ESC CONGRESS 2012

Lo mejor en FA.

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SOCIEDAD ESPAÑOLA DE CARDIOLOGÍA | Comité de Acreditación CASEC

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Registro RE-LY:
Variaciones en el manejo de la FA y la mortalidad.

15.408 pacientes en 47 paises.

Mortalidad a 1 año 11%.

Africa	20%
Sur America	18%
Europa occidental	7,5%
Europa del este	8%
India	9%

Jeff Healey

End point	No rheumatic heart disease (n=13 507)	Rheumatic heart disease (n=1788)
Stroke (%)	4	3
Age (y)	66.2	49.5
Female (%)	45.4	64.9
Hypertension (%)	60.3	19.6
Coronary disease (%)	34.3	5.5
Heart failure (%)	33	34.7
Warfarin use (%)	32	68.7

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European Heart Journal (2011) **32**, 1173–1181
doi:10.1093/eurheartj/ehr114

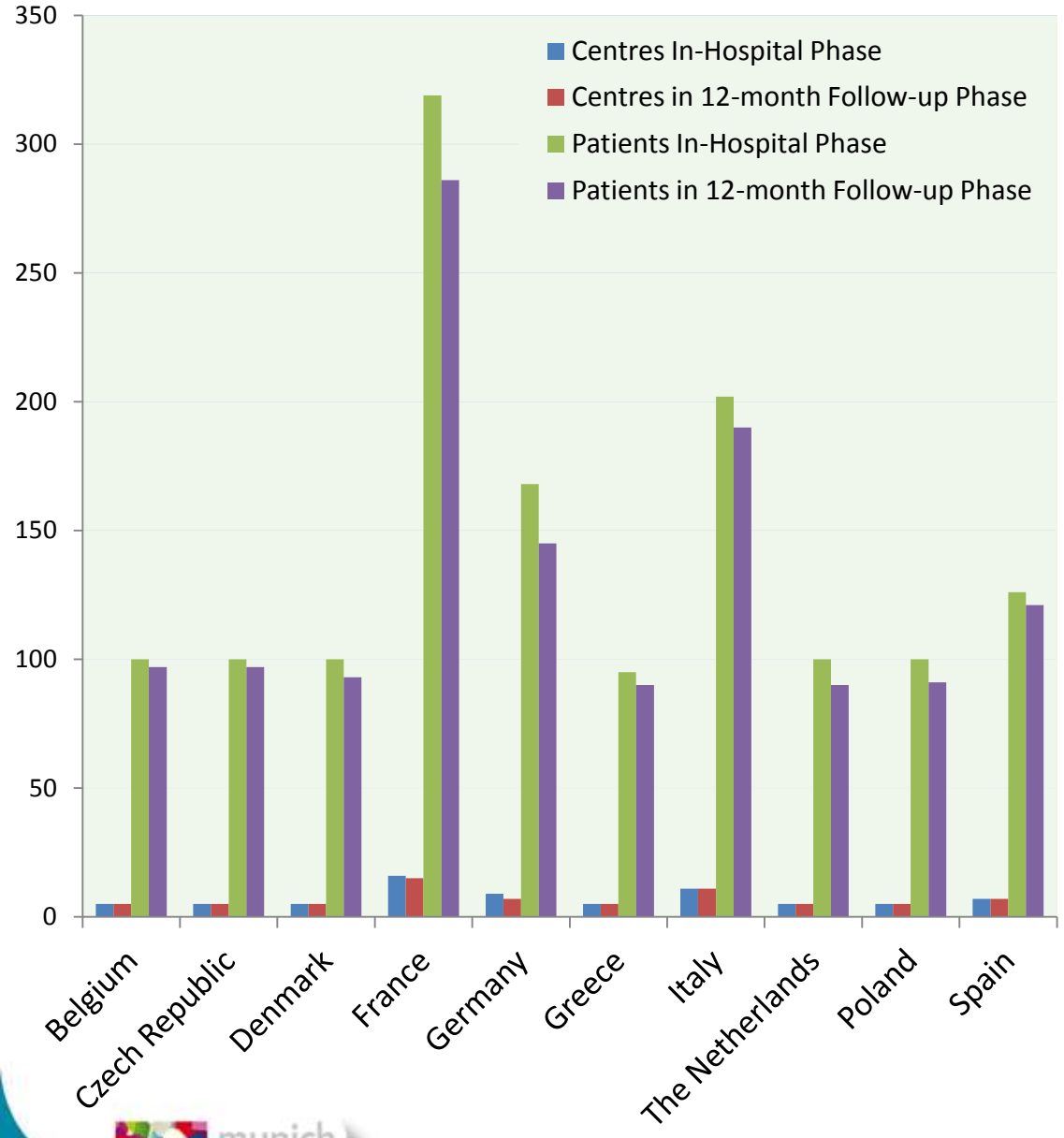
Atrial Fibrillation Ablation Pilot Study: a new feature of the EURObservational Research Programme

Primary endpoint

To describe the clinical epidemiology of patients undergoing an AFib ablation procedure, and the diagnostic / therapeutic processes applied in these patients across Europe.

Specific aims

- To describe the demographic, clinical, and biological characteristics of patients undergoing a first AFib ablation procedure.
- To describe the diagnostic and therapeutic approaches undertaken in the routine practice of cardiologists performing AFib ablation procedures.
- To assess the acute and chronic outcomes.
- To assess the short- and long-term safety/complications of the procedure.
- To assess how the participating centres evaluate the success of the procedure during the follow-up.
- To evaluate how the recommendations of the most recent European guidelines are adopted in clinical practice.



