CARDIO RUN 2025

17ème CONGRÈS DE PATHOLOGIE CARDIO-VASCULAIRE

17-18-19 SEPTEMBRE 2025

Hôtel Saint Alexis ILE DE LA RÉUNION France

Frédéric Lapostolle

SAMU 93, UF Recherche - Enseignement

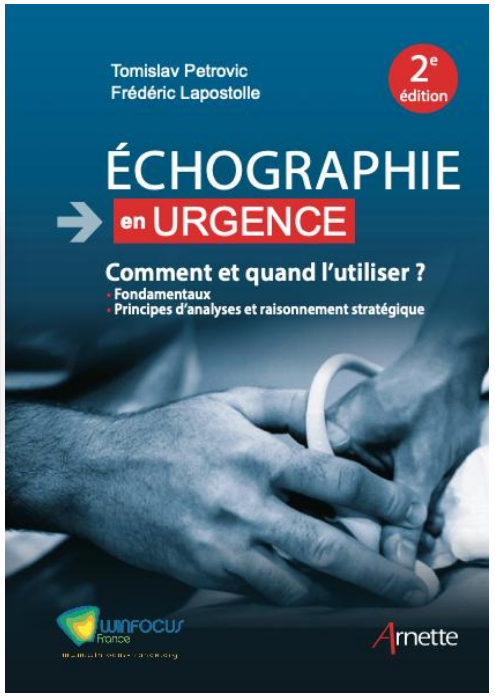
Hôpital Avicenne & Université Paris 13, Bobigny

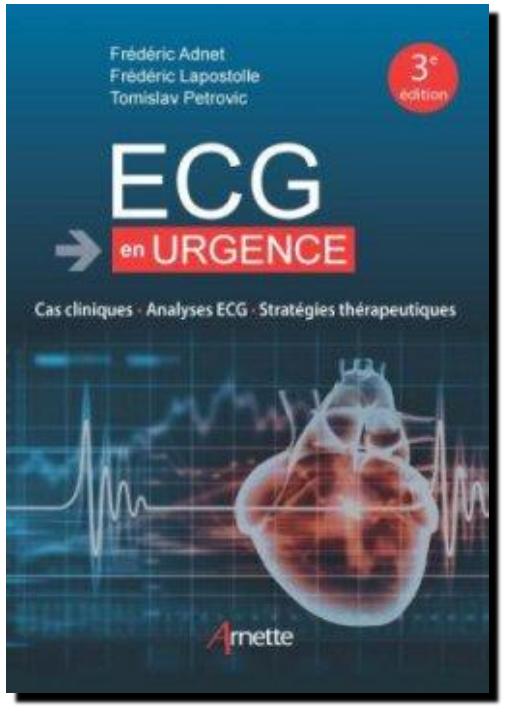
Hôpitaux Universitaires Avicenne Jean-Verdier René-Muret Paris-Seine Saint-Denis

Disclosures

Partenariat recherche : Mundipharma, Serb, Teleflex

FORMATION SANTÉ EDUPRAT





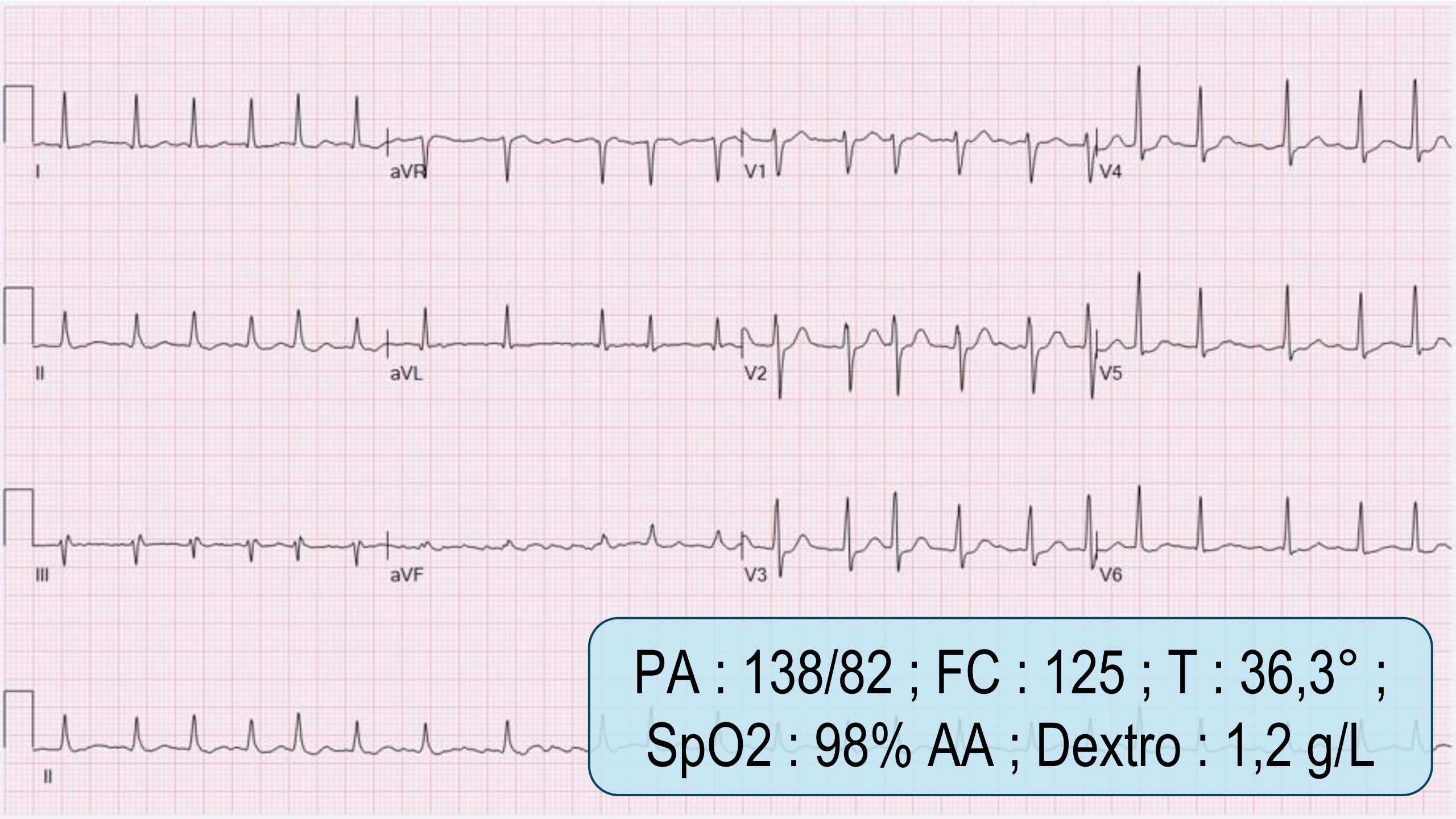
🚹 66 ans – HTA, UGD

Consultation samedi matin :

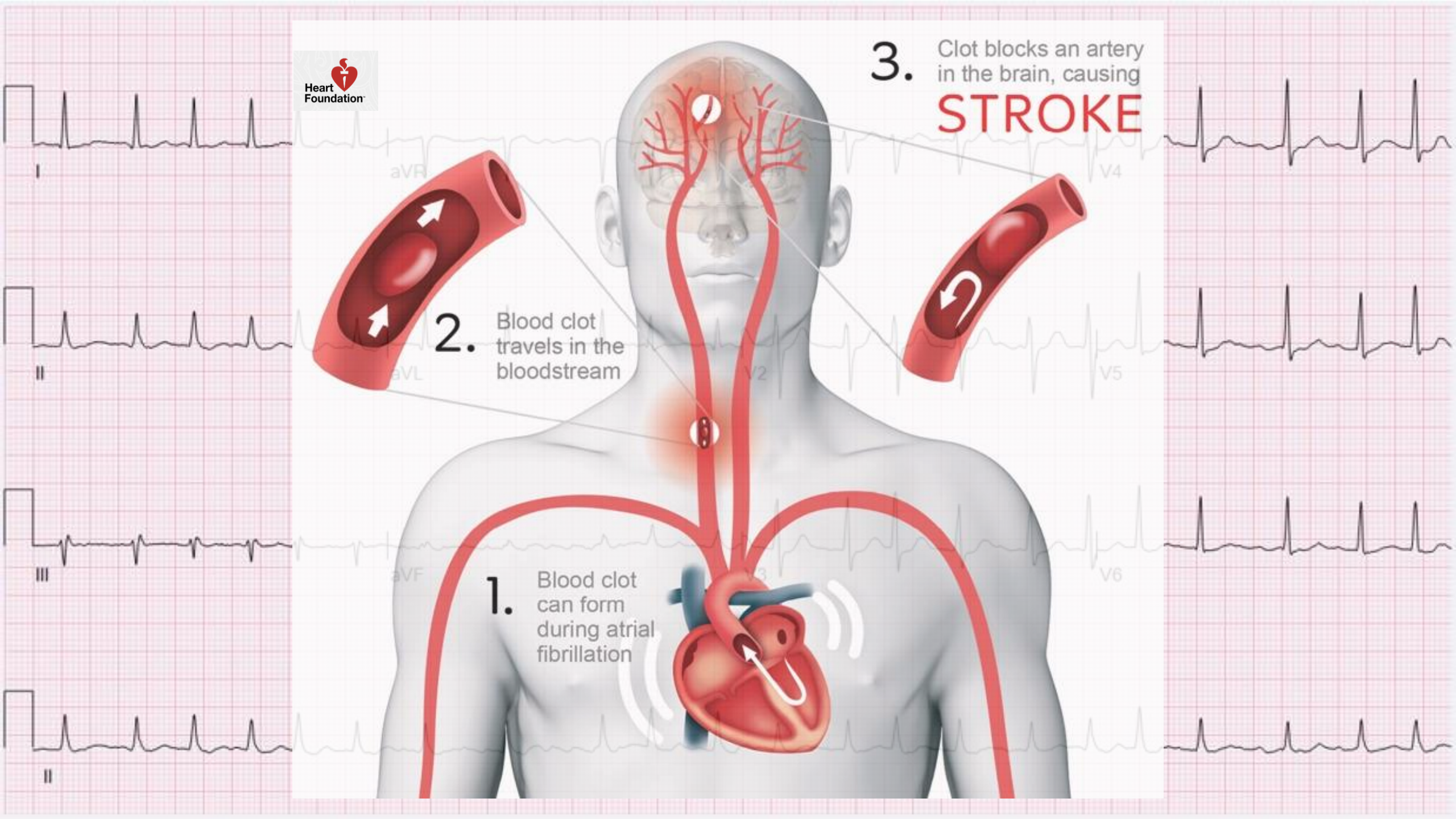
palpitations, malaise, faiblesse générale

