



*FA*

*Le risque thrombo-embolique  
les nouveaux anticoagulants*

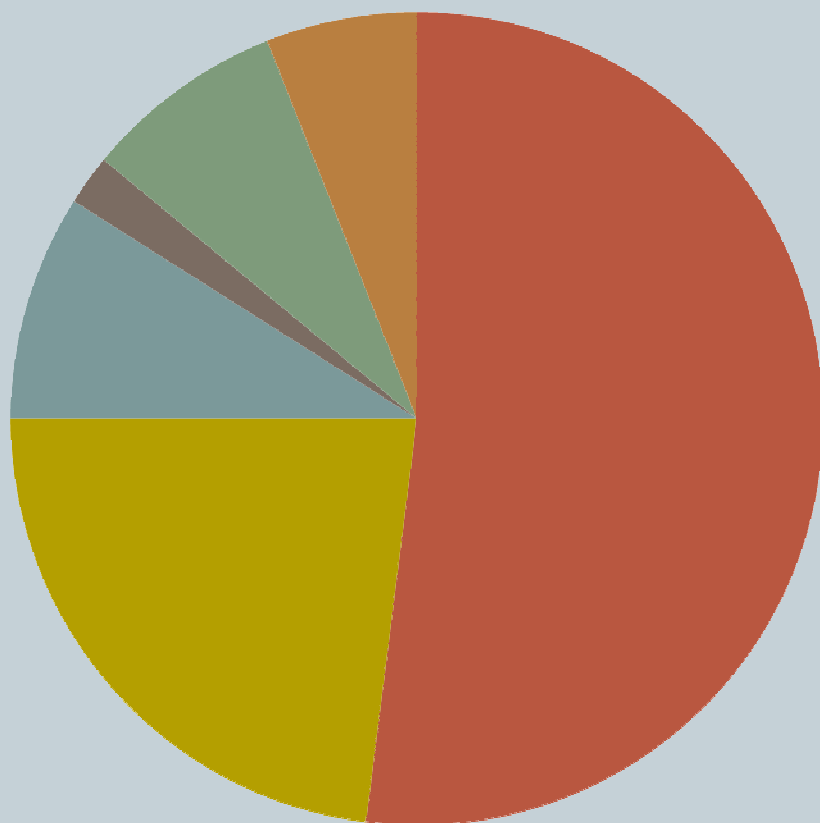
*P.Avinée*

*EPU B 2012*

# COCAF STUDY



## Coût FA



■ hospitalisations

■ Drogues

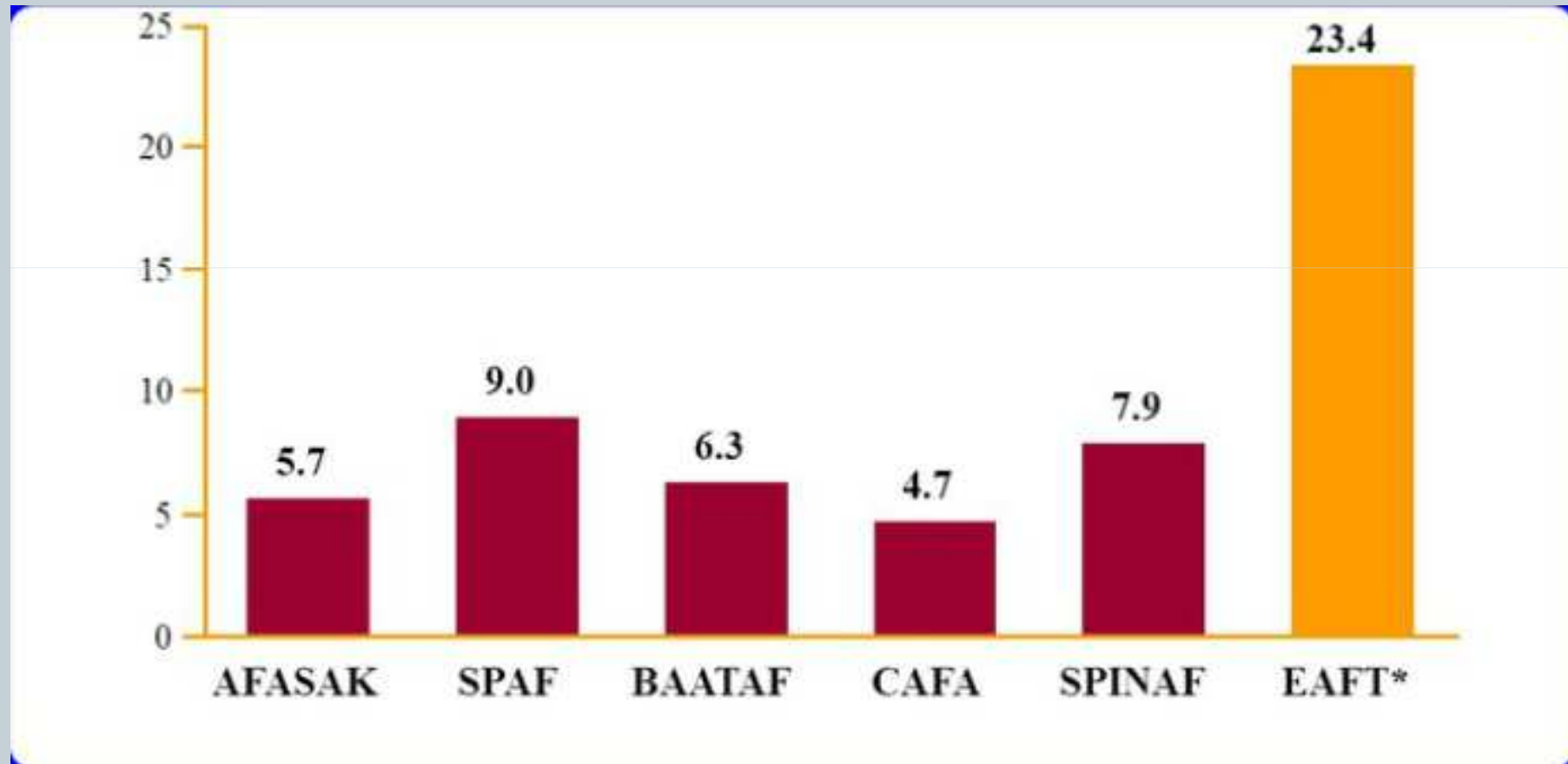
■ Consultations

■ Procédures  
interventionnelles

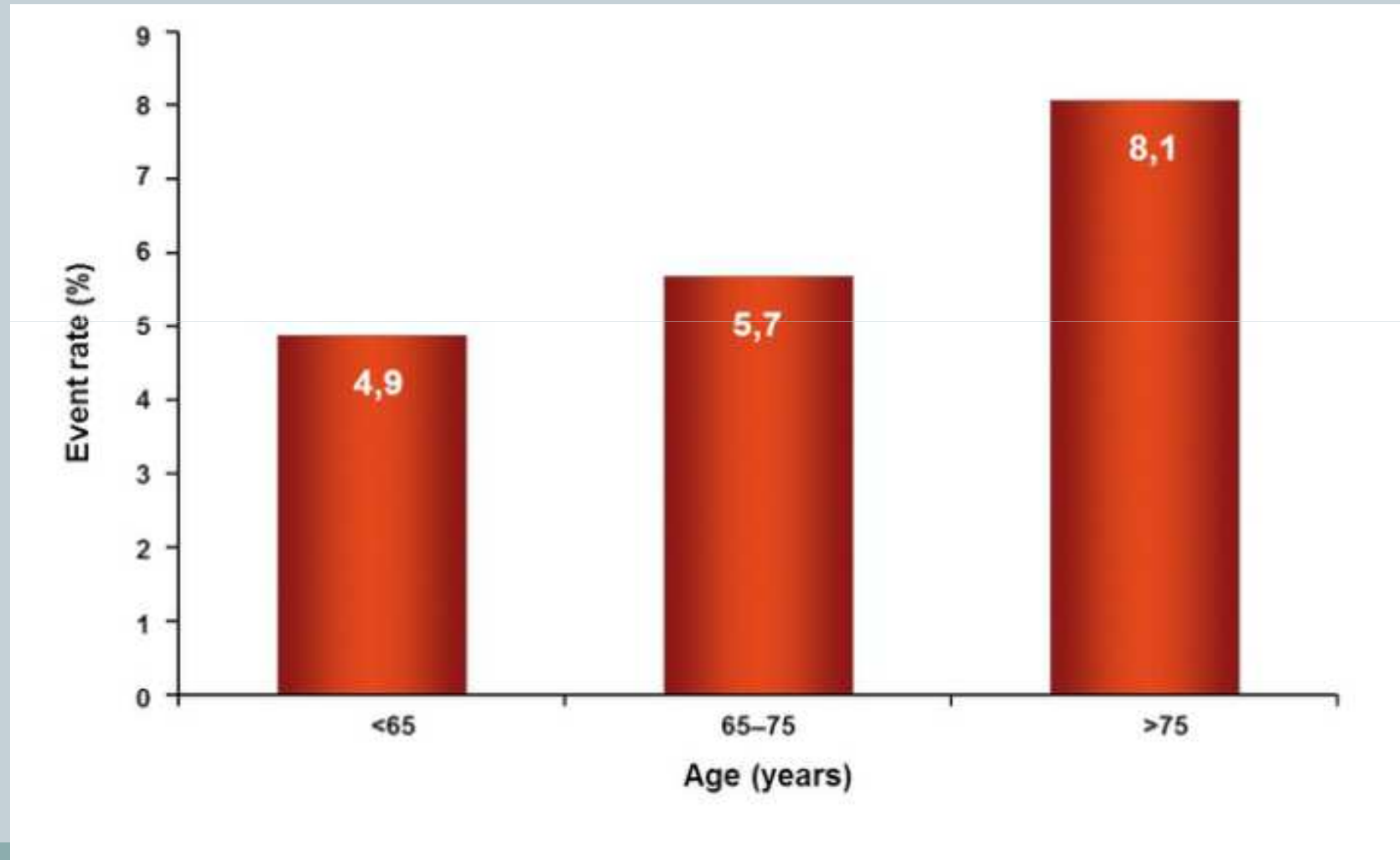
■ Investigations  
complémentaires

■ Perte de productivité

# AVC chez les patients non anticoagulés



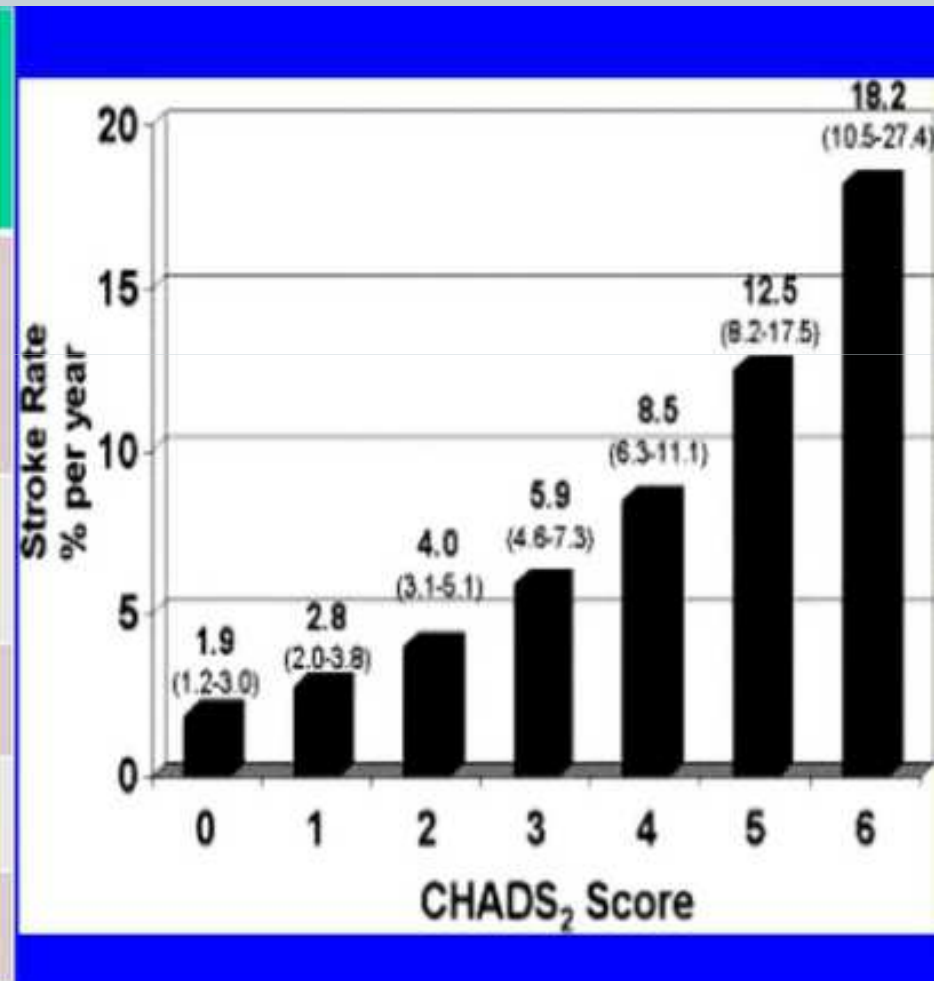
# AVC si plus d'un facteur de risque d'ATE et sans anticoagulant



# CHADS<sub>2</sub>



Risk factor	Score
<b>C</b> = congestive heart failure	1
<b>H</b> = hypertension	1
<b>A</b> = age	1
<b>D</b> = diabetes	1
<b>S</b> = stroke	2



# Evaluation du risque d'ATE



## CHADS<sub>2</sub>

Risk Factor	Score
Congestive heart failure	1
Hypertension	1
Age ≥75y	1
Diabetes mellitus	1
Stroke/TIA/thromboembolism	2
