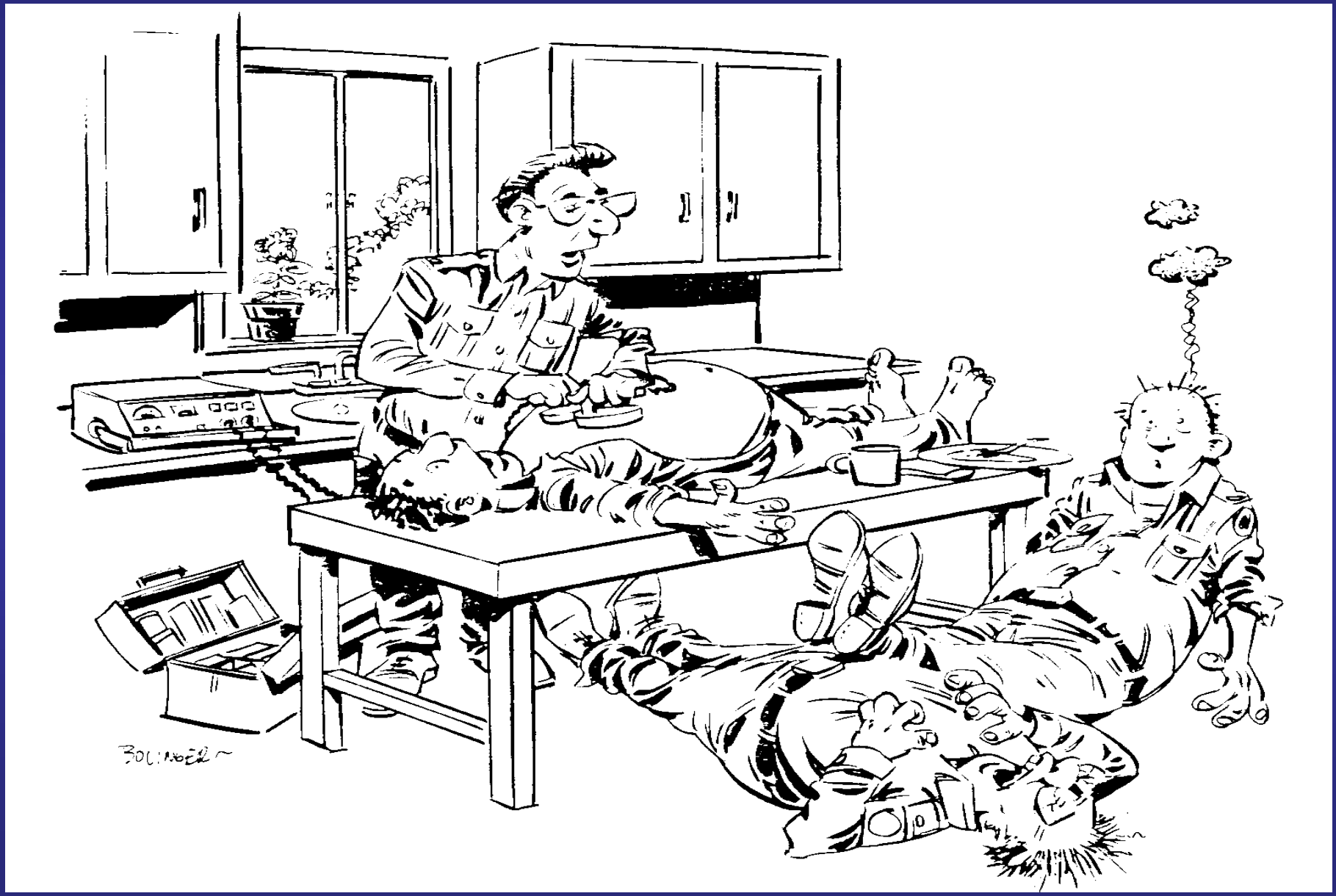
“ Scores nella Fibrillazione atriale ”

- il buono

- il brutto

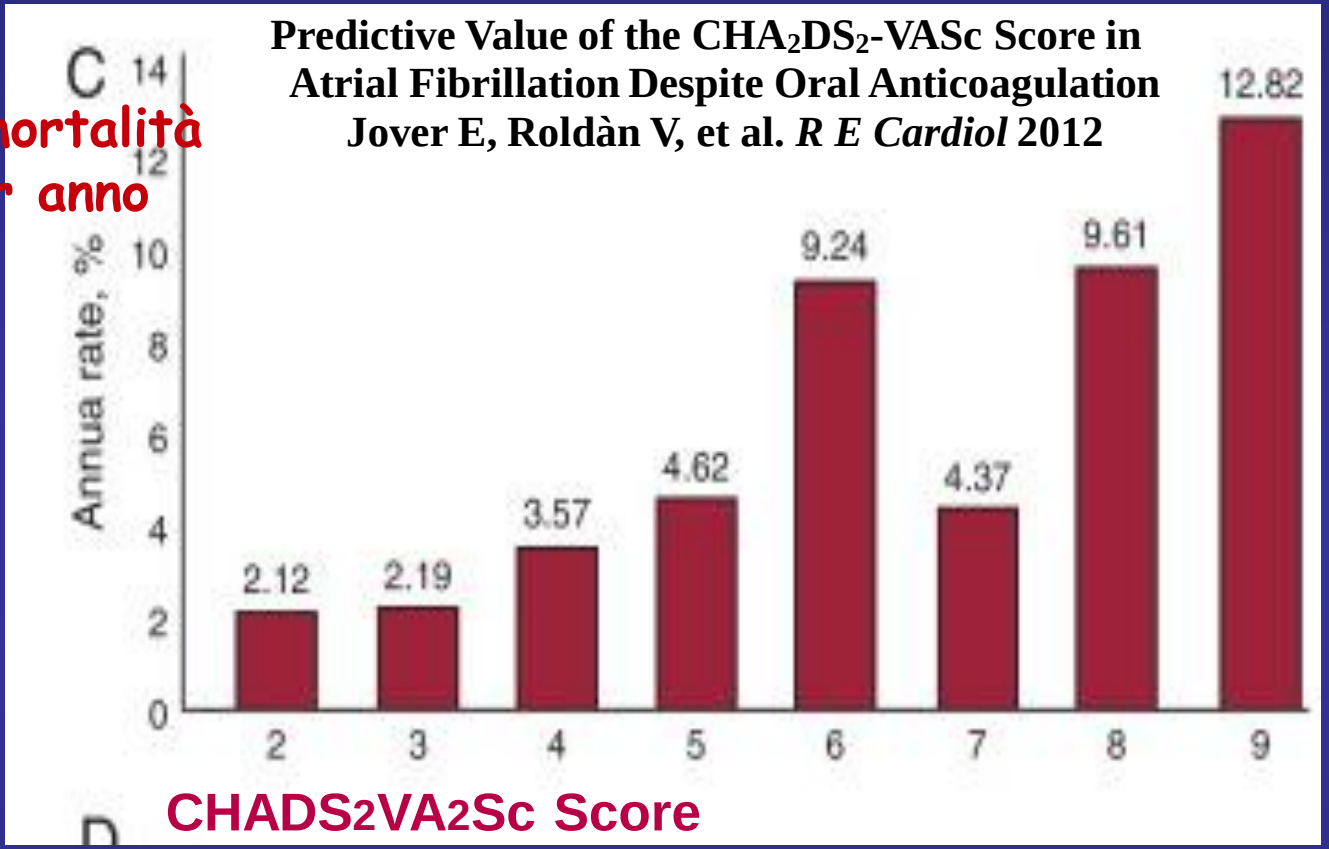
-il cattivo

Si muore di FA?