« Il a pris une cuite hier,

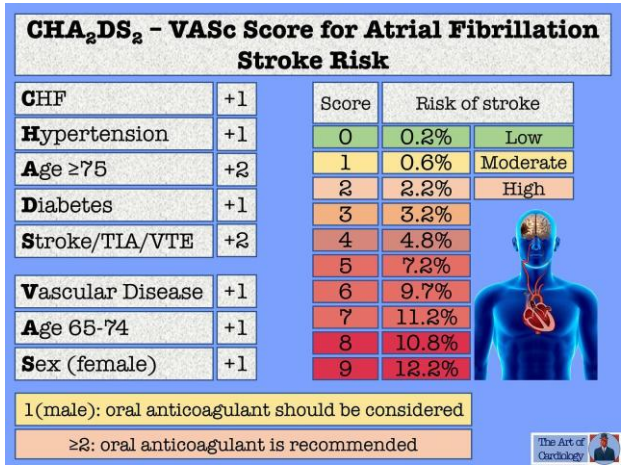
comme tous les week-ends »



PA : 138/82 ; FC : 125 ; T : 36,3° ;
SpO2 : 98% AA ; Dextro : 1,2 g/L


Heart Foundation
3. Clot blocks an artery in the brain, causing STROKE
2. Blood clot travels in the bloodstream
1. Blood clot can form during atrial fibrillation

CHADS2 – VASc Score		
C	Congestive Heart Failure	1
H	Hypertension (>140/90 mmHg)	1
A	Age ≥ 75	2
D	Diabetes Mellitus	1
S_2	Prior TIA or stroke	2
V	Vascular disease (MI, aortic plaque etc)	1
A	Age 65-74	1
Sc	Sex category (Female = 1 pt)	1



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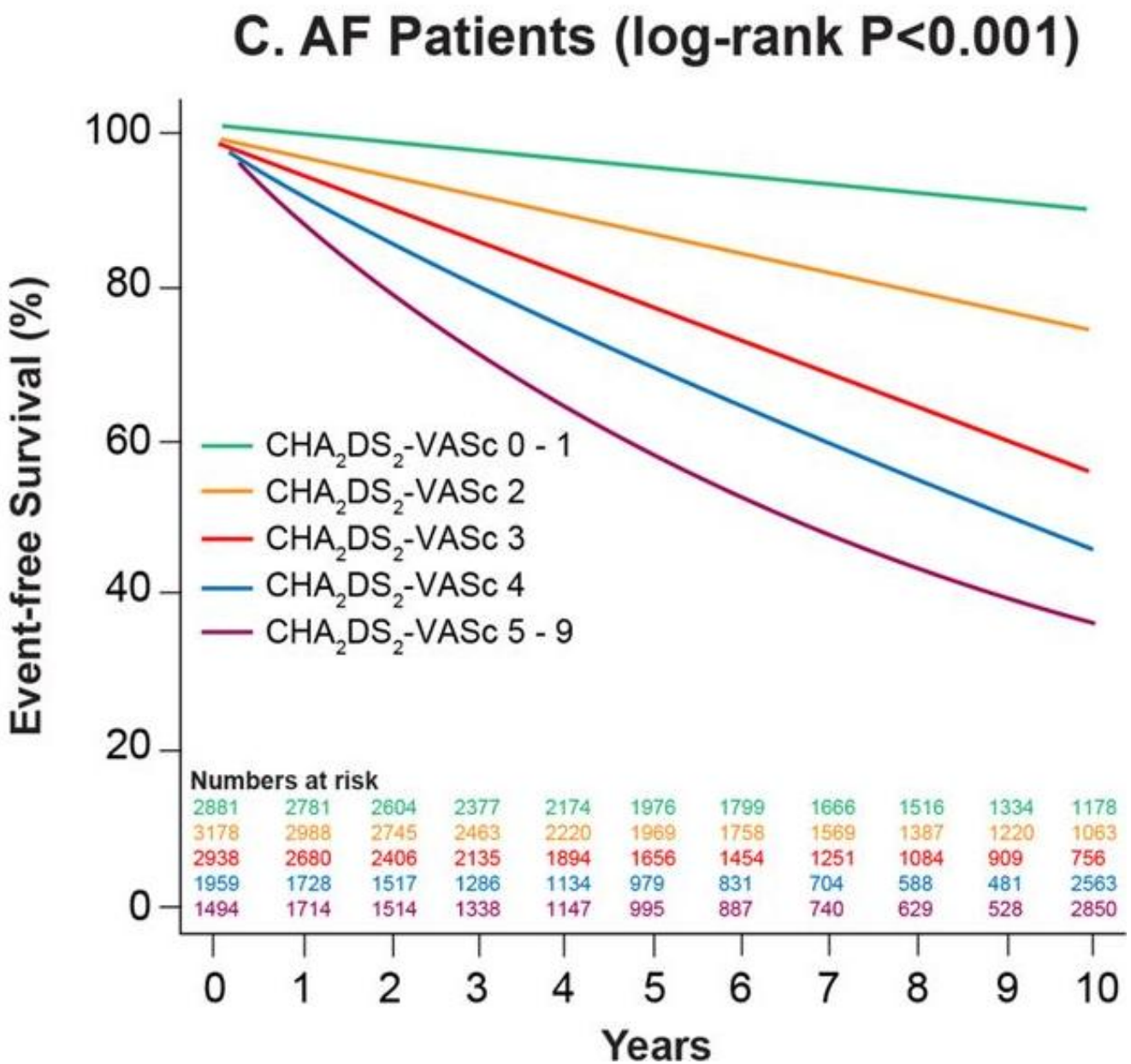

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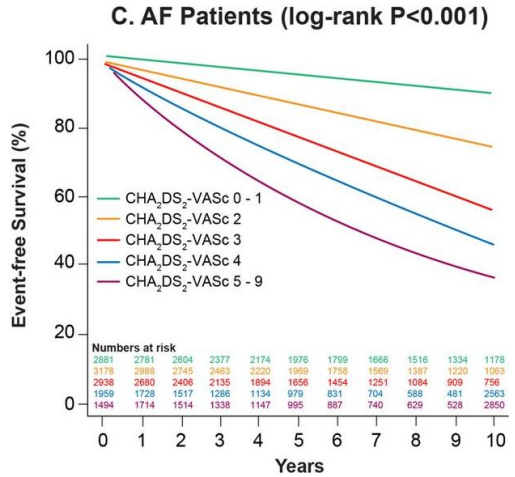
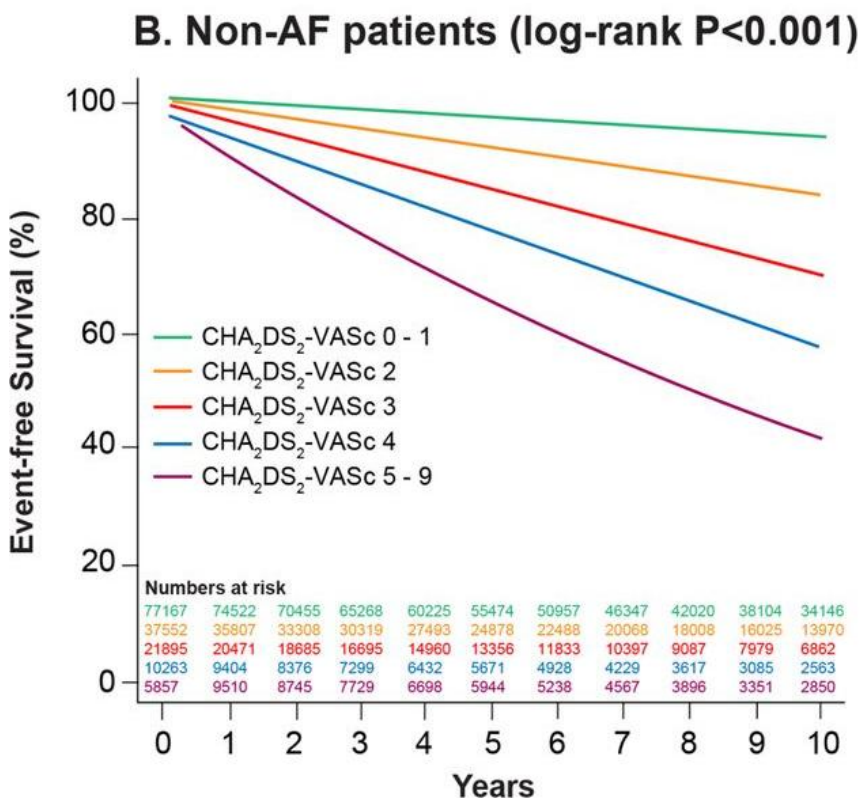
Harb, BMJ Open, 2021