1410 patients included

19 patients without ablation

1391 patients with ablation Procedure performed

1 death during the in-hospital phase

1390 patients at discharge

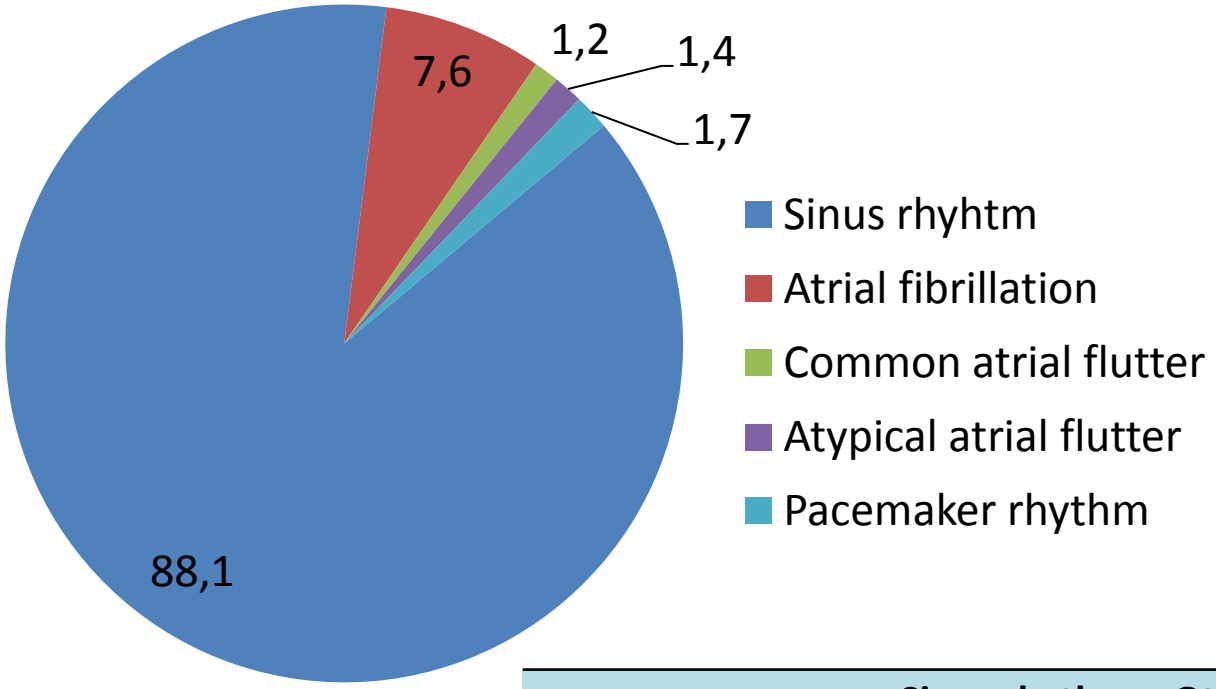
90 lost to Follow-up (6.5%)

1300 patients at 12 months follow-up

Atrial Fibrillation Ablation Pilot Registry

Follow-up status

Baseline rhythm at 12-month FU



	Sinus rhythm	Other rhythms	P	TOTAL
Heart rate (bpm)			<0.0001	
mean ± SD	68.7 ± 11.5	91.7 ± 26.2		71.4 ± 15.8
median (IQR)	67 (60 – 67)	90 (70 – 100)		69 (61 – 79)

Atrial Fibrillation Ablation Pilot Registry
Follow-up status

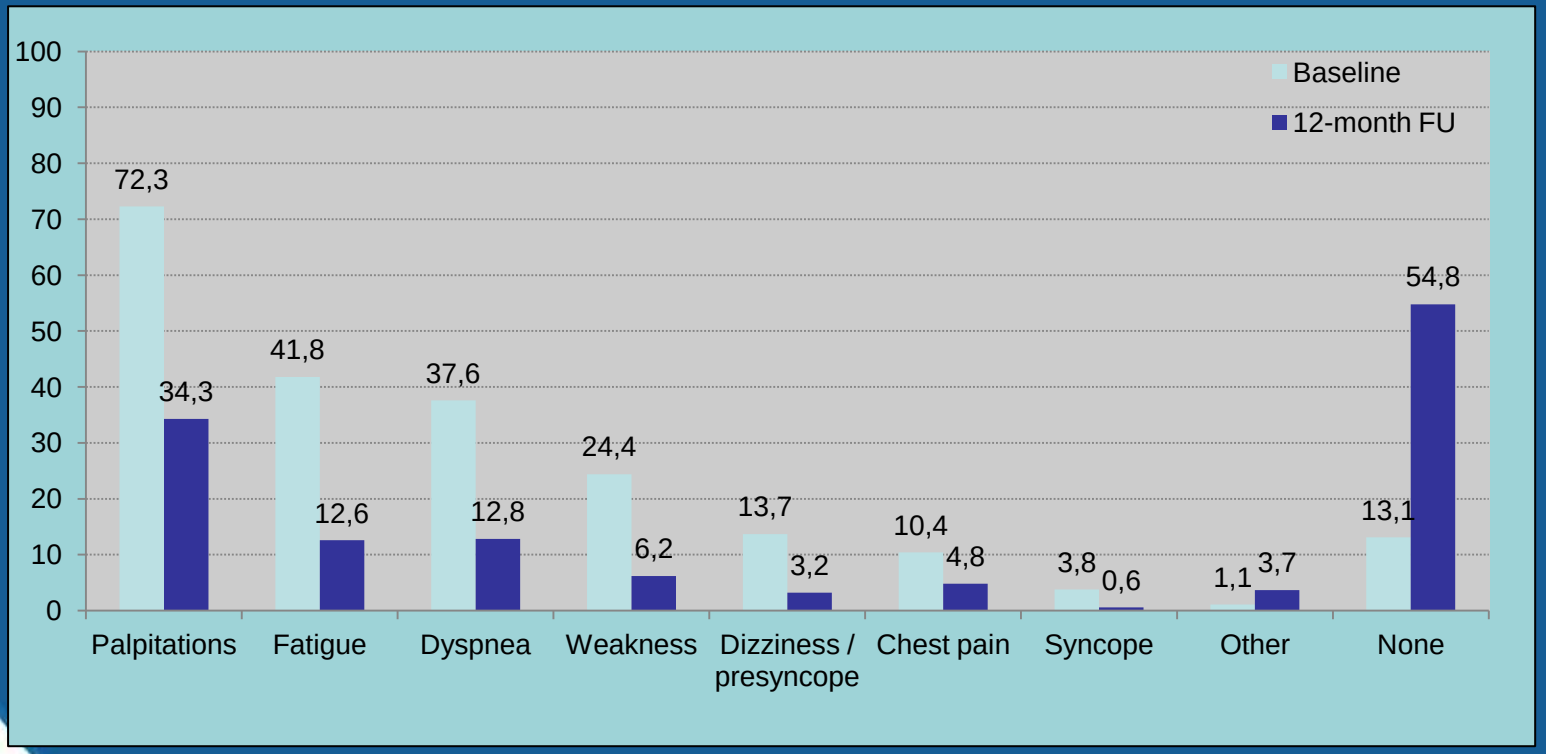
	Paroxysmal AFib (n = 856)	Non-paroxysmal AFib (n = 425)	p	TOTAL (n = 1281)
Overall Success, %	75.6	69.0	0.015	73.7
Without AADs, %*	59.8	49.1		56.5
With AADs, %*	40.2	50.9		43.5

