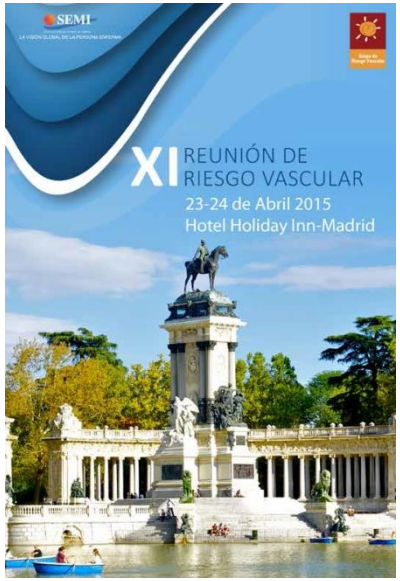


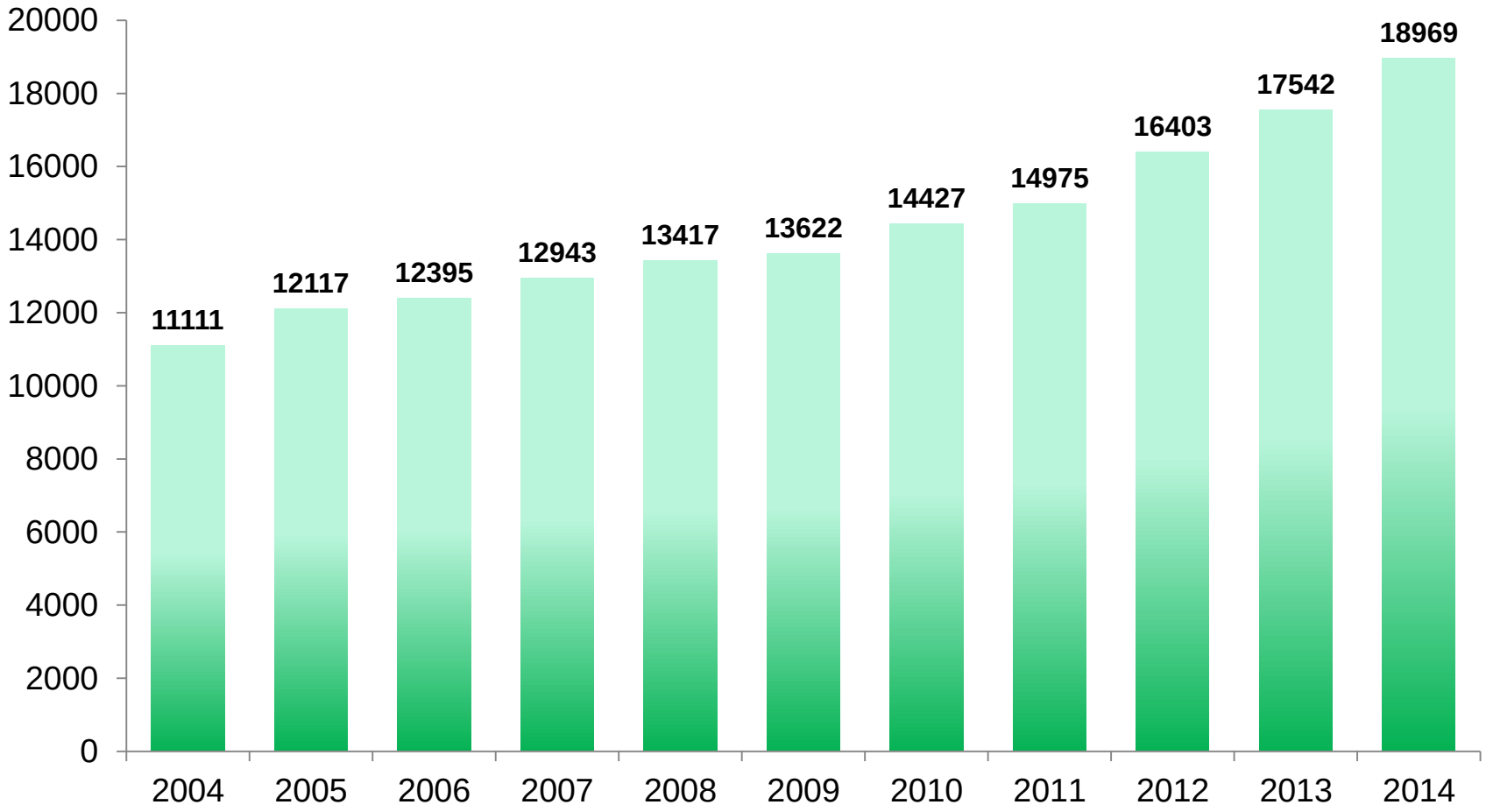
Lo mejor del año en 10 minutos

Dr. Javier Sobrino Martínez
Unidad de HTA

Madrid 24 de abril de 2015

FUNDACIÓ HOSPITAL DE l'Esperit Sant

Arterial Hypertension



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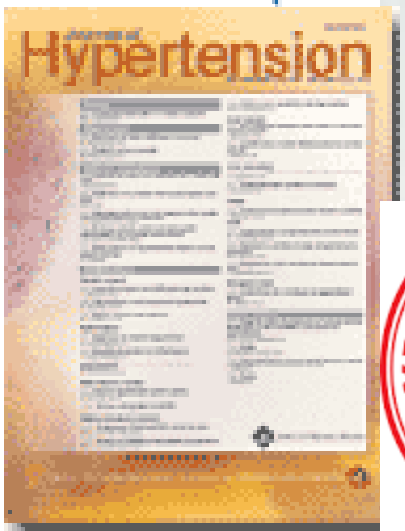