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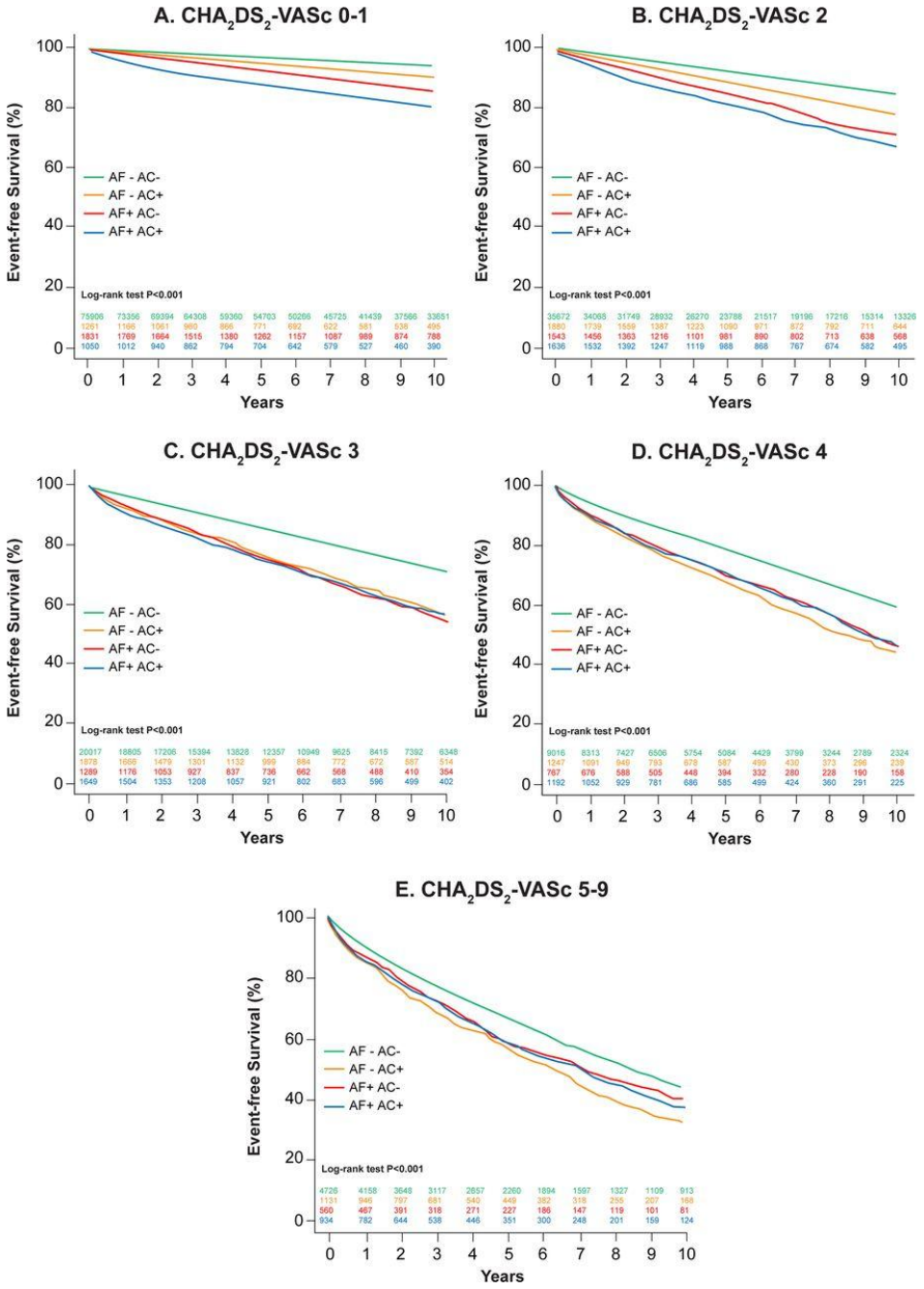
Harb, BMJ Open, 2021

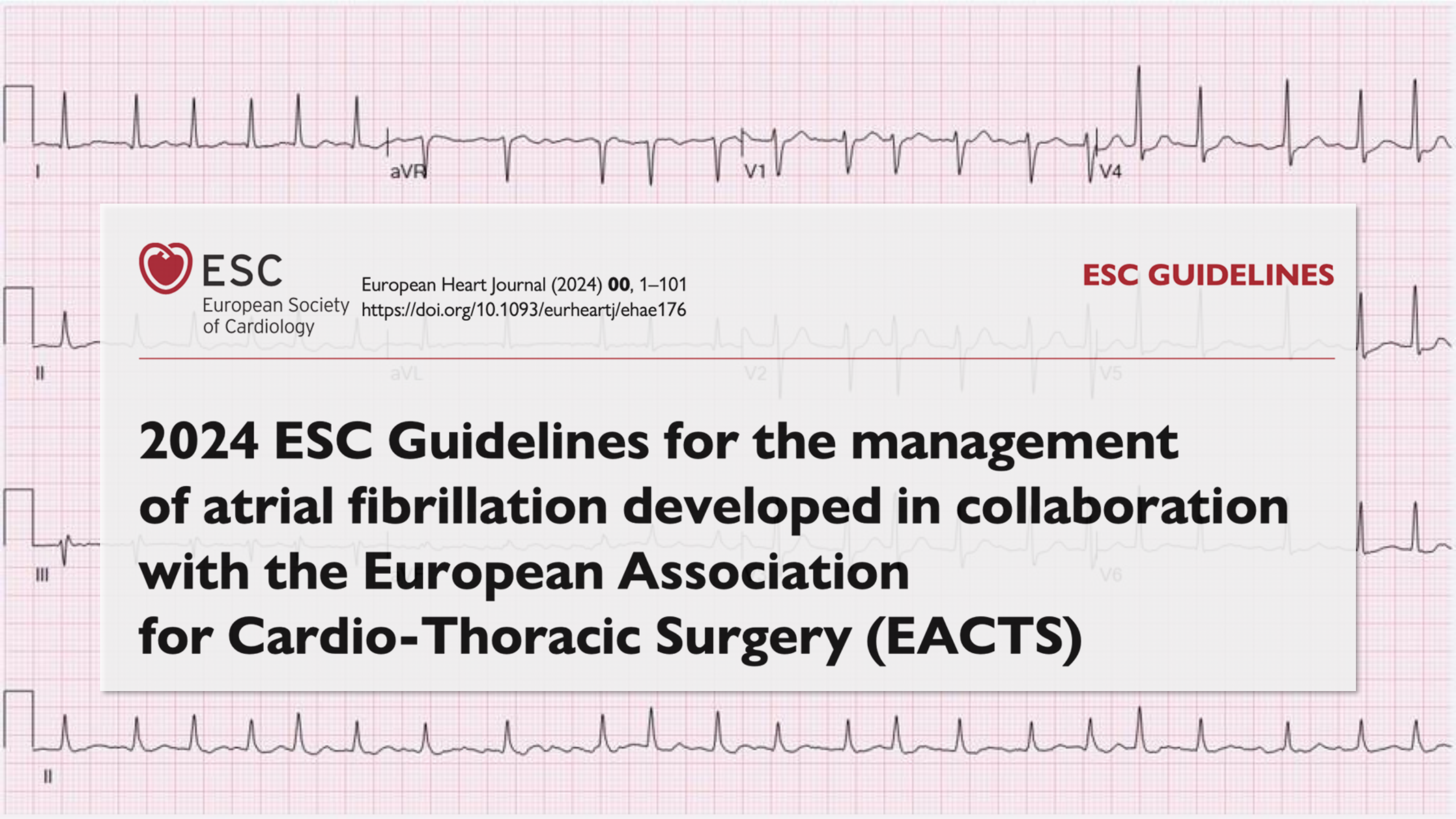
« *Anticoagulation use was associated with worse survival in non-AF patients and AF patients with low CHA_2DS_2-VASc scores, but was protective in AF patients with high CHA_2DS_2-VASc scores.* »



Harb, BMJ Open, 2021

Maximum Daily AF Duration		CHA_2DS_2-VASc Score				
		0 n=2922 (13.4%)	1 n=2151 (9.9%)	2 n=4554 (20.9%)	3-4 n=7164 (32.9%)	≥5 n=4977 (22.9%)
	No AF n=16815 (77.2%)	**0.33%** 40 events	**0.62%** 46 events	**0.70%** 95 events	**0.83%** 139 events	**1.79%** 157 events
	AF 6 min–23.5 h n=3381 (15.5%)	**0.52%** 11 events	**0.32%** 4 events	**0.62%** 17 events	**1.28%** 42 events	**2.21%** 36 events
	AF >23.5h n=1572 (7.2%)	**0.86%** 4 events	**0.50%** 3 events	**1.52%** 19 events	**1.77%** 28 events	**1.68%** 13 events

Kaplan, Circulation, 2019



ESC
European Society
of Cardiology

European Heart Journal (2024) **00**, 1–101
https://doi.org/10.1093/eurheartj/ehae176

ESC GUIDELINES

2024 ESC Guidelines for the management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS)

CHA_2DS_2-VASc → CHA_2DS_2-VA

A — Avoid stroke and thromboembolism

Risk of thrombo-embolism	Use locally-validated risk score or CHA_2DS_2-VA	Choice of anticoagulant	Assess bleeding risk	Prevent bleeding
Start oral anticoagulation (Class I)	OAC if CHA_2DS_2-VA score = 2 or more (Class I)	Use DOAC, except mechanical valve or mitral stenosis (Class I)	Assess and manage all modifiable risk factors for bleeding (Class I)	Do not combine antiplatelets and OAC for stroke prevention (Class III)
Temporal pattern of AF not relevant (Class III)	OAC if CHA_2DS_2-VA score = 1 (Class IIa)	If VKA: Target INR 2.0–3.0; (Class I) >70% INR range; (Class IIa) or switch to DOAC (Class I)	Do not use risk scores to withhold anticoagulation (Class III)	Avoid antiplatelets beyond 12 months in OAC treated CCS/PVD (Class III)
Antiplatelet therapy not an alternative (Class III)				

Sc : sexe category

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European Heart Journal (2020) **00**, 1–125
doi:10.1093/eurheartj/ehaa612

ESC GUIDELINES

2020 ESC Guidelines for the diagnosis and management of atrial fibrillation developed in collaboration with the European Association of Cardio-Thoracic Surgery (EACTS)

Step 2

Consider stroke prevention (ie. OAC) in all AF patients with CHA_2DS_2-VASc ≥1 (male) or ≥2 (female)

Address modifiable bleeding risk factors in all AF patients.

Calculate the HAS-BLED score.

If HAS-BLED ≥3, address the modifiable bleeding risk factors and 'flag up' patient for regular review and follow-up.

High bleeding risk scores should not be used as a reason to withhold OAC.

