TRACTAMENT DEL BINOMI DIABETIS – HIPERTENSIÓ QUÈ PODEM FER?

KEEP
CALM
i
BLOQUEJA
EL SRAA

DE QUÈ PARLAR QUAN SEMBLA QUE JA ESTÀ TOT DIT?

- P
- S
- T
- C

PRIMUM NON NOCERE

Association between cardiovascular events and sodium-containing effervescent, dispersible, and soluble drugs: nested case-control study

Table 1| Examples of sodium content per tablet and maximum daily ingested sodium for selected sodium-containing formulations

Formulation	…let (mmol)		Maximum daily Na$^+$ (mmol/day)	
Paracetamol soluble tablet 500 mg	.6	(0.4 g)	148.8	(3,4 g)
Paracetamol with codeine phosphate effervesce…	.8		142.4	

SODIO: 33 mg 1%

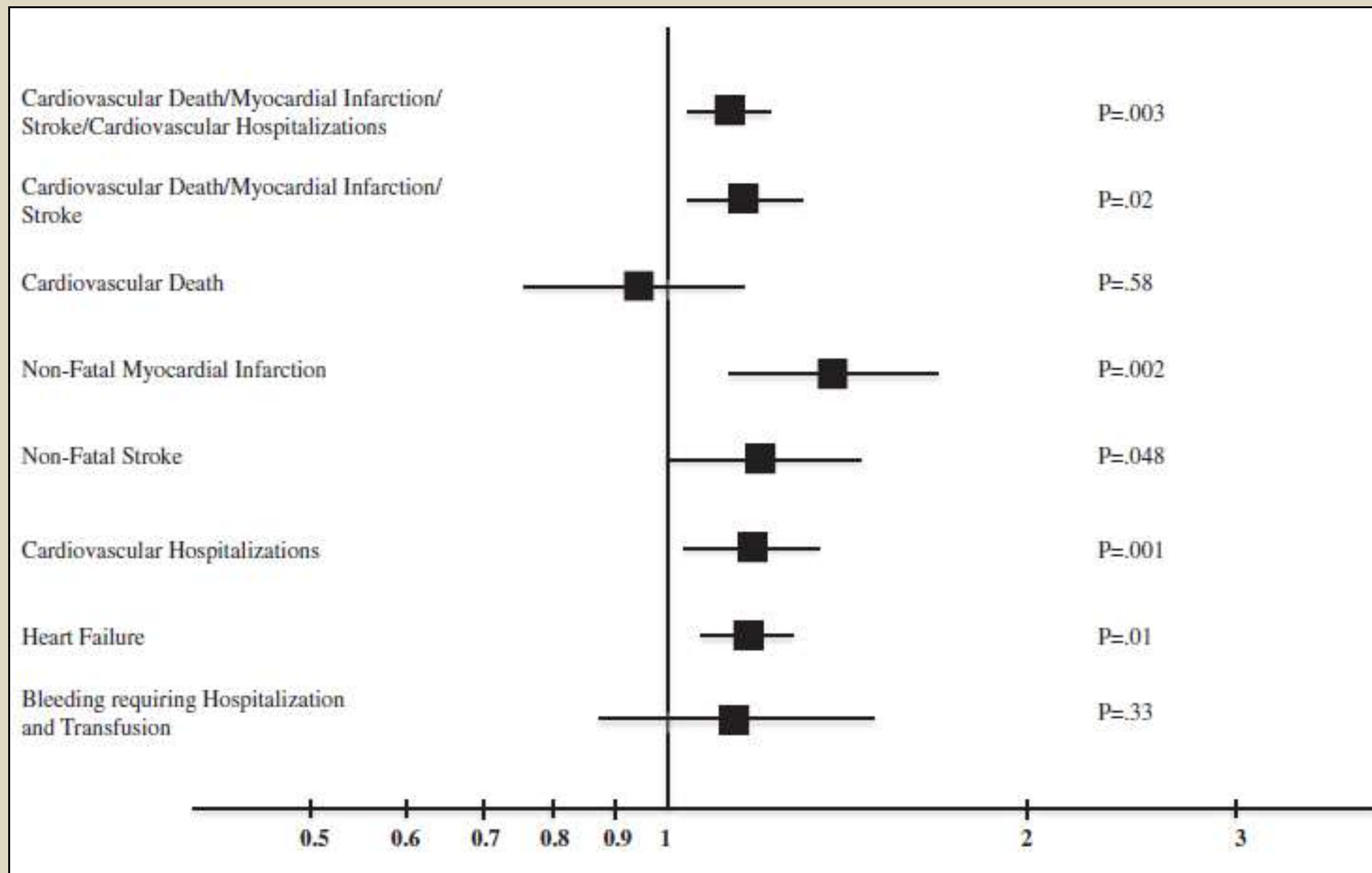
*Recomendación de Ingesta Diaria calculado con base en una dieta de 2000 kcal.

Vascular death	0.70 (0.31 to 1.59)
Hypertension	7.18 (6.74 to 7.65)
Heart failure	0.98 (0.93 to 1.04)
All cause mortality	1.28 (1.23 to 1.33)

*Incident non-fatal myocardial infarction, incident non-fatal stroke, and vascular death.

BMJ 2013;347:f6954

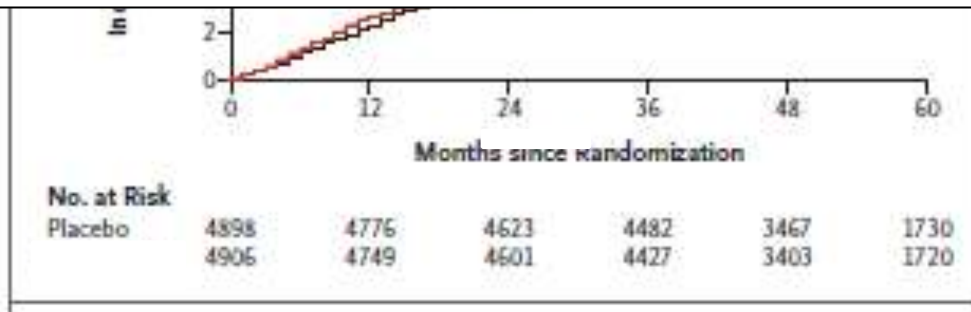
NSAID Use and Association with Cardiovascular Outcomes in Outpatients with Stable Atherothrombotic Disease

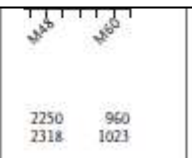


http://dx.doi.org/10.1016/j.amjmed.2013.08.017

Quan perdre pes és perjudicial

Effect of Sibutramine on Cardiovascular Outcomes in Overweight and Obese Subjects

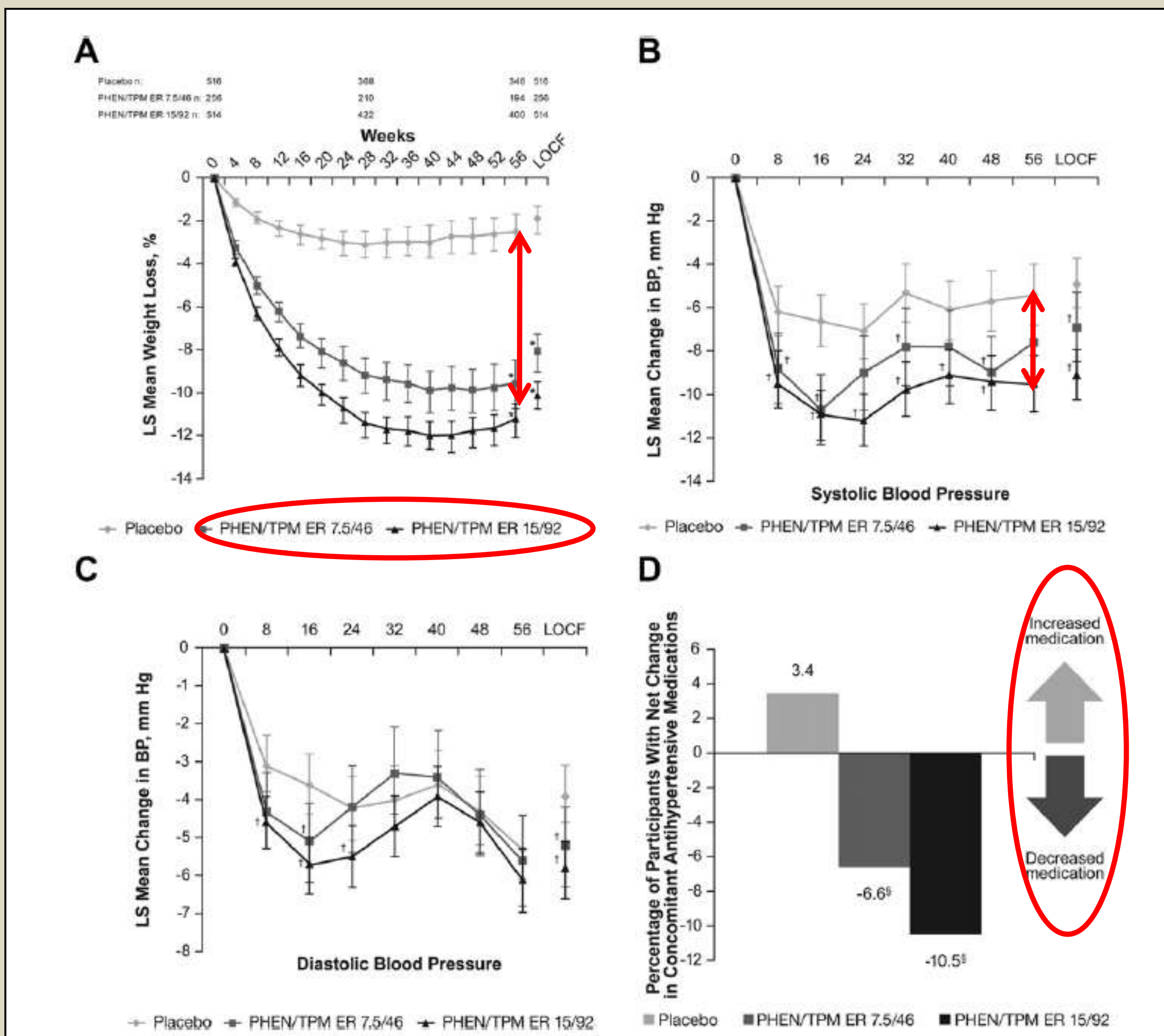




N Engl J Med 2010;363:905-17.