Maximum score	6

## CHA<sub>2</sub>DS<sub>2</sub>-VASc

Risk Factor	Score
Congestive heart failure	1
Hypertension	1
Age ≥75y	2
Diabetes mellitus	1
Stroke/TIA/thromboembolism	2
Vascular disease	1
Age 65-74y	1
Female	1
Maximum score	9

# Poids des facteurs de risque d'ATE

## Swedish Atrial Fibrillation Cohort Study



	<b>Multivariable Hazard Ratios (95% CI)</b>
Age (years)	
< 65	1.0 (Reference)
65–74	2.97 (2.54–3.48)
≥75	5.28 (4.57–6.09)
Female sex	1.17 (1.11–1.22)
Previous ischaemic stroke	2.81 (2.68–2.95)
Intracranial bleeding	1.49 (1.33–1.67)
Vascular disease (any)	1.14 (1.06–1.23)
• Myocardial infarction	1.09 (1.03–1.15)
• Previous CABG	1.19 (1.06–1.33)
• Peripheral arterial disease	1.22 (1.12–1.32)
Hypertension	1.17 (1.11–1.22)
Heart failure (history)	0.98 (0.93–1.03)
Diabetes mellitus	1.19 (1.13–1.26)
Thyroid disease	1.00 (0.92–1.09)
Thyrotoxicosis	1.03 (0.83–1.28)

