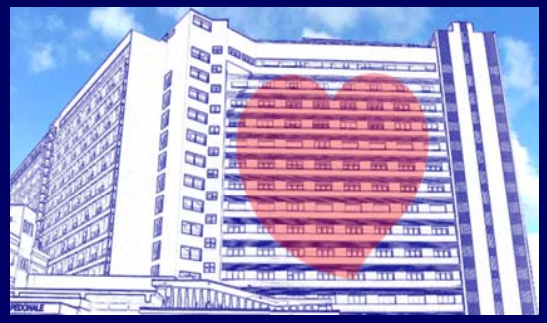
LA GESTIONE DEL PAZIENTE CON FIBRILLAZIONE ATRIALE

Convegno Associazione G. Dossetti
"Le Malattie Cardiovascolari : dalla Fase Acuta alla Prevenzione, l'Accesso alle Terapie nell'Era del Risanamento Economico"

Roma, 4 Ottobre 2011

Giuseppe Di Pasquale
Unità Operativa di Cardiologia
Ospedale Maggiore, Bologna



European Heart Journal (2010) 31, 2369–2429
doi:10.1093/eurheartj/ehq278

Guidelines for the management of atrial fibrillation

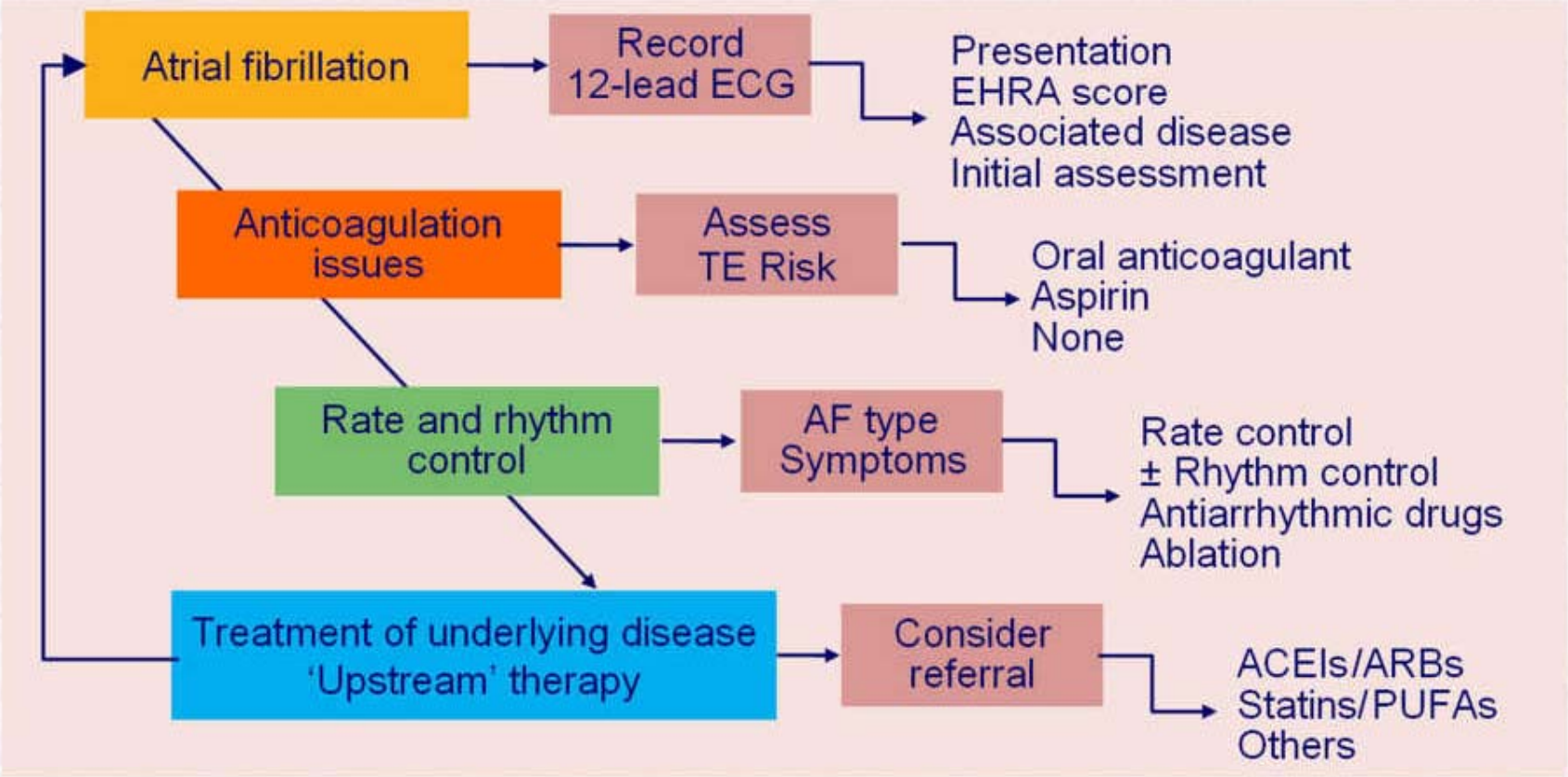
The Task Force for the Management of Atrial Fibrillation of the European Society of Cardiology (ESC)

Developed with the special contribution of the European Heart Rhythm Association (EHRA)†

Endorsed by the European Association for Cardio-Thoracic Surgery (EACTS)

Authors/Task Force Members: A. John Camm (Chairperson) (UK)*, Paulus Kirchhof (Germany), Gregory Y. H. Lip (UK), Ulrich Schotten (The Netherlands), Irene Savelieva (UK), Sabine Ernst (UK), Isabelle C. Van Gelder (The Netherlands), Nawwar Al-Attar (France), Gerhard Hindricks (Germany), Bernard Prendergast (UK), Hein Heidbuchel (Belgium), Ottavio Alfieri (Italy), Annalisa Angelini (Italy), Dan Atar (Norway), Paolo Colonna (Italy), Raffaele De Caterina (Italy), Johan De Sutter (Belgium), Andreas Goette (Germany), Bulent Gorenek (Turkey), Magnus Heldal (Norway), Stefan H. Hohloser (Germany), Philippe Kolh (Belgium), Jean-Yves Le Heuzey (France), Piotr Ponikowski (Poland), Frans H. Rutten (The Netherlands).

The management cascade for patients with AF

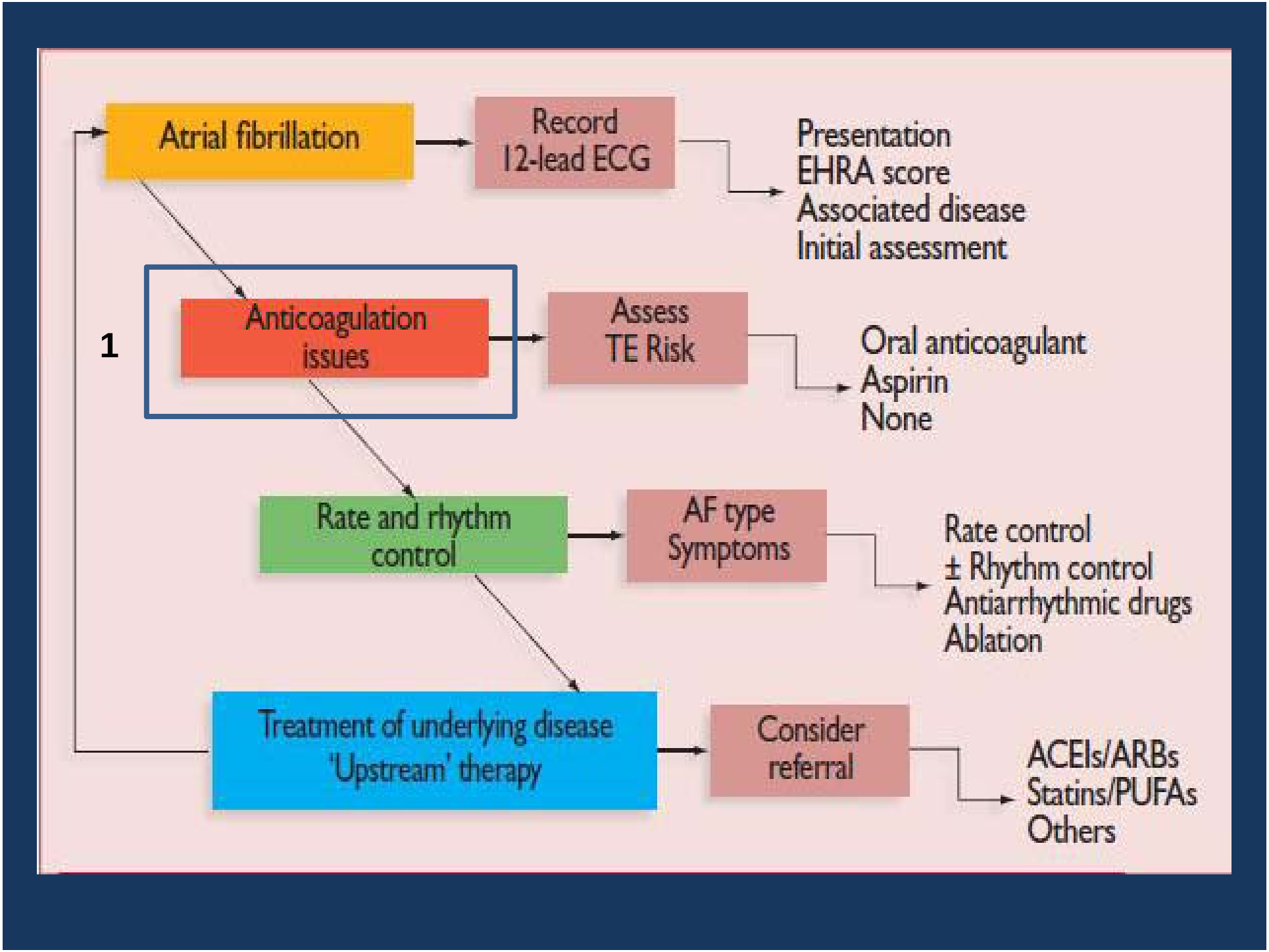


ACEI = angiotensin-converting enzyme inhibitor; AF = atrial fibrillation; ARB = angiotensin receptor blocker; PUFA = polyunsaturated fatty acid; TE = thrombo-embolism.

www.escardio.org/guidelines

European Heart Journal (2010) 31, 2369-2429

EUROPEAN SOCIETY OF CARDIOLOGY®


Atrial fibrillation
Record 12-lead ECG
Presentation
EHRA score
Associated disease
Initial assessment
1
Anticoagulation issues
Assess TE Risk
Oral anticoagulant
Aspirin
None
Rate and rhythm control
AF type
Symptoms
Rate control
± Rhythm control
Antiarrhythmic drugs
Ablation
Treatment of underlying disease
'Upstream' therapy
Consider referral
ACEIs/ARBs
Statins/PUFAs
Others

$CHADS_2$ Score

Risk Factor	SCORE
CHF / LV dysfunction	1
Hypertension	1
Age > 75 years	1
Diabetes mellitus	1
Stroke / TIA	2

