Statine negli anziani
Prevenzione primaria e secondaria: quando e perchè?

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Statine: farmaci importanti perché…

- Diversi trials su larga scala hanno da tempo dimostrato che tali farmaci riducono gli eventi cardiovascolari sia in prevenzione primaria che secondaria
- farmaci ipolipemizzanti → metanalisi dei trials con statine mostra che a prescindere dalla presenza di aterosclerosi, la **riduzione di 1 mmol/l (38 mg/dl) di LDL** riduce la frequenza annuale di **eventi CV** maggiori del **21%** e la **mortalità totale** del **10%**
- **effetti pleiotropici**: - antinfiammatori
  - antiossidanti
  - stabilizzazione della placca aterosclerotica
  - in parte riducono anche trigliceridi (30-50%) e aumentano quota HDL (5-10%)

tatine: sono tutte uguali?

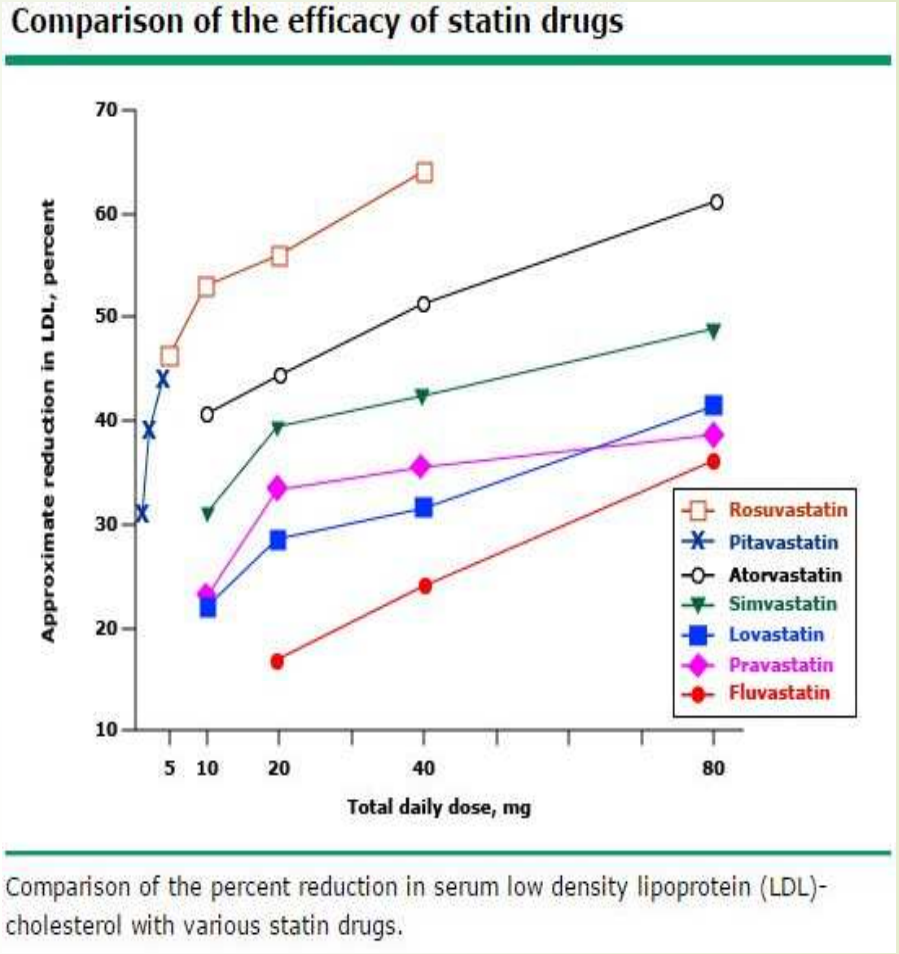
nno diverse caratteristiche di farmacocinetica e
macodinamica che si traducono in diversa potenza
efficacia nella riduzione del colesterolo LDL.

**ntità della riduzione [LDL] varia a seconda del
PO di statina utilizzata ed è DOSE
PENDENTE**

4. Caratteristiche farmacologiche delle statine.

	Lovastatina	Pravastatina	Simvastatina	Fluvastatina	Atorvastatina	Rosuvastatina	Pitavastatina
50 isoenzima[a]	CYP3A4	Nessuno[b]	CYP3A4 (maggiore) CYP3A5	CYP2C9 CYP3A4 (minore)	CYP3A4	CYP2C9 (<10%) CYP2C19 (minore)	Glucuronidazione[c] CYP2C19 (minore) CYP3A4 (minore)
ponibilità (%)	<5	18	<5	19-29	12	20	51
bimento (%)	30	34	60-80	98	30	Rapido	50
ia	Si	No	Si	Si	Si	No	Si
a (h)	2.9	1.3-2.8	2-3	0.5-2.3	15-30	15-30	8-12
ione urinaria (%)	10	20	13	5	2	10	15
ione fecale (%)	83	70	58	95	98	90	79

0, citocromo P450.
zimi del CYP450 coinvolti nel metabolismo della statina.
avastatina è metabolizzata per solfatazione.
avastatina è metabolizzata principalmente per UGT glucuronidazione.
cata da Harper e Jacobson[31].



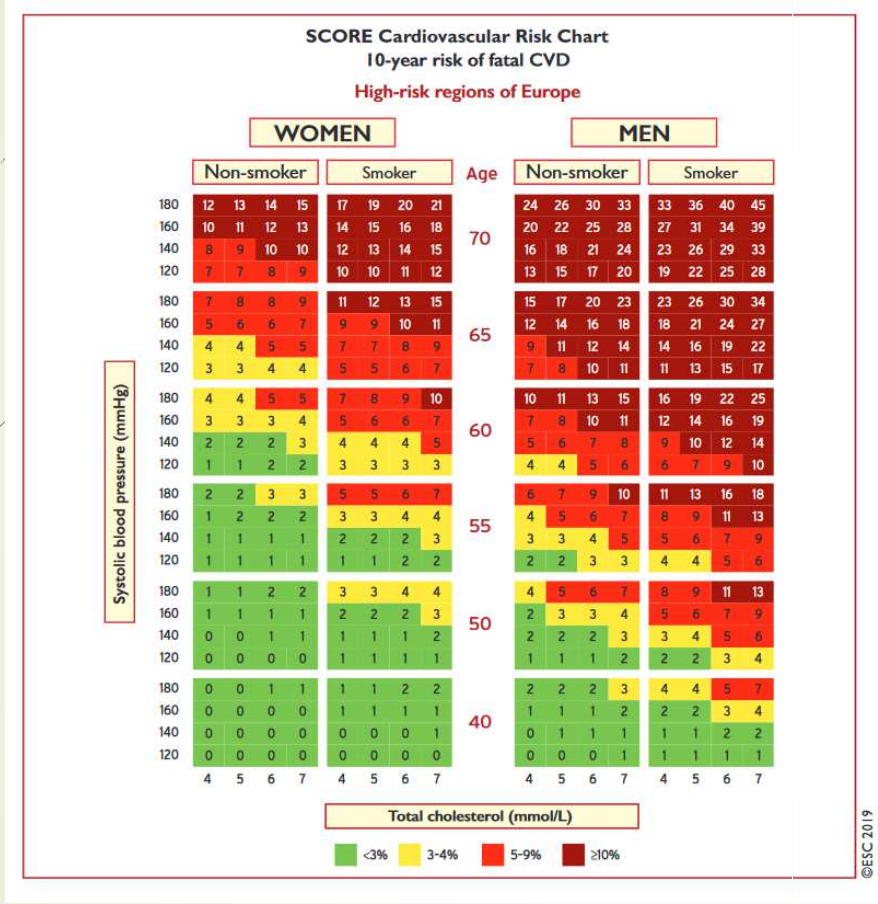
Comparison of the percent reduction in serum low density lipoprotein (LDL)-cholesterol with various statin drugs.