… No, non subito …

Tasso di mortalità globale per anno



Spesso la causa di morte è l' ICTUS
(fino al 20-50% casi)

Scheda P.S. anno 2000

Modalità di invio

DINAMICA DELL'EVENTO **MALATTIA**

LIVELLO DI URGENZA IN USCITA

ESITO

Al curante per proseg. cure

DIAGNOSI

F.A. AD INSORGENZA NON DATABILE.

ANAMNESI

Data e Ora **23/01/2001 19:28:10** Medico

RISCONTRO DI FA IN PREGRESSO IMA. EPOCA NON DATABILE.

PARAMETRI VITA				
Data/ora	P. MAX	P. MIN	FREQ. CARDIA	SA O2 %
23/01/2001 19:18	140	90	106	98

ESAME OBIETTIVO

Data e Ora **23/01/2001 19:28:10** Medico

ECG: FA NORMOFREQUENTE

PRESTAZIONI ED ACCERTAMENTI EFFETTUATI

PS-VISITA IN PS

RX TORACE STANDARD 2 PROIEZ.

NOTE

IL PZ DEVE ESSERE SCOAGULATO PRIMA DELLA TP ANTIARITMICA . DOMANI SI PRESENTERA' PRESSO L'AMBULATORIO ANALISI PER INIZIARE TP CON COUMADIN.

Table 1.
ACCP Stroke Prevention Guidelines 2001[7]

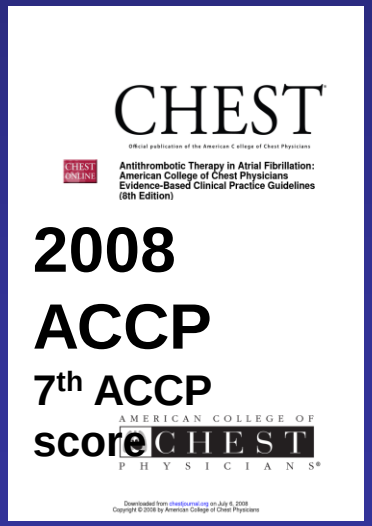
Atrial Fibrillation Stroke Profile	Risk Factors
High Risk	One or more of the following: ■ Age ≥ 75 years ■ History of hypertension ■ Prior cerebrovascular accident/ transient ischemic attack ■ Prior arterial thromboembolism ■ Poor left ventricular systolic dysfunction (ef<40%) ■ Rheumatic mitral valve disease or prosthetic heart valve ■ Two or more moderate-risk factors
Moderate Risk	No high-risk factors and one of the following: ■ Age 65-74 years ■ Diabetes ■ Coronary Artery Disease
Low Risk	No high- or moderate-risk factors and: ■ Age <65 years

… Crono-storia "scores" …

Circulation
JOURNAL OF THE AMERICAN HEART ASSOCIATION

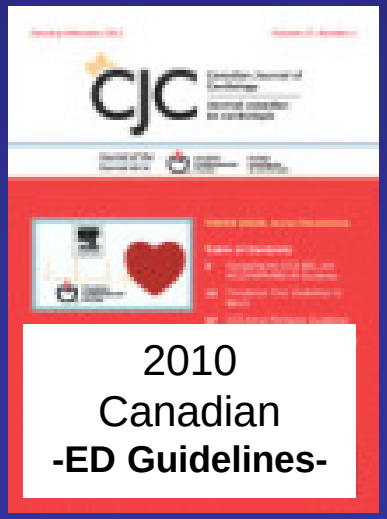
ACC/AHA/ESC 2006 Guidelines

CHADS2 Score

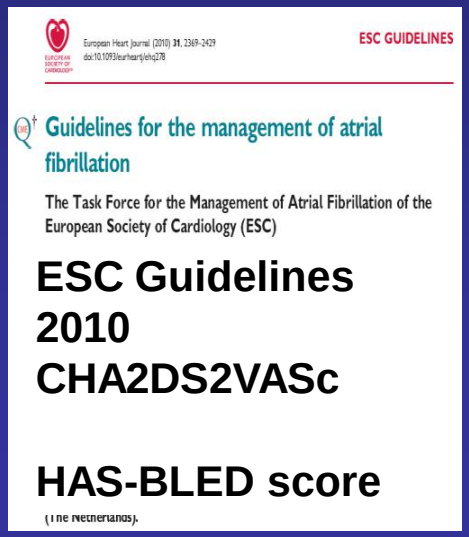


2008 ACCP

7th ACCP score



2010
Canadian
-ED Guidelines-



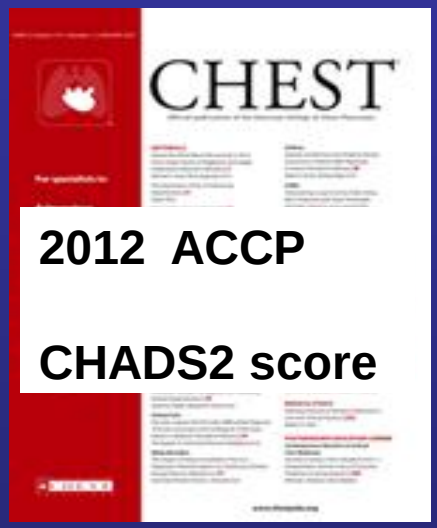
ESC Guidelines 2010 CHA2DS2VASc

HAS-BLED score

Circulation
JOURNAL OF THE AMERICAN HEART ASSOCIATION

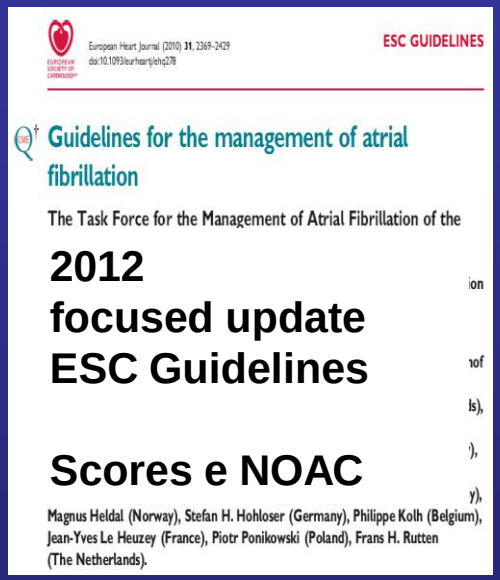
2011 ACCF/AHA/HRS Focused Updates ACC/AHA/ESC 2006

CHADS2VA2Sc



2012 ACCP

CHADS2 score



2012 focused update ESC Guidelines

Scores e NOAC

Concordanza tra Scores ...

