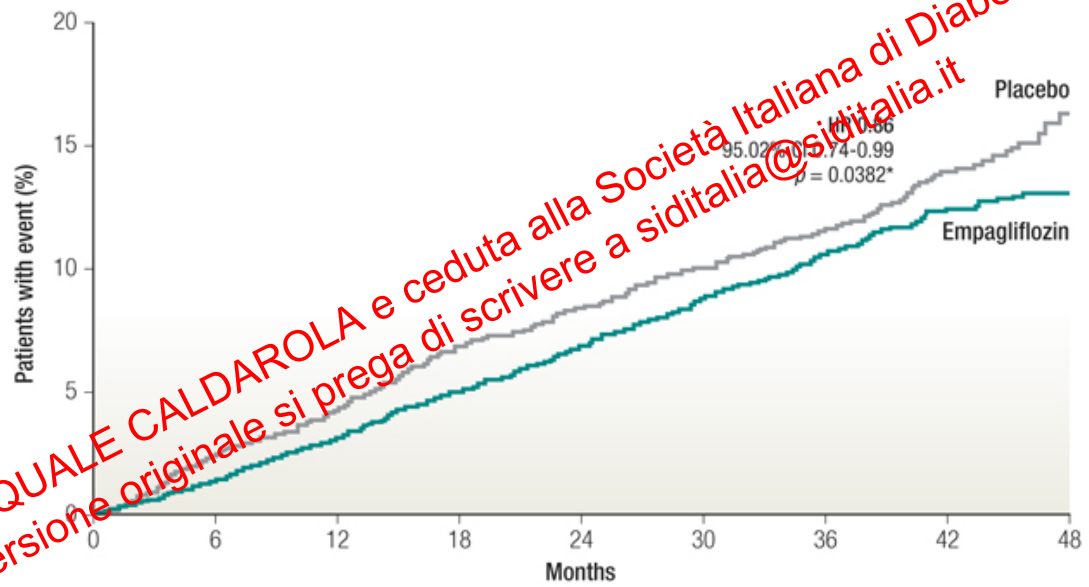
Recommendations for management of diabetes

Recommendations	Class[a]	Level[b]
Lifestyle changes including smoking cessation, low fat diet, high fibre diet, aerobic physical activity, and strength training are recommended.	I	A
Reduction in energy intake is recommended to patients to help achieve lower weight or prevent weight gain.	I	B
A target HbA1c for the reduction in risk of CVD and microvascular complications in DM of <7.0% (<53 mmol/mol) is recommended for the majority of non-pregnant adults with either type 1 or type 2 DM.	I	A
For patients with a long duration of DM, the elderly, frail, those with existing CVD, a relaxing of the HbA1c targets (i.e. less stringent) should be considered.	IIa	B
A target HbA1c of ≤6.5% (≤48 mmol/mol) should be considered at diagnosis or early in the course of type 2 DM in patients, who are not frail and do not have CVD.	IIa	B
When screening for DM in individuals with or without CVD, assessment of HbA1c (which can be done non-fasting) or fasting blood glucose should be considered. An oral glucose tolernce test can be offered when there is still doubt.	IIa	A
Metformin is recommended as first-line therapy, if tolerated and not contra-indicated, following evaluation of renal function.	I	B
Avoidance of hypoglycaemia and excessive weight gain should be considered and individual approaches (with respect to both treatment targets and drug choices) should be considered in patients with advanced disease.	IIa	B
In patients with type 2 DM and CVD, the use of an SGLT2 inhibitor should be considered early in the course of the disease to reduce CV and total mortality.	IIa	B

Riduzione eventi CV: EMPA-REG

FIGURE 1

Cumulative Incidence of Nonfatal MI, Nonfatal Stroke, or CV Death with Empagliflozin or Placebo in the EMPA-REG OUTCOME Study (Primary Outcome)[10]



Number of patients:									
Empagliflozin	4,687	4,580	4,455	4,328	3,851	2,821	2,359	1,534	370
Placebo	2,333	2,256	2,194	2,112	1,875	1,380	1,161	741	166

Cumulative incidence function.
*Two-sided tests for superiority were conducted (statistical significance was indicated if $p \leq 0.0498$)

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

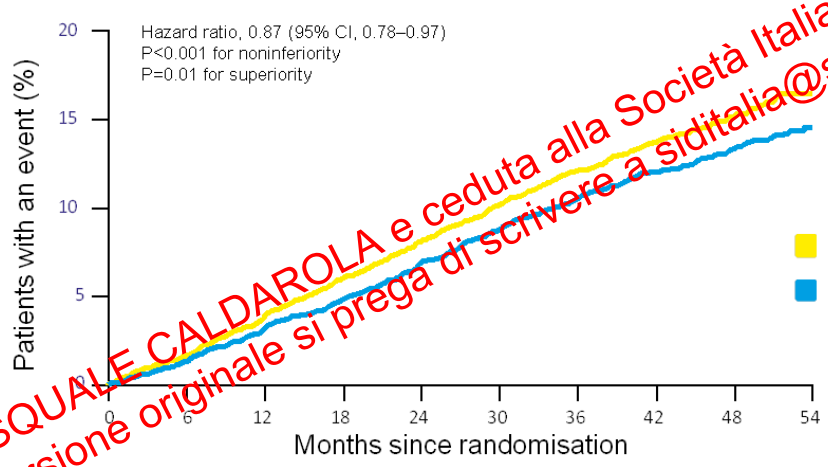
Empagliflozin, Cardiovascular Outcomes, and Mortality in Type 2 Diabetes

2015

Riduzione eventi CV: LEADER

LEADER trial: Primary Outcome

First occurrence of CV death, nonfatal myocardial infarction, or nonfatal stroke in the time-to-event analysis in patients with type 2 diabetes and high CV risk.

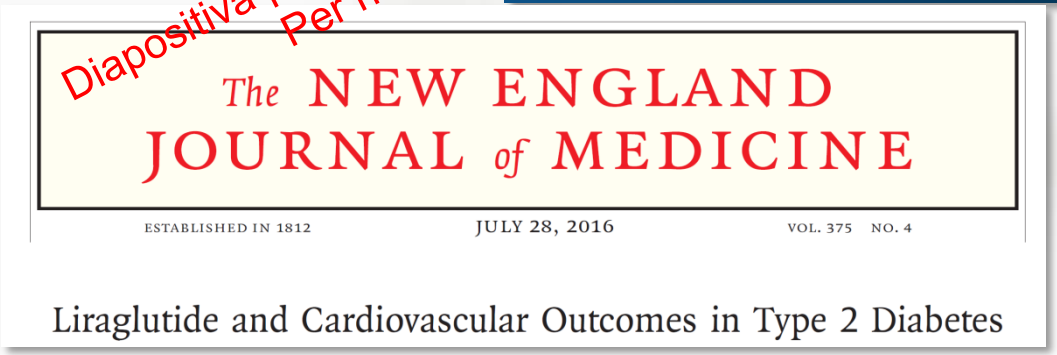


22%

Liraglutide Effect and Action in Diabetes: Evaluation of cardiovascular outcome Results (LEADER) trial

Adapted from: Marso SP *et al.*, NEJM 2016

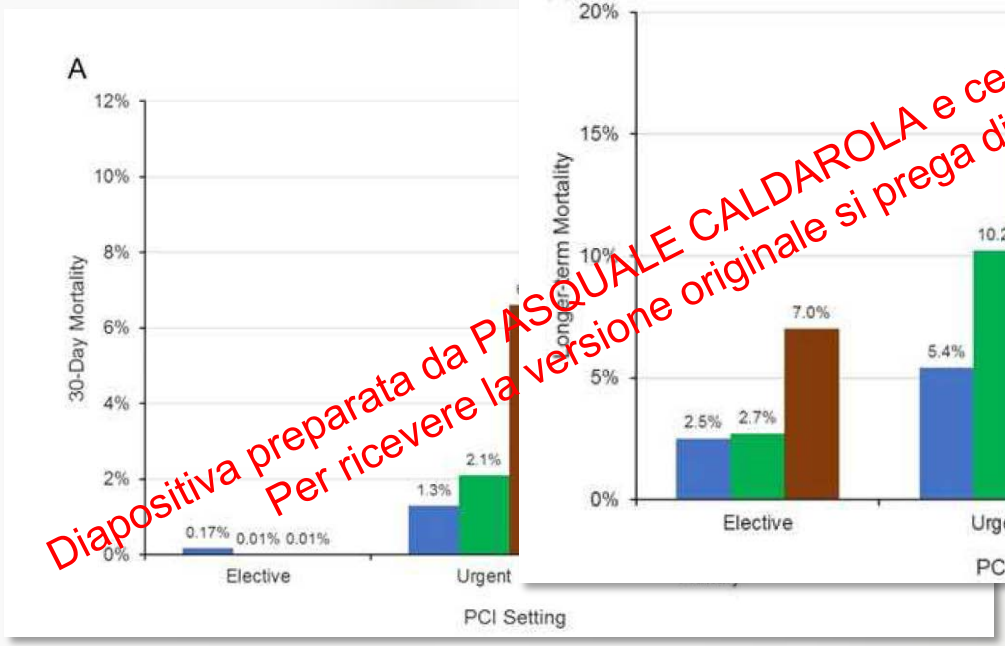
PACE-CME

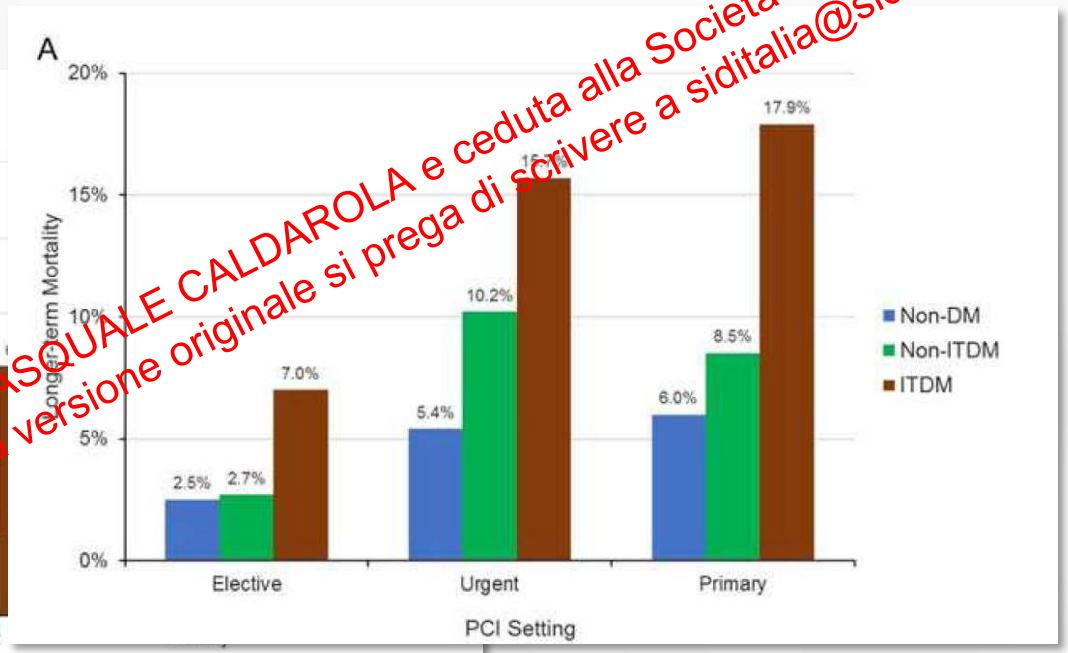


Catheterization and Cardiovascular Interventions 89:1195–1204 (2017)

