FIBRILACION AURICULAR : TRATAMIENTO MEDICO

EFRAIN GIL R

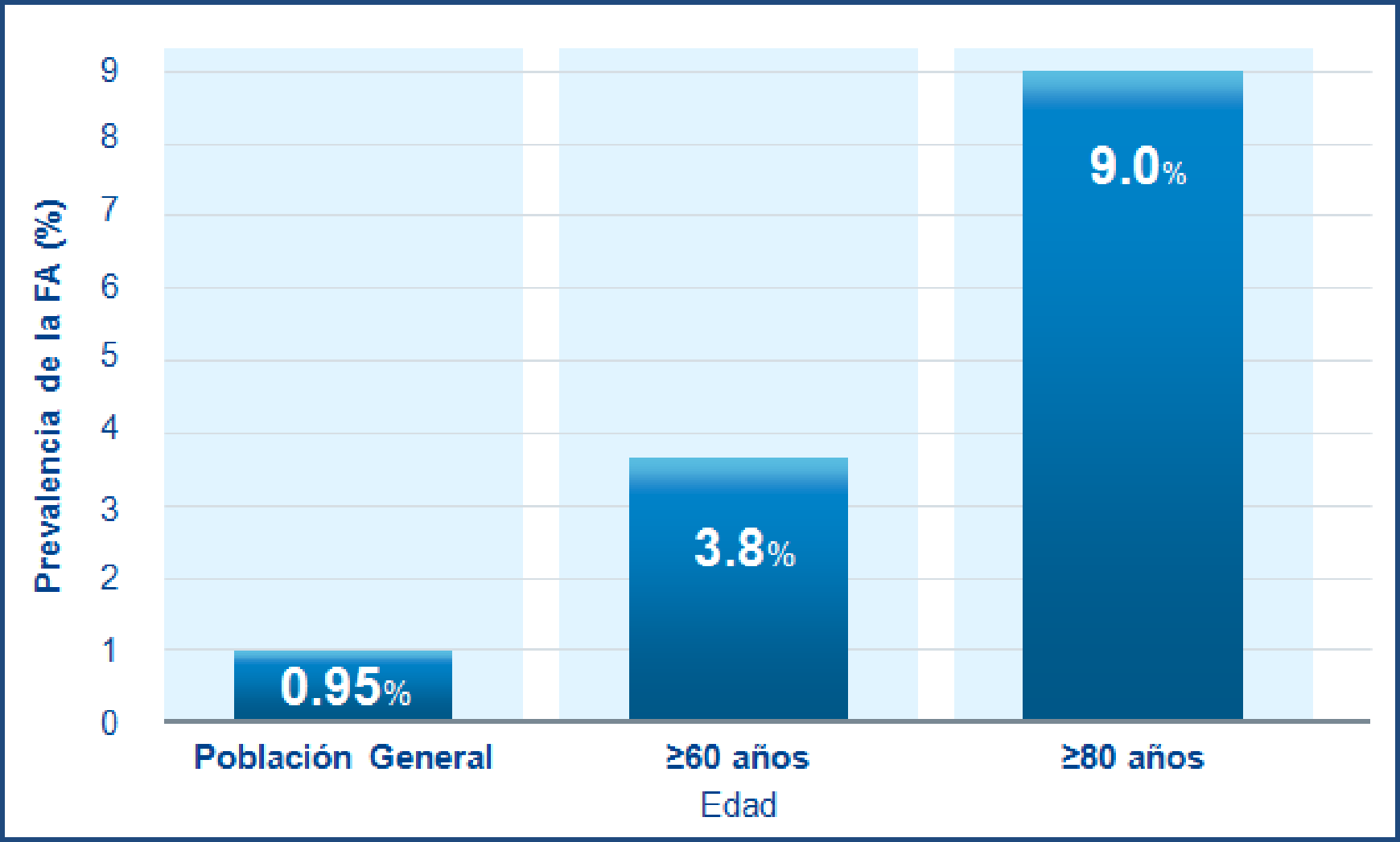
ELECTROFISIOLOGO

FA y riesgo de ACV

- La FA está asociada con un estado protrombótico.[1]
  - Aumenta en aproximadamente 5 veces el riesgo de ACV. [2]
- Cada año, hasta 3 millones de personas padecen ACV relacionados con la FA. [2-4]
- Los ACV relacionados con FA tienden a ser especialmente severos e incapacitantes, con una tasa de mortalidad a 1 año de aproximadamente 50%. [4,5]
  - El ACV cardioembólico presenta una tasa de mortalidad del 25% a 30 días. [4]
- El riesgo de ACV es el mismo en todos los pacientes con FA, sin importar si presentan FA paroxística o sostenida. [6,7]

1. Watson T, et al. *Lancet* 2009;373:155-166. 2. Wolf PA, et al. *Stroke* 1991;22:983-988.
3. Atlas of Heart Disease and Stroke, World Health Organization, September 2004. Viewed at http://www.who.int/cardiovascular_diseases/en/cvd_atlas_15_burden_stroke.pdf.
4. Lin HJ, et al. *Stroke* 1996;27:1760-1764. 5. Marini C, et al. *Stroke* 2005;36:1115-1119.
6. Rosamond W, et al. *Circulation* 2008;117:e25-146. 7. Hart RG, et al. *J Am Coll Cardiol* 2000;35:183-187.