Hypertension


NEW ENGLAND JOURNAL OF MEDICINE
1812
1823
1828
1928

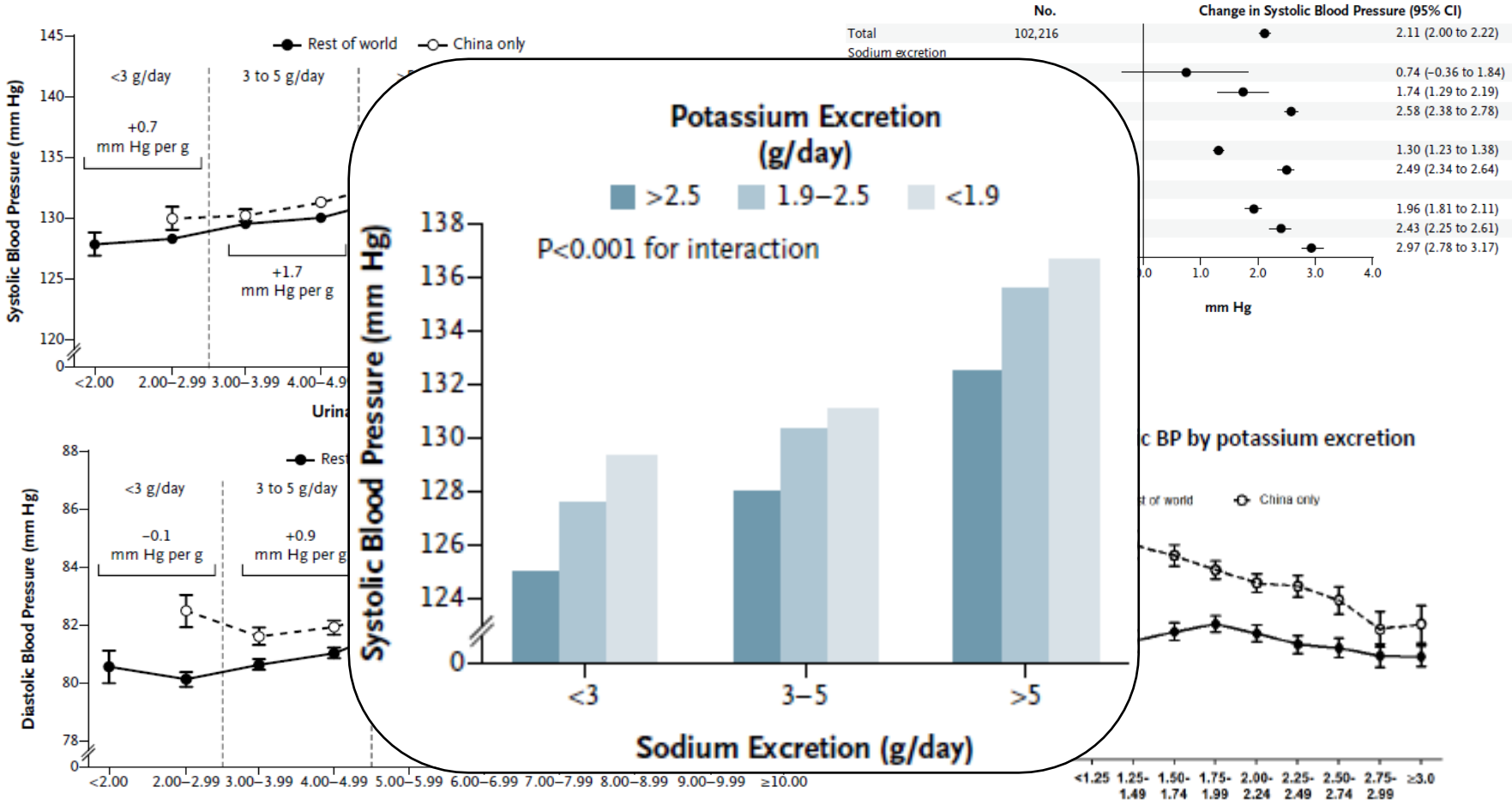

Hypertension

Mente A. N Engl J Med. 2014; 371: 601-11

Relación de la ingesta de sodio y potasio con la presión arterial, la mortalidad total y la morbilidad cardiovascular

- Estudio PURE (*Prospective Urban Rural Epidemiology*)
- 102.000 individuos (18-70 años. Edad media 51 años) de 18 países de los 5 continentes abarcando todas las condiciones sociales y económicas.
- La EU de Na y K en orina matinal
- El cálculo estimado en 24 h Fórmula de Kawasaki.
- EU de 1 g de Na ≈ Ingesta de 2,5 g de sal

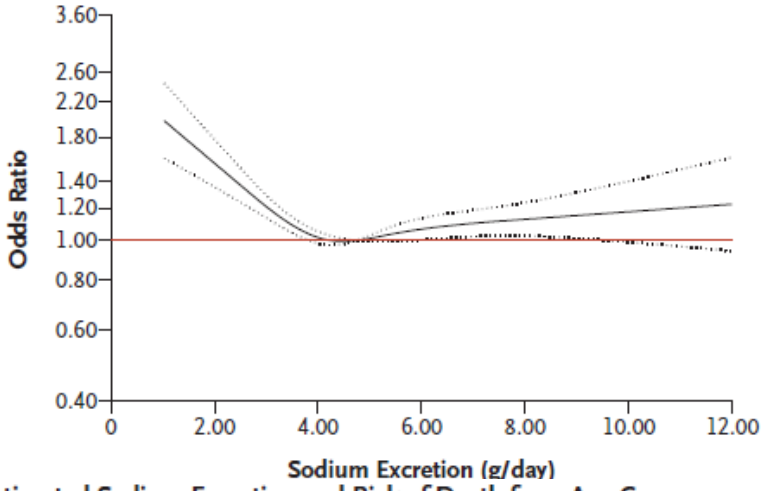
EU media de Na 4,93 g/día; de K 2,12 g/d
44 % EU Na > 5 g /d (12,5 g de sal).
46 % EU Na entre 3-5 g/d.


Rest of world
China only
<3 g/day
3 to 5 g/day
+0.7 mm Hg per g
+1.7 mm Hg per g
Systolic Blood Pressure (mm Hg)
<2.00
2.00–2.99
3.00–3.99
4.00–4.99
Diastolic Blood Pressure (mm Hg)
−0.1 mm Hg per g
+0.9 mm Hg per g
5.00–5.99
6.00–6.99
7.00–7.99
8.00–8.99
9.00–9.99
≥10.00
No.
Change in Systolic Blood Pressure (95% CI)
Total
102,216
2.11 (2.00 to 2.22)
Sodium excretion
0.74 (−0.36 to 1.84)
1.74 (1.29 to 2.19)
2.58 (2.38 to 2.78)
1.30 (1.23 to 1.38)
2.49 (2.34 to 2.64)
1.96 (1.81 to 2.11)
2.43 (2.25 to 2.61)
2.97 (2.78 to 3.17)
mm Hg
Potassium Excretion (g/day)
>2.5
1.9–2.5
<1.9
P<0.001 for interaction
Systolic Blood Pressure (mm Hg)
<3
3–5
>5
Sodium Excretion (g/day)
c BP by potassium excretion
China only
<1.25
1.25–1.49
1.50–1.74
1.75–1.99
2.00–2.24
2.25–2.49
2.50–2.74
2.75–2.99
≥3.0

Media de seguimiento 3,7 años
Variable compuesta:
Mortalidad + Eventos CV: 3.317 sujetos (3,3%)
Muertes: 1.976

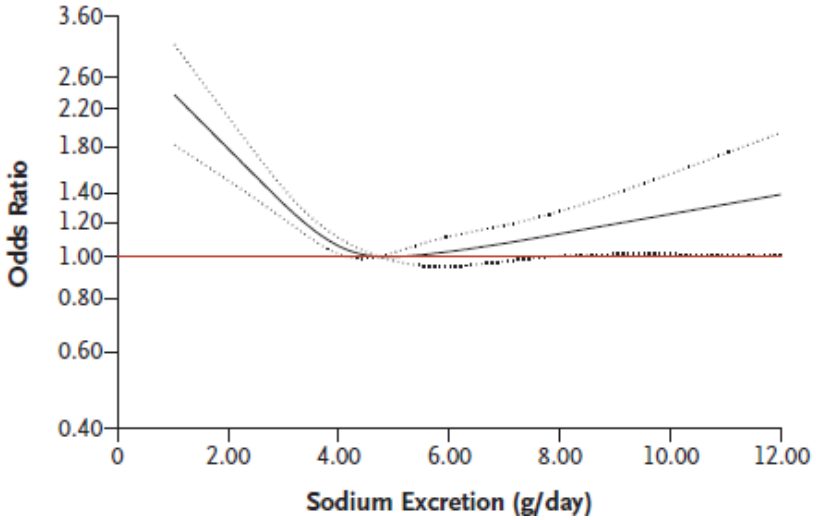
O'Donnell M. **N Engl J Med.** 2014; 371: 612-23