Mortality After Percutaneous Coronary Revascularization: Prior Cardiovascular Risk Factor Control and Improved Outcomes in Patients with Diabetes Mellitus

Awsan Noman,[1] MD, Karthik Balasubramaniam,[2] MB, M. Hafez A. Alhous,[1] MBBS, Kelvin Lee,[3] PhD, Peter Jesudason,[3] MB, Muhammad Rashid,[5] MBBS, Mamas A. Mamas,[4,5] PhD, and Azfar G. Zaman,[2,3*] MD



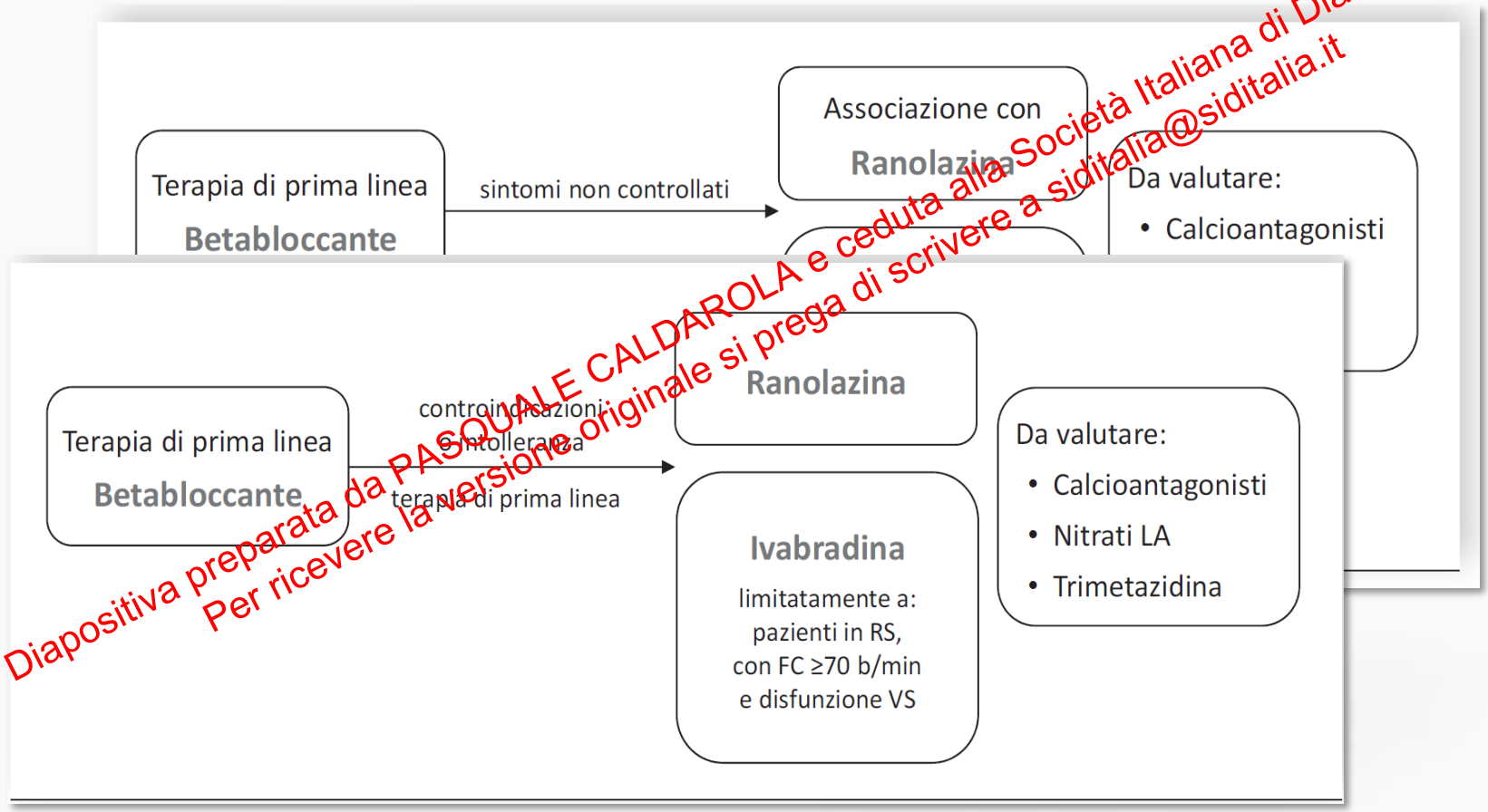


Terapia nel paziente con CAD:

Terapia antischemica

Documento di consenso ANMCO/GICR-IACPR/SICI-GISE: La gestione clinica del paziente con cardiopatia ischemica cronica

Carmine Riccio[1] (Coordinatore), Michele Massimo Gulizia[2] (Coordinatore), Furio Colivicchi[3] (Coordinatore), Andrea Di Lenarda[4] (Coordinatore), Giuseppe Musumeci[5], Pompilio Massimo Faggiano[6], Maurizio Giuseppe Abrignani[7], Roberta Rossini[5], Francesco Fattirolli[8], Serafina Valente[9], Gian Francesco Mureddu[10], Pier Luigi Temporelli[11], Zoran Olivari[12], Antonio Francesco Amico[13], Giancarlo Casolo[14], Claudio Fresco[15], Alberto Menozzi[16], Federico Nardi[17]



G Ital Cardiol 2016;17(7-8):529-569

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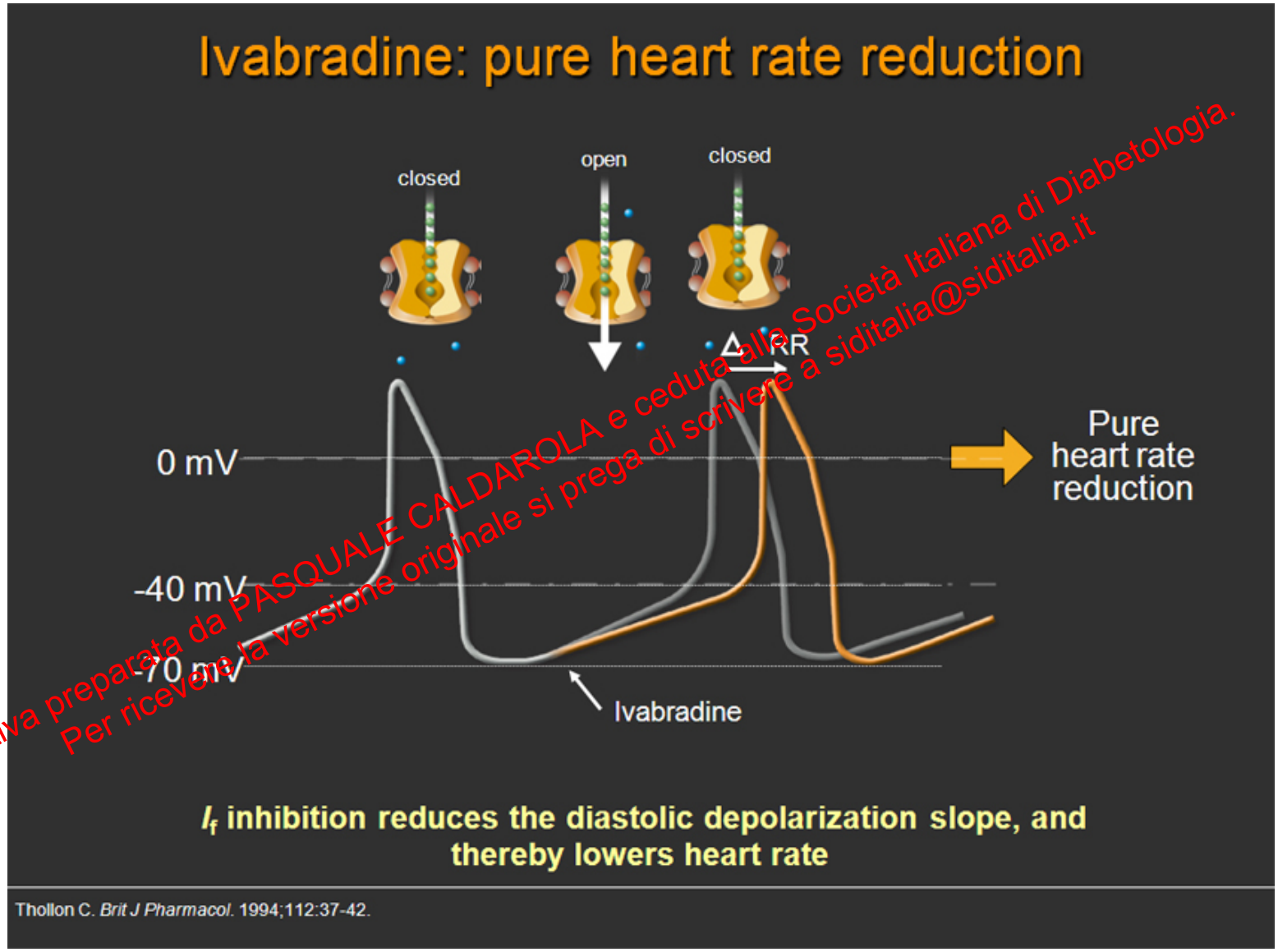
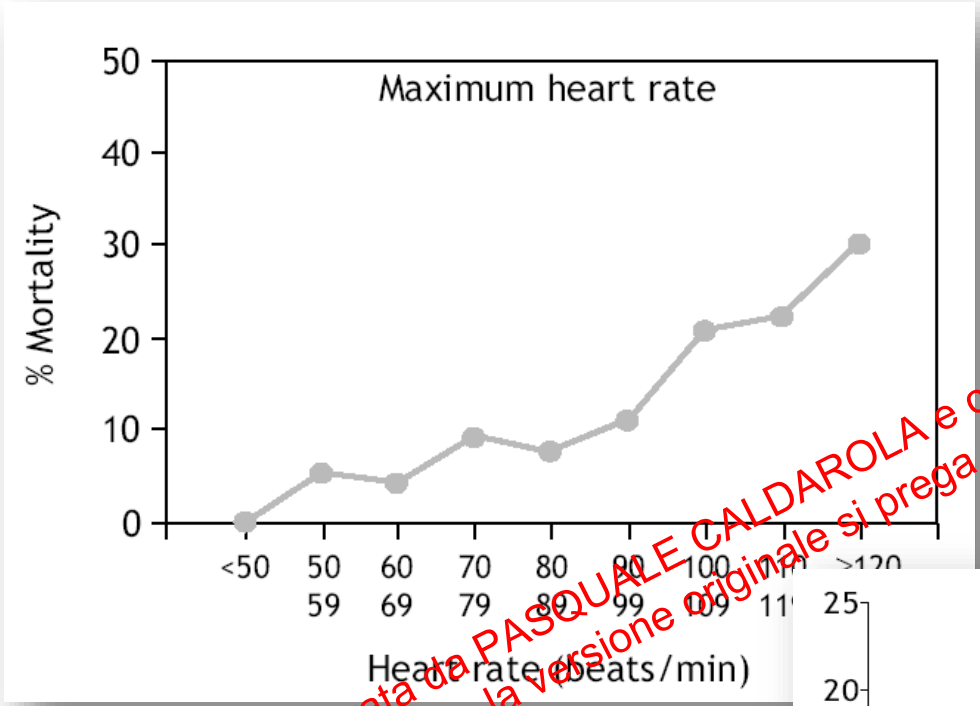
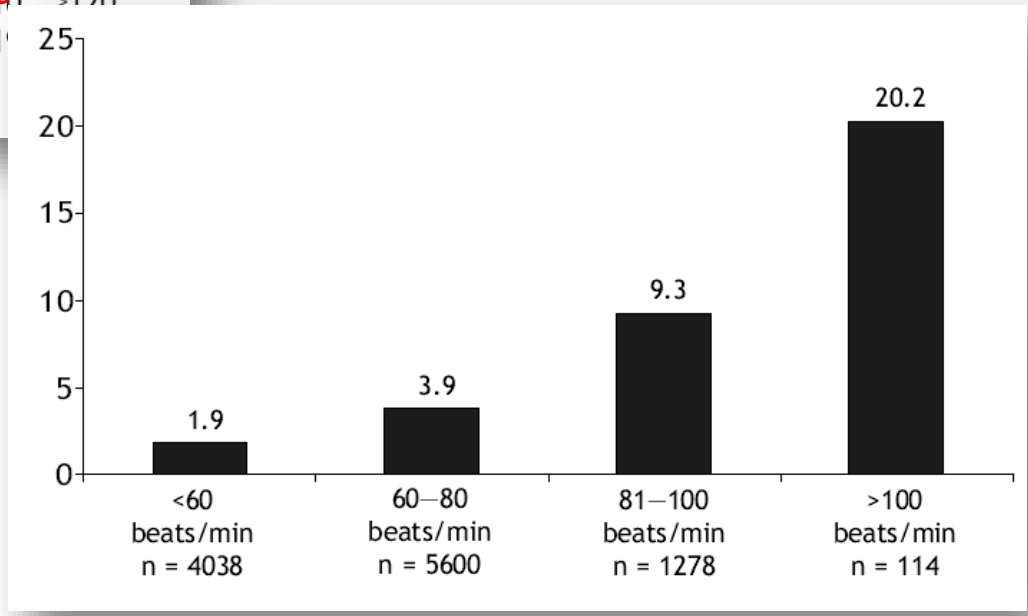