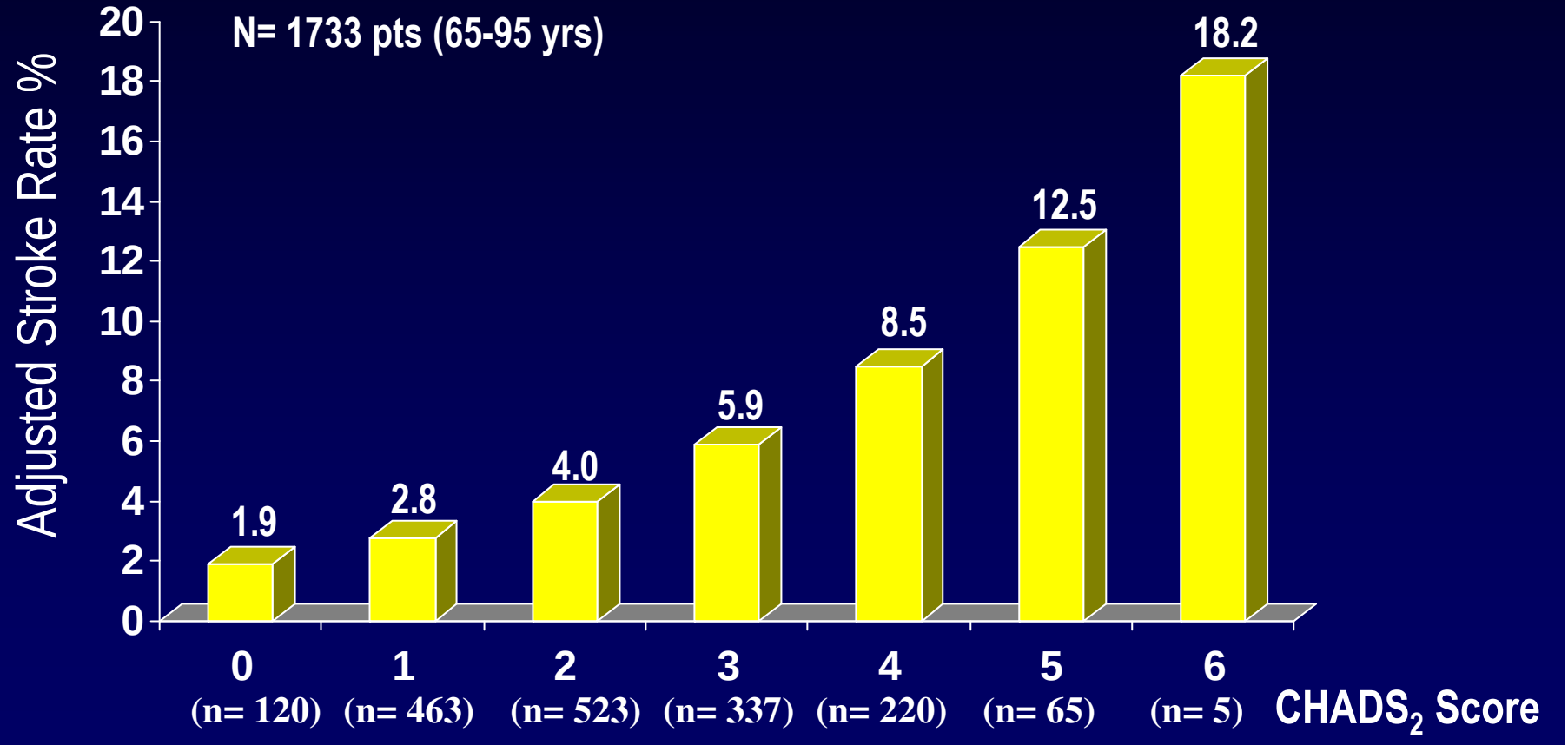
Gage BF et al. JAMA 2001; 285: 2864-70

$CHADS_2$ Score: Validation for Predicting Stroke

US National Registry of AF

- AFI scheme
- SPAF scheme

$CHADS_2$ index



1 point: recent CHF, hypertension, age ≥ 75 years, diabetes mellitus

2 points: prior stroke or TIA

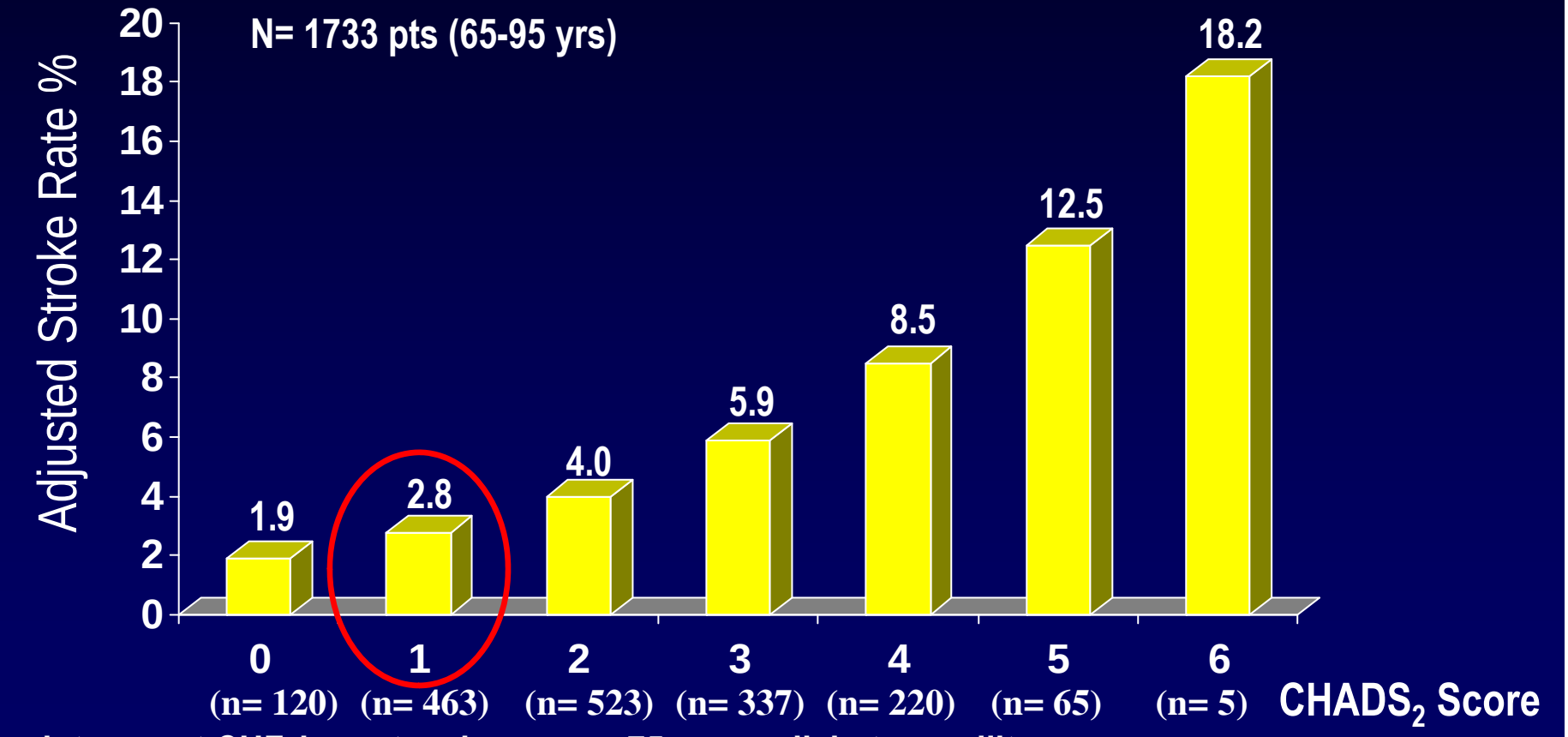
Gage BF et al. JAMA 2001; 285: 2864-70

$CHADS_2$ Score: Validation for Predicting Stroke

US National Registry of AF

- AFI scheme
- SPAF scheme

$CHADS_2$ index



1 point: recent CHF, hypertension, age ≥ 75 years, diabetes mellitus

2 points: prior stroke or TIA

Gage BF et al,. JAMA 2001; 285: 2864-70

CHEST

Original Research

THROMBOEMBOLISM

Refining Clinical Risk Stratification for Predicting Stroke and Thromboembolism in Atrial Fibrillation Using a Novel Risk Factor-Based Approach

The Euro Heart Survey on Atrial Fibrillation

Gregory Y. H. Lip, MD; Robby Nieuwlaat, PhD; Ron Pisters, MD; Deirdre A. Lane, PhD; and Harry J. G. M. Crijns, MD

CHEST 2010; 137(2):263–272

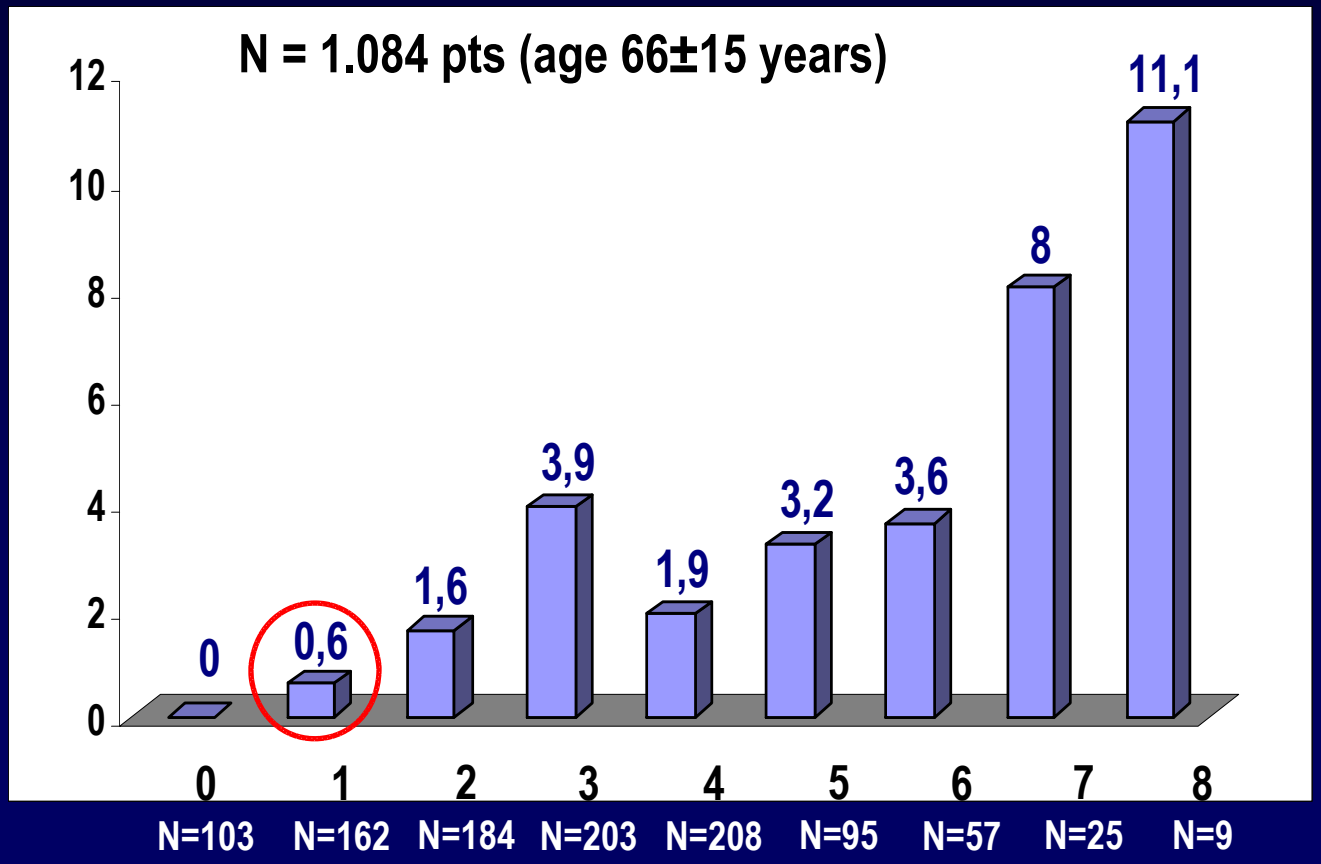
CHA_2DS_2 - VASc Score

Risk Factor	Score
Congestive heart failure / LV dysfunction	1
Hypertension	1
Age ≥ 75 y	2
Diabetes mellitus	1
Stroke / TIA / systemic embolism	2
Vascular disease (prior myocardial infarction, peripheral artery disease or aortic plaque)	1
Age 65 - 74 y	1
Sex category (ie female gender)	1

Lip GYH et al. Chest 2010;137(2): 263-72

CHA_2DS_2 - VASc Score: Validation for Predicting Stroke

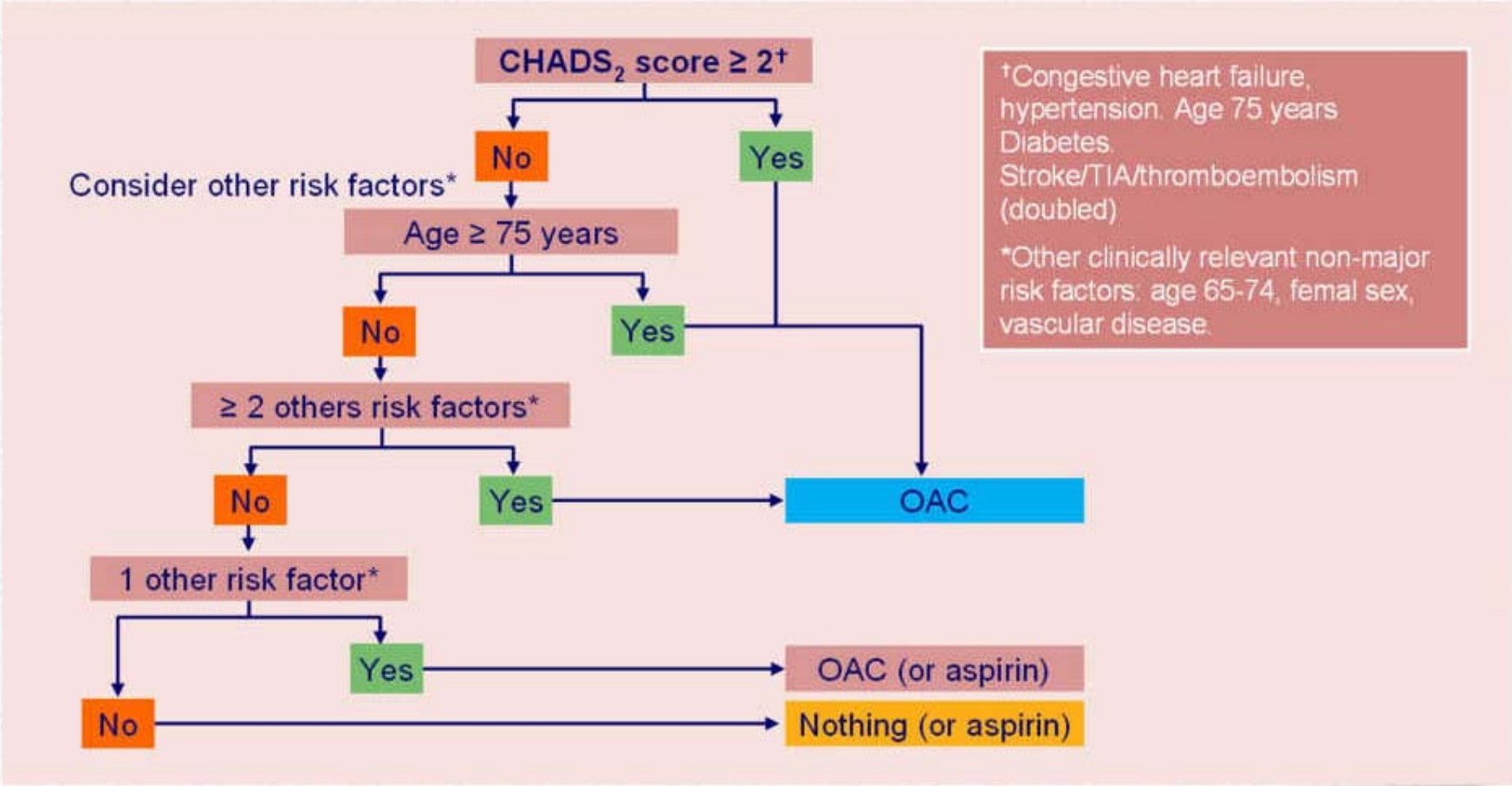
The Euro Heart Survey on AF



- 1 point: CHF/LV dysfunction, Hypertension, Diabetes , Vascular disease, Age 65-74 y, Sex category
- 2 points: Age ≥ 75 y, Stroke/TIA/TE

Lip G et al. Chest 2010;137:263-72

Use of oral anticoagulation for stroke prevention in AF



AF = atrial fibrillation; OAC = oral anticoagulant; TIA = transient ischaemic attack.