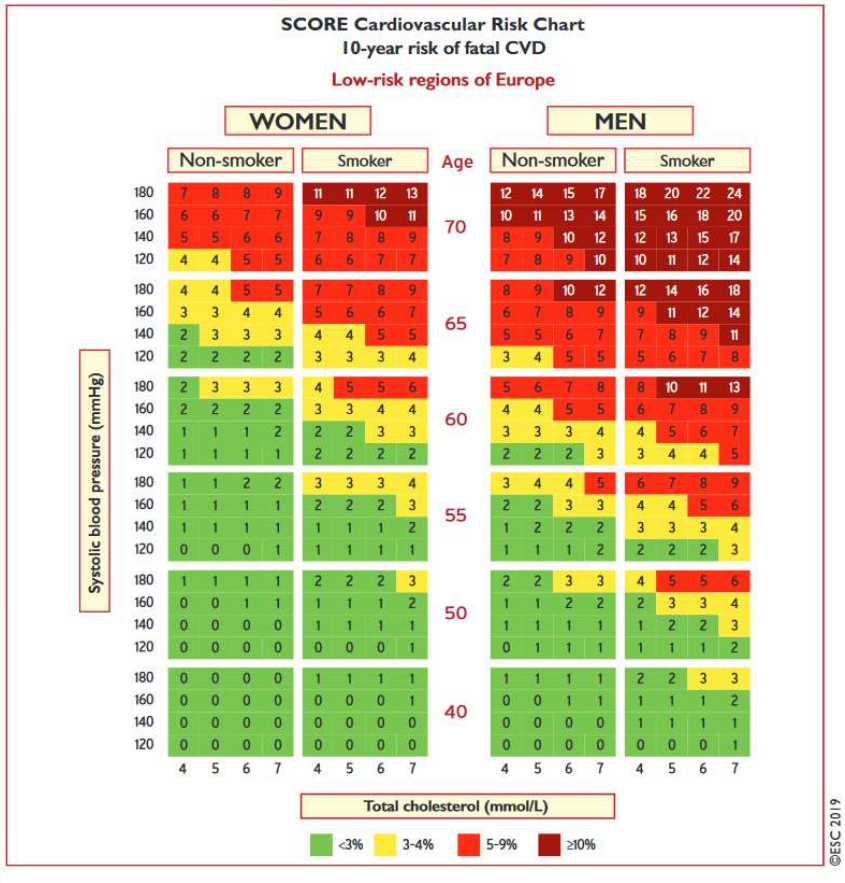
Tabella 1. Riduzione del colesterolo LDL (C-LDL) e dosaggi di statine.

Riduzione C-LDL (%)	Atorvastatina (mg)	Fluvastatina (mg)	Lovastatina (mg)	Pravastatina (mg)	Rosuvastatina (mg)	Simvasta (mg)
>40	>20	–	–	–	>5	>40
30-40	10	80	40/80	–	–	20
20-30	–	40	10/20	20/40	–	10
<20	–	20	–	10	–	–

Modificata da Weng et al.[31].

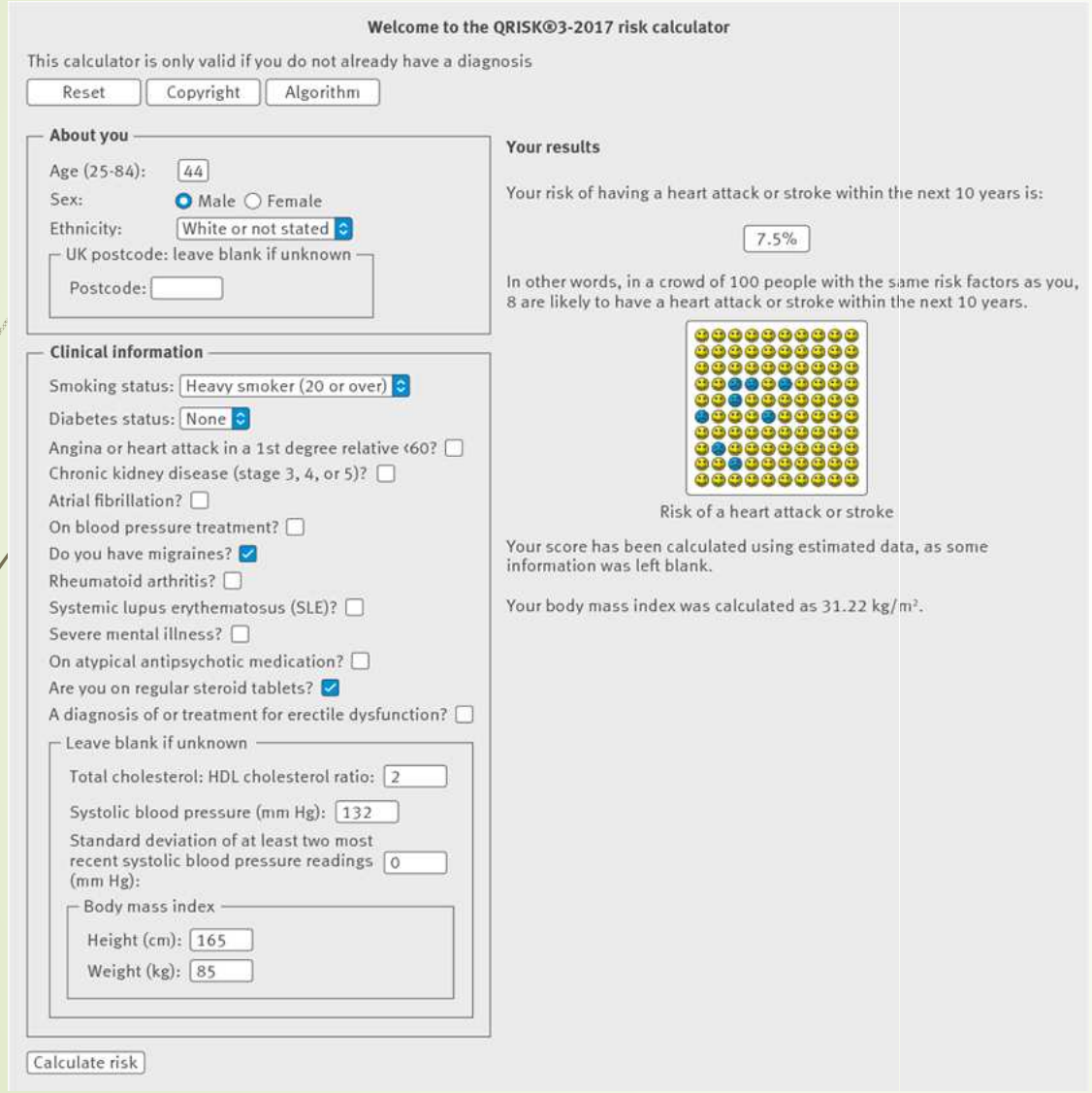
L'indicazione a terapia con statine si basa sulla stima del rischio CV





The European Guidelines on CVD prevention in clinical practice (both the 2019 and 2016 versions) recommend the use of the SCOREsystem because it is based on large, representative European cohort data sets and because it is relatively straightforward to recalibrate for individual countries.

Oltre alle carte del rischio…



Formal risk assessment is not necessary for the following people, as they are considered already to high enough risk to justify lifestyle and other interventions (antithrombotic, antihypertensive and lipid-lowering therapies).

-Patients with atherosclerotic CVD.

-Hypertension (≥160/100 mm Hg) with target or damage.

-Patients with type 1 or type 2 diabetes mellitus.