frequenza cardiaca in prevenzione secondaria

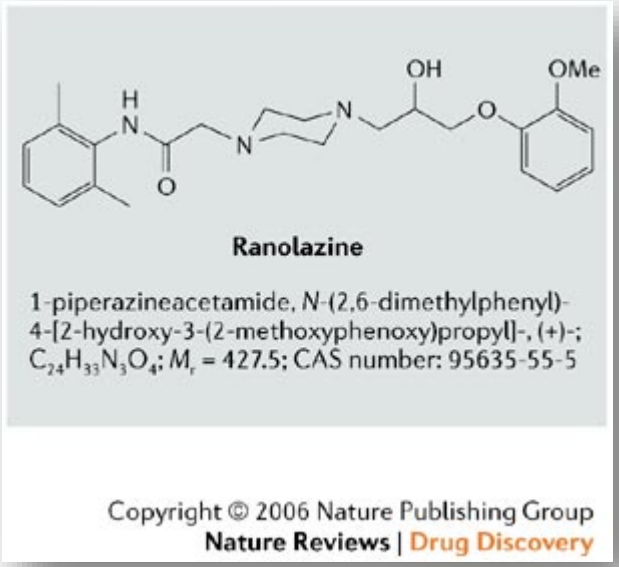


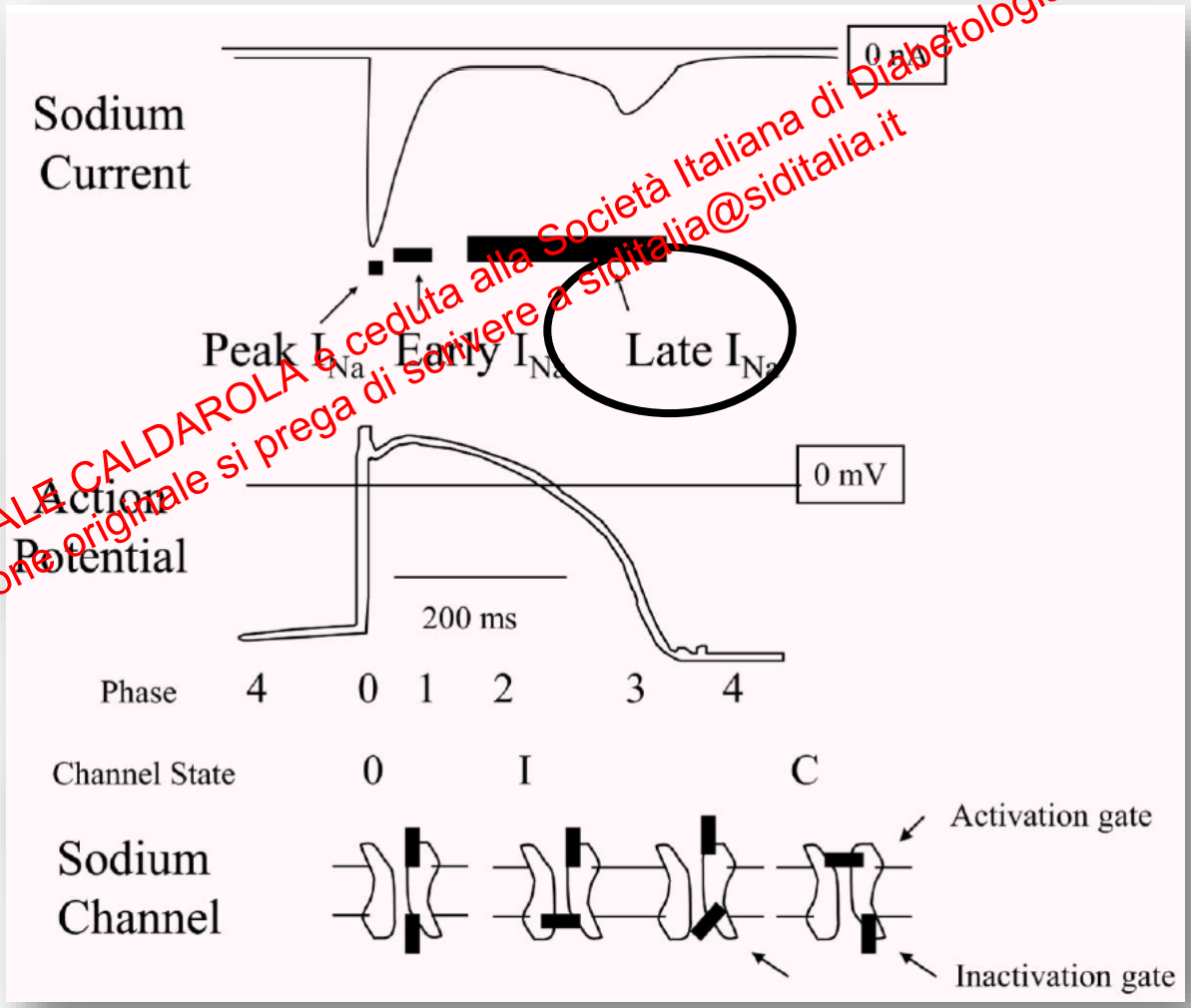
Hjalmarson et al., Am J Cardiol 65:547-553, 1990



Tavazzi, Eur Heart J 5 (suppl G): G15-G18, 2003

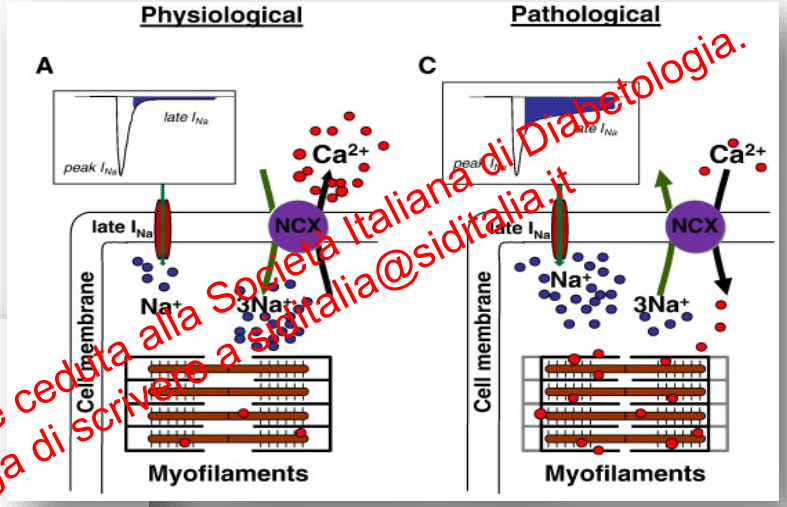
Bersaglio della Ranolazina: corrente del sodio