www.escardio.org/guidelines

European Heart Journal (2010) 31, 2369-2429

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Bleeding Risk

… an assessment of bleeding risk should be part of the patient assessment before starting anticoagulation…

ESC AF GUIDELINES 2010

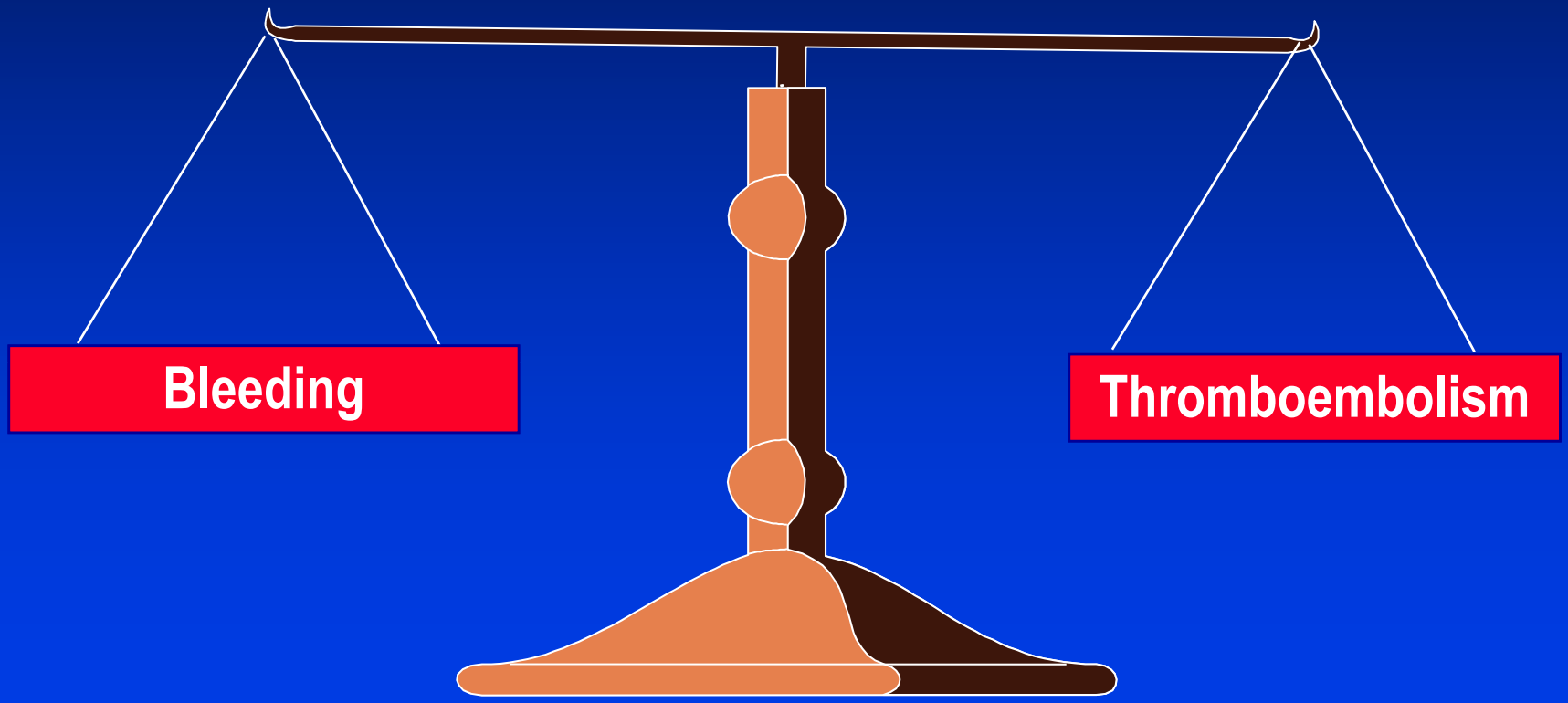
HAS-BLED Bleeding Risk Score

H	1 point	Hypertension
A	1 or 2 points	Abnormal renal and liver function
S	1	Stroke
B	1	Bleeding
L	1	Labile INRs
E	1	Eldery (e.g. age > 65 years)
D	1 or 2 points	Drugs or alcohol

Maximum 9 points

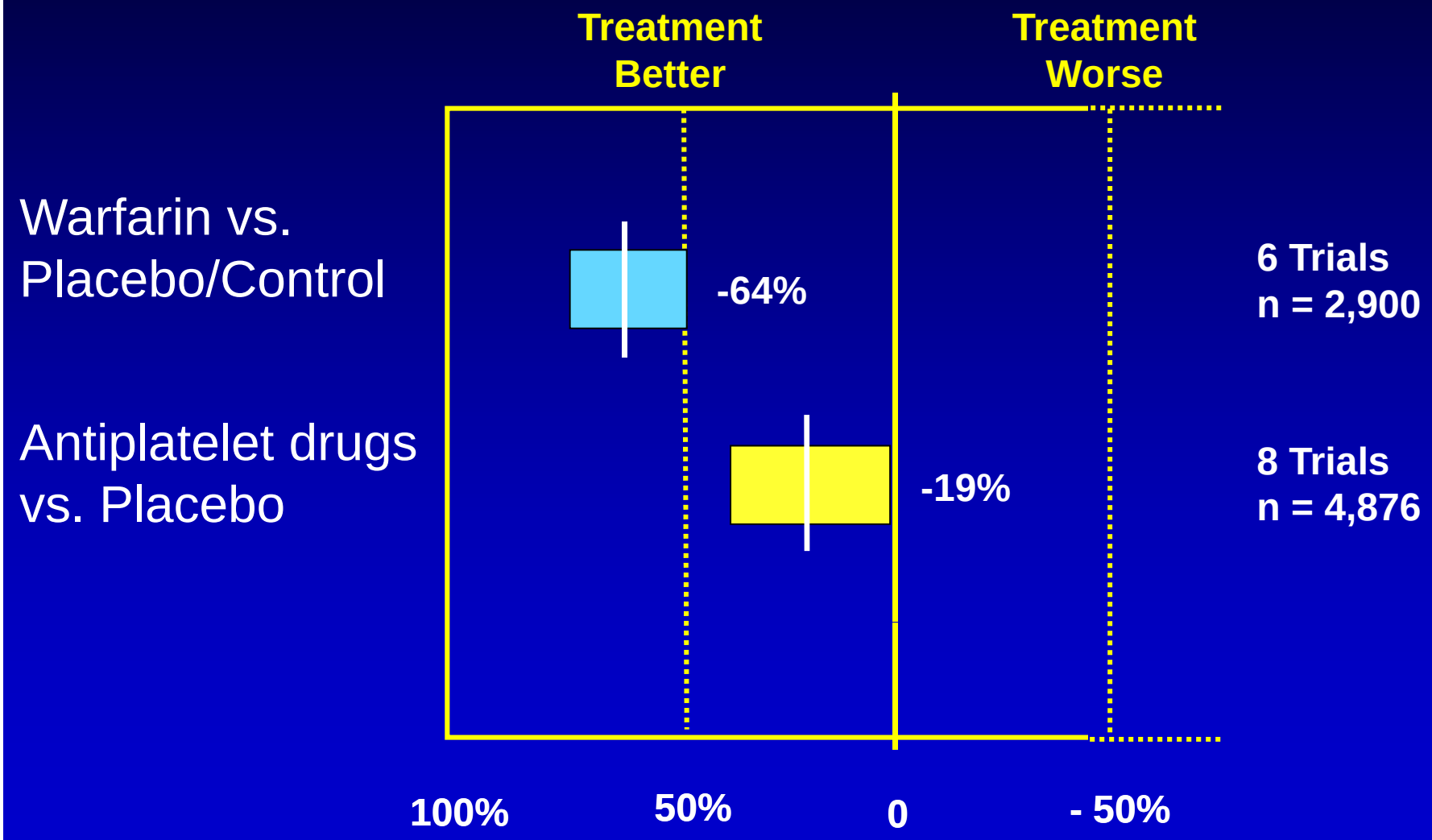
Pisters R et al. Chest 2010

NET CLINICAL BENEFIT OF ORAL ANTICOAGULANT TREATMENT IN ATRIAL FIBRILLATION



Antithrombotic Therapy for AFib

Stroke Risk Reduction



Hart RG et al. Ann Intern Med 2007; 146: 857

Limiti della terapia con antagonisti della Vitamina K

La terapia con antagonisti della vitamina K presenta diversi limiti che ne rendono difficoltoso l'impiego nella pratica clinica

- Risposta non prevedibile
- Finestra di trattamento stretta (INR range 2-3)
- Monitoraggio routinario dei fattori della coagulazione
- Lente insorgenza/termine d'azione
- Frequenti aggiustamenti della dose
- Numerose interazioni alimentari
- Numerose interazioni con altri farmaci
- Resistenza al Warfarin

1. Ansell J, et al. *Chest* 2008;133;160S-198S; 2. Umer Ushman MH, et al. *J Interv Card Electrophysiol* 2008; 22:129-137; Nutescu EA, et al. *Cardiol Clin* 2008; 26:169-187.

Limiti della Terapia Anticoagulante Orale

Conseguenze nella FA

- Un significativo numero di pazienti con FA a rischio di stroke non riceve la TAO

CLINICAL RESEARCH STUDY

THE AMERICAN JOURNAL of MEDICINE®

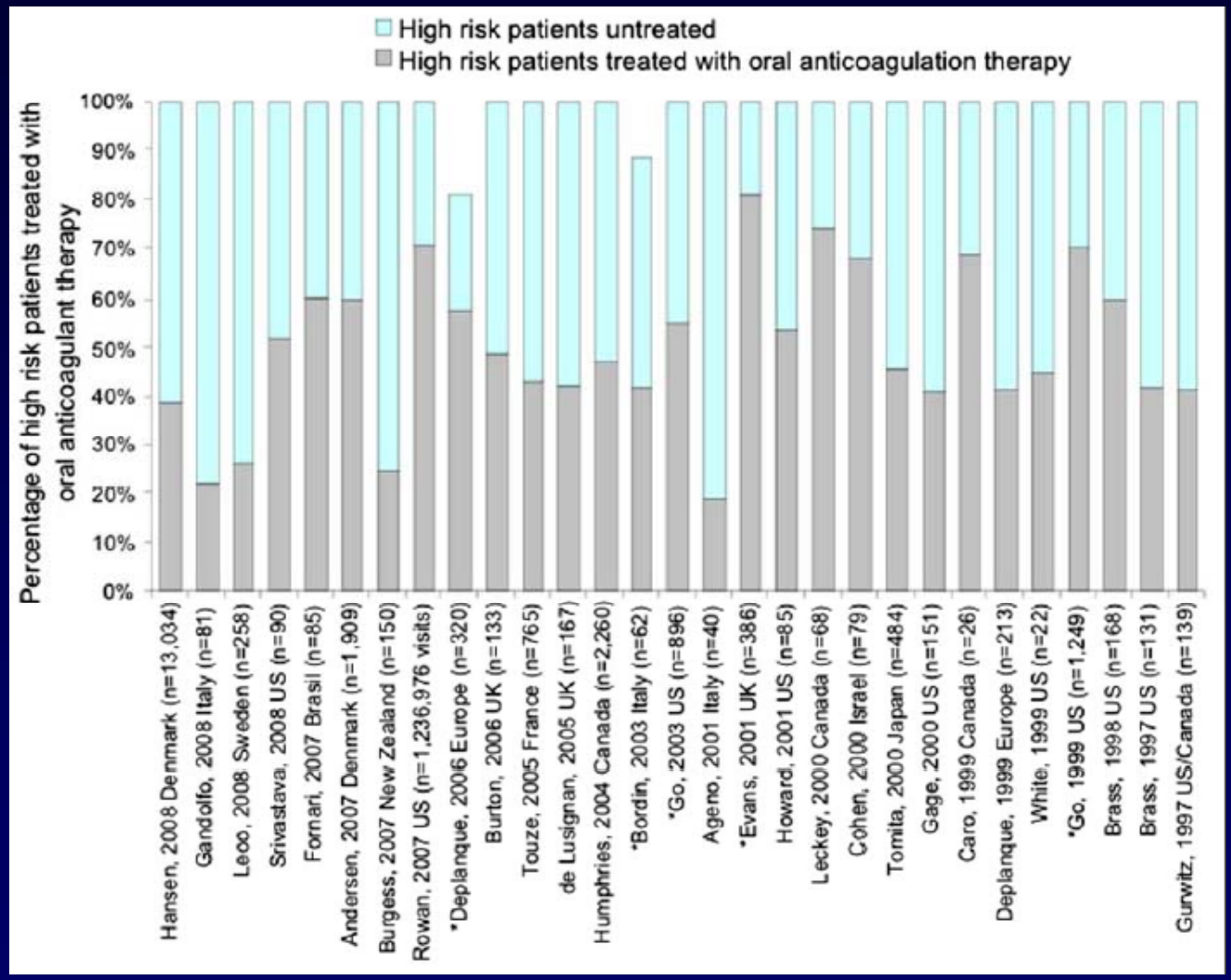
Underuse of Oral Anticoagulants in Atrial Fibrillation: A Systematic Review

Isla M. Ogilvie, PhD,[a] Nick Newton, PhD,[a] Sharon A. Welner, PhD,[a] Warren Cowell, MSc,[b] Gregory Y. H. Lip, MD[c]