Prevalencia de la FA según la edad

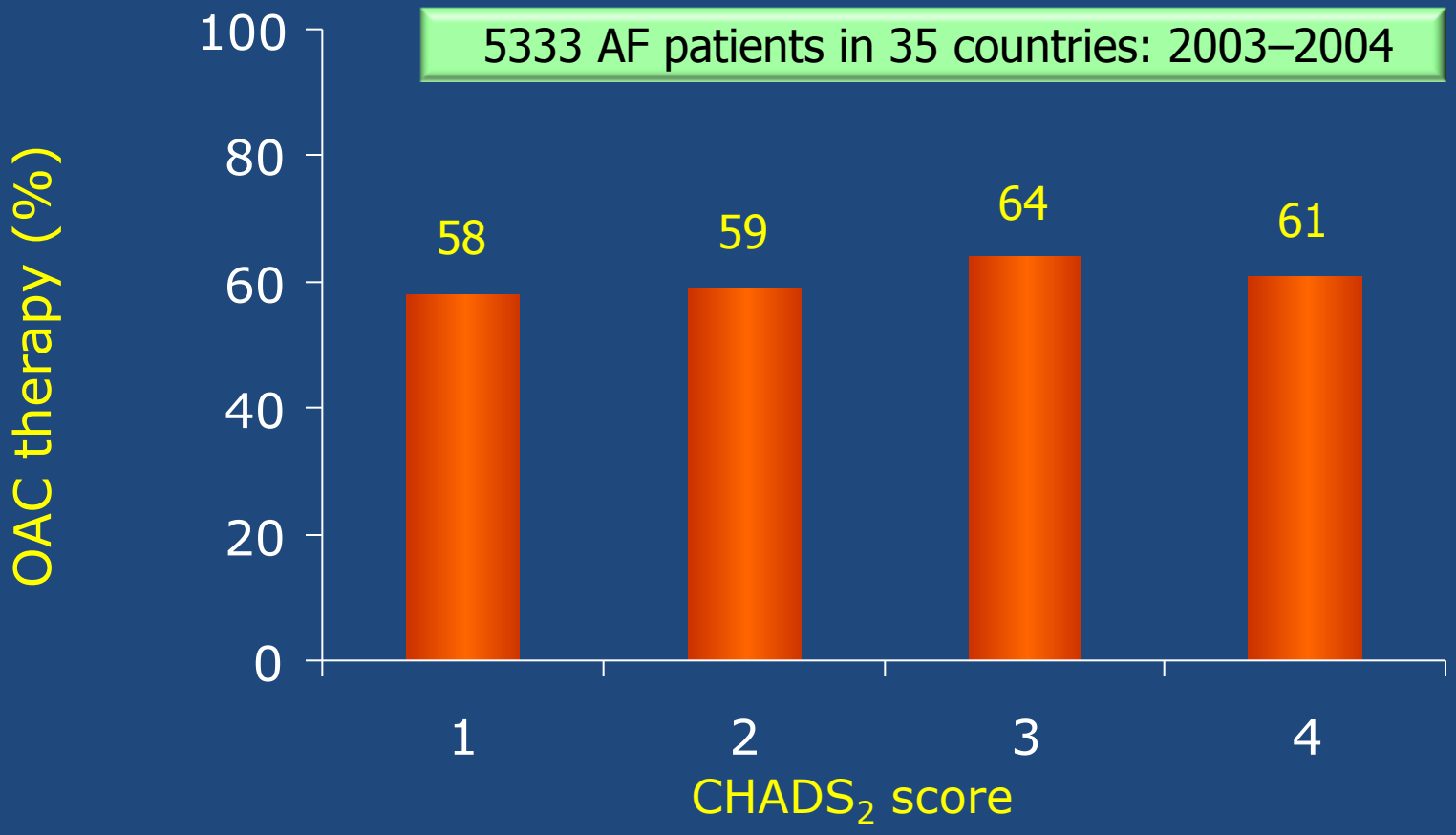


- WARFARINA

DISMINUYE 67% RIESGO ECV
DISMINUYE 26% MORTALIDAD

Subutilización de warfarina en FA

European Heart Survey



OAC, oral anticoagulant

Nieuwlaat *et al*. *Eur Heart J* 2006; Gage *et al. JAMA* 2001

Subutilización de la ACO: Factores médicos

	Médicos generales (N=158)	Cardiólogos (N=141)
Pacientes elegibles no prescritos con ACO	**139 (88%)**	**88 (62.4%)**
Razones médicas para subuso de ACO	**Número de pacientes**	
No está indicado	49	33
Negativa del paciente	5	6
Bajo nivel de cumplimiento	32	18
Temor de hemorragia	31	24
Posible contraindicación	61	32
Edad avanzada	25	12
Deterioro cognitivo	16	3
Disminución/trastorno de la marcha	14	7
Paciente que vive solo	10	4
Sangrado severo previo	8	6

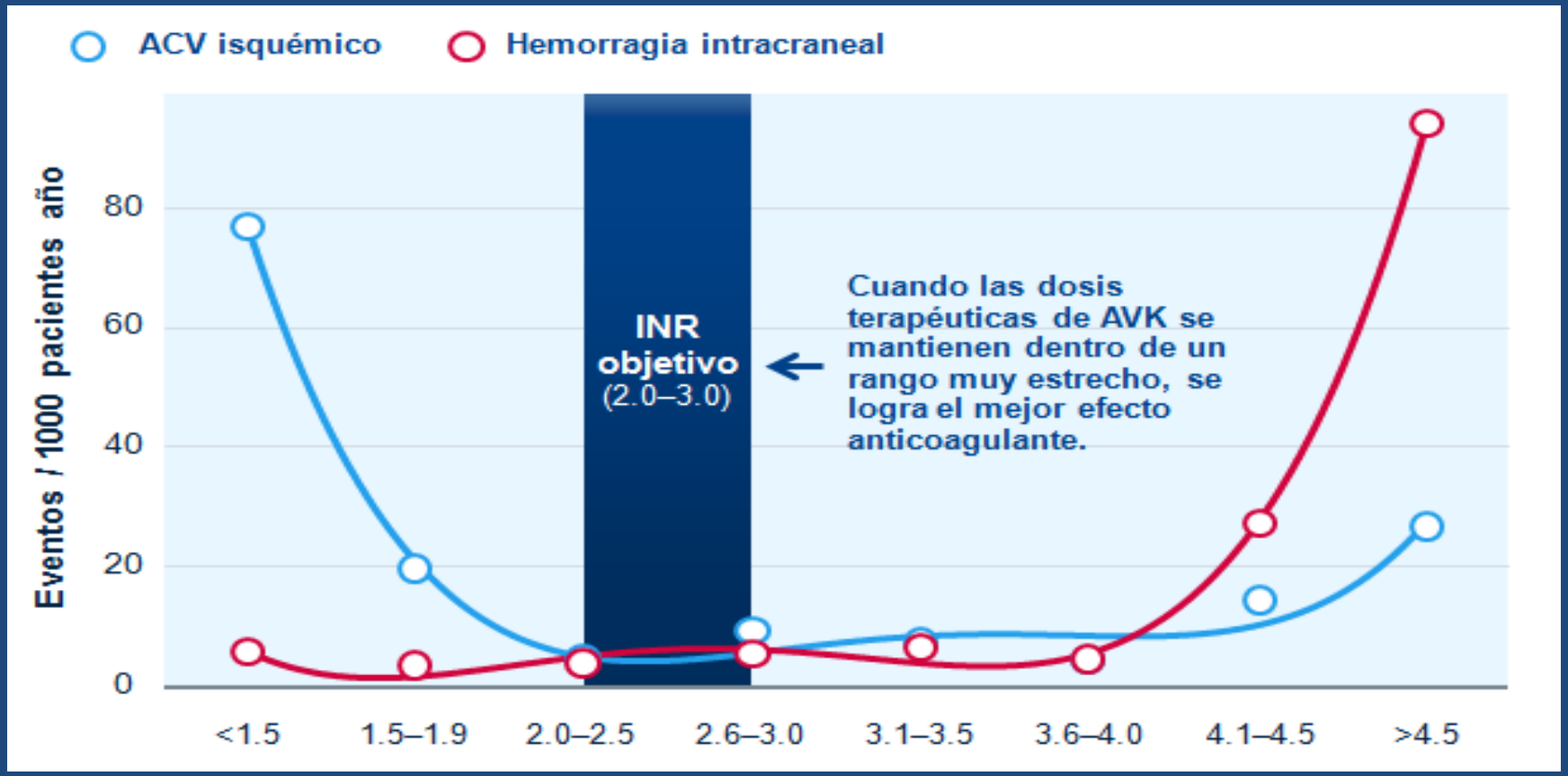
Deplanque D *et al*. *Br J Clin Pharmacol* 2004;57:798–806