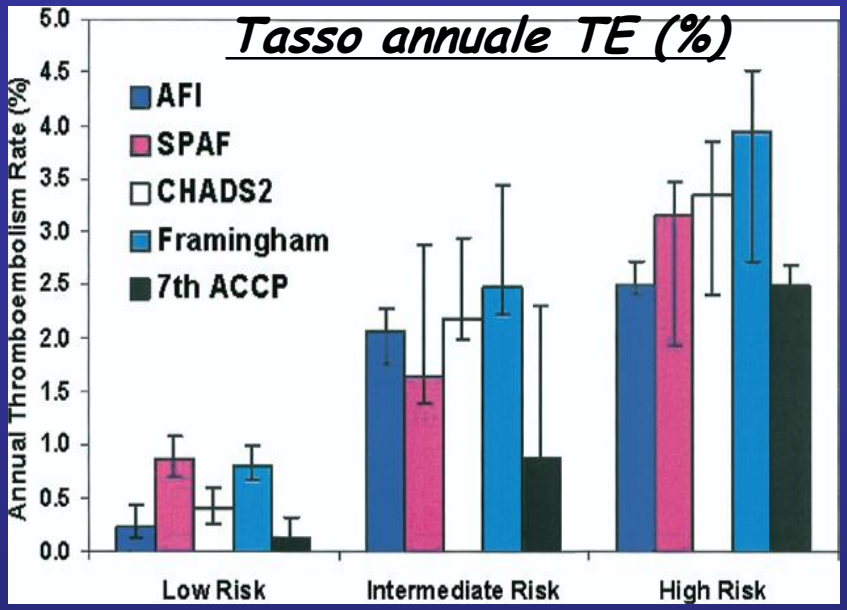
Comparison of Risk Stratification Schemes to Predict Thromboembolism in People With Nonvalvular Atrial Fibrillation

M.G.Fang, A.S. Go, Singer D.E, et al. *J Am Coll Cardiol 2008; Vol 51(8)*

- Oltre 10.000 pazienti con FA non valvolare *non in TAO* seguiti per 6 anni.
- 685 eventi tromboembolici.
- Confrontano 5 diversi sistemi di "Score" di Rischio TE

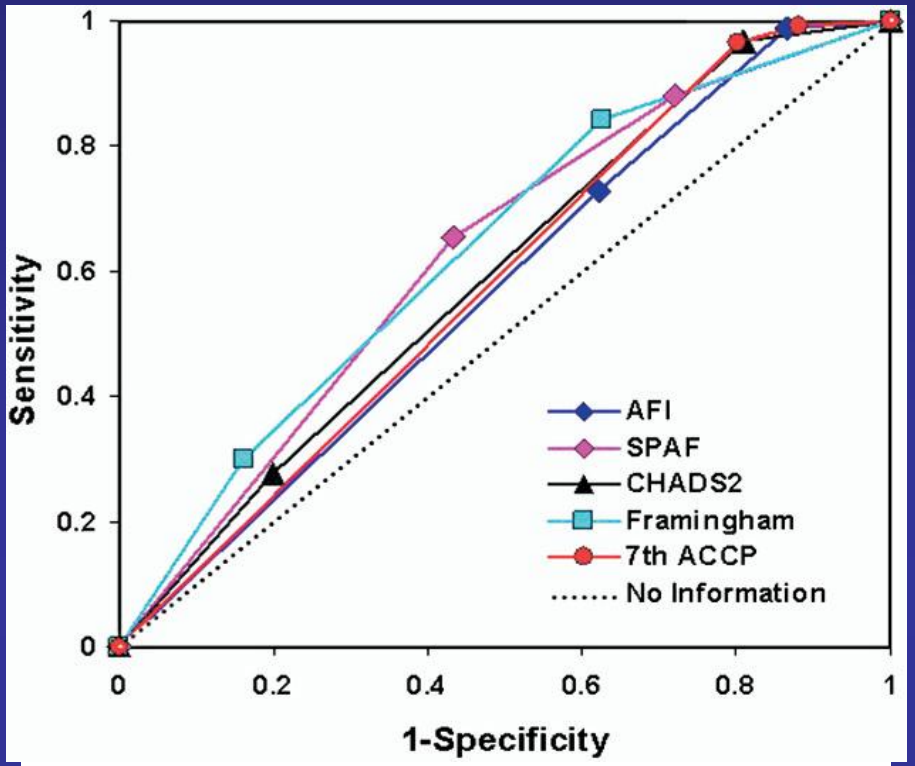
	Low Risk(%)	Interm.(%)	High Risk(%)
AFI Score	13	25	62
SPAF	28	28	44
CHADS2	19	61	20
Framingham	37	47	16
7th ACCP	12	8	80

Distribuzione dei pazienti nei diversi "score system"

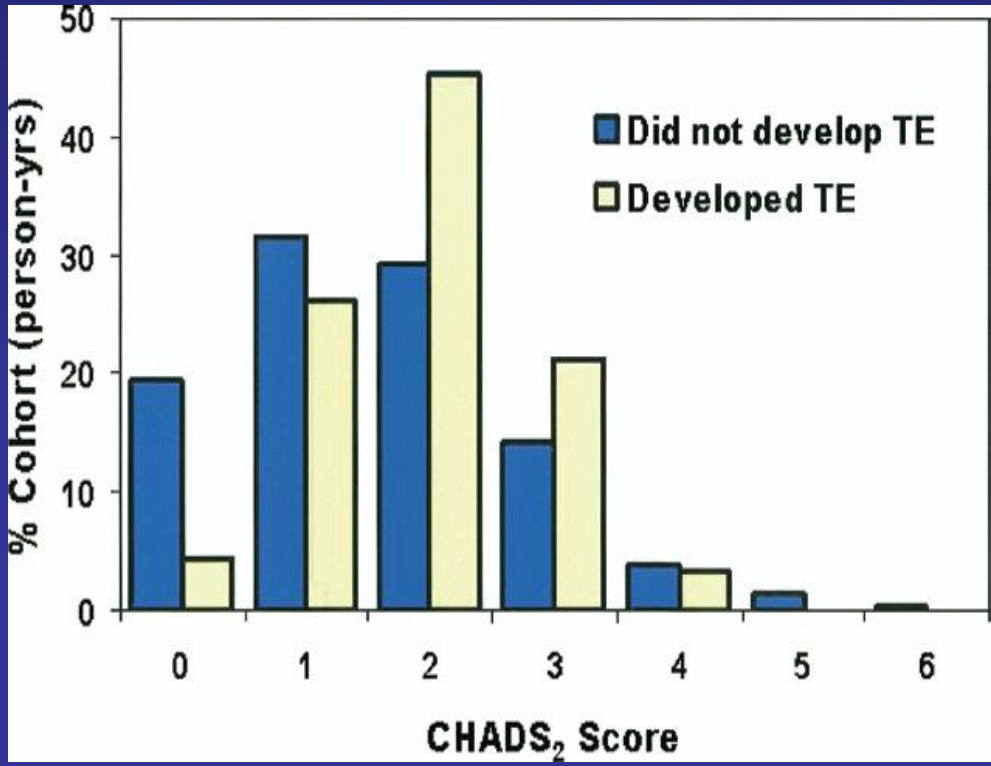


Conclusioni: scarsa concordanza

Ma ... funzionano?