* With respect to overall success.

Ablación FA:
Registro europeo.

1.300 pacientes en 10 paises europeos.

73,7% libres de recurrencia de arritmias en 1 año.
90% libres de síntomas.
65% tomaban ACO.
33% bajo tto antiarrítmico.



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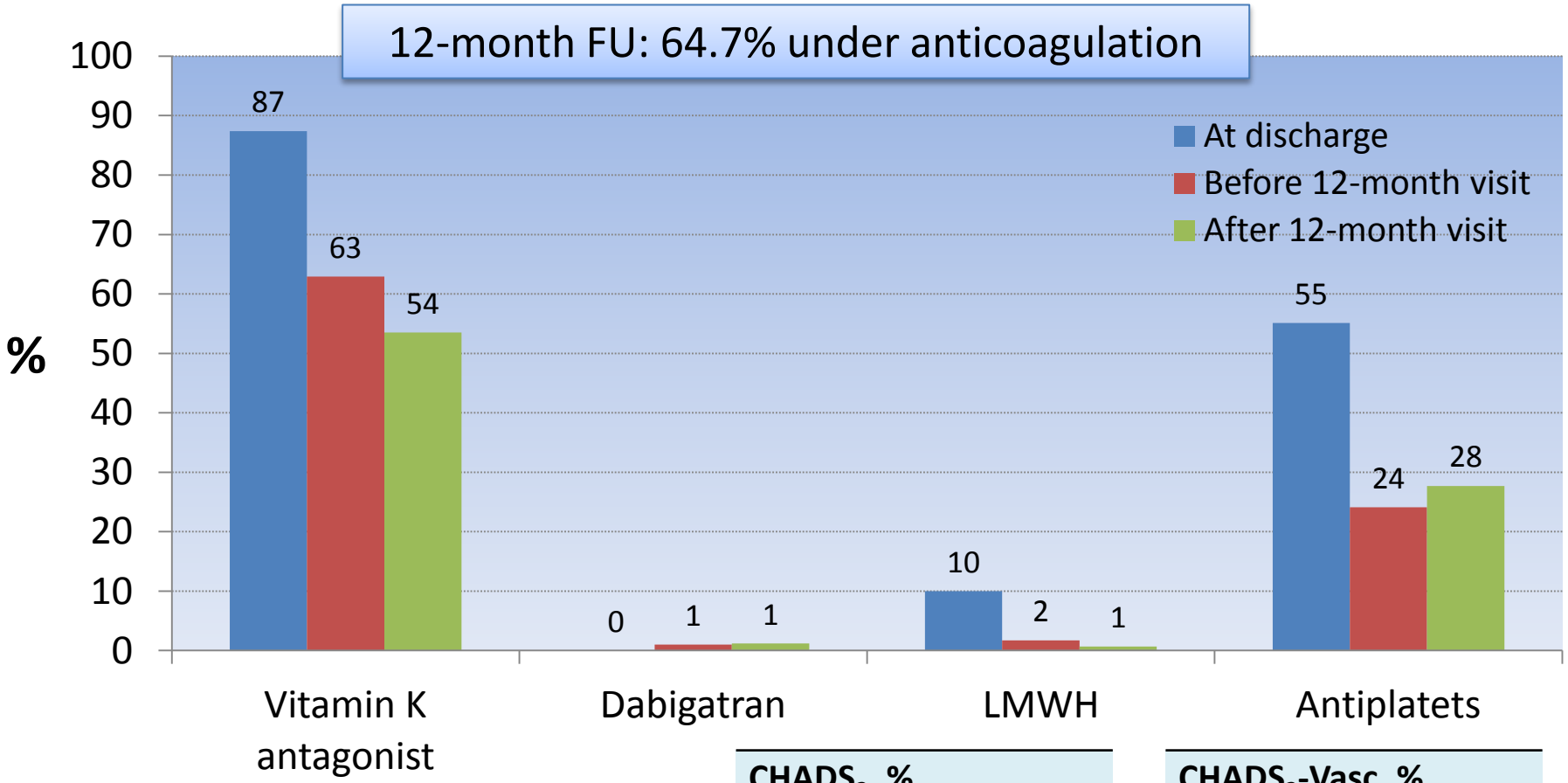
Atrial Fibrillation Ablation Pilot Registry