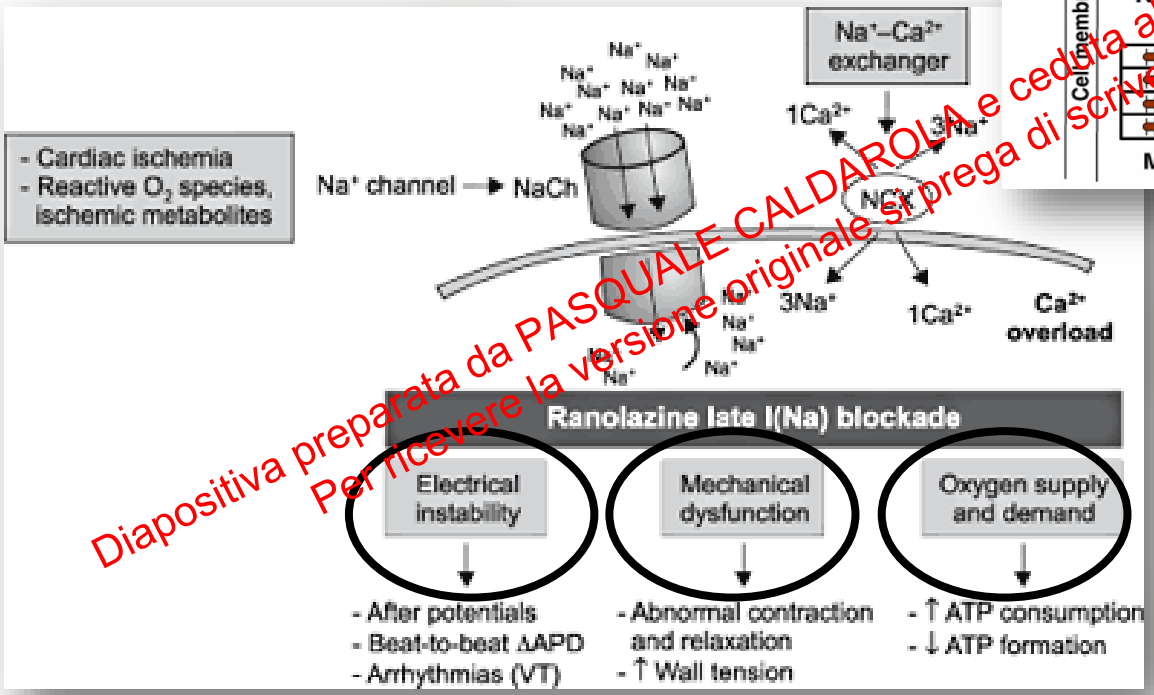




Pharm Ther 2012;133:311–323

Conseguenze dell' aumento correnti lente del sodio



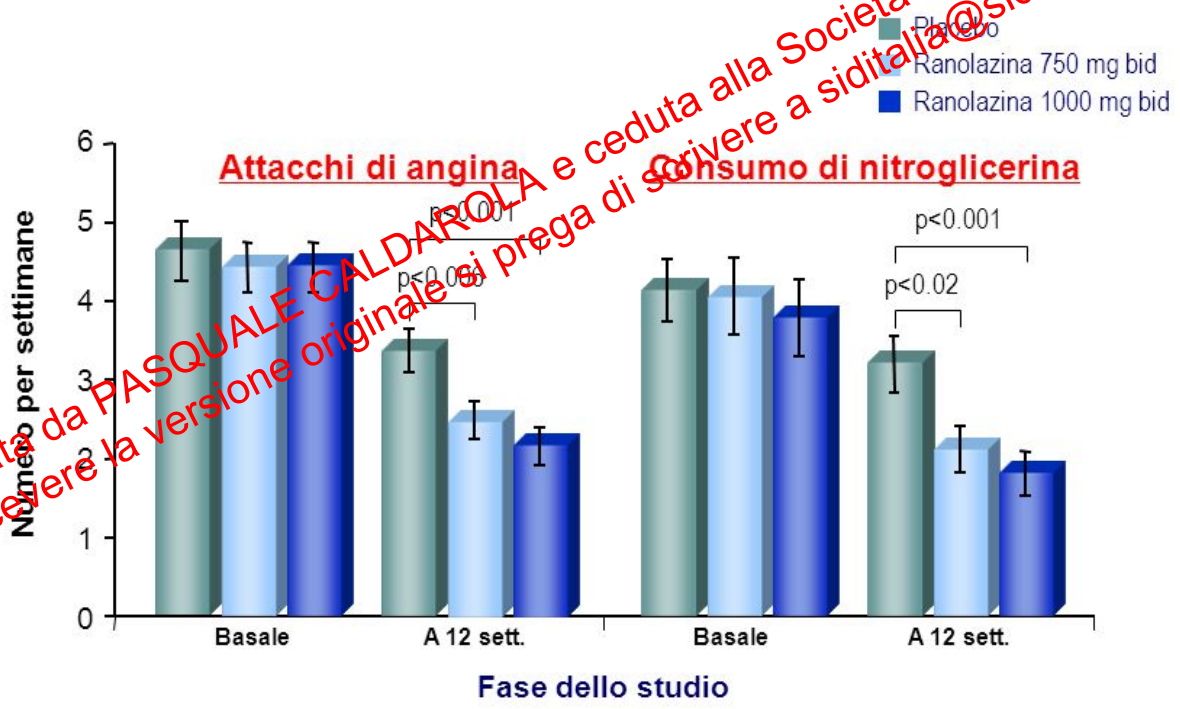


Pharm Ther 2012;133:311–323

CARISA

CARISA: efficacia

(Combination Assessment of Ranolazine In Stable Angina)



5) Chaitman JAMA 2004; 291:303-316

Chaitman et al JAMA 2004;21:309-316

European Heart Journal (2006) 27, 42–48
doi:10.1093/eurheartj/ehi495

Clinical research

Effects of ranolazine on exercise tolerance and HbA_{1c} in patients with chronic angina and diabetes

Adam D. Timmis[1]*, Bernard R. Chaitman[2], and Michael Crager[3]

[1]Department of Cardiology, London
Center, St Louis, MO, USA; and [3]CV

Table 4 Patients with $HbA_{1c} < 7\%$

	Placebo ($n = 37$)	Ranolazine 750 mg BID ($n = 47$)	Ranolazine 1000 mg BID ($n = 47$)
Baseline, *n* (%)	14 (37.8)	17 (36.2)	12 (25.5)
Week 12 or time of early termination, *n* (%)[a]	16 (43.2)	24 (51.1) ($P = 0.30$ vs. placebo)	26 (55.3) ($P = 0.004$ vs. placebo)

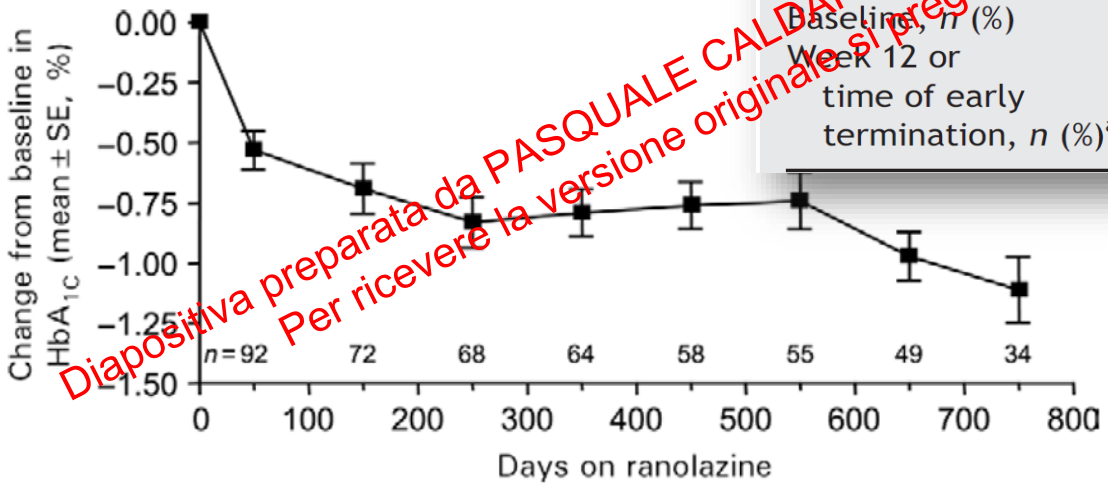


Figure 3 Change from baseline in HbA_{1c} levels over time in diabetic patients treated with ranolazine in the double-blind and open-label phase. Data include all patients treated with ranolazine.

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

Vol. 61, No. 20, 2013
ISSN 0735-1097/$36.00
http://dx.doi.org/10.1016/j.jacc.2013.02.011

CLINICAL RESEARCH — Late-Breaking Clinical Trials

Evaluation of Ranolazine in Patients With Type 2 Diabetes Mellitus and Chronic Stable Angina

Results From the TERISA Randomized Clinical Trial (Type 2 Diabetes Evaluation of Ranolazine in Subjects With Chronic Stable Angina)

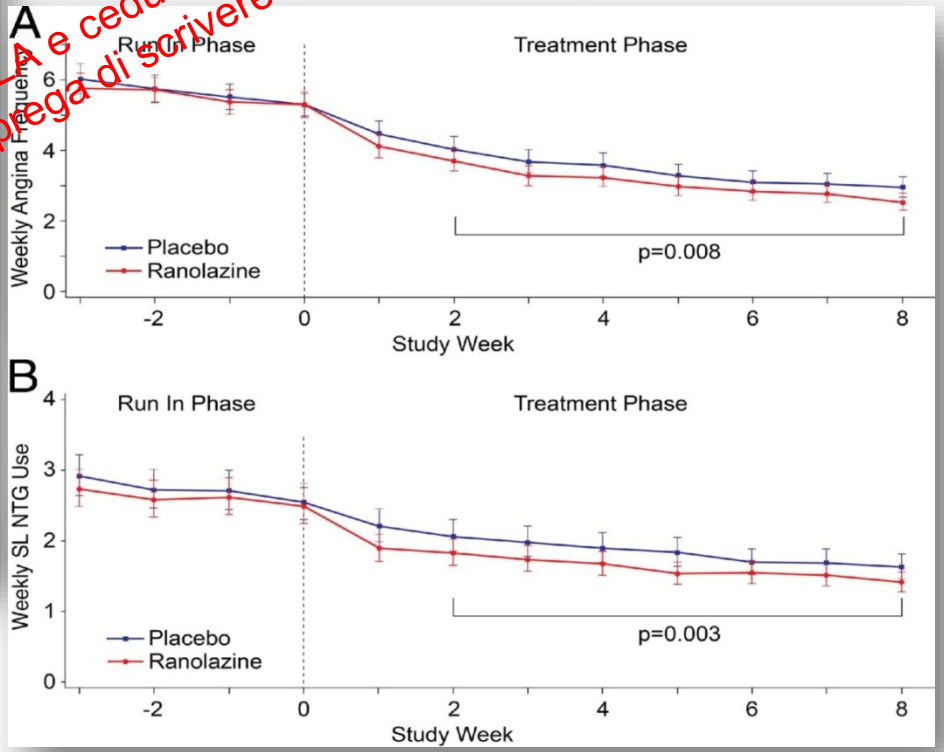
Mikhail Kosiborod, MD,*† Suzanne V. Arnold, MD, MHA,*† John A. Spertus, MD, MPH,*† Darren K. McGuire, MD, MHSC,‡ Yan Li, PHD,* Patrick Yue, MD,§ Ori Ben-Yehuda, MD,§ Amos Katz, MD,‖ Philip G. Jones, MS,* Ann Olmsted, PHD,§ Luiz Belardinelli, MD,§ Bernard R. Chaitman, MD¶

