

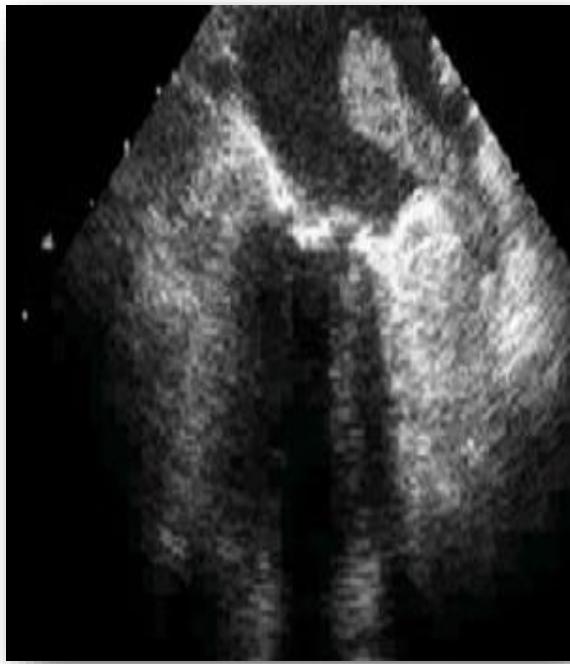
cardioversion

Prevalence of Left Atrial Thrombus Detection by Transesophageal Echocardiography

A Comparison of Continuous Non-Vitamin K Antagonist
Oral Anticoagulant Versus Warfarin Therapy in Patients
Undergoing Catheter Ablation for Atrial Fibrillation

4,4%

AF \geq 4 weeks of therapy NOACs

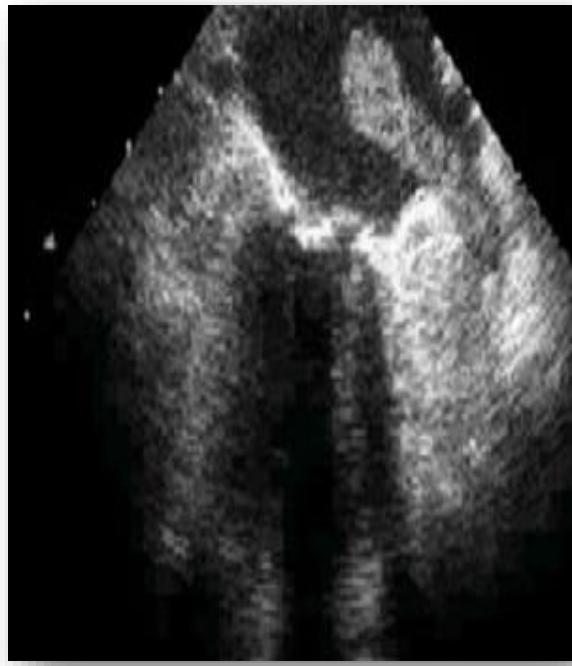


Embolic Events in Patients With Atrial Fibrillation and Effective Anticoagulation: Value of Transesophageal Echocardiography to Guide Direct-Current Cardioversion

Final Results of the Ludwigshafen Observational Cardioversion Study

7,7%

AF and effective anticoagulation



Principal efficacy outcome



	Rivaroxaban (N=978)		VKA (N=492)		Risk ratio (95% CI)
	%	n*	%	n*	
Primary efficacy outcome	0.51	5	1.02	5	0.50 (0.15–1.73)
Stroke	0.20	2	0.41	2	
Haemorrhagic stroke	0.20	2		0	
Ischaemic stroke	0	0.41	2		
TIA	0			0	
Non-CNS SE	0	0.20	1		
MI	0.10	1	0.20	1	
Cardiovascular death	0.41	4	0.41	2	