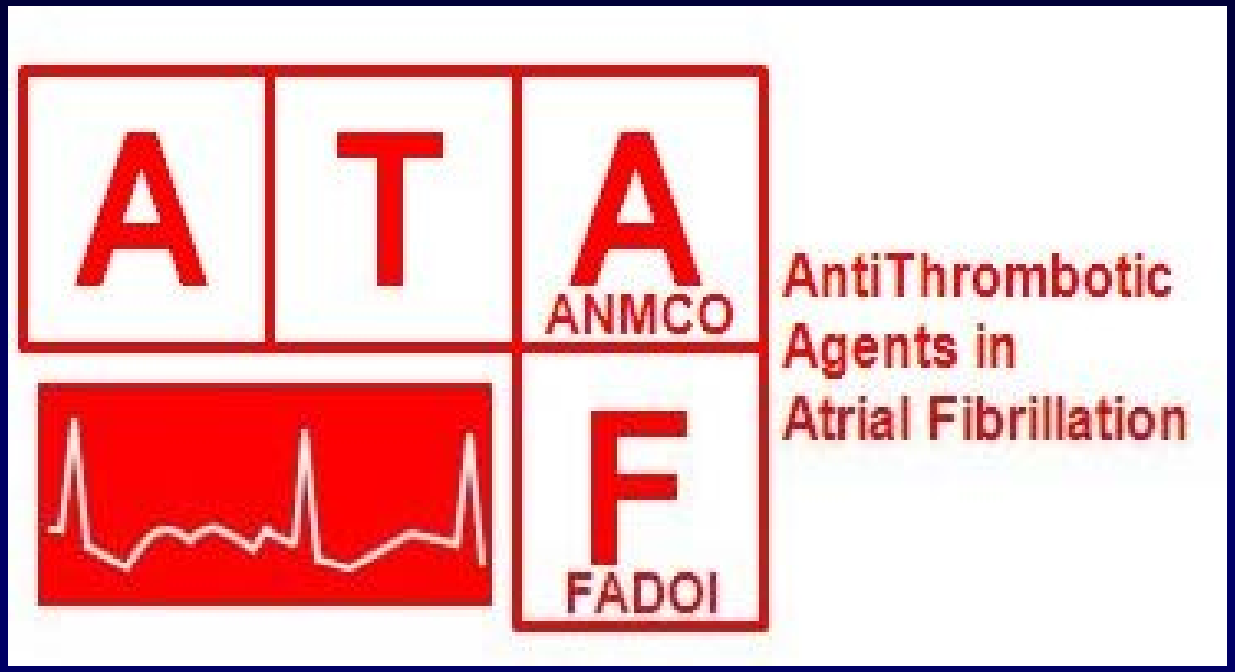
The American Journal of Medicine (2010) 123, 638-645

- *Underuse of OAC for high risk AF patients was found in most of the 54 studies (1998-2008)*
- *Over two third of studies of AF patients with prior stroke/TIA reported treatment levels of under 60% of eligible patients*
- *Most studies based on $CHADS_2$ score reported OAC treatment levels of high risk subjects below 70%*

Patients with AF and prior stroke/TIA: OAC treatment levels as a proportion of patients eligible for OAC



Ogilvie IM et al. Am J Med 2010;123:638-45



Steering Committee

Giuseppe Di Pasquale (Chairman ANMCO), Giovanni Mathieu (Chairman FADOI), Francesco Chiarella, Fabrizio Colombo, Michele Gulizia, Gualberto Gussoni, Carlo Nozzoli, Domenico Panuccio, Salvatore Pirelli, Marino Scherillo, Giorgio Vescovo, Massimo Zoni Berisso

Setting of the Study

AntiThrombotic Agents in Atrial Fibrillation

360 Participating Centers

7148 enrolled patients

164 Cardiology Departments

Cardiology ward
Cardiology ward and Cath Lab
Cardiology ward with Cath Lab and CCH

196 Internal Medicine Dept.

Hospital without cardiology
Hospital with cardiology ward
Hospital with cardiology ward and Cath Lab (with or without CCH)

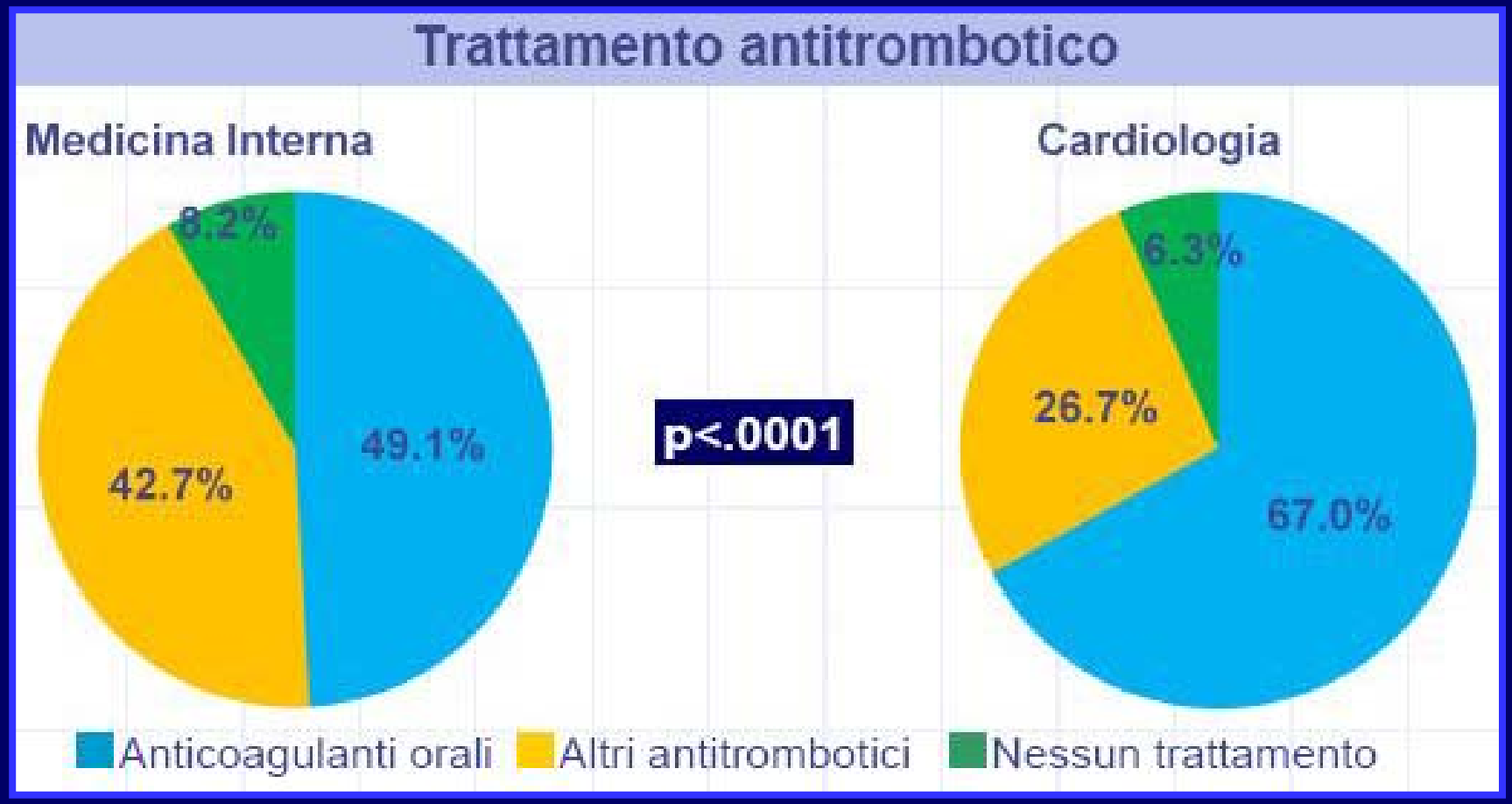
From each Center:

Duration of the enrollment 4 weeks

Baseline Characteristics

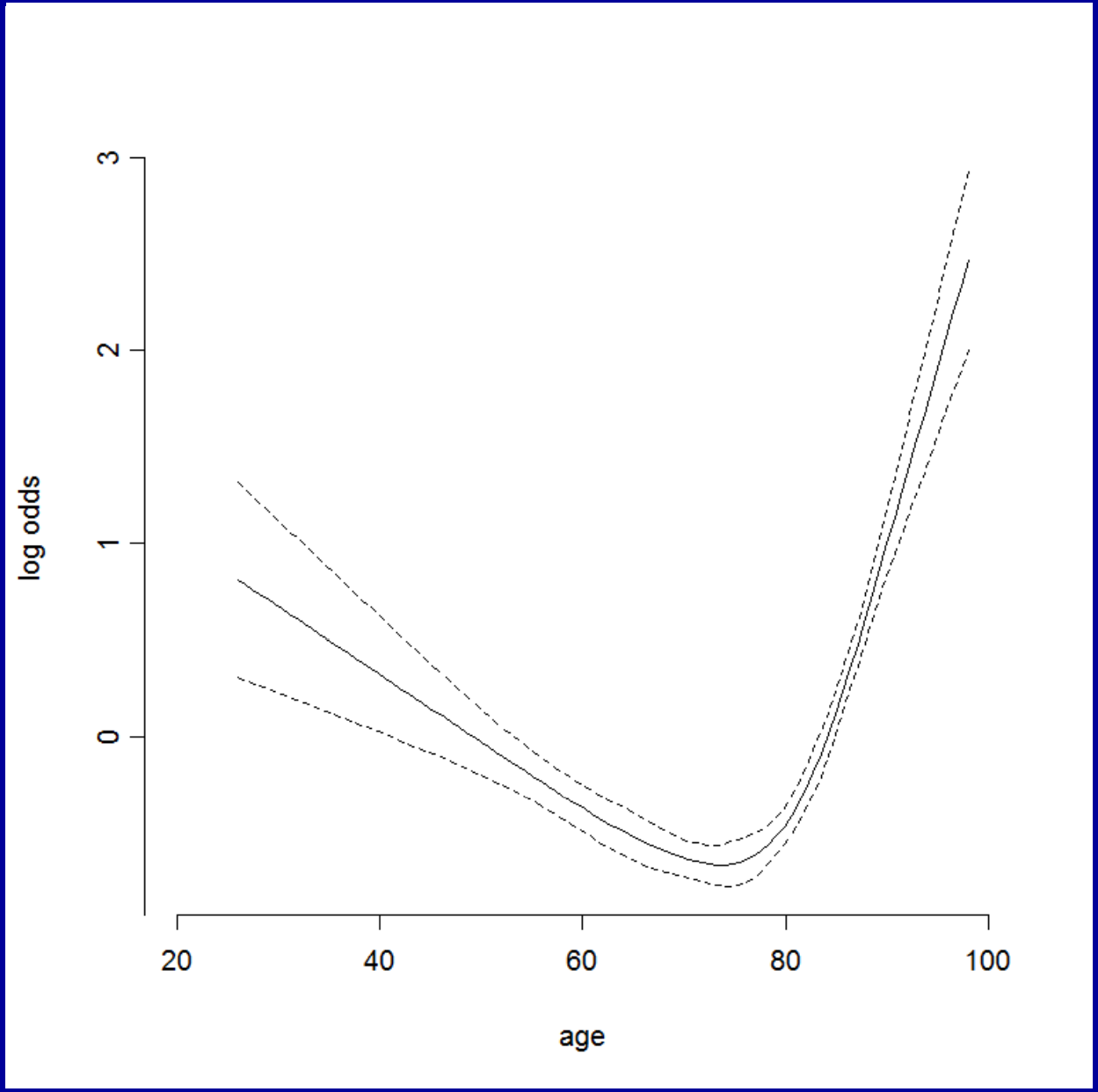
		Clinical Setting		
	Total (n. 7148)	**Cardiology (n. 3862)**	**Internal Medicine (n. 3286)**	**p**
Females, %	47.0	43.4	51.3	<.0001
Age >75 years, %	56.8	44.6	71.3	<.0001
Age (years), median [IQR]	77 [70-83]	74 [66-80]	80 [74-86]	<.0001
BMI >25, %	61.9	67.1	55.9	<.0001
SBP (mmHg), mean±SD	130±18	130±17	130±19	0.16

Antithrombotic Treatments in non valvular AF (4.845 pts)



