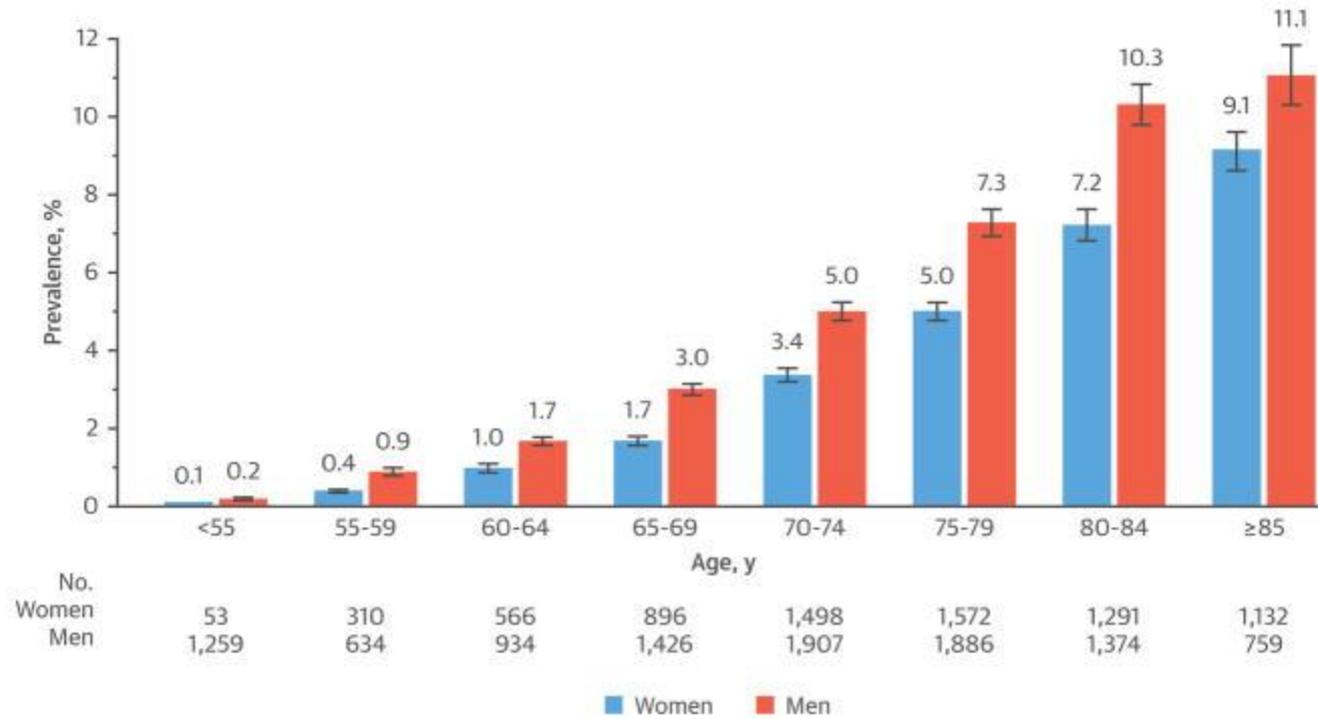


Comment je traite mes « vieux » patients en FA : du bon sens !

Didier Klug

Institut Cardiopulmonaire Lille

Probabilité du maintien en rythme sinusal diminue avec l'âge



Avec l'âge plus de comorbidités, plus de pathologies cardiovasculaire, des oreillettes plus pathologiques

Une probabilité de maintient en rythme sinusal plus faible

Rigidité artérielle

Diabète

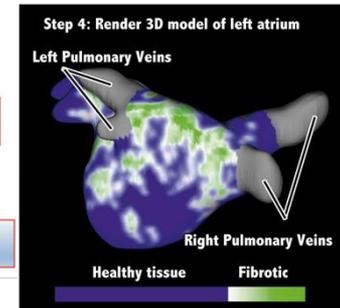
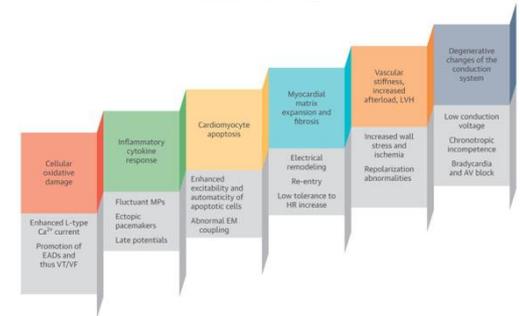
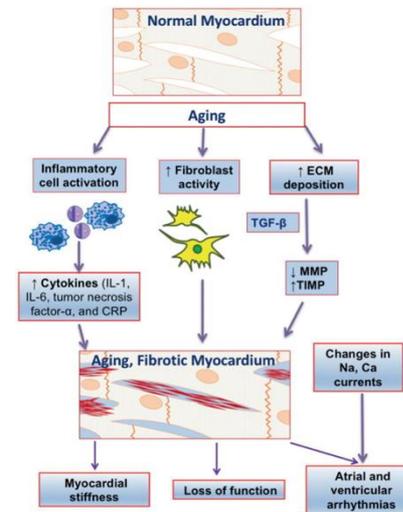
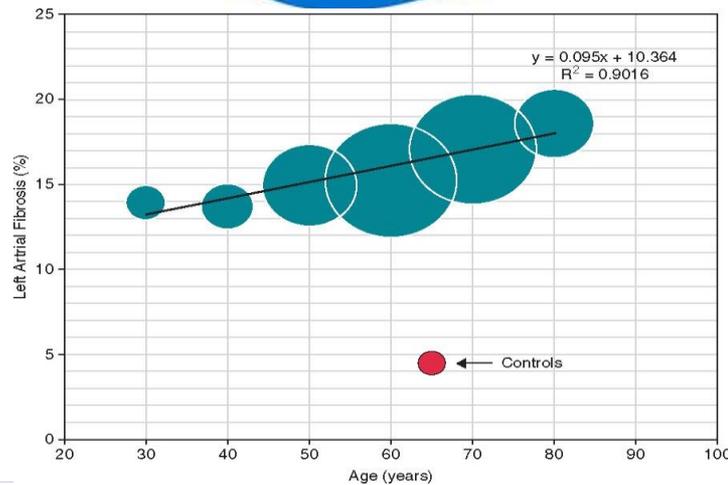
HTA

Sédentarité

Obésité

Insuffisance cardiaque

Pathologies coronaires



Clinical Presentation



Asymptomatic or Silent (!)



Symptomatic

Palpitations, dyspnoea, fatigue,

Chest tightness/pain, poor effort tolerance, dizziness, syncope, disordered sleep, etc.

Haemodynamically unstable

- Syncope
- Symptomatic hypotension
- Acute HF, pulmonary oedema
- Ongoing myocardial ischaemia
- Cardiogenic shock

Haemodynamically stable

AF-related OUTCOMES

AF-Related Outcome	Frequency in AF	Mechanism(s)
 Death	1.5 - 3.5 fold increase	Excess mortality related to: <ul style="list-style-type: none"> • HF, comorbidities • Stroke
 Stroke	20-30% of all ischaemic strokes, 10% of cryptogenic strokes	<ul style="list-style-type: none"> • Cardioembolic, or • Related to comorbid vascular atheroma
 LV dysfunction / Heart failure	In 20-30% of AF patients	<ul style="list-style-type: none"> • Excessive ventricular rate • Irregular ventricular contractions • A primary underlying cause of AF
 Cognitive decline / Vascular dementia	HR 1.4 / 1.6 (irrespective of stroke history)	<ul style="list-style-type: none"> • Brain white matter lesions, inflammation, • Hypoperfusion, • Micro-embolism
 Depression	Depression in 16-20% (even suicidal ideation)	<ul style="list-style-type: none"> • Severe symptoms and decreased QoL • Drug side effects
 Impaired quality of life	>60% of patients	<ul style="list-style-type: none"> • Related to AF burden, comorbidities, psychological functioning and medication • Distressed personality type
 Hospitalizations	10-40% annual hospitalization rate	<ul style="list-style-type: none"> • AF management, related to HF, MI or AF related symptoms • Treatment-associated complications

Atrial fibrillation: age at diagnosis, incident cardiovascular events, and mortality

Take Home Message

Younger AF patients display increased hazard ratios of subsequent myocardial disease and shorter life expectancy compared with older AF patients. Thus, AF may be an important marker of subsequent disease and mortality.

Cohort and methods



Data obtained from nationwide Danish health registries



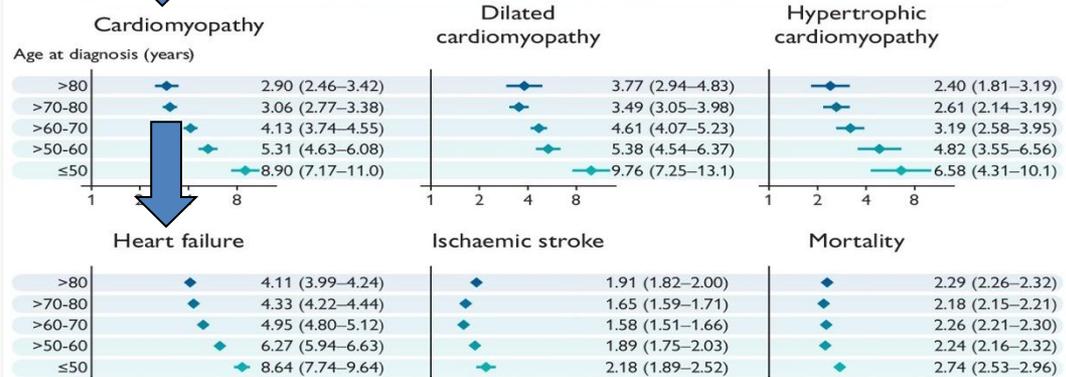
Individuals diagnosed with AF during the past >20 years