Estimated Sodium Excretion and Risk of Death or Cardiovascular Events

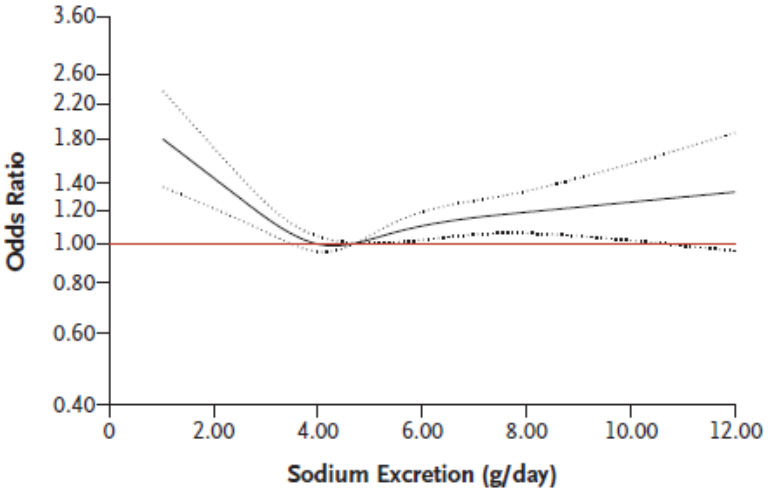


Referencia 4-6 g/dia
- > 7 gr/dia: OR 1,15 (1,02–1,30)
- < 3 gr/dia OR 1,27 (1,12–1,44)

Estimated Sodium Excretion and Risk of Death from Any Cause

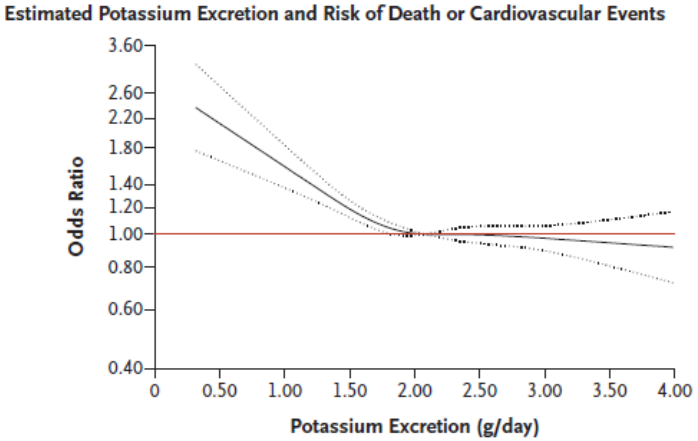


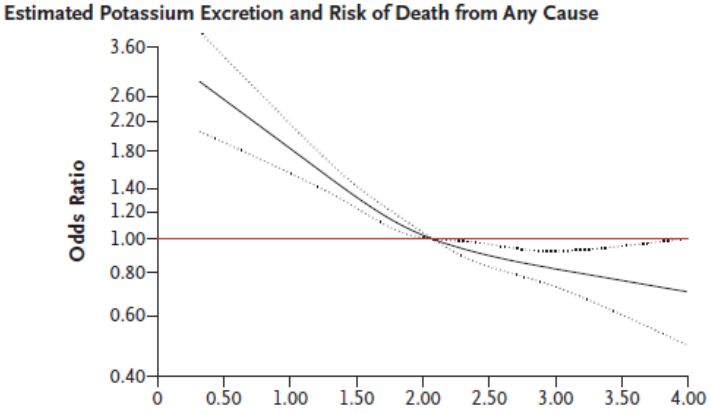
Estimated Sodium Excretion and Risk of Major Cardiovascular Events

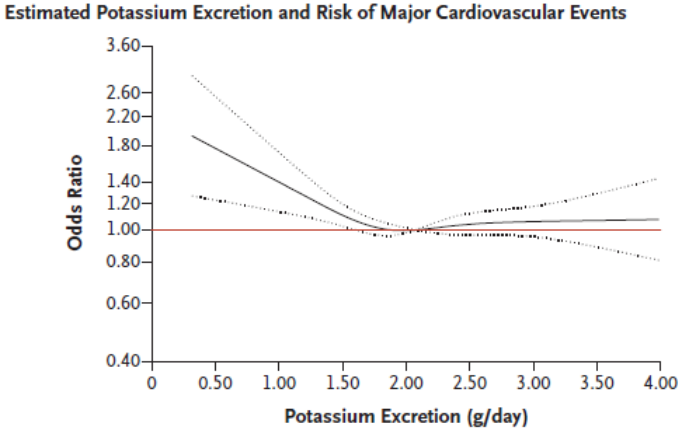


Asociación entre EU de K con Mortalidad y Eventos Cardiovasculares

<1.50 g/d	1.50–1.99 g/d	2.00–2.49 g/d	2.50–3.00 g/d	>3.00 g/d
OR	↓	↓	↓	↓
1.00	0.86 (0.77–0.97)	0.81 (0.73–0.91)	0.86 (0.75–0.98)	0.78 (0.67–0.91)







Original Article

Prognostic impact from clinic, daytime, and night-time systolic blood pressure in nine cohorts of 13 844 patients with hypertension

The ABC-H Investigators.
Journal of Hypertension 2014, 32:2332-40

Metaanalisis de 9 estudios de cohortes de pacientes hipertensos seguidos como mínimo 1 año
13.844 pacientes de Europa, Brasil y Japon

Hazard ratio (IC 95%) para ECV por cada incremento de 10 mmHg de PAS

	Total eventos CV	Cardiopatía isquémica	Ictus
Sin ajustar			
PAS nocturna	1,25 (1,22-1,29)	1,13 (1,05-1,22)	1,29 (1,19-1,39)
PAS diurna	1,20 (1,15-1,26)	1,08 (0,99-1,18)	1,29 (1,20-1,38)
PAS clínica	1,11 (1,06-1,16)	1,13 (0,95-1,34)	1,13 (1,06-1,21)
Con ajuste			
PAS nocturna	**1,26 (1,20-1,31)**	**1,22 (1,13-1,31)**	**1,26 (1,09-1,46)**
PAS diurna	1,01 (0,94-1,08)	0,97 (0,88-1,07)	1,04 (0,92-1,17)
PAS clínica	1,00 (0,95-1,05)	1,01 (0,93-1,09)	1,00 (0,97-1,03)

Original Article

The importance of night-time systolic blood pressure in diabetic patients: Dublin Outcome Study

Mohd S. Draman[a], Eamon Dolan[c], Lelane van der Poel[c], Tommy Kyaw Tun[b], John H. McDermott[b], Seamus Sreenan[b], and Eoin O'Brien[d]

Draman M.S.
J Hypertens. 2015 Apr 16. [Epub ahead of print]

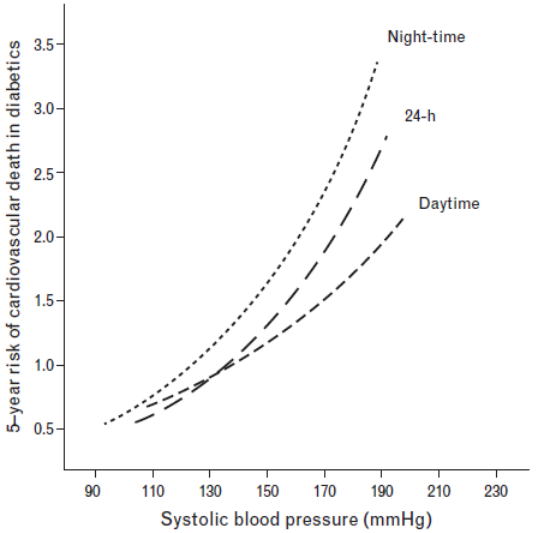
- 11.291 pacientes sin medicación antihipertensiva
- 859 diabéticos
- Seguimiento medio 5,3 años
- 74 muertes

	Diabéticos	No Diabéticos	p
PAS dia (mmHg)	146,4	145,1	n.s.
PAS noche (mmHg)	131,2	126,4	<0,0001
% Non-dipper	47,4	35,5	<0,0001

TABLE 2. Hazard ratios for a 10-mmHg increase in night-time and daytime SBP for overall and cause-specific cardiovascular mortality in diabetic patients

	Cardiovascular	Stroke	Cardiac
Number of events	74	27	47
Daytime	1.10 (1.03–1.17)*	1.12 (1.00–1.25)	1.10 (1.02–1.19)*
Night time	1.25 (1.11–1.39)*	1.38 (1.13–1.58)*	1.16 (1.02–1.25)*
Daytime[a]	0.99 (0.96–1.17)	0.97 (0.91–1.14)	0.99 (0.96–1.24)
Night time[a]	1.32 (1.12–1.69)*	1.95 (1.18–3.27)*	1.24 (0.99–1.56)

Hazard rates (95% confidence intervals) for each 10-mmHg increase in systolic pressure with adjustments applied for baseline characteristics including sex, age, BMI, history of cardiovascular events and smoking status.
[a]Daytime further adjusted for night-time blood pressure and *vice versa*.
*$P < 0.05$.