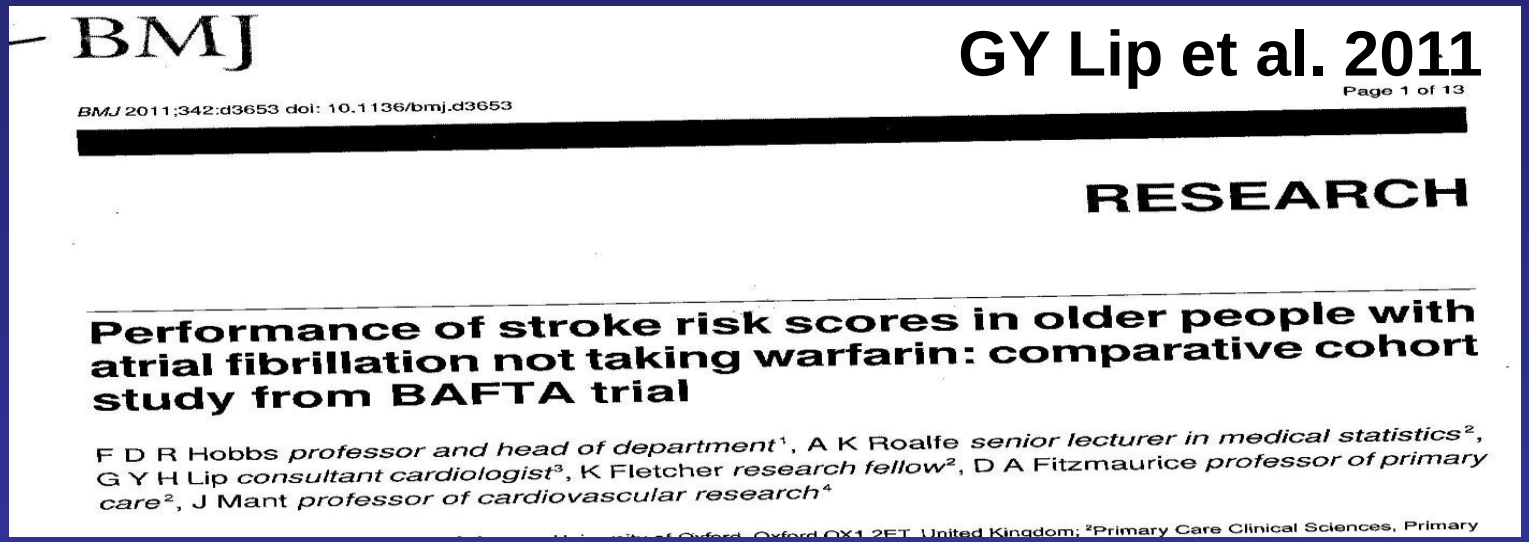
Receiver Operating Characteristic Curves



C- statistic test variabile da 0,56 a 0,62.

Conclusioni:
scarsa concordanza e limitata performance

GY Lip et al. 2011



BMJ

BMJ 2011;342:d3653 doi: 10.1136/bmj.d3653

RESEARCH

Performance of stroke risk scores in older people with atrial fibrillation not taking warfarin: comparative cohort study from BAFTA trial

F D R Hobbs *professor and head of department*[1], A K Roalfe *senior lecturer in medical statistics*[2], G Y H Lip *consultant cardiologist*[3], K Fletcher *research fellow*[2], D A Fitzmaurice *professor of primary care*[2], J Mant *professor of cardiovascular research*[4]

[1]University of Oxford, Oxford OX1 2ET, United Kingdom; [2]Primary Care Clinical Sciences, Primary

- **665 pazienti di età > 75 anni non in TAO seguiti per 3 anni.**
- **71 eventi trombo-embolici.**
- **Confrontano la capacità di discriminare i pazienti a rischio tra**

sette diversi Scores *(CHADS; CHA2DS2VASc; ACCP; NICE; AHA; Framingham; Reitbrock modified).*

CONCLUSIONI: data la scarsa accuratezza predittiva comune a tutti gli Scores (C-statistic da 0,55 a 0,62) è pragmatico considerare tutti i pazienti età > 75 anni ad "alto rischio".

OGGI:

… What is, and what should never be …

Caso Clinico ...

Donna, 68 anni, Ipertesa, FA < 48 ore.

Cardiovertita con propafenone e.v.

CHA_2DS_2VASc: 3 punti

Dimessa con TAO e Rytmonorm.

DOPO UNA SETTIMANA

(visita cardiologica)

$CHADS_2$ (o altro score): 1 punto.

Consigliata cardioaspirina e beta-bloccante.

… Il paziente …

“ Dottò,

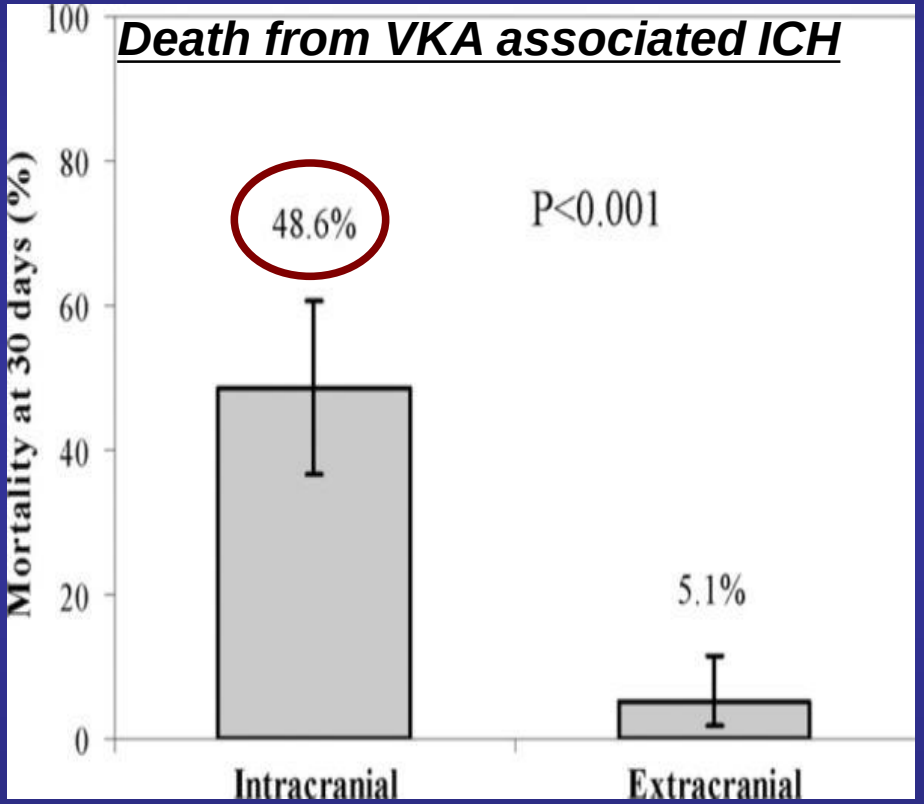
Gentilmente …

Ecche è sto
Valzer é pasticche ...”

Rischio Emorragico:

Emorragie Maggiori
definizione:

- Letali
- Intracraniche/Cerebrali (30-50%)
- Gastrointestinali.
- Retro-peritoneali/addominali.
- Oculari/articolari/spinali
- Anemizzazione > 2 g/dl.
- Richiedono chirurgia/angiografia o trasfusioni > 2 U GRC.



Fang MC, JAMA 2007

Aspetti statistici ...