Is cardiometabolic risk improved by weight-loss drugs?

www.thelancet.com Vol 376 August 21, 2010



Am J Cardiol 2013;111:1131–1138

Is cardiometabolic risk improved by weight-loss drugs?

www.thelancet.com Vol 376 August 21, 2010

	Placebo	Naltrexone 16 mg plus bupropion	Naltrexone 32 mg plus bupropion	p value for comparison with placebo	
				Naltrexone 16 mg plus bupropion	Naltrexone 32 mg plus bupropion
Systolic blood pressure (mm Hg)					
Baseline	119·0 (9·8)	119·5 (9·9)	118·9 (9·9)	..	..
Change	−1·9 (−2·7 to −1·2)	0·3 (−0·5 to 1·1)	−0·1 (−0·9 to 0·7)	<0·0001	0·0008
Diastolic blood pressure (mm Hg)					
Baseline	77·3 (6·6)	76·6 (7·2)	77·1 (7·2)	..	..
Change	−0·9 (−1·4 to −0·3)	0·1 (−0·5 to 0·7)	0·0 (−0·5 to 0·6)	0·0150	0·0217

Lancet 2010; 376: 595–605

Combined Angiotensin Inhibition for the Treatment of Diabetic Nephropathy

Table 3. Safety Outcomes.*

Outcome	Losartan plus Placebo (N=724)	Losartan plus Lisinopril (N=724)	Hazard Ratio with Losartan plus Lisinopril (95% CI)	P Value
Patients with serious adverse events — no. (%)	380 (52.5)	416 (57.5)	NA	0.06
No. of serious adverse events	1274	1539†	NA	
Attribution of serious adverse events to study drugs — no. of events (%)†				0.049
Not attributed	1159 (91.0)	1365 (88.7)	NA	
Possibly attributed	104 (8.2)	146 (9.5)	NA	
Attributed	11 (0.9)	27 (1.8)	NA	
Acute kidney injury — no. of patients (%)	80 (11.0)	130 (18.0)	1.7 (1.3–2.2)	<0.001
Hyperkalemia — no. of patients (%)	32 (4.4)	72 (9.9)	2.8 (1.8–4.3)	<0.001

N Engl J Med 2013;369:1892-903

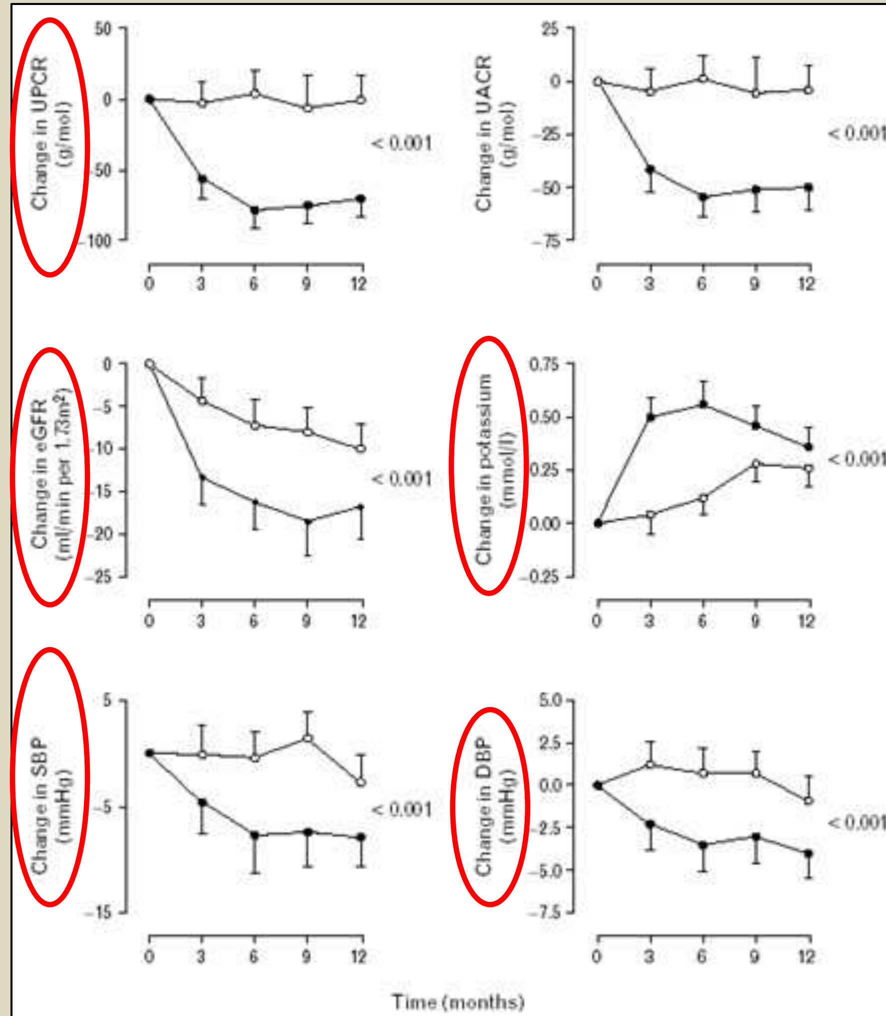
Cardiorenal End Points in a Trial of Aliskiren for Type 2 Diabetes

Table 3. Most Commonly Reported Adverse Events and Study-Drug Discontinuation.*

Event	Any Event Reported		P Value	Event Leading to Permanent Study-Drug Discontinuation		P Value
	Aliskiren (N=4272)	Placebo (N=4285)		Aliskiren (N=4272)	Placebo (N=4285)	
	no. of patients (%)			*no. of patients (%)*		
Hyperkalemia	1670 (39.1)	1244 (29.0)	<0.001	205 (4.8)	111 (2.6)	<0.001
Peripheral edema	686 (16.1)	706 (16.5)	0.60	11 (0.3)	7 (0.2)	0.34
Hypotension	519 (12.1)	357 (8.3)	<0.001	28 (0.7)	13 (0.3)	0.02
Diarrhea	417 (9.8)	312 (7.3)	<0.001	11 (0.3)	7 (0.2)	0.34
Hypertension	429 (10.0)	469 (10.9)	0.17	3 (0.1)	9 (0.2)	0.15
Renal impairment	418 (9.8)	371 (8.7)	0.07	65 (1.5)	54 (1.3)	0.30

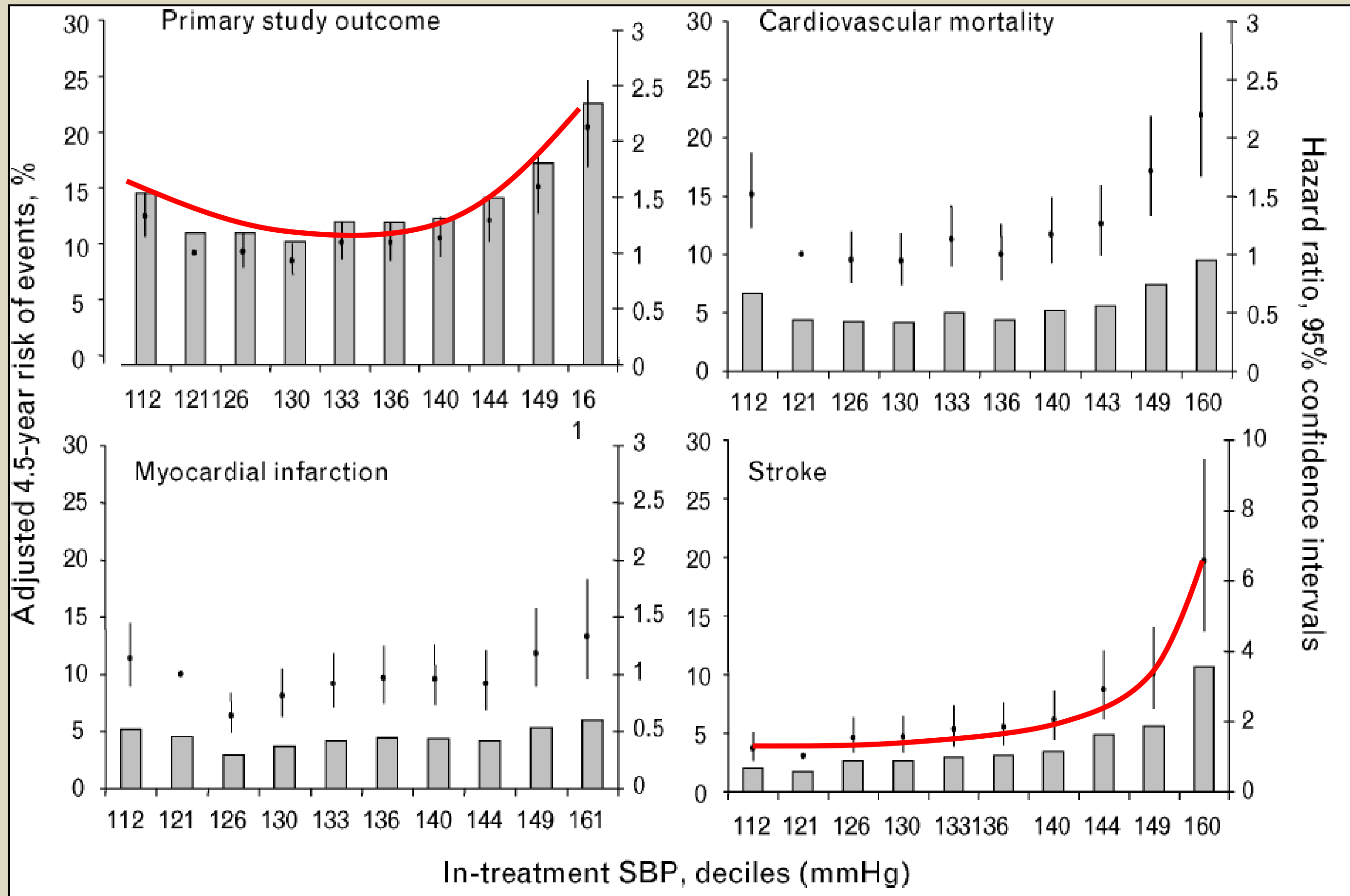
N Engl J Med 2012;367:2204-13

... i la ESPIRONOLACTONA?



Medwave 2008 sep;8(8):e1652 doi: 10.5867/medwave.2008.08.1652

HOW LOW?



Journal of Hypertension 2009, 27:1360–1369

HOW LOW?

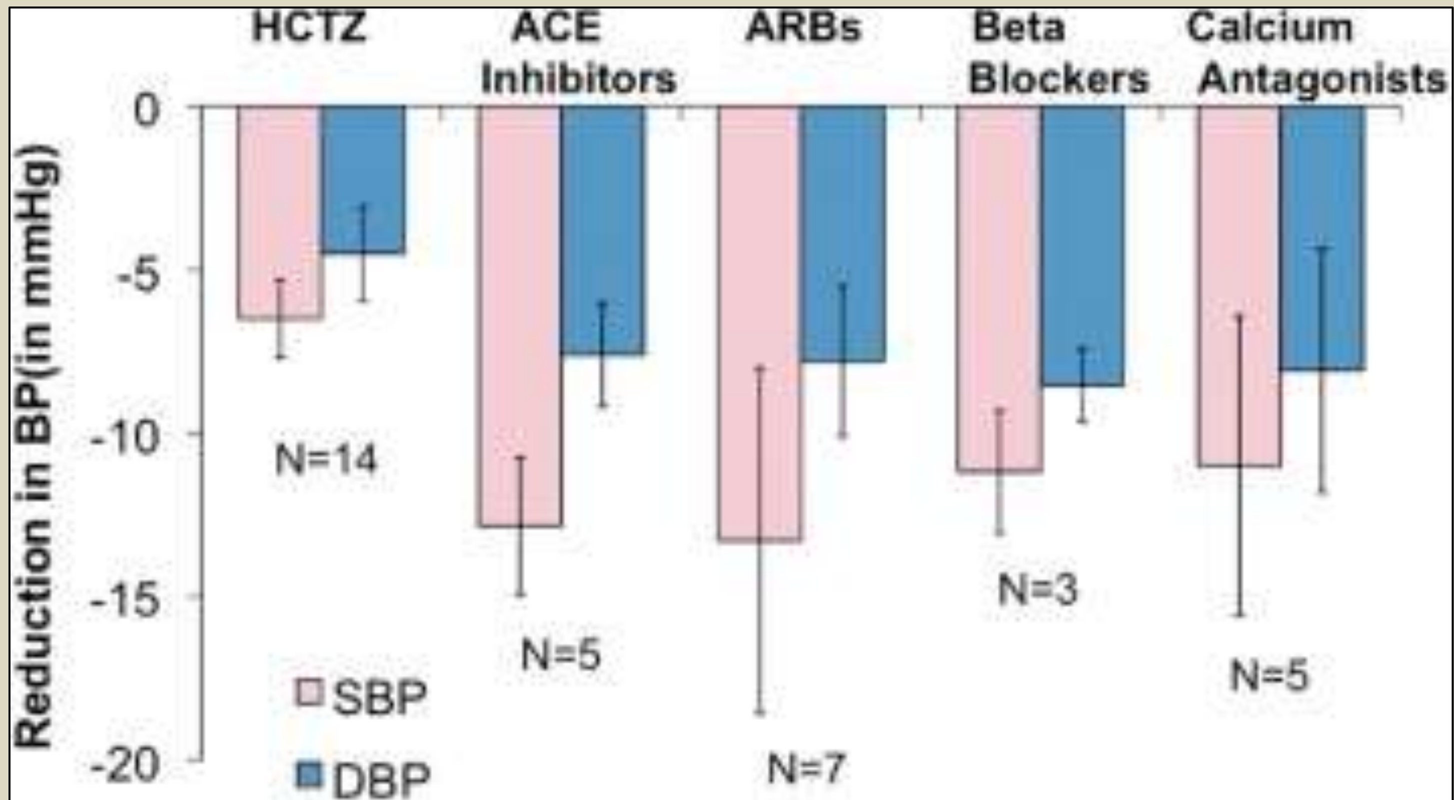
2014

Goals

- People with diabetes and hypertension should be treated to a systolic blood pressure (SBP) goal of <140 mmHg. **B**
- Lower systolic targets, such as <130 mmHg, may be appropriate for certain individuals, such as younger patients, if it can be achieved without undue treatment burden. **C**
- Patients with diabetes should be treated to a diastolic blood pressure (DBP) <80 mmHg. **B**