Follow-up status



Anticoagulation at 12-m FU according to cardioembolic risk

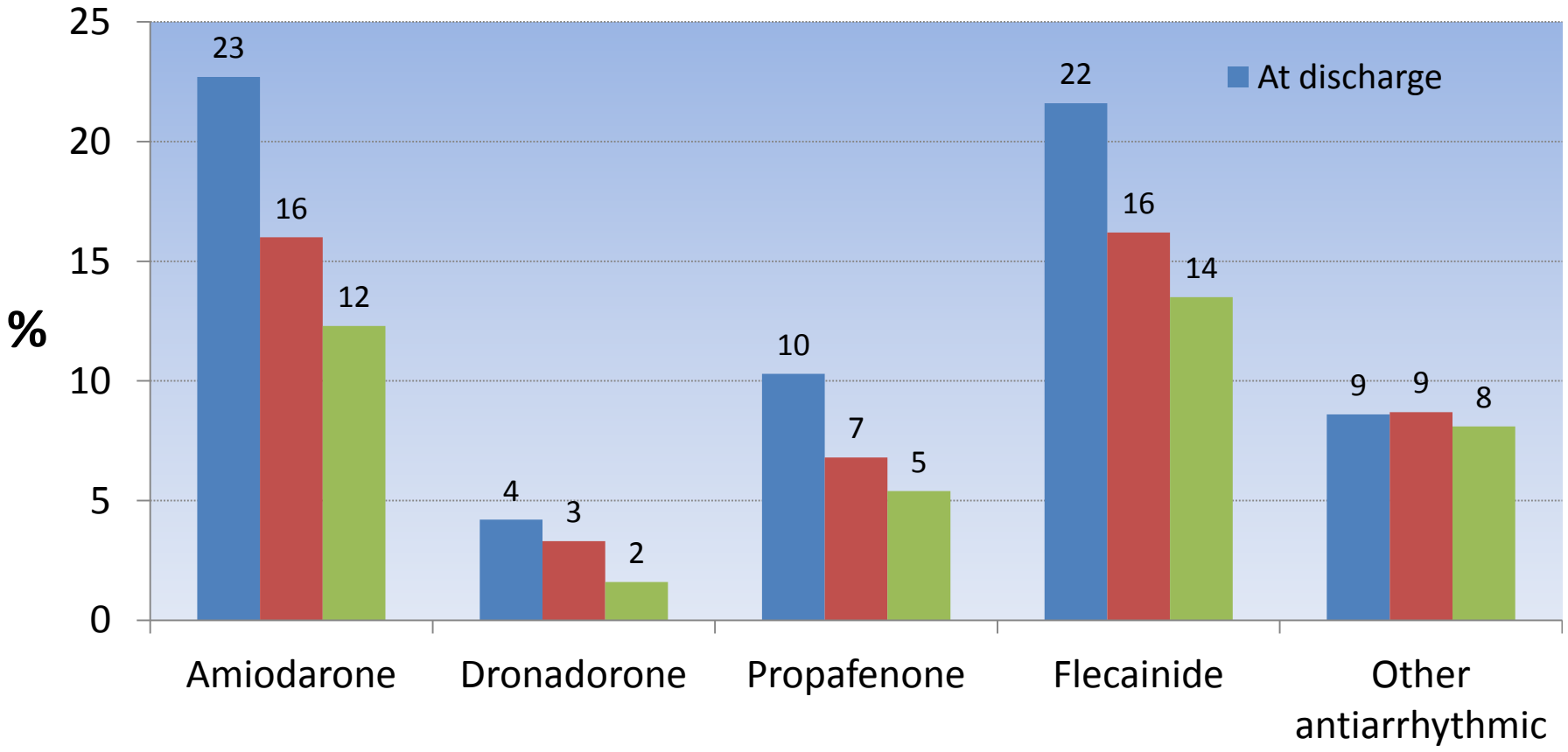
$CHADS_2$, %	
0	53.1
1	69.0
>1	81.6

$CHADS_2$-Vasc, %	
0	48.0
1	63.3
>1	76.2

Atrial Fibrillation Ablation Pilot Registry

Follow-up status

12-month FU: 32.1% under AADs



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Complications/events	In-hospital (%)	Postdischarge (%)
All complications	7.7	2.6
Major complications	1.7	0.8
Mortality	0.07	0.31
CV mortality	0.07	0.16

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Atrial Fibrillation Ablation Pilot Registry

Follow-up status

Adverse events during 12-month follow-up	
Cerebrovascular event, %	0.54
Phrenic nerve injury, %	0.16
Esophageal perforation/fistula, %	0
PV stenosis (≥75%) requiring intervention, %	0.08
Vascular injury	
AV fistula, %	0.47
Pseudoaneurysm, %	0.24
Pacemaker implantation, %	1.02
Death, %	0.31
Cardiovascular, %	0.08 (1 hemorrhagic stroke, 1 ischemic VF)
Non-cardiovascular, %	0.08 (1 other)
Unknown, %	0.16
OVERALL, %	2.6

PRAGUE-12

Dr Petr Widimsky

Patients	Maze procedure with surgery (%)	No maze procedure with surgery (%)	p
All patients (n=224)	60.2	35.5	0.002
Paroxysmal AF	61.9	58.3	1.00
Persistent AF	72	50	0.194
Longstanding, persistent AF	53.2	13.9	<0.001

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2012 focused update of the ESC Guidelines for the management of atrial fibrillation

Recommendation for screening of AF

Recommendations	Class[a]	Level[b]	Ref[C]
Opportunistic screening for AF in patients ≥65 years of age using pulse-taking followed by an ECG is recommended to allow timely detection of AF.	I	B	14, 15

AF = atrial fibrillation; ECG = electrocardiogram.
[a]Class of recommendation.
[b]Level of evidence.
[c]References.