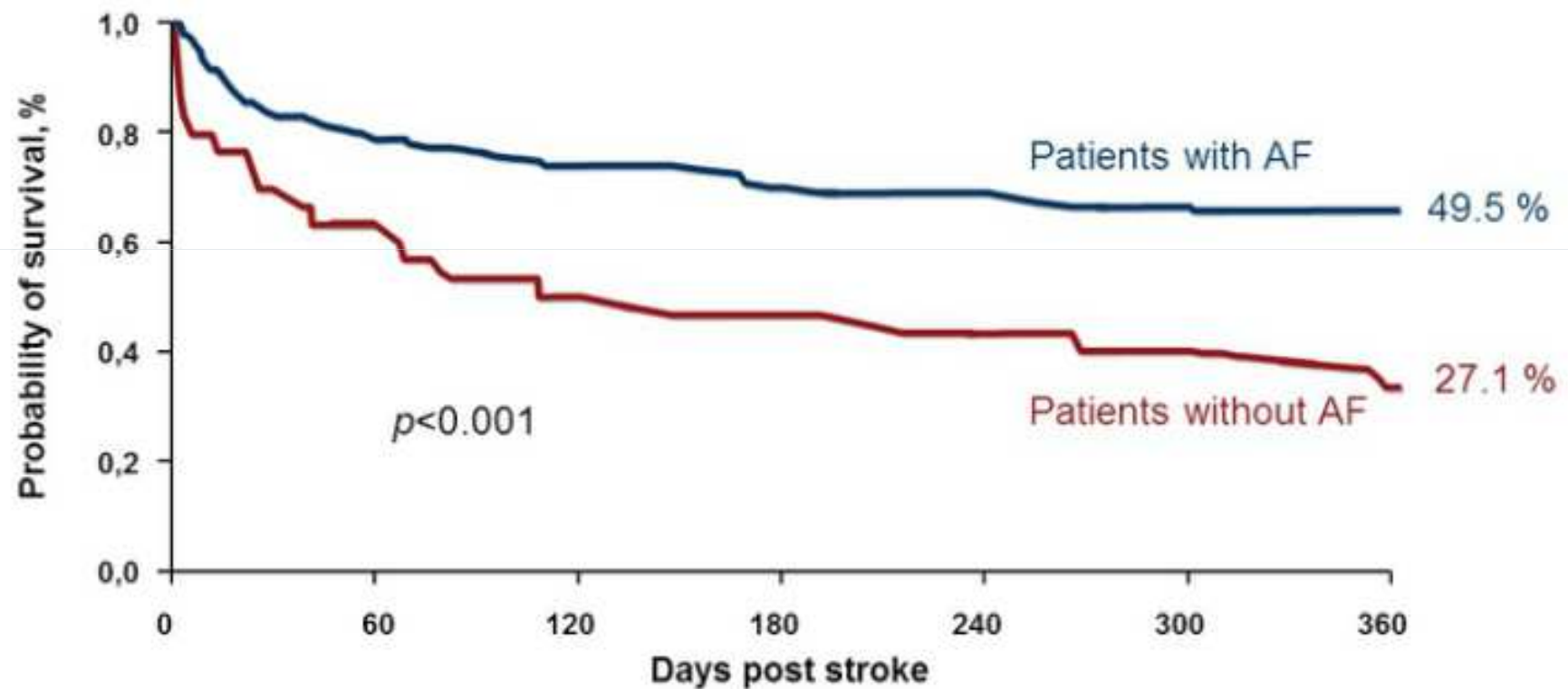
# AVC, principale complication de la FA



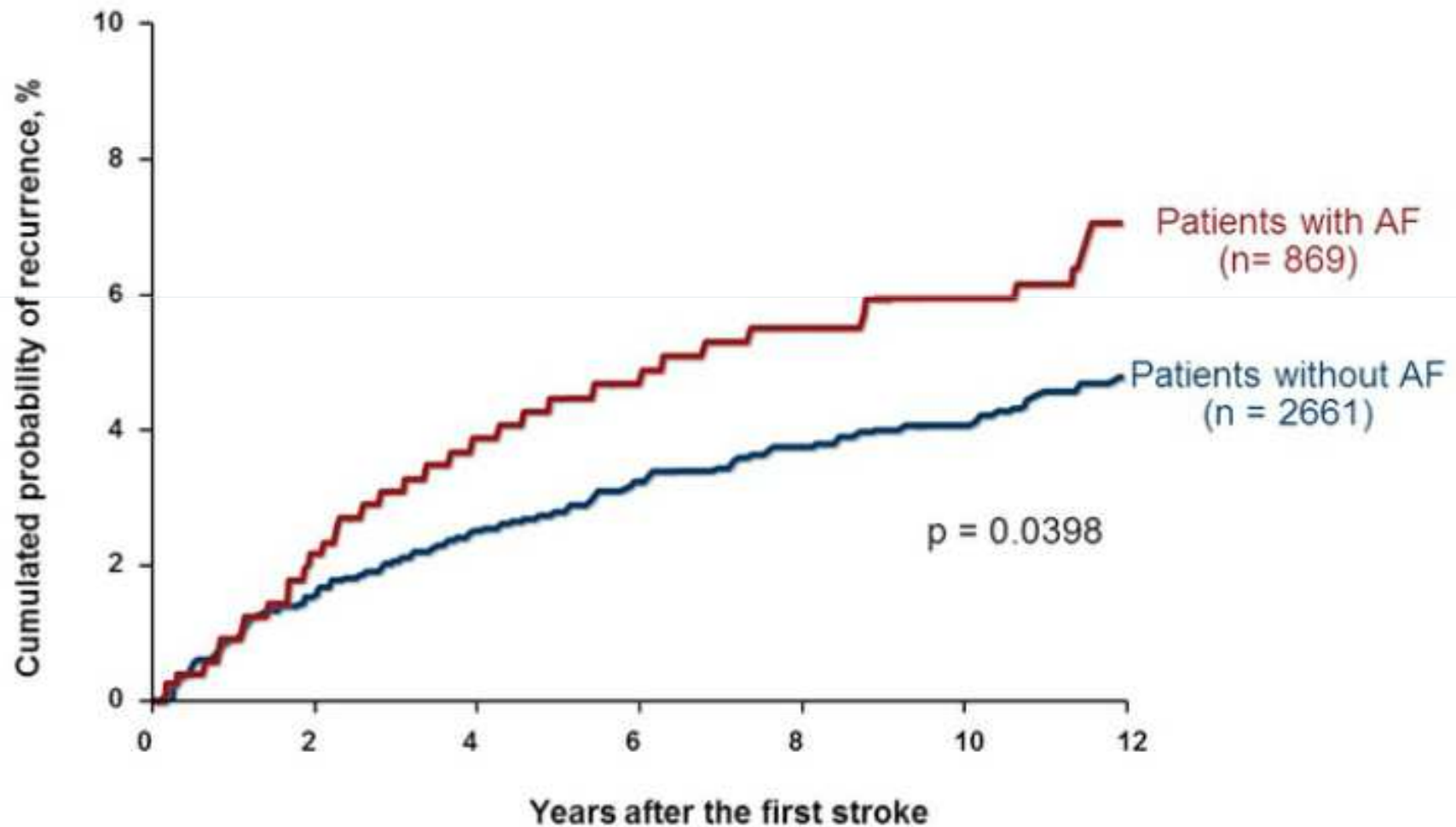
- La FA est associée à un risque global d'AVC x 5
- La FA est responsable de 15 à 20% des AVC
- Le risque d'AVC est comparable que la FA soit paroxystique ou permanente
- Les AVC survenant chez les patients en FA sont plus sévères



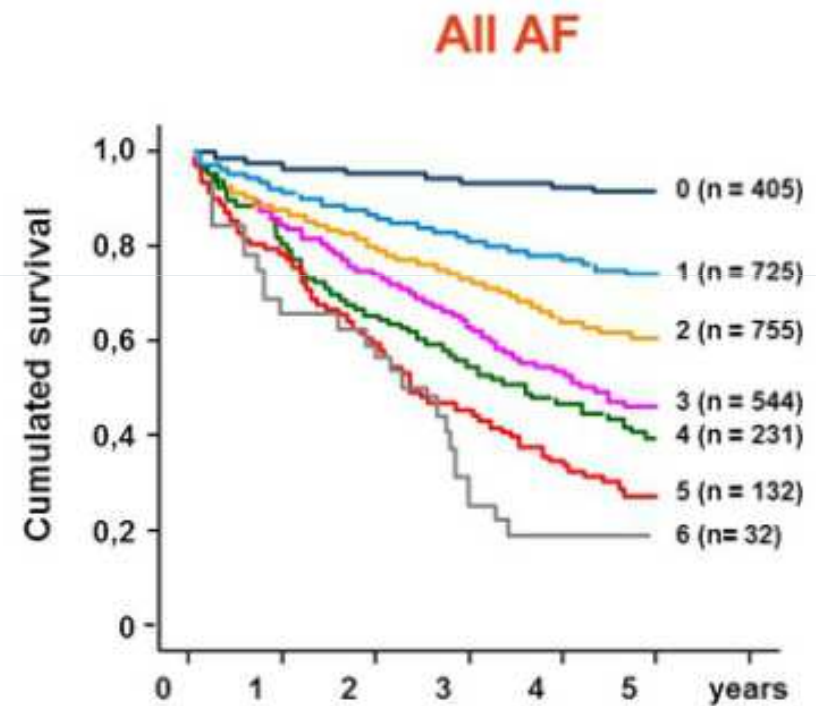
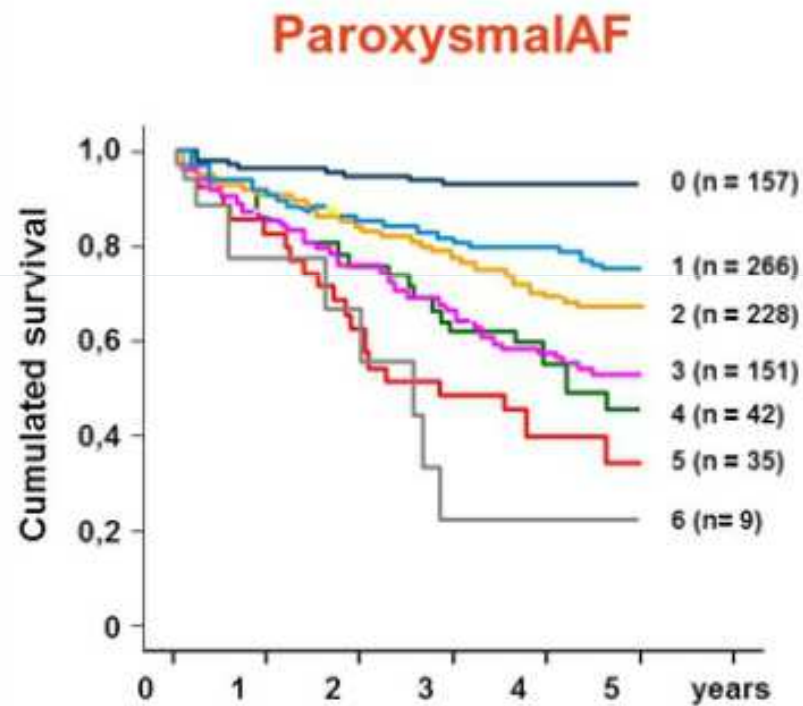
# Mortalité à un an des AVC sur FA