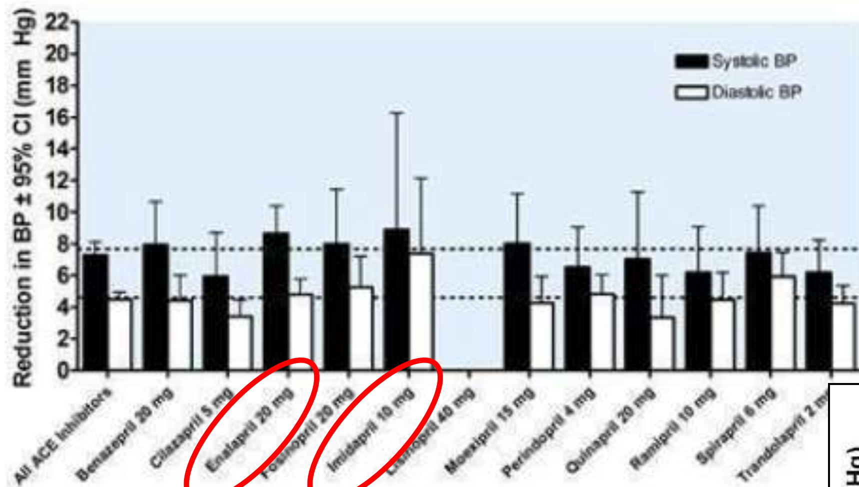
SECUNDO VALET

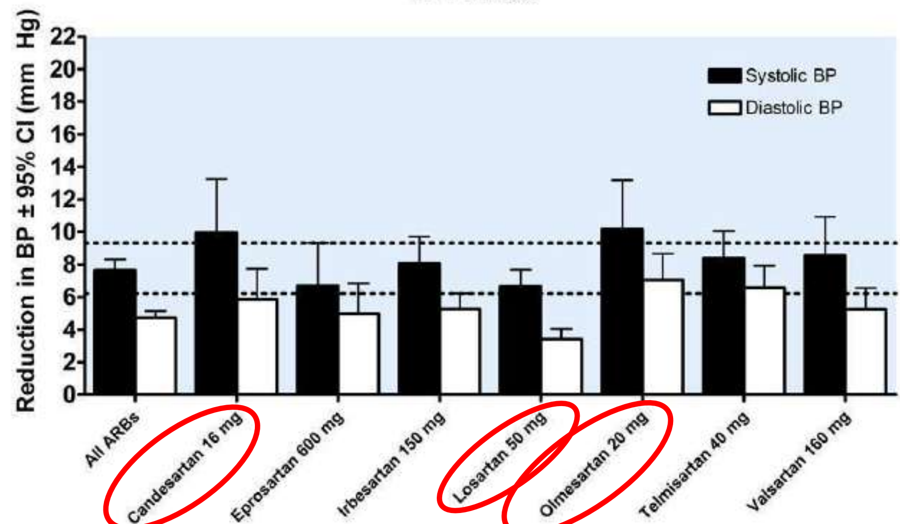
EFICACIA HIPOTENSORA



J Am Coll Cardiol 2011;57:590–600)

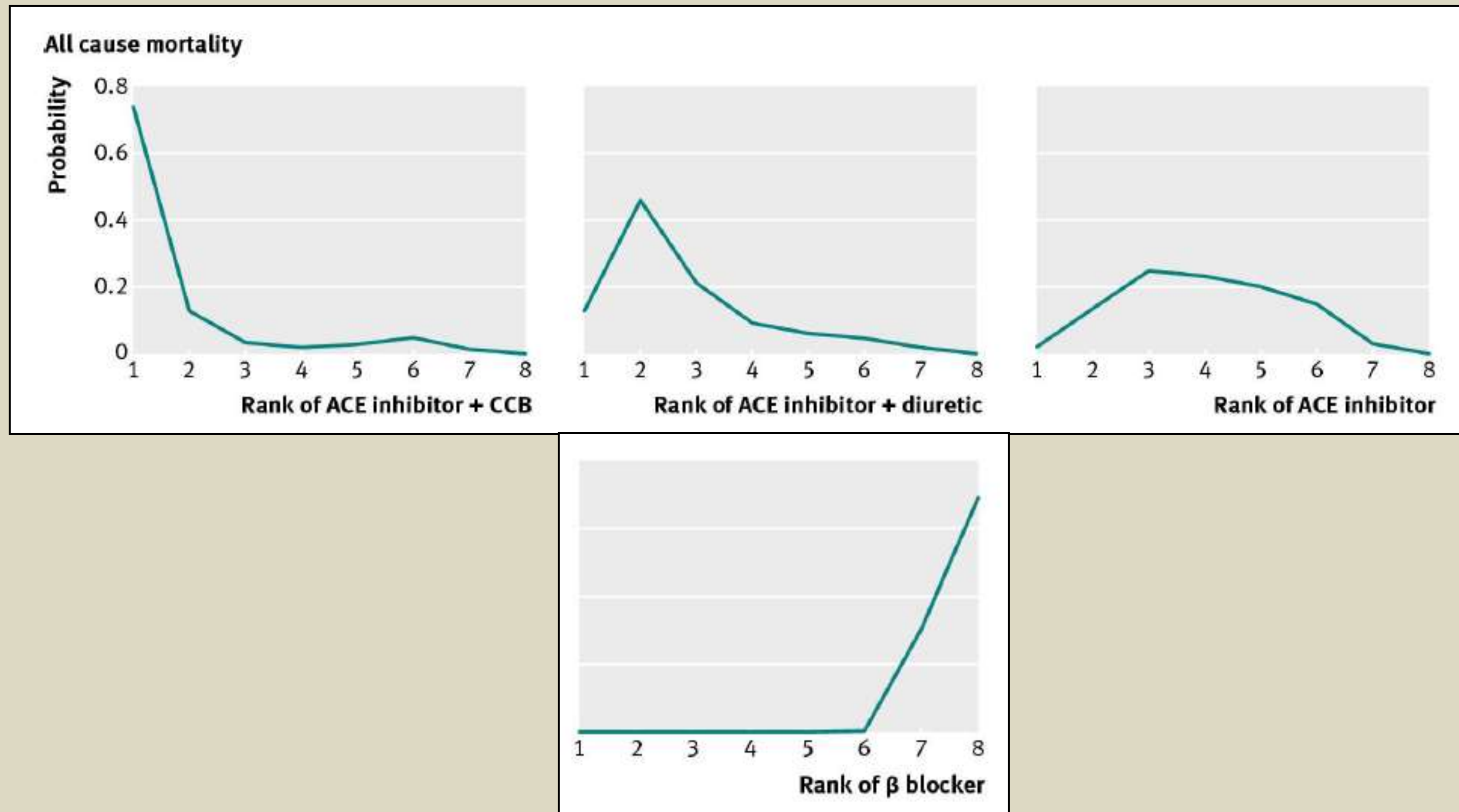
Blood pressure lowering efficacy of angiotensin converting enzyme (ACE) inhibitors for primary hypertension (Review)





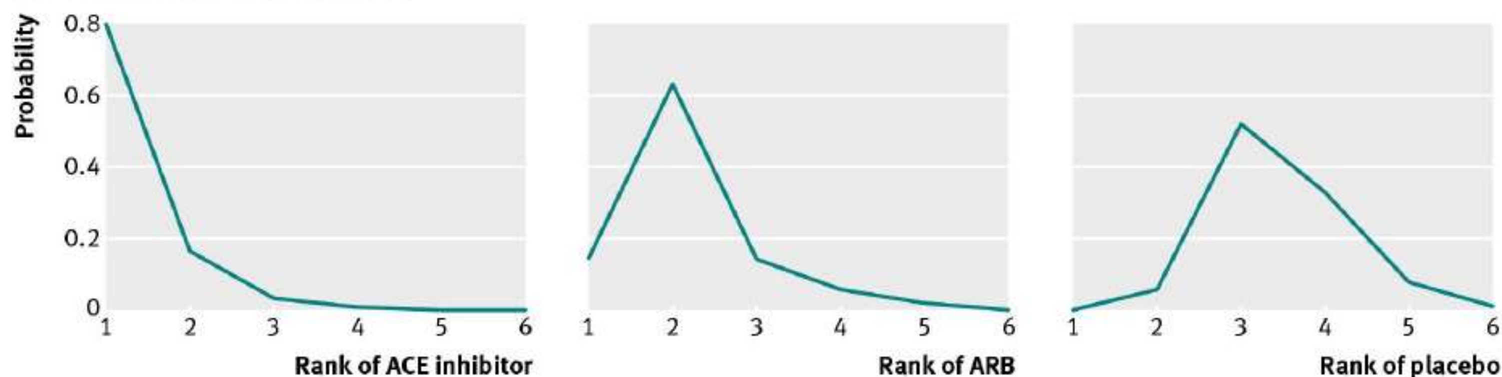
http://www.thecochranelibrary.com

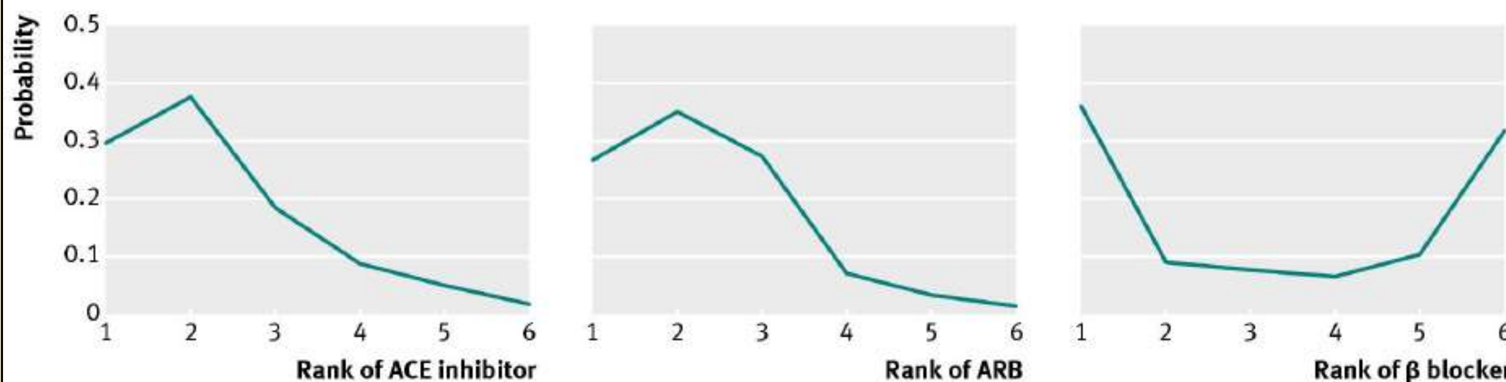
Comparative effectiveness of renin-angiotensin system blockers and other antihypertensive drugs in patients with diabetes: systematic review and bayesian network meta-analysis