216
866

Cox
estima

Results

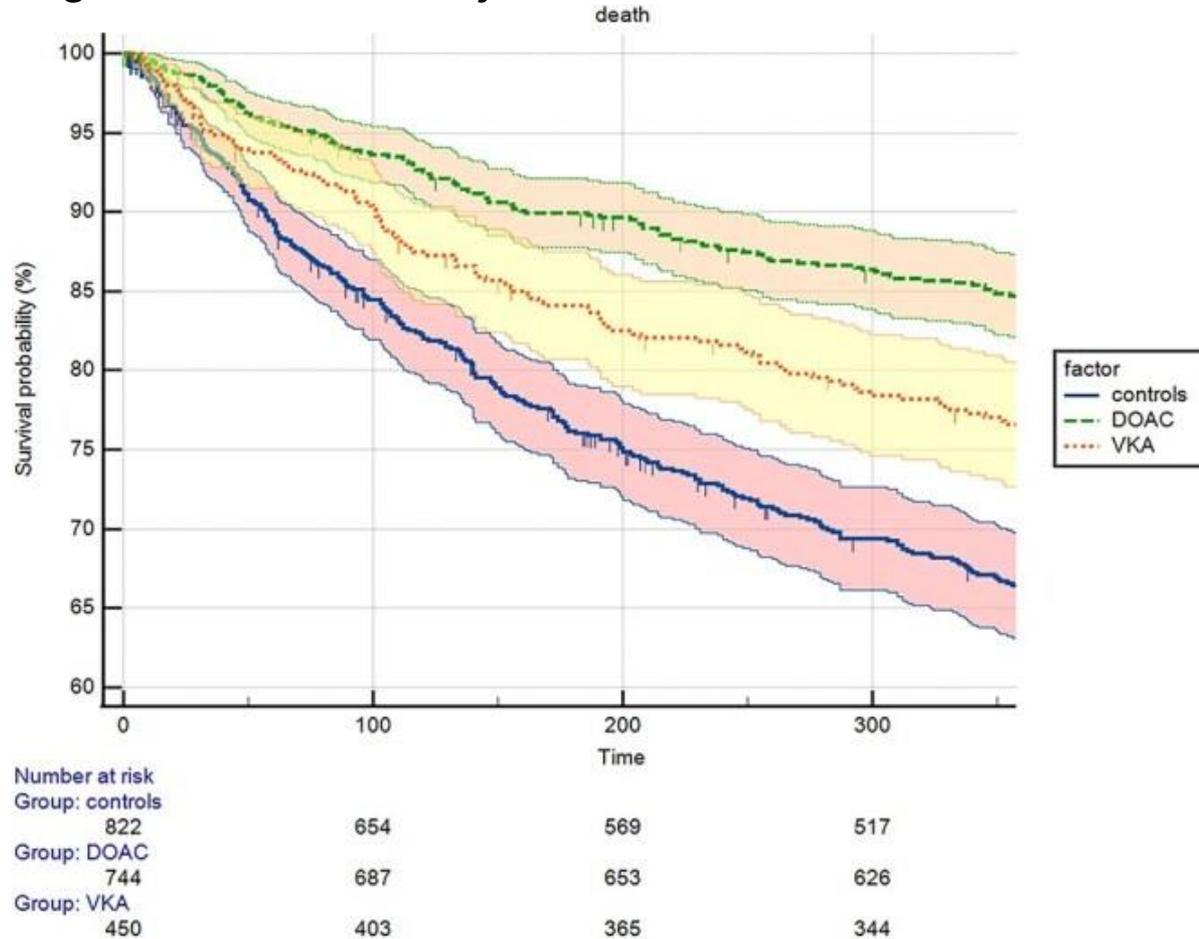
The observed hazard ratios comparing AF patients and controls were most pronounced among the younger group (aged ≤50 years at diagnosis)



Differences in predicted survival among AF patients and controls showed a large reduction in life expectancy among especially younger patients



Frailty and anticoagulants in older subjects with atrial fibrillation: the EUROSAF study



les AOD, sont associé à une réduction de la mortalité indépendamment de l'état de fragilité des patients, sans augmentation significative des événements hémorragiques incidents

La prise en charge du trouble du rythme

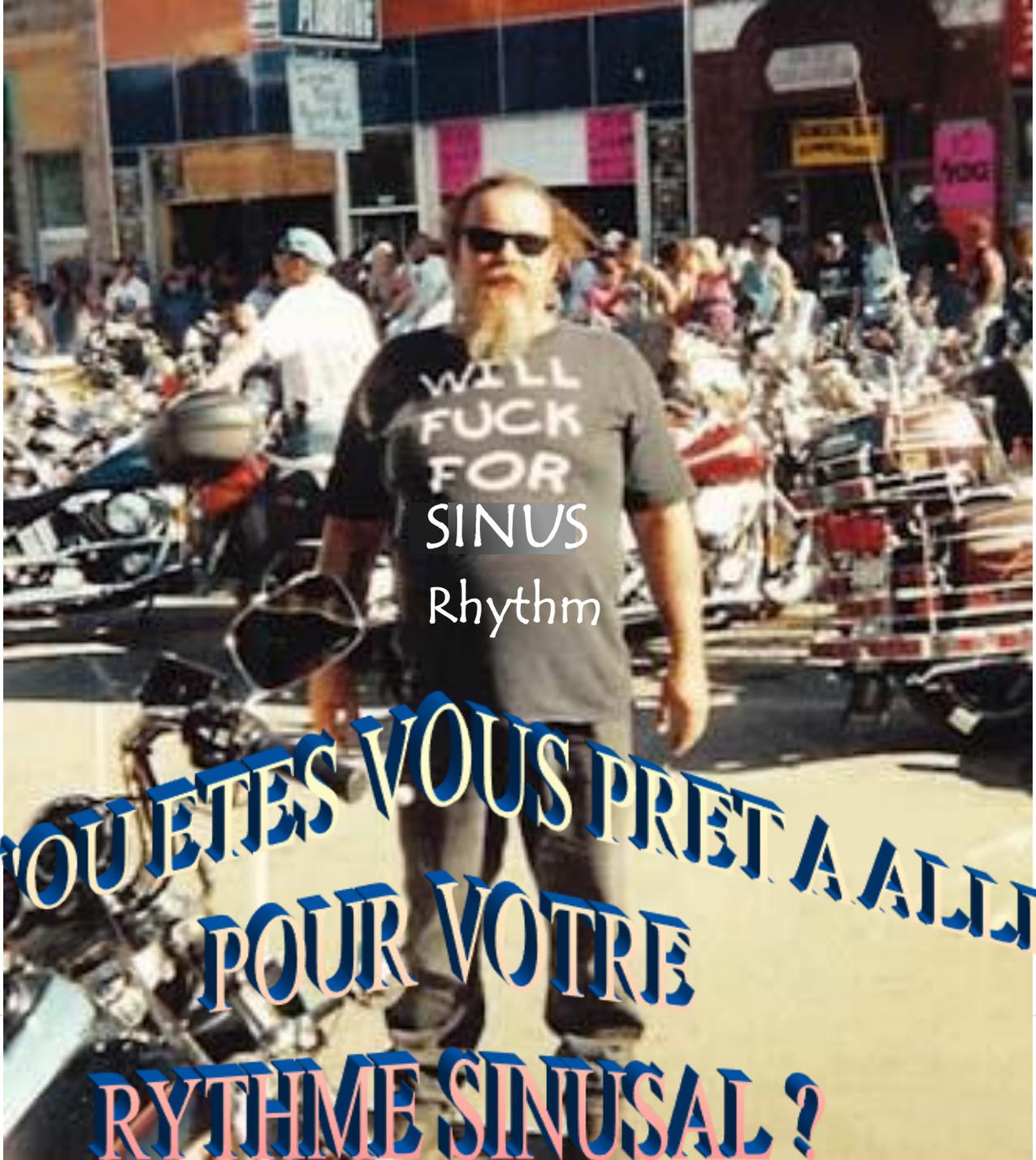
Que proposer au patient pour son arythmie ?

- **Contrôle du rythme**

- Je restaure un rythme sinusal

- **Contrôle de fréquence**

- Je laisse le patient en FA et contrôle sa fréquence cardiaque
-

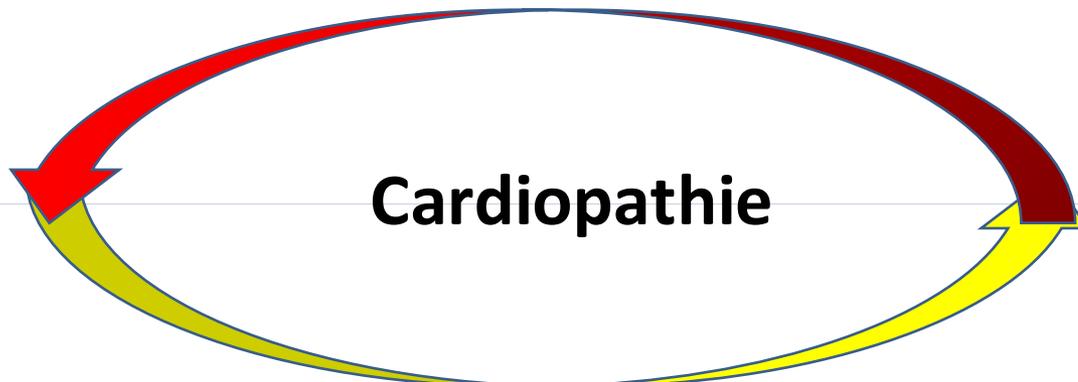
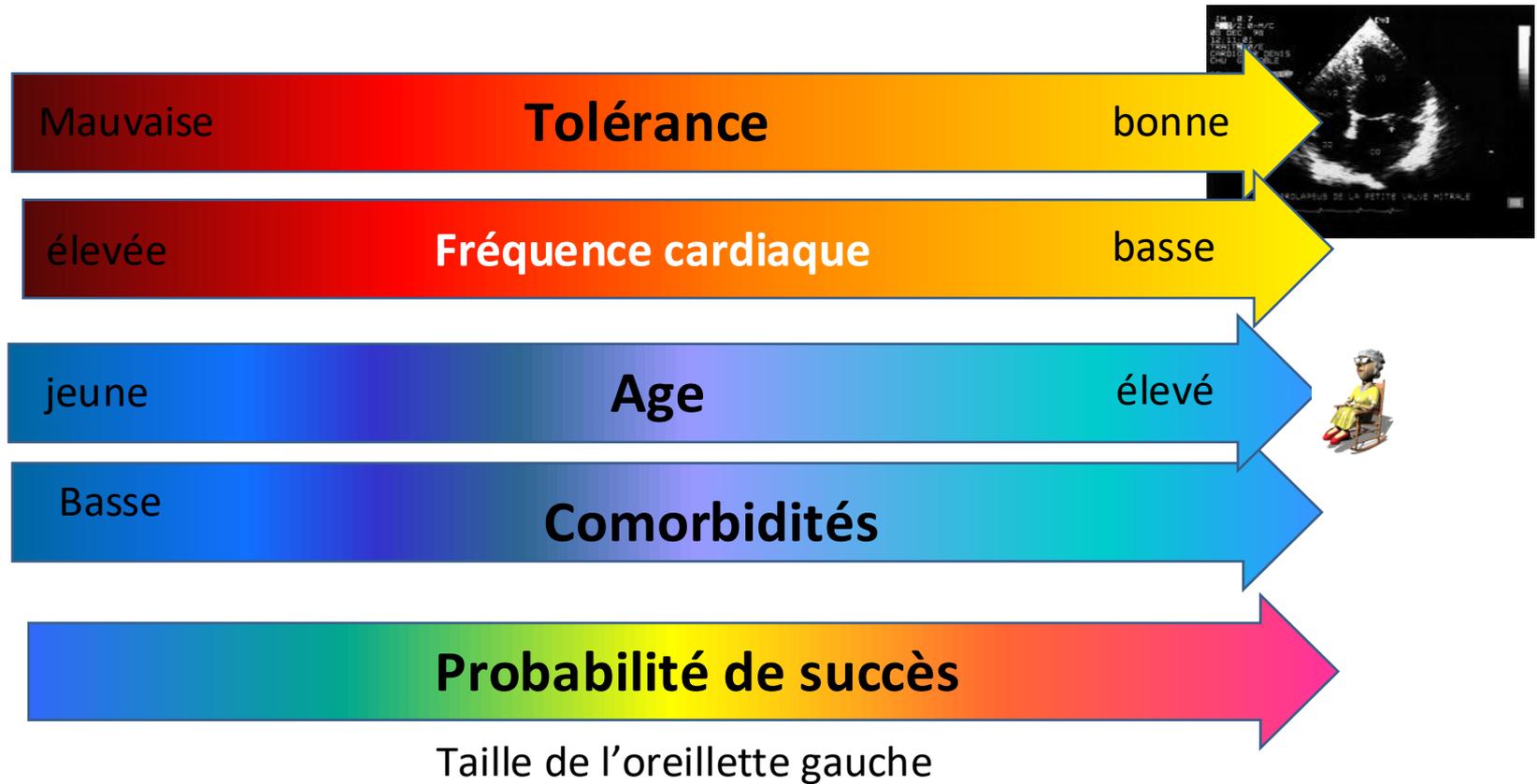