Table 4. National Estimates of Medications Commonly Implicated in Emergency Hospitalizations for Adverse Drug Events in Older U.S. Adults, 2007–2009.*

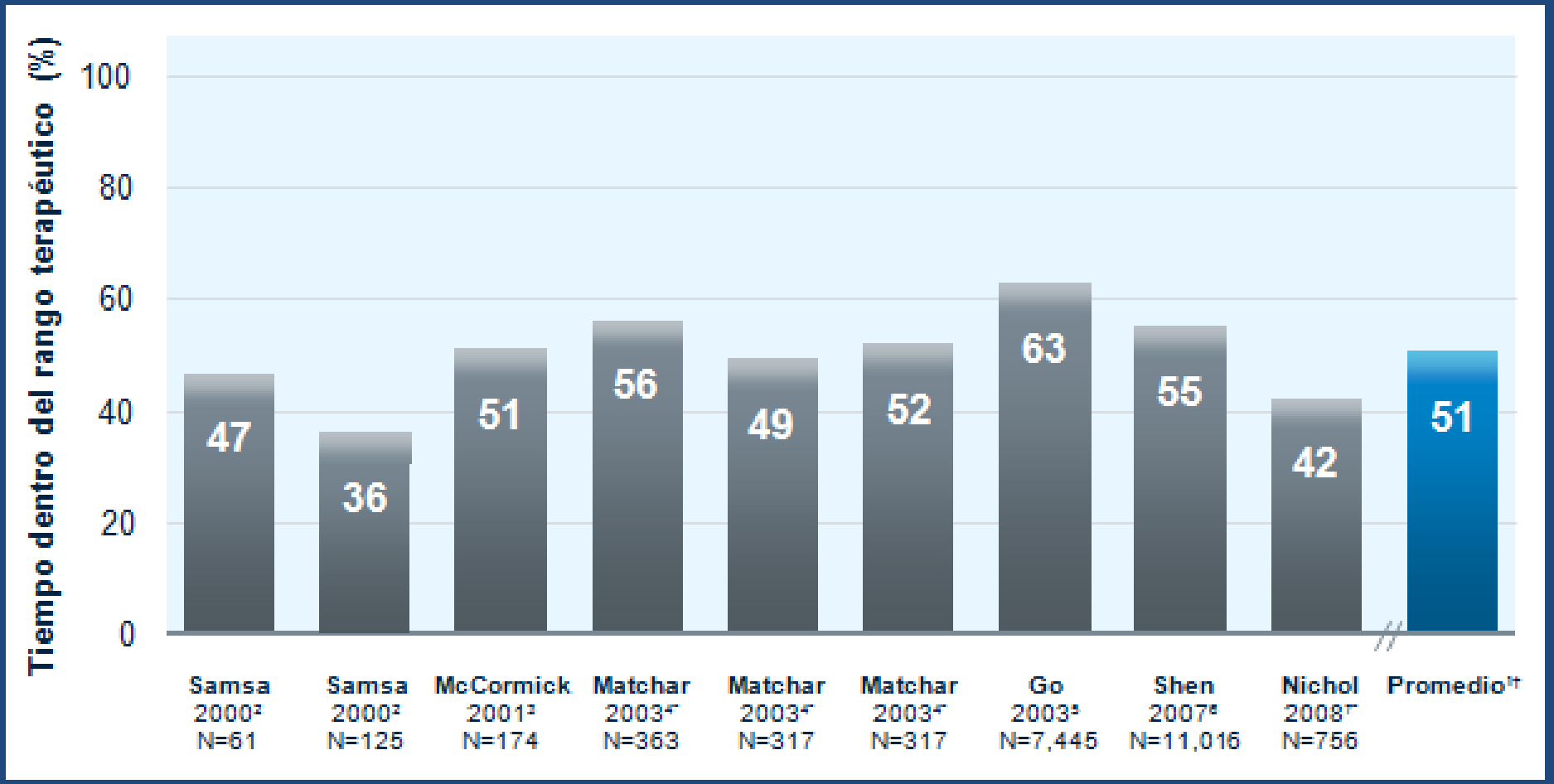
Medication	Annual National Estimate of Hospitalizations (N=99,628)		Proportion of Emergency Department Visits Resulting in Hospitalization
	no.	*% (95% CI)*	%
Most commonly implicated medications†			
Warfarin	33,171	33.3 (28.0–38.5)	46.2
Insulins	13,854	13.9 (9.8–18.0)	40.6
Oral antiplatelet agents	13,263‡	13.3 (7.5–19.1)	41.5
Oral hypoglycemic agents	10,656	10.7 (8.1–13.3)	51.8

Warfarina es el principal medicamento generador de hospitalizaciones por efectos adversos

Rango terapéutico estrecho con avk



Tiempo dentro del rango terapéutico con el uso de warfarina en la práctica clínica



The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 SEPTEMBER 17, 2009 VOL. 361 NO. 12

Dabigatran versus Warfarin in Patients with Atrial Fibrillation

Stuart J. Connolly, M.D., Michael D. Ezekowitz, M.B., Ch.B., D.Phil., Salim Yusuf, F.R.C.P.C., D.Phil., John Eikelboom, M.D., Jonas Oldgren, M.D., Ph.D., Amit Parekh, M.D., Janice Pogue, M.Sc., Paul A. Reilly, Ph.D., Ellison Themeles, B.A., Jeanne Varrone, M.D., Susan Wang, Ph.D., Marco Alings, M.D., Ph.D., Denis Xavier, M.D., Jun Zhu, M.D., Rafael Diaz, M.D., Basil S. Lewis, M.D., Harald Darius, M.D., Hans-Christoph Diener, M.D., Ph.D., Campbell D. Joyner, M.D., Lars Wallentin, M.D., Ph.D., and the RE-LY Steering Committee and Investigators*

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Study of stroke prevention in atrial fibrillation