-Renal dysfunction (including diabetic nephropa

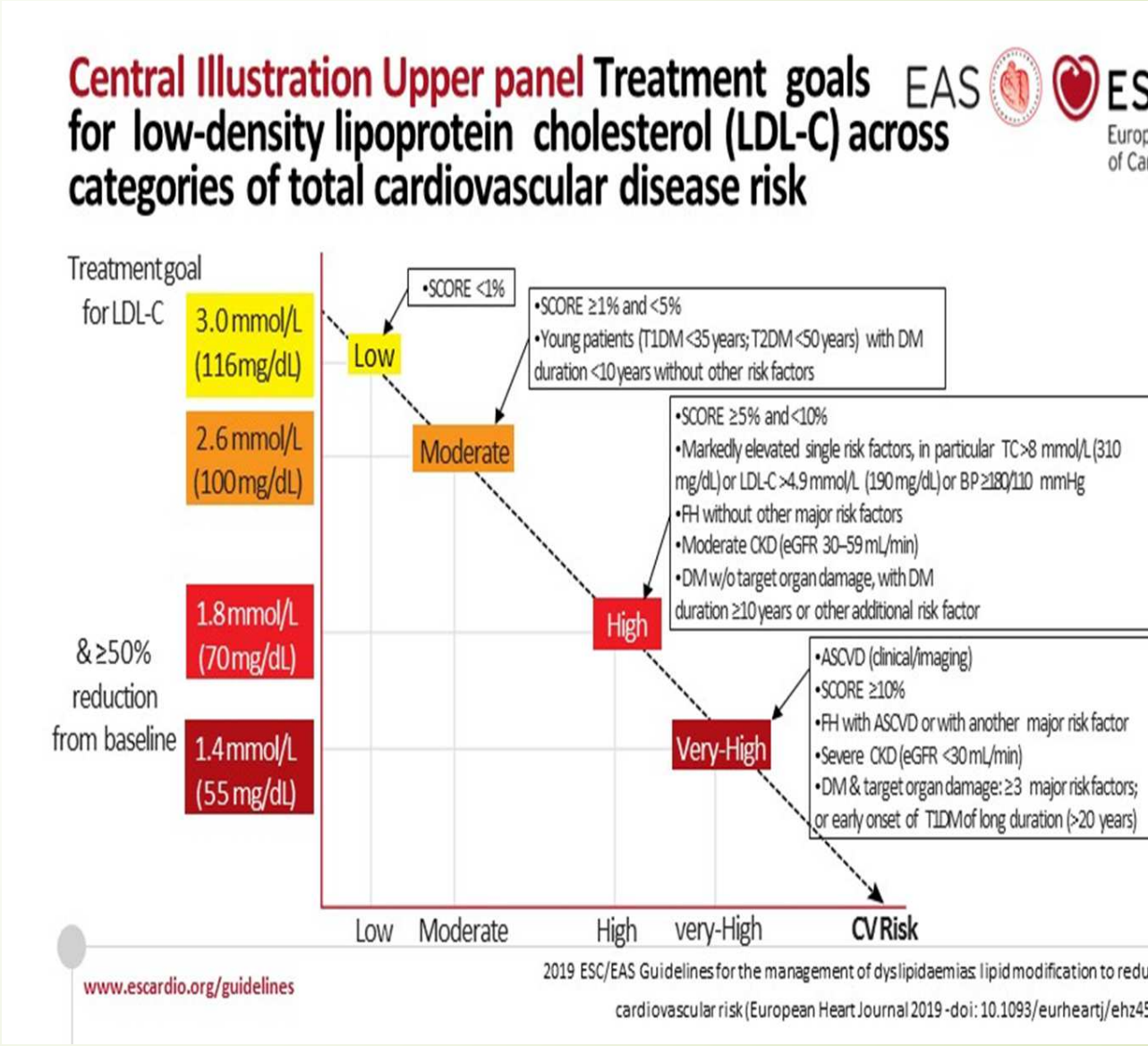
-Familial hypercholesterolaemia, familial combi hyperlipidaemia or other inherited dyslipidaemia a identified by Simon Broome diagnostic criteria.[5]

- People aged 75 or older.

4 categorie di rischio cardiovascolare

Table 4 Cardiovascular risk categories

Very-high-risk	People with any of the following: Documented ASCVD, either clinical or unequivocal on imaging. Documented ASCVD includes previous ACS (MI or unstable angina), stable angina, coronary revascularization (PCI, CABG, and other arterial revascularization procedures), stroke and TIA, and peripheral arterial disease. Unequivocally documented ASCVD on imaging includes those findings that are known to be predictive of clinical events, such as significant plaque on coronary angiography or CT scan (multivessel coronary disease with two major epicardial arteries having >50% stenosis), or on carotid ultrasound. DM with target organ damage,[a] or at least three major risk factors, or early onset of T1DM of long duration (>20 years). Severe CKD (eGFR <30 mL/min/1.73 m^2). A calculated SCORE ≥10% for 10-year risk of fatal CVD. FH with ASCVD or with another major risk factor.
High-risk	People with: Markedly elevated single risk factors, in particular TC >8 mmol/L (>310 mg/dL), LDL-C >4.9 mmol/L (>190 mg/dL), or BP ≥180/110 mmHg. Patients with FH without other major risk factors. Patients with DM without target organ damage,[a] with DM duration ≥10 years or another additional risk factor. Moderate CKD (eGFR 30–59 mL/min/1.73 m^2). A calculated SCORE ≥5% and <10% for 10-year risk of fatal CVD.
Moderate-risk	Young patients (T1DM <35 years; T2DM <50 years) with DM duration <10 years, without other risk factors. Calculated SCORE ≥1 % and <5% for 10-year risk of fatal CVD.
Low-risk	Calculated SCORE <1% for 10-year risk of fatal CVD.



Target in prevenzione primaria e secondaria

ntervention strategies as a function of total cardiovascular risk and untreated low-density lipoprotein choles-

Total CV risk (SCORE) %	Untreated LDL-C levels					
	<1.4 mmol/L (55 mg/dL)	1.4 to <1.8 mmol/L (55 to <70 mg/dL)	1.8 to <2.6 mmol/L (70 to <100 mg/dL)	2.6 to <3.0 mmol/L (100 to <116 mg/dL)	3.0 to <4.9 mmol/L (116 to <190 mg/dL)	≥4.9 mmol/L (≥190 mg/dL)
<1, low-risk	Lifestyle advice	Lifestyle advice	Lifestyle advice	Lifestyle advice	Lifestyle intervention, consider adding drug if uncontrolled	Lifestyle intervention and concomitant drug intervention
Class[a]/Level[b]	I/C	I/C	I/C	I/C	IIa/A	IIa/A
>1 to <5, or moderate risk (see *Table 4*)	Lifestyle advice	Lifestyle advice	Lifestyle advice	Lifestyle intervention, consider adding drug if uncontrolled	Lifestyle intervention, consider adding drug if uncontrolled	Lifestyle intervention and concomitant drug intervention
Class[a]/Level[b]	I/C	I/C	IIa/A	IIa/A	IIa/A	IIa/A
>5 to <10, or high-risk (see *Table 4*)	Lifestyle advice	Lifestyle advice	Lifestyle intervention, consider adding drug if uncontrolled	Lifestyle intervention and concomitant drug intervention	Lifestyle intervention and concomitant drug intervention	Lifestyle intervention and concomitant drug intervention
Class[a]/Level[b]	IIa/A	IIa/A	IIa/A	I/A	I/A	I/A
>10, or at very-high risk due to a risk condition (see *Table 4*)	Lifestyle advice	Lifestyle intervention, consider adding drug if uncontrolled	Lifestyle intervention and concomitant drug intervention	Lifestyle intervention and concomitant drug intervention	Lifestyle intervention and concomitant drug intervention	Lifestyle intervention and concomitant drug intervention
Class[a]/Level[b]	IIa/B	IIa/A	I/A	I/A	I/A	I/A
Very-high-risk	Lifestyle intervention, consider adding drug if uncontrolled	Lifestyle intervention and concomitant drug intervention	Lifestyle intervention and concomitant drug intervention	Lifestyle intervention and concomitant drug intervention	Lifestyle intervention and concomitant drug intervention	Lifestyle intervention and concomitant drug intervention
Class[a]/Level[b]	IIa/A	I/A	I/A	I/A	I/A	I/A

scular; LDL-C = low-density lipoprotein cholesterol; SCORE = Systematic Coronary Risk Estimation.
mmendation.
nce.

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Recommendations for treatment goals for low-density lipoprotein cholesterol

Recommendations	Cla
In secondary prevention for patients at very-high risk,[c] an LDL-C reduction of ≥50% from baseline[d] and an LDL-C goal of <1.4 mmol/L (<55 mg/dL) are recommended.[33–35,119,120]	
In primary prevention for individuals at very-high risk but without FH,[c] an LDL-C reduction of ≥50% from baseline[d] and an LDL-C goal of <1.4 mmol/L (<55 mg/dL) are recommended.[34–36]	
In primary prevention for individuals with FH at very-high risk, an LDL-C reduction of ≥50% from baseline and an LDL-C goal of <1.4 mmol/L (<55 mg/dL) should be considered.	I
For patients with ASCVD who experience a second vascular event within 2 years (not necessarily of the same type as the first event) while taking maximally tolerated statin-based therapy, an LDL-C goal of <1.0 mmol/L (<40 mg/dL) may be considered.[119,120]	II
In patients at high risk,[c] an LDL-C reduction of ≥50% from baseline[d] and an LDL-C goal of <1.8 mmol/L (<70 mg/dL) are recommended.[34,35]	
In individuals at moderate risk,[c] an LDL-C goal of <2.6 mmol/L (<100 mg/dL) should be considered.[34]	I
In individuals at low risk,[c] an LDL-C goal <3.0 mmol/L (<116 mg/dL) may be considered.[36]	II