WILL
FUCK
FOR
SINUS
Rhythm

JUSQU'OU ETES VOUS PRET A ALLER
POUR VOTRE
RYTHME SINUSAL ?

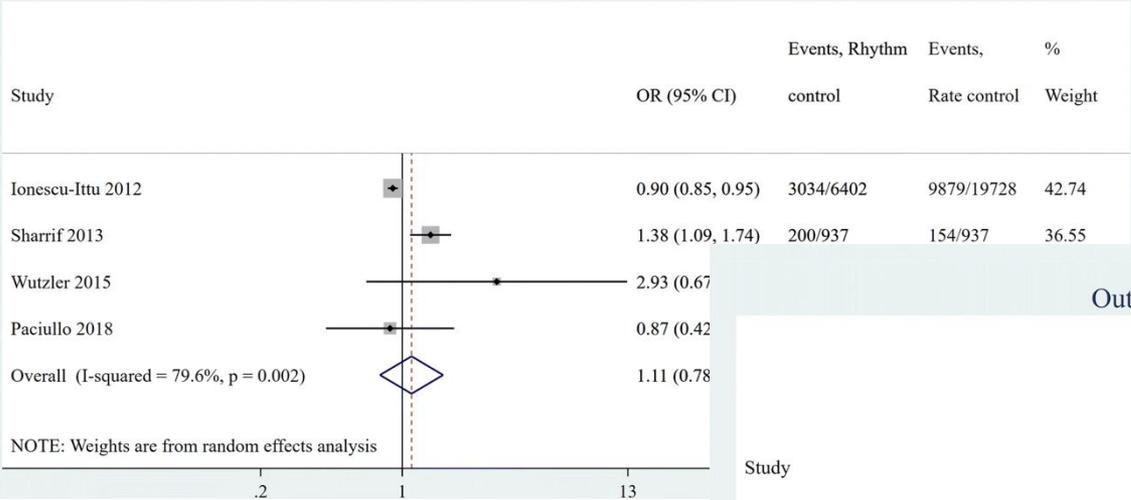
Controle du rythme

Controle de fréquence

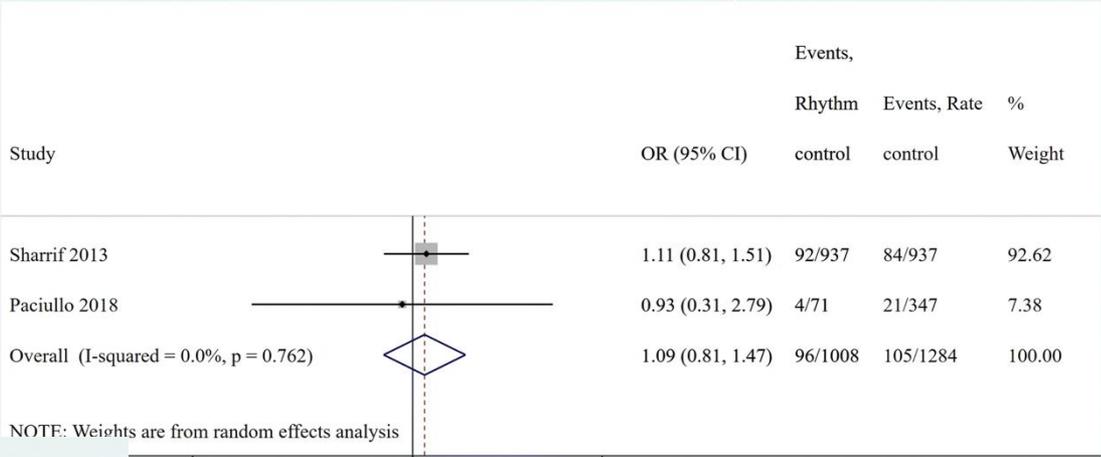


Clinical Outcomes of Rate vs Rhythm Control for Atrial Fibrillation in Older People: A Systematic Review and Meta-Analysis

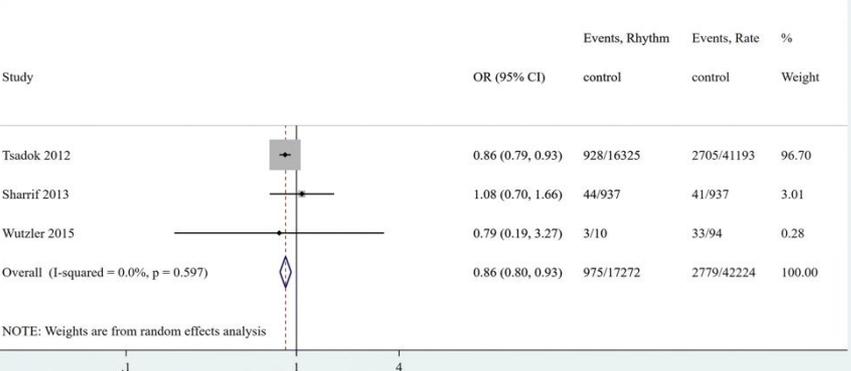
Outcome: all-cause mortality



Outcome: cardiovascular mortality



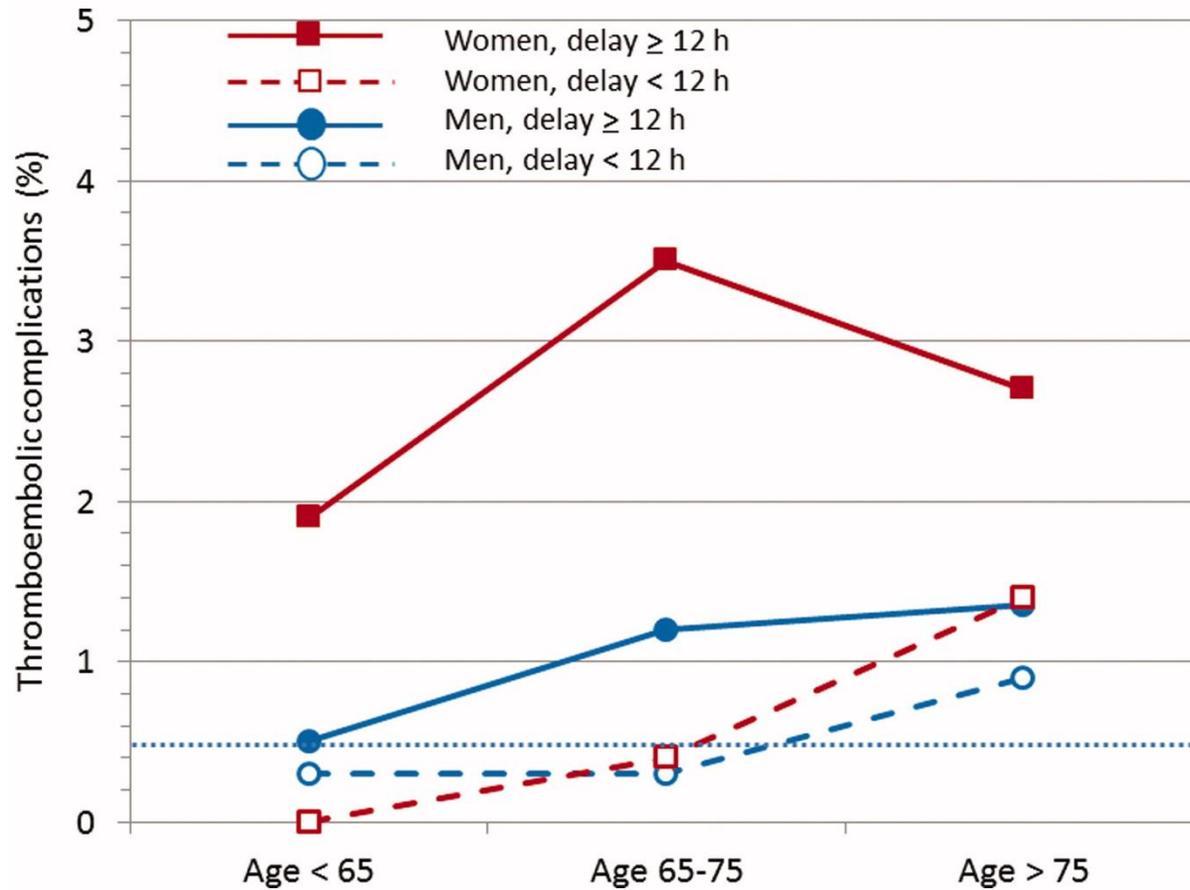
Outcome: TIA or Stroke



**Chez la personne âgée
On a le choix !**

On a rien sans risque

Thromboembolic complications, sex, age, and time to cardioversion



Electrical Cardioversion of Atrial Fibrillation and the Risk of Brady-Arrhythmic Events



What is the risk of brady-arrhythmic complications in patients with atrial fibrillation undergoing non-emergent electrical cardioversion ?