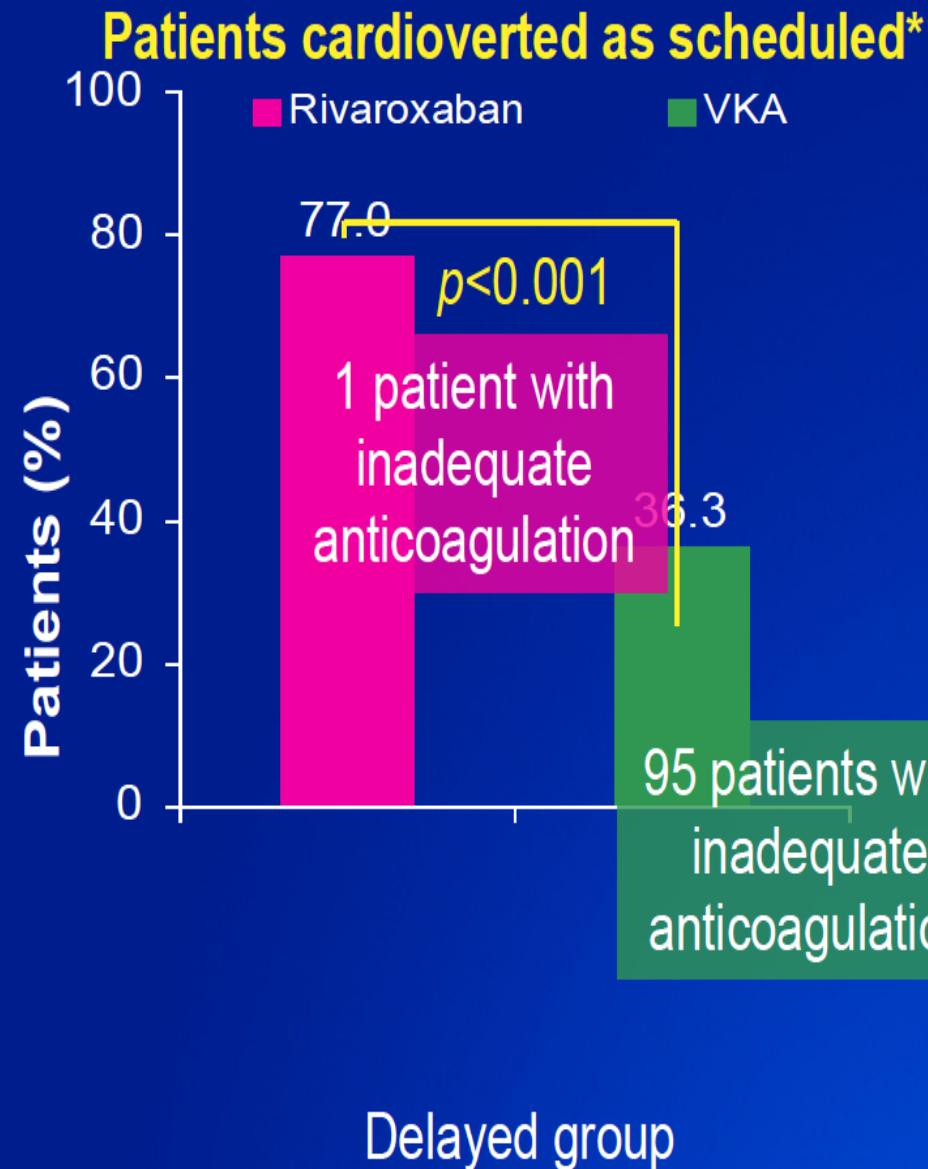