CHA_2DS_2-VASc

=1 (male) or =2 (female)	≥2 (male) or ≥3 (female)
OAC should be considered (Class IIa)	OAC is recommended (Class IA)

Step 3 Begin NOAC (or VKA with high time in therapeutic range[a])

NOACs generally recommended as first line therapy for OAC

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V	Vascular disease (MI, aortic plaque etc)	1
A	Age 65-74	1
Sc	Sex category (Female = 1 pt)	1

Table 10 Updated definitions for the CHA_2DS_2-VA score

CHA_2DS_2-VA component		Definition and comments	Points awarded[a]
C	Chronic heart failure	Symptoms and signs of heart failure (irrespective of LVEF, thus including HFpEF, HFmrEF, and HFrEF), or the presence of asymptomatic LVEF ≤40%.[261–263]	1
H	Hypertension	Resting blood pressure >140/90 mmHg on at least two occasions, or current antihypertensive treatment. The optimal BP target associated with lowest risk of major cardiovascular events is 120–129/70–79 mmHg (or keep as low as reasonably achievable).[162,264]	1
A	Age 75 years or above	Age is an independent determinant of ischaemic stroke risk.[265] Age-related risk is a continuum, but for reasons of practicality, two points are given for age ≥75 years.	2
D	Diabetes mellitus	Diabetes mellitus (type 1 or type 2), as defined by currently accepted criteria,[266] or treatment with glucose lowering therapy.	1
S	Prior stroke, TIA, or arterial thromboembolism	Previous thromboembolism is associated with highly elevated risk of recurrence and therefore weighted 2 points.	2
V	Vascular disease	Coronary artery disease, including prior myocardial infarction, angina, history of coronary revascularization (surgical or percutaneous), and significant CAD on angiography or cardiac imaging.[267] OR Peripheral vascular disease, including: intermittent claudication, previous revascularization for PVD, percutaneous or surgical intervention on the abdominal aorta, and complex aortic plaque on imaging (defined as features of mobility, ulceration, pedunculation, or thickness ≥4 mm).[268,269]	1
A	Age 65–74 years	1 point is given for age between 65 and 74 years.	1

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Recommendations in 2020 version	Class[a]	Level[b]	Recommendations in 2024 version	Class[a]	Level[b]
***Section 6.7*—Bleeding risk**					
For a formal risk-score-based assessment of bleeding risk, the HAS-BLED score should be considered to help address modifiable bleeding risk factors, and to identify patients at high risk of bleeding (HAS-BLED score ≥3) for early and more frequent clinical review and follow-up.	IIa	B	Assessment and management of modifiable bleeding risk factors is recommended in all patients eligible for oral anticoagulation, as part of shared decision-making to ensure safety and prevent bleeding.	I	B

CHA_2DS_2-VASc	Score	HAS-BLED	Score
Congestive heart failure/LV dysfunction	1	Hypertension i.e. uncontrolled BP	1
Hypertension	1	Abnormal renal/liver function	1 or 2
Aged ≥75 years	2	Stroke	1
Diabetes mellitus	1	Bleeding tendency or predisposition	1
Stroke/TIA/TE	2	Labile INR	1
Vascular disease [prior MI, PAD, or aortic plaque]	1	Age (e.g. >65)	1
Aged 65-74 years	1	Drugs (e.g. concomitant aspirin or NSAIDSs) or alcohol	1
Sex category [i.e. female gender]	1		
Maximum score	**9**		**9**

🚹 66 ans – HTA, UGD

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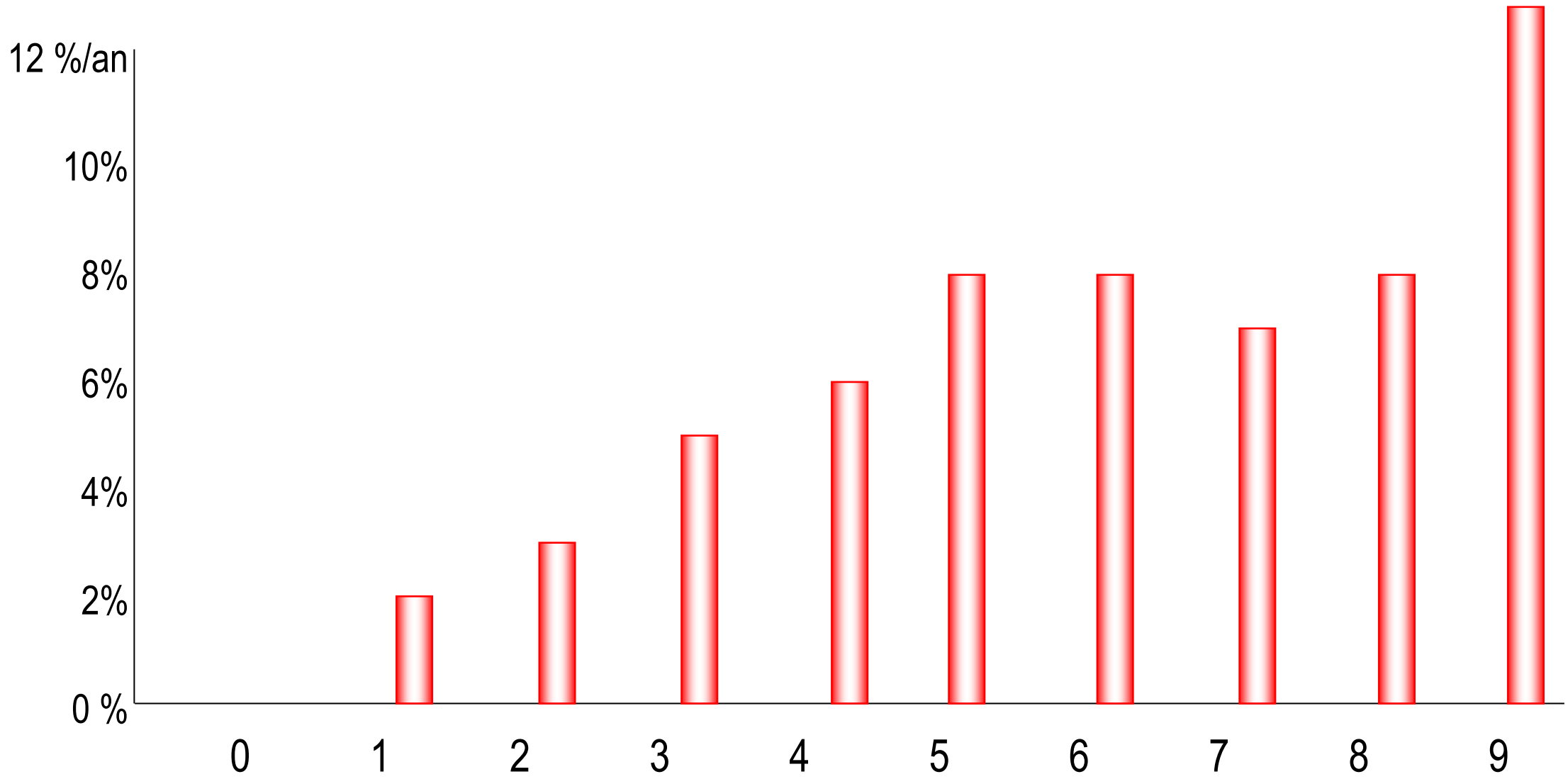
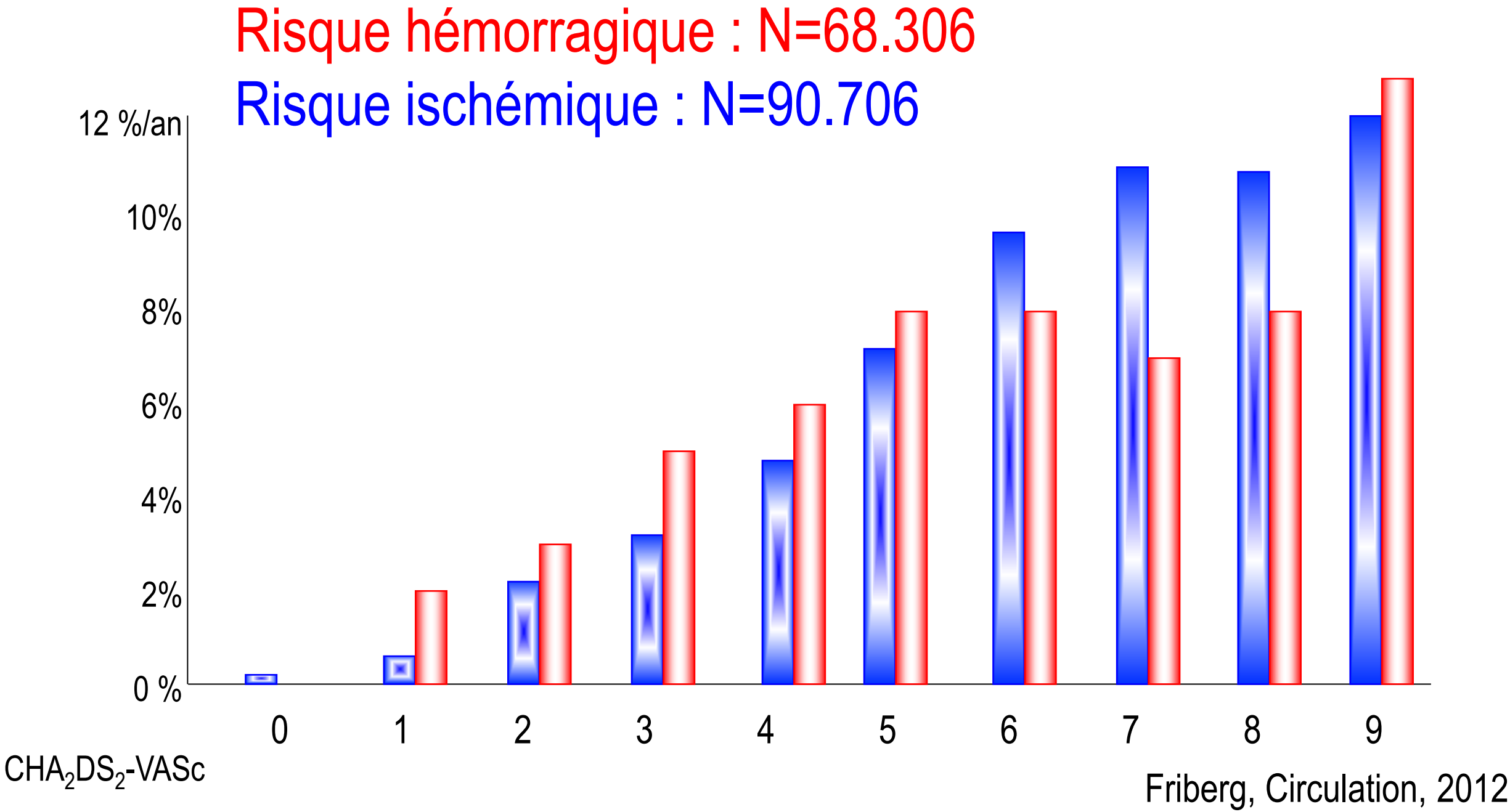
2