TERISA

Type 2 Diabetes Evaluation of Ranolazine in Subjects With Chronic Stable Angina

Pazienti ELEGGIBILI

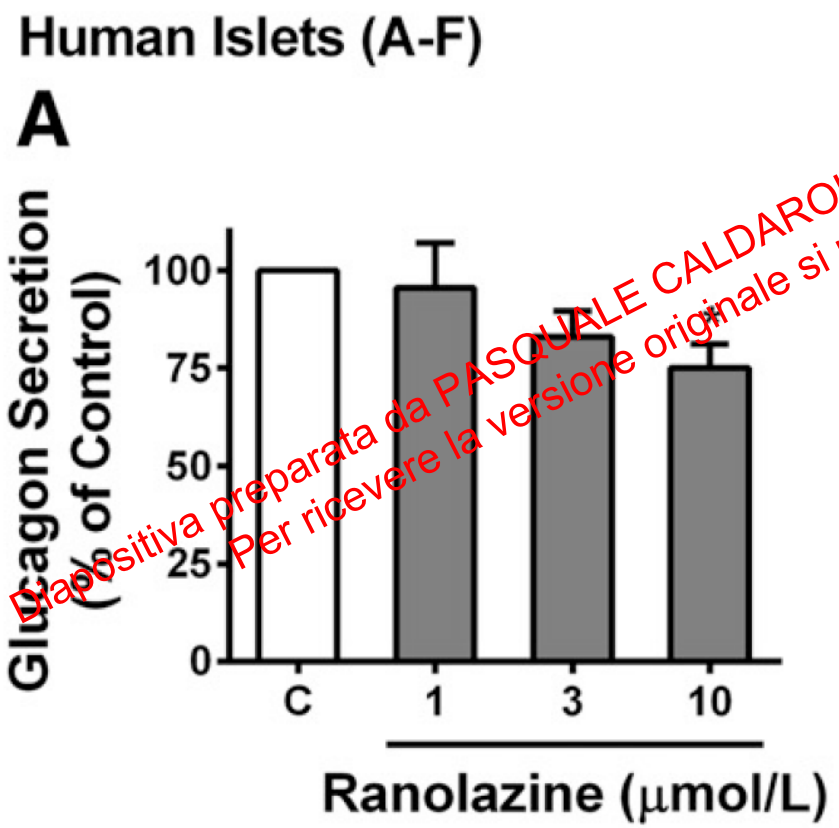
1) Storia documentata CAD + T2DM
2) A. Stabile da almeno 3 mesi
3) In tp con 1 o 2 farmaci antianginosi a dosi stabili per almeno due settimane (B-blocc; Ca-Ant; NTS)



Arvinder K. Dhalla, Ming Yang, Yun Ning, Kristopher M. Kahlig, Michael Krause, Sridharan Rajamani, and Luiz Belardinelli

Blockade of Na^+ Channels in Pancreatic α-Cells Has Antidiabetic Effects

Diabetes 2014;63:3545–3556 | DOI: 10.2337/db13-1562



- Le cell α pancreatiche possiedono canali del Na voltage-gated che se stimolati generano attività elettrica che favorisce liberazione di Ca ed esocitosi di **glucagone**
- La ranolazina, bloccando i canali del Na, quindi esocitosi di glucagone che è associato ad iperglicemia
- L'effetto aumenta con il dosaggio

Terapia nel paziente con CAD:

Terapia a lungo termine

2015 ESC

of acute c

presenting

elevation

Task Force fo

in Patients Pr

of the Europe

Recommendations for long-term management after non-ST-elevation acute coronary syndromes

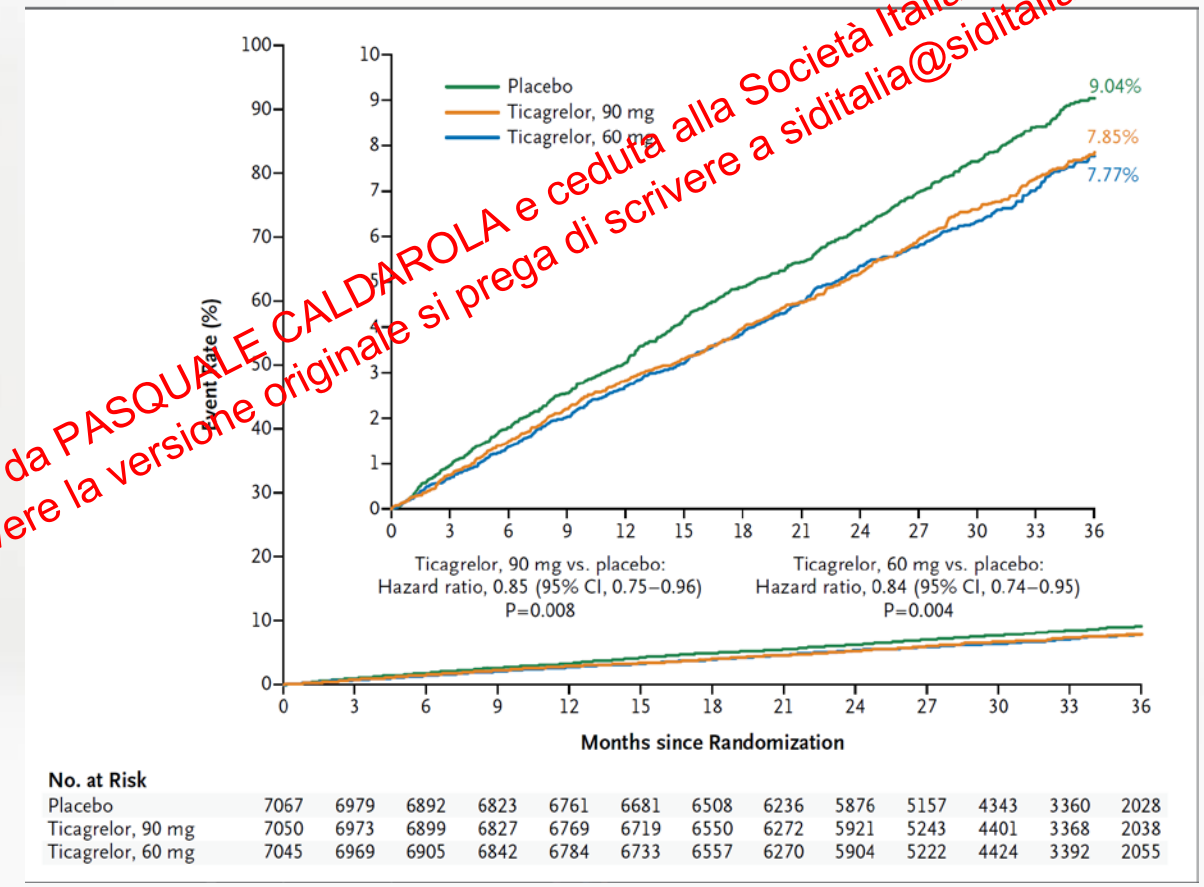
Recommendations (for the recommendations on antithrombotic treatment, see sections 5.2.9 and 5.3.3)	**Class**[a]	**Level**[b]	**Ref.**[c]
It is recommended to advise all patients on lifestyle changes (including smoking cessation, regular physical activity and a healthy diet).	I	A	536, 537
It is recommended to start high-intensity statin therapy as early as possible, unless contraindicated, and maintain it long term.	I	A	522, 527, 528
An ACE inhibitor is recommended in patients with LVEF ≤40%, or heart failure, hypertension or diabetes, unless contraindicated. An ARB provides an alternative, particularly if ACE inhibitors are not tolerated.	I	A	478–481, 530, 531, 538
Beta-blocker therapy is recommended in patients with LVEF ≤40%, unless contraindicated.	I	A	482–486
Mineralocorticoid receptor antagonists, preferably eplerenone, are recommended in patients with LVEF ≤35% and either heart failure or diabetes after NSTE-ACS but no significant renal dysfunction or hyperkalaemia.[d]	I	A	487, 488, 525
A diastolic blood pressure goal of <90 mmHg is recommended (<85 mmHg in diabetic patients).	I	A	539, 540

Per quanto tempo proseguire DAPT

The NEW ENGLAND JOURNAL of MEDICINE

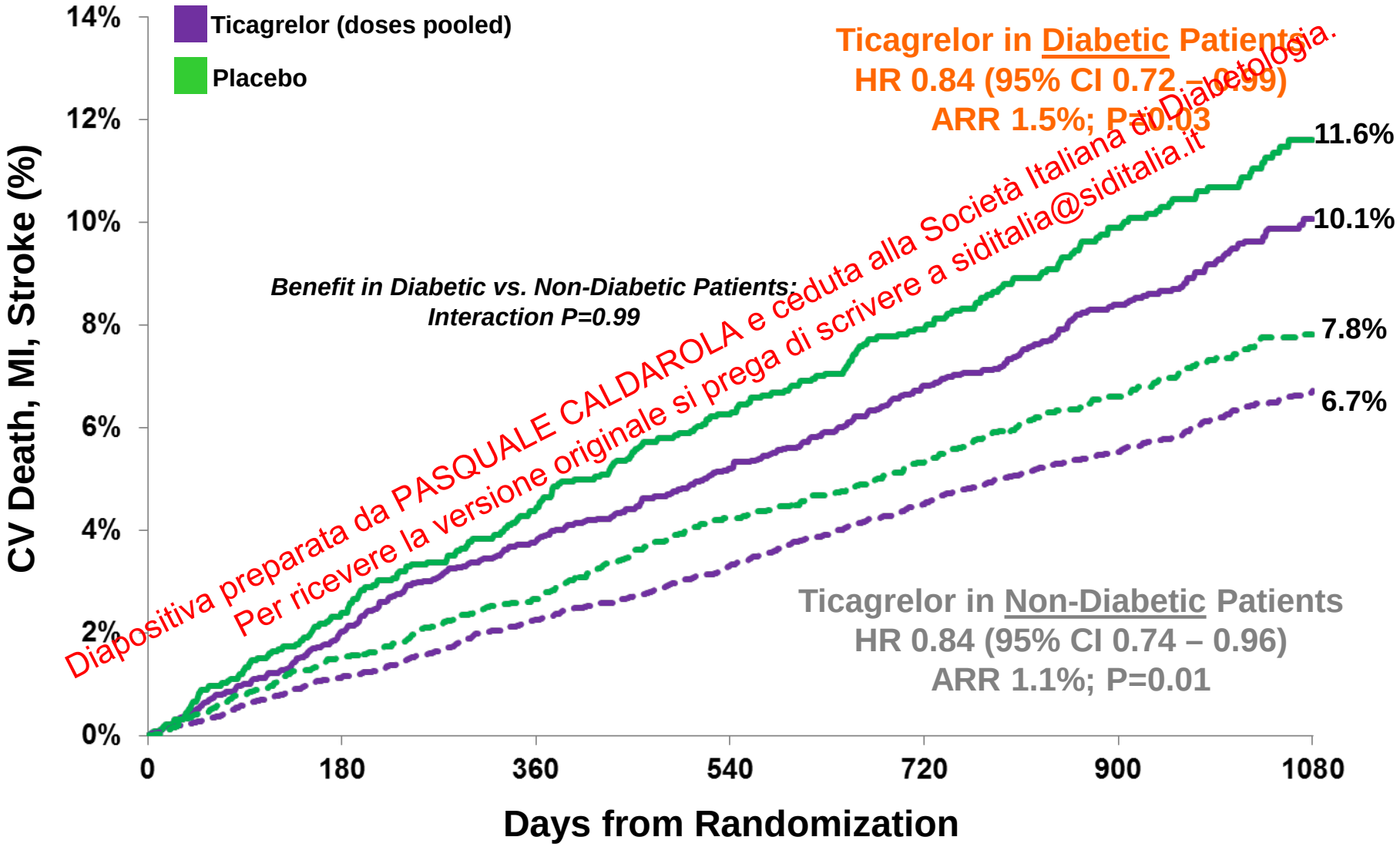
ESTABLISHED IN 1812 MAY 7, 2015 VOL. 372 NO. 19

