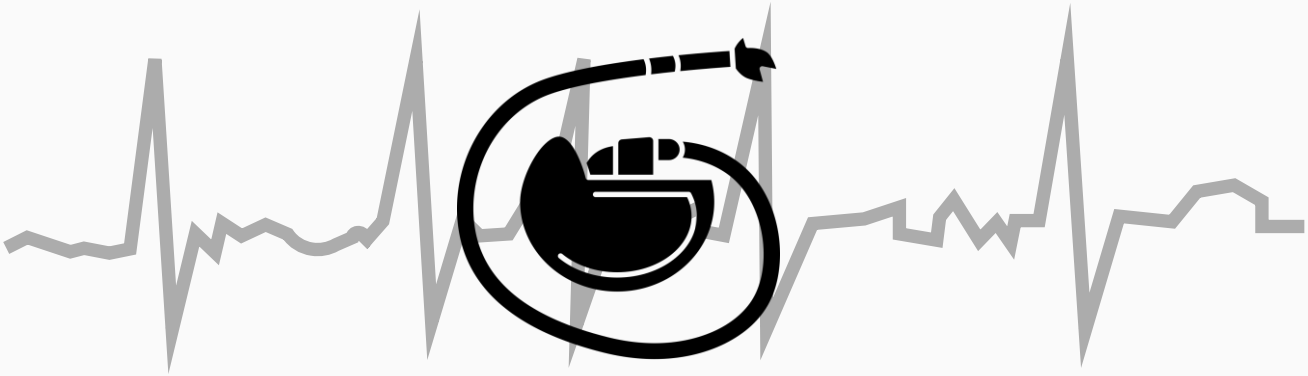
GREAT DEBATES

Device-detected or clinically diagnosed AF: the same decision for oral anticoagulation-

PRO



William F. McIntyre MD PhD FRCPC

August 31, 2025

Population Health Research Institute
HEALTH THROUGH KNOWLEDGE

McMaster University

Heart &Stroke

WF McIntyre MD PhD FRCPC

Disclosures

Speaking:

iRhythm

Consulting:

Atricure

Peer Reviewed Grants and Salary Support:

Heart and Stroke Foundation of Canada

Population Health Research Institute

Canadian Institutes of Health Research

ORIGINAL RESEARCH ARTICLE

Direct Oral Anticoagulants for Stroke Prevention in Patients With Device-Detected Atrial Fibrillation: A Study-Level Meta-Analysis of the NOAH-AFNET 6 and ARTESiA

William F. McIntyre, MD, PhD; Alexander P. Benz, MD, MSc; Nina Becher, M
Christopher B. Granger, MD; Lena Rivard, MD, MSc; A. John Camm, MD; A
Marco Alings, MD, PhD; Stuart J. Connolly, MD, MSc; Paulus Kirchhof, MD

ESC European Society of Cardiology
European Heart Journal (2024) 00, 1–15
https://doi.org/10.1093/eurheartj/ehae596

FASTTRACK – CLINICAL RESEARCH
Arrhythmias

Outcomes and Management of Trigg Atrial Fibrillation

JACC State-of-the-Art Review

Julian S. Haimovich, MD, Shinwan Kany, MD, MSc, Ezimamaka Ajufo, MD, Jason
Emelia J. Benjamin, MD, ScM, Jeffrey S. Healey, MD, Paulus Kirchhof, MD, Steven
William F. McIntyre, MD, Michiel Rienstra, MD, PhD, MHA, Prashanthan Sanders, MBBS,
Renate B. Schnabel, MD, Patrick T. Ellinor, MD, PhD, Shaan Khurshid, MD, MPH

Anticoagulation in device-detected atrial fibrillation with or without vascular disease: a combined analysis of the NOAH-AFNET 6 and ARTESiA trials

Renate B. Schnabel[1,2,3], Juan Benezet-Mazuecos[4], Nina Becher[1,2], William F. McIntyre[5], Alexander Fierenz[6], Shun Fu Lee[7], Andreas Goette[8,9], Dan Atar[10], Emanuele Bertaglia[11], Alexander P. Benz[5,12], Gregory Chlouverakis[13], David H. Birnie[14], Wolfgang Dichtl[15], Carina Blomstrom-Lundqvist[16,17], A. John Camm[18], Julia W. Erath[19], Emmanuel Simantirakis[20], Valentina Kutyifa[21], Gregory Y. H. Lip[22,23], Philippe Mabo[24], Eloi Marijon[25], Lena Rivard[26], Ulrich Schotten[3,27], Marco Alings[28], Susanne Sehner[6], Tobias Toennis[1,2], Cecilia Linde[29], Panos Vardas[20,30], Christopher B. Granger[31], Antonia Zapf[6], Renato D. Lopes[32], Jeff S. Healey[5], and Paulus Kirchhof[1,2,3,33]*

Efficacy and safety of direct oral anticoagulants in patients with device-detected atrial fibrillation with and without dose reduction criteria: a pooled analysis of ARTESiA and NOAH-AFNET 6