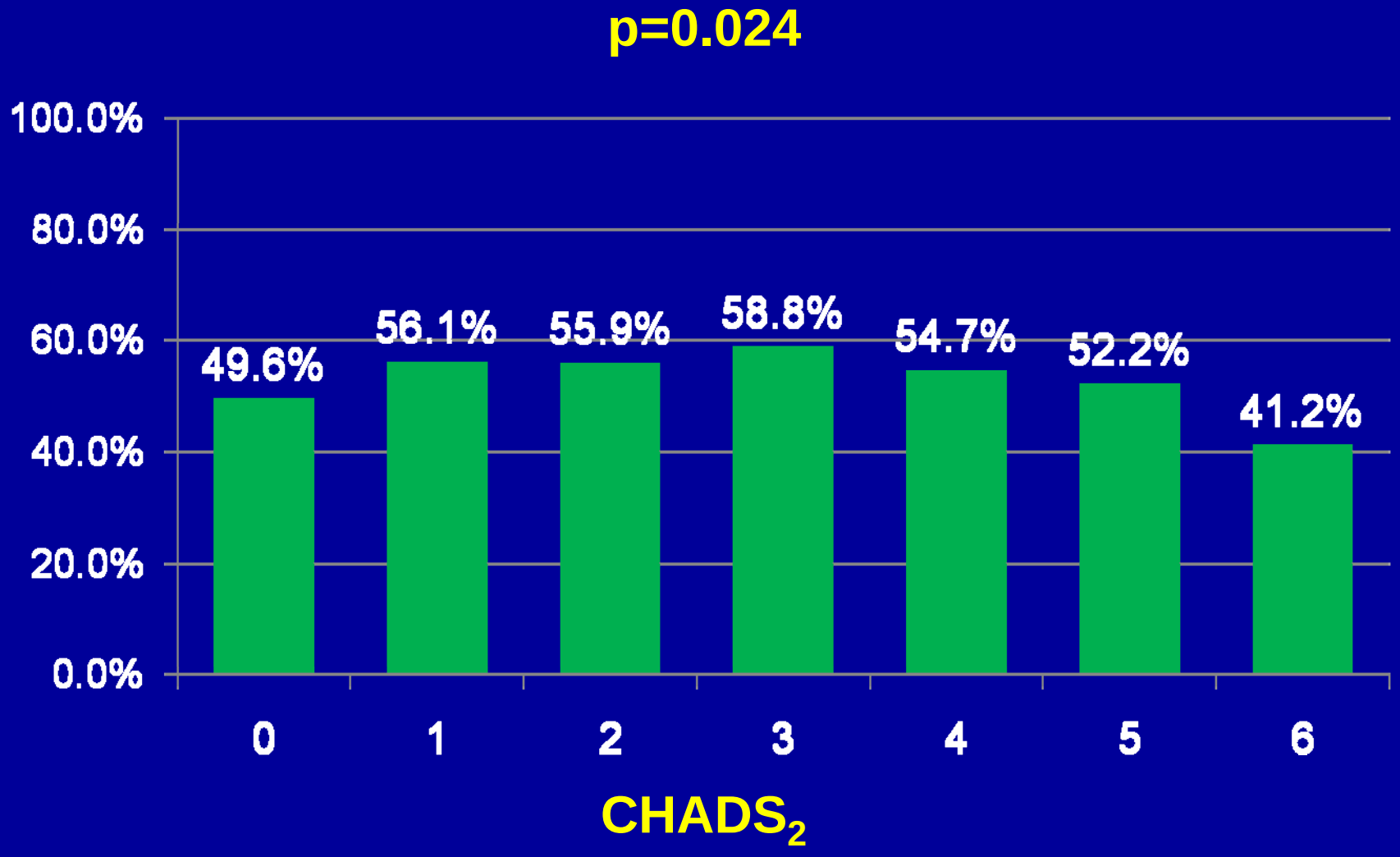
None Other ATT OAC

Risk of non prescription of OAC by age



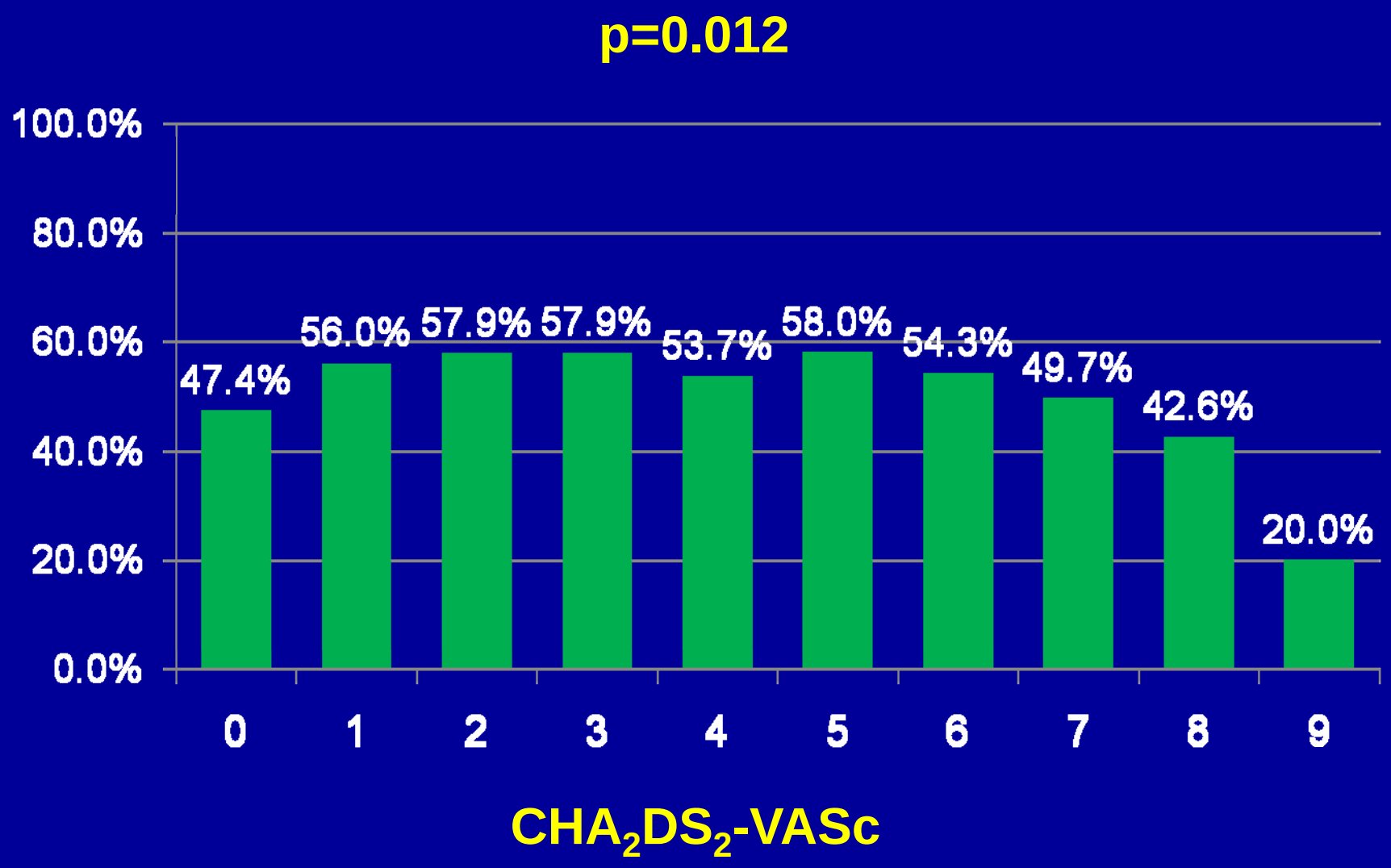
Prescription of OAC by $CHADS_2$

(non valvular AF, 4845 pts)



Prescription of OAC by CHA_2DS_2-VASc

(non valvular AF, 4845 pts)



Limiti della Terapia Anticoagulante Orale

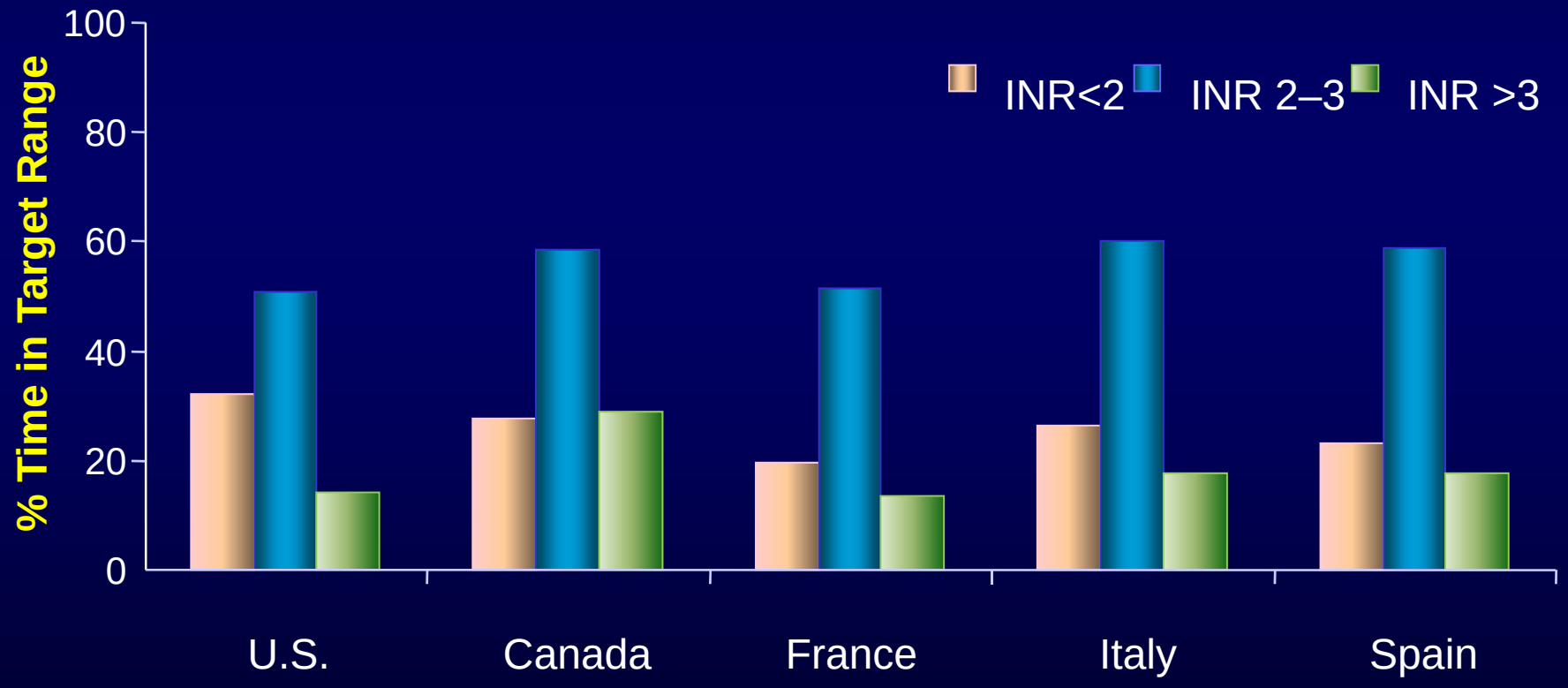
Conseguenze nella FA

- Un significativo numero di pazienti con FA a rischio di stroke non riceve la TAO
- L'intensità della scoagulazione è spesso al di fuori del range terapeutico (INR 2.0 – 3.0)

Anticoagulation with Warfarin

Intensity Often Outside the Target Range

International Study of Anticoagulation Management



Ansell J, et al. J Thromb Thrombolysis 2007; 23: 83.

Adherence to treatment and anticoagulation control in vitamin K antagonists-treated patients: an administrative databases analysis in a large Italian population

RICERCA ORIGINALE

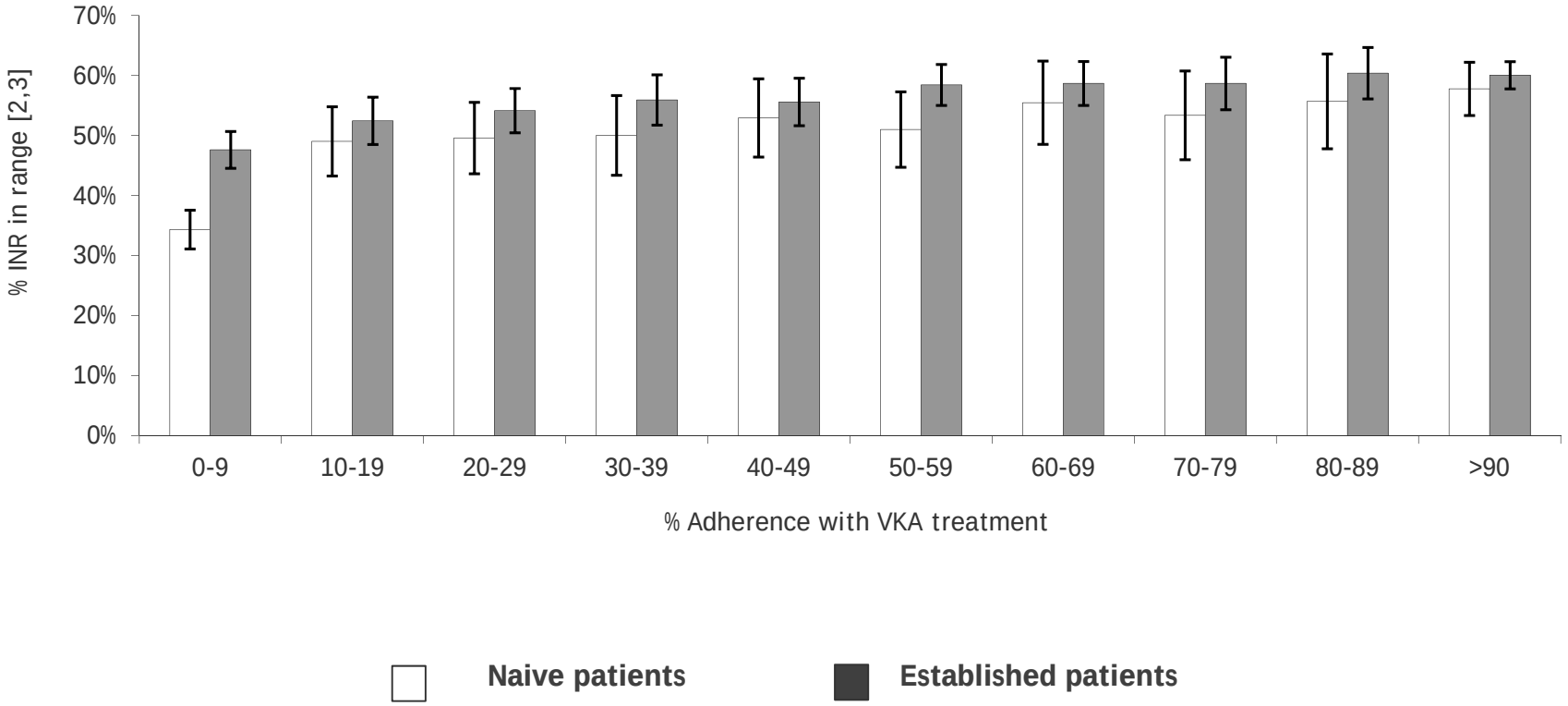
Luca Degli Esposti [1], Diego Sangiorgi [1], Giuseppe Di Pasquale [2], Gian Franco Gensini [3,4], Ido Iori [5], Stefano Buda [1], Ezio Degli Esposti [1] on the behalf of the Study Group

% di permanenza in range INR in real life in Italia

Descrizione della distribuzione delle percentuali di controllo dell'INR

Range INR	*VKA Precedente*	*media*	*mediana*	*(p25 - p75)*
% INR < 2	No	33.4%	28.8%	(15.4% - 47.9%)
% INR < 2	Si	25.3%	20.0%	(7.7% - 36.4%)
% INR in [2,3]	No	49.7%	50.0%	(33.3% - 66.7%)
% INR in [2,3]	Si	56.8%	58.3%	(42.5% - 73.1%)
% INR> 3	No	16.9%	13.3%	(0.0% - 25.0%)
% INR> 3	Si	17.9%	14.3%	(4.0% - 26.7%)

Anticoagulation control and treatment coverage in vitamin K antagonists-treated patients: An administrative databases analysis in a large Italian population