Riesgo Mortalidad en diabeticos non-dipper comparados con dipper HR 2,11, (IC 95% 1,11–4,01; p<0.05).

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http://dx.doi.org/10.1016/j.jacc.2014.10.060

Isolated Systolic Hypertension in Young and Middle-Aged Adults and 31-Year Risk for Cardiovascular Mortality

The Chicago Heart Association Detection Project in Industry Study

Yuichiro Yano, MD, PhD,* Jeremiah Stamler, MD,* Daniel B. Garside, MA,*† Martha L. Daviglus, MD, PhD,*† Stanley S. Franklin, MD,‡ Mercedes R. Carnethon, PhD,* Kiang Liu, PhD,* Philip Greenland, MD,* Donald M. Lloyd-Jones, MD, ScM*

27.081 sujetos entre 18 y 49 años, sin ECV previa, ni tto antihipertensivo
Seguimiento medio 31,1 años

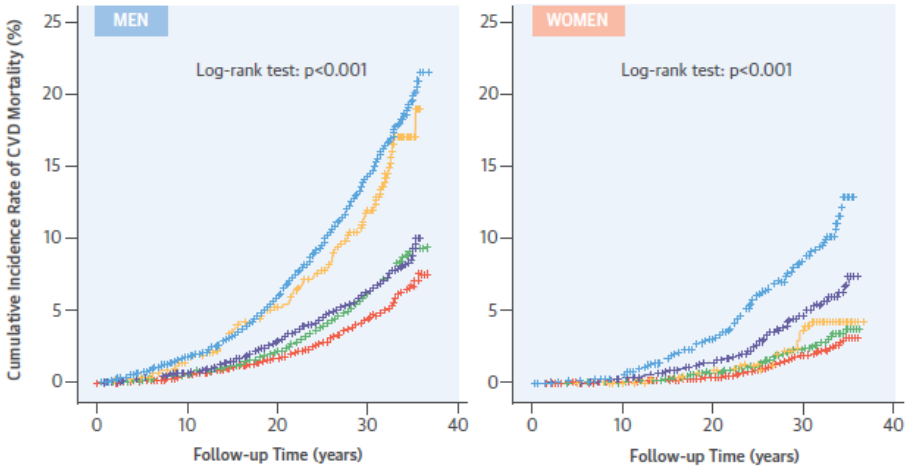
TABLE 4 Sex-Specific Unadjusted and Multivariate-Adjusted HR (95% CIs) for BP as a Continuous Variable for Risk for CVD Mortality, CHD Mortality, and Stroke Mortality

	Men (n = 15,868)		Women (n = 11,213)	
Model	SBP, 10 mm Hg	DBP, 5 mm Hg	SBP, 10 mm Hg	DBP, 5 mm Hg
CVD mortality				
Model 1 (unadjusted)	1.26 (1.23–1.30)‡	1.25 (1.22–1.28)‡	1.37 (1.31–1.43)‡	1.28 (1.23–1.33)‡
Model 2	1.18 (1.15–1.21)‡	1.15 (1.13–1.18)‡	1.19 (1.13–1.25)‡	1.14 (1.09–1.19)‡
Model 3	1.13 (1.10–1.17)‡	1.12 (1.09–1.15)‡	1.15 (1.09–1.21)‡	1.11 (1.07–1.17)‡
Model 4	1.06 (1.01–1.10)†	1.08 (1.05–1.12)‡	1.10 (1.02–1.19)*	1.05 (0.99–1.12)
CHD mortality				
Model 1 (unadjusted)	1.25 (1.20–1.29)‡	1.24 (1.20–1.27)‡	1.41 (1.33–1.49)‡	1.30 (1.24–1.37)‡
Model 2	1.16 (1.12–1.20)‡	1.14 (1.11–1.17)‡	1.23 (1.15–1.31)‡	1.16 (1.10–1.23)‡
Model 3	1.11 (1.07–1.16)‡	1.10 (1.07–1.14)‡	1.17 (1.10–1.25)‡	1.12 (1.06–1.19)‡
Model 4	1.05 (0.997–1.10)	1.08 (1.03–1.12)‡	1.14 (1.03–1.25)†	1.04 (0.96–1.12)
Stroke mortality				
Model 1 (unadjusted)	1.39 (1.29–1.51)‡	1.38 (1.29–1.47)‡	1.35 (1.22–1.50)‡	1.27 (1.16–1.39)‡
Model 2	1.29 (1.19–1.40)‡	1.27 (1.19–1.36)‡	1.19 (1.06–1.33)†	1.14 (1.03–1.26)†
Model 3	1.26 (1.16–1.37)‡	1.25 (1.17–1.35)‡	1.19 (1.06–1.34)†	1.14 (1.03–1.26)*
Model 4	1.08 (0.96–1.23)	1.19 (1.07–1.33)†	1.13 (0.95–1.34)	1.06 (0.92–1.22)

Sex-specific unadjusted and adjusted HRs (95% CI) of BP (continuous variable) for risk for CVD mortality, CHD mortality, and stroke mortality are shown. As adjustment factors, model 2 includes demographic variables (age at baseline, race, and education) plus SBP (or DBP), model 3 includes demographic variables plus clinical characteristics (body mass index, current smoking, total cholesterol, and diabetes) plus SBP (or DBP), and model 4 includes demographic variables plus clinical characteristics plus SBP plus DBP. Statistical significance was defined as $p < 0.05$. *$p < 0.05$; †$p < 0.01$; ‡$p < 0.001$.

Abbreviations as in Tables 1 and 3.

CENTRAL ILLUSTRATION Hypertension Subtype and Cardiovascular Mortality: Kaplan-Meier Curves of the Cumulative Incidence of CVD Mortality by Sex



Number at risk

SDE	3149	3028	2763	930	1085	1062	994	855
IDH	589	569	523	191	328	323	309	283
ISH	4015	3940	3748	1565	1446	1425	1373	1237
High-normal BP	3854	3786	3643	1472	2419	2402	2336	2176
Optimal-normal BP	4261	4202	4067	1565	5935	5890	5747	5416

Yano, Y. et al. J Am Coll Cardiol. 2015; 65(4):327-35.