# Haut risque de récurrence d'AVC

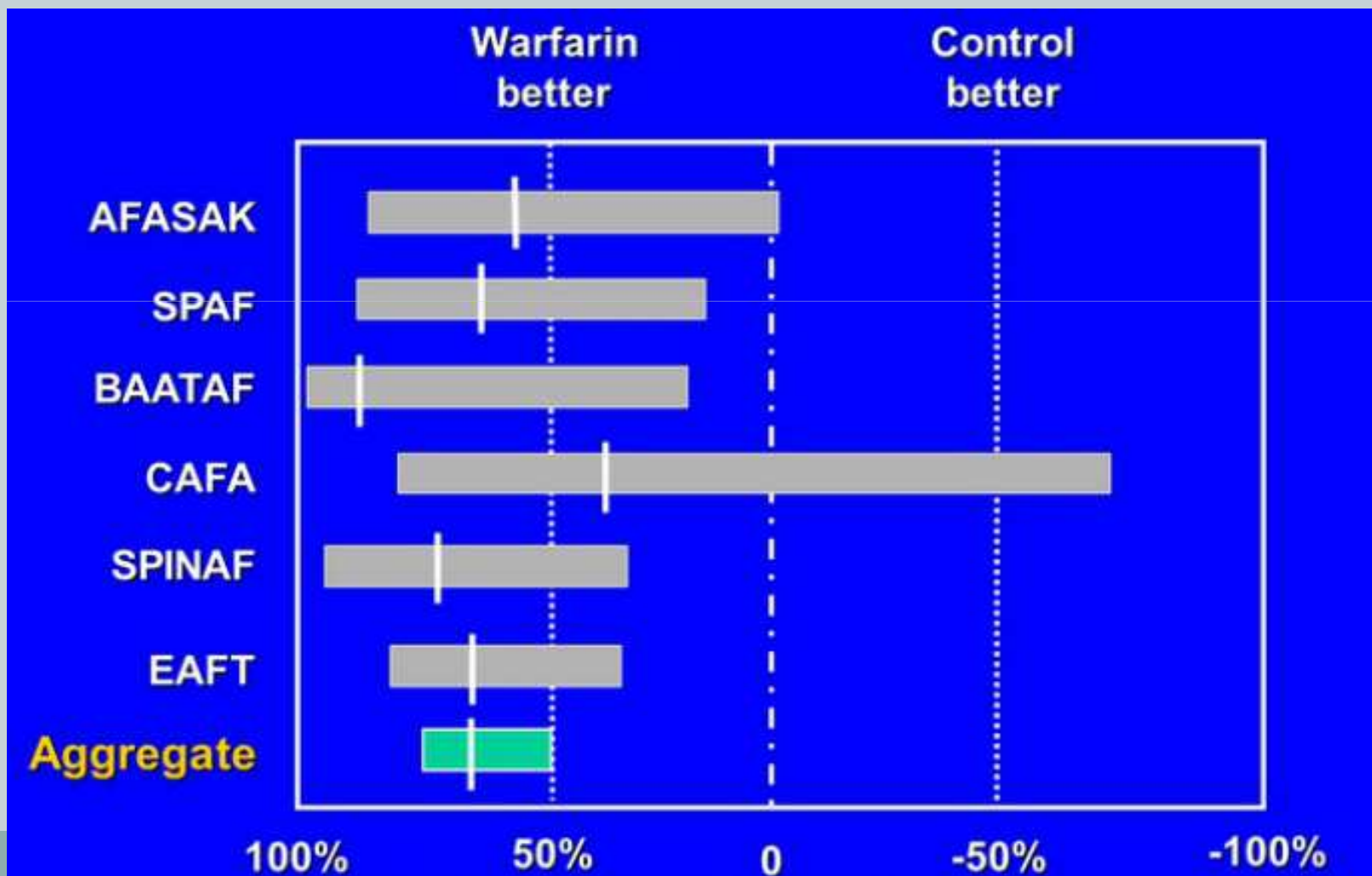


# Risque de mortalité selon le score de CHADS 2



Stockholm Cohort Study of Atrial Fibrillation

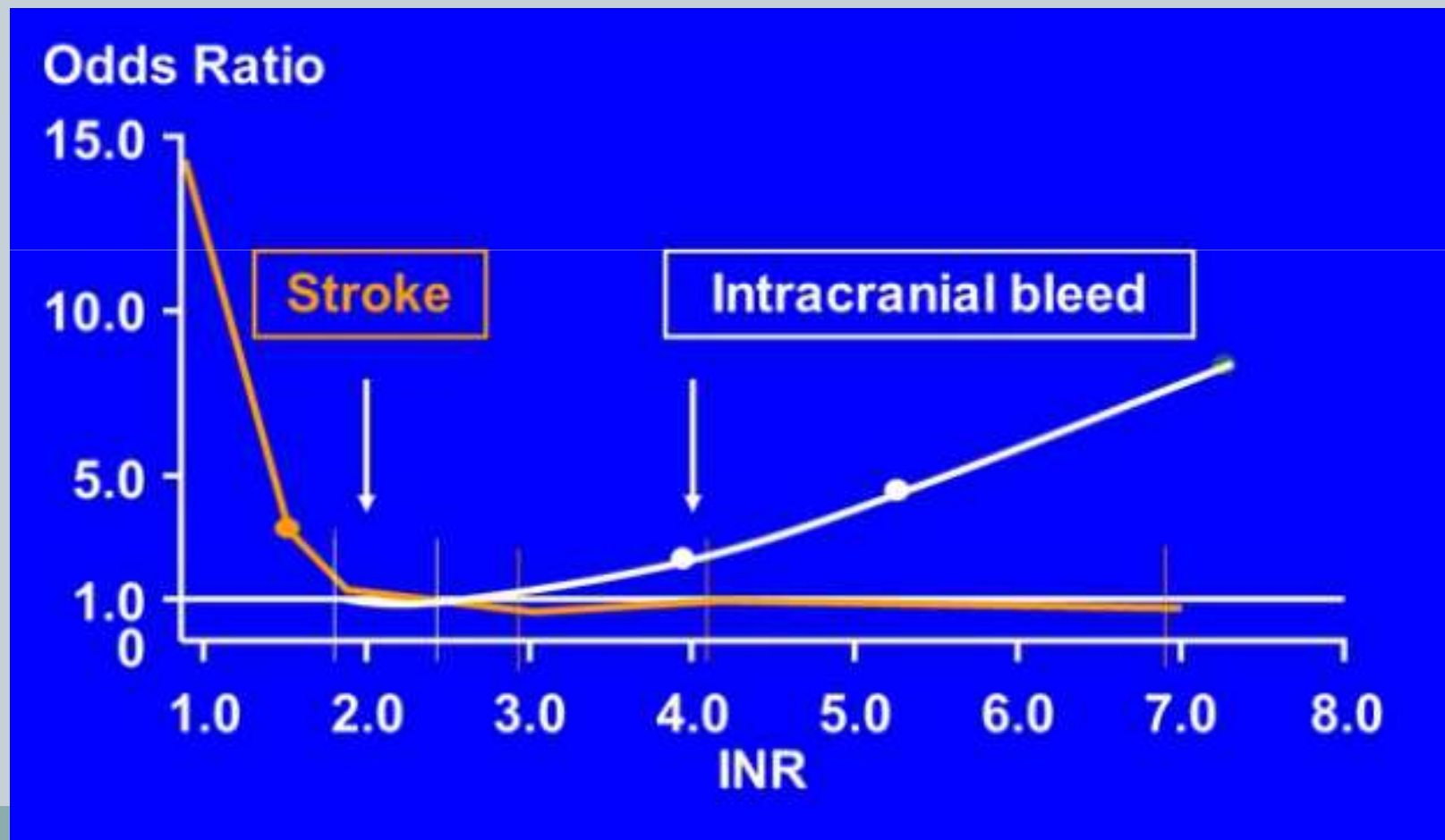
# Réduction de risque d'AVC sous Warfarine