Nationwide study population of 20,725 patients undergoing their first non-emergent electrical cardioversion between 2005 and 2018

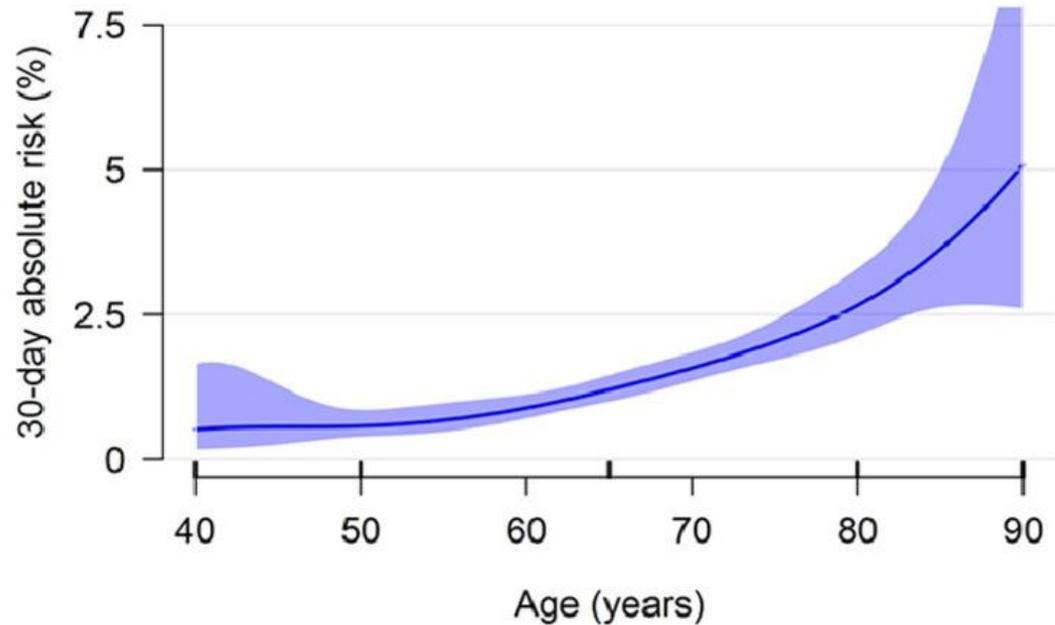


Primary outcome of brady-arrhythmic complications measured as a diagnosis of bradycardia or pacemaker implantation.



Electrical cardioversion conferred clinically relevant risks of brady-arrhythmic events, especially in older patients.

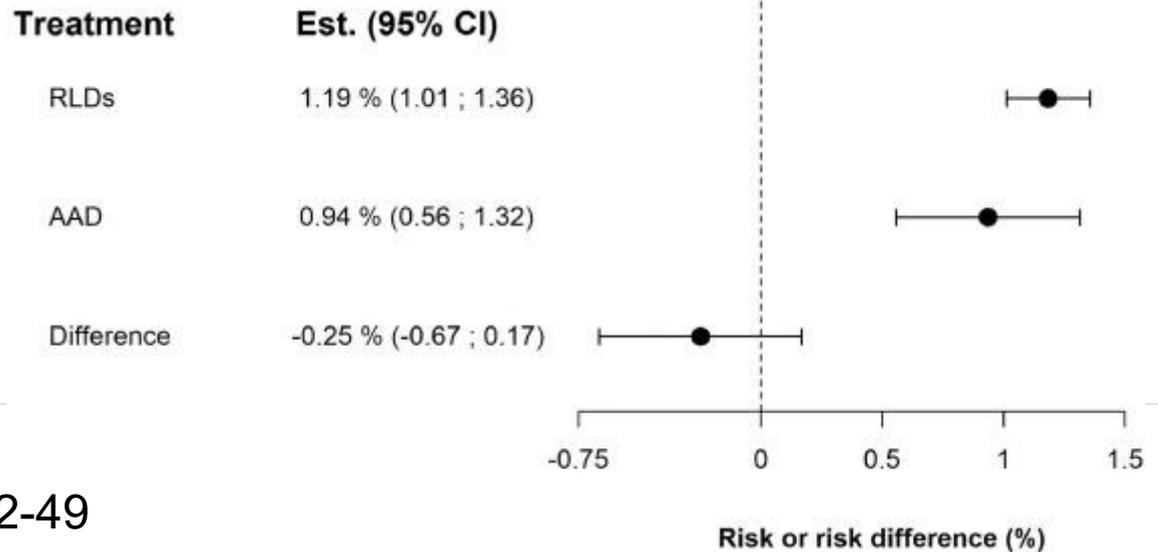
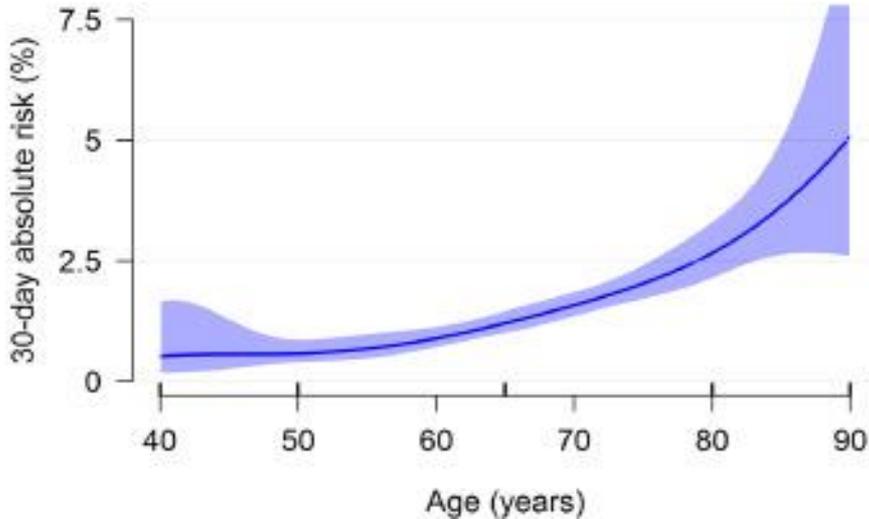
Figure: Absolute risk of brady-arrhythmic complications after electrical cardioversion of atrial fibrillation by age



The x-axis depicts age continuously in years and the y-axis depicts the absolute risk of brady-arrhythmic events in percentage (%) with 95% confidence intervals (95% CI)

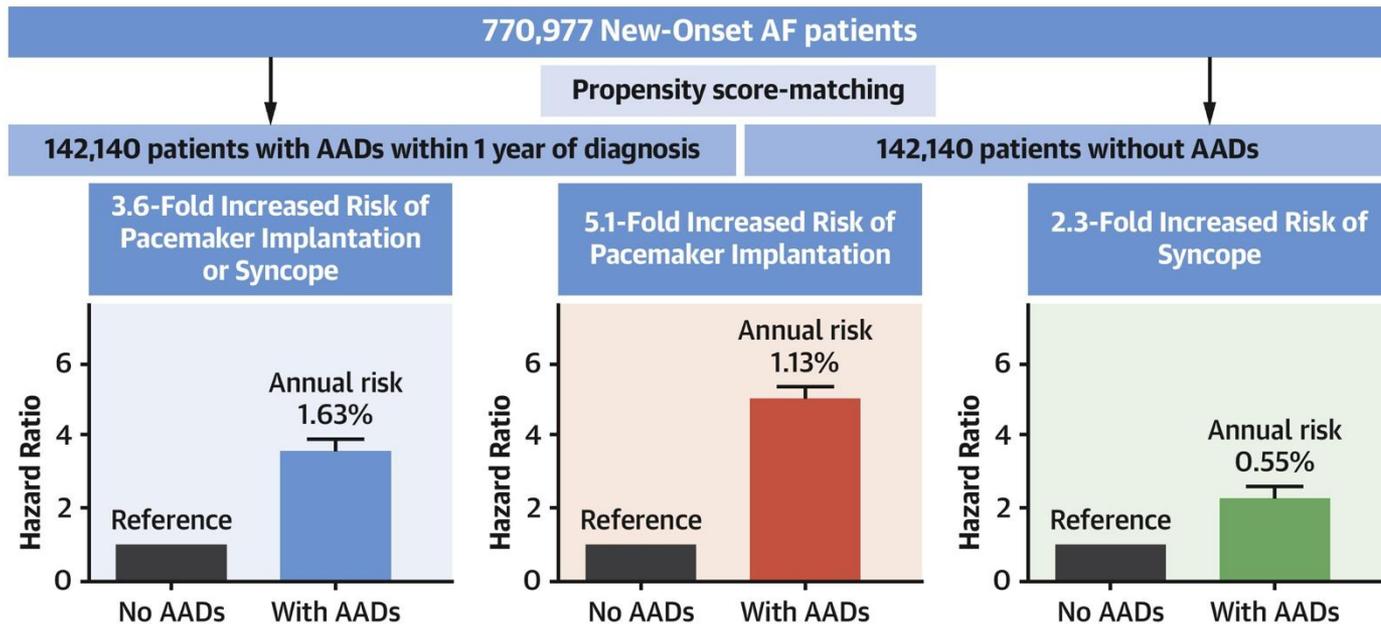
Electrical cardioversion of atrial fibrillation and the risk of brady-arrhythmic events

Danish nationwide registers 20,725 eligible patients with a median age of 66 years (IQR 60-72)



Association of Antiarrhythmic Drug Therapy With Syncope and Pacemaker Implantation in Patients With Atrial Fibrillation