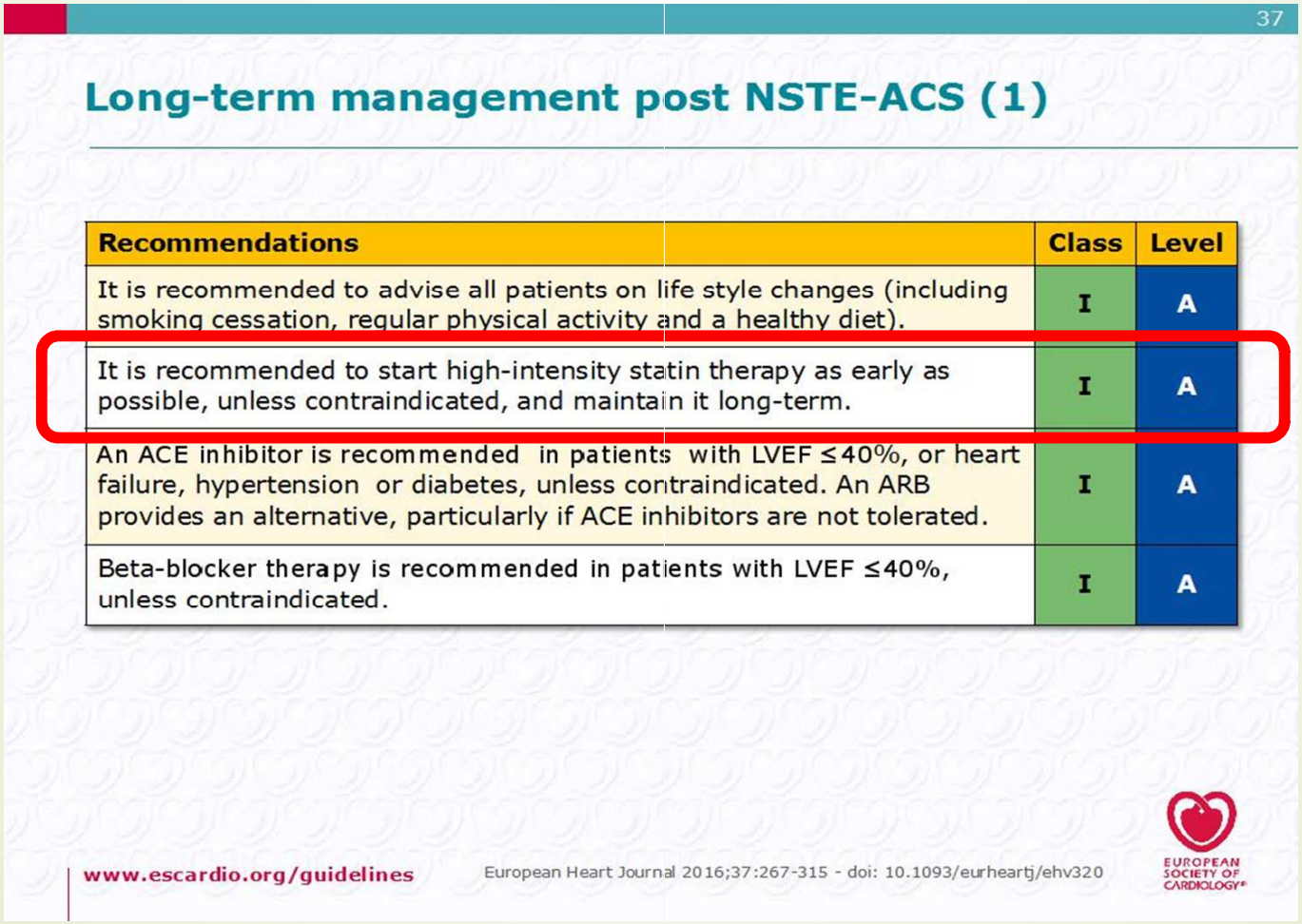
ASCVD = atherosclerotic cardiovascular disease; FH = familial hypercholesterolaemia; LDL-C = low-density lipoprotein cholesterol.
[a]Class of recommendation.
[b]Level of evidence.
[c]For definitions see *Table 4*.
[d]The term 'baseline' refers to the LDL-C level in a person not taking any LDL-C-lowering medication. In people who are taking LDL-C-lowering medication(s baseline (untreated) LDL-C levels should be estimated, based on the average LDL-C-lowering efficacy of the given medication or combination of medications.

Problema negli anziani:

- pazienti fragili
- varie comorbilità
- polifarmacoterapia
- maggior rischio di effetti collaterali e di interazioni farmacologiche

Statine negli anziani : prevenzione secondaria

In prevenzione secondaria esistono solide evidenze scientifiche che il trattamento con statine anche nei pazienti over 75 anni determina riduzione significativa dei principali endpoint di mortalità CV e recidive infartuali.

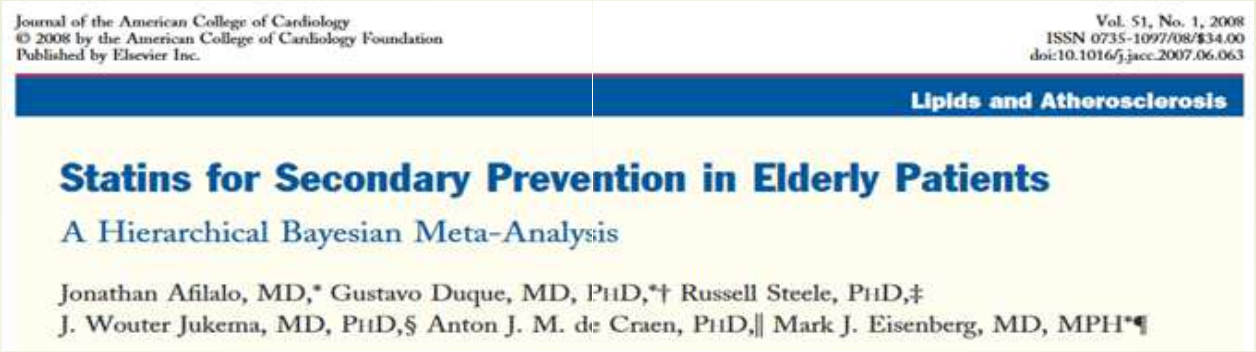


ALS IN PREVENZIONE SECONDARIA

)	Pazienti	Intervento vs Controllo	Outcome principale	Tempo	Riduzione di LDL (mg/dL)	Eventi coronarici maggiori* (%)
	4.444 pz Età: 59 anni Pregresso IMA: 79% Maschi: 81% LDL media: 194 mg/dL	simva 20-40mg (37% con 40mg) vs placebo	8% vs 12% mortalità totale	5,4 anni	126 vs 194 -35%	15,9% vs 22,6% **-6,7%**
	20.536 pz Età > 65 anni: 46% Pregresso IMA: 65% Maschi: 75% LDL media: 130 mg/dL	simva 40mg vs placebo	12,9% vs 14,7% mortalità totale	5,3 anni	87 vs 130 -33%	8,7% vs 11,8% **-3,1%**
PER[30]	5.804 pz Età: 75,3 anni Prec. evento CV: 44% Maschi: 48% LDL media: 150 mg/dL	prava 40mg vs placebo	14,2% vs 16,2% eventi CV	3,2 anni	99 vs 150 -34%	12,7% vs 16,7% **-4,0%**
1	4.159 pz Età media: 59 anni Pregresso IMA: 100% Maschi: 86% LDL media: 139 mg/dL	prava 40mg vs placebo	10,2% vs 13,2% IMA/mortalità CV	5,0 anni	95 vs 139 -32%	10,2% vs 13,2% **-3,0%**
32	9.014 pz Età media: 62 anni Prec. IMA/SCA: 100% Maschi: 83% LDL media: 150 mg/dL	prava 40mg vs placebo	6,4% vs 8,3% mortalità CV	6,1 anni	113 vs 150 -25%	12,3% vs 15,9% **-3,6%**
	1.677 pz Età media: 60 anni Rivasc. coronar.: 100% Maschi: 84% LDL media: 132 mg/dL	fluva 40mg x 2 vs placebo	21,4% vs 26,7% eventi CV	3,9 anni	96 vs 132 -27%	5,0% vs 7,2% **-2,2%**

Il trattamento con simvastatina 40 mg ha ridotto mortalità per tutte le cause del 14,7% e gli event cardiovascolari del 18%; questi effetti sono appa indipendenti dall'età, e anche in un sottogruppo soggetti 75-80enni all'inizio dello studio (e quin 80-85 anni alla fine dello studio), la riduzione de eventi era considerevole (-30%)

Terapia con pravastatina 40 mg in pz di età compresa tra 70 e 82 anni riduce del 15% l'endpoint primario (infarto miocardico e ictus non-fatali, morte per coronaropatia) nei pz con malattia aterosclerotica.