BMJ 2013;347:f6008

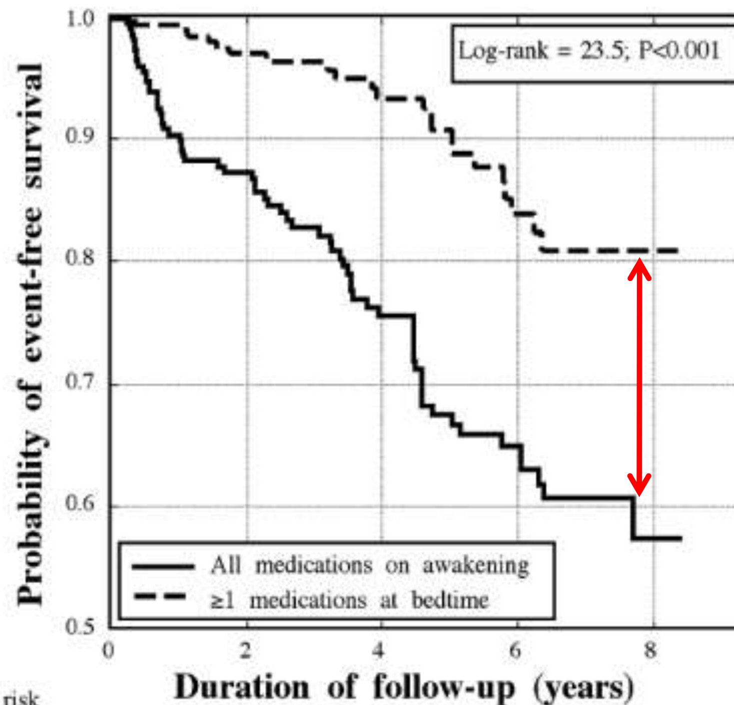
Comparative effectiveness of renin-angiotensin system blockers and other antihypertensive drugs in patients with diabetes: systematic review and bayesian network meta-analysis





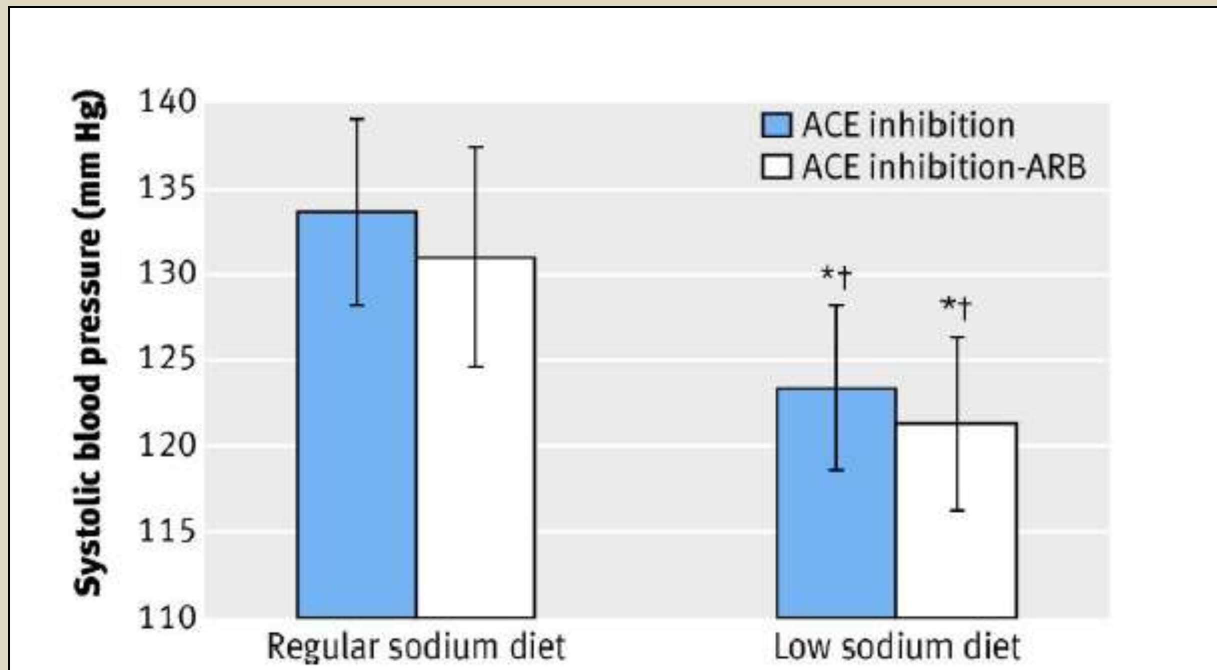
BMJ 2013;347:f6008

Influence of Time of Day of Blood Pressure–Lowering Treatment on Cardiovascular Risk in Hypertensive Patients With Type 2 Diabetes



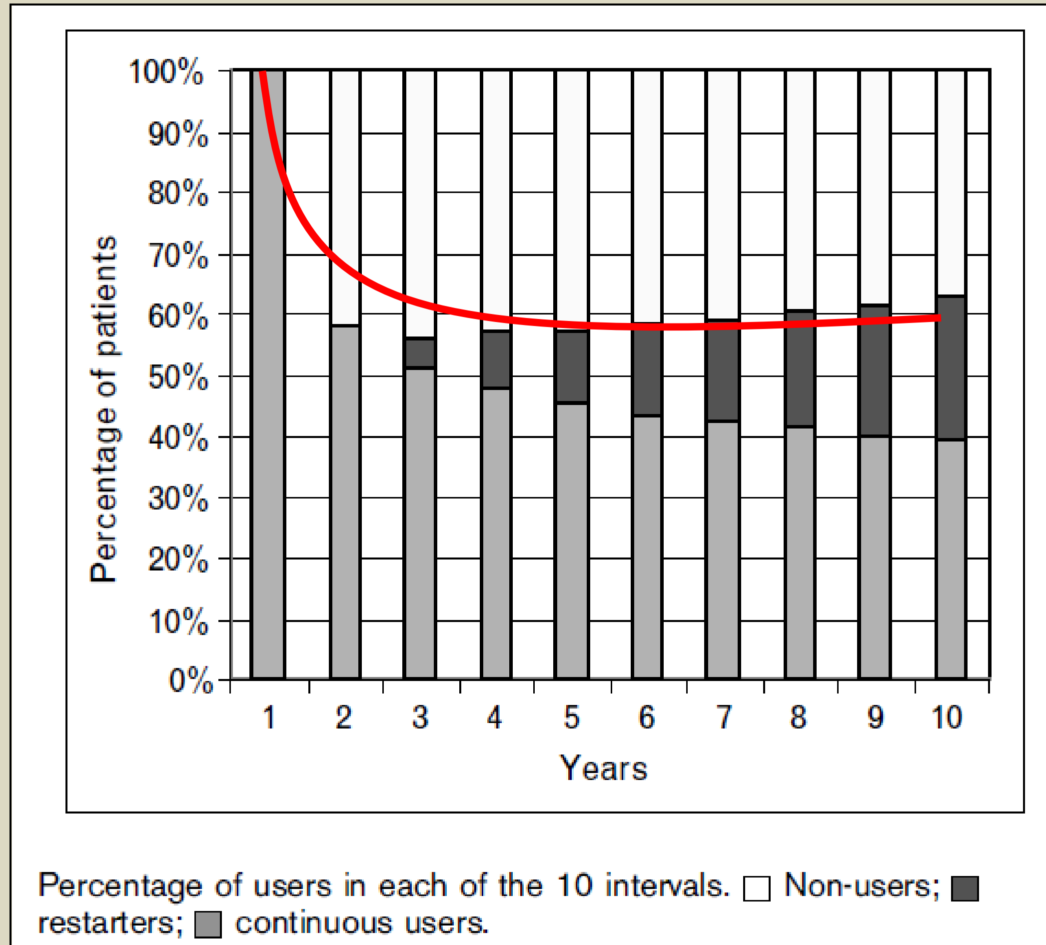
Diabetes Care 34:1270–1276, 2011

Moderate dietary sodium restriction added to angiotensin converting enzyme inhibition compared with dual blockade in lowering proteinuria and blood pressure: randomised controlled trial



BMJ 2011;343:d4366 doi: 10.1136/bmj.d4366

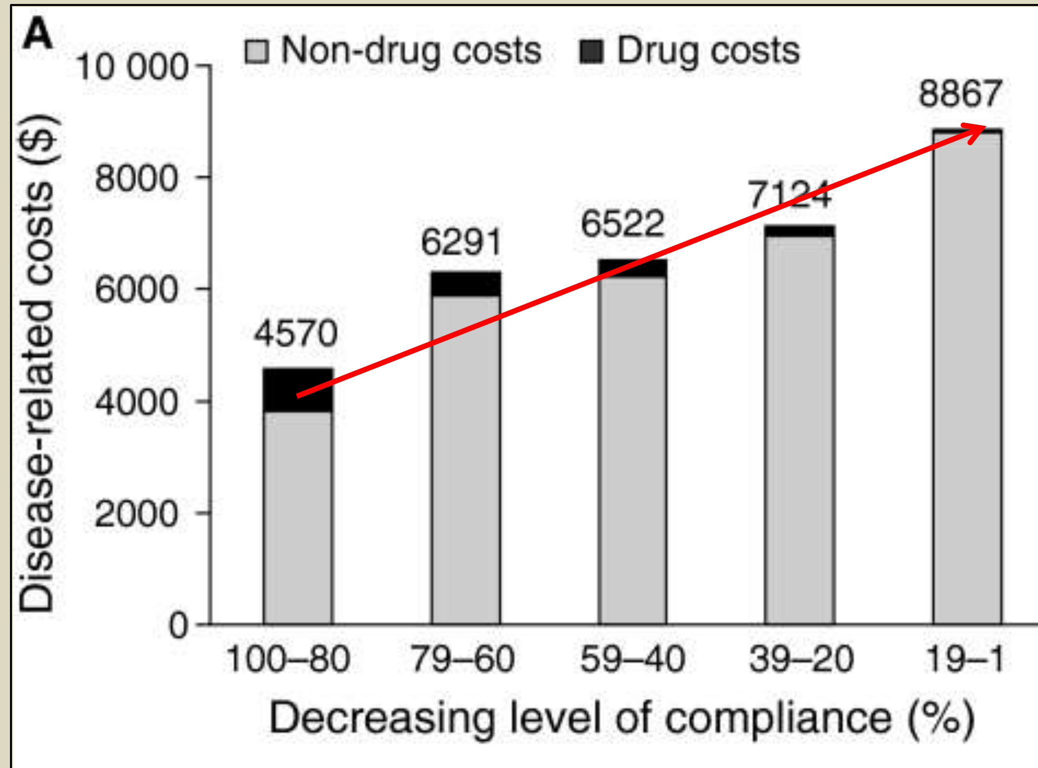
El compliment és un problema



Percentage of users in each of the 10 intervals. □ Non-users; ■ restarters; ■ continuous users.

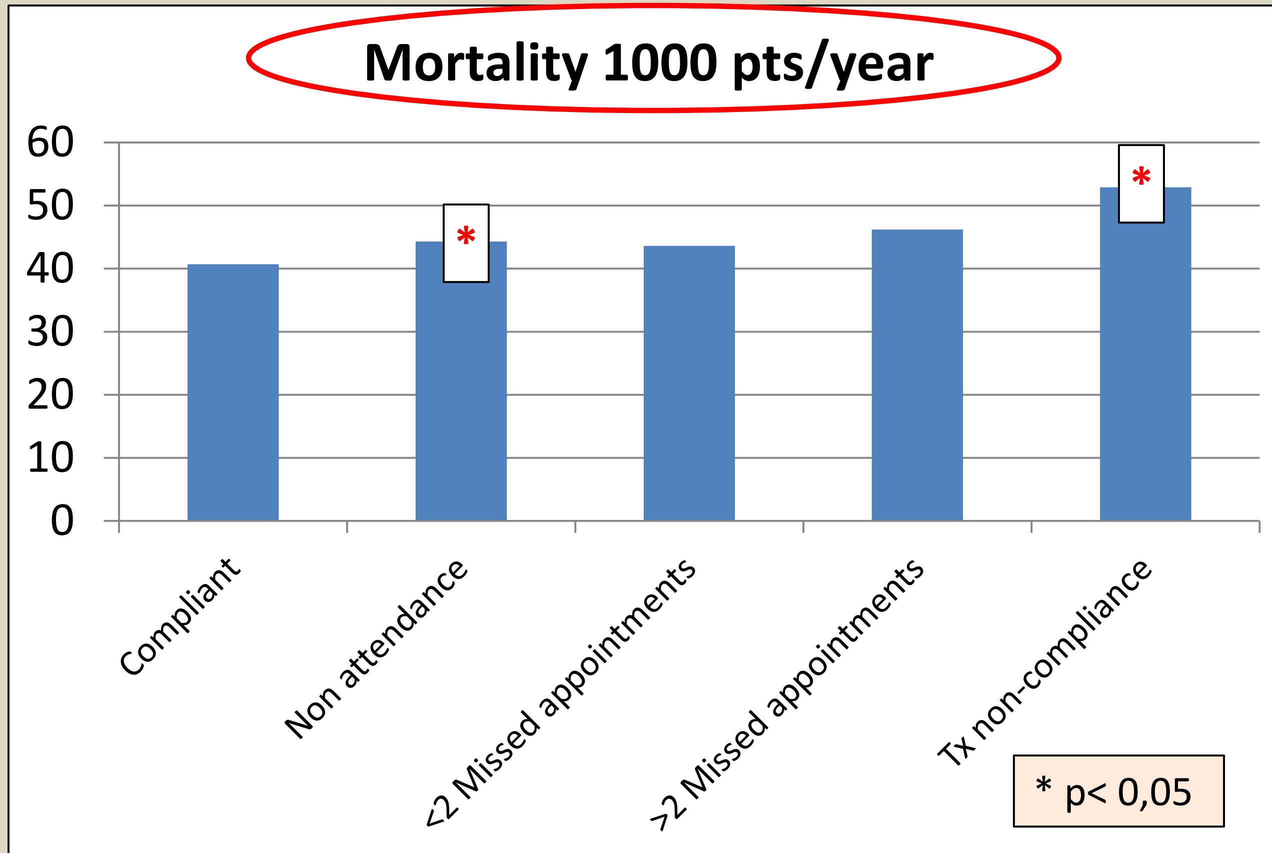
Journal of Hypertension 2005, 23:2101–2107

...que incrementa els costos



Int J Clin Pract. 2008;62:338-51.