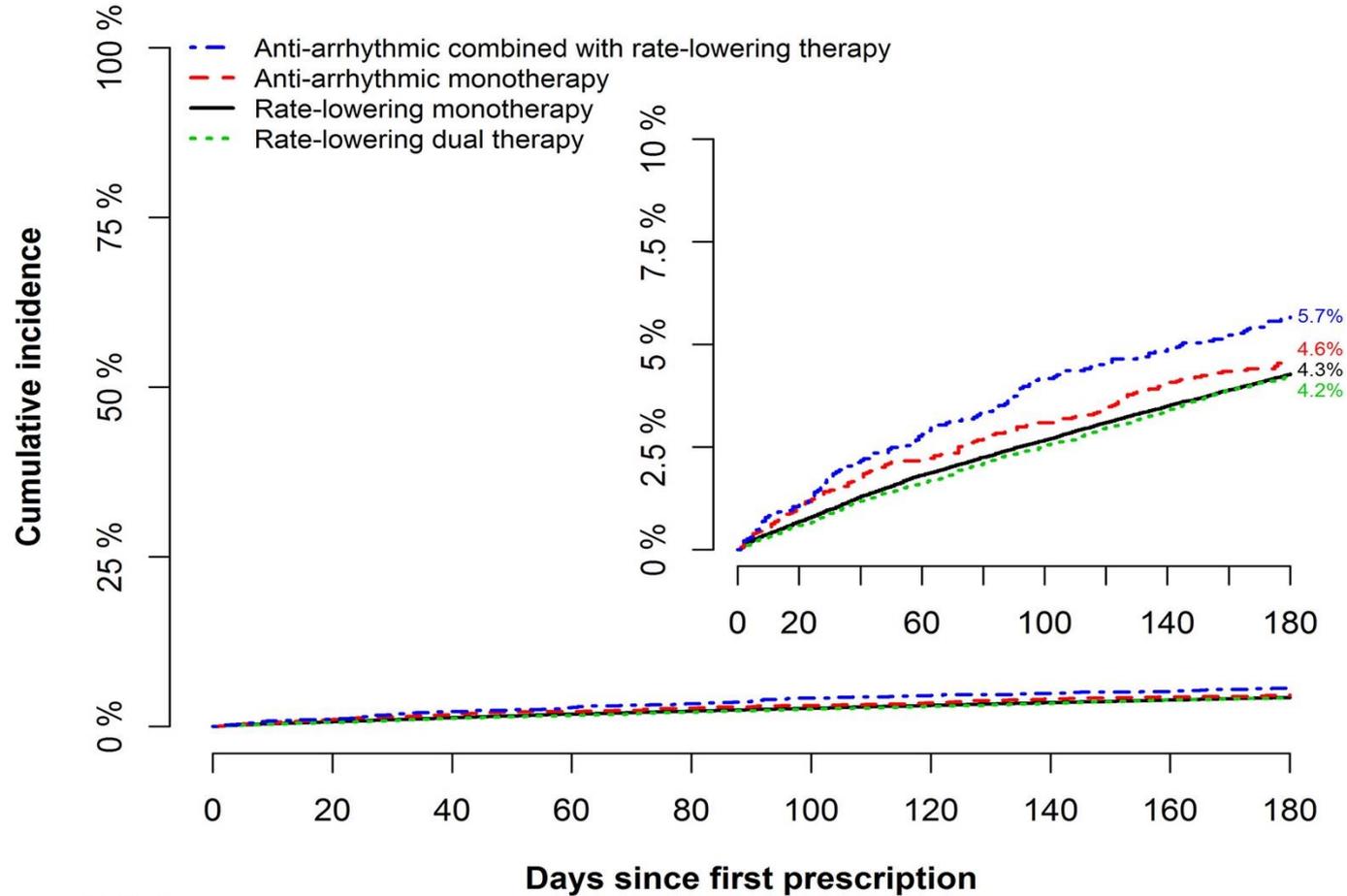
CENTRAL ILLUSTRATION: Adverse Effects of Antiarrhythmic Drugs



Kim YG, et al. J Am Coll Cardiol. 2024;83(11):1027-1038.

Rate or Rhythm Control in Older Atrial Fibrillation Patients: Risk of Fall-Related Injuries and Syncope

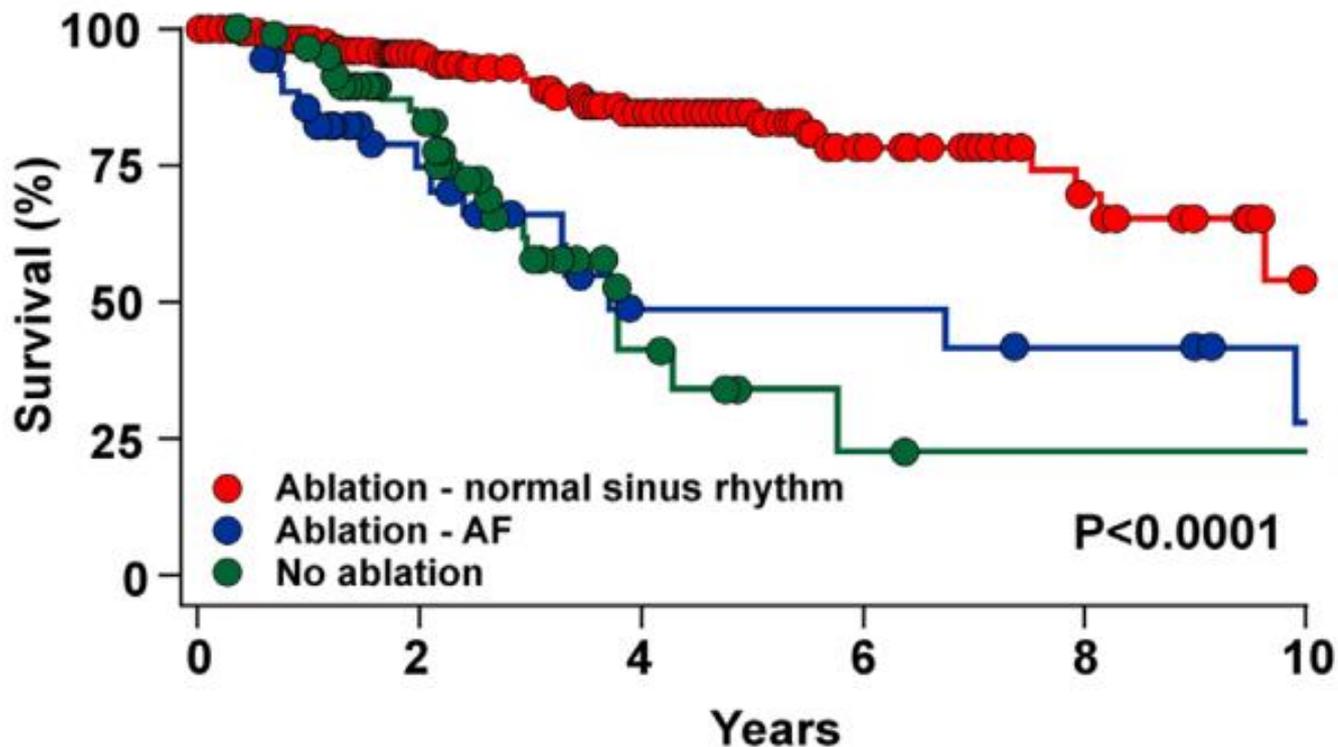
Cumulative incidence of fall-related injury or syncope (composite)



At Risk	0	20	40	60	80	100	120	140	160	180
RLD monotherapy:	77639	72020	68911	66522						
AAD monotherapy:	3384	3096	2947	2855						
RLD dual therapy:	17590	15977	15090	14489						
AAD combined with RLD:	2322	2107	1995	1925						

Benefits and risks of catheter ablation in elderly patients with atrial fibrillation