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TABLE 3 Sex-Specific Unadjusted and Multivariate-Adjusted HRs (95% CIs) for Risk for CVD Mortality, CHD Mortality, and Stroke Mortality by Hypertension Subtype

	Men (n = 15,868)					Women (n = 11,213)				
	Optimal-Normal BP	High-Normal BP	ISH	IDH	SDH	Optimal-Normal BP	High-Normal BP	ISH	IDH	SDH
CVD mortality										
Person-yrs of follow-up	134,247	120,694	124,588	17,741	92,124	188,288	76,827	45,054	10,198	32,839
Number of events (incidence per 100,000 person-yrs)	221 (165)	276 (229)	282 (226)	79 (445)	460 (499)	139 (74)	73 (95)	82 (182)	13 (127)	103 (314)
Relative risk: HR (95% CI)										
Model 1 (unadjusted)	1 (reference)	1.39 (1.16-1.66)‡	1.39 (1.16-1.65)‡	2.75 (2.13-3.56)‡	3.16 (2.69-3.71)‡	1.00 (reference)	1.28 (0.96-1.70)	2.49 (1.90-3.27)‡	1.73 (0.98-3.06)	4.37 (3.39-5.64)‡
Model 2	1 (reference)	1.31 (1.10-1.57)†	1.36 (1.14-1.63)†	1.93 (1.49-2.49)‡	2.16 (1.83-2.54)‡	1.00 (reference)	1.04 (0.78-1.38)	1.66 (1.26-2.19)‡	1.21 (0.68-2.13)	2.13 (1.64-2.77)‡
Model 3	1 (reference)	1.25 (1.05-1.50)*	1.23 (1.03-1.46)*	1.68 (1.29-2.17)‡	1.77 (1.49-2.09)‡	1.00 (reference)	1.00 (0.75-1.33)	1.55 (1.18-2.05)†	1.05 (0.59-1.85)	1.79 (1.36-2.37)‡
CHD mortality										
Number of events (incidence per 100,000 person-yrs)	152 (113)	200 (166)	203 (163)	55 (310)	315 (342)	71 (38)	39 (51)	60 (133)	9 (88)	64 (194)
Relative risk: HR (95% CI)										
Model 1 (unadjusted)	1.00 (reference)	1.46 (1.18-1.81)‡	1.45 (1.18-1.79)†	2.78 (2.04-3.79)‡	3.13 (2.58-3.79)‡	1.00 (reference)	1.34 (0.91-1.98)	3.57 (2.53-5.04)‡	2.35 (1.18-4.71)*	5.33 (3.80-7.47)‡
Model 2	1.00 (reference)	1.38 (1.12-1.70)†	1.42 (1.15-1.75)†	1.94 (1.43-2.65)‡	2.13 (1.75-2.59)‡	1.00 (reference)	1.09 (0.73-1.61)	2.35 (1.66-3.33)‡	1.62 (0.81-3.25)	2.58 (1.83-3.66)‡
Model 3	1.00 (reference)	1.32 (1.07-1.63)*	1.28 (1.04-1.58)*	1.71 (1.25-2.33)†	1.75 (1.43-2.14)‡	1.00 (reference)	1.03 (0.70-1.52)	2.12 (1.49-3.01)‡	1.33 (0.66-2.68)	1.97 (1.36-2.85)‡
Stroke mortality										
Number of events (incidence per 100,000 person-yrs)	24 (18)	26 (22)	26 (21)	6 (34)	63 (68)	28 (15)	17 (22)	14 (31)	1 (10)	18 (55)
Relative risk: HR (95% CI)										
Model 1 (unadjusted)	1.00 (reference)	1.20 (0.69-2.09)	1.18 (0.68-2.05)	1.93 (0.79-4.72)	4.05 (2.53-6.49)‡	1.00 (reference)	1.48 (0.81-2.70)	2.10 (1.11-3.99)*	0.66 (0.90-4.86)	3.77 (2.09-6.82)‡
Model 2	1.00 (reference)	1.14 (0.66-1.99)	1.17 (0.67-2.04)	1.32 (0.54-3.24)	2.74 (1.70-4.41)‡	1.00 (reference)	1.22 (0.66-2.23)	1.47 (0.77-2.81)	0.47 (0.06-3.44)	1.92 (1.04-3.53)*
Model 3	1.00 (reference)	1.12 (0.64-1.95)	1.08 (0.62-1.90)	1.15 (0.47-2.83)	2.40 (1.46-3.94)†	1.00 (reference)	1.23 (0.67-2.25)	1.46 (0.76-2.82)	0.45 (0.06-3.30)	1.91 (1.01-3.62)*

Sex-specific unadjusted and adjusted HRs (95% CI) for risk of CVD mortality, CHD mortality, and stroke mortality among each hypertension subtype are shown. As adjustment factors, model 2 includes demographic variables (age at baseline, race, and education), and model 3 includes demographic variables plus body mass index, current smoking, total cholesterol, and diabetes. Statistical significance was defined as $p < 0.05$. *$p < 0.05$; †$p < 0.01$; ‡$p < 0.001$.

CHD = coronary heart disease; CI = confidence interval; CVD = cardiovascular disease; HR = hazard ratio; other abbreviations as in Table 1.

REVIEW

Annals of Internal Medicine

Effects of Blood Pressure Reduction in Mild Hypertension

A Systematic Review and Meta-analysis

Johan Sundström, MD, PhD; Hisatomi Arima, MD, PhD; Rod Jackson, MBChB, PhD; Fiona Turnbull, MBChB, MPH (Hons), PhD; Kazem Rahimi, MD; John Chalmers, MD, PhD; Mark Woodward, PhD; and Bruce Neal, MBChB, PhD, on behalf of the Blood Pressure Lowering Treatment Trialists' Collaboration*

Ann Intern Med. 2015;162:184-191.

•Selección de estudios: Pacientes sin enfermedad cardiovascular con HTA grado 1 (140-150/90-99 mmHg) que fueron asignados aleatoriamente a tratamiento activo (fármacos antihipertensivos: IECAs, calcioantagonistas, diureticos (95%) o intensificación del tratamiento vs control: placebo o tratamiento menos intenso.

•Extracción de los datos: Se extrajeron los datos de pacientes individuales de los ensayos clínicos del BPLTCC y datos agregados de los otros ensayos clínicos

15.266 pacientes incluidos con seguimiento medio 4,4 años
Edad media 63 años; 40% mujeres
PA medias iniciales 146/84

Evento	Porcentaje	Riesgo a 5 años (%)
Eventos Cardiovasculares	5,1	7,4
Enfermedad coronaria	2,8	2,8
Ictus	1,8	4,6
Insuficiencia Cardiaca	2,5	2,4
Muertes Cardiovasculares	3,9	3,1
Muertes totales	4,4	6,6

REVIEW

Annals of Internal Medicine

Effects of Blood Pressure Reduction in Mild Hypertension

A Systematic Review and Meta-analysis

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Ann Intern Med. 2015;162:184-191.