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

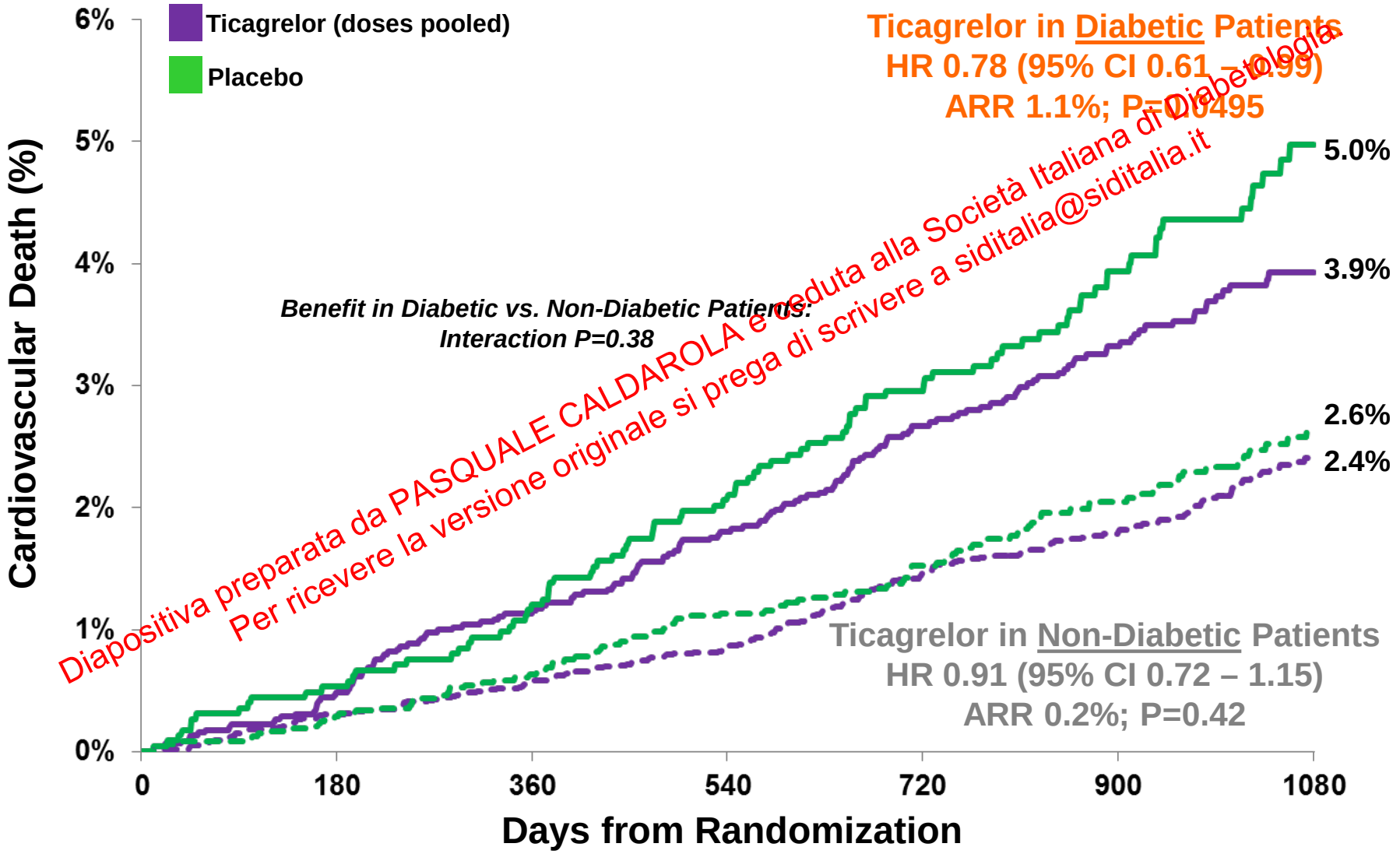


No. at Risk													
Placebo	7067	6979	6892	6823	6761	6681	6508	6236	5876	5157	4343	3360	2028
Ticagrelor, 90 mg	7050	6973	6899	6827	6769	6719	6550	6272	5921	5243	4401	3368	2038
Ticagrelor, 60 mg	7045	6969	6905	6842	6784	6733	6557	6270	5904	5222	4424	3392	2055

Primary Endpoint - MACE



Cardiovascular Death



POSITION PAPER

Gestione multidisciplinare del paziente con sindrome coronarica acuta e diabete mellito: dalla terapia antitrombotica al trattamento dell'iperglicemia

Roberta Rossini[1], Antonino Cimino[2], Stefano De Servi[3], Niccolò Grieco[4], Corrado Lettieri[5], Antonio Mafrici[6], Giuseppe Musumeci[1], Gianluca Perseghin[7], Carlo Sponzilli[8], Roberto Trevisan[9], Luigi Oltrona Visconti[3], a nome della Sezione Lombarda dell'Associazione Nazionale Medici Cardiologi Ospedalieri (ANMCO), della Società Italiana di Cardiologia Invasiva (GISE), dell'Associazione Medici Diabetologi (AMD) e della Società Italiana di Diabetologia (SID)

G Ital Cardiol 2014;15(6):378-392

Tabella 2. Protocollo operativo per ottimizzare la gestione del profilo metabolico del paziente con sindrome coronarica acuta e diabete/iperglicemia nelle varie fasi del ricovero ospedaliero.

	Fase iniziale	Fase intermedia	Dimissione
Iperglicemia/diabete	• Rapido rilievo di eventuale iperglicemia • Indicazione alla terapia insulinica • Monitoraggio della glicemia	• Diagnosi differenziale tra iperglicemia da stress e diabete • Monitoraggio della glicemia • Indicazione all'introduzione (prosecuzione) della terapia insulinica	• Impostare la terapia ipoglicemizzante • Impostare il programma educativo • Programmare le visite di controllo

Documento ANMCO/GICR-IACPR/GISE
L'organizzazione dell'assistenza nella fase post-acuta delle sindromi coronariche

Commissione ANMCO/GICR-IACPR/GISE
Associazione Nazionale Medici Cardiologi Ospedalieri (ANMCO)
Società Italiana di Cardiologia Riabilitativa e Preventiva (GICR-IACPR)
Società Italiana di Cardiologia Invasiva (GISE)

Il Panel ritiene che l'elevato rischio cardiovascolare residuo, il diabete mellito, l'insufficienza renale, l'arteriopatia periferica,

Il Panel ritiene che il livello di rischio trombotico al quale ritenere indicato un intervento intensivo di prevenzione secondaria sarà dettato dalle condizioni organizzative locali, essendo ragionevolmente allargato a più pazienti in centri con maggiori risorse. L'intervento di prevenzione secondaria intensiva potrà essere prestato in ambulatori specificamente dedicati (ambulatori di prevenzione secondaria) o potrà essere una funzione riservata ad un sottogruppo di pazienti in un unico ambulatorio per il follow-up delle SCA.

G Ital Cardiol 2014;15(1 Suppl 1):3S-27S

Obiettivi nel follow up post SCA

- Assicurarsi che i seguenti trattamenti raccomandati siano stati iniziati alla dimissione e mantenuti in terapia:
  - Doppia antiaggregazione per 12 mesi ☐
  - Statina ad alta efficacia ☐
  - Betabloccante (o ivabradina, se controindicato) ☐
  - ACE-inibitore (o ARB se non tollerato) ☐
  - Omega-3 ☐
  - Antialdosteronico (se disfunzione ventricolare sinistra o scompenso cardiaco) ☐
- Verificare che la titolazione dei farmaci fino al dosaggio raccomandato (o se necessario l'associazione di più farmaci) consenta di raggiungere e mantenere i seguenti target:
  - Frequenza cardiaca a riposo ≤60/min ☐
  - Pressione arteriosa ≤140/90 mmHg (eventualmente ≤130/80 mmHg) ☐
  - Colesterolo LDL <70 mg/dl (colesterolo non HDL <100 mg/dl) ☐
  - HbA_{1c} <7% ☐
- Verificare l'aderenza alla terapia, alla doppia antiaggregazione in particolare, per il periodo di tempo necessario
- Indicare l'introduzione di nuovi farmaci per la comparsa di sintomi (es. ranolazina per angina, diuretici per dispnea, ecc.)

G Ital Cardiol 2014;15(1 Suppl 1):3S-27S

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  - Betabloccante (o ivabradina, se controindicato) ☐
  - ACE-inibitore (o ARB se non tollerato) ☐
  - Omega-3 ☐
  - Antialdosteronico (se disfunzione ventricolare sinistra o scompenso cardiaco) ☐
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G Ital Cardiol 2014;15(1 Suppl 1):3S-27S

Progetto PONTE-SCA- HF ed ambulatori dedicati

Proposta di PDTA per la gestione dei paz. post SCA

Per **garantire un follow-up ambulatoriale a tutti i pazienti dopo un evento coronarico acuto o dopo episodio di SC acuto,** attraverso il coinvolgimento dei cardiologi dei centri SPOKE, dei cardiologi territoriali e dei MMG per una **adeguata presa in carico.**