The NEW ENGLAND JOURNAL of MEDICINE

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Apixaban versus Warfarin in Patients with Atrial Fibrillation

Christopher B. Granger, M.D., John H. Alexander, M.D., M.H.S., John J.V. McMurray, M.D., Renato D. Lopes, M.D., Ph.D., Elaine M. Hylek, M.D., M.P.H., Michael Hanna, M.D., Hussein R. Al-Khalidi, Ph.D., Jack Ansell, M.D., Dan Atar, M.D., Alvaro Avezum, M.D., Ph.D., M. Cecilia Bahit, M.D., Rafael Diaz, M.D., J. Donald Easton, M.D., Justin A. Ezekowitz, M.B., B.Ch., Greg Flaker, M.D., David Garcia, M.D., Margarida Geraldes, Ph.D., Bernard J. Gersh, M.D., Sergey Golitsyn, M.D., Ph.D., Shinya Goto, M.D., Antonio G. Hermosillo, M.D., Stefan H. Hohnloser, M.D., John Horowitz, M.D., Puneet Mohan, M.D., Ph.D., Petr Jansky, M.D., Basil S. Lewis, M.D., Jose Luis Lopez-Sendon, M.D., Prem Pais, M.D., Alexander Parkhomenko, M.D., Freek W.A. Verheugt, M.D., Ph.D., Jun Zhu, M.D., and Lars Wallentin, M.D., Ph.D., for the ARISTOTLE Committees and Investigators*

ARISTOTLE

The NEW ENGLAND JOURNAL of MEDICINE

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Rivaroxaban versus Warfarin in Nonvalvular Atrial Fibrillation

Manesh R. Patel, M.D., Kenneth W. Mahaffey, M.D., Jyotsna Garg, M.S., Guohua Pan, Ph.D., Daniel E. Singer, M.D., Werner Hacke, M.D., Ph.D., Günter Breithardt, M.D., Jonathan L. Halperin, M.D., Graeme J. Hankey, M.D., Jonathan P. Piccini, M.D., Richard C. Becker, M.D., Christopher C. Nessel, M.D., John F. Paolini, M.D., Ph.D., Scott D. Berkowitz, M.D., Keith A.A. Fox, M.B., Ch.B., Robert M. Califf, M.D., and the ROCKET AF Steering Committee, for the ROCKET AF Investigators*