# Difficultés du traitement par AVK



Fenêtre d'efficacité réduite+cinétique complexe+interactions multiples

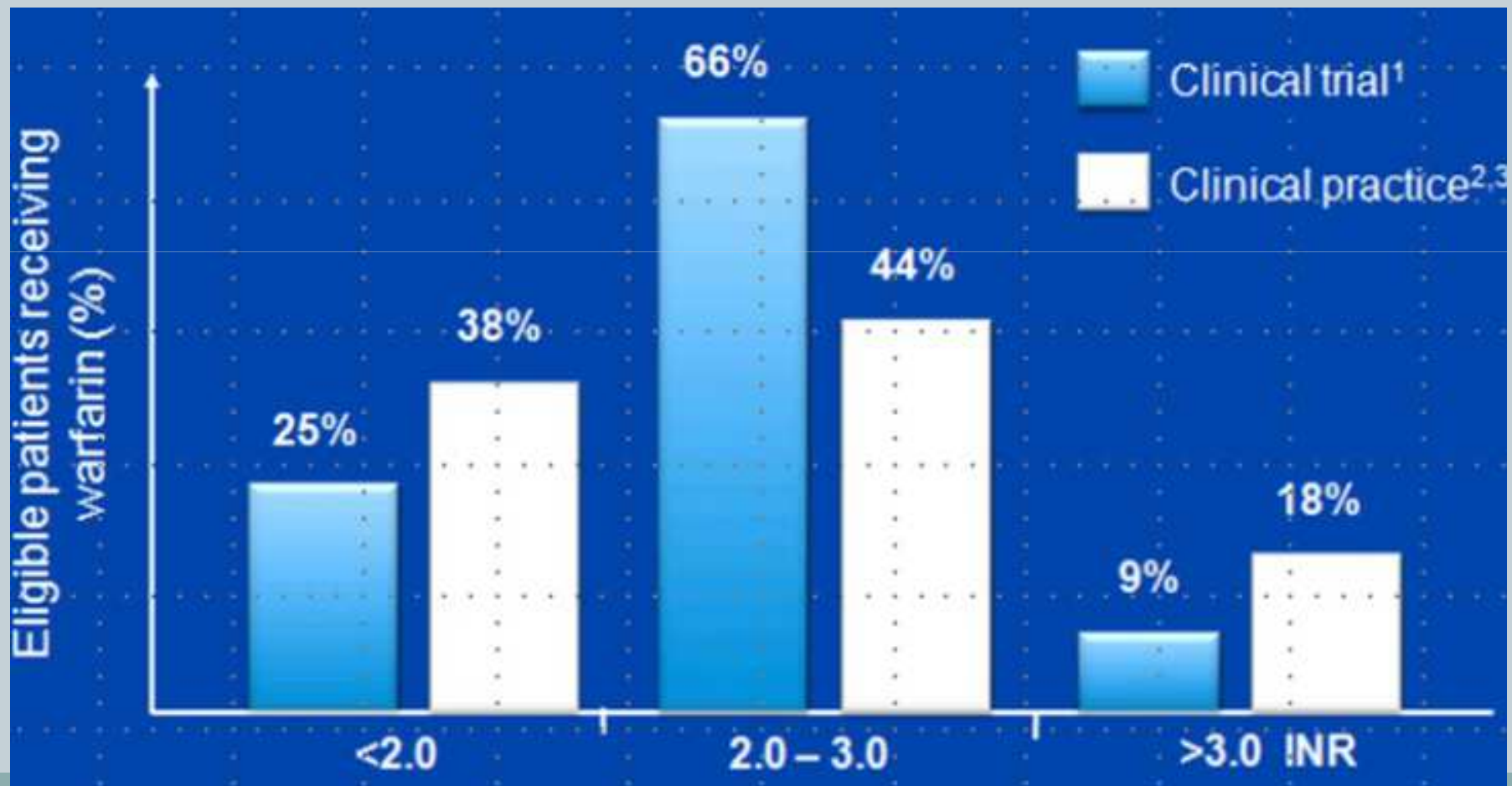


# Limitations pour les AVK



- Réponse imprévisible
- Fenêtre thérapeutique étroite (INR 2 à 3)
- Monitoring difficile en routine
- Ajustements fréquents
- Interactions médicaments et nourriture
- Résistance