Diferencia media final entre activo vs control
PAS 3,6 mmHg PAD 2,4 mmHg

Evento	Odds Ratio	IC 95%
Eventos CV	0,86	0,74-1,01
Enfermedad coronaria	0,91	0,74-1,12
Ictus	**0,72**	**0,55-0,94**
Insuficiencia Cardiaca	0,80	0,57-1,12
Muertes CV	**0,75**	**0,57-0,98**
Muertes totales	**0,78**	**0,67-0,92**

Research

Original Investigation

Effect of Self-monitoring and Medication Self-titration on Systolic Blood Pressure in Hypertensive Patients at High Risk of Cardiovascular Disease

The TASMIN-SR Randomized Clinical Trial

Richard J. McManus, FRCGP; Jonathan Mant, MD; M. Sayeed Haque, PhD; Emma P. Bray, PhD; Stirling Bryan, PhD; Sheila M. Greenfield, PhD; Miren I. Jones, PhD; Sue Jowett, PhD; Paul Little, MD; Cristina Penaloza, MA; Claire Schwartz, PhD; Helen Shackleford, RGN; Claire Shovelton, PhD; Jinu Varghese, RGN; Bryan Williams, MD; F.D. Richard Hobbs, FMedSci

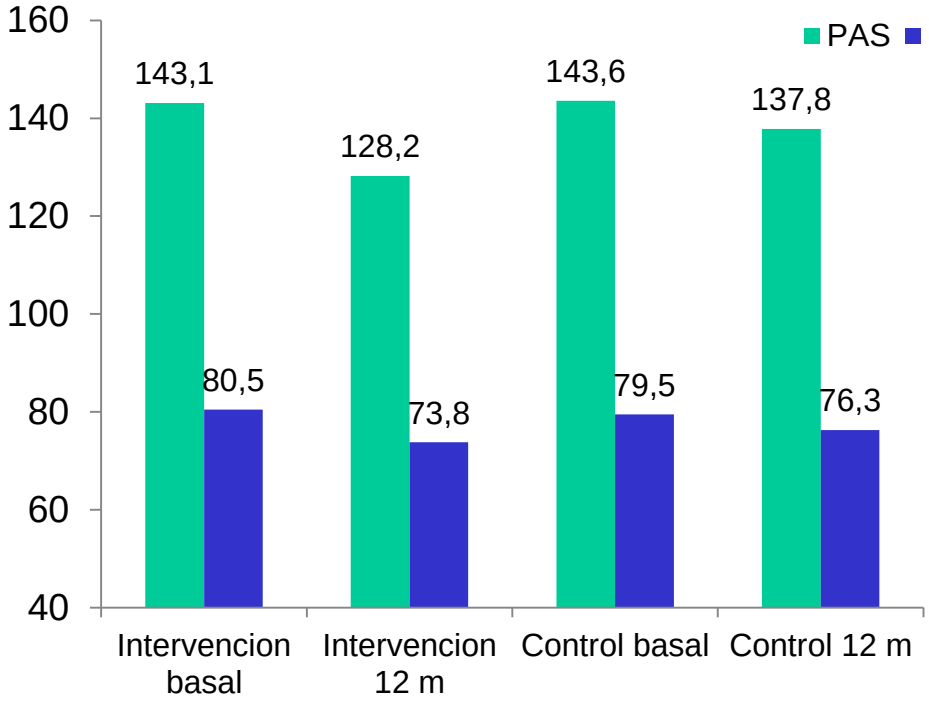
JAMA®
The Journal of the American Medical Association

JAMA. 2014;312(8):799-808

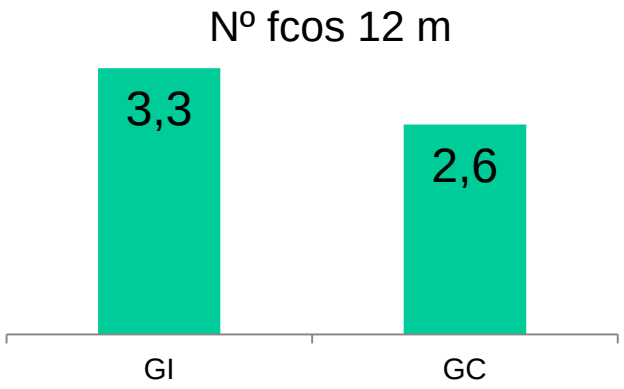
Objetivo determinar si en pacientes con ECV establecida, DM o ERC La auto-monitorización de la PA y del tratamiento antihipertensivo, con ajuste de la dosis de acuerdo a un algoritmo, es más eficaz que el tratamiento habitual en el control de las cifras de PAS

Estudio aleatorizado incluidos 552 pacientes > 35 años
PA clínica objetivo < 130/80 AMPA < 120/75

Grupo intervención: AMPA 2 medidas matinales diarias la primera semana de cada mes si AMPA con al menos 4 lecturas elevadas 2 meses consecutivos, modificaban el tratamiento según algoritmo previo establecido con su medico de AP

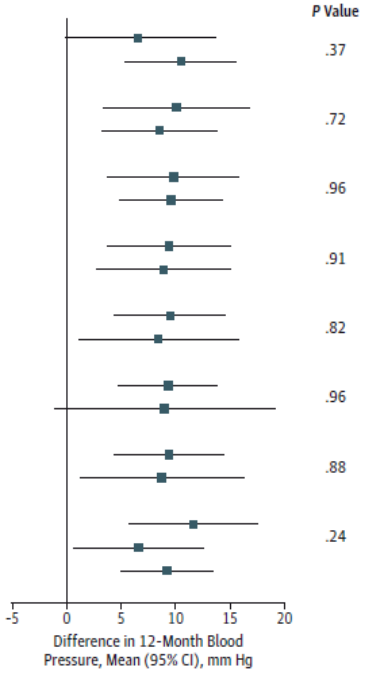


Diferencia entre Intervención vs Control a 12 meses:
PAS 9,2 mmHg PAD 3,4 mmHg



Los fármacos añadidos con mayor frecuencia fueron calcioantagonistas y diuréticos tiazídicos

	No. of Patients	Difference in 12-Month Blood Pressure, Mean (95% CI), mm Hg[a]	Subgroup Comparison P Value
Age, y			
≤65	149	6.5 (-0.7 to 13.7)	.37
>65	301	10.5 (5.4 to 15.6)	
Sex			
Women	174	10.1 (3.4 to 16.8)	.72
Men	276	8.5 (4.1 to 13.0)	
Blood pressure systolic			
>145	173	9.8 (3.7 to 15.8)	.96
≤145	277	9.6 (4.8 to 14.3)	
Diabetes			
Absent	246	9.4 (3.8 to 15.1)	.91
Present	204	8.9 (3.7 to 14.1)	
Chronic kidney disease			
Absent	304	9.5 (4.4 to 14.6)	.82
Present	146	8.4 (1.1 to 15.8)	
Stroke or transient ischemic attack			
Absent	373	9.3 (4.7 to 13.8)	.96
Present	77	8.9 (-1.1 to 19.1)	
Coronary heart disease			
Absent	311	9.4 (4.4 to 14.4)	.88
Present	139	8.7 (1.2 to 16.3)	
IMD2007[b]			
Lower	225	11.6 (5.7 to 17.5)	.24
Higher	225	6.6 (0.7 to 12.5)	
Overall		9.2 (5.0 to 13.4)	



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Less-Tight versus Tight Control of Hypertension in Pregnancy

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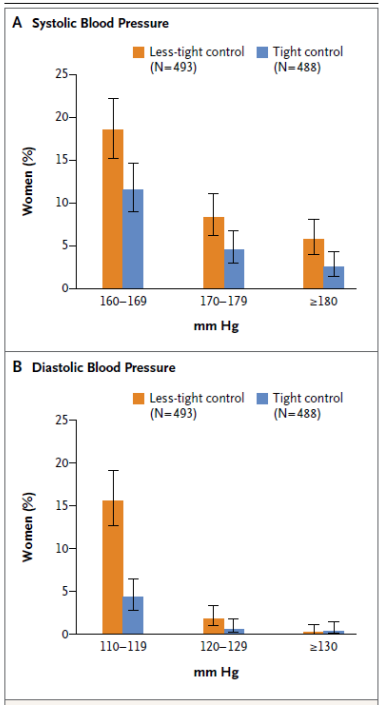


- Mujeres gestantes hipertensas entre la 14 y la 33 semana de gestación
- No HTA grave y no proteinuria previa
- Aleatorizadas a control estricto PAD 85 mmHg vs menos estricto PAD 100 mmHg
- Se incluyeron 987 pacientes
- Objetivo compuesto: interrupción embarazo o cuidados perinatales intensivos