3

Risque hémorragique : N=68.306



Friberg, Circulation, 2012



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Vascular disease [prior MI, PAD, or aortic plaque]	1	Age (e.g. >65)	1
Aged 65-74 years	1	Drugs (e.g. concomitant aspirin or NSAIDSs) or alcohol	1
Sex category [i.e. female gender]	1		
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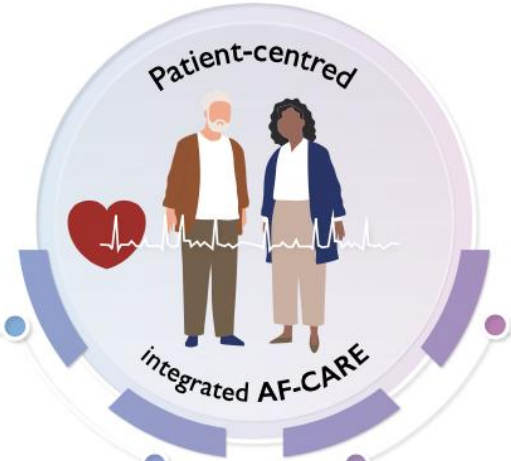
Anticoagulation / Avoid stroke

Better symptom management

Cardiovascular and
Comorbidity optimization

Atrial fibrillation



C

Comorbidity and risk factor management

- Lifestyle help
- Primary care
- Cardiology
- Internal medicine
- Nursing care
- Other

A

Avoid stroke and thromboembolism

- Primary care
- Cardiology
- Neurology
- Nursing care
- Anticoagulation services
- e-Health

R

Reduce symptoms by rate and rhythm control

- Primary care
- Cardiology
- Electrophysiology
- Cardiac surgeons
- e-Health

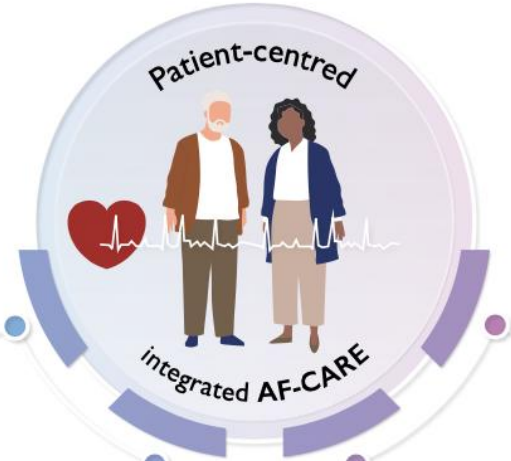
E

Evaluation and dynamic reassessment

- Primary care
- Cardiology
- Pharmacy
- Nursing
- Family/carers
- e-Health

ESC

Atrial fibrillation



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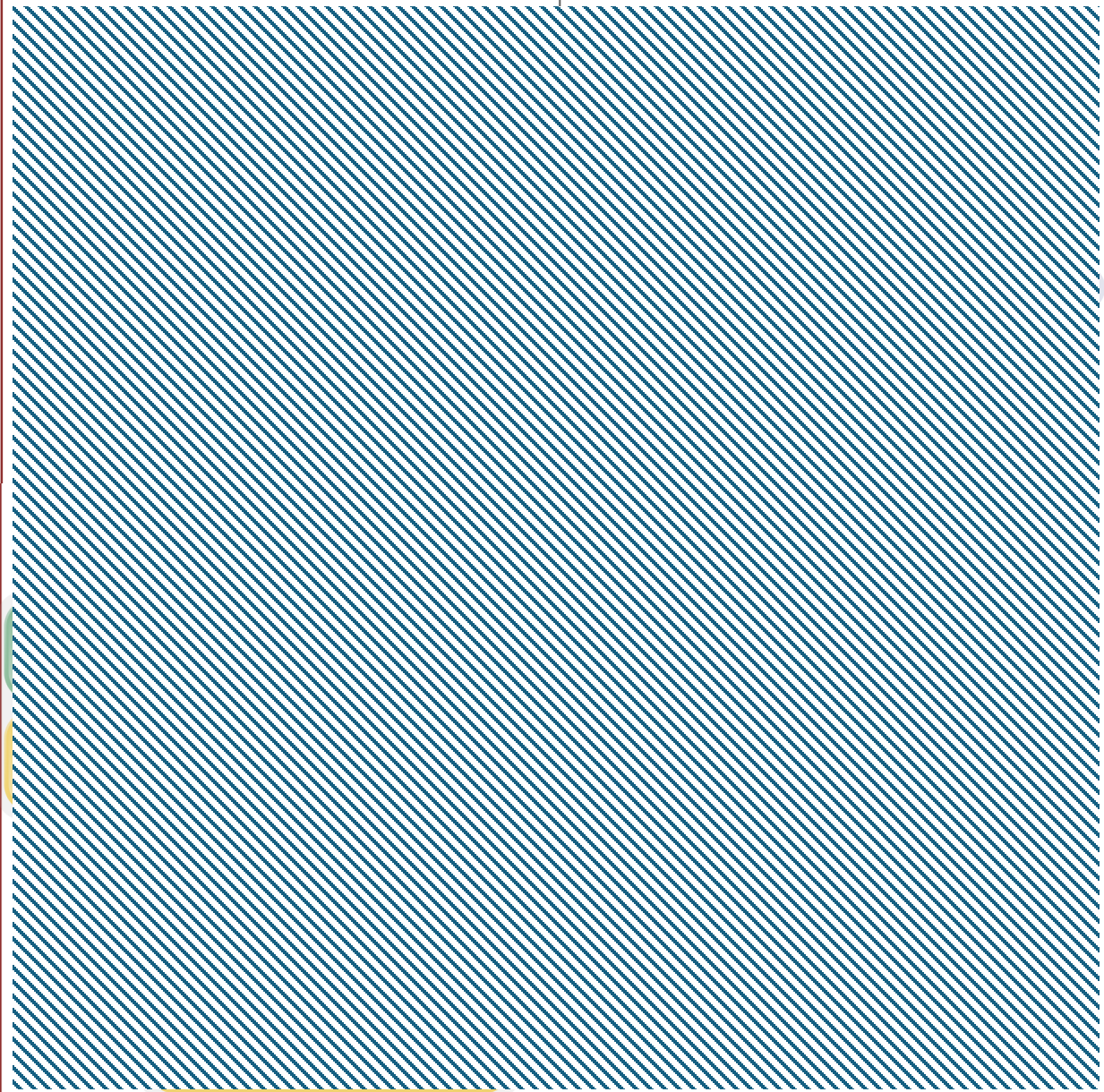
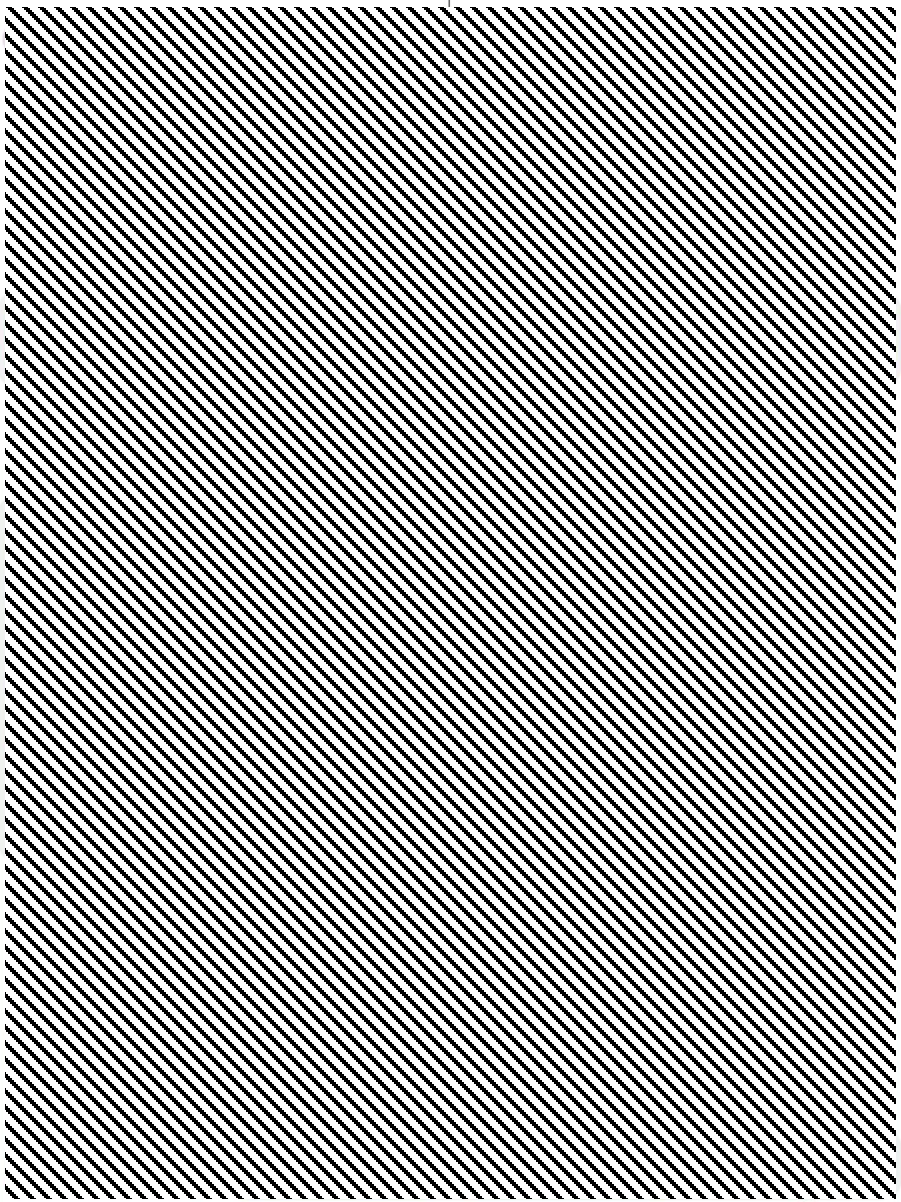
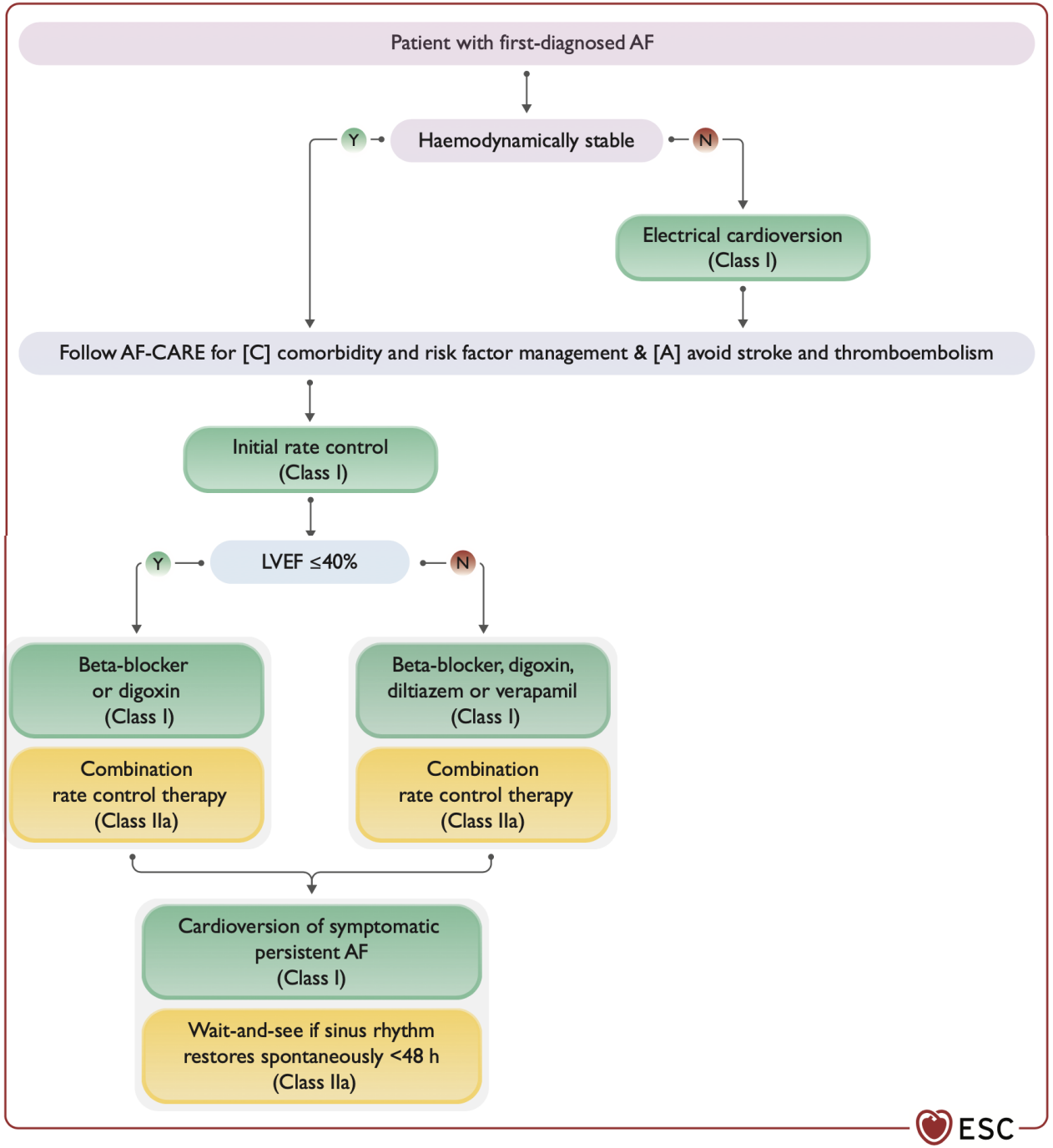
ESC