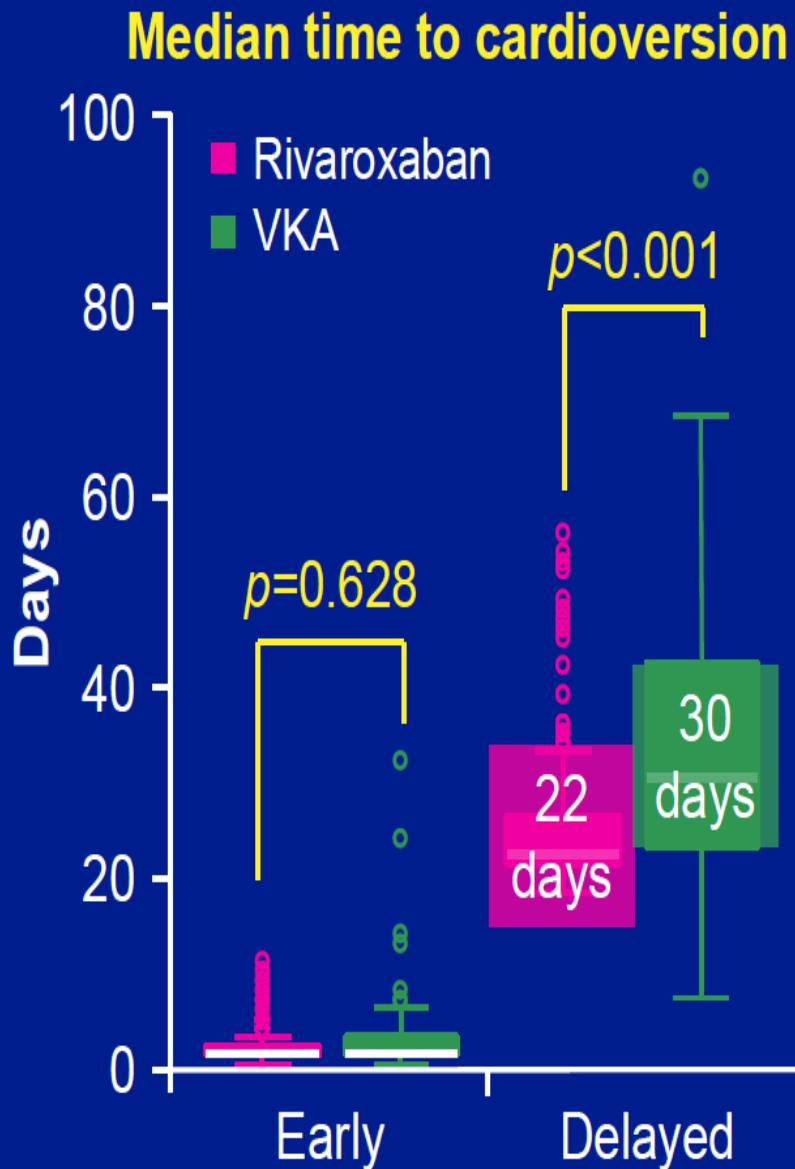
Principal safety outcome