...i empitjora el pronòstic



Diabetes Care 35:1279–1284, 2012

millorant l'adherència el paper del farmacèutic

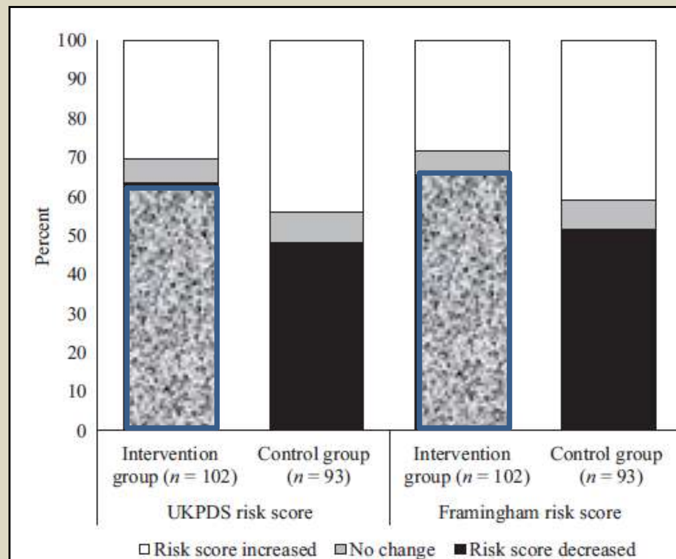


FIGURE 2 Proportion of patients with risk score changes from baseline.

Table 3 Changes to UK Prospective Diabetes Study (UKPDS) risk score attributable to individual risk factors

	Intervention group (n = 102)	Control group (n = 93)	P-value*
One-year value used			
HbA_{1c}	0.1 (2.2)	−0.3 (2.5)	0.24
Systolic blood pressure	−0.5 (1.6)	−0.2 (1.4)	0.12
Total cholesterol	−0.8 (3.5)	−0.0 (2.9)	0.065
HDL cholesterol	0.2 (2.7)	−0.3 (2.0)	0.26
All four risk factors	−1.3 (3.6)	−0.4 (3.8)	0.032

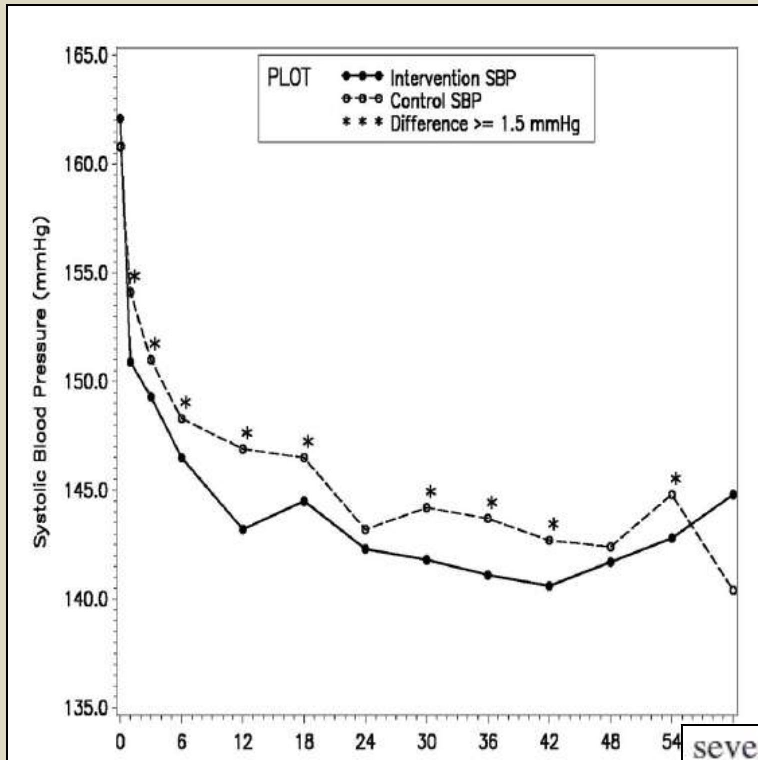
Change from baseline (1 year minus baseline) are presented as mean (standard deviation).
*Mann–Whitney U-test for difference in change between groups.

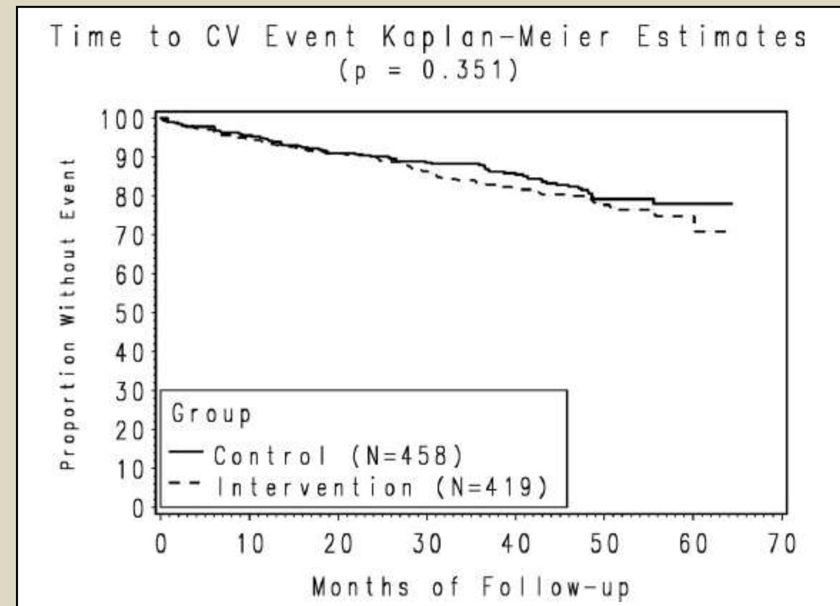
Diabet. Med. 29, 1433–1439 (2012)

Between-group comparison at 8-month follow-up	Intervention Group %	(n)	Control Group %	(n)	Difference (95% CI)		P Value[a]
Systolic blood pressure control	54.5	(194)	45.5	(163)	9.0	(1.6-16.3)	0.017
Diastolic blood pressure control	71.6	(255)	70.4	(252)	1.2	(−5.4-7.9)	0.716
Blood pressure control[b]	52.5	(187)	43.0	(154)	9.5	(2.2-16.8)	0.011

J Manag Care Pharm. 2012;18(4):311-23

millorant l’adherència l’abordatge multidisciplinar

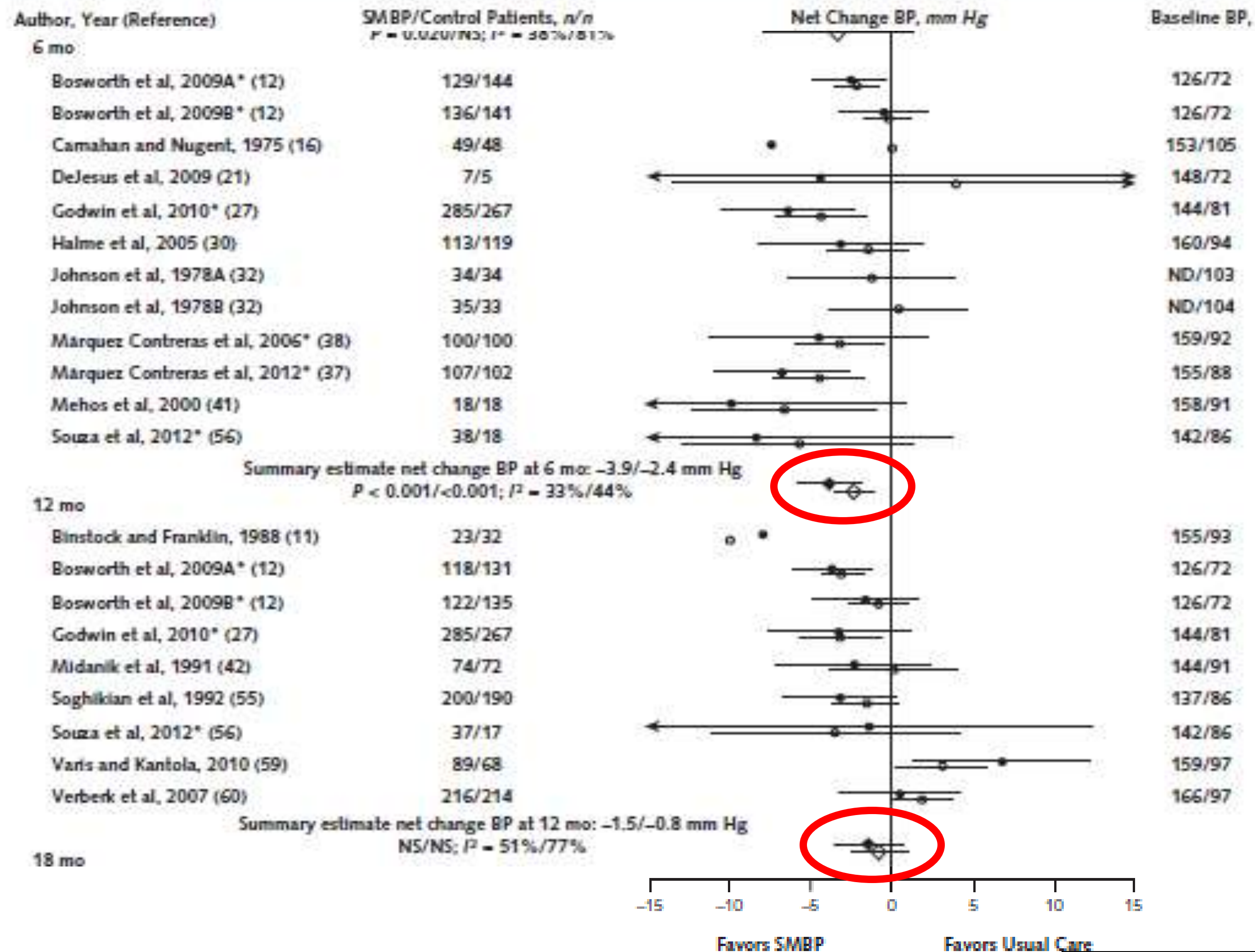




severe hypertension. The intervention to improve adherence in the treatment group lasted 6 months and consisted of 3 main components: (1) The counting of pills during physician visits, (2) designation of a family member to support adherence behavior, and (3) provision of an information sheet to patients at the start of the intervention. Patients were supposed to bring back the information

Circulation. 2010;122:1183-1191

el paper de l'autocontrol



Ann Intern Med. 2013;159:185-194.