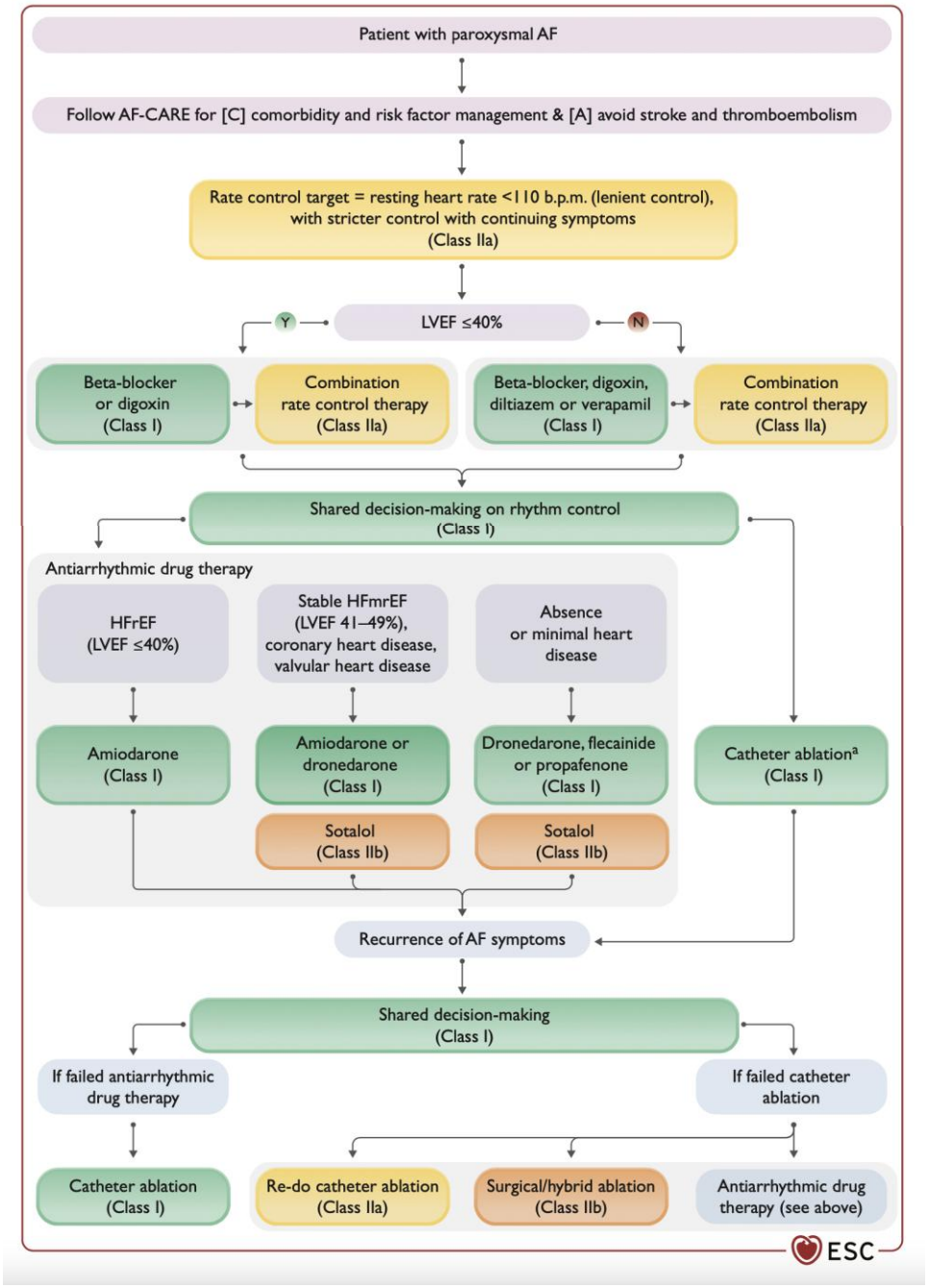
Patient with first-diagnosed AF



Patient with paroxysmal AF



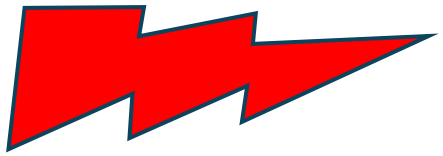

Patient with first-diagnosed AF
Haemodynamically stable
Y
N
Electrical cardioversion
(Class I)
Follow AF-CARE for [C] comorbidity and risk factor management & [A] avoid stroke and thromboembolism
Initial rate control
(Class I)
LVEF ≤40%
Y
N
Beta-blocker
or digoxin
(Class I)
Combination
rate control therapy
(Class IIa)
Beta-blocker, digoxin,
diltiazem or verapamil
(Class I)
Combination
rate control therapy
(Class IIa)
Cardioversion of symptomatic
persistent AF
(Class I)
Wait-and-see if sinus rhythm
restores spontaneously <48 h
(Class IIa)
ESC


Patient with paroxysmal AF
Follow AF-CARE for [C] comorbidity and risk factor management & [A] avoid stroke and thromboembolism
Rate control target = resting heart rate <110 b.p.m. (lenient control),
with stricter control with continuing symptoms
(Class IIa)
LVEF ≤40%
Y
N
Beta-blocker
or digoxin
(Class I)
Combination
rate control therapy
(Class IIa)
Beta-blocker, digoxin,
diltiazem or verapamil
(Class I)
Combination
rate control therapy
(Class IIa)
Shared decision-making on rhythm control
(Class I)
Antiarrhythmic drug therapy
HFrEF
(LVEF ≤40%)
Stable HFmrEF
(LVEF 41–49%),
coronary heart disease,
valvular heart disease
Absence
or minimal heart
disease
Amiodarone
(Class I)
Amiodarone or
dronedarone
(Class I)
Dronedarone, flecainide
or propafenone
(Class I)
Catheter ablation[a]
(Class I)
Sotalol
(Class IIb)
Sotalol
(Class IIb)
Recurrence of AF symptoms
Shared decision-making
(Class I)
If failed antiarrhythmic
drug therapy
If failed catheter
ablation
Catheter ablation
(Class I)
Re-do catheter ablation
(Class IIa)
Surgical/hybrid ablation
(Class IIb)
Antiarrhythmic drug
therapy (see above)
ESC