Tasso annuale di emorragie maggiori:

Variano da 1,3% (AFI) al 7,4% (Landefeld).

Profilassi tromboembolica in FA non valvolare:

NNT in prevenzione secondaria = 12 pazienti.

NNT in prevenzione primaria = 37 pazienti.

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

AF Guidelines ESC 2010

Scores di rischio emorragico

Modified Outpatient Bleeding Risk Index

HEMORR2HAGES

HAS-BLED

ATRIA score

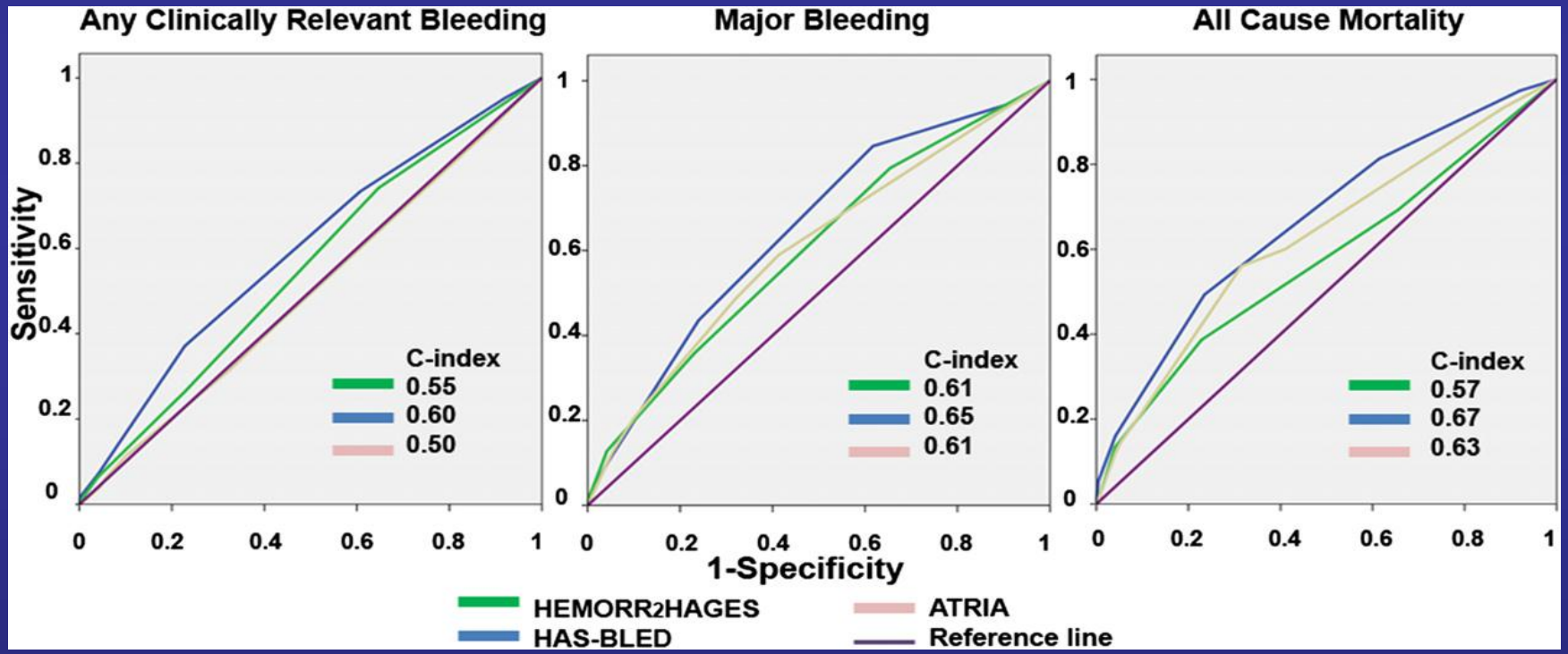
Etc ... etc … *Sì, ma Quale … ?*

Performance of the HEMORR2HAGES, ATRIA, and HAS-BLED Bleeding Risk-Prediction Scores in Patients With AF undergoing Anticoagulation. *Apostolakis S et al.* ***JACC 2012.***

2,293 pazienti 251(11%) emorragie 39 (1,7%) major bleeding

Scarsa concordanza tra i diversi score:

HAS-BLED 24% pazienti High Risk; ATRIA 5,6% HR ed hemorr2hages 0,5% HR.



HAS-BLED funziona meglio (C- index fino a 0,75 per ICH)

ed è più semplice

The HAS-BLED
bleeding risk score

Letter	Clinical characteristic*	Points awarded
H	Hypertension	1
A	Abnormal renal and liver function (1 point each)	1 or 2
S	Stroke	1
B	Bleeding	1
L	Labile INRs	1
E	Elderly (e.g. age > 65 years)	1
D	Drugs or alcohol (1 point each)	1 or 2
		Maximum 9 points

*Hypertension is defined as systolic blood pressure > 160 mmHg. INR = international normalized ratio.

- **Low- Risk: 0-1** *point.* *Bleeding rate (%/y): 2,5%*
- **Intermediate: 2** *points.* *5,5%*
- **High Risk ≥ 3** *points.* *8,1%*

Olesen J.B; J Thromb Haemost 2011

… Care, vecchie Controindicazioni …

HEMORR2HAGES
(risk of falls)

Qualità della TAO
(tempo in Range INR)

HAS-BLED (labile INR)

Table 2.
Contraindications to and Acceptable Reasons Not to Prescribe or to Discontinue Warfarin Therapy[11]

Contraindications/acceptable reasons patients not on warfarin therapy	
■ Syncope	■ Major bleeding (requiring hospitalization or transfusion)
■ Multiple falls/risk of falls	■ AF lasting <48 hours and did not recur or secondary to medical condition
■ Advanced dementia	■ Seizure disorder
■ Hemorrhagic cerebrovascular accident	■ At risk of falls
■ Patient noncompliance/refusal	■ Prior bleeding with anticoagulants
■ Warfarin allergy	■ Alcohol abuse
■ Prior serious gastrointestinal bleeding and/or untreated or unresponsive peptic ulcer disease	■ Terminal/comfort care
■ Predisposition to bleeding (thrombocytopenia, end-stage renal disease, cirrhosis, hemophilia)	■ Extensive, metastatic cancer

AF guidelines ESC 2010: HAS BLED Score.

… The fear of falls may be overstated,

as a patient ***may need to fall 300 times per year*** *for the risk of intracranial haemorrhage to outweigh the benefit of OAC in stroke prevention*

… Sgambetta il nonno
in Coumadin

almeno una volta al giorno.

E poi vediamo …

… Caso clinico ...

Uomo 76 anni, iperteso, dislipidemico, pregresso TIA.

HASBLED 3 punti- Alto rischio.

CHA_2DS_2VASc 5 punti- Alto rischio.

Cosa fare? ...

… Le Linee Guida ...