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Lipids and Atherosclerosis

Statins for Secondary Prevention in Elderly Patients

A Hierarchical Bayesian Meta-Analysis

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Metanalisi condotta su 9 trials clinici con arruolamento di 19.569 pazienti

Criteri inclusione: - studi randomizzati di confronto tra statina e placebo

- pazienti di età compresa tra 65 e 82 anni
- documentata malattia coronarica

Obiettivo: valutare efficacia delle statine nei pz anziani nel determinare riduzione dei principali endpoint primari di mortalità per tutte le cause, morte CV, IMA non fatale, necessità di rivascolarizzazione e stroke.

Study	No. Events/ Total No. of Patients: Statin	Placebo	Posterior Median Relative Risk (95% Credible Interval)
4S	67 / 518	96 / 503	0.75 (0.59 , 0.89)
CARE	77 / 640	108 / 643	0.76 (0.61 , 0.90)
FLARE	2 / 179	6 / 187	0.74 (0.47 , 0.97)
HPS	963 / 5366	1089 / 5331	0.87 (0.80 , 0.93)
LIPID	287 / 1741	365 / 1773	0.80 (0.71 , 0.90)
LIPS	23 / 324	32 / 299	0.75 (0.55 , 0.94)
PLAC I	1 / 42	2 / 52	0.76 (0.51 , 1.00)
PROSPER	110 / 934	128 / 899	0.82 (0.69 , 0.98)
REGRESS	1 / 75	1 / 63	0.75 (0.49 , 0.99)
Pooled (5 year)	**1531 / 9819**	**1827 / 9750**	**0.78 (0.65 , 0.89)**

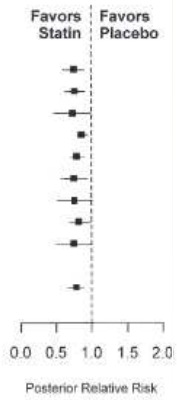


Figure 2 **Bayesian Forest Plot for All-Cause Mortality**

Statin therapy reduced the incidence of all-cause mortality by 22% over 5 years as compared to placebo. The posterior median estimate of the number need to treat was 28.

Study	No. Events/ Total No. of Patients: Statin	Placebo	Posterior Median Relative Risk (95% Credible Interval)
4S	44 / 518	73 / 503	0.67 (0.49 , 0.84)
CARE	37 / 640	66 / 643	0.65 (0.46 , 0.83)
FLARE	2 / 179	3 / 187	0.69 (0.41 , 1.04)
HPS	558 / 5366	664 / 5331	0.82 (0.74 , 0.91)
LIPID	160 / 1741	211 / 1773	0.74 (0.63 , 0.88)
LIPS	8 / 324	15 / 299	0.66 (0.39 , 0.89)
PLAC I	0 / 42	1 / 52	0.67 (0.36 , 0.99)
PROSPER	48 / 934	69 / 899	0.70 (0.53 , 0.90)
REGRESS	0 / 75	0 / 63	0.67 (0.35 , 0.96)
Pooled (5 year)	**857 / 9819**	**1102 / 9750**	**0.70 (0.53 , 0.83)**

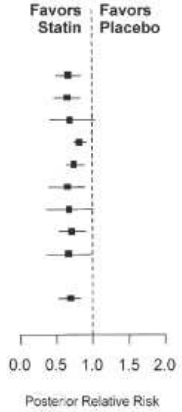
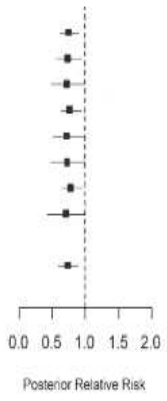


Figure 3 **Bayesian Forest Plot for Coronary Heart Disease Mortality**

Statin therapy reduced the incidence of coronary heart disease mortality by 30% over 5 years as compared to placebo. The posterior median estimate of the number need to treat was 34.

Study	No. Events/ Total No. of Patients: Statin	Placebo	Posterior Median Relative Risk (95% Credible Interval)
4S	89 / 518	122 / 503	0.75 (0.62 , 0.89)
CARE	41 / 640	57 / 643	0.73 (0.57 , 0.93)
FLARE	5 / 179	9 / 187	0.72 (0.49 , 0.98)
LIPID	110 / 1741	138 / 1773	0.77 (0.64 , 0.93)
LIPS	12 / 324	16 / 299	0.72 (0.51 , 0.97)
PLAC I	2 / 42	6 / 52	0.73 (0.48 , 0.99)
PROSPER	98 / 934	116 / 899	0.78 (0.64 , 0.95)
REGRESS	0 / 75	1 / 63	0.71 (0.43 , 0.97)
Pooled (5 year)	**357 / 4453**	**465 / 4419**	**0.74 (0.60 , 0.89)**



Bayesian Forest Plot for Nonfatal Myocardial Infarction

apy reduced the incidence of nonfatal myocardial infarction by 26%
rs as compared to placebo. The posterior median estimate of the number need to treat was 38.

Study	No. Events/ Total No. of Patients: Statin	Placebo	Posterior Median Relative Risk (95% Credible Interval)
4S	51 / 518	80 / 503	0.68 (0.53 , 0.83)
CARE	73 / 640	104 / 643	0.71 (0.58 , 0.86)
LIPID	205 / 1741	284 / 1773	0.73 (0.63 , 0.84)
LIPS	57 / 324	76 / 299	0.73 (0.59 , 0.88)
PLAC I	5 / 42	7 / 52	0.71 (0.52 , 1.02)
PROSPER	29 / 934	31 / 899	0.71 (0.55 , 0.99)
REGRESS	1 / 75	5 / 63	0.66 (0.42 , 0.90)
Pooled (5 year)	**422 / 4274**	**586 / 4232**	**0.70 (0.53 , 0.83)**

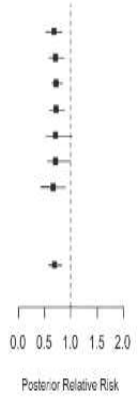


Figure 5 **Bayesian Forest Plot for Revascularization**

Statin therapy reduced the need for revascularization (percutaneous coronary intervention or aortocoronary bypass surgery) by 30% over 5 years as compared to placebo. The posterior median estimate of the number need to treat was 24.

Study	No. Events/ Total No. of Patients: Statin	Placebo	Posterior Median Relative Risk (95% Credible Interval)
CARE	29 / 640	47 / 643	0.72 (0.51 , 0.92)
HPS	280 / 5366	390 / 5331	0.73 (0.64 , 0.84)
LIPID	104 / 1741	119 / 1773	0.80 (0.66 , 1.01)
PLAC I	0 / 42	2 / 52	0.72 (0.35 , 1.04)
PROSPER	45 / 934	53 / 899	0.77 (0.60 , 1.02)
Pooled (5 year)	**458 / 8723**	**611 / 8698**	**0.75 (0.56 , 0.94)**

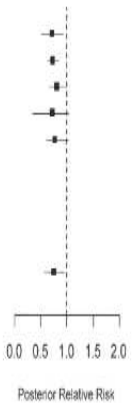


Figure 6 **Bayesian Forest Plot for Stroke**

Statin therapy reduced the incidence of stroke by 25% over 5 years as compared to placebo. The posterior median estimate of the nu

Statine negli anziani: prevenzione primaria

A differenza della prevenzione secondaria, in questo setting di pazienti le evidenze a favore dell'utilizzo di statine sono meno evidenti e controverse.

PRO	PRO (solo x mortalità CV, pz diabetici)	CONTRO
HOPE-3 study	JUPITER study	ALLHAT- LLT trial
Metanalisi italiana (J Am Coll Cardiology, 2013)	CARDS study	PROSPER study
Metanalisi su 28 trials (Lancet 2019)	Studio spagnolo retrospettivo di coorte (BMJ, 2018)	ASPEN study
Studio francese retrospettivo di coorte (European Heart Journal 2019)		
[STAREE trial – ongoing, risultati attesi nel 2020]		

HOPE – 3 study

12 705 pazienti senza malattia cardiovascolare randomizzati a rosuvastatina 10 mg/die, terapia antipertensiva con candesartan 16 mg/die + idroclorotiazide 12.5 mg/die o la combinazione dei due interventi vs placebo.