ROCKET AF

The NEW ENGLAND JOURNAL of MEDICINE

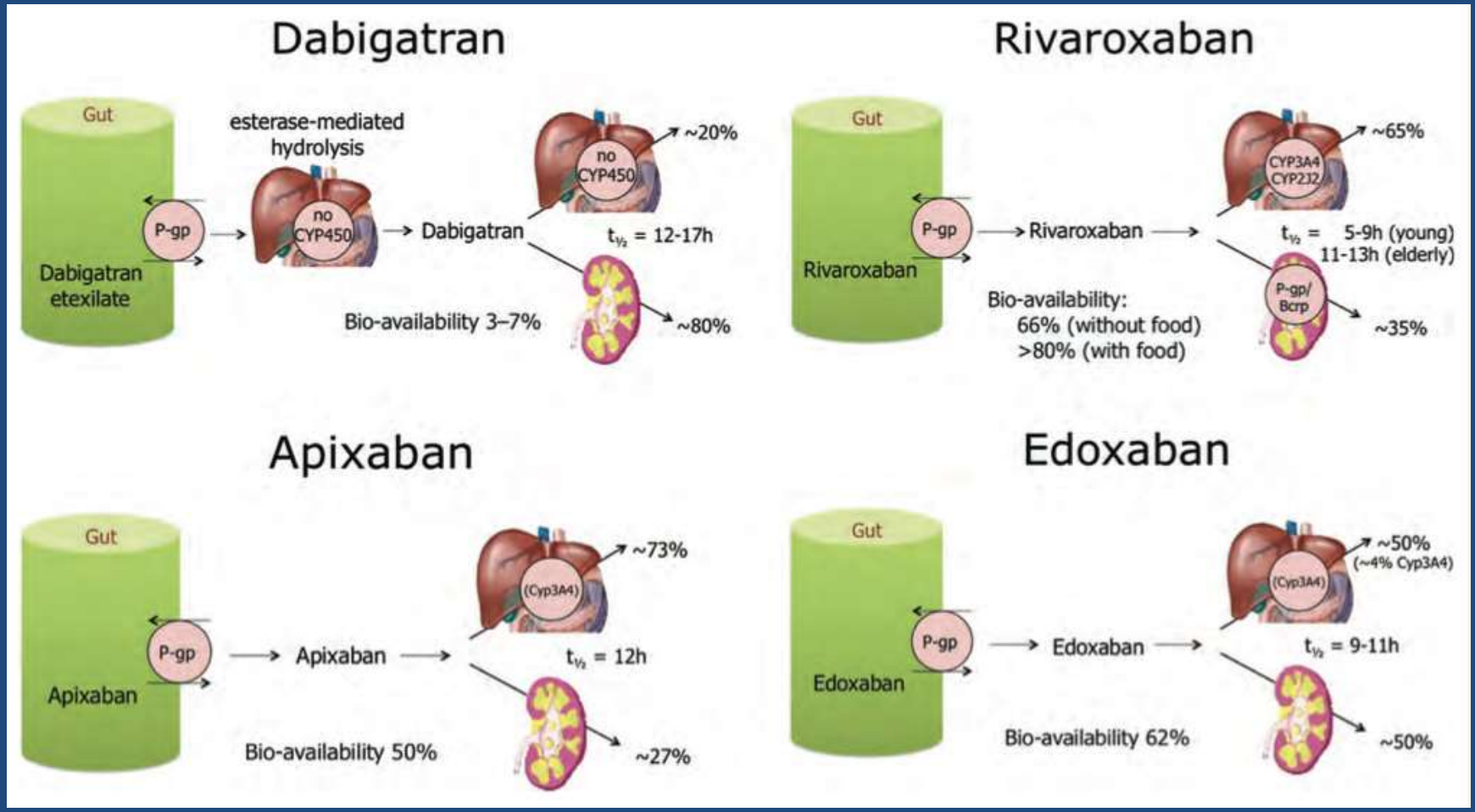
ORIGINAL ARTICLE

Edoxaban versus Warfarin in Patients with Atrial Fibrillation

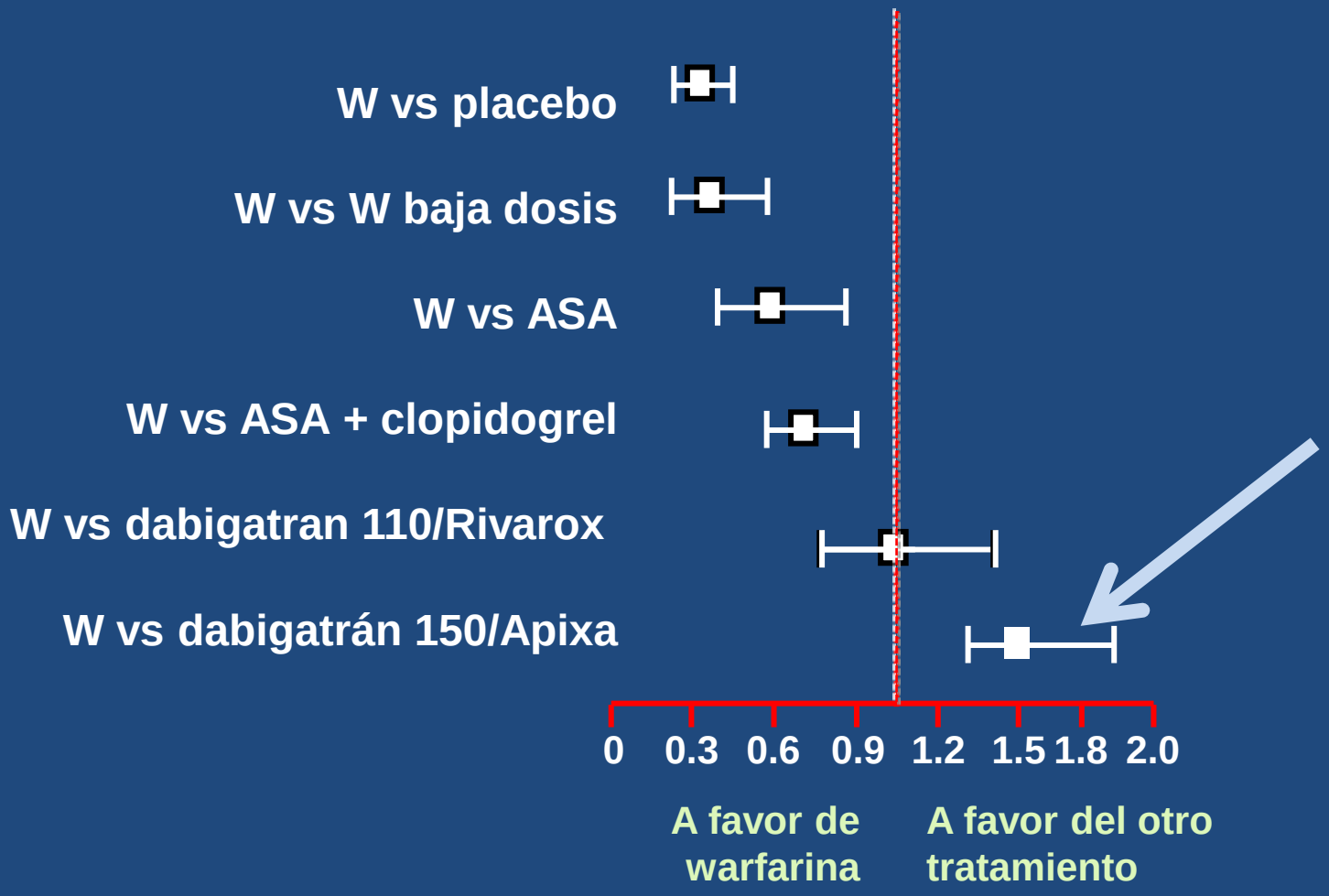
Robert P. Giugliano, M.D., Christian T. Ruff, M.D., M.P.H., Eugene Braunwald, M.D., Sabina A. Murphy, M.P.H., Stephen D. Wiviott, M.D., Jonathan L. Halperin, M.D., Albert L. Waldo, M.D., Michael D. Ezekowitz, M.D., D.Phil., Jeffrey I. Weitz, M.D., Jindřich Špinar, M.D., Witold Ruzyllo, M.D., Mikhail Ruda, M.D., Yukihiro Koretsune, M.D., Joshua Betcher, Ph.D., Minggao Shi, Ph.D., Laura T. Grip, A.B., Shirali P. Patel, B.S., Indravadan Patel, M.D., James J. Hanyok, Pharm.D., Michele Mercuri, M.D., and Elliott M. Antman, M.D., for the ENGAGE AF-TIMI 48 Investigators*