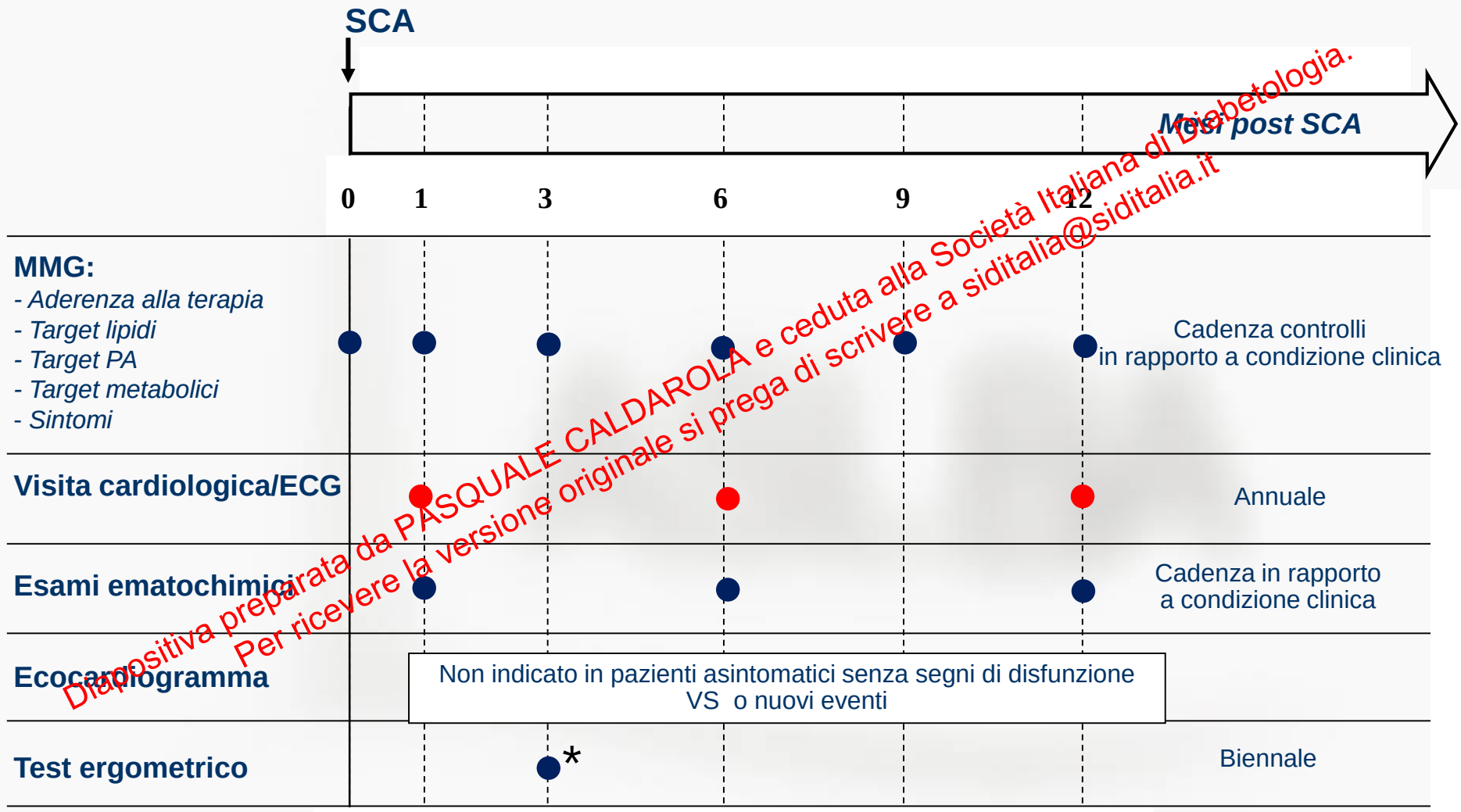
Obiettivi del PDTA

- Migliorare l'adesione alle modifiche dello **stile di vita** e alle terapie consigliate;
- Favorire il raggiungimento dei **target terapeutici** previsti dalle LG;
- Assicurare **continuità assistenziale** dal momento della dimissione ospedaliera alla presa in carico nel territorio;
- **Escludere dalle liste di attesa** ordinarie e prevedere percorsi preferenziali per i pazienti affetti da recente SCA-SC;
- **Ridurre il ricorso al PS** ed eventualmente a ricoveri ripetuti ;
- Valutare l'impatto di tale modello assistenziale sulla **morbilità e mortalità cardiovascolare.**

LETTERA DI DIMISSIONI:
contenuti minimi

- Dati anagrafici
- Generalità del medico curante
- Diagnosi principale e secondarie, con evidenza delle comorbilità e della presenza di device
- Obiettività cardiopolmonare all'ingresso e dimissione
- PA e Peso corporeo
- Copia dell'ecg alla dimissione
- Variazioni significative dei parametri ematochimici (funzionalità renale, tiroidea ed epatica, emoglobina, BNP, troponina)
- Copia o referti degli esami strumentali eseguiti
- Decorso clinico con terapia somministrata
- Terapia farmacologica da assumere con dosaggio, modalità e durata
- Indicazione dei target da raggiungere in termini di pressione arteriosa, frequenza cardiaca, LDL, emoglobina glicata
- Modifica dello stile di vita con particolare riferimento alle attività consentite e/o vietate
- Controlli successivi consigliati o programmati

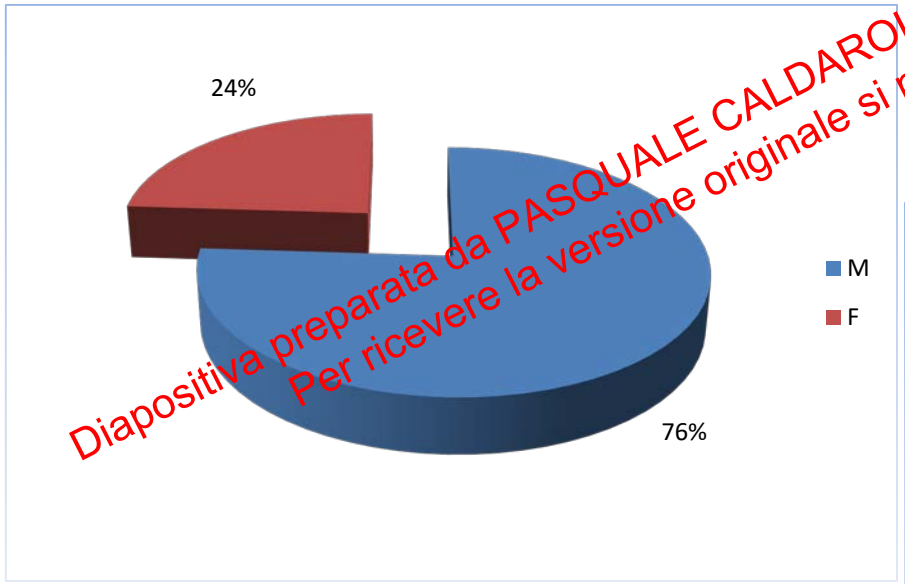
Pazienti Post SCA e/o Rivascolarizzazione
Ambulatorio cardiologico H o territoriale/MMG

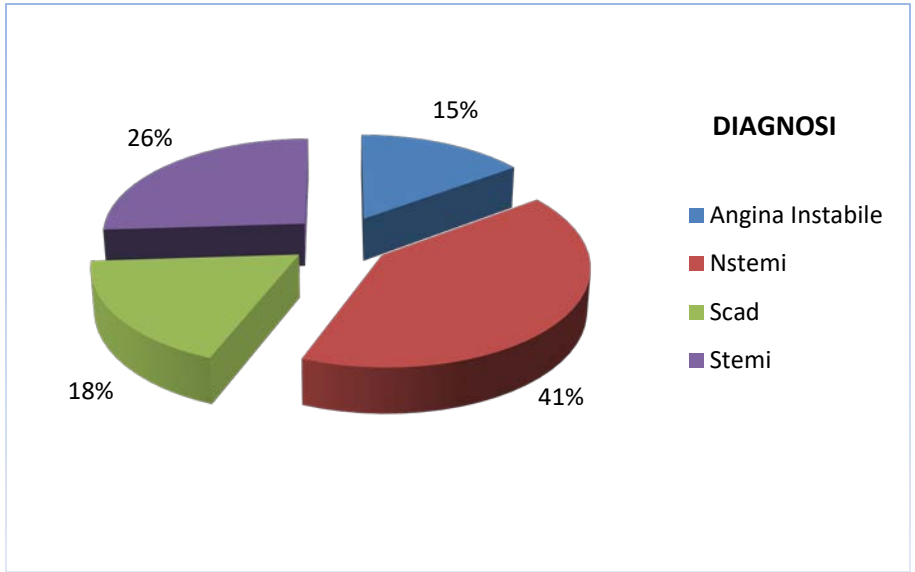


*Prova da sforzo precoce indicata in caso di risultato subottimale della procedura