Patient with first-diagnosed AF

↓

Haemodynamically stable



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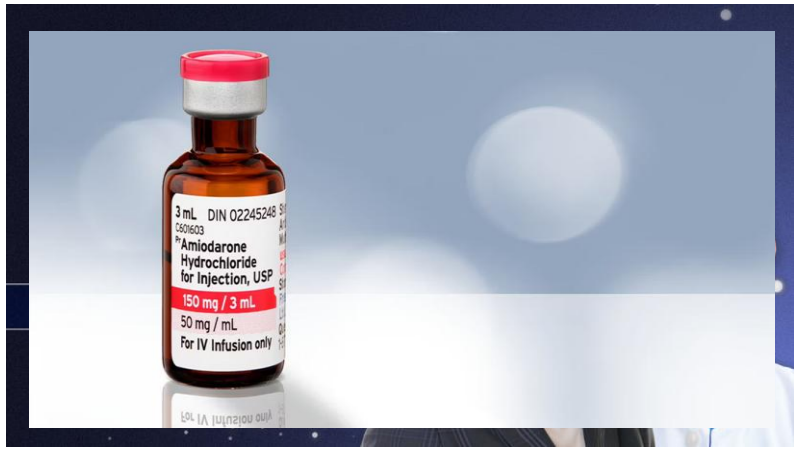

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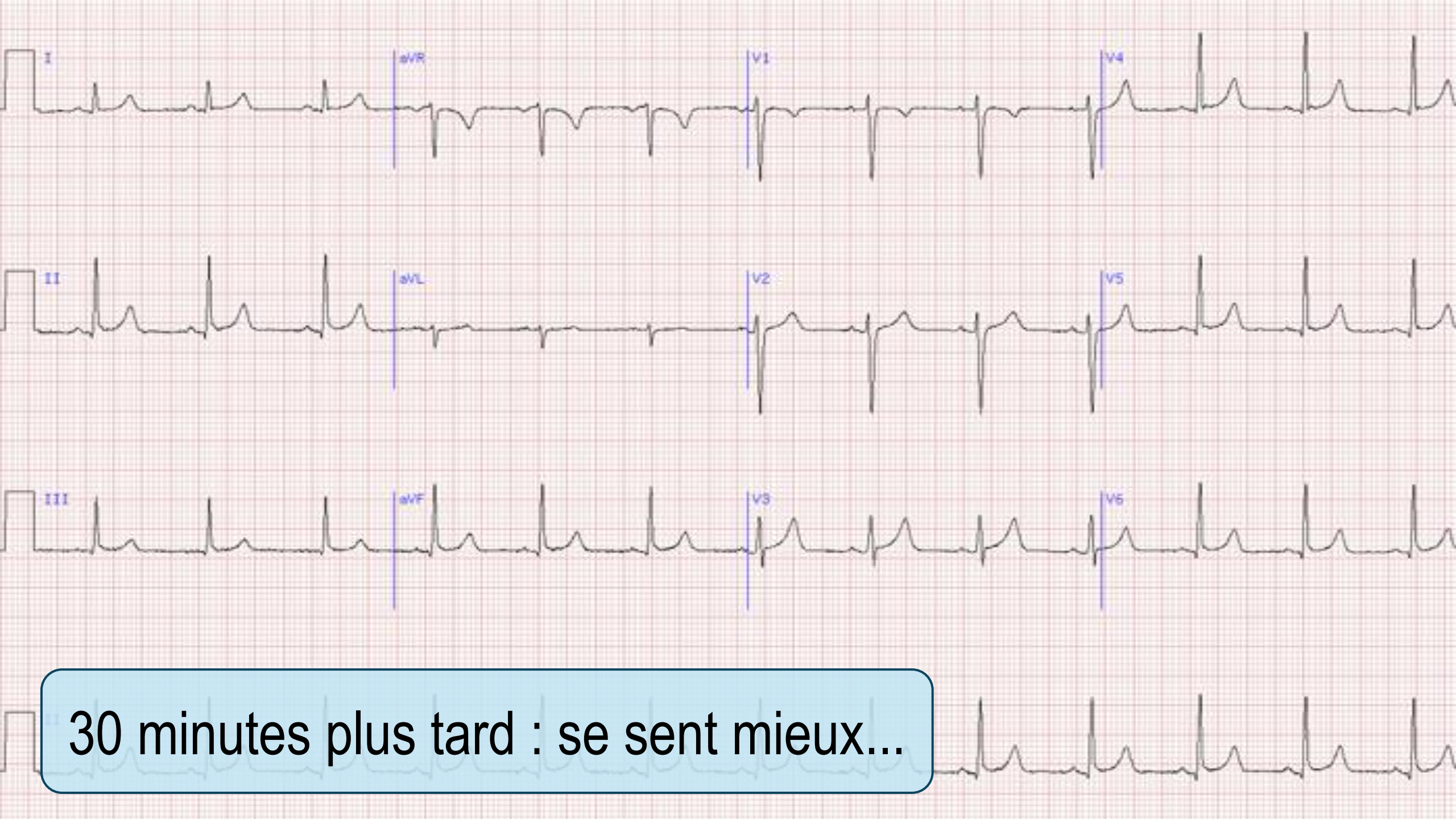


30 minutes plus tard : se sent mieux...

Avoid stroke and thromboembolism

Risk of thrombo-embolism	Use locally-validated risk score or CHA_2DS_2-VA	Choice of anticoagulant	Assess bleeding risk	Prevent bleeding
Start oral anticoagulation (Class I)	OAC if CHA_2DS_2-VA score = 2 or more (Class I)	Use DOAC, except mechanical valve or mitral stenosis (Class I)	Assess and manage all modifiable risk factors for bleeding (Class I)	Do not combine antiplatelets and OAC for stroke prevention (Class III)
Temporal pattern of AF not relevant (Class III)	OAC if CHA_2DS_2-VA score = 1 (Class IIa)	If VKA: Target INR 2.0–3.0; (Class I) >70% INR range; (Class IIa) or switch to DOAC (Class I)	Do not use risk scores to withhold anticoagulation (Class III)	Avoid antiplatelets beyond 12 months in OAC treated CCS/PVD (Class III)
Antiplatelet therapy not an alternative (Class III)				