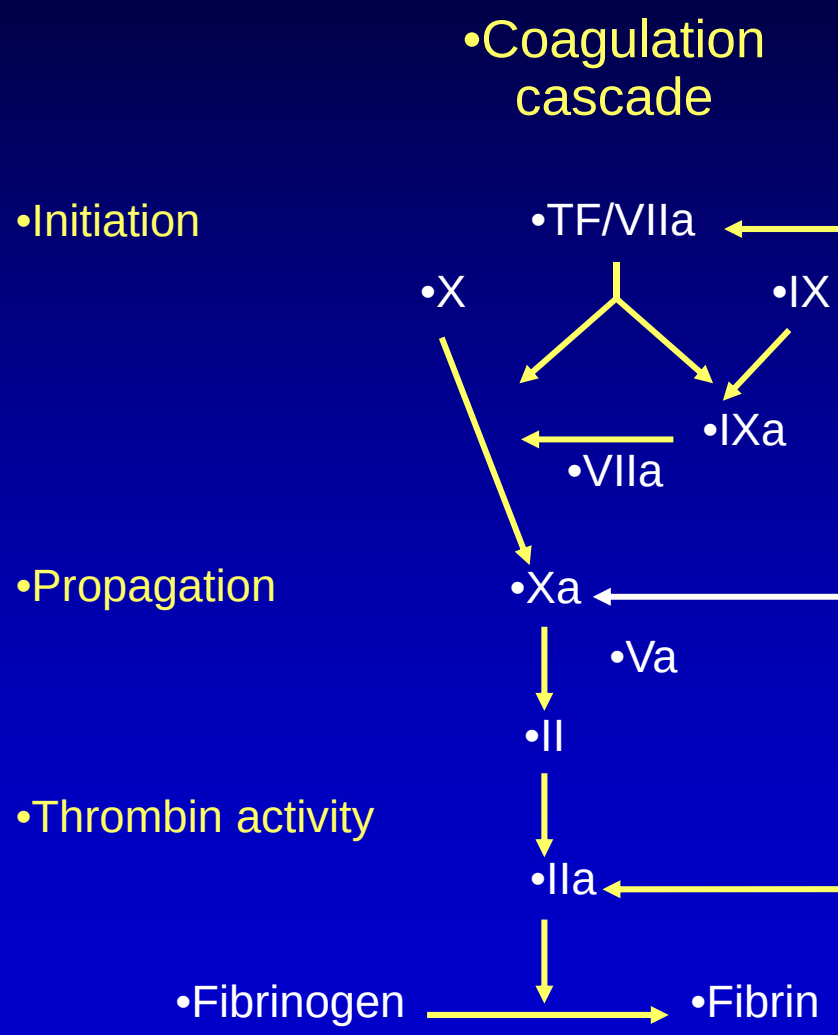


Degli Esposti L et al. 2011

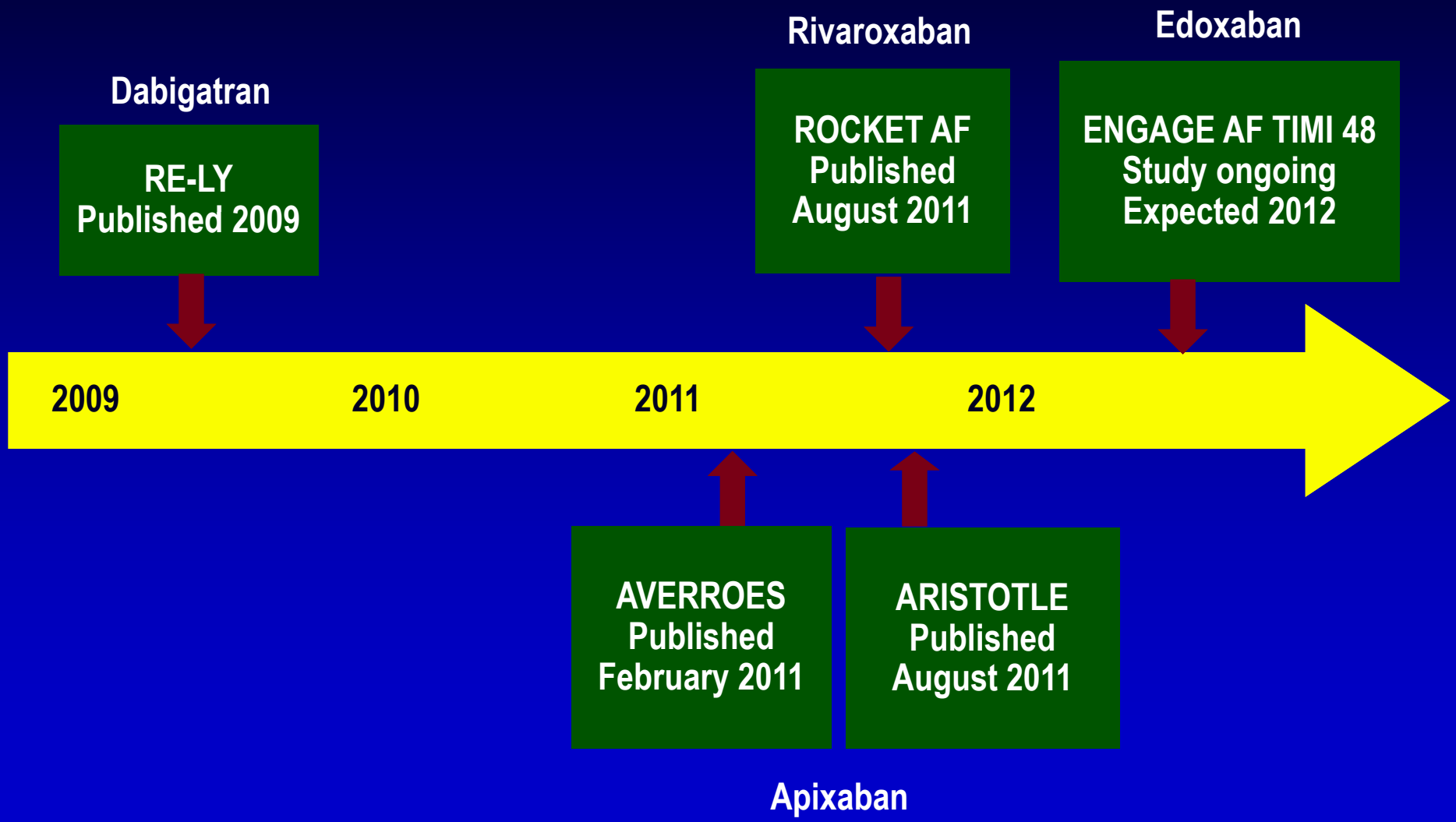
Anticoagulation control and treatment coverage in vitamin K antagonists-treated patients: an administrative databases analysis in a large Italian population (L Degli Esposti et al, 20110411)

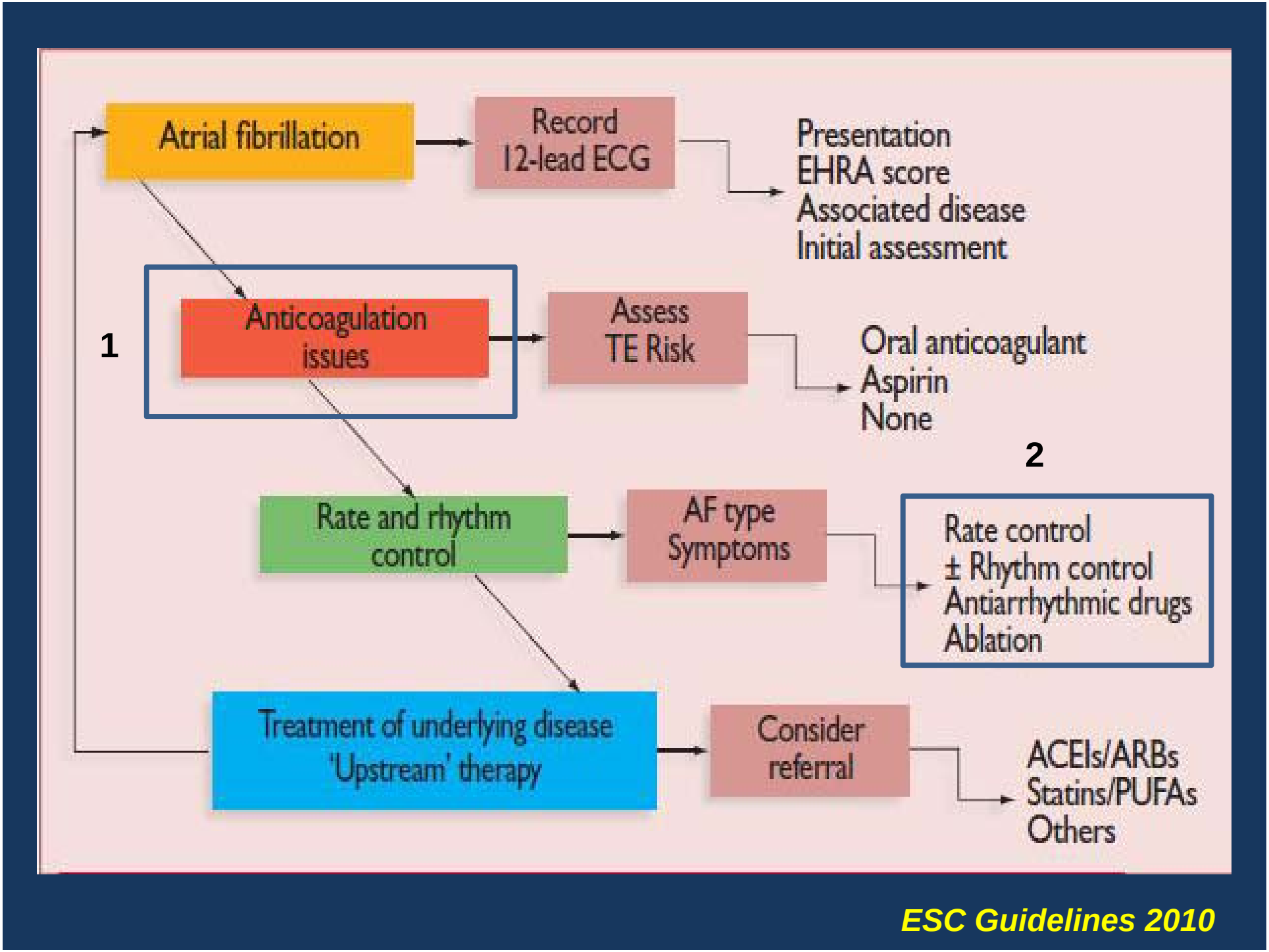
The Promise of New Anticoagulants

New Anticoagulants



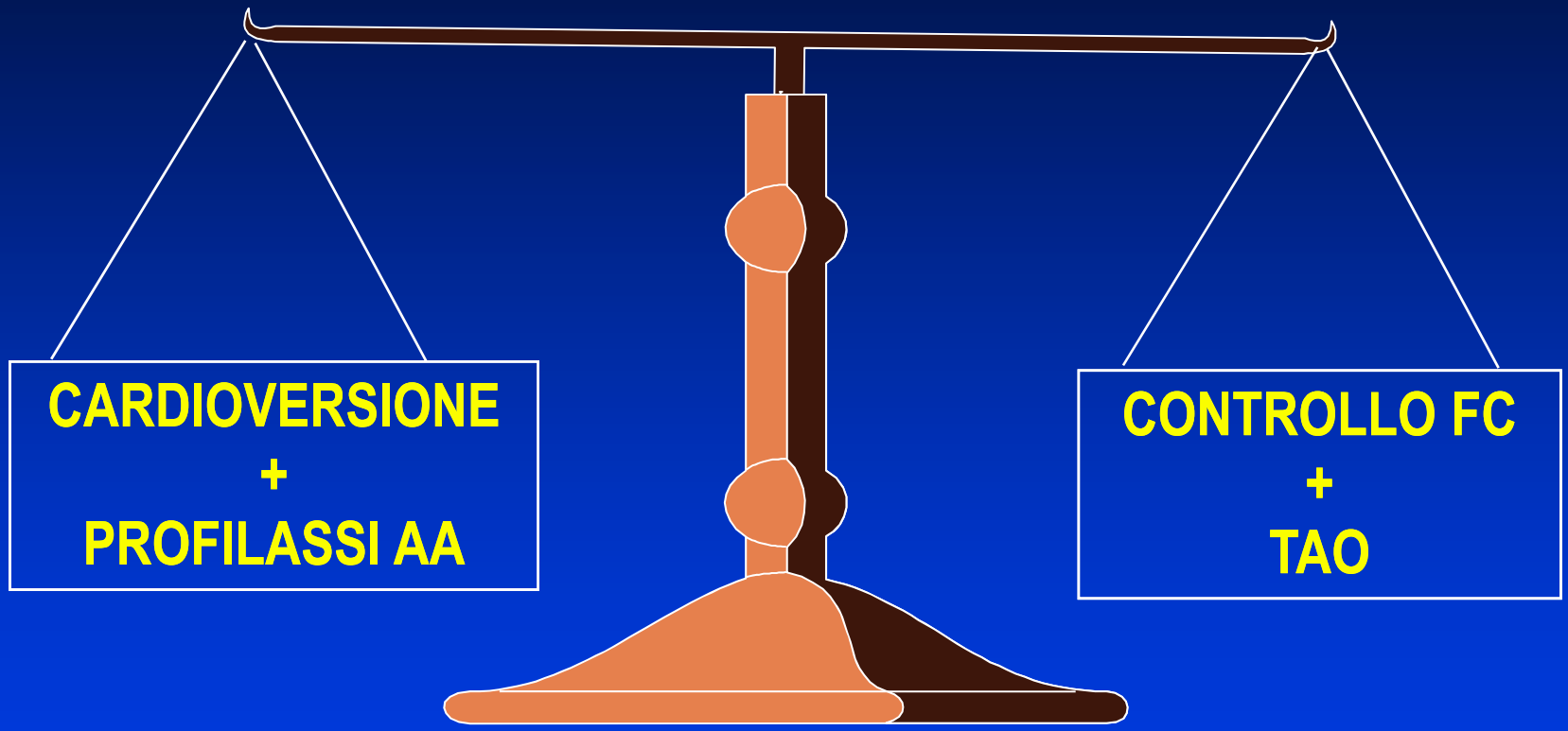
Atrial Fibrillation
Phase 3 Study Timelines