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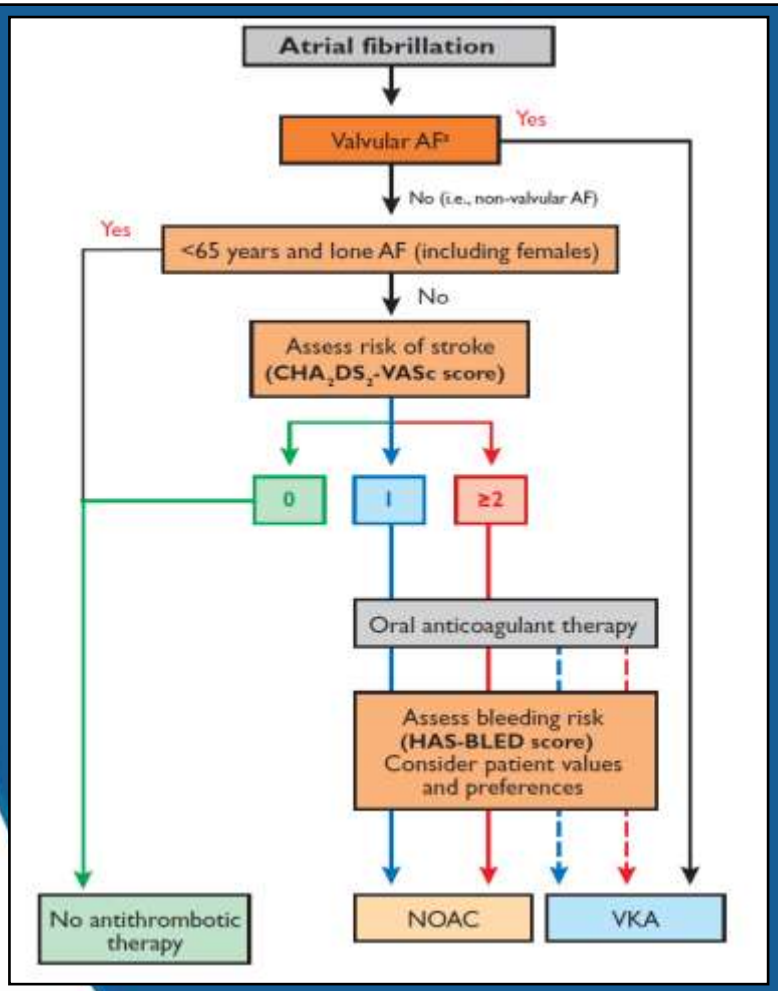

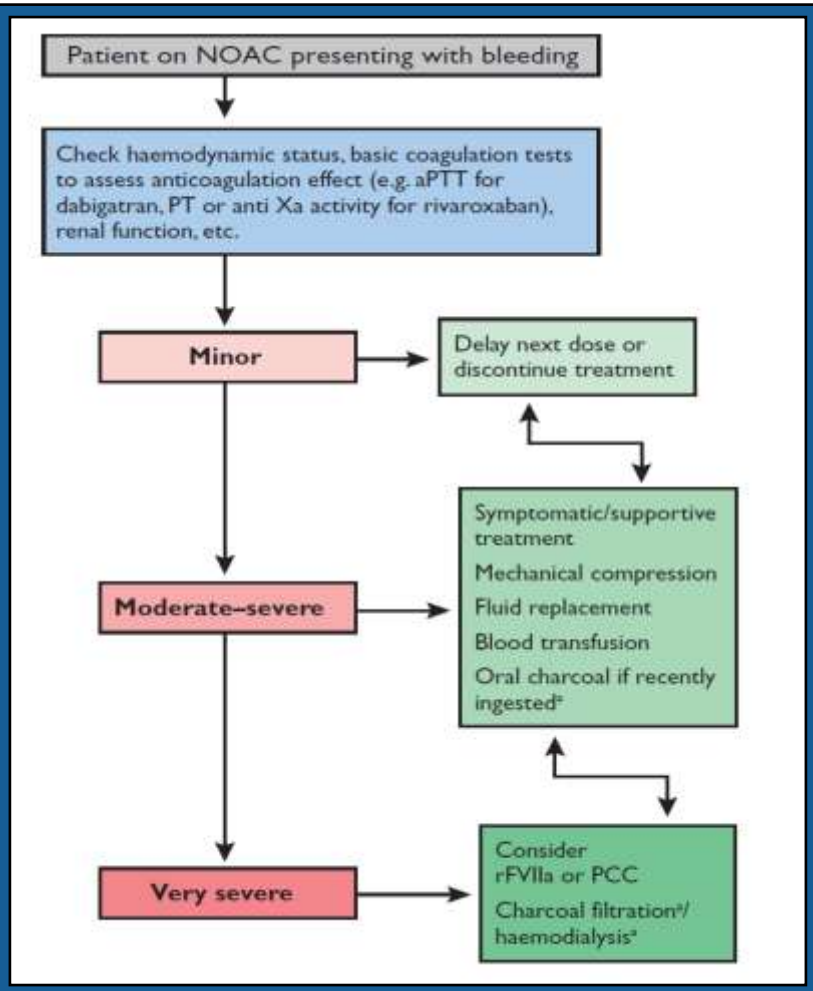

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Recommendations	Class[a]	Level[b]	Ref[c]
Recommendations for prevention of thromboembolism in non-valvular AF—general			
Antithrombotic therapy to prevent thromboembolism is recommended for all patients with AF, except in those patients (both male and female) who are at low risk (aged <65 years and lone AF), or with contraindications.	I	A	21, 63, 104, 105, 106
The choice of antithrombotic therapy should be based upon the absolute risks of stroke/thromboembolism and bleeding and the net clinical benefit for a given patient.	I	A	21, 63, 105
The CHA_2DS_2-VASc score is recommended as a means of assessing stroke risk in non-valvular AF.	I	A	25, 36 ,39
In patients with a CHA_2DS_2-VASc score of 0 (i.e., aged <65 years with lone AF) who are at low risk, with none of the risk factors, no antithrombotic therapy is recommended.	I	B	21, 36, 82
In patients with a CHA_2DS_2-VASc score ≥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)[d] … is recommended, unless contraindicated.	I	A	3, 4, 70, 82

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Recommendations	Class[a]	Level[b]	Ref[c]
Recommendations for prevention of thromboembolism in non-valvular AF—general			
In patients with a CHA_2DS_2-VASc score of 1, 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)[d] …. should be considered, based upon an assessment of the risk of bleeding complications and patient preferences.	IIa	A	33, 44
Female patients who are aged <65 and have lone AF (but still have a CHA_2DS_2-VASc score of 1 by virtue of their gender) are low risk and no antithrombotic therapy should be considered.	IIa	B	33, 44
When patients refuse the use of any OAC (whether VKAs or NOACs), antiplatelet therapy should be considered, using combination therapy with aspirin 75–100 mg plus clopidogrel 75 mg daily (where there is a low risk of bleeding) or—less effectively—aspirin 75–325 mg daily.	IIa	B	21, 26, 51, 109