Engage AF TIMI 48

INTERACCIONES

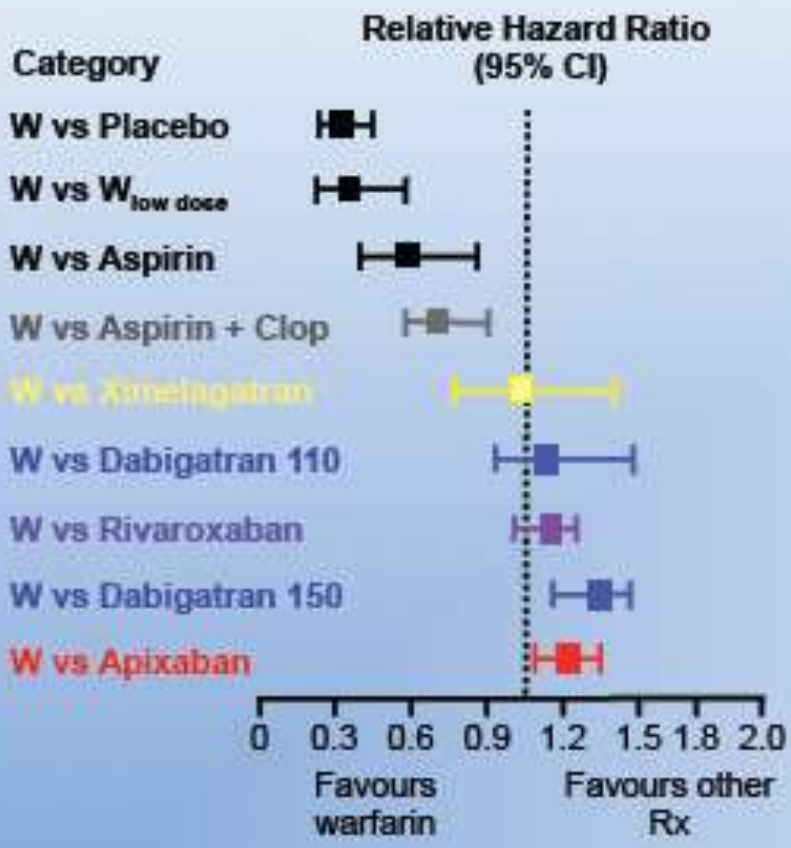


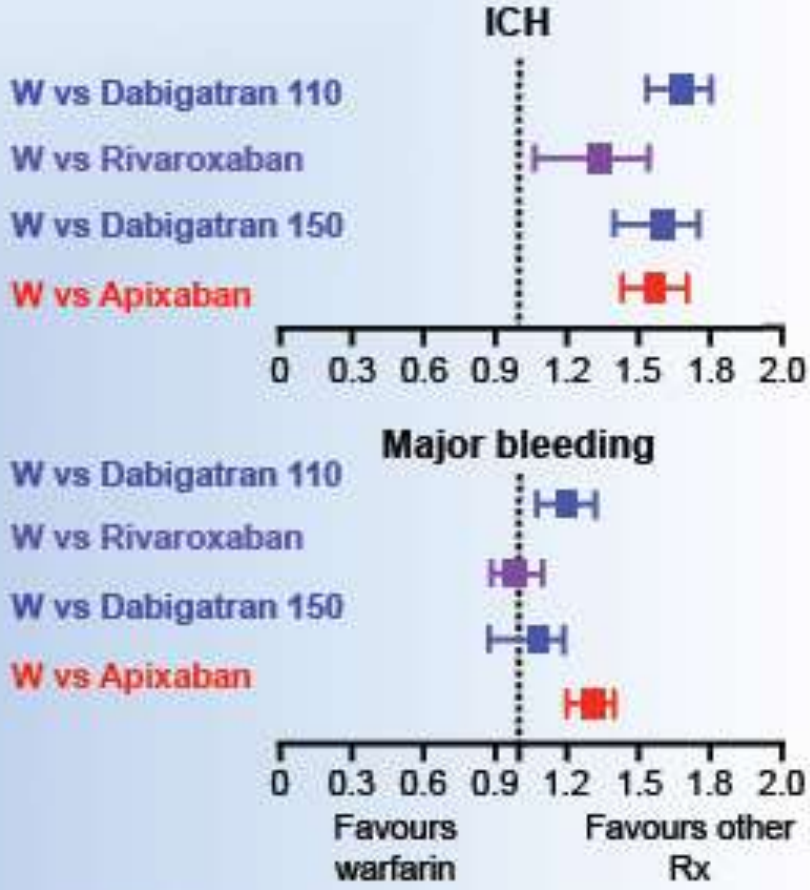
Meta-análisis de ACV isquémico o embolia sistémica



Stroke Prevention in AF 2013

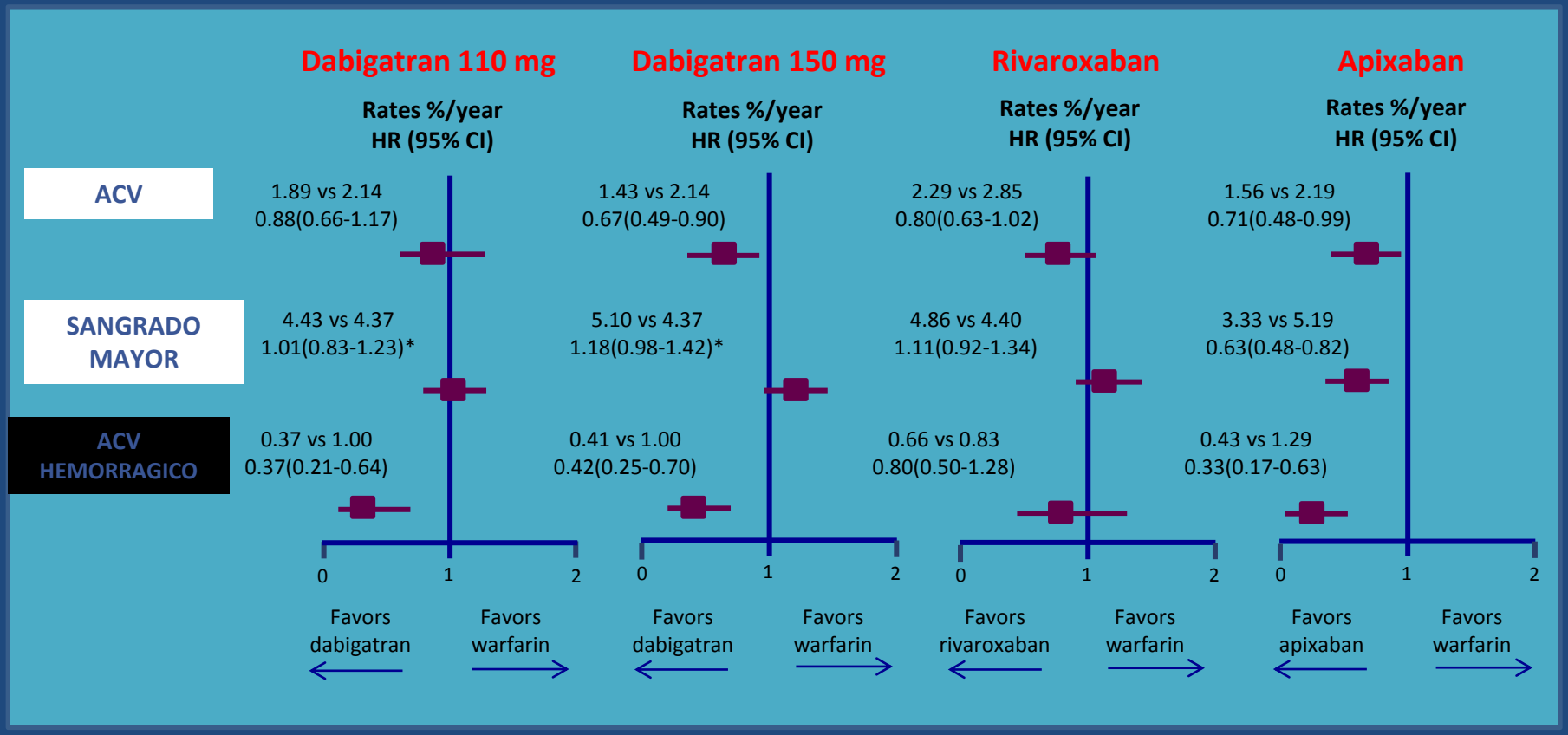
Meta-analysis of stroke or systemic embolism





Modified from Camm AJ. EHJ 2009;30:2554-2555.