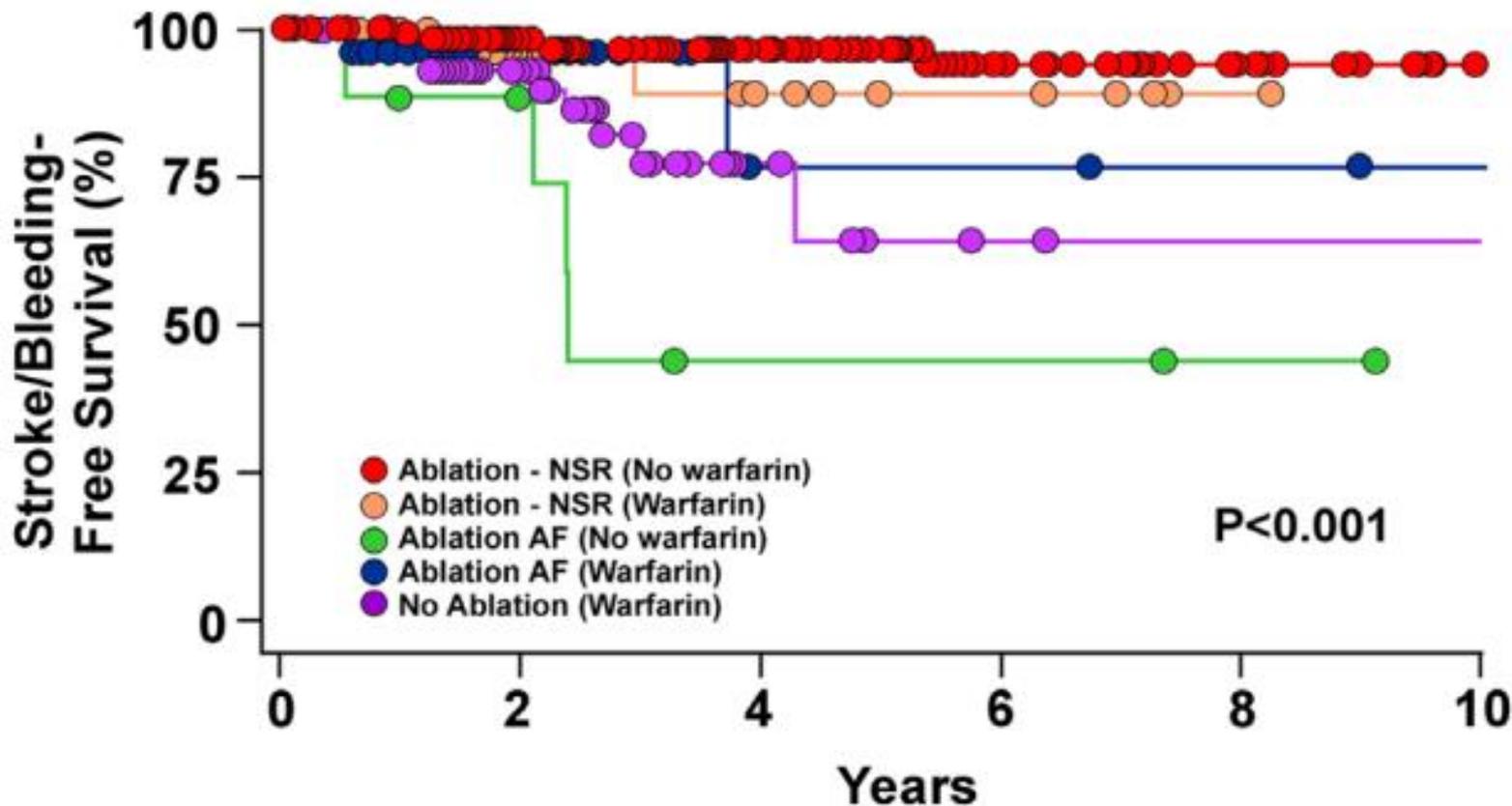
79±4 ans



	0	2	4	6	8	10
# Left	216	117	69	33	15	4
in	45	18	7	7	7	5
Study	63	37	7	2	1	1

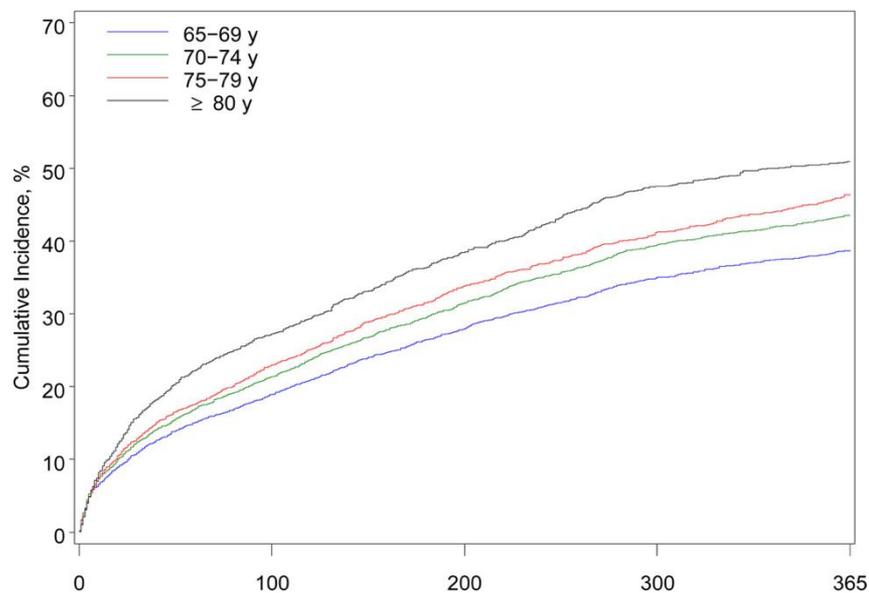
Benefits and risks of catheter ablation in elderly patients with atrial fibrillation

79±4 ans

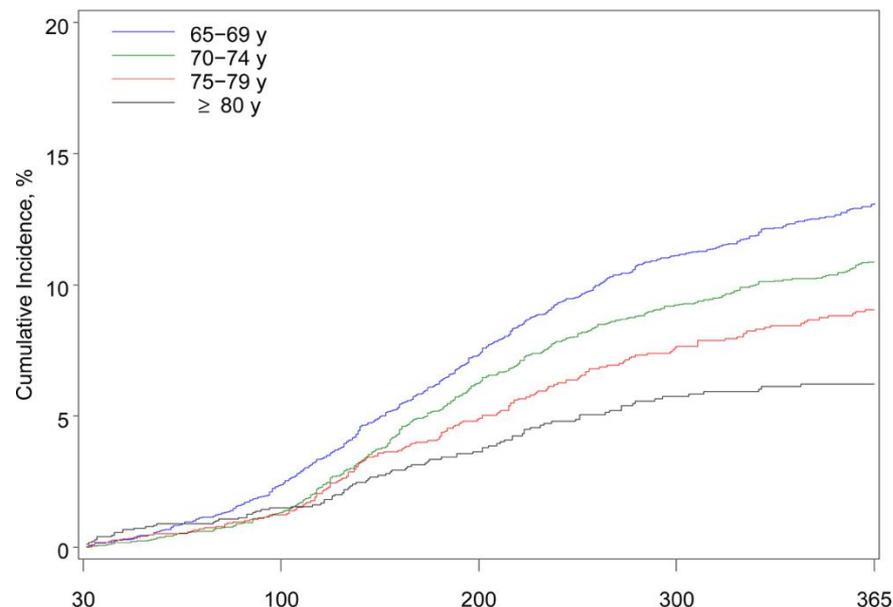


Outcomes of Medicare Beneficiaries Undergoing Catheter Ablation for AF

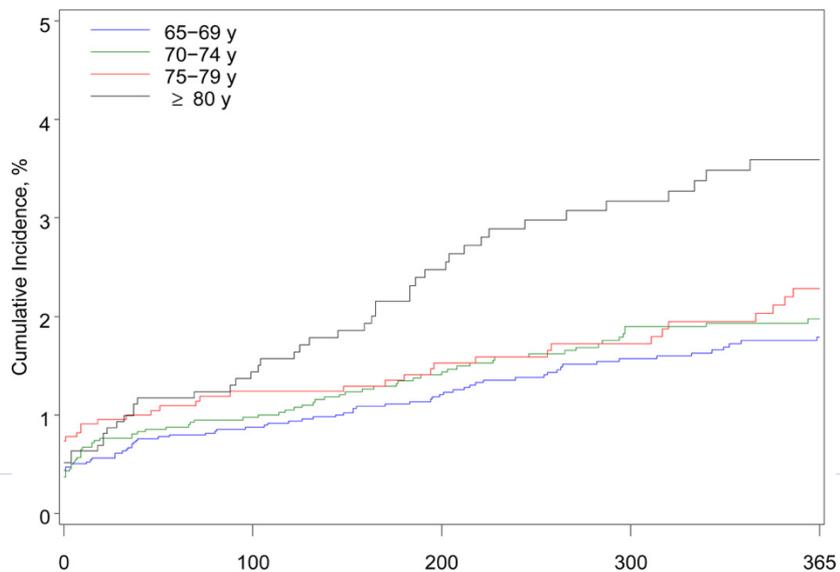
New Hospitalization



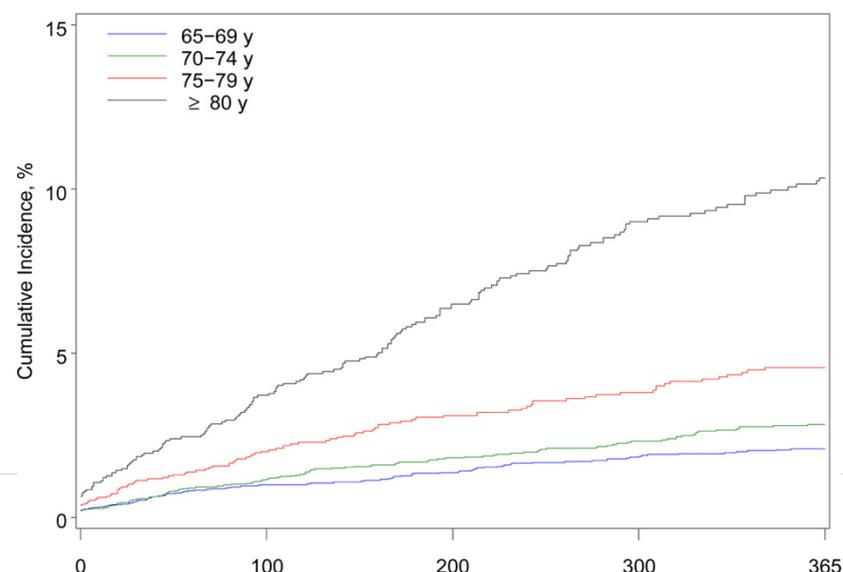
Repeat Ablation



Stroke



All-Cause Mortality



Stroke

En conclusion dans la grande majorité des cas, le rythme sinusal n'est pas notre objectif les patients âgés !

CENTRAL ILLUSTRATION: The Management of Older Patients With Atrial Fibrillation

Primary and Secondary Prevention

- Opportunistic screening
- Weight loss efforts
- Physical activity
- Decrease alcohol intake
- Management of HTN and DM



Avoiding Adverse Drug Reactions

- Assistance of pharmacologists to assess drug-drug interactions and appropriate dosing
- Ensure serum digoxin concentration <1.2 ng/ml
- Syncope and falls/injuries are higher with use of AAD, especially amiodarone



Management of Older Patients with Atrial Fibrillation

Reduction of Stroke Risk

- Opportunistic screening?
- Use guideline-directed risk scores for stroke prevention and bleeding
- Avoid underprescribing of OAC