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Recommendations	Class[a]	Level[b]	Ref[c]
Recommendations for prevention of thromboembolism in non-valvular AF—general			
When adjusted-dose VKA (INR 2–3) cannot be used in a patient with AF where an OAC is recommended, due to difficulties in keeping within therapeutic anticoagulation, experiencing side effects of VKAs, or inability to attend or undertake INR monitoring, one of the NOACs, either: • a direct thrombin inhibitor (dabigatran); or • an oral factor Xa inhibitor (e.g. rivaroxaban, apixaban)[d] … is recommended.	I	B	2, 28, 65, 107
Where OAC is recommended, one of the NOACs, either: • a direct thrombin inhibitor (dabigatran); or • an oral factor Xa inhibitor (e.g. rivaroxaban, apixaban)[d] … 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	3, 4, 70, 82
Where dabigatran is prescribed, a dose of 150 mg b.i.d. should be considered for most patients in preference to 110 mg b.i.d., with the latter dose recommended in: • elderly patients, age ≥ 80 • concomitant use of interacting drugs (e.g. verapamil) • high bleeding risk (HAS-BLED score ≥3) • moderate renal impairment (CrCl 30–49 mL/min).	IIa	B	85, 96
Where rivaroxaban is being considered, a dose of 20 mg o.d. should be considered for most patients in preference to 15 mg o.d., with the latter dose recommended in: • high bleeding risk (HAS-BLED score ≥3) • moderate renal impairment (CrCl 30–49 mL/min).	IIa	C	3, 108
Baseline and subsequent regular assessment of renal function (by CrCl) is recommended in patients following initiation of any NOAC, which should be done annually but more frequently in those with moderate renal impairment where CrCl should be assessed 2–3 times per year.	IIa	B	85

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Recommendations	Class[a]	Level[b]	Ref[c]
Recommendations for prevention of thromboembolism in non-valvular AF—bleeding			
Assessment of the risk of bleeding is recommended when prescribing antithrombotic therapy (whether with VKA, NOAC, aspirin/clopidogrel, or aspirin).	I	A	25, 54, 59, 60
The HAS-BLED score should be considered as a calculation to assess bleeding risk, whereby a score ≥3 indicates 'high risk' and some caution and regular review is needed, following the initiation of antithrombotic therapy, whether with OAC or antiplatelet therapy (LoE = A). Correctable risk factors for bleeding [e.g. uncontrolled blood pressure, labile INRs if the patient was on a VKA, concomitant drugs (aspirin, NSAIDs, etc.), alcohol, etc.] should be addressed (LoE = B). Use of the HAS-BLED score should be used to identify modifiable bleeding risks that need to be addressed, but should not be used on its own to exclude patients from OAC therapy (LoE = B).	IIa	A B	25, 54, 60
The risk of major bleeding with antiplatelet therapy (with aspirin–clopidogrel combination therapy and – especially in the elderly – also with aspirin monotherapy) should be considered as being similar to OAC.	IIa	B	18, 21, 23, 24, 26, 35
Recommendations for prevention of thromboembolism in non-valvular AF—peri-cardioversion			
For patients with AF of ≥48 h duration, or when the duration of AF is unknown, OAC therapy (e.g. VKA with INR 2-3 or dabigatran) is recommended for ≥3 weeks prior to and for ≥4 weeks after cardioversion, regardless of the method (electrical or oral/i.v. pharmacological).	I	B	93
In patients with risk factors for stroke or AF recurrence, OAC therapy, whether with dose-adjusted VKA (INR 2-3) or a NOAC, should be continued lifelong irrespective of the apparent maintenance of sinus rhythm following cardioversion.	I	B	110

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Recommendations for LAA closure/occlusion/excision

Recommendations	Class[a]	Level[b]	Ref[c]
Interventional, percutaneous LAA closure may be considered in patients with a high stroke risk and contraindications for long-term oral anticoagulation.	IIb	B	115, 118
Surgical excision of the LAA may be considered in patients undergoing open heart surgery.	IIb	C	

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Recommendations	Class[a]	Level[b]	Ref[c]
When pharmacological cardioversion is preferred and there is no or minimal structural heart disease, intravenous flecainide, propafenone, ibutilide, or vernakalant are recommended.	I	A	120, 121, 123, 124, 126, 127, 131–134
In patients with AF ≤7 days and moderate structural heart disease [but without hypotension <100 mm Hg, NYHA class III or IV heart failure, recent (<30 days) ACS, or severe aortic stenosis], intravenous vernakalant may be considered. Vernakalant should be used with caution in patients with NYHA class I–II heart failure.	IIb	B	120, 121, 124, 128
Intravenous vernakalant may be considered for cardioversion of postoperative AF ≤3 days in patients after cardiac surgery.	IIb	B	122