Eficacia y seguridad de los NACOs vs Warfarina en ≥75 años



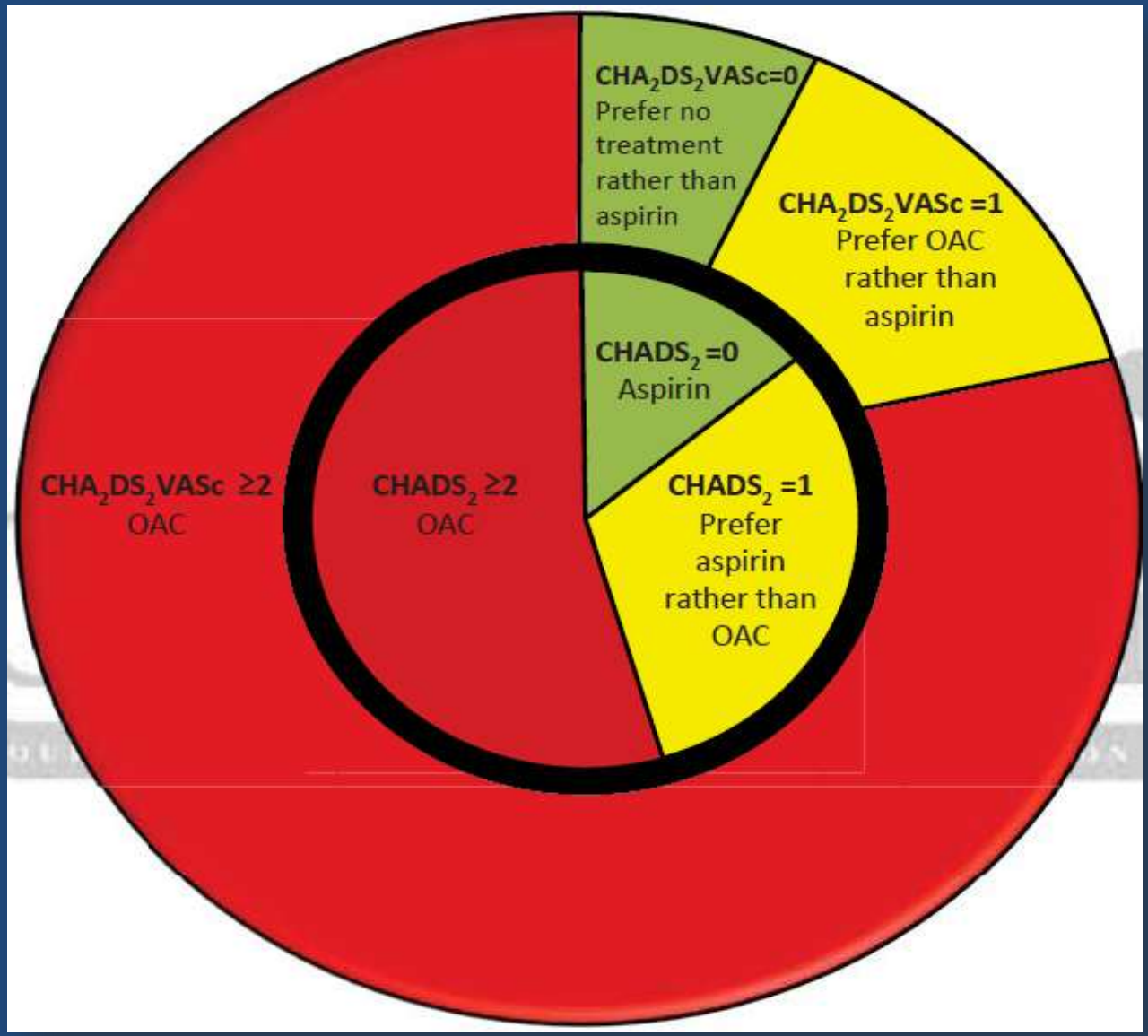
Capranzano P, et al. *Expert Rev Cardiovasc Ther*. 2013;11(3):307-317.

Desenlace	Dabigatrán 110 c/12h	Dabigatrán 150 c/12h	Rivaroxabán 20 mg c/24 h	Apixabán 5 mg c/12h
Reducción de ACV/embolismo sistémico	✗	✓	✗	✓
Reducción de la mortalidad global	✗	✗	✗	✓
Reducción de hemorragia intracraneana	✓	✓	✓	✓
Reducción del sangrado mayor	✓	✗	✗	✓
Igual tasa de sangrado digestivo	✓	✗	✗	✓

Connolly et al. NEJM 2010;363:1875-6 Patel et al. NEJM 2011;365:883-91. 3 Granger et al. NEJM 2011;365:981-92

SWITCH

- WARFARINA A NOACs : INR < 2
- HEPARINA I.V. A NOACs : 2 HORAS
- LMWH : SIGUIENTE DOSIS
- NOACs A WARFARINA : CONCOMITANTE HASTA INR**