Table 2. Primary and Other Perinatal Outcomes.*

Variable	Less-Tight Control (N=493)	Tight Control (N=488)	Adjusted Odds Ratio (95% CI)†
Primary outcome — no. (%)	155 (31.4)	150 (30.7)	1.02 (0.77–1.35)
Pregnancy loss — no. (%)	15 (3.0)	13 (2.7)	1.14 (0.53–2.45)
Miscarriage	0	1 (0.2)	
Ectopic pregnancy	0	0	
Elective termination‡	1 (0.2)	1 (0.2)	
Perinatal death	14 (2.8)	11 (2.3)	1.25 (0.56–2.81)
Stillbirth	12 (2.4)	7 (1.4)	
Neonatal death	2 (0.4)	4 (0.8)	
High-level neonatal care for >48 hr — no./total no. (%)§	141/480 (29.4)	139/479 (29.0)	1.00 (0.75–1.33)
Gestational age at delivery — wk	36.8±3.4	37.2±3.1	
Small-for-gestational-age newborns — no./total no. (%)¶			
Birth weight <10th percentile	79/491 (16.1)	96/488 (19.7)	0.78 (0.56–1.08)
Birth weight <3rd percentile	23/491 (4.7)	26/488 (5.3)	0.92 (0.51–1.63)
Other perinatal outcomes of liveborn infants			
Respiratory complications — no./total no. (%)			
Clinical respiratory problem	82/480 (17.1)	67/479 (14.0)	1.19 (0.83–1.71)
Administration of oxygen beyond the first 10 min of life	34/479 (7.1)	25/477 (5.2)	1.24 (0.72–2.14)
Ventilatory support (with or without intubation) beyond the first 10 min of life	35/478 (7.3)	38/479 (7.9)	0.86 (0.53–1.40)
Use of surfactant	28/480 (5.8)	26/479 (5.4)	0.97 (0.55–1.69)
At least one serious neonatal complication — no./total no. (%)‖	40/480 (8.3)	40/479 (8.4)	0.96 (0.60–1.52)

Table 3. Secondary and Other Maternal Outcomes.*

Variable	Less-Tight Control (N=493)	Tight Control (N=488)	Adjusted Odds Ratio (95% CI)†
Serious maternal complications — no. (%)‡	18 (3.7)	10 (2.0)	1.74 (0.79–3.84)
Uncontrolled hypertension	0	0	
Transient ischemic attack or stroke	0	1 (0.2)	
Pulmonary edema	2 (0.4)	1 (0.2)	
Renal failure	0	1 (0.2)	
Transfusion§	16 (3.2)	8 (1.6)	
Placental abruption — no. (%)	11 (2.2)	11 (2.3)	0.94 (0.40–2.21)
Severe hypertension — no. (%)	200 (40.6)	134 (27.5)	1.80 (1.34–2.38)
Preeclampsia — no./total no. (%)	241/493 (48.9)	223/488 (45.7)	1.14 (0.88–1.47)
Defined only by new proteinuria¶	148/493 (30.0)	132/488 (27.0)	1.08 (0.74–1.59)
At least one symptom of preeclampsia‖	171/493 (34.7)	156/488 (32.0)	1.11 (0.84–1.46)
Abnormal laboratory test results			
Platelet count <100×10^9/liter	21/493 (4.3)	8/488 (1.6)	2.63 (1.15–6.05)
Elevated AST or ALT level, with symptoms	21/492 (4.3)	9/488 (1.8)	2.33 (1.05–5.16)
Elevated LDH level, with symptoms	16/491 (3.3)	9/488 (1.8)	1.78 (0.77–4.11)
HELLP syndrome**	9/493 (1.8)	2/488 (0.4)	4.35 (0.93–20.35)
Serum creatinine level >2.3 mg/dl	0	1/488 (0.2)	

Original Investigation

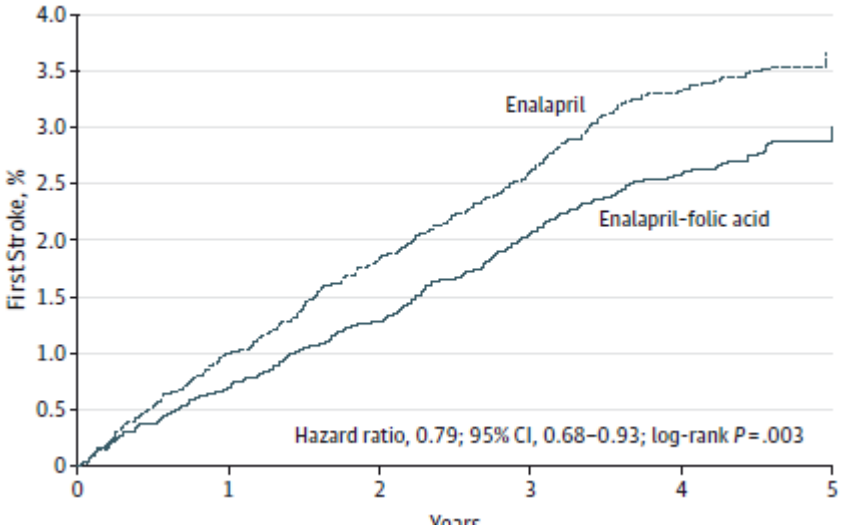
Efficacy of Folic Acid Therapy in Primary Prevention of Stroke Among Adults With Hypertension in China

The CSPPT Randomized Clinical Trial

JAMA®
The Journal of the American Medical Association

Yong Huo, JAMA 2015 Apr 7;313(13):1325-35

Hipertensos entre 45-75 años sin ECV previa
Enalapril 10 mg + acido folico 0,8 mg vs enalapril 10 mg
20.702 chinos incluidos
Seguimiento medio 4,5 años



Outcomes	No. (%) With Outcome		Hazard Ratio (95% CI)[a]	*P* Value[b]
	Enalapril-Folic Acid (n = 10 348)	Enalapril (n = 10 354)		
First stroke (primary outcome)[c]	282 (2.7)	355 (3.4)	0.79 (0.68-0.93)[d]	.003
Secondary outcomes				
Ischemic stroke	223 (2.2)	292 (2.8)	0.76 (0.64-0.91)	.002
Hemorrhagic stroke	58 (0.56)	62 (0.60)	0.93 (0.65-1.34)	.71
Composite of stroke, myocardial infarction, or death due to cardiovascular causes	324 (3.1)	405 (3.9)	0.80 (0.69-0.92)	.002
Myocardial infarction[e]	25 (0.24)	24 (0.23)	1.04 (0.60-1.82)	.89
Death due to cardiovascular causes[f]	43 (0.4)	43 (0.4)	1.00 (0.66-1.53)	>.99
All-cause death	302 (2.9)	320 (3.1)	0.94 (0.81-1.10)	.47

Caffeine and Blood Pressure

Associations of Ambulatory Blood Pressure With Urinary Caffeine and Caffeine Metabolite Excretions

Idris Guessous, Menno Pruijm, Belén Ponte, Daniel Ackermann, Georg Ehret, Nicolas Ansermot, Philippe Vuistiner, Jan Staessen, Yumei Gu, Fred Paccaud, Markus Mohaupt, Bruno Vogt, Antoinette Pechère-Berstchi, Pierre-Yves

Idris Guessous.
Hypertension. 2015;65:691-696.