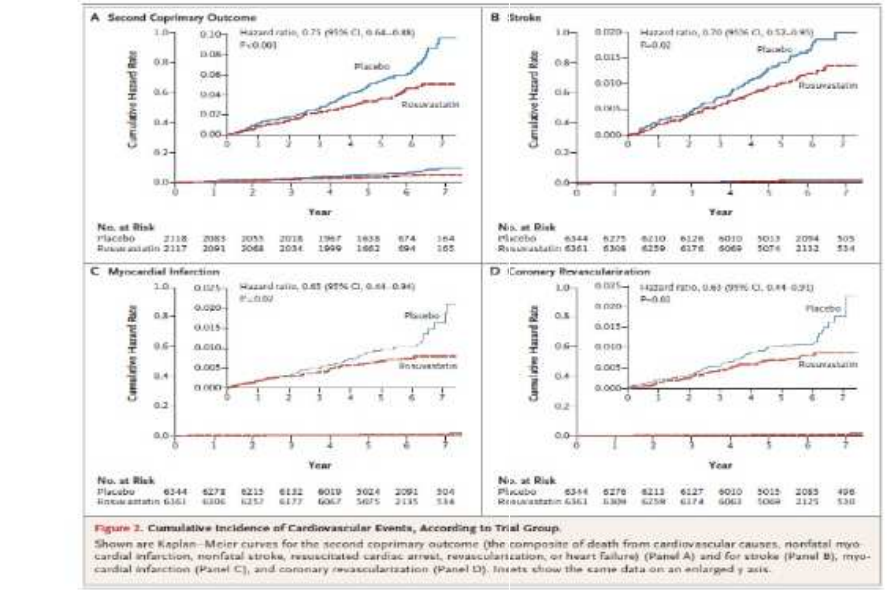


Figure 2. Cumulative Incidence of Cardiovascular Events, According to Trial Group.
Shown are Kaplan–Meier curves for the second coprimary outcome (the composite of death from cardiovascular causes, nonfatal myocardial infarction, nonfatal stroke, resuscitated cardiac arrest, revascularization, or heart failure) (Panel A) and for stroke (Panel B), myocardial infarction (Panel C), and coronary revascularization (Panel D). Insets show the same data on an enlarged y axis.

Yusuf S. et al. N Engl J Med. 2016 Apr 2

<u>CONCLUSIONI</u>: La terapia con statina da sola o in associazione a terapia antipertensiva può prevenire gli eventi CV (morte CV, ictus, IMA) nei pazienti considerati a "rischio intermedio" per malattia coronarica (CHD), ma la sola riduzione della BP non ottiene lo stesso effetto.

Efficacy and safety of statin therapy in older people: a meta-analysis of individual participant data from 28 randomised controlled trials

Metanalisi (Lancet, 2019)

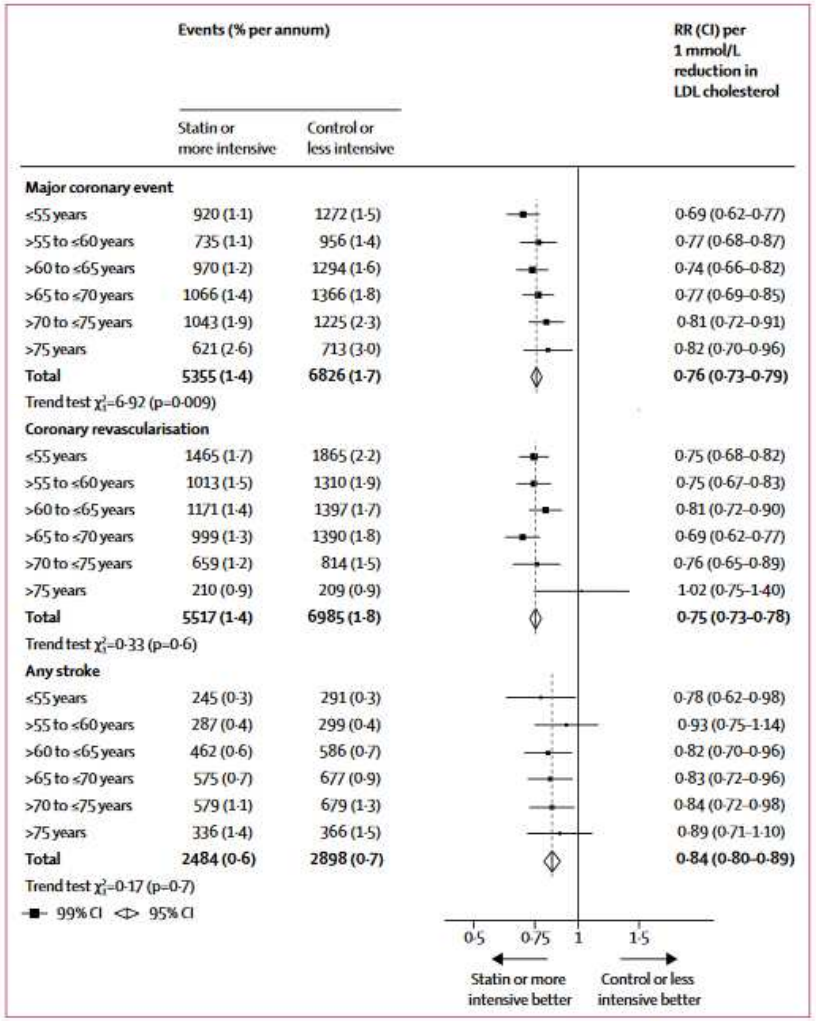


Figure 3: Effects on components of major vascular events per mmol/L reduction in LDL cholesterol in all studies, by age at randomisation
Data from participants with missing baseline data included in the totals. RR=rate ratio.

23 trials di confronto statina VS placebo + 5 trials trattamento intensivo statina VS trattamento standard

Follow up : 4-9 anni

CONCLUSIONI:

terapia con statina determina riduzione del rischio di eventi CV del **21%** ogni riduzione di **1 mmol/L** di colesterolo LDL

Tale beneficio si mantiene anche nei pz over 75 anni soprattutto con storia di malattia vascolare e seppur in misura minore, anche in prevenzione primaria , con risultati più significativi nelle sottoanalisi che escludevano pz con HF e IRC pre-dialisi

ESC European Society of Cardiology
European Heart Journal (2019) **40**, 3516–3525
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CLINICAL RESEARCH
Prevention and epidemiology

Cardiovascular effect of discontinuing statins for primary prevention at the age of 75 years: a nationwide population-based cohort study in France