Adaptado de: Fuster V. Circulation 2012; epubl April 18

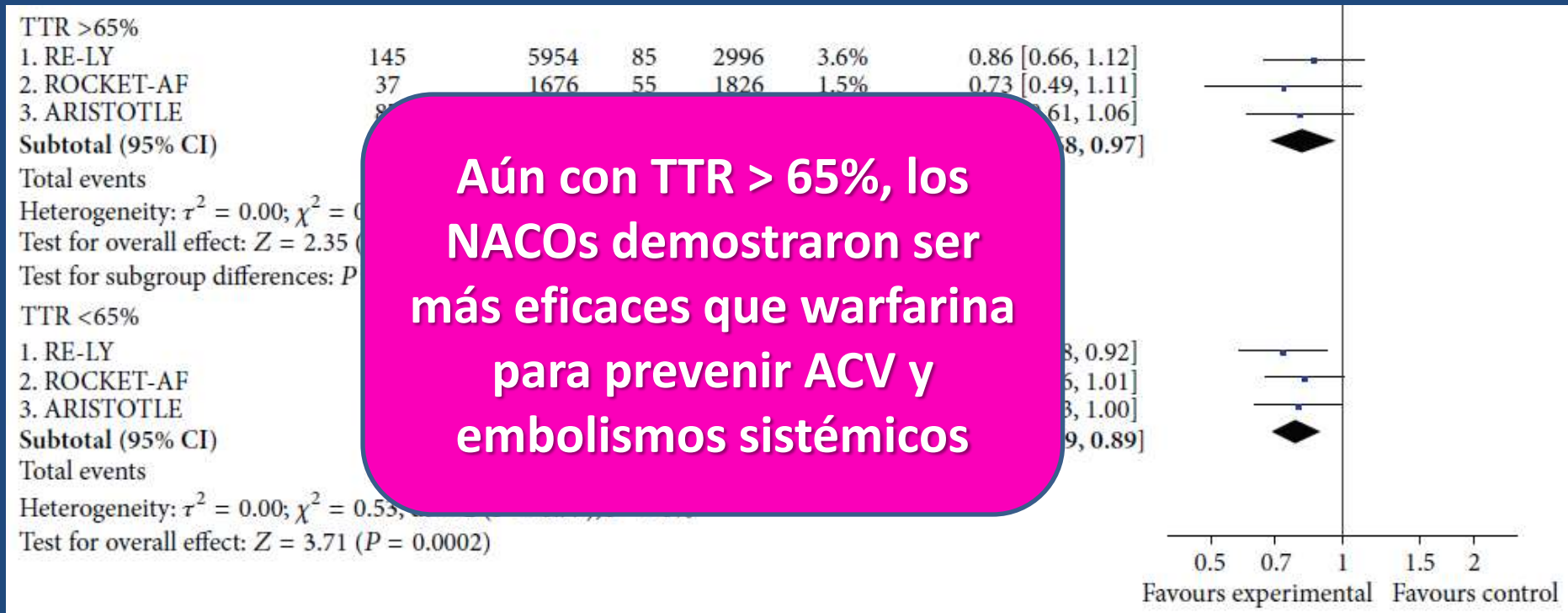
CHA_2DS_2-VASc Score

	Puntos
Congestive heart failure or LVEF ≤ 35%	1
Hypertension	1
Age > 75 years	2
Diabetes mellitus	1
Stroke/TIA/systemic embolism	2
Vascular Disease (MI/PAD/Aortic plaque)	1
Age 65-74 years	1
Sex **c**ategory (female)	1

Moderate-High risk ≥ 2

Low risk 0-1

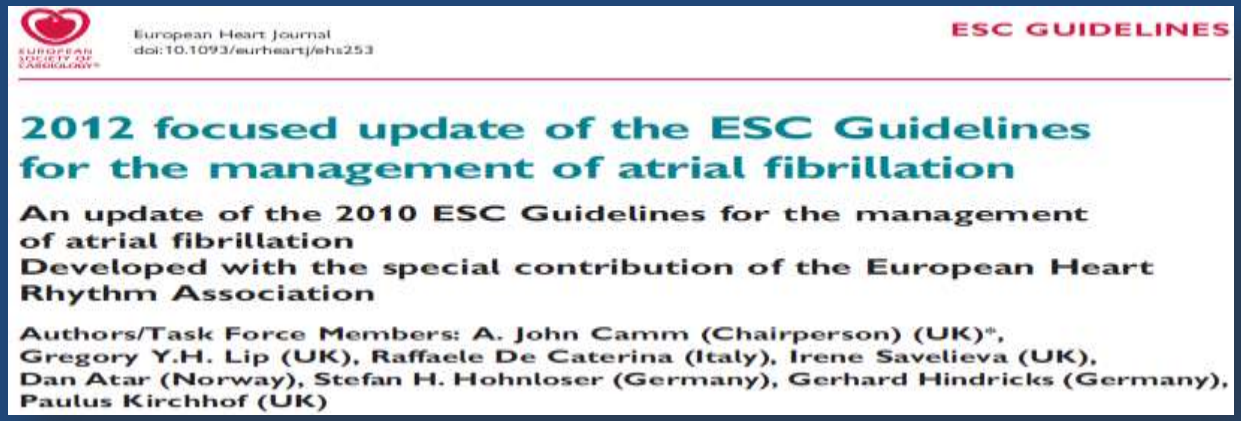
Lip GYH, Halperin JL. Am J Med 2010; 123: 484.



Aún con TTR > 65%, los NACOs demostraron ser más eficaces que warfarina para prevenir ACV y embolismos sistémicos

FIGURE 4: All strokes and systemic embolic events (intention-to-treat).

Aún en los bien controlados, usar un NACO reduce en un 19% el riesgo de ACV y embolismo sistémico



European Heart Journal
doi:10.1093/eurheartj/ehs253

ESC GUIDELINES

2012 focused update of the ESC Guidelines for the management of atrial fibrillation

An update of the 2010 ESC Guidelines for the management of atrial fibrillation
Developed with the special contribution of the European Heart Rhythm Association

Authors/Task Force Members: A. John Camm (Chairperson) (UK)*, Gregory Y.H. Lip (UK), Raffaele De Caterina (Italy), Irene Savelieva (UK), Dan Atar (Norway), Stefan H. Hohnloser (Germany), Gerhard Hindricks (Germany), Paulus Kirchhof (UK)

Where OAC is recommended, one of the NOACs, either: • a direct thrombin inhibitor (dabigatran); or • an oral factor Xa inhibitor (e.g. rivaroxaban, apixaban)[f] … should be considered rather than adjusted-dose VKA (INR 2–3) for most patients with non-valvular AF, based on their net clinical benefit.	IIa	A

Cuando la anticoagulación esté recomendada, uno de los nuevos anticoagulantes orales debe ser considerado por encima de la warfarina, basado en el beneficio clínico neto

IIa	A

Circulation
JOURNAL OF THE AMERICAN HEART ASSOCIATION

American Heart Association®

2014 AHA/ACC/HRS Guideline for the Management of Patients With Atrial Fibrillation: Executive Summary: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Heart Rhythm Society

Craig T. January, L. Samuel Wann, Joseph S. Alpert, Hugh Calkins, Joseph C. Cleveland, Jr, Joaquin E. Cigarroa, Jamie B. Conti, Patrick T. Ellinor, Michael D. Ezekowitz, Michael E. Field, Katherine T. Murray, Ralph L. Sacco, William G. Stevenson, Patrick J. Tchou, Cynthia M. Tracy and Clyde W. Yancy

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With prior stroke, TIA, or CHA_2DS_2-VASc score ≥2, oral anticoagulants recommended. Options include:		
• Warfarin	I	A
• Dabigatran, rivaroxaban, or apixaban	I	B
With nonvalvular AF and CHA_2DS_2-VASc score of 0, it is reasonable to omit antithrombotic therapy	IIa	B
With nonvalvular AF and a CHA_2DS_2-VASc score of 1, no antithrombotic therapy or treatment with an oral anticoagulant or aspirin may be considered	IIb	C

NICE National Institute for Health and Care Excellence

Atrial fibrillation: the management of atrial fibrillation

Issued: June 2014

NICE clinical guideline 180
guidance.nice.org.uk/cg180

Anticoagulation

Anticoagulation may be with apixaban, dabigatran etexilate, rivaroxaban or a vitamin K antagonist.

1.5.2 Consider anticoagulation for men with a CHA_2DS_2-VASc score of 1. Take the bleeding risk into account. **[new 2014]**

1.5.3 Offer anticoagulation to people with a CHA_2DS_2-VASc score of 2 or above, taking bleeding risk into account. **[new 2014]**

Antiplatelets

- Do not offer aspirin monotherapy solely for stroke prevention to people with atrial fibrillation. **[new 2014]**

- GRACIAS