Igual per tots els fàrmacs?

110%

Table 3 Patient and spouse themes regarding sexual function and adherence

Patient themes	Spouse themes
Sexual intercourse is a high priority	Sexual intercourse is a low priority
Decrease in the frequency of sexual intercourse is abnormal	Decrease in the frequency of sexual intercourse is normal
Seeking treatment for impotence	Discouraging patients from taking PDE-5 inhibitors
Selectively adhering to antihypertensive medications to preserve sexual function	Discouraging patients from skipping their antihypertensive medications

Patient Preference and Adherence 2008:2

calcium antagonists; alpha-blockers; diuretics; beta-blockers.

Journal of Hypertension 2005, 23:2101–2107

El paper del nombre de comprimits

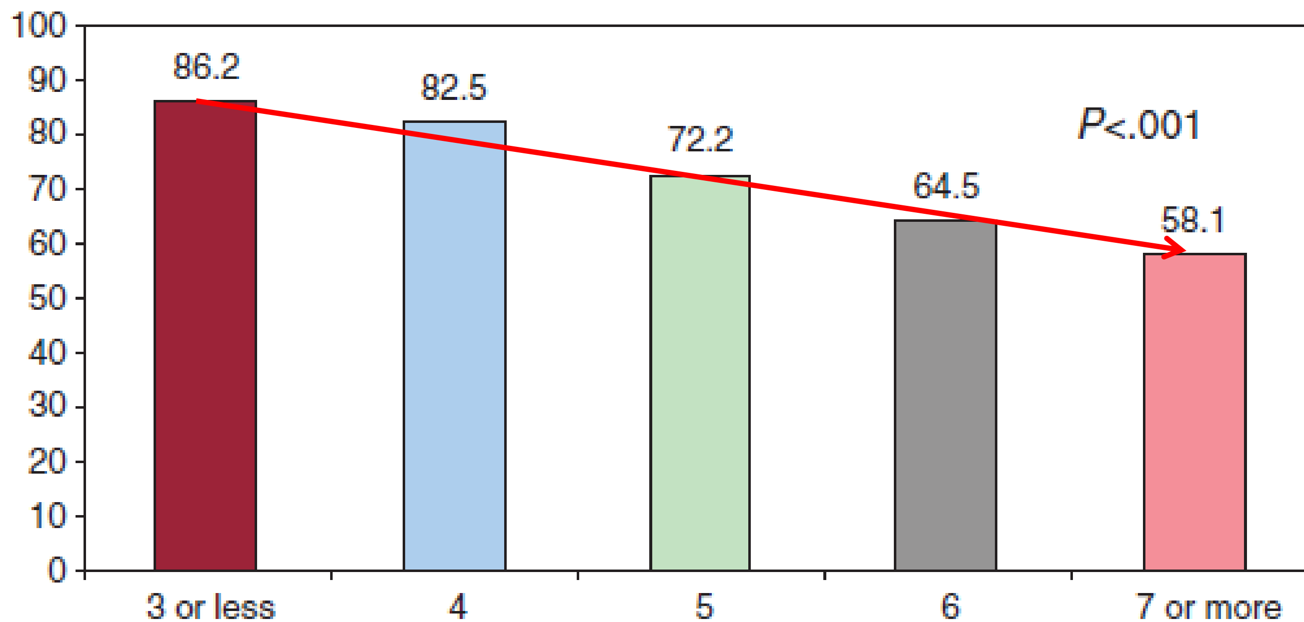
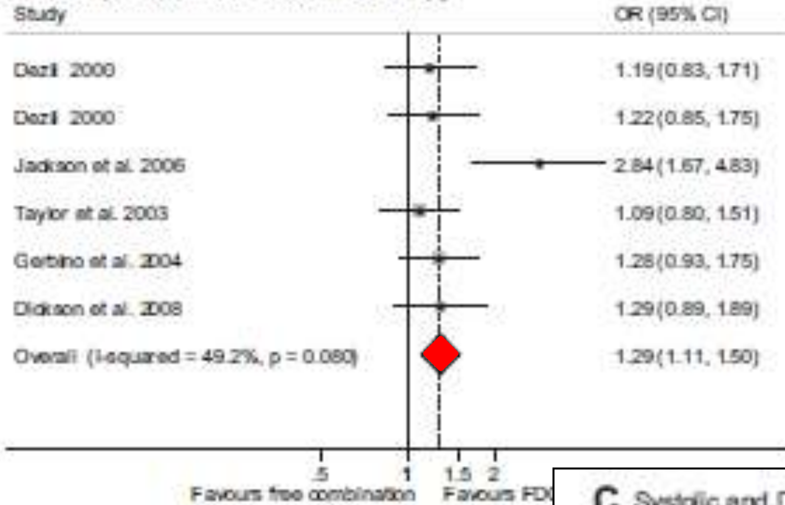


Figure 2. Percentage of compliers according to the number of tablets prescribed.

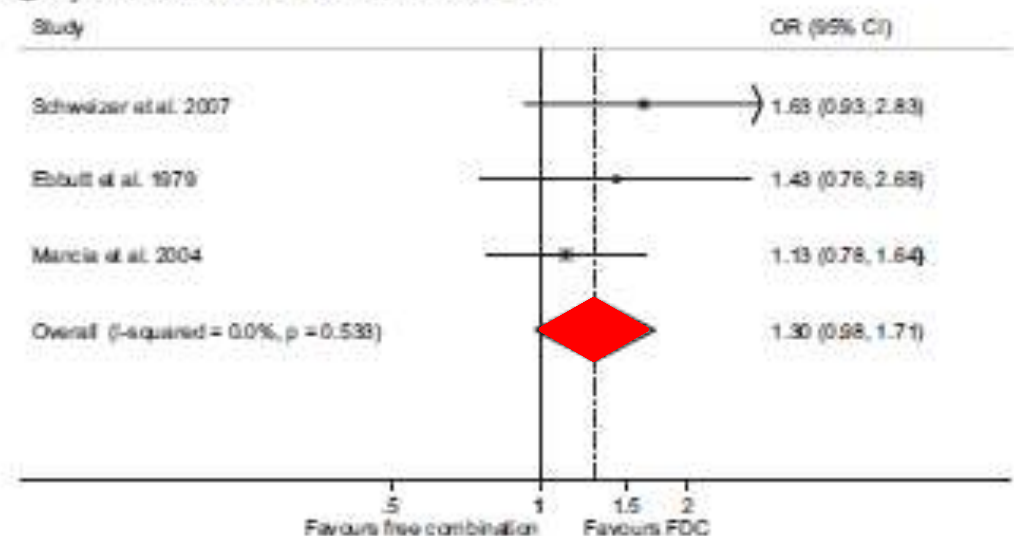
Rev Esp Cardiol. 2012;**65**(**6**):544–550

… i si el baixem?