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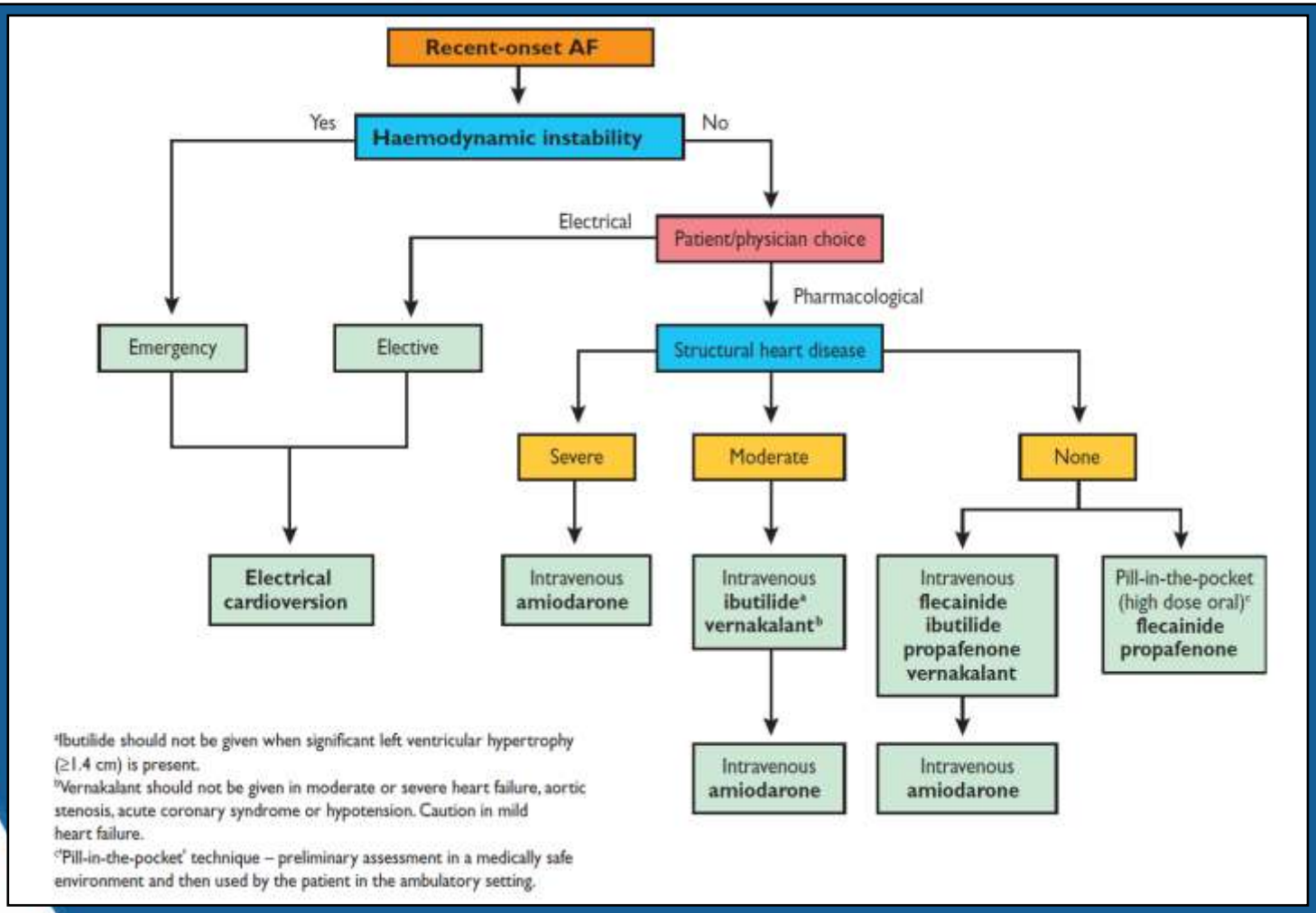

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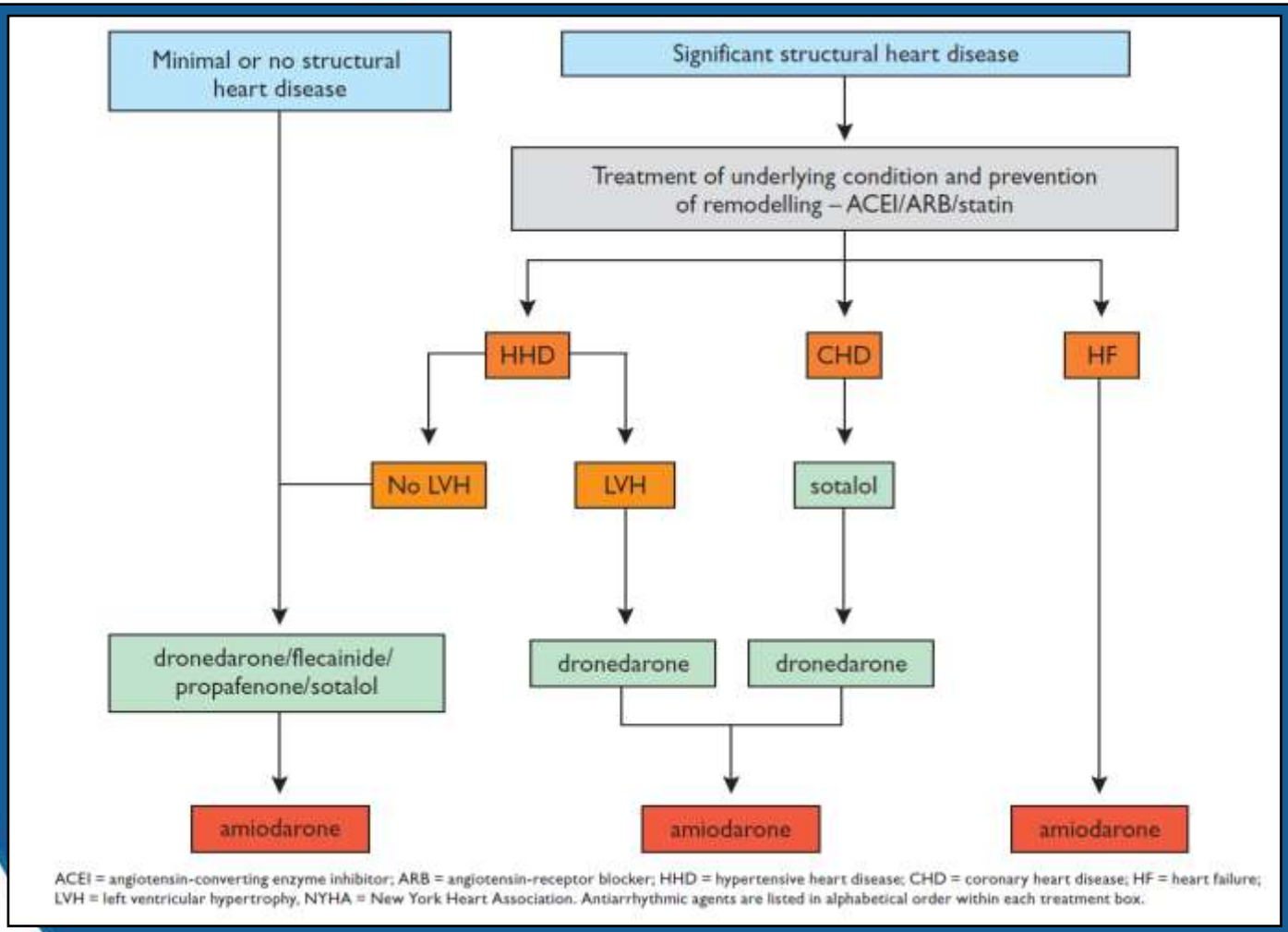