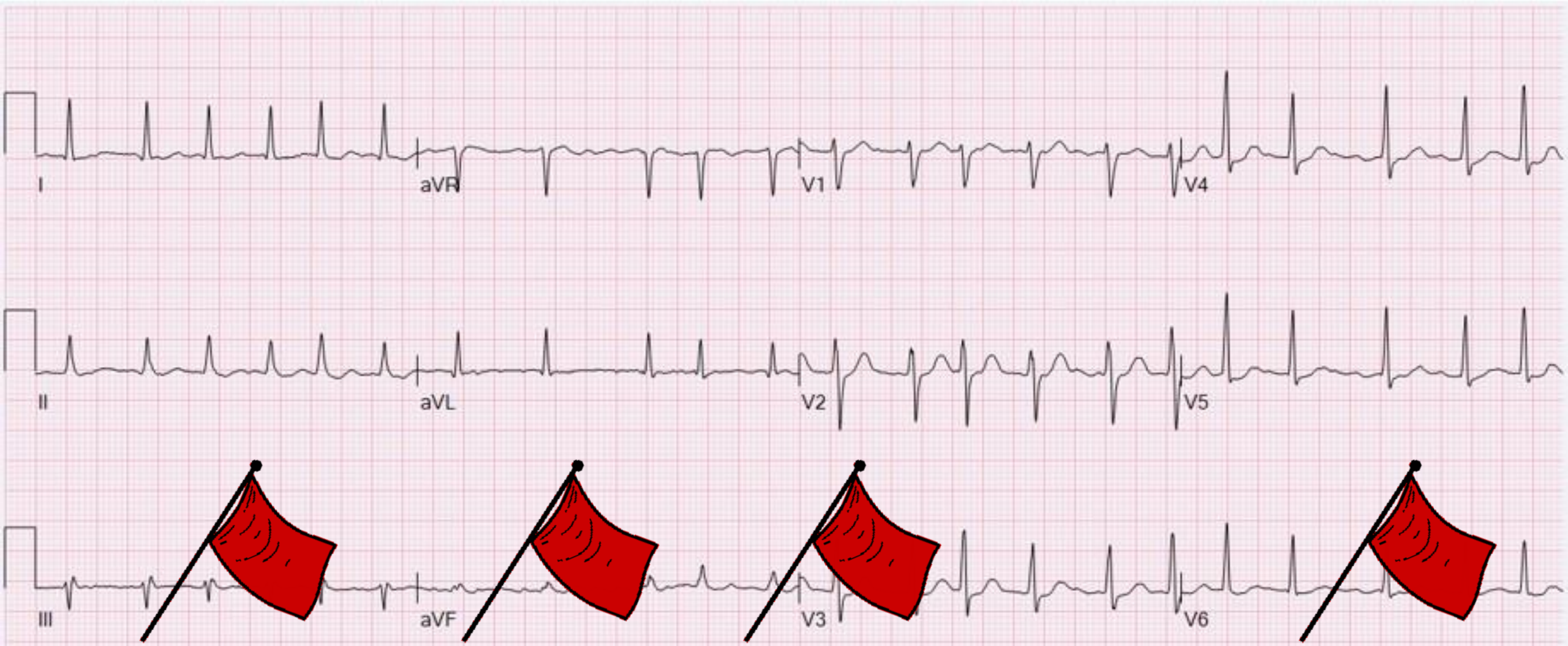
Antiagrégant plaquettaire ⛔

Anticoagulant ✅

Gestion risque hémorragique ✅

Anti-arythmique ⛔

Filière cardiologie ✅

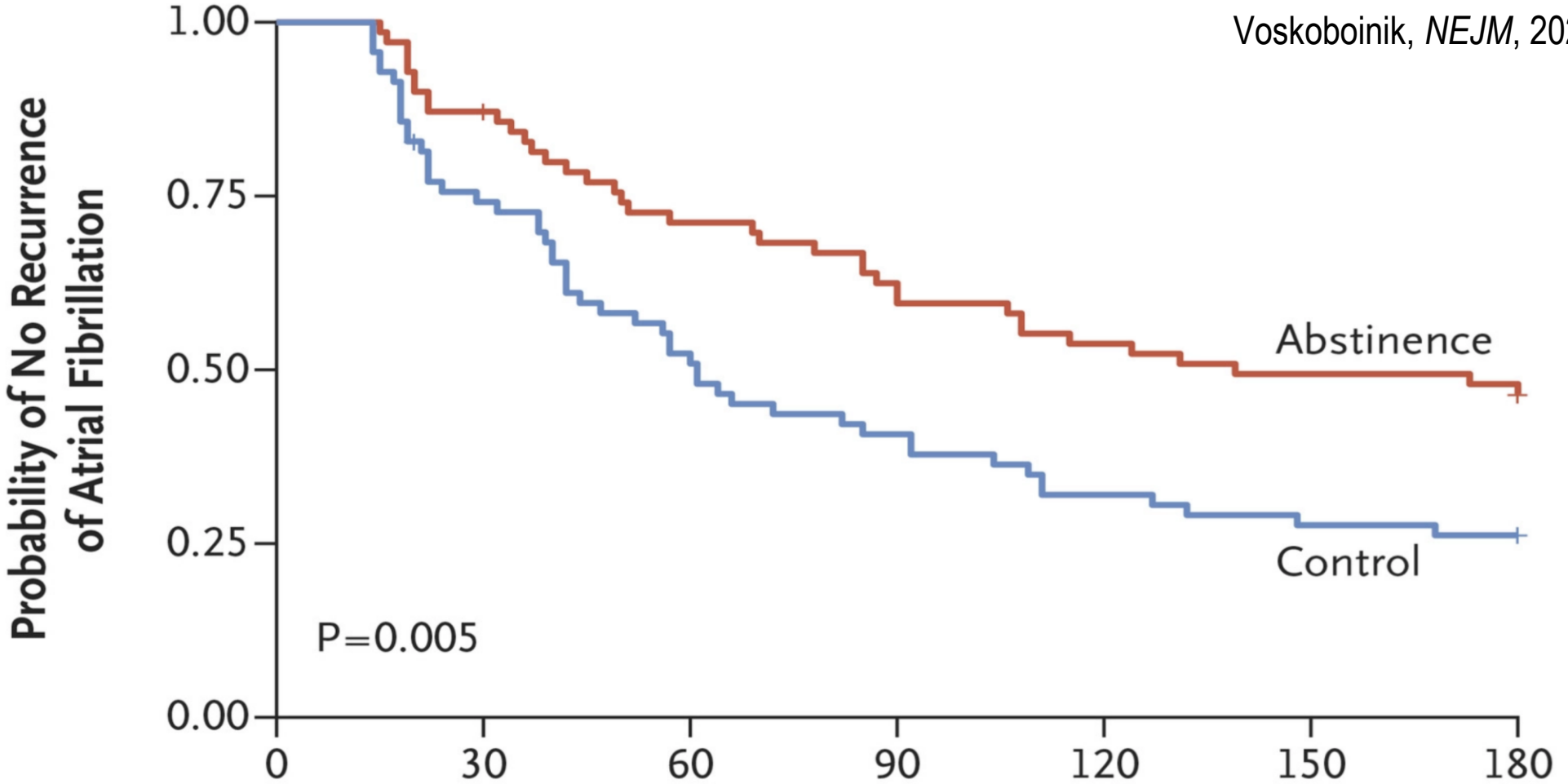


PA : 138/82 ; FC : 125 ; T : 36,3° ;
SpO2 : 98% AA ; Dextro : 1,2 g/L

Réduire la consommation d'alcool réduit la FA

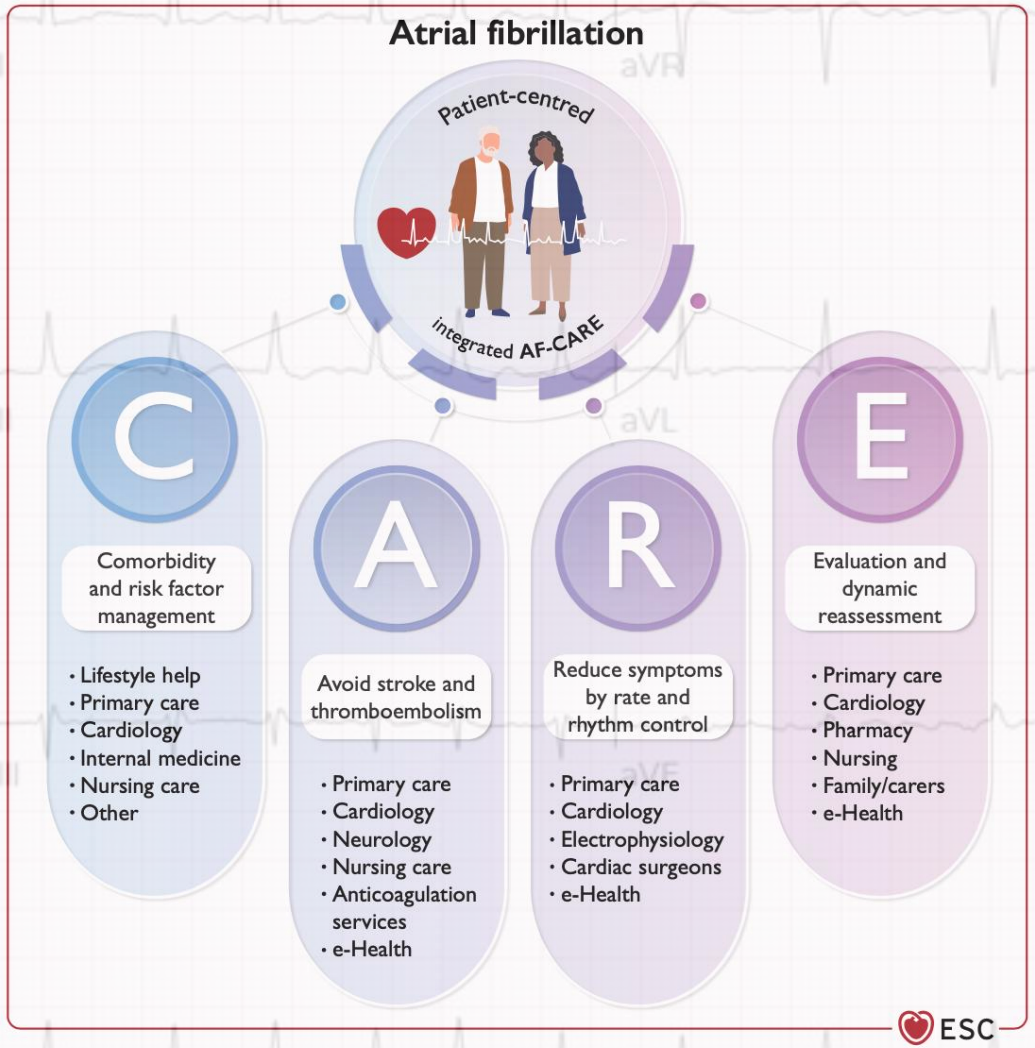
17 verres/semaine 2 verres/semaine	vs Voskoboinik, *NEJM*, 2020	16 verres/semaine 13 verres/semaine

Voskoboinik, *NEJM*, 2020



No. at Risk							
Abstinence	70	61	49	43	37	34	33
Control	70	51	36	28	22	19	18


URGENCES
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
II
ACCUEIL



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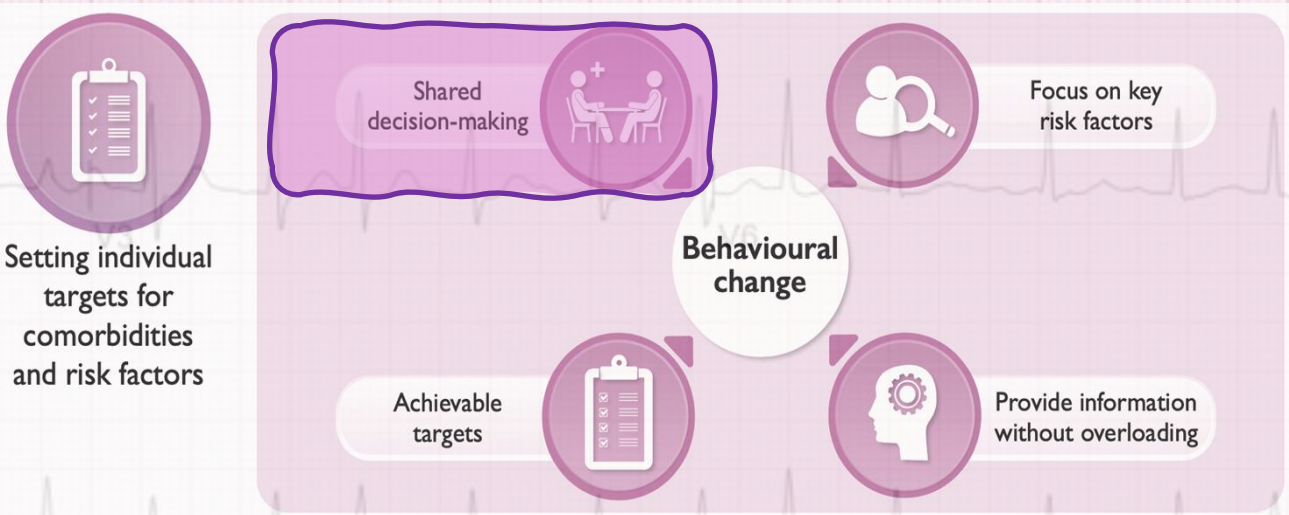
ESC GUIDELINES

2024 ESC Guidelines for the management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS)



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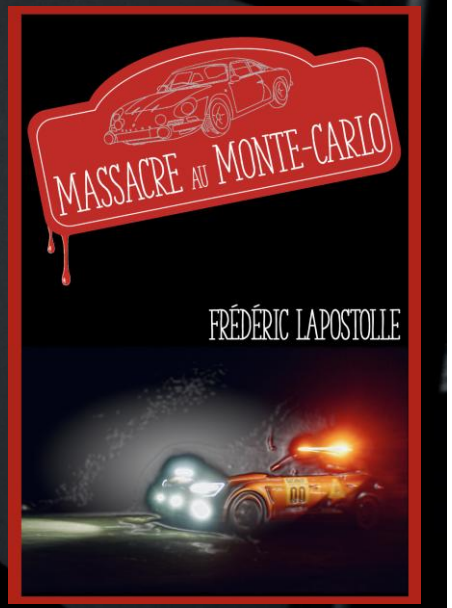

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