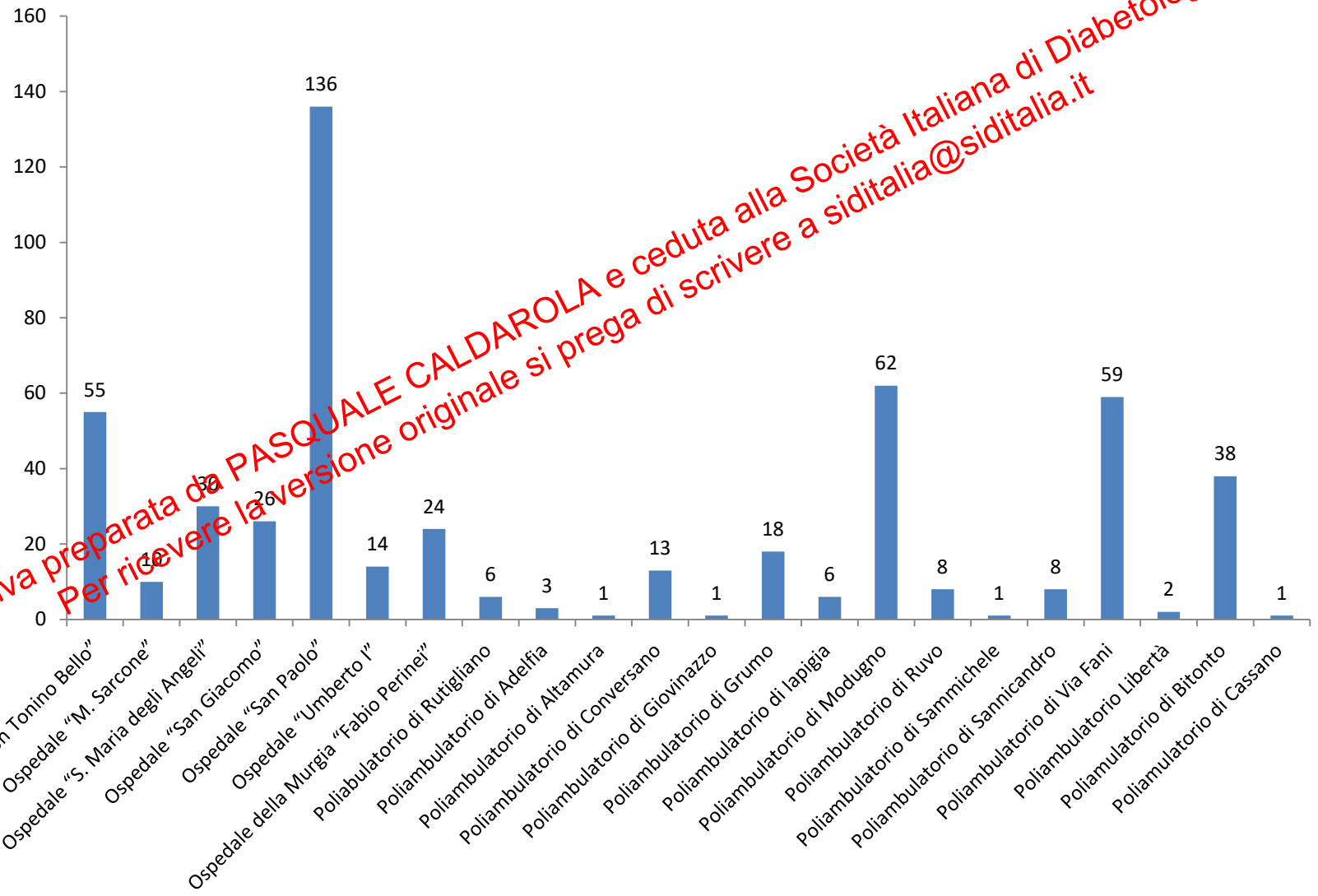
Progetto PONTE-SCA

Pazienti arruolati e con FU a 12 mesi	**619**
Età media	67

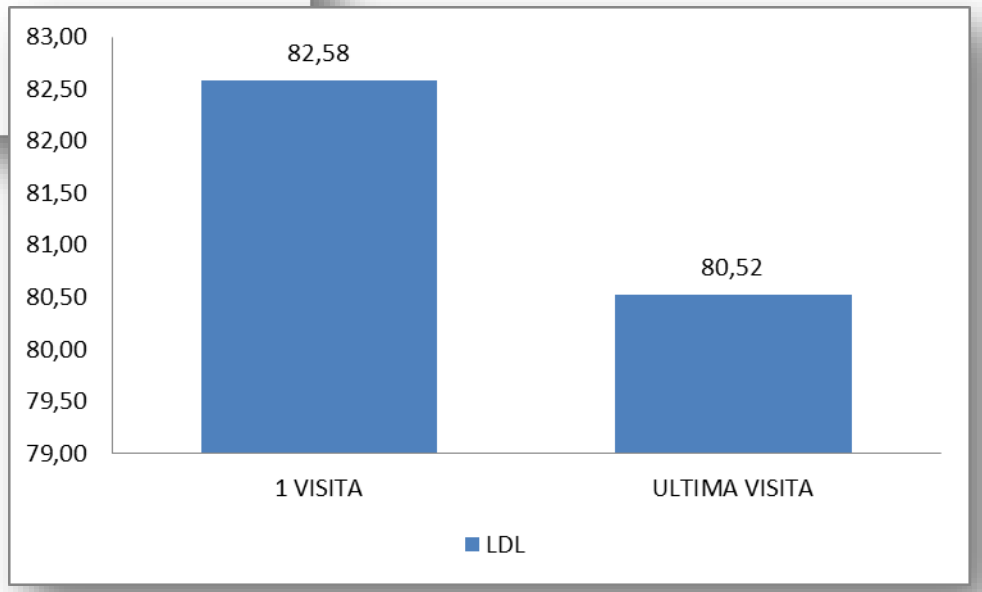




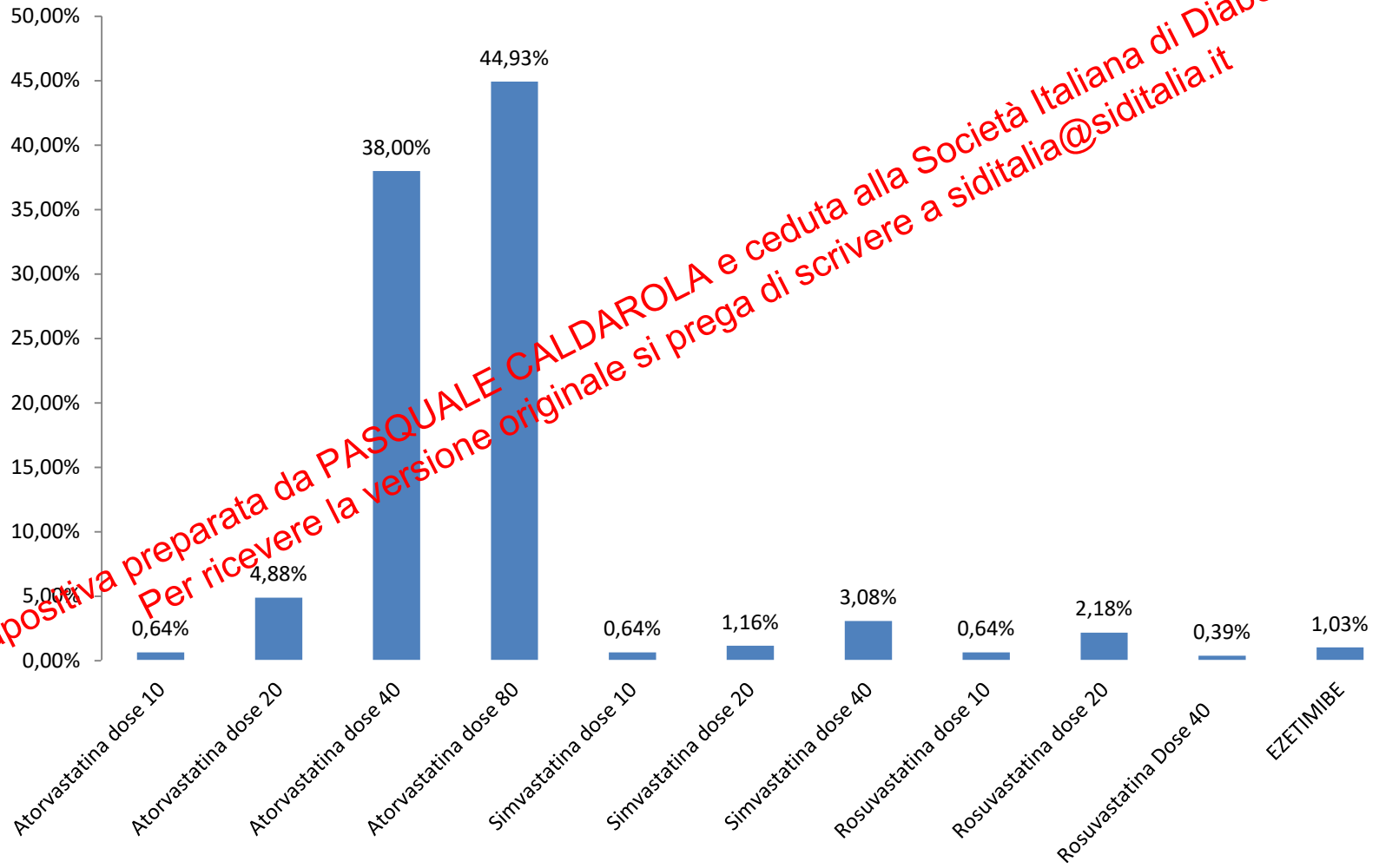
Follow-up nei Centri SPOKE
Pazienti inviati dal San Paolo



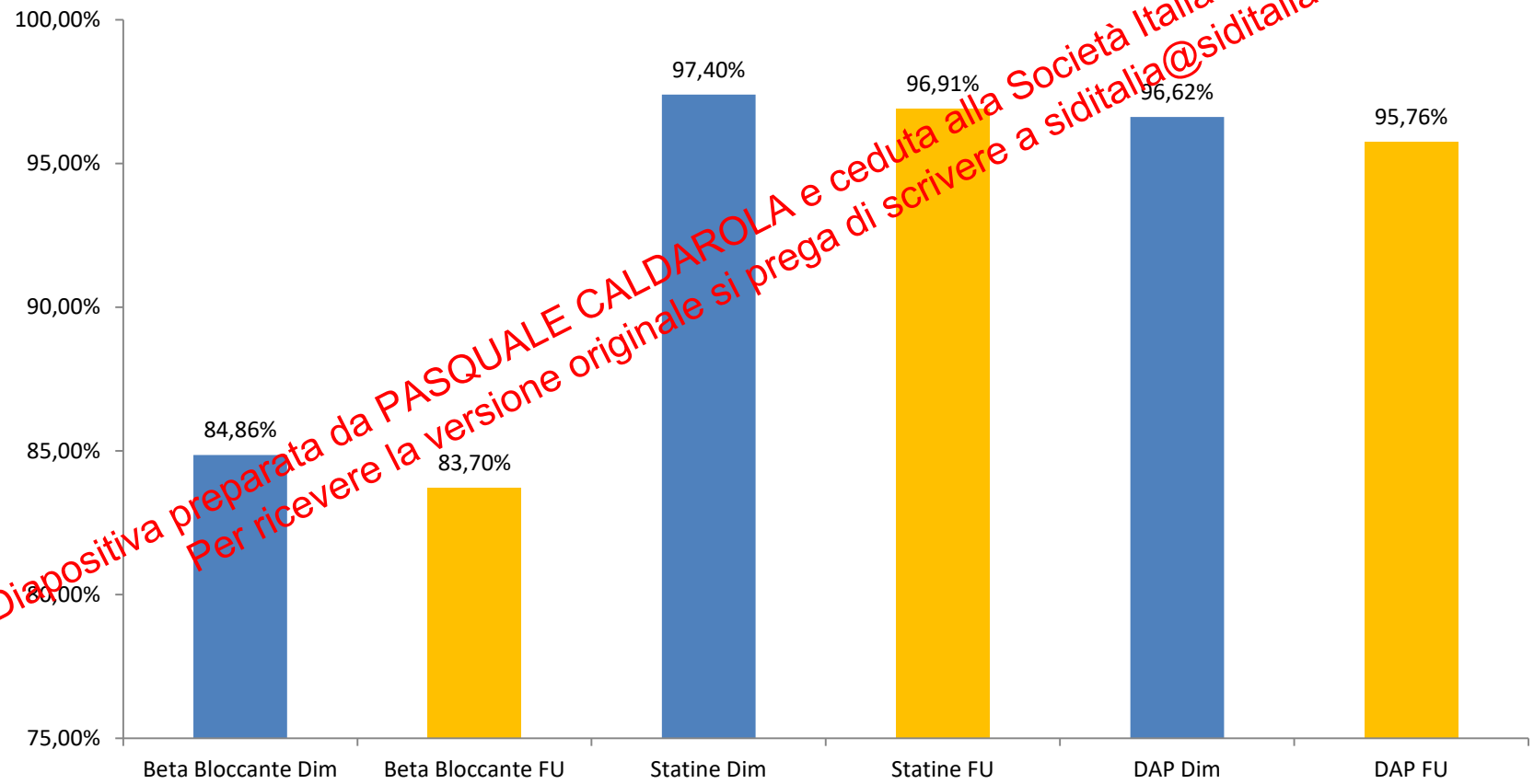
Progetto PONTE-SCA



Progetto PONTE: terapia statinica al FU di 12 mesi



Progetto PONTE: terapia alla dimisssione e al FU di 12 mesi



Conclusioni

I Pazienti diabetici traggono beneficio da trattamenti più intensivi (ma spesso sono meno trattati)

Traggono beneficio da un follow up intensivo con adeguata presa in carico (raggiungimento target, terapia antischemica, prolungamento della terapia antiaggregante)