# INR : Etudes cliniques versus la pratique



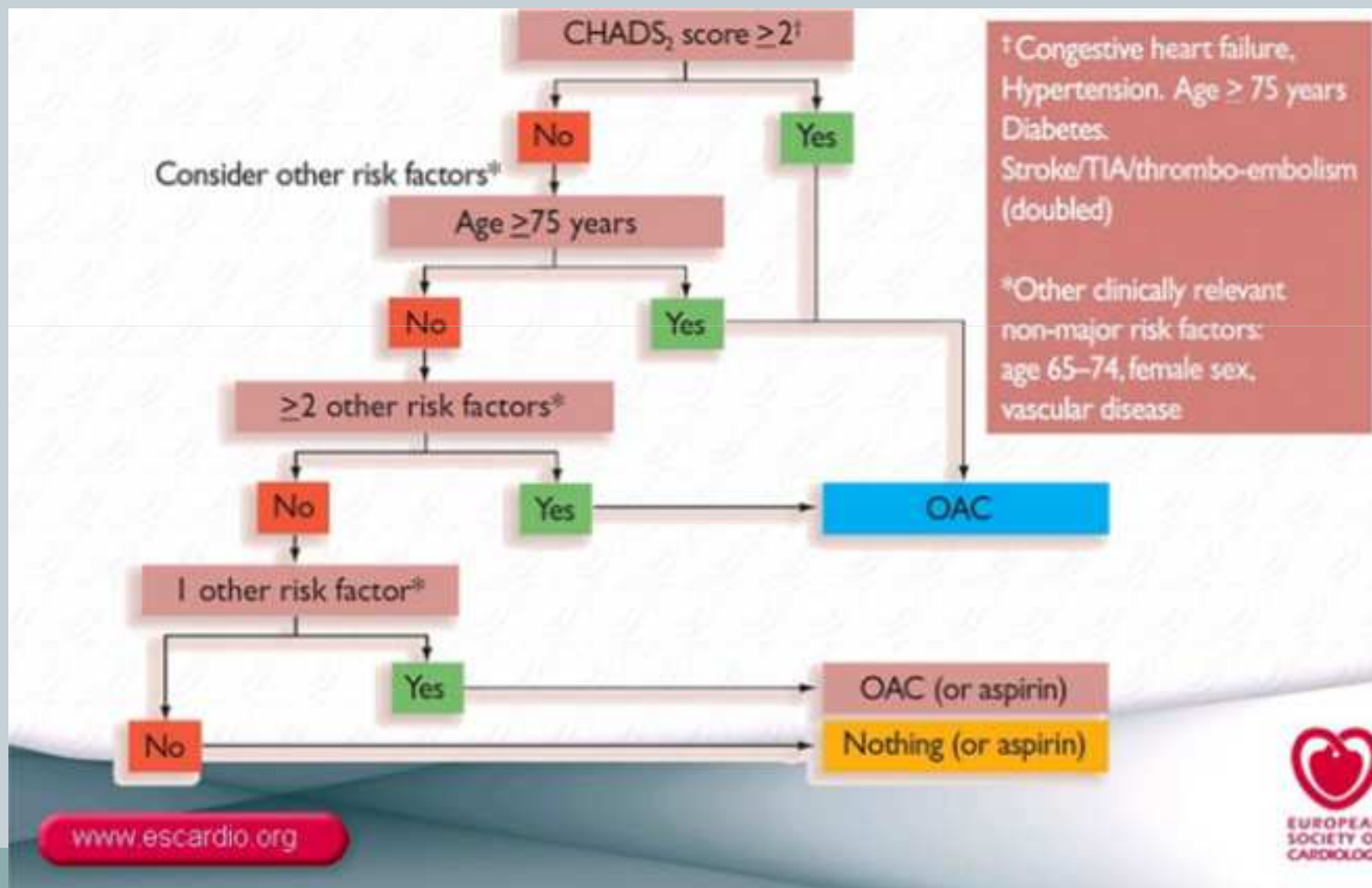
# Recommendations



Recommendations	Class <sup>a</sup>	Level <sup>b</sup>
Antithrombotic therapy to prevent thrombo-embolism is recommended for all patients with AF, except in those at low risk (lone AF, aged <65 years, or with contraindications).	I	A
It is recommended that the selection of the antithrombotic therapy should be based upon the absolute risks of stroke/thrombo-embolism and bleeding, and the relative risk and benefit for a given patient.	I	A
The CHADS <sub>2</sub> [cardiac failure, hypertension, age, diabetes, stroke (doubled)] score is recommended as a simple initial (easily remembered) means of assessing stroke risk in non-valvular AF.	I	A
<ul style="list-style-type: none"> <li>For the patients with a CHADS<sub>2</sub> score of <math>\geq 2</math>, chronic OAC therapy with a VKA is recommended in a dose-adjusted regimen to achieve an INR range of 2.0–3.0 (target 2.5), unless contraindicated.</li> </ul>		A
For a more detailed or comprehensive stroke risk assessment in AF (e.g. with CHADS <sub>2</sub> scores 0–1), a risk factor-based approach is recommended, considering 'major' and 'clinically relevant non-major' stroke risk factors <sup>3</sup> .	I	A
In patients with no risk factors who are at low risk (essentially patients aged <65 years with lone AF, with none of the risk factors), no antithrombotic therapy should be considered, rather than aspirin.	IIa	B
Combination therapy with aspirin 75–100 mg plus clopidogrel 75 mg daily, should be considered for stroke prevention in patients for whom there is patient refusal to take OAC therapy or a clear contraindication to OAC therapy (e.g. inability to cope or continue with anticoagulation monitoring), where there is a low risk of bleeding.	IIa	B