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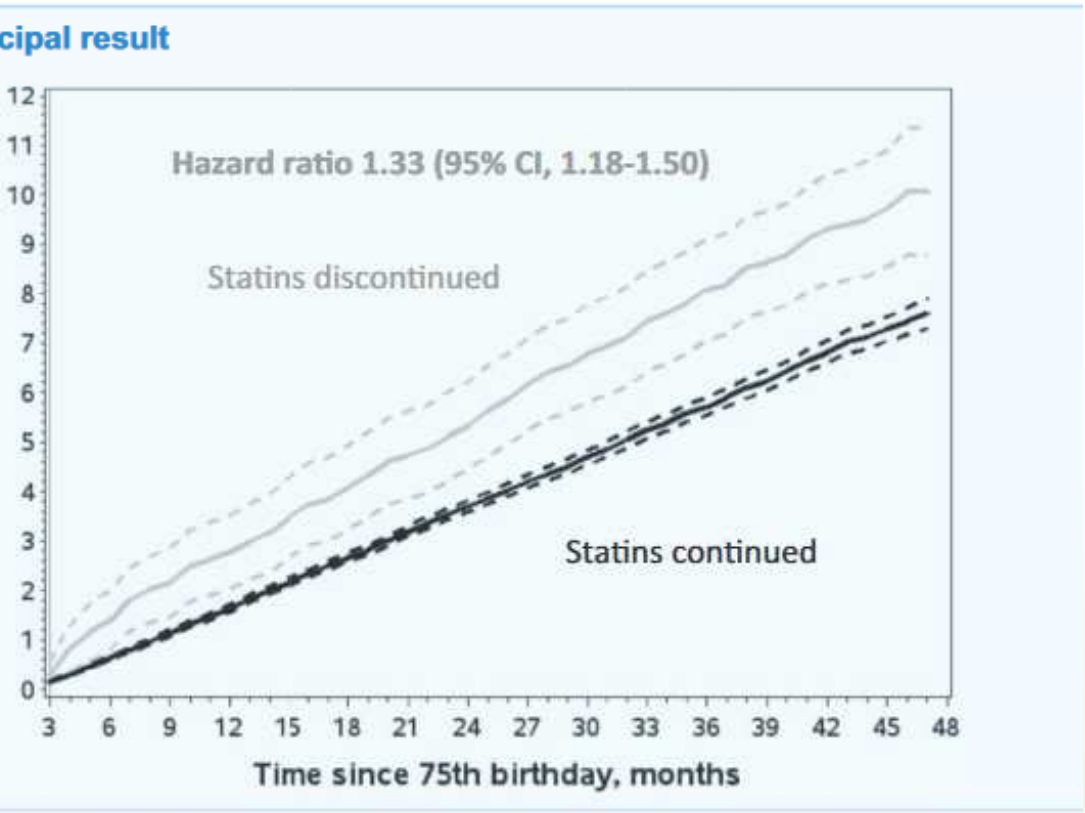
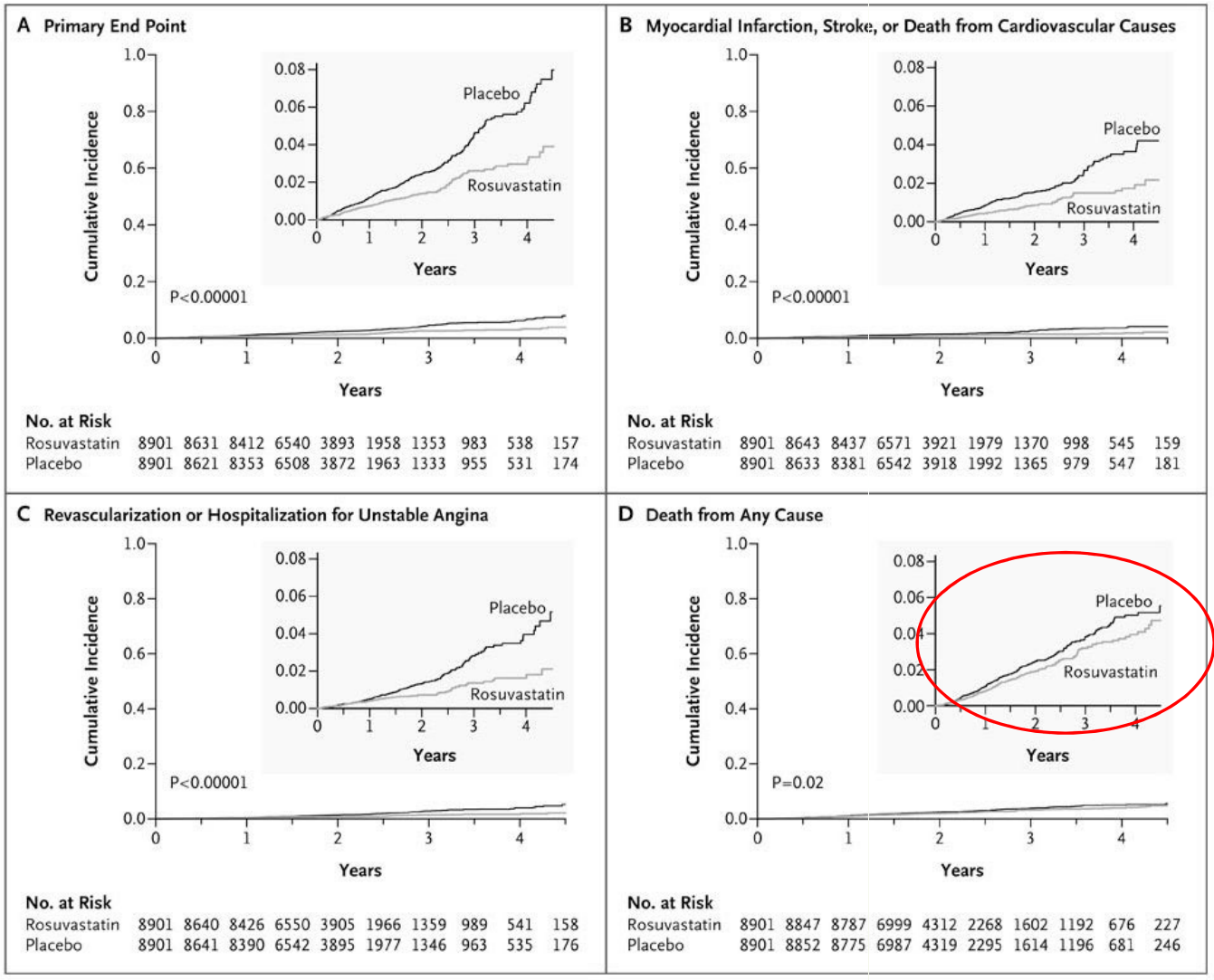


Pazienti di 75 anni in prevenzione primaria e che erano in terapia continuativa con statina nei 2 anni precedenti

CONCLUSIONI: L'interruzione della statina (per almen mesi consecutivi) è stata associata ad un aumento del 33% rischio di ricovero per evento cardiovascolare.

LIMITI: studio di tipo osservazionale; necessaria confer trials futuri

JUPITER study



SCOPO: valutare l'efficacia di rosuvastatina rispetto a placebo in uomini di età superiore a 50 anni e donne di età superiore ai 60 anni caratterizzati da un basso rischio cardiovasco

RISULTATI: nel sottogruppo di pazienti di **e superiore ai 70 anni** (n=5595, 32% del totale terapia preventiva a base di **statine** era risulta **efficace** nel **ridurre il rischio di andare incontro a patologie CV**

Tuttavia, **non emergono differenze significa tra i due gruppi in termini di mortalità per tutte le cause**

3; 362: k3359. PMCID: PMC6123838
online 2018 Sep 5. doi: 10.1136/bmj.k3359 PMID: 30185425

s for primary prevention of cardiovascular events and mortality in old ery old adults with and without type 2 diabetes: retrospective cohort

os, senior researcher,[1,2,3,4] Marc Comas-Cufí, statistician,[1,2] Ruth Martí-Lluch, senior researcher,[1,2,3] Balló, primary care physician,[1,2,3,4] Anna Ponjoan, senior researcher,[1,2,3] Lia Alves-Cabratosa, ral researcher,[1,2] Jordi Blanch, statistician,[1,2] Jaume Marrugat, senior researcher,[5,6] Roberto Elosua, senior ,[5,6] María Grau, senior researcher and associate professor,[5,6] Marc Elosua-Bayes, predoctoral researcher,[1] rcía-Ortiz, senior researcher,[7] and Maria Garcia-Gil, senior researcher[1,2,4]

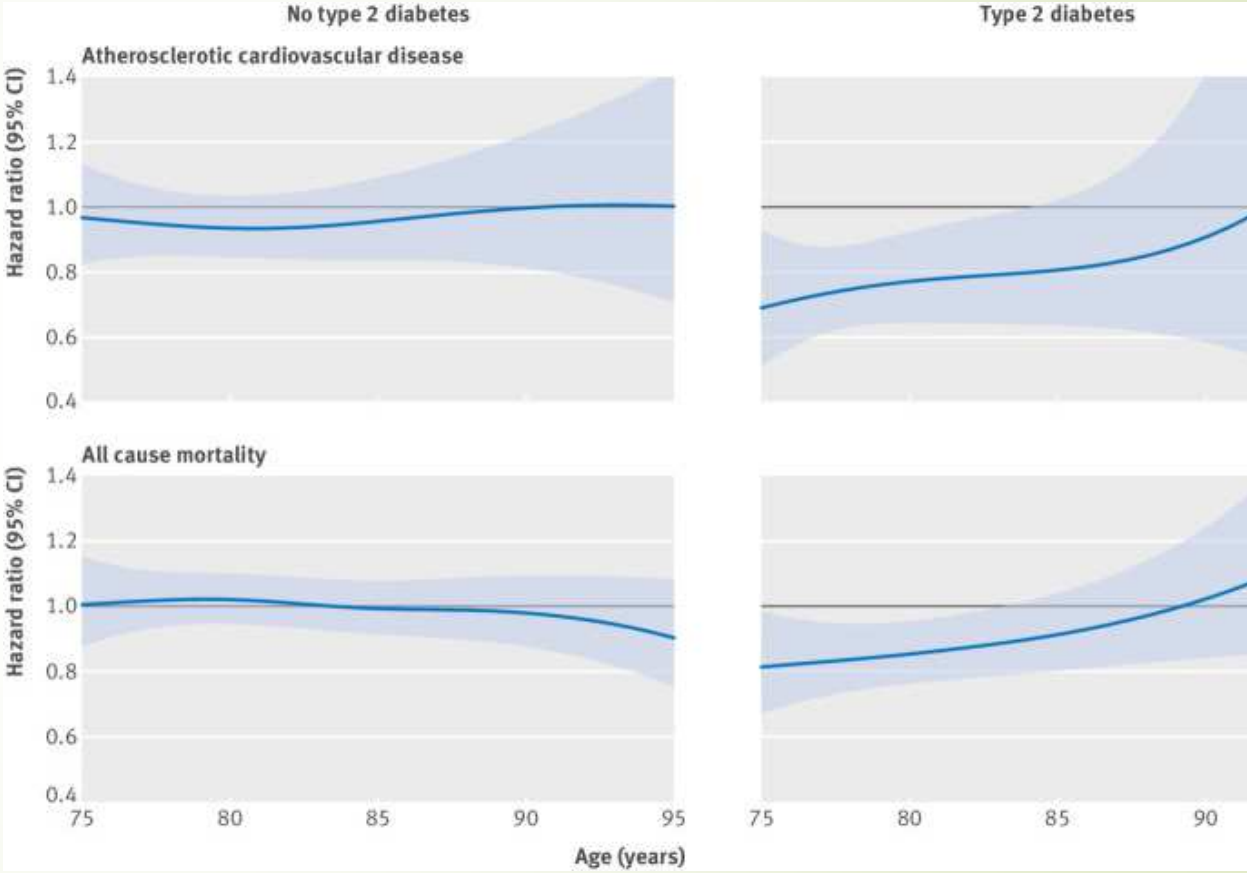
o retrospettivo di coorte su pz >74 anni in prevenzione aria