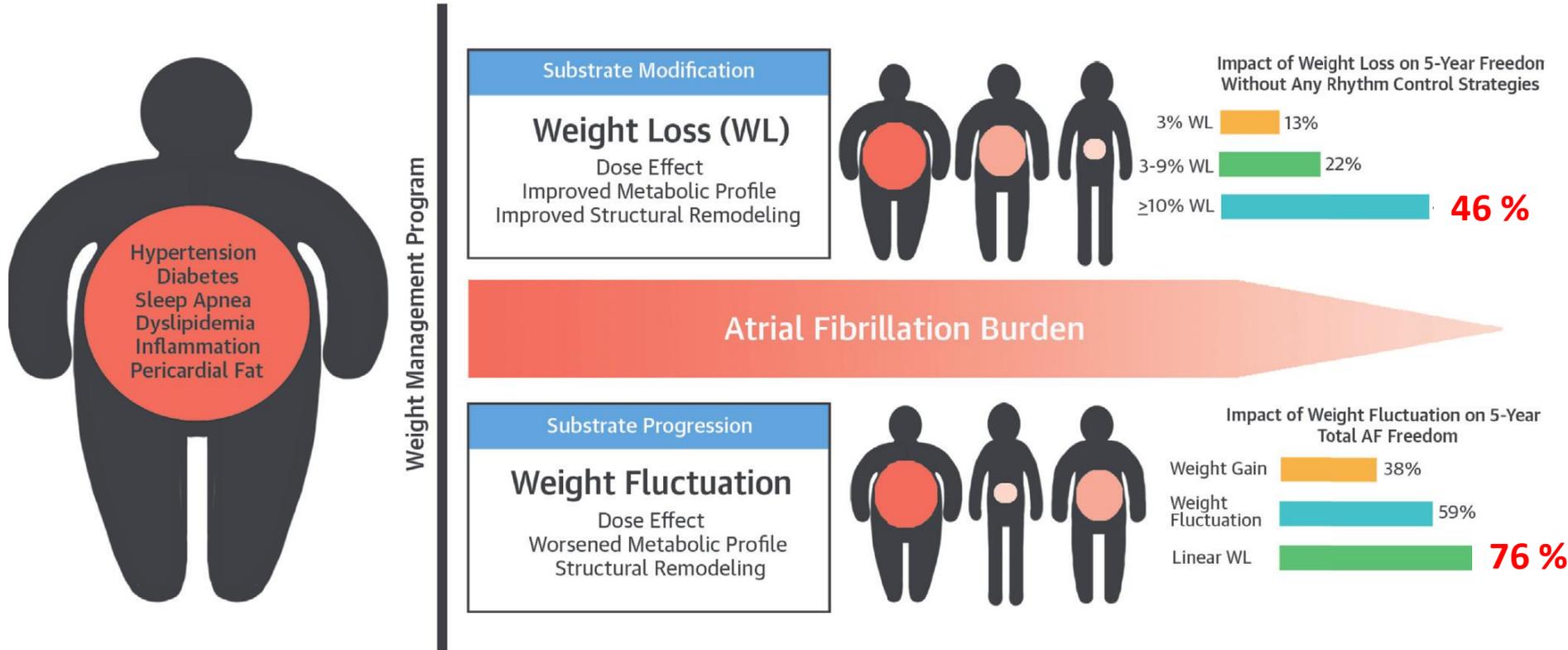
Reduction of Bleeding Risk

- Assessment of modifiable bleeding risk factors
- Occupational and physical therapists to identify ways to avoid falls
- Strength training and balancing is vital
- If patient needs DAPT and OAC, use DAPT for the shortest time necessary

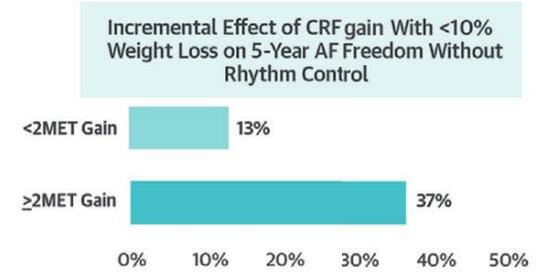
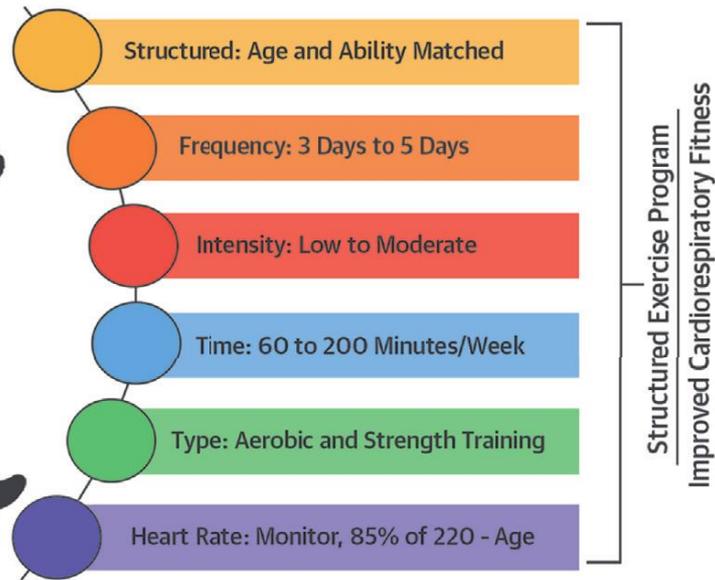


Volgman, A.S. et al. J Am Coll Cardiol. 2022;79(2):166-179.

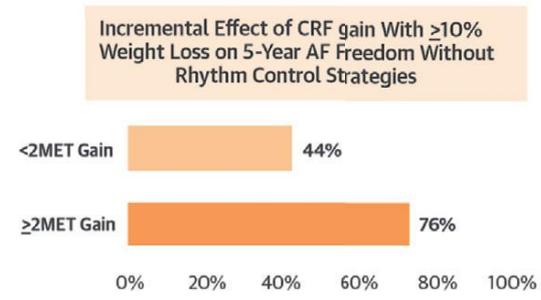
Weight Management and Atrial Fibrillation



Cardiorespiratory Fitness and AF Recurrence: CARDIO-FIT trial



Atrial Fibrillation Burden



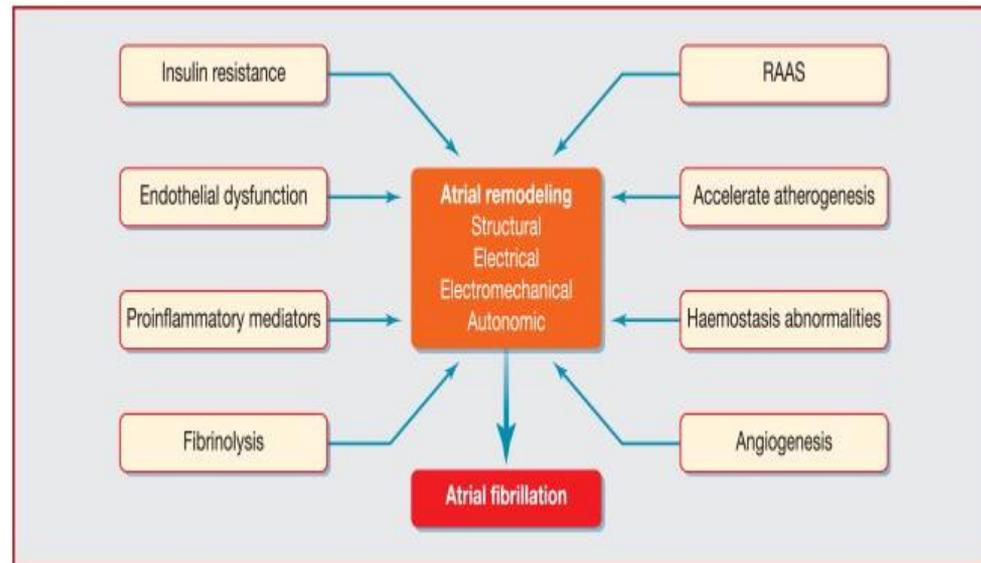
Sport pour tous ?

JEAN CLAUDE AURAIT DÛ COMPRENDRE DÈS LES PREMIÈRES FOULÉES QU'IL N'AVAIT PAS UN PHYSIQUE PRÉDISPOSÉ À LA COURSE À PIED...MAIS NON...



Diabète

Characteristic/comorbidity	Association with AF
Diabetes mellitus vs. none ¹⁹	HR 1.25 (95% CI 0.98–1.60)



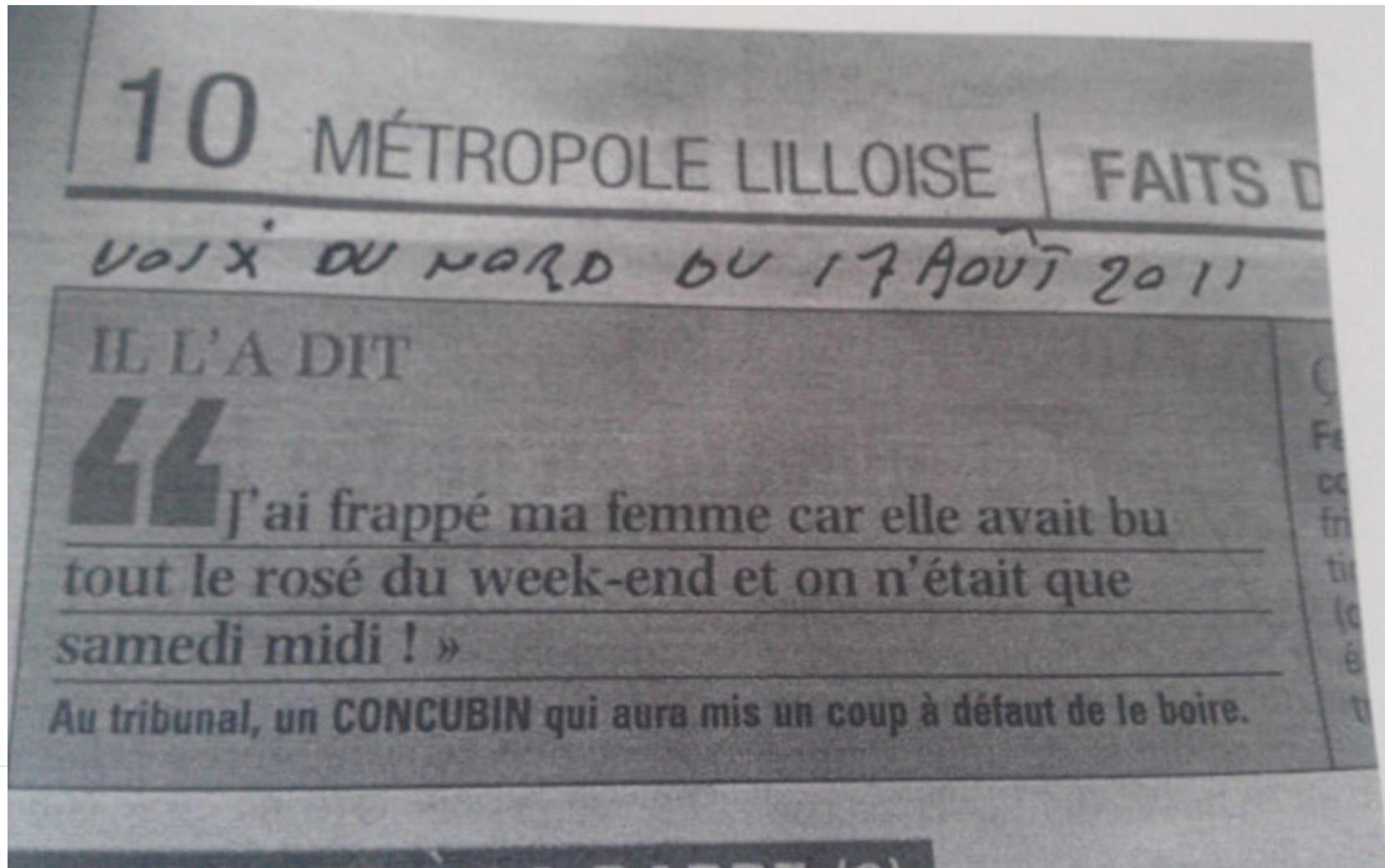
- Lien de causalité difficile à démontrer (facteurs confondants)
- Etudes thérapeutiques contradictoires
- Surisque embolique