	Rivaroxaban (N=988)		VKA (N=499)		Risk ratio (95% CI)
	%	n*	%	n*	
Major bleeding	0.61	6	0.80	4	0.76 (0.21–2.67)
Fatal	0.1	1	0.4	2	
Critical-site bleeding	0.2	2	0.6	3	
Intracranial haemorrhage	0.2	2	0.2	1	
Hb decrease ≥ 2 g/dl	0.4	4	0.2	1	
Transfusion of ≥ 2 units of packed RBCs or whole blood	0.3	3	0.2	1	

Time to cardioversion by cardioversion strategy

X-VERT

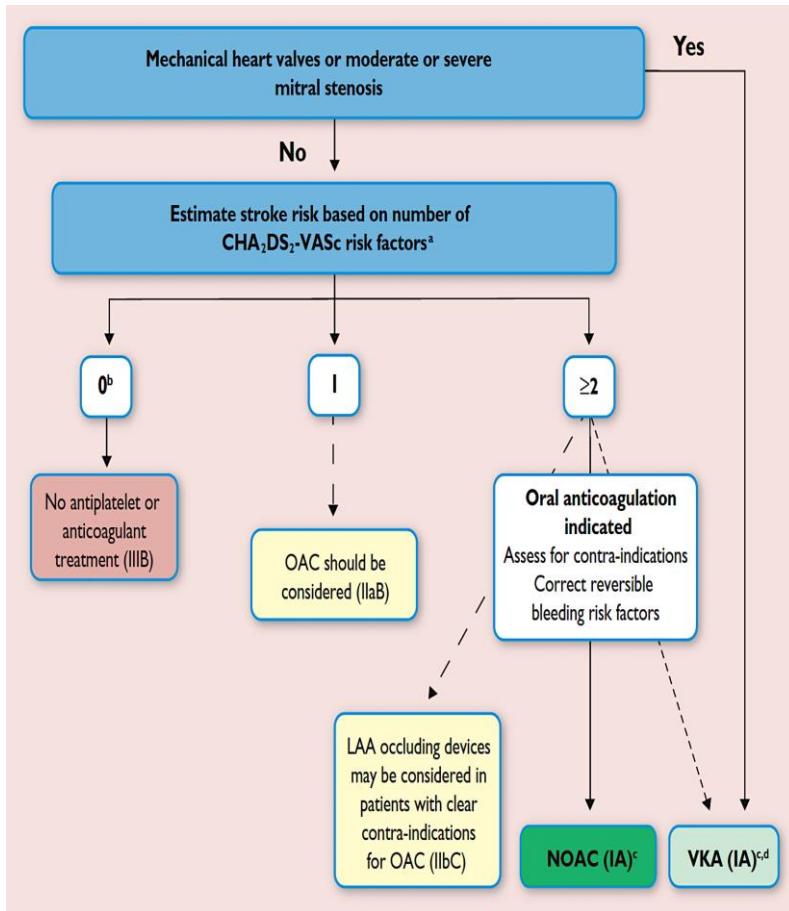


TRT

2016 ESC Guidelines for the management of atrial fibrillation developed in collaboration with EACTS



EUROPEAN
SOCIETY OF
CARDIOLOGY



Recommendations

Vitamin K antagonist therapy (INR 2.0–3.0 or higher) is recommended for stroke prevention in AF patients with moderate-to-severe mitral stenosis or mechanical heart valves.

When oral anticoagulation is initiated in a patient with AF who is eligible for a NOAC (apixaban, dabigatran, edoxaban, or rivaroxaban), a NOAC is recommended in preference to a Vitamin K antagonist.

Class ^a	Level ^b
I	B
I	A

practical guide NOAC

Last intake of drug before elective surgical intervention

Dabigatran

Apixaban–Edoxaban–Rivaroxaban

No important bleeding risk and/or adequate local haemostasis possible: perform at trough level (i.e. ≥ 12 or 24 h after last intake)

Low risk

High risk

Low risk

High risk

CrCl ≥ 80 mL/min

≥ 24 h

≥ 48 h

≥ 24 h

≥ 48 h

CrCl 50–80 mL/min

≥ 36 h

≥ 72 h

≥ 24 h

≥ 48 h

CrCl 30–50 mL/min^a

≥ 48 h

≥ 96 h

≥ 24 h

≥ 48 h

CrCl 15–30 mL/min^a

Not indicated

Not indicated

≥ 36 h

≥ 48 h

CrCl <15 mL/min

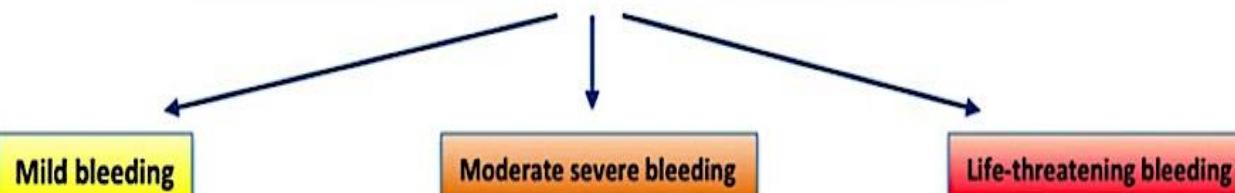
No official indication for use

There is no need for pre-operative bridging with LMWH/UFH

Bleeding while using a NOAC



- Inquire about last NOAC intake
- Blood sample to determine creatinine (clearance), hemoglobin and WBC
- Inquire lab on possibility for rapid coagulation assessment



- Delay or discontinue next dose
- Reconsider concomitant medication

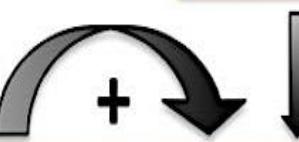


Moderate/severe bleeding

- Supportive measures :
 - mechanical compression
 - endoscopic hemostasis if gastro-intestinal bleed
 - surgical hemostasis
 - fluid replacement (colloids if needed)
 - RBC substitution if needed
 - fresh frozen plasma (as plasma expander)
 - platelet substitution (if platelet count $\leq 60 \times 10^9 / L$)

For dabigatran:

- maintain adequate diuresis
- consider hemodialysis
- consider idarucizumab 5g IV (approval pending)
- (charcoal haemoperfusion?)