NCLUSIONI: differenza tra pz diabetici (DM 2) e non etici, tra pz anziani (75-85 anni) e molto anziani (over 85 aa).

pazienti **diabetici** con età **75-84 anni** il trattamento con ne determina una **riduzione d'incidenza del 24% di malattia osclerotica CV** e del **16% mortalità x tutte le cause.**

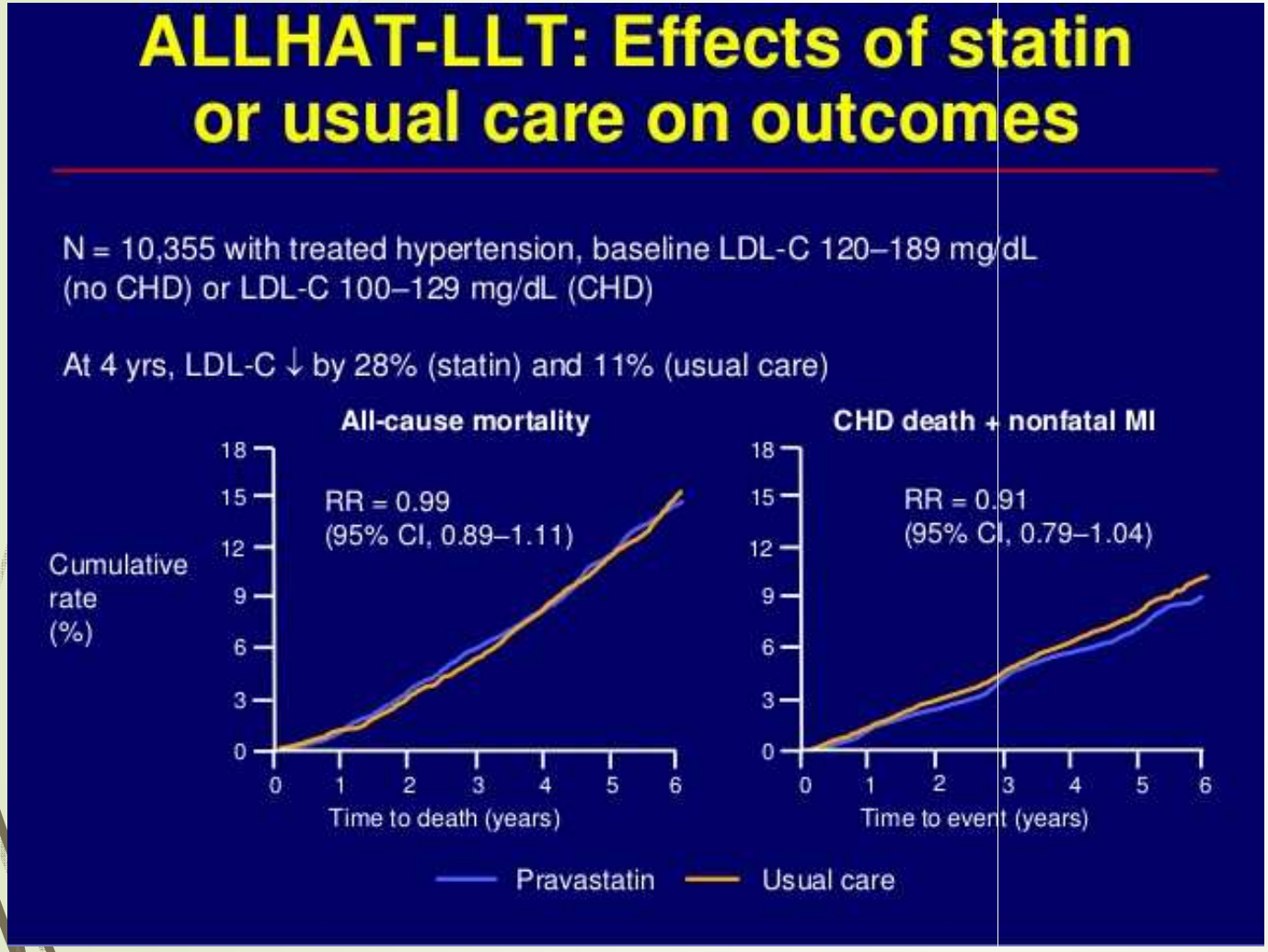
oz diabetici over 85 anni non vi sono benefici nell'uso di ne

oz non diabetici non vi sono sostanziali benefici nell'uso di ne



Thin plate regression splines of hazard ratios of atherosclerotic cardiovascular disease and all cause mortality for stat age, in participants with and without type 2 diabetes mellitus

ALLHAT-LLT trial



Studio multicentrico randomizzato (published Jama, 2002)

Pazienti età > 55 anni ipertesi, ipercolesterolemici, sia con documentata malattia CV che in prevenzione primaria

Pravastatina 40 mg VS usual care

CONCLUSIONI:
Pravastatina non determina riduzione significativa della mortalità per tutte le cause o di malattia CV nei pazienti anziani con HTA ben controllata e ipercolesterolemia moderata (prev. primaria)

PROSPER study

- 5804 patients aged 70–82 years with a history of vascular disease or with cardiovascular risk factors
- Randomized to pravastatin 40 mg/d or placebo
- Baseline TC 155–348 mg/dL
- Follow-up 3.2 years (mean)
- Primary endpoint (composite): coronary death, nonfatal MI, fatal or nonfatal stroke

CONCLUSIONI: il trattamento con pravastatina in prevenzione primaria (in assenza di malattia aterosclerotica) non determina un effetto significativo sull'outcome primario (endopoint composito di morte, infarto miocardico non fatale e fatale, ictus).
Nel sottogruppo dei pazienti in prevenzione secondaria è stato possibile dimostrare l'efficacia della statina, con una frequenza di eventi cardiovascolari del 17,4% rispetto al 21,7% del placebo.

… quindi che fare nel paziente anziano?

- PREVENZIONE SECONDARIA : evidenze scientifiche sono sufficientemente solide nel raccomandare di proseguire la terapia con statina se ben tollerata

- PREVENZIONE PRIMARIA: 'tailored therapy' → scelta a discrezione del medico che deve esser guidato dal buon senso clinico e dalle caratteristich individuali di ogni paziente

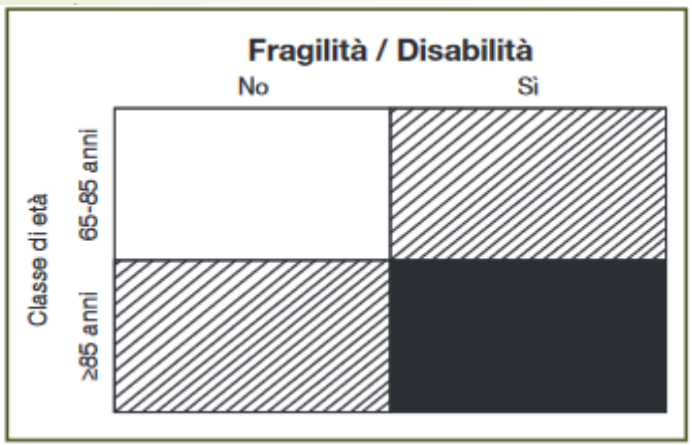


Figura 3 - Rappresentazione schematica delle indicazioni al trattamento farmacologico ipolipemizzante in rapporto ad età e condizioni patologiche concomitanti nei pazienti anziani ad elevato rischio CV. Area bianca: la terapia è indicata; area tratteggiata: indicazioni contrastanti; area nera: la terapia non è indicata.