… whereby a score of ≥3 (HASBLED) indicates 'high risk',

and some caution and regular review of the patient is needed following the initiation of antithrombotic therapy,

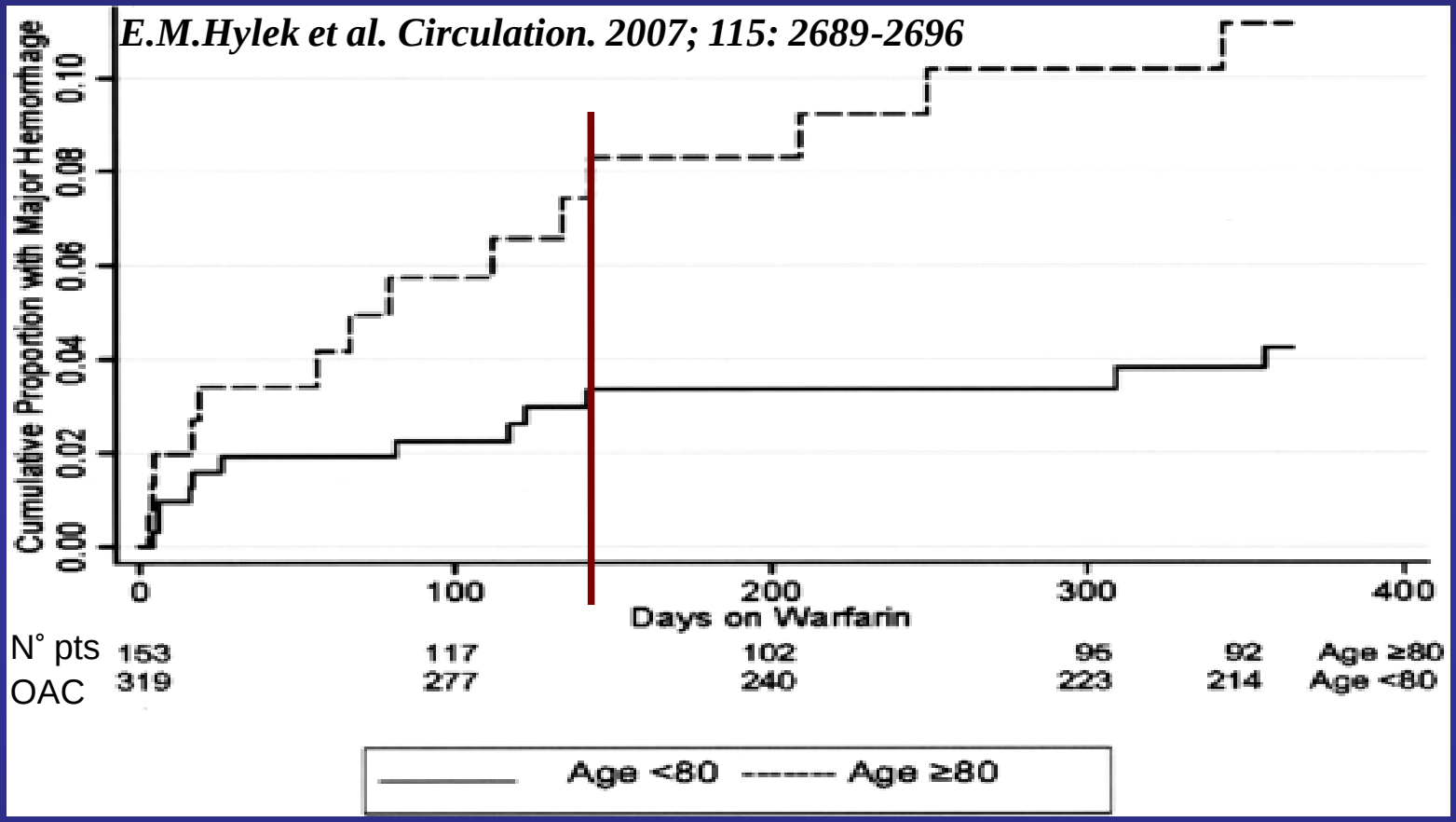
whether with VKA or aspirin.

… è buona educazione chiedere

un parere

al paziente …

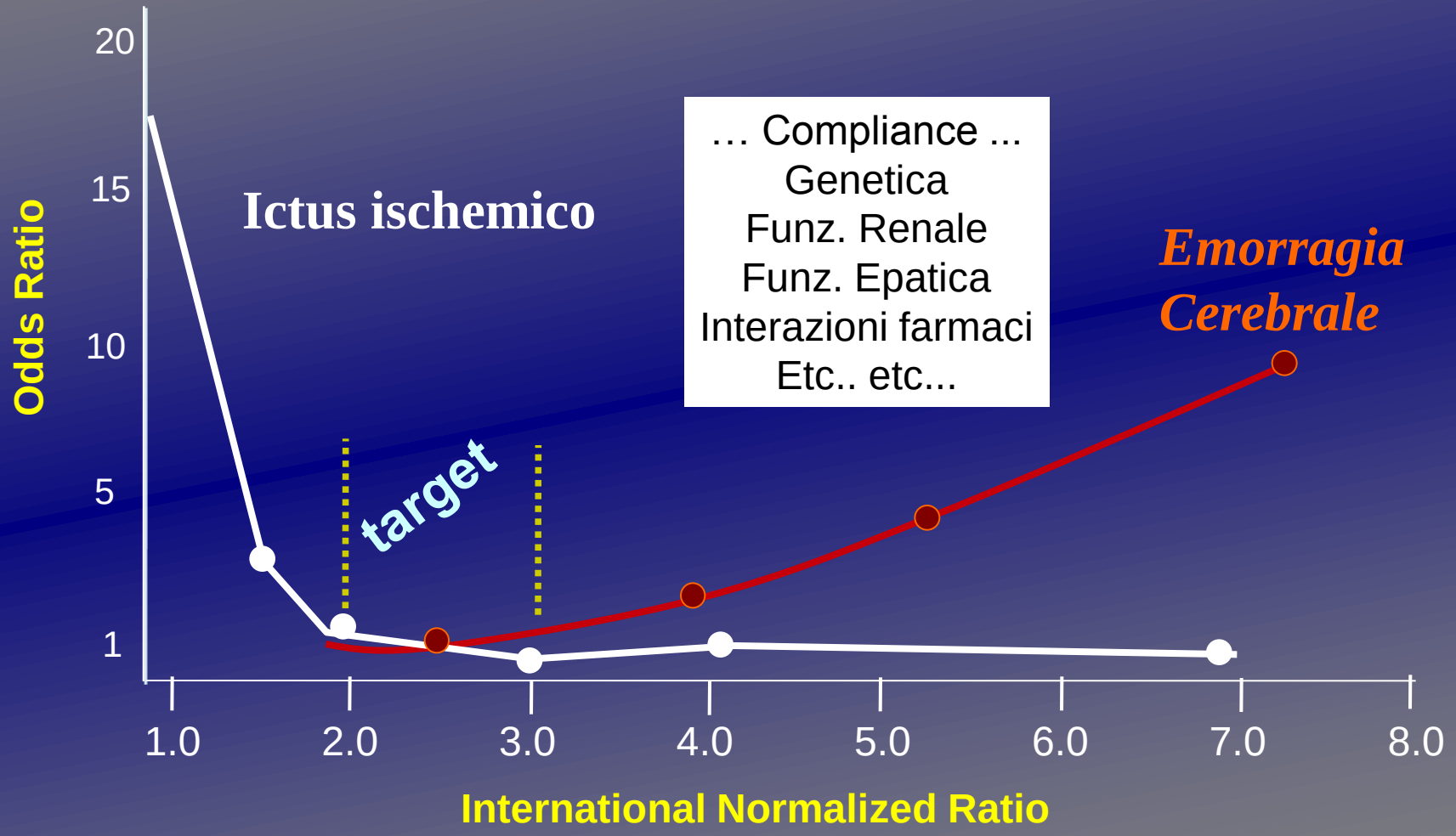
Età ed inizio della TAO: Rischio emorragico



Massimo rischio emorragico nei pazienti anziani, nei primi 3-4 mesi di TAO (Hylek, Pengo, Palareti, etc...)