Obstructive Sleep Apnea (OSA)



Un nouveau type d'apnée du sommeil

Acute and chronic alcohol consumption



Mr Mer C 84 ans

- 90 kg 1m74
- HTA équilibrée par IEC et bisoprolol 5 mg
- IDM inférieur il y a 20 ans (stent CD)
- Suivi annuellement avec echo : FE 56 % OG :27 cm2
- Hospitalisé il y 9 semaines pour Covid avec passage en FA rapide 120 bpm initialement; toujours en FA : 94 bpm FE 48%
- Xarelto 20 mg depuis découverte FA

- 1) Contrôle de fréquence
 - 2) CEE + amiodarone
 - 3) CEE + ablation FA
 - 4) CEE et surveillance Holter
-

Marinette 78 ans

- Agricultrice jamais malade
- 77 kg pour 1m74
- Continue à aider son fils à la ferme
- Dyspnéique et moins bien depuis 3 semaines
- Hospitalisée pour choc cardiogénique FE 22% OG : 29 cm²
- FA: 120 bpm

1) Contrôle de fréquence

2) CEE + amiodarone

3) CEE + ablation FA

4) CEE et surveillance Holter

Josette 81 ans

- 112 kg 1m51
- Diabète non équilibré hémoglobine glyquée: 8,4%
- TA: 148/92
- Plus dyspnéique depuis 4 jours et OMI
- FA: 112 bpm
- FE: 48% OG: 30cm²

1) Contrôle de fréquence

2) CEE + amiodarone

3) CEE + ablation FA

4) CEE et surveillance Holter

Summary of recommendations for atrial fibrillation (AF) lifestyle interventions.



Fit and functional

Recommend obesity prevention, weight loss, moderate physical activity, normotension, and avoidance of alcohol



Multimorbid or frail

Shared decision making, as likely to have benefits beyond AF



End of life

Recommend only if it brings comfort/palliates symptoms

Summary of recommendations for rate and rhythm control in older adults with atrial fibrillation (AF).



Fit and functional

Rhythm control

- For symptoms
- For AF diagnosed in previous year
- To prolong survival

Catheter ablation

- When AADs are ineffective, contraindicated, not tolerated, or not preferred
- First line for symptoms and to reduce AF progression



Multimorbid or frail

Rhythm control

- For heart failure
- For reduced LVEF
- To improve quality of life

Catheter ablation

- Individualized decision based on life expectancy, comorbidities, and symptoms



End of life

Rhythm control

- Only to relieve significant symptoms

Catheter ablation

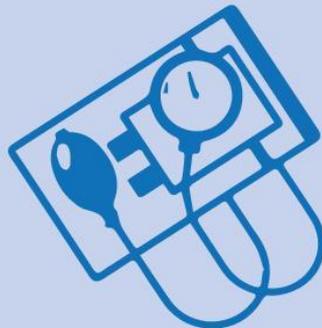
- Not appropriate

Modifiable risk factors for bleeding in older adults on anticoagulants.

1. De-prescribing unnecessary antiplatelet medication



2. Controlling hypertension



3. Minimizing NSAIDs



4. Consider proton pump inhibitors



Summary of recommendations for anticoagulation in older adults with atrial fibrillation.



Fit and functional

- DOACs rather than warfarin for most patients unless stable on warfarin; apixiban may be favored
- Mitigate reversible bleeding risks



Multimorbid or frail

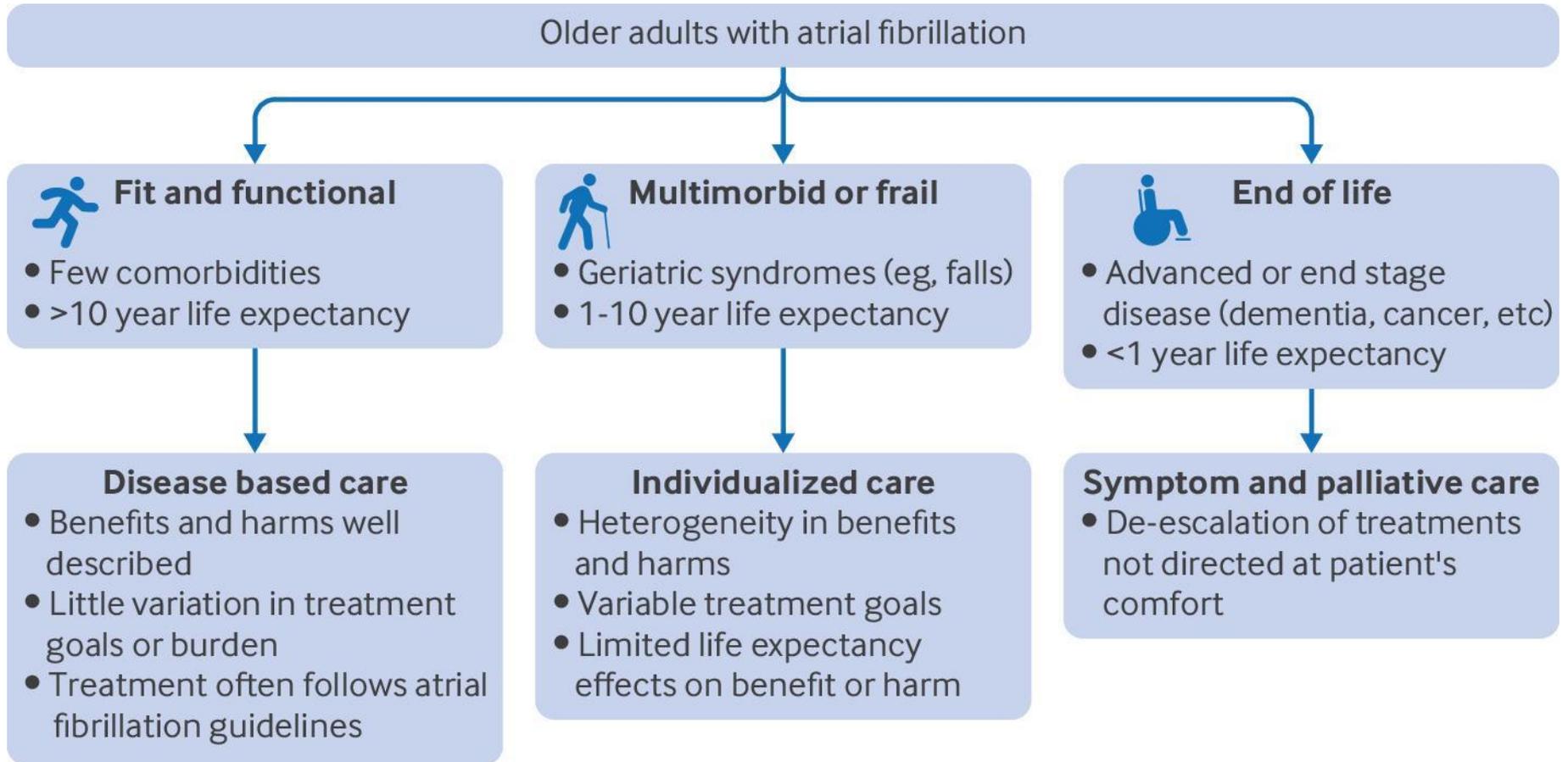
- Shared decision making, as benefit diminishes with age
- Mitigate reversible bleeding risks



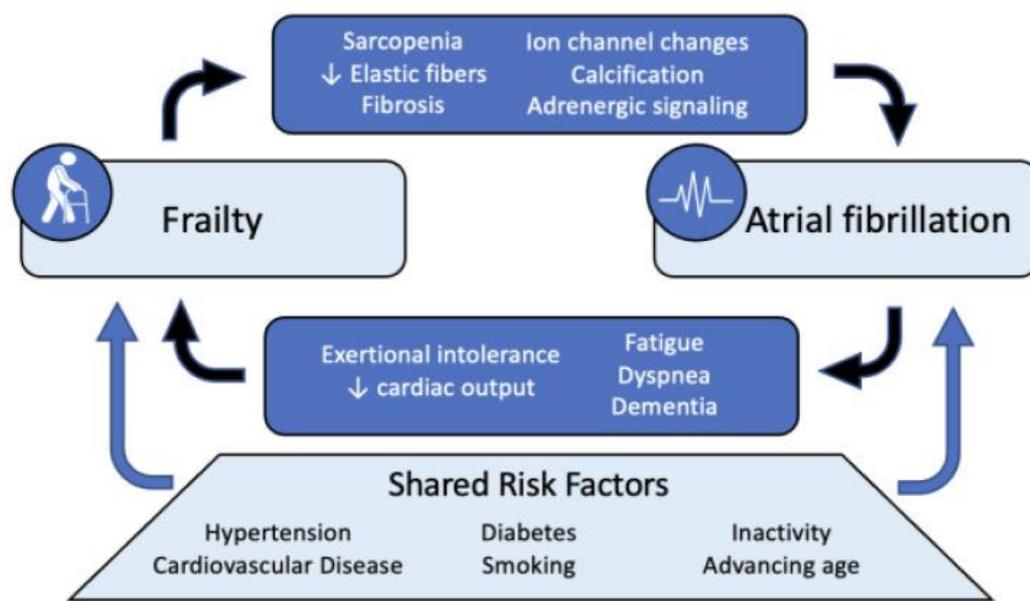
End of life

- Harms likely outweigh benefits
- Mitigate reversible bleeding risks

Proposed approach to tailor clinical management of atrial fibrillation (AF) to older adults.



A.



B.