ESC Guidelines 2010

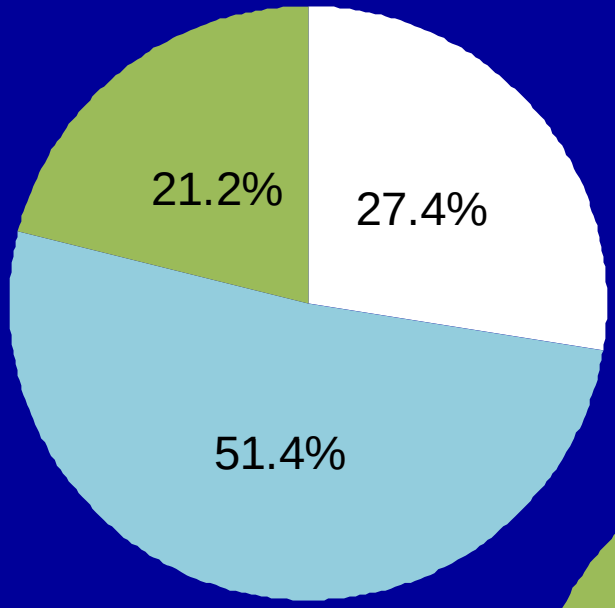
SCELTA DI STRATEGIE NELLA FA



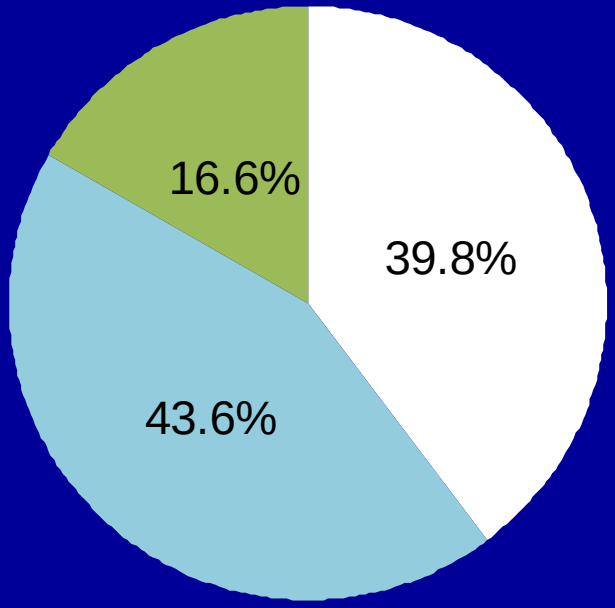
Efficacia ?
Sicurezza ?
Qualità di vita ?
Preferenze del paziente ?

Therapeutic Strategies

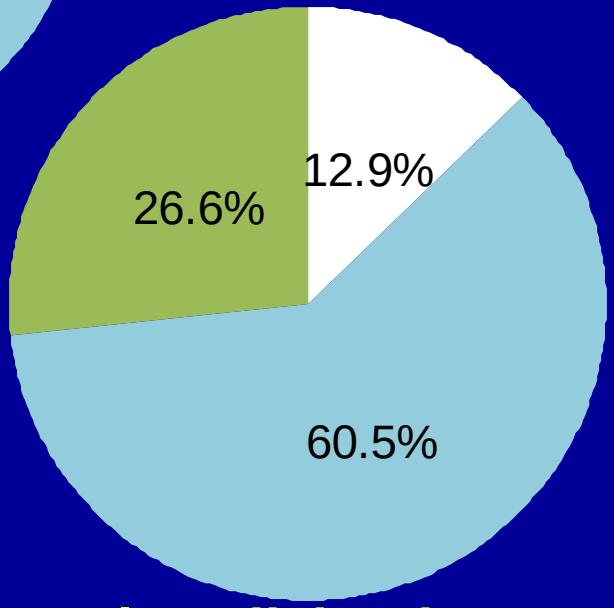
Total (7148 pts)



Cardiology (3862 pts)



p<.0001

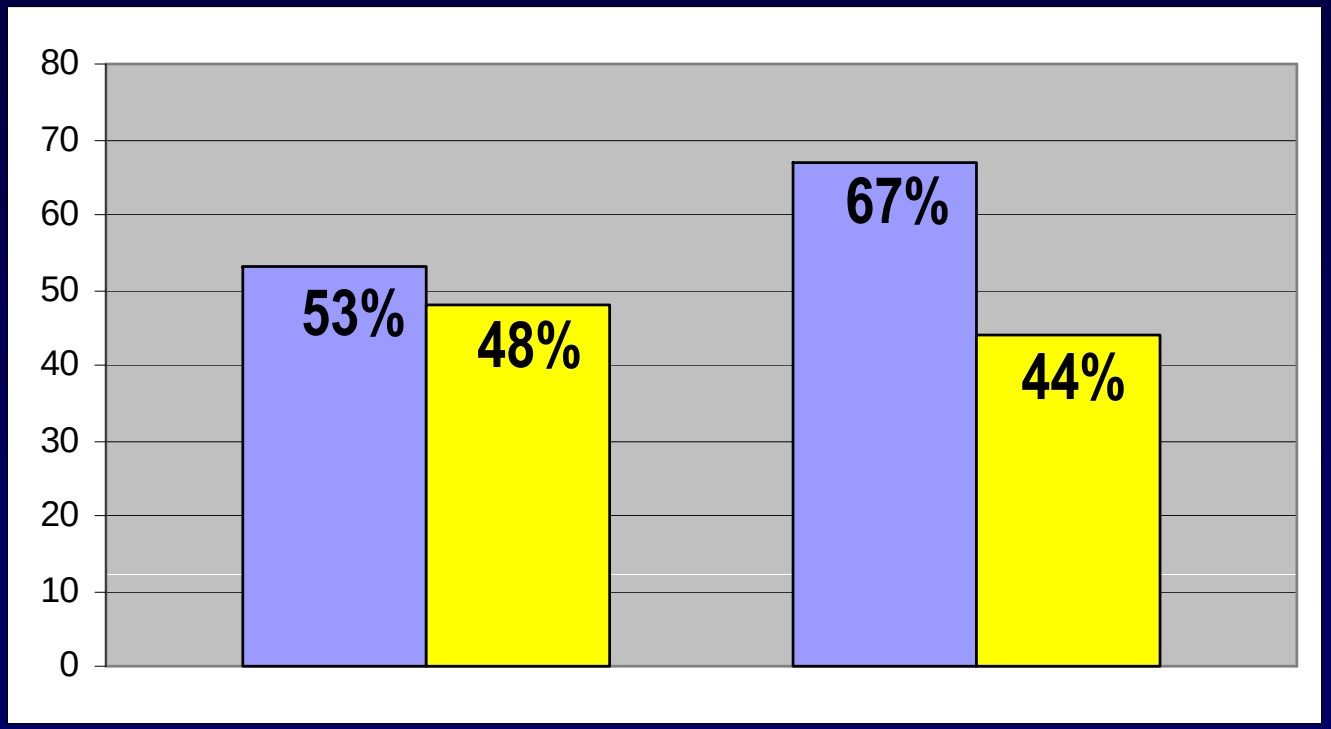


Internal Medicine (3286 pts)

- Rhythm control
- Rate control
- Unknown

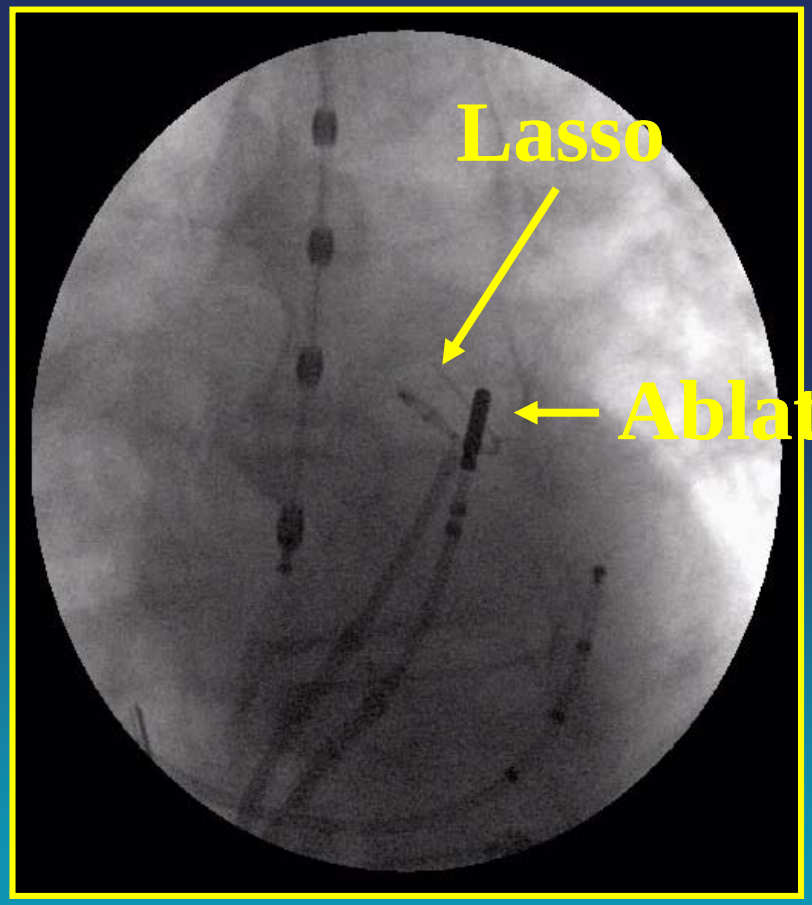
Decision on Rate and Rhythm Control in Patients With Persistent AF

Rhythm control strategy

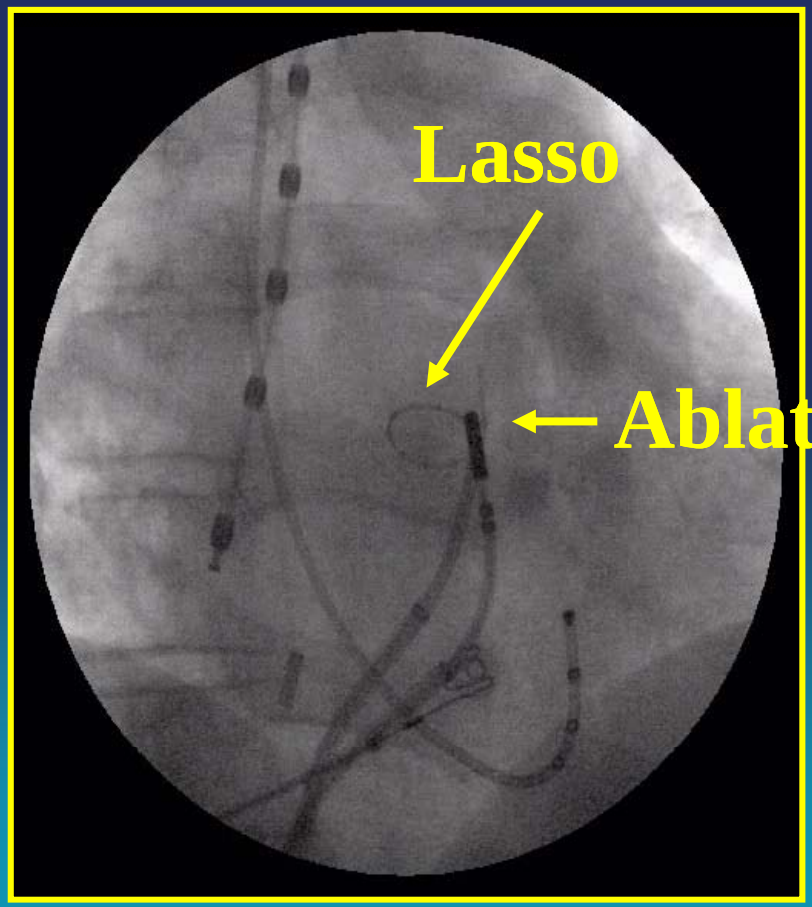


Rhythm control
Left atrial catheter ablation

Catheter Ablation for AFib



LAO



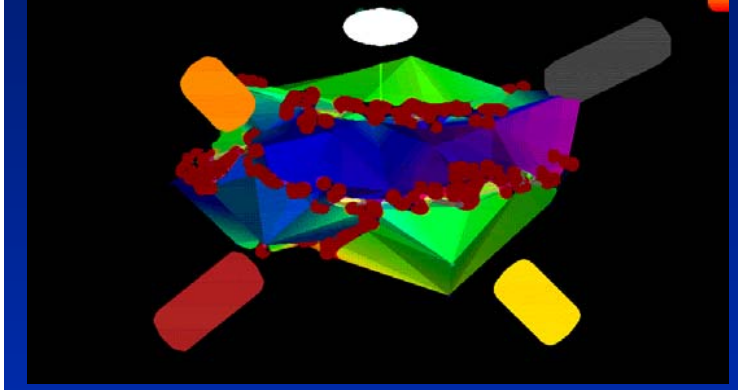
RAO

Catheter Ablation for AF

Catheter Ablation of Paroxysmal Atrial Fibrillation Using a 3D Mapping System

Carlo Pappone, MD; Giuseppe Oreto, MD; Filippo Lamberti, MD; Gabriele Vicedomini, MD; Maria Luisa Loricchio, MD; Shlomo Shpun, DSc; Mariano Rillo, MD; Maria Pia Calabrò, MD; Andrea Conversano, MD; Shlomo A. Ben-Haim, MD, DSc; Riccardo Cappato, MD; Sergio Chierchia, MD