# IC des anticoagulants

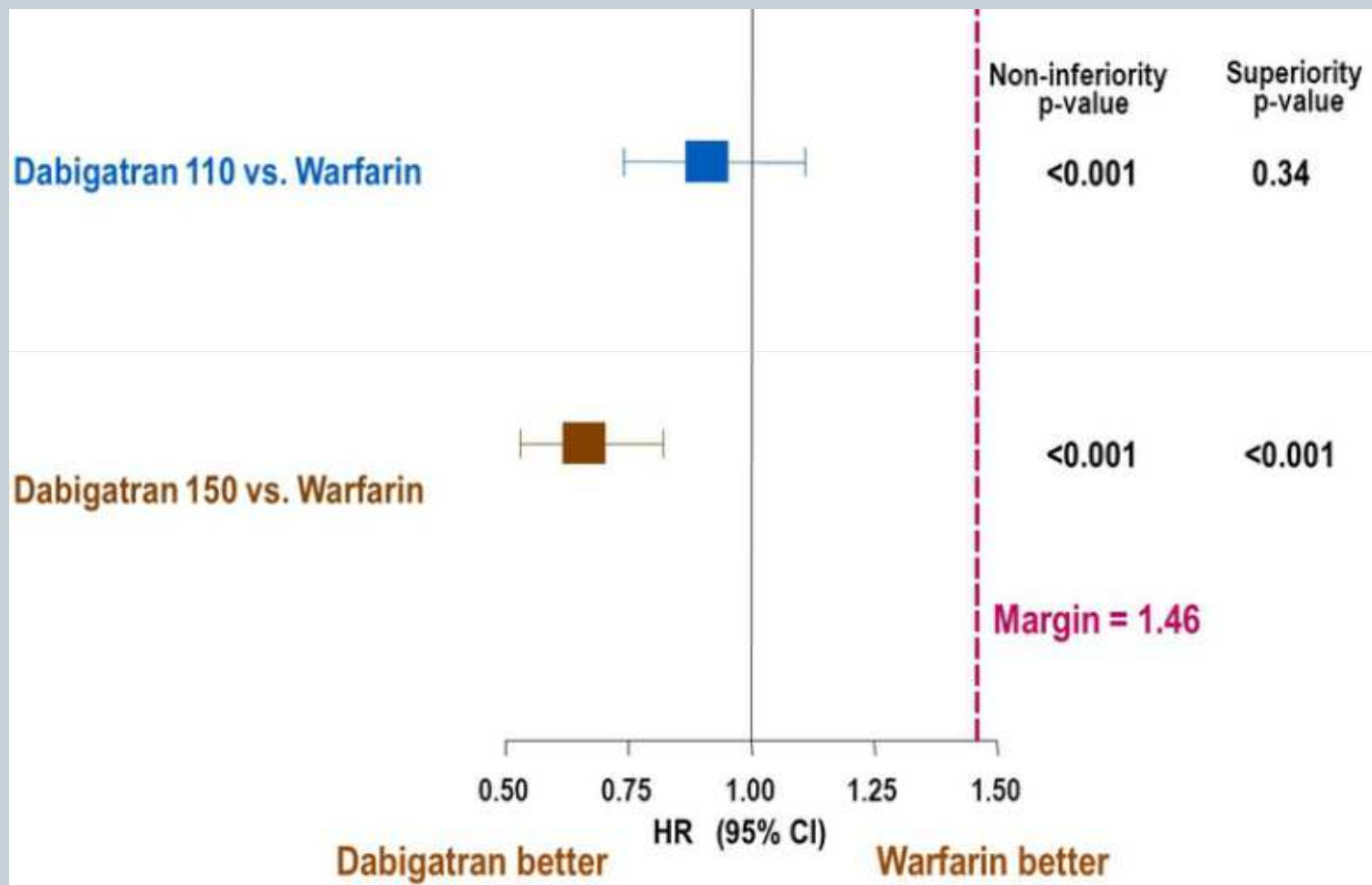


# IC des anticoagulants

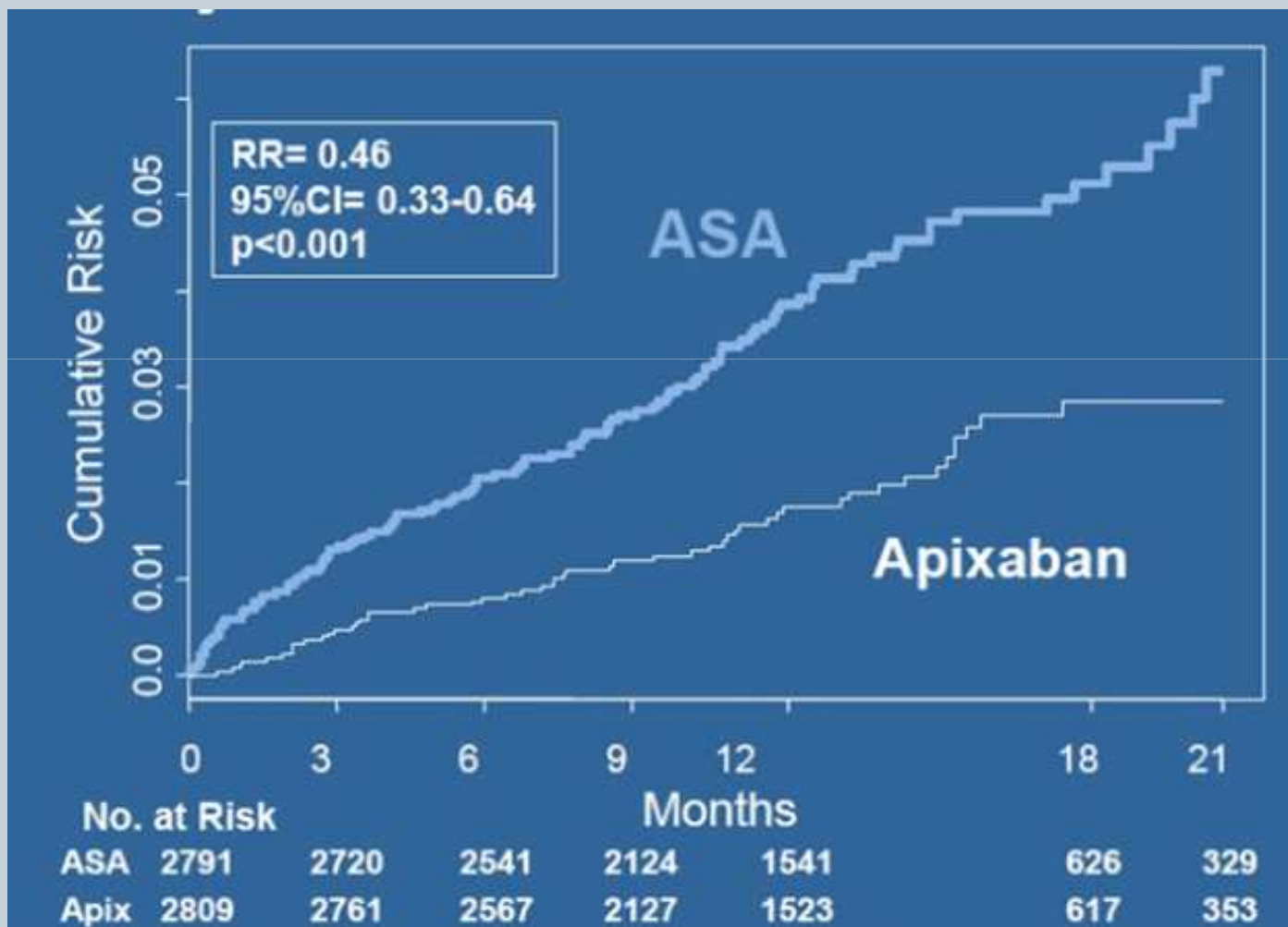


Risk category	CHA <sub>2</sub> DS <sub>2</sub> -VASc score	Recommended antithrombotic therapy
One 'major' risk factor or $\geq 2$ 'clinically relevant non-major' risk factors	$\geq 2$	OAC <sup>a</sup>
One 'clinically relevant non-major' risk factor	1	Either OAC <sup>a</sup> or aspirin 75–325 mg daily. Preferred: OAC rather than aspirin.
No risk factors	0	Either aspirin 75–325 mg daily or no antithrombotic therapy. Preferred: no antithrombotic therapy rather than aspirin.