Compliment

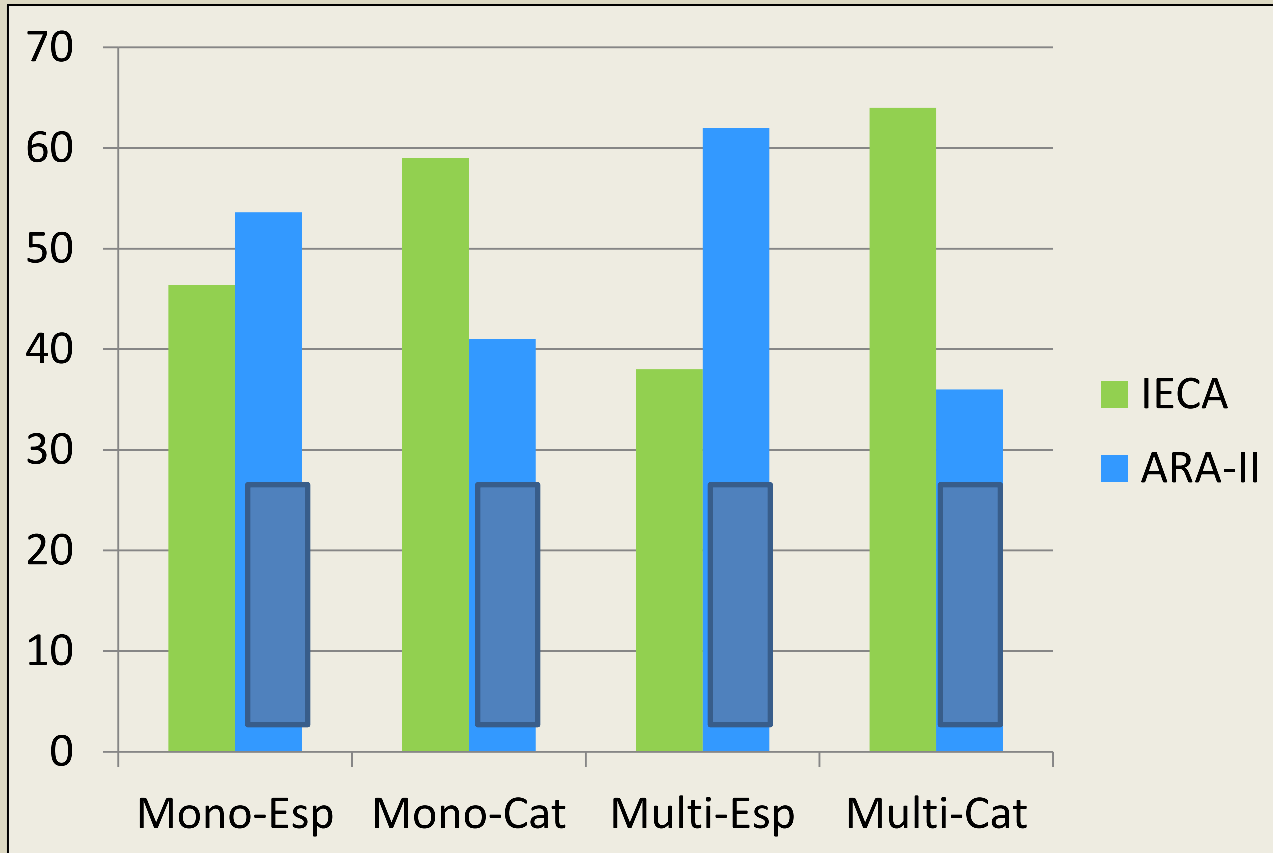
Control tensional



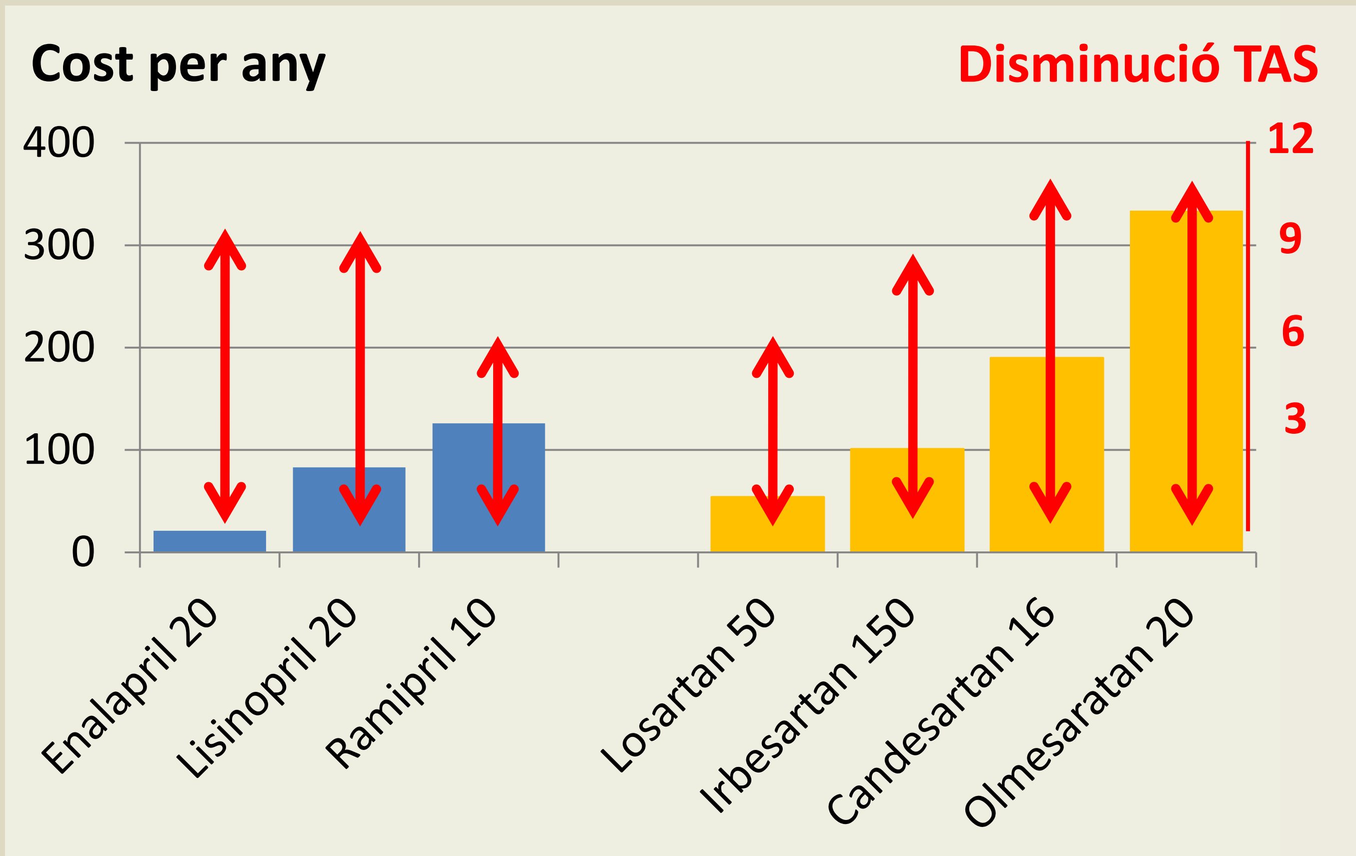
Hypertension. 2010;55:399-407;

TERTIO EFFICIENS

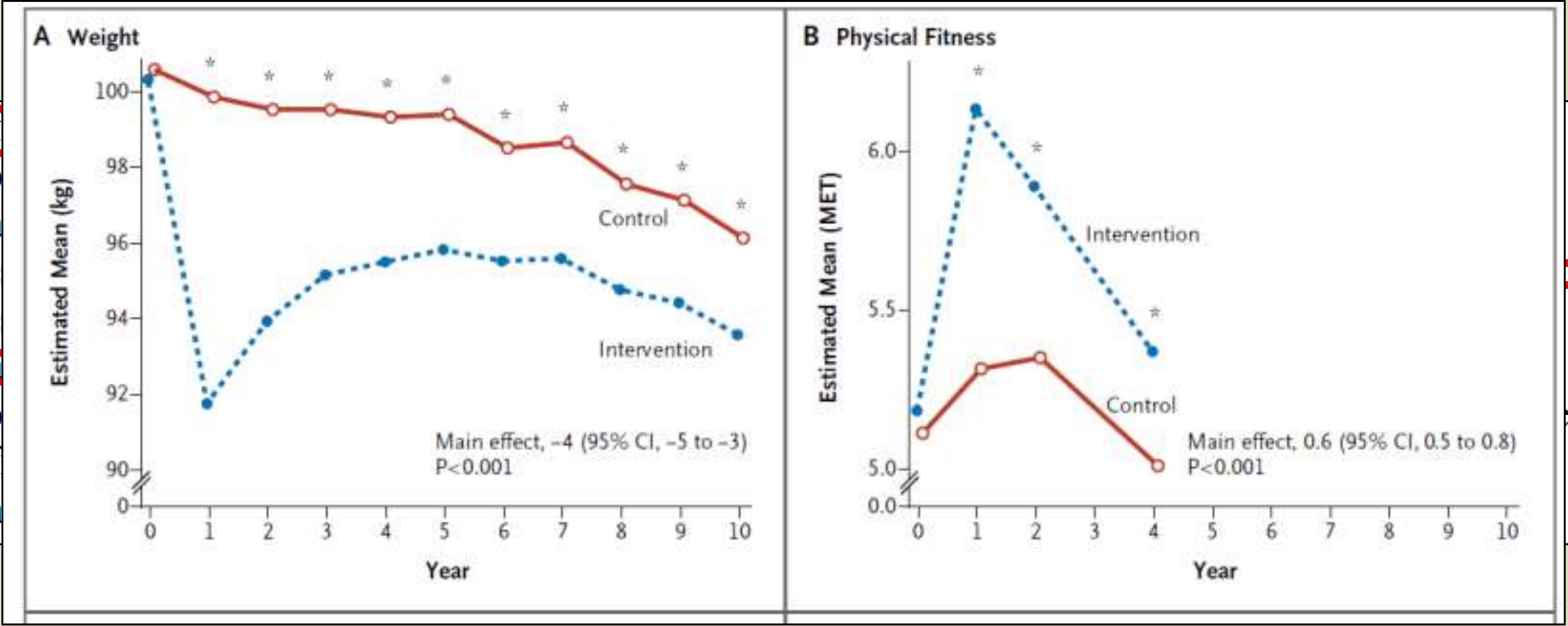
... fer el màxim gastant el mínim...



... fer el màxim gastant el mínim...



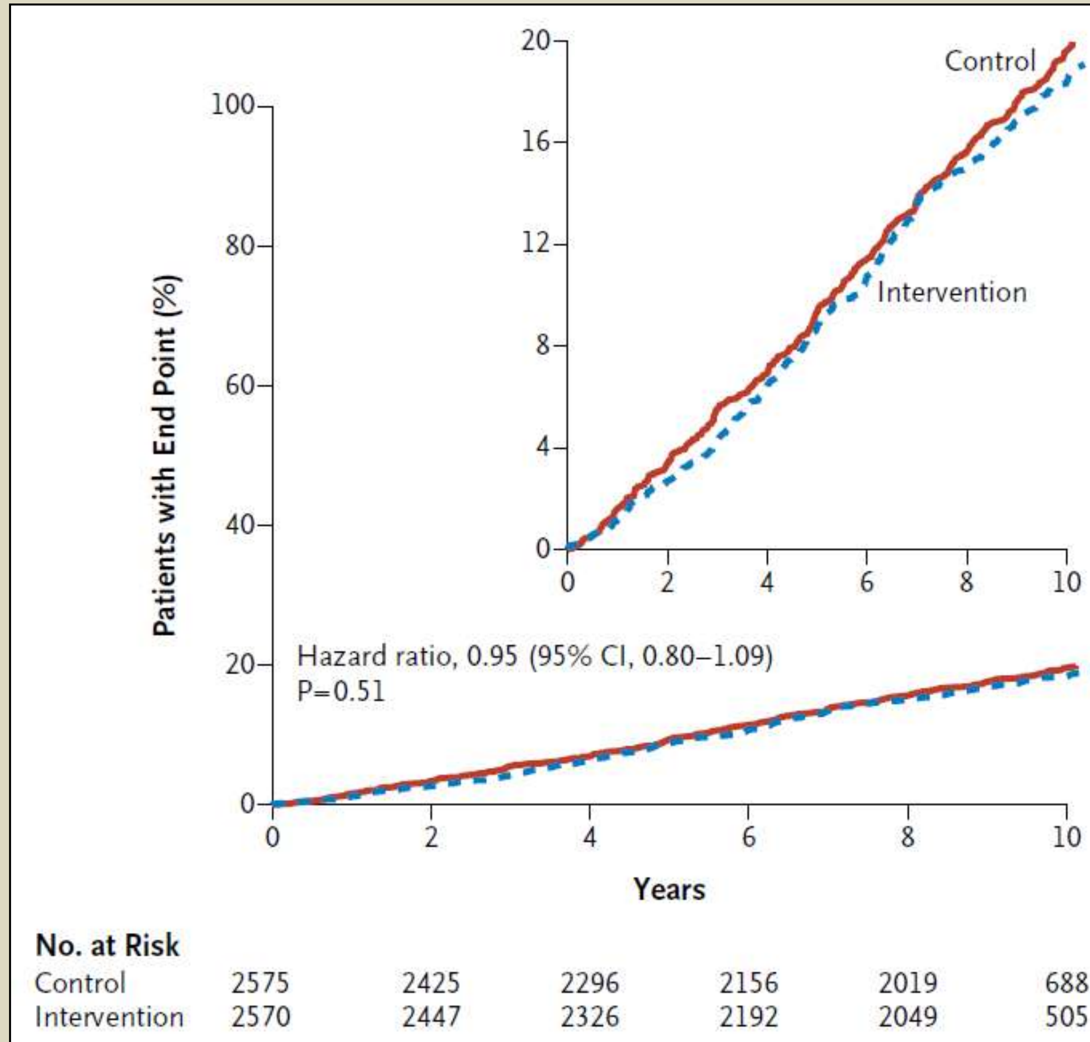
... i evitar la futilitat.



The Look AHEAD Research Group*

N Engl J Med 2013;369:145-54.

... i evitar la futilitat...



QUARTA EXPLORAT

La genòmica i la medicina del futur

B Angiotensin-converting enzyme inhibitor

C Angiotensin

Gene
of tre

Genetic risk scores
for mortality & cv

scores
nsion

Genetic risk of
secondary effects

therapeutic targets

Chromosome

Int. J. Mol. Sci. **2009**, *10*, 247-291; doi:10.3390/ijms10010247

OPEN ACCESS

International Journal of
Molecular Sciences
ISSN 1422-0067
www.mdpi.com/journal/ijms