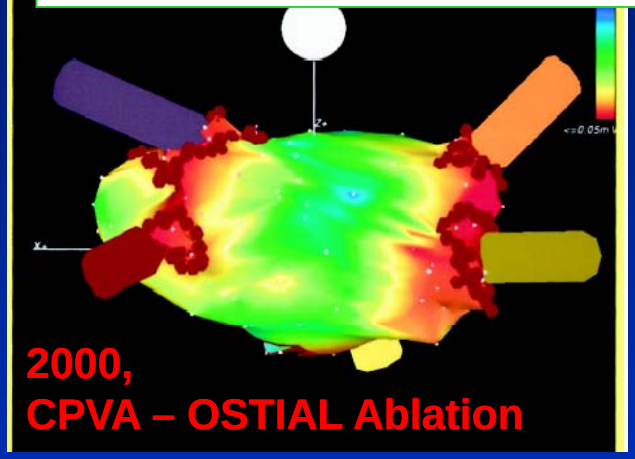
1999,
Left COMPARTIMENTALIZATION



Circumferential Radiofrequency Ablation of Pulmonary Vein Ostia

A New Anatomic Approach for Curing Atrial Fibrillation

Carlo Pappone, MD, PhD; Salvatore Rosanio, MD, PhD; Giuseppe Oreto, MD; Monica Tocchi, MD; Filippo Gugliotta, BS; Gabriele Vicedomini, MD; Adriano Salvati, MD; Cosimo Dicandia, MD; Patrizio Mazzone, MD; Vincenzo Santinelli, MD; Simone Gulletta, MD; Sergio Chierchia, MD

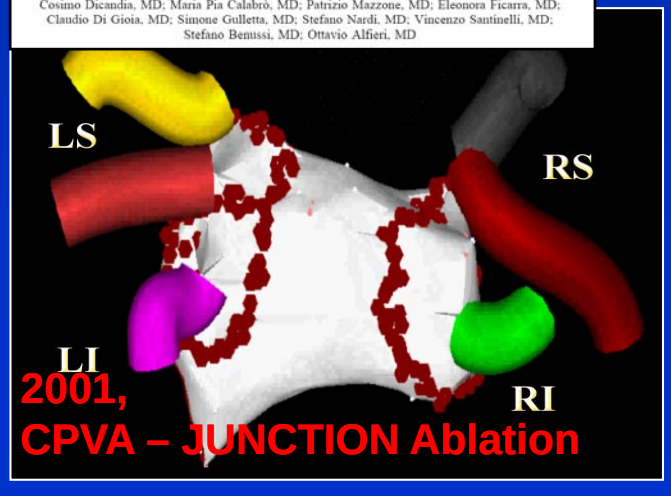


2000,
CPVA – OSTIAL Ablation

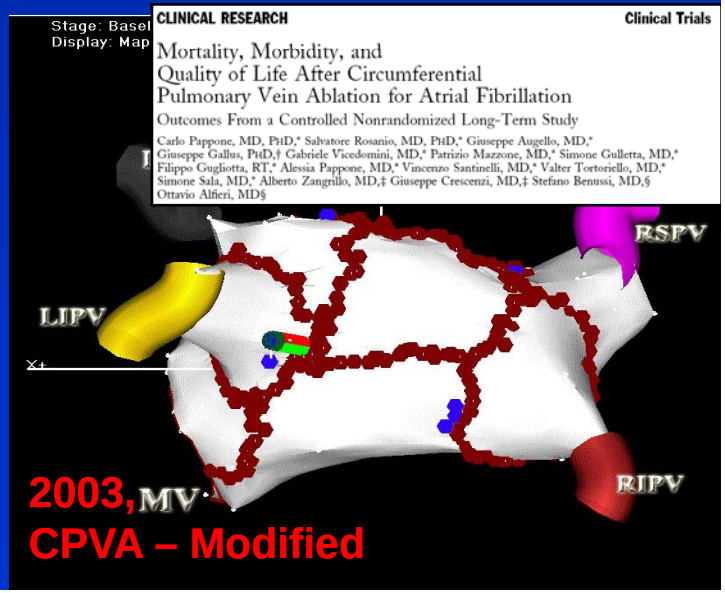
Atrial Electroanatomic Remodeling After Circumferential Radiofrequency Pulmonary Vein Ablation

Efficacy of an Anatomic Approach in a Large Cohort of Patients With Atrial Fibrillation

Carlo Pappone, MD, PhD; Giuseppe Oreto, MD; Salvatore Rosanio, MD, PhD; Gabriele Vicedomini, MD; Monica Tocchi, MD, PhD; Filippo Gugliotta, BS; Adriano Salvati, MD; Cosimo Dicandia, MD; Maria Pia Calabrò, MD; Patrizio Mazzone, MD; Eleonora Ficarra, MD; Claudio Di Gioia, MD; Simone Gulletta, MD; Stefano Nardi, MD; Vincenzo Santinelli, MD; Stefano Benussi, MD; Ottavio Alfieri, MD



2001,
CPVA – JUNCTION Ablation



2003, MV
CPVA – Modified

Underuse of Non-Pharmacological Treatment

Europace (2010) **12**, 1070–1077
doi:10.1093/europace/euq158

CLINICAL RESEARCH
Atrial Fibrillation – Clinical Issues

Adherence to guidelines for atrial fibrillation management of patients referred to cardiology departments: Studio Italiano multicentrico sul Trattamento della Fibrillazione Atriale (SITAF)

Nicola Bottoni [1]*, Massimo Tritto [2], Renato Ricci [3], Michele Accogli [4], Matteo Di Biase [5], Saverio Iacopino [6], Matteo Iori [1], Sakis Themistoclakis [7], Nadir Sitta [8], Gianmario Spadacini [2], Roberto De Ponti [9], and Michele Brignole [10] on behalf of the SITAF investigators

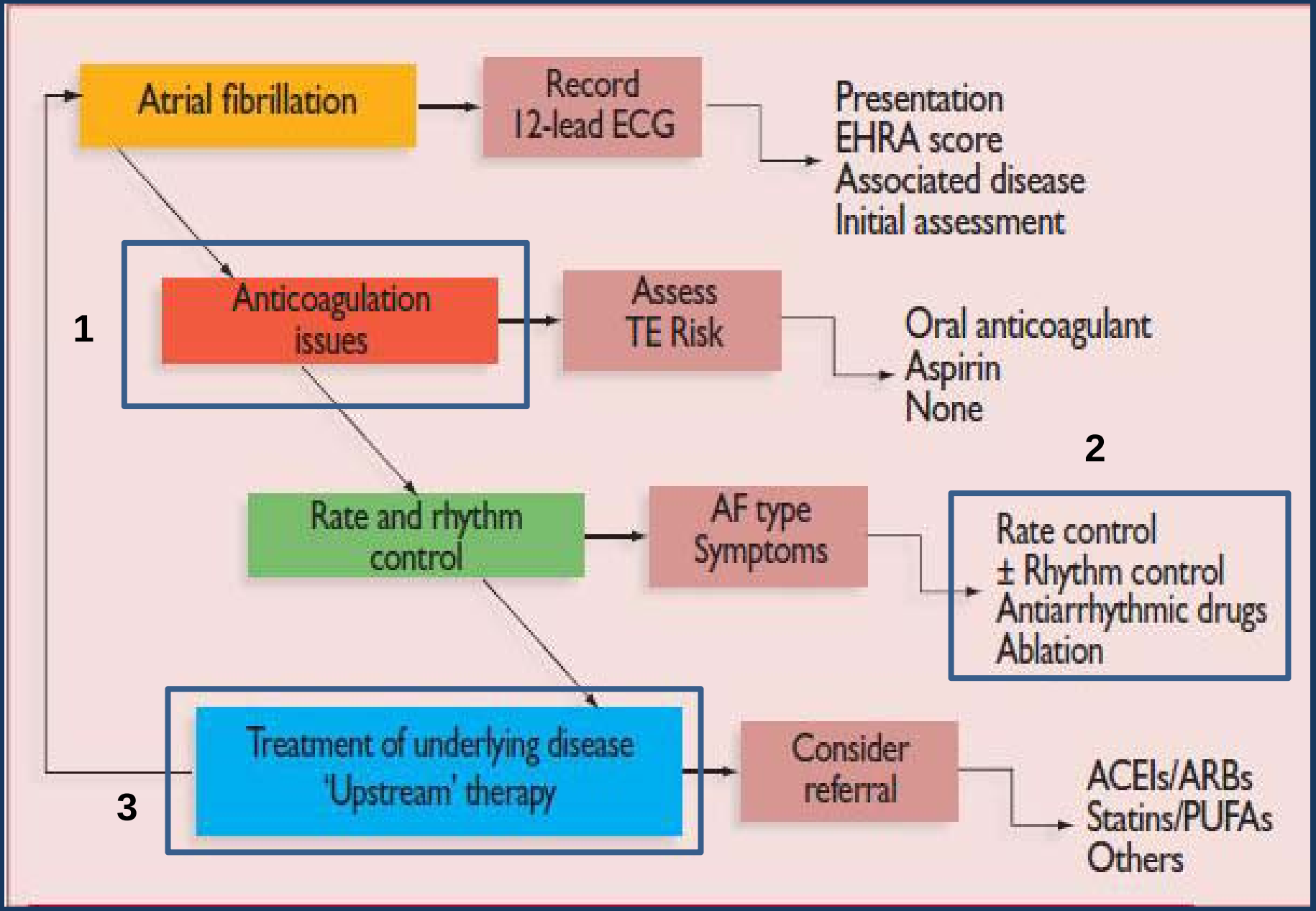
Adherence to Guidelines for AF Management
The SITAF Study

Table 4 Substrate catheter ablation: correlation between the treatment that was actually indicated by the centres and that based on the guidelines

All Centres		Guideline indications		
		No	Yes	Total
Centre indications	No	991	78	1069
	Yes	82	105	187
	Total	1073	183	1256

K statistics for agreement for indications = 0.47.

Bottoni N et al. Europace 2010;12:1070-77

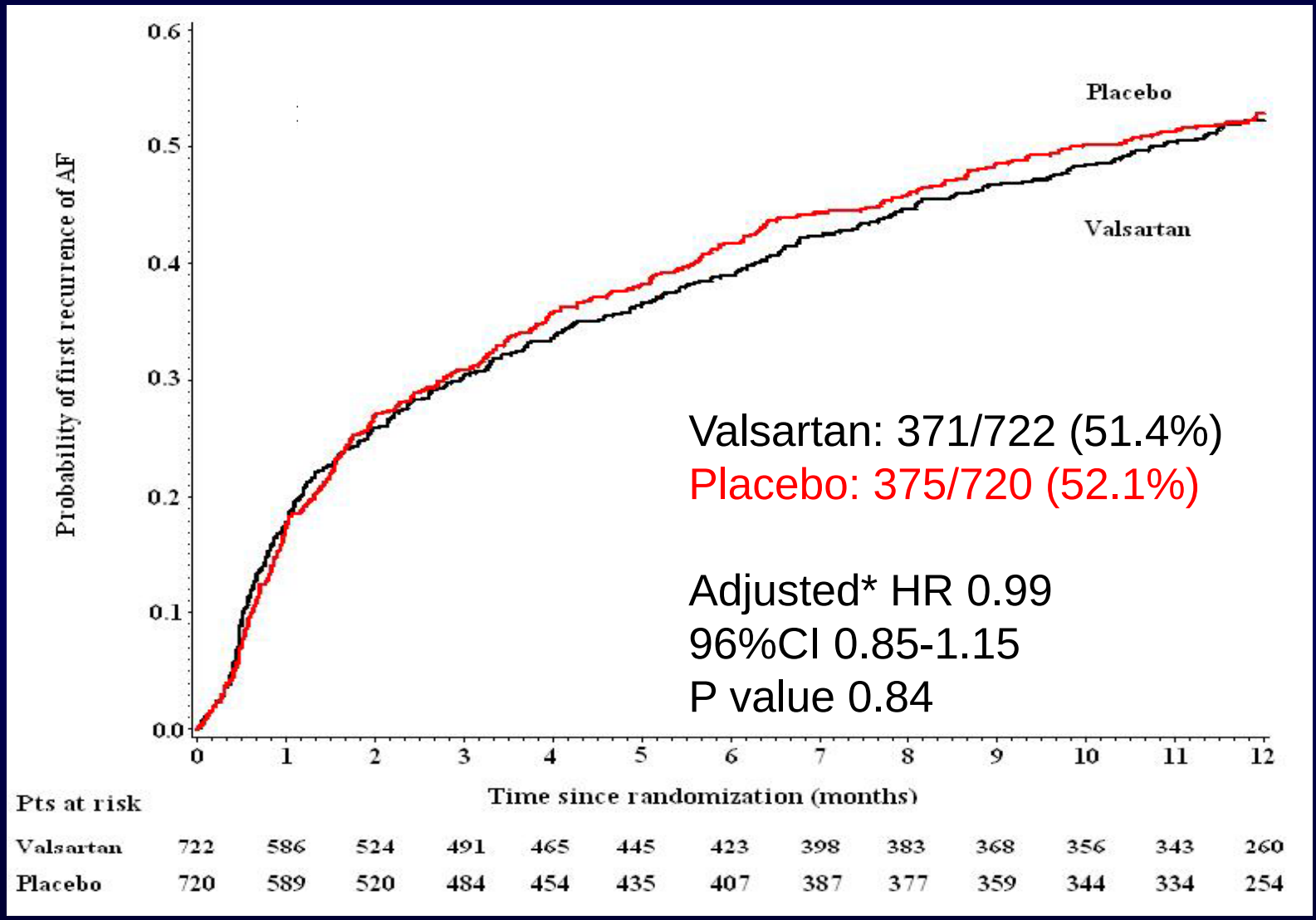


ESC Guidelines 2010



To evaluate whether in patients with previous AF episodes treated with the best recommended therapies the addition of valsartan can prevent AF recurrence

Time to first recurrence of AF (n. 1442)



** The 96%CI was calculated by Cox proportional hazards model adjusted for ACE-I, amiodarone use, cardioversion, PAD, CAD*



Con il Patrocinio di:

ICTUS E FIBRILLAZIONE ATRIALE: ASPETTI CLINICI, ECONOMICI, SOCIALI E STRATEGIE DI INTERVENTO

27 Settembre 2011, Ore 11.00
Sala Caduti di Nassirya
Senato della Repubblica
Piazza Madama, 11 Roma