ACEI = angiotensin-converting enzyme inhibitor; ARB = angiotensin-receptor blocker; HHD = hypertensive heart disease; CHD = coronary heart disease; HF = heart failure; LVH = left ventricular hypertrophy, NYHA = New York Heart Association. Antiarrhythmic agents are listed in alphabetical order within each treatment box.

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Recommendations for oral antiarrhythmic agents

Recommendations	Class[a]	Level[b]	Ref[c]
Dronedarone is recommended in patients with recurrent AF as a moderately effective antiarrhythmic agent for the maintenance of sinus rhythm.	I	A	142, 144, 153
Short-term (4 weeks) antiarrhythmic therapy after cardioversion may be considered in selected patients e.g. those at risk for therapy-associated complications.	IIb	B	145
Dronedarone is not recommended in patients with permanent AF.	III	B	5

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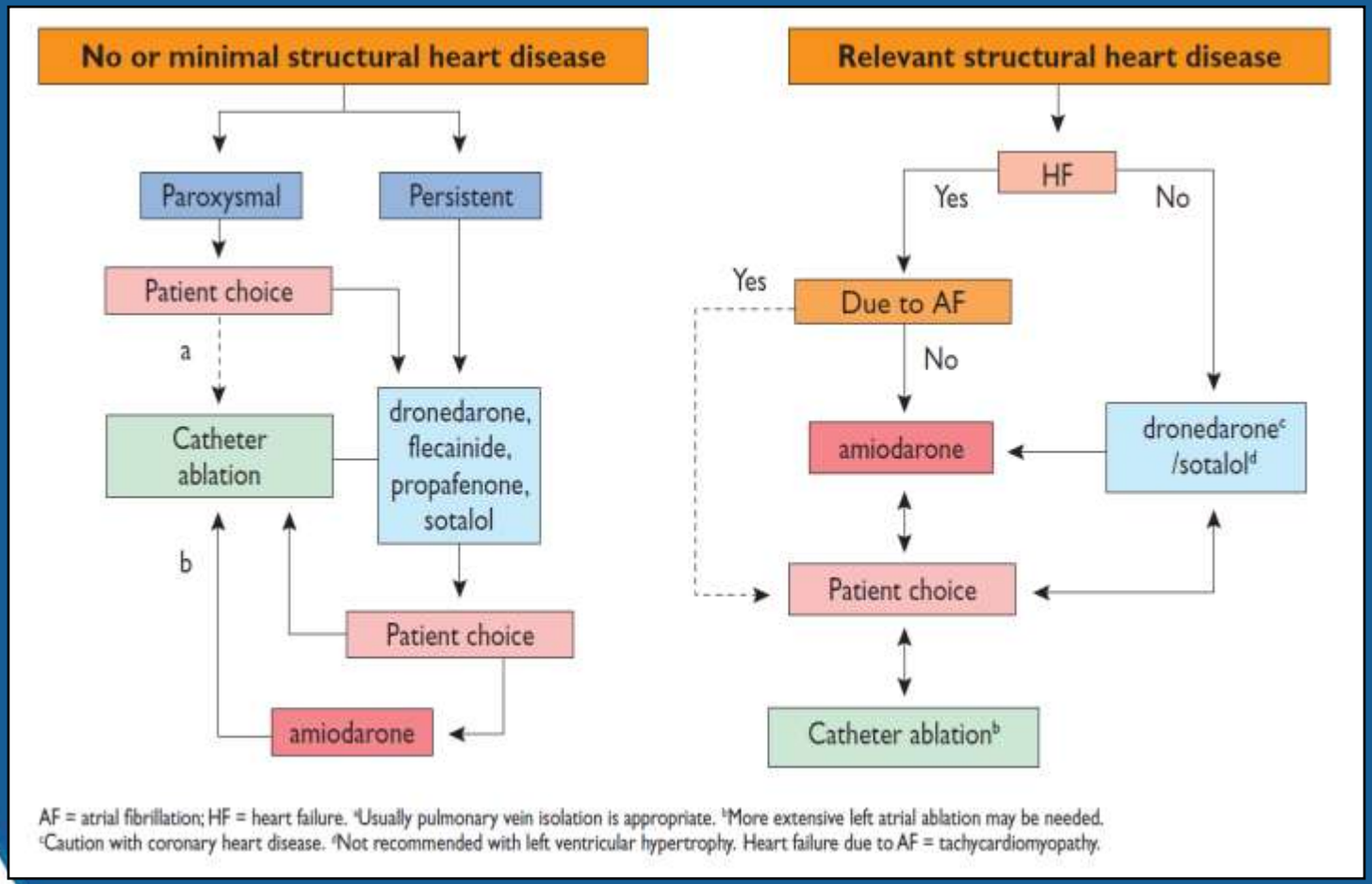

AF = atrial fibrillation; HF = heart failure. [a]Usually pulmonary vein isolation is appropriate. [b]More extensive left atrial ablation may be needed. [c]Caution with coronary heart disease. [d]Not recommended with left ventricular hypertrophy. Heart failure due to AF = tachycardiomyopathy.

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