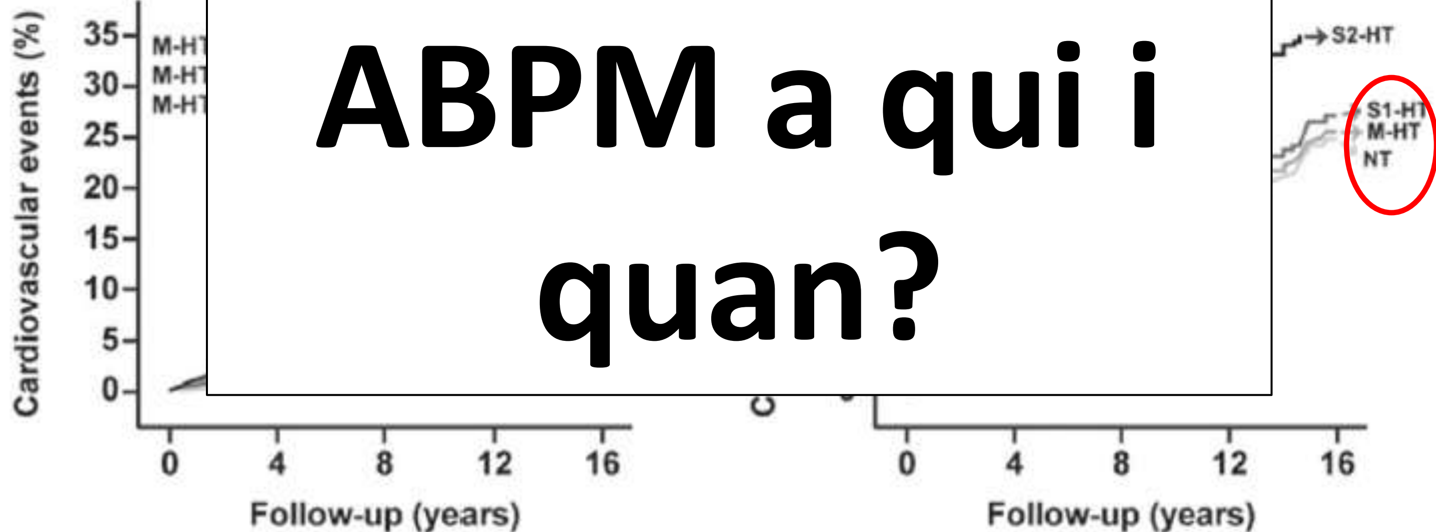
Review

The Capabilities of Chaos and Complexity

David L. Abel

Pharmacogenomics 2013:14;1709–1721

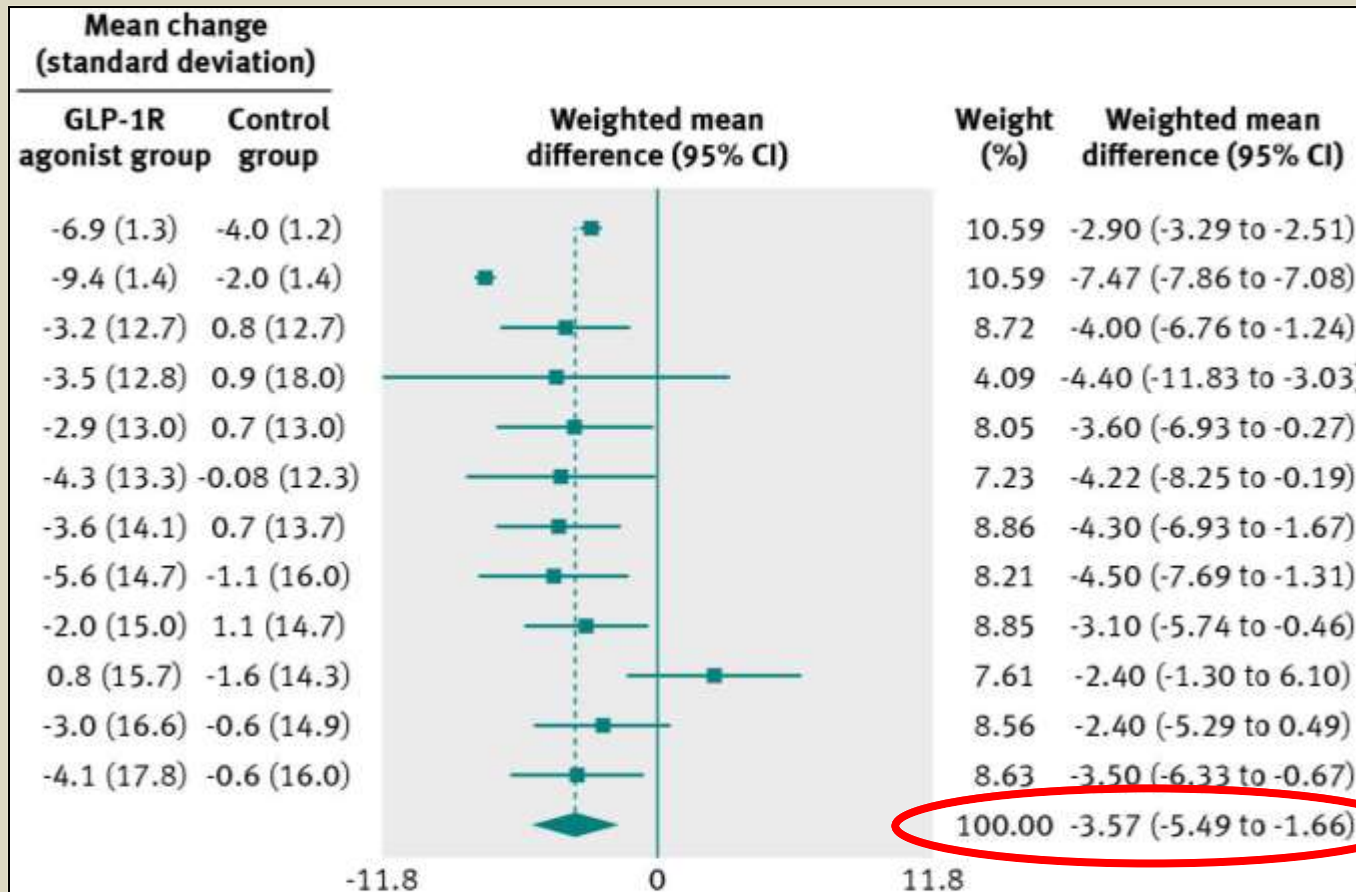
a la recerca de la hipertensió oculta



ABPM a qui i quan?

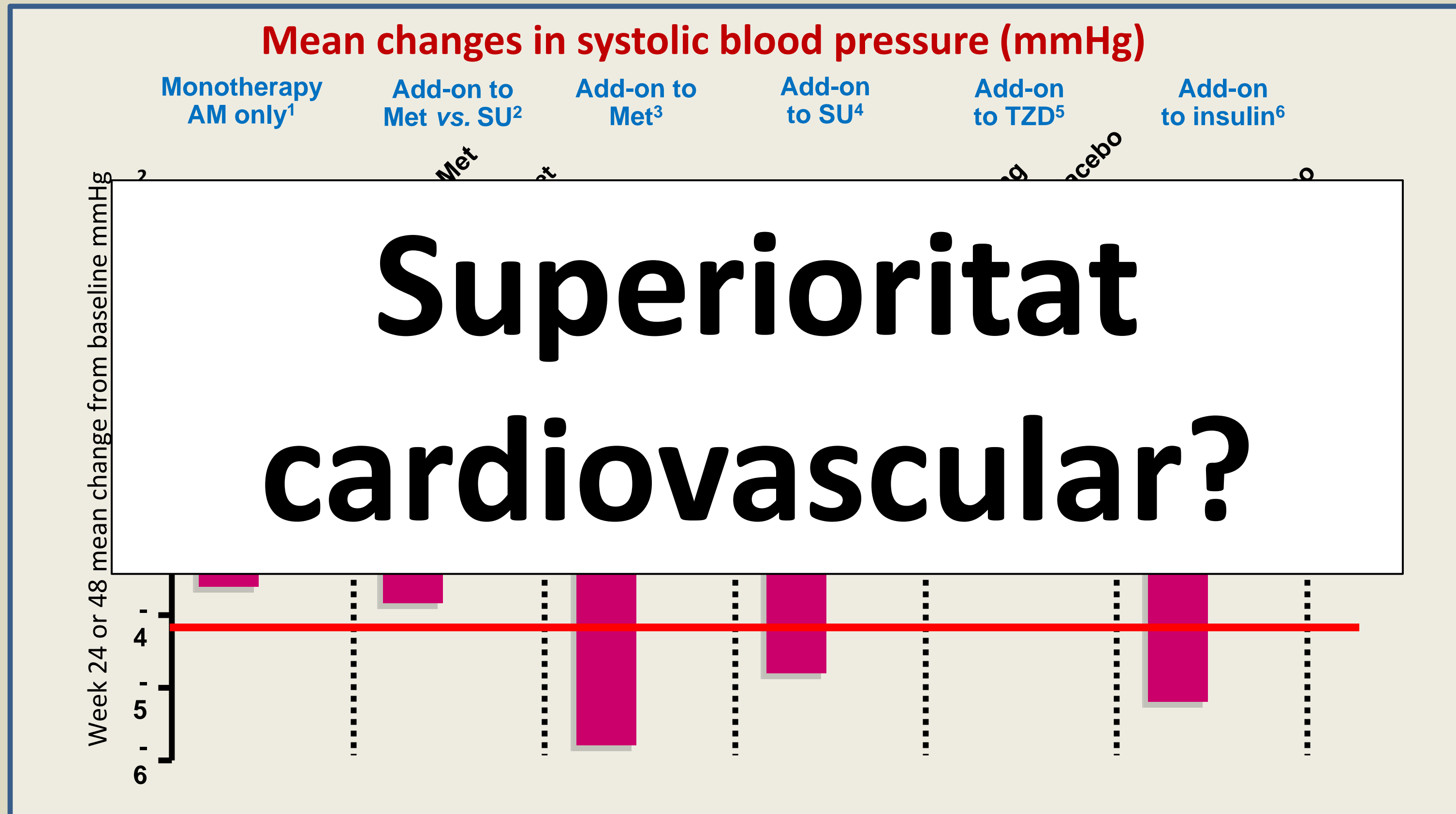
Hypertension. 2013 May ; 61(5): 964–971

nous fàrmacs i pressió arterial
Anàlegs GLP-1



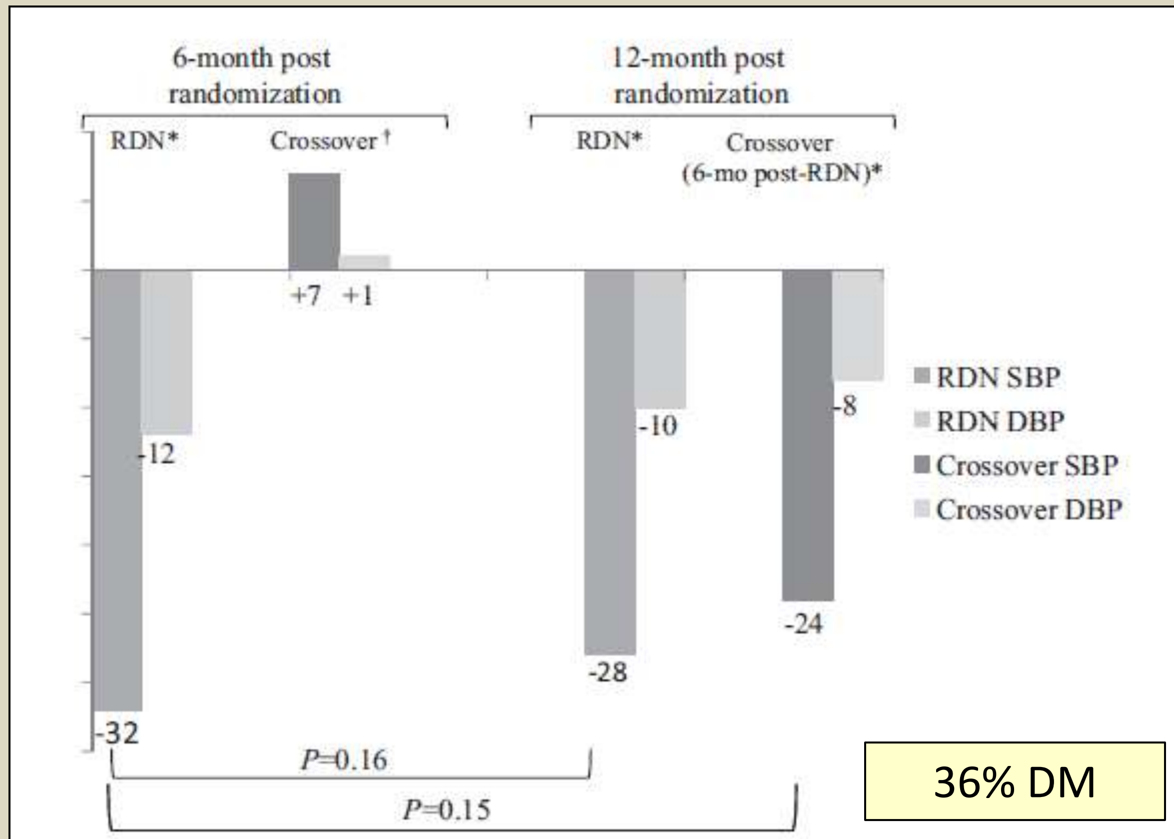
BMJ 2012;344:d7771

nous fàrmacs i pressió arterial
Inhibidors SGLT-2



[1]*Diabetes Care* 2010;33:2217-2224; [2]*Diabetes Care* 2011;34:2015-22; [3]*Lancet* 2010;375:2223-33; [4]S*Diabetes Obes Metab* 2011;13:928-38; [5] 71st ADA Scientific Sessions, San Diego, 24-28 June, 2011 [Abstract 0986-P]; [6]*Diabetes* 2010;59 (Suppl 1):A21-A22 [Abstract 0078-OR].

noves tecnologies
Denervació renal



Circulation. 2012;126:2976-2982.

AS HAPPY AS OUR FRIENDS, THE TOAST OF THE WHOLE VILLAGE, WHICH, THANKS TO THEM, HAS PRESERVED ITS HONOUR INTACT!

BUT WHAT I NEVER DID UNDERSTAND IS WHY ANYONE WOULD PUT MONEY IN THAT CAULDRON INSTEAD OF ONION SOUP IN THE FIRST PLACE!

THE END