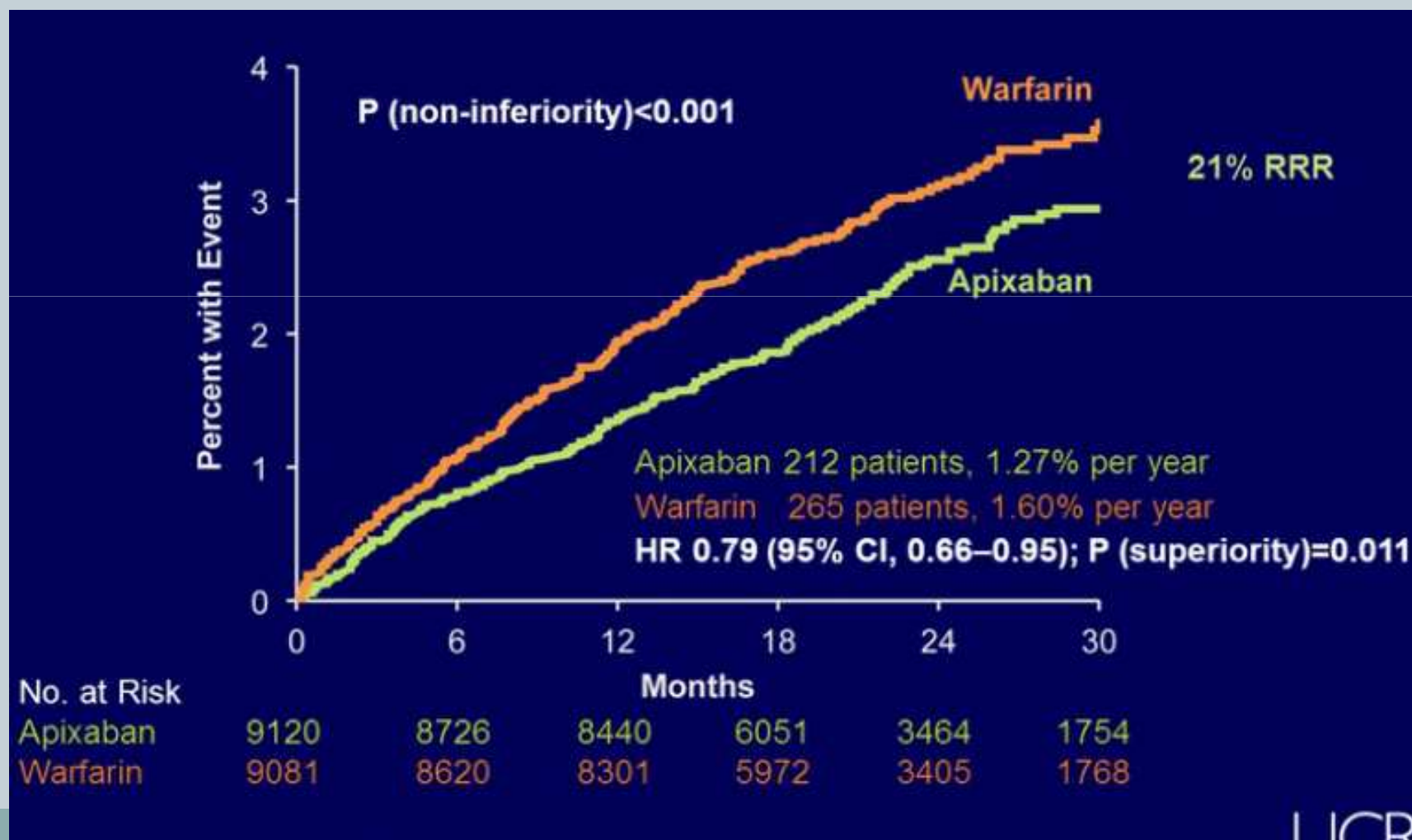
# AVC ou Embolie systémique



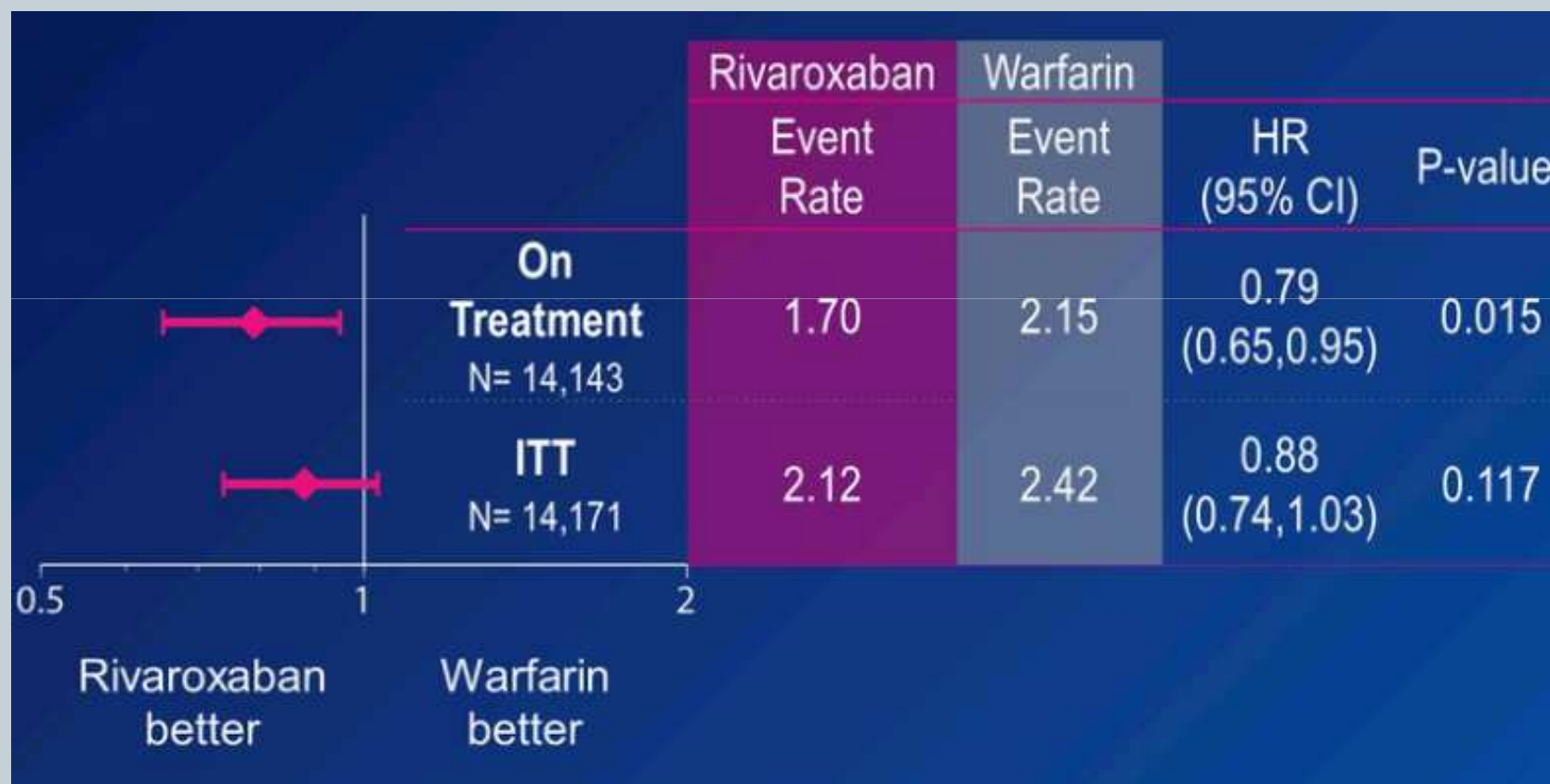
# AVC ou Embolie systémique



# AVC ou Embolie systémique



# AVC ou Embolie systémique



# CI aux nouveaux anticoagulants



- CI aux anticoagulant (sd hémorragique)
- Absence d'IC aux Anticoagulants (CHADS<sub>2</sub>=0)
- FA valvulaire (RM rhumatismal, prothèse mécanique)
- IR, surtout âgés
- INR très stables, pas d'historique d'acdt embolique ou hémorragique, pas de volonté de changement

# Limitations des nouveaux anticoagulants



- Absence d'antidote (cofact pour Xarelto)
- Tests biologiques d'interprétation difficile
- Interactions drogues
- Précaution ++ chez l'IR modéré
- CI si clearance  $< 30$  ml/mn
- Schéma thérapeutique à définir (I.coronarienne, Association aspirine/plavix)
- Coût ++



# Coût



- PREVISCAN  $0.39^E/J$
- XARELTO  $5.92^E/J$
- PRADAXA  $4.39^E/J$
- INR      B20  $5.40^E/J$

# Recommendations SFC 2012



In patients with a CHA<sub>2</sub>DS<sub>2</sub>-VASc score  $\geq 2$ , OAC therapy with:

- adjusted-dose VKA (INR 2–3); or
- a direct thrombin inhibitor (dabigatran); or
- an oral factor Xa inhibitor (e.g. rivaroxaban, apixaban)

... is recommended, unless contraindicated.

I

A

Where OAC is recommended, one of the NOACs, either:

- a direct thrombin inhibitor (dabigatran)
- an oral factor Xa inhibitor (e.g. rivaroxaban, apixaban<sup>d</sup>)

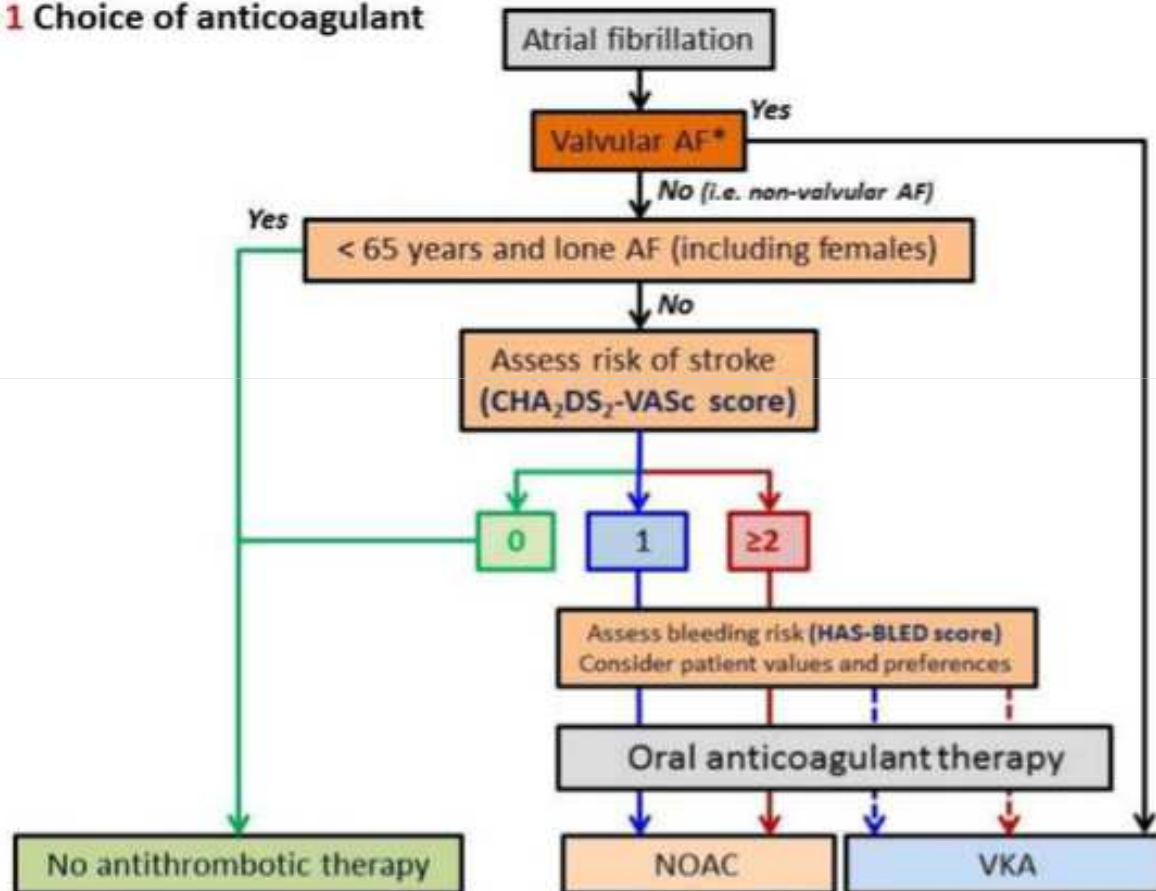
... should be considered rather than adjusted-dose VKA (INR 2–3) for most patients with non-valvular AF, based on their net clinical benefit.

IIa

A

# Recommandations SFC 2012

Figure 1 Choice of anticoagulant



Antiplatelet therapy with aspirin plus clopidogrel, or – less effectively – aspirin only, should be considered in patients who refuse any OAC. If absolute contraindications to any OAC or anti-platelet therapy, left atrial appendage closure device may be considered.

# Conclusions



- 1- Il existe encore une place pour les AVK
- 2- Exclusion pour les nouveaux anticoagulants:
  - FA valvulaire
  - IR
  - Patients ne désirant pas changer, avec INR stables
- 3- Difficultés économiques pour les patients, le système de soin, les pays.

# Epitaphe des AVK?