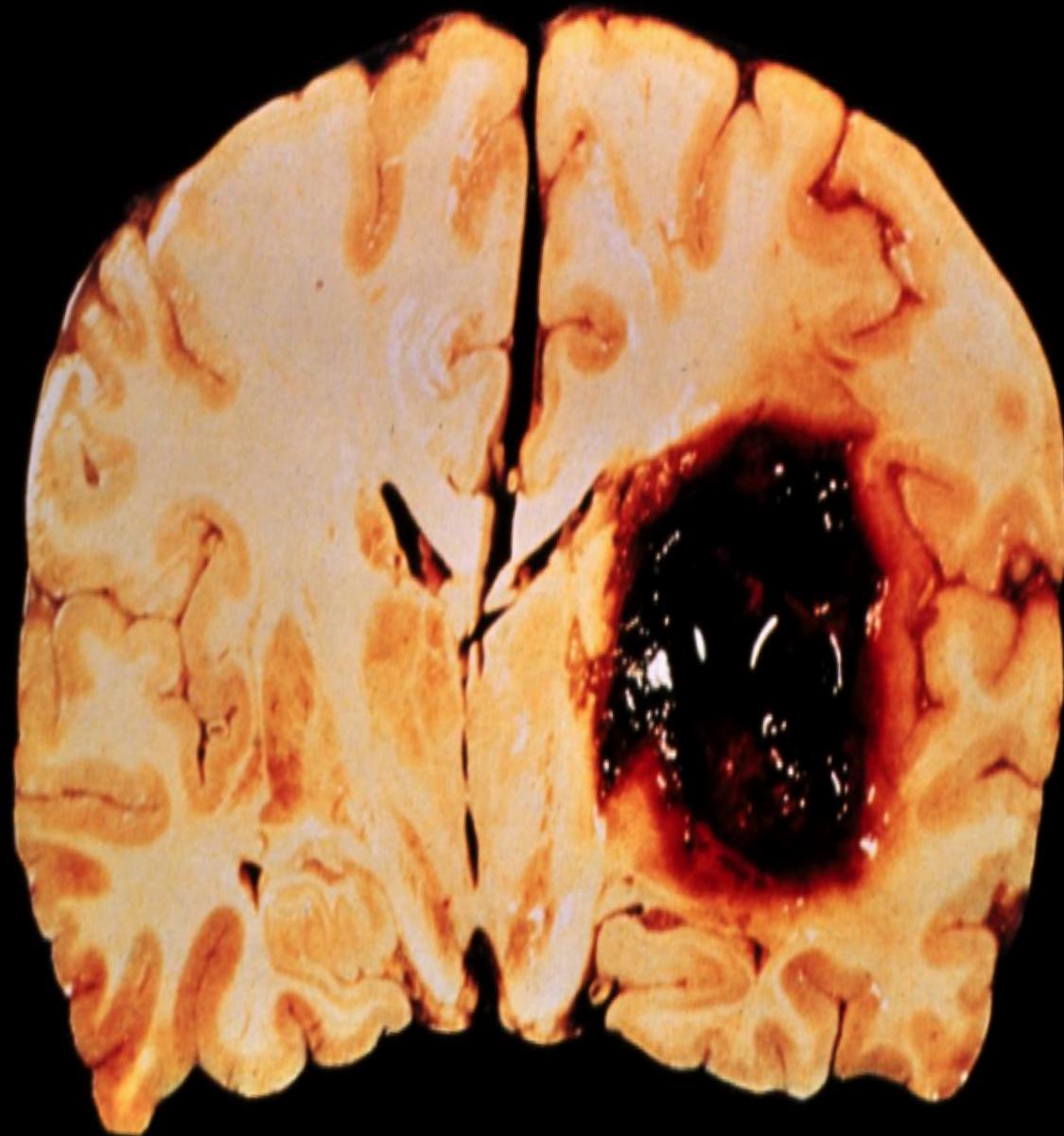


Life-threatening bleeding

- For dabigatran-treated patients: idarucizumab 5g IV
- Otherwise, consider:
 - PCC (e.g. Beriplex®, CoFact®) 50 U/kg; +25 U/kg if indicated
 - aPCC (Feiba®) 50 U/kg; max 200 U/kg/day
 - (rFVIIa (NovoSeven®) 90 µg/kg no data about additional benefit)







domingo.marzal@secardiologia.es

@domingomarzal



gracias por vuestra atención