- 836 suizos
- MAPA de 24 horas
- Medicion de cafeina

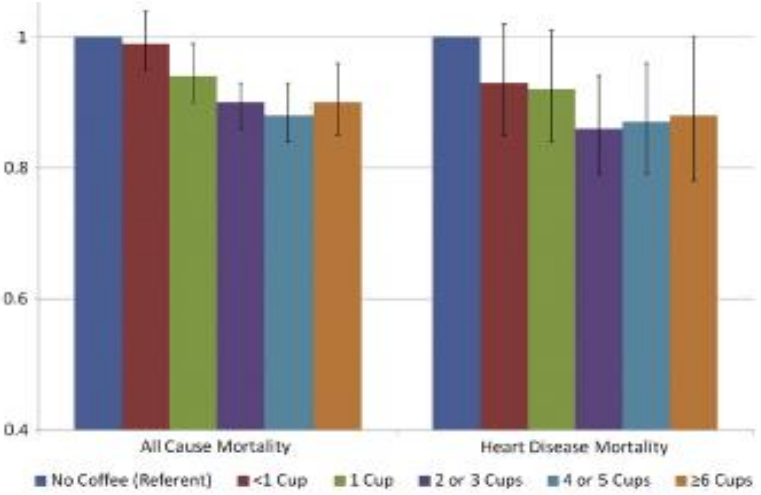
Table 2. Adjusted Associations of Ambulatory Blood Pressure With 24 Methylxanthines Excretions

	Systolic BP	
Methylxanthine	Beta, SE	*P* Va
Caffeine*		
24 h	−0.642, 0.296	0.
Day	−0.505, 0.313	0.
Night	−1.107, 0.315	<0.
Paraxanthine*		
24 h	−0.718, 0.343	0.
Day	−0.545, 0.362	0.
Night	−1.376, 0.364	<0.
Theophylline*		
24 h	−0.633, 0.341	0.
Day	−0.458, 0.360	0.
Night	−1.183, 0.363	0.
Theobromine*		
24 h	0.302, 0.338	0.
Day	0.325, 0.357	0.
Night	0.003, 0.361	0.

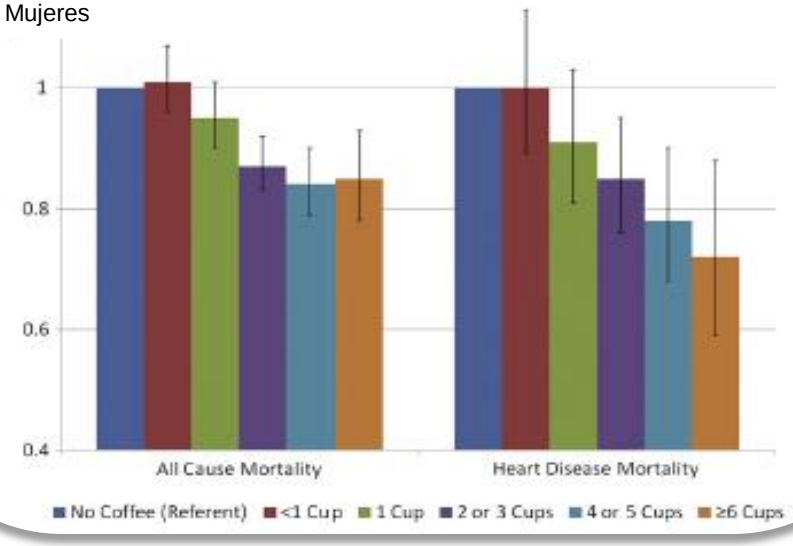
Models are adjusted for age, sex, use, diabetes mellitus, current alcohol u antihypertensive treatment, blood Na^+ and values highlighted in bold are statistically sig body mass index; BP, blood pressure; and GFR, gl
*Log-transformed.

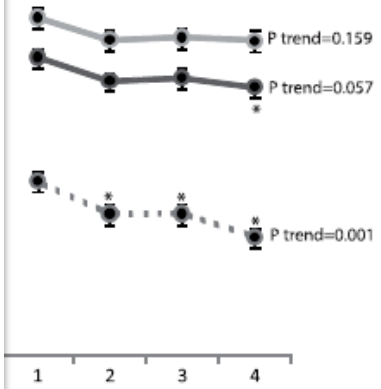
Hombres

J.H. O'Keefe. J Am Coll Cardiol 2013;62:1043–51



Mujeres





uartiles of urinary paraxanthine excretions ng/24h

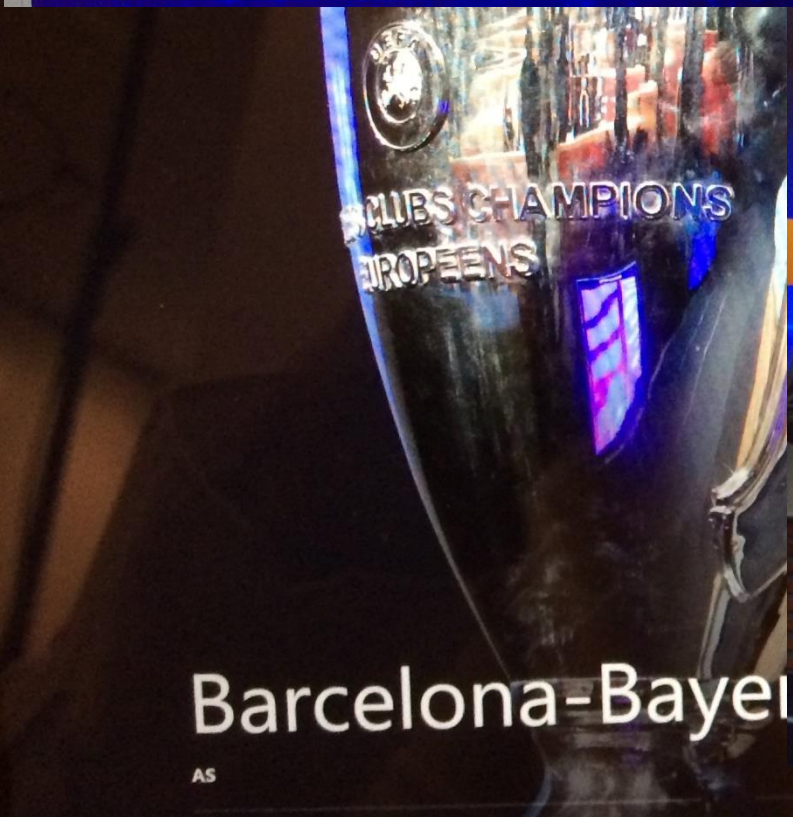
quartile 1 (reference)

HTA 2014 en 30 segundos

- Mayor consumo de sal mayor incremento de PA y a la inversa con K
- El riesgo mas bajo de mortalidad y morbilidad CV con consumo de 10-15 g sal/día y mayor ingesta de K.
- Los valores de PAS nocturna son los mejores predictores de mortalidad CV en hipertensos y en diabéticos
- La HSA en el joven presenta un mayor riesgo CV
- El tto antihipertensivo previene ictus y mortalidad en HTA grado 1
- La AMPA y auto ajuste tto antiHTA reduce + PAS a 12 meses que cuidado habitual.
- Un objetivo de control estricto de PA no confiere mejor pronostico materno-infantil en gestantes hipertensas.
- El acido fólico asociado a enalapril redujo la incidencia de ictus en hipertensos
- A mayor consumo de café menores valores de PAS ambulatoria

MUCHAS GRACIAS


SEMI-FINAL 1
FC BARCELONA
VS
FC BAYERN MÜNCHEN
SEMI-FINAL 2
JUVENTUS
VS
REAL MADRID CF
FINAL
BERLIN 2015


CLUBS CHAMPIONS
UROPEENS
Barcelona-Bayer
AS


UEFA Club Competitions
Semi-finals draws