Intensità anticoagulazione: rischio ischemico *vs* emorragico

- Oden A. Throm Res 2006 -
- Fang MC. Ann Intern Med 2004 -
- Hylek EM. N Engl J Med 2003 -



Terapia antitrombotica in pazienti con stent coronarico (fino al 20% dei pazienti con FA)

Low or intermediate (e.g. HAS-BLED score 0–2)	Elective	Bare-metal	1 month: triple therapy of VKA (INR 2.0–2.5) + aspirin ≤100 mg/day + clopidogrel 75 mg/day Up to 12th month: combination of VKA (INR 2.0–2.5) + clopidogrel 75 mg/day[b] (or aspirin 100 mg/day) Lifelong: VKA (INR 2.0–3.0) alone
	Elective	Drug-eluting	3 (-olimus[a] group) to 6 (paclitaxel) months: triple therapy of VKA (INR 2.0–2.5) + aspirin ≤100 mg/day + clopidogrel 75 mg/day Up to 12th month: combination of VKA (INR 2.0–2.5) + clopidogrel 75 mg/day[b] (or aspirin 100 mg/day) Lifelong: VKA (INR 2.0–3.0) alone
	ACS	Bare-metal/ drug-eluting	6 months: triple therapy of VKA (INR 2.0–2.5) + aspirin ≤100 mg/day + clopidogrel 75 mg/day Up to 12th month: combination of VKA (INR 2.0–2.5) + clopidogrel 75 mg/day[b] (or aspirin 100 mg/day) Lifelong: VKA (INR 2.0–3.0) alone
High (e.g. HAS-BLED score ≥3)	Elective	Bare-metal[c]	2–4 weeks: triple therapy of VKA (INR 2.0–2.5) + aspirin ≤100 mg/day + clopidogrel 75 mg/day Lifelong: VKA (INR 2.0–3.0) alone
	ACS	Bare-metal[c]	4 weeks: triple therapy of VKA (INR 2.0–2.5) + aspirin ≤100 mg/day + clopidogrel 75 mg/day Up to 12th month: combination of VKA (INR 2.0–2.5) + clopidogrel 75 mg/day[b] (or aspirin 100 mg/day) Lifelong: VKA (INR 2.0–3.0) alone

6 mesi triplice Tx
1 anno TAO + anti-PLT

2 settimane triplice Tx
Poi solo TAO

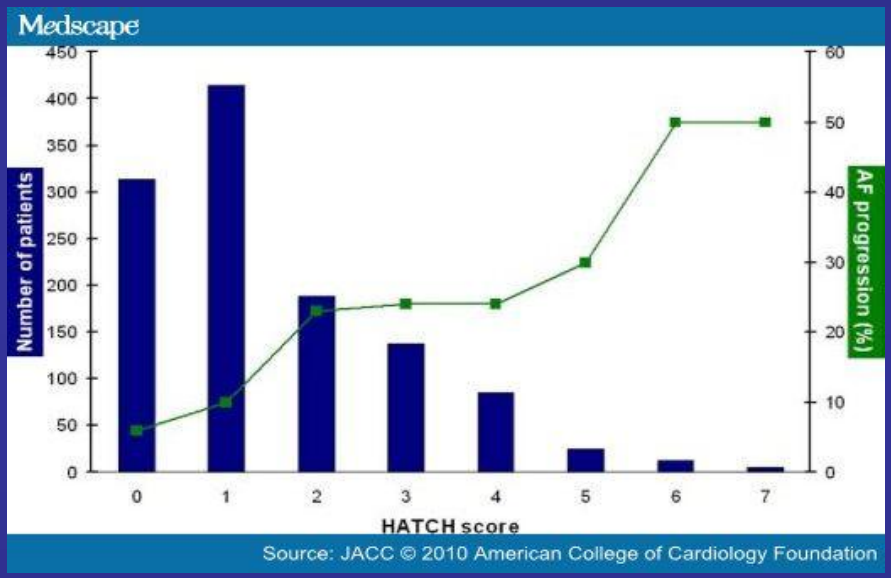
ESC guidelines atrial fibrillation 2010

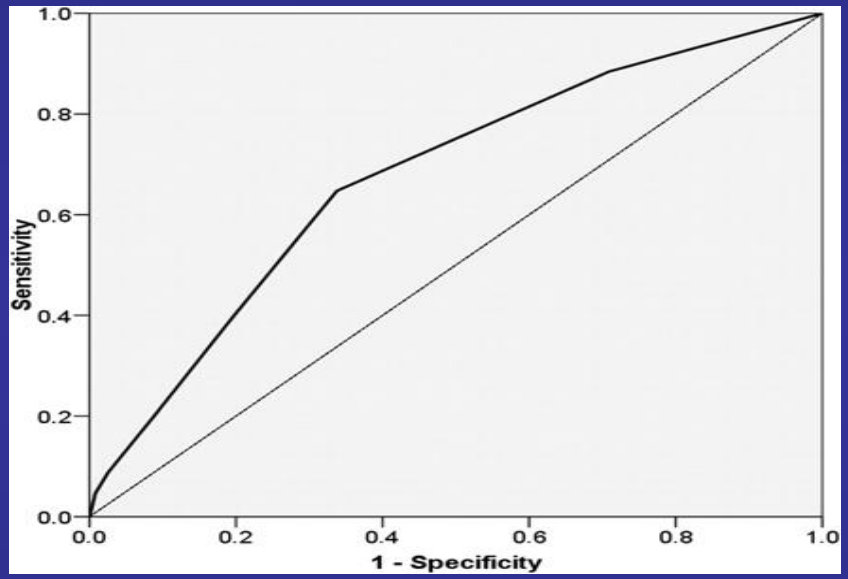
Prospettive future

Progression from Paroxysmal to Persistent Atrial Fibrillation

C.B. De Vos et al. ***JACC 2010.***

HATCH score: Hypertension; Age > 75; TIA (x2); COPD; Heart Failure (x2).





- **Progressione FA: nel 6% pazienti con HATCH score 0 vs 50% HATCH > 5.**
- **C index: 0,67**
- **Identifica pazienti candidati a "rate control strategy" (antiaritmici inefficaci)**

- **NECESSITA di VALIDAZIONE in un campione più ampio.**

E ancora "scores" …

Score for the Targeting of Atrial Fibrillation (STAF)
A New Approach to the Detection of Atrial Fibrillation in the Secondary Prevention of Ischemic Stroke

Laurent Suissa, MD; David Bertora, MD; Sylvain Lachaud, MD; Marie Hélène Mahagne, MD, PhD

Stroke 2009

Per il Neurologo

A Multicenter Risk Index for Atrial Fibrillation After Cardiac Surgery **JAMA 2004**

Per il Cardiochirurgo

< Previous Article | Next Article >

The Lancet, Volume 373, Issue 9665, Pages 739 - 745, 28 February 2009
doi:10.1016/S0140-6736(09)60443-8 Cite or Link Using DOI

This article can be found in the following collections: Cardiology & Vascular Medicine (Arrhythmias)

Development of a risk score for atrial fibrillation (Framingham Heart Study): a community-based cohort study **Lancet 2009**

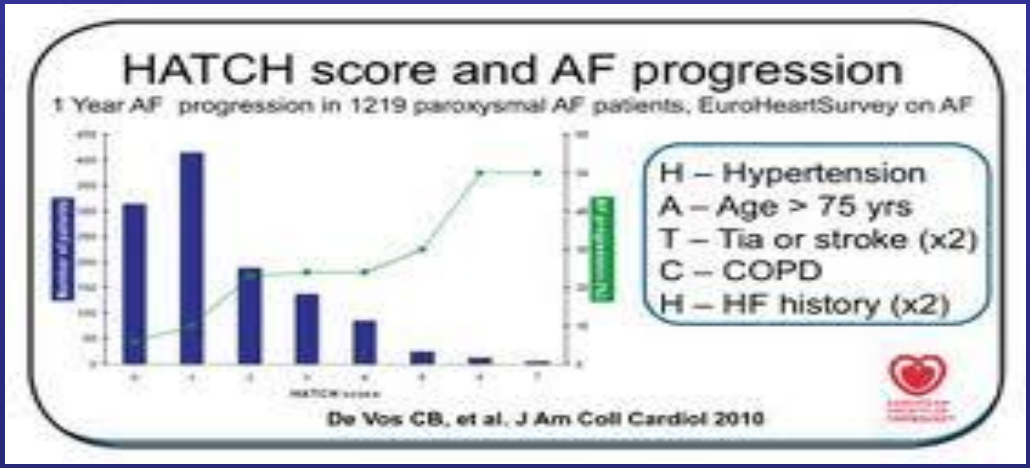
Prof Daniel Levy MD [a f g i], Michael J Pencina PhD [a b], Joseph M Massaro

Per il Medico di Base

Ipotesi N°1: quali pazienti candidare a strategie di "Rate control" v.s. "Rhythm control".

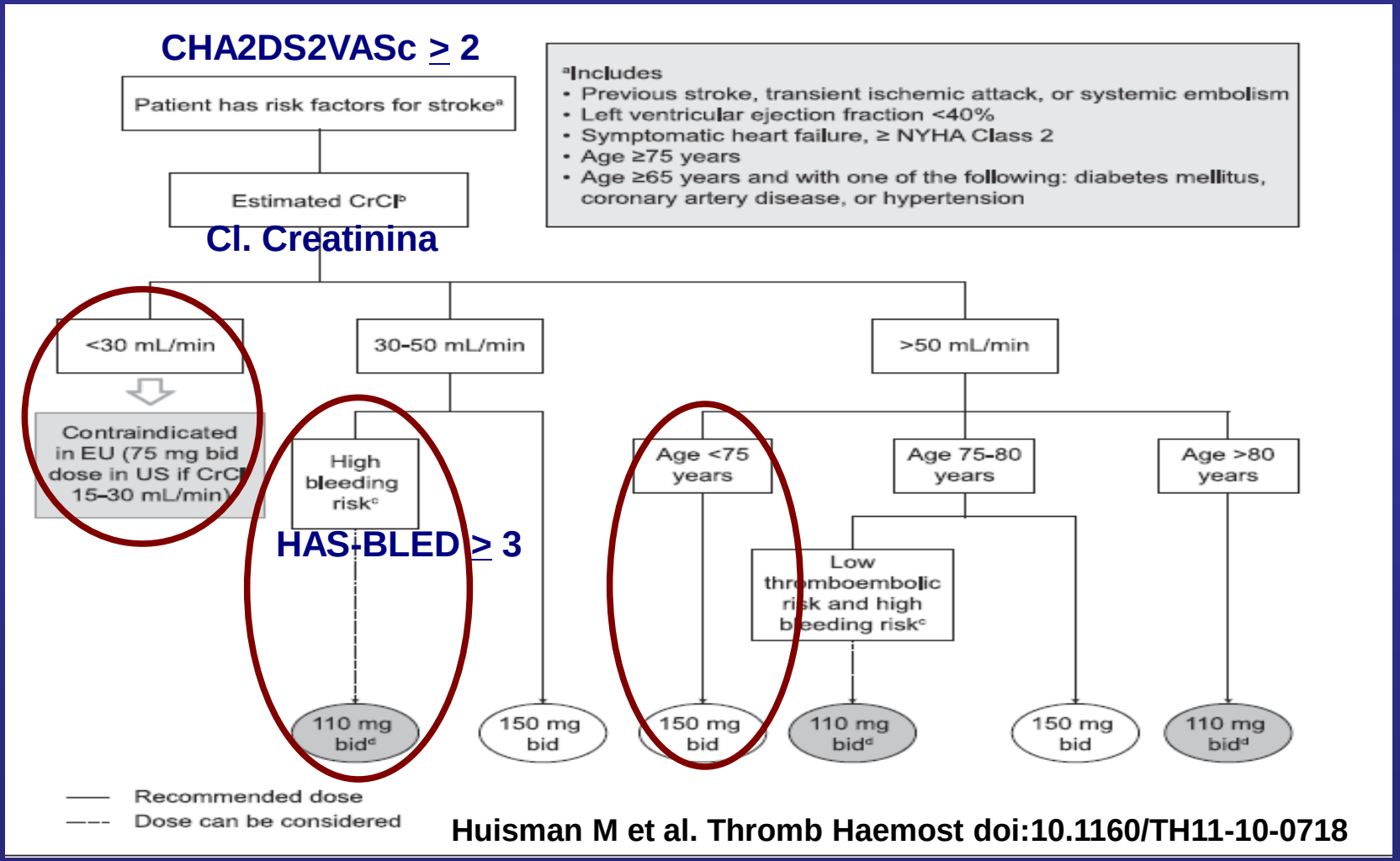
Classification of AF-related symptoms **(EHRA score)**	
EHRA class	**Explanation**
EHRA I	'No symptoms'
EHRA II	'Mild symptoms'; normal daily activity not affected
EHRA III	'Severe symptoms', normal daily activity affected
EHRA IV	'Disabling symptoms'; normal daily activity discontinued

+



Ipotesi N°2: quali pazienti candidare al trattamento con NOAC vs VKA.

CHA2DS2VAsc
HAS-BLED
Cockroft-Gault



Huisman M et al. Thromb Haemost doi:10.1160/TH11-10-0718

Scores, perchè sì...

- Miglior definizione del profilo di rischio.

- Uniformità di linguaggio (indispensabile).

- Strategia terapeutica personalizzata.

Considerando che:

- Lo Score è uno “ Strumento” .

- Si basa su un campione di derivazione ed uno di validazione.

- Valore predittivo (performance = C statistics)

Gli Scores sono indispensabili

MA

Evitiamo le “insalate” di Scores

…

Utilizzo condiviso di scores

=

Miglior utilizzo delle risorse (meno consulenze)

Minore permanenza del paziente in PS (meno overcrowding)

Formulare percorsi assistenziali integrati (contenimento di accessi e ricoveri)


... Non siamo solo ragionieri ...