Authors

WF Mcintyre[1], N Becher[2], AP Benz[1], T Toennis[2], A Goette[3], CB Granger[4], A Fierenz[2], A Zapf[2], R Mian[1], RD Lopes[4], JS Healey[1], P Kirchhof[2], [1]Population Health Research Institute - Hamilton - Canada, [2]University Heart and Vascular Centre Hamburg (UHZ) - Hamburg - Germany, [3]Saint Vincenz Hospital Paderborn - Paderborn - Germany, [4]Duke Clinical Research Institute - Durham - United States of America,

Great Debates: stroke prevention in specific clinical scenarios

31 August from 08:15 to 09:45 | Paris(Hall 4) | Great Debates | Stroke in Atrial Fibrillation

08:15

Device-detected or clinically diagnosed atrial fibrillation: the same decision for oral anticoagulation therapy - pro

Speaker: William McIntyre (Population Health Research Institute - Hamilton, Canada) 𝕏 WFMMD

Device-detected or clinically diagnosed atrial fibrillation: the same decision for oral anticoagulation therapy - con

Speaker: Paulus Kirchhof (University Heart and Vascular Centre Hamburg (UHZ) - Hamburg, Germany) 𝕏 UCCS_HH,

Tarragona, Spain
August 2025

OAC for device-detected AF?
The Issues

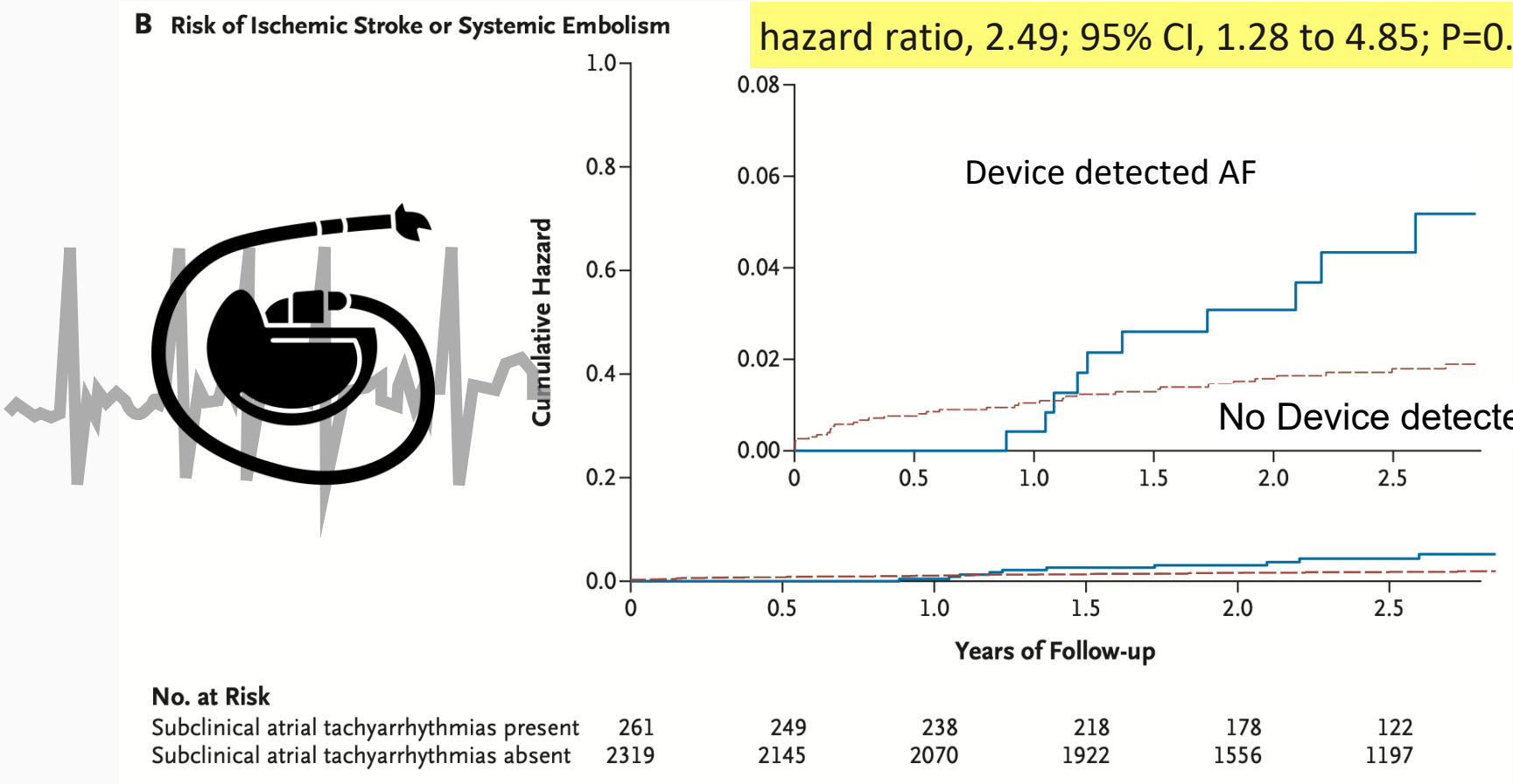
1. Are patients with device-detected AF at risk of stroke?

2. Does OAC reduce stroke in these patients?

3. Is the risk of stroke sufficiently high to justify OAC?

4. Is the bleeding risk acceptable?

Device-detected AF increases the risk of stroke



Healey JS et al NEJM 2012

OAC for device-detected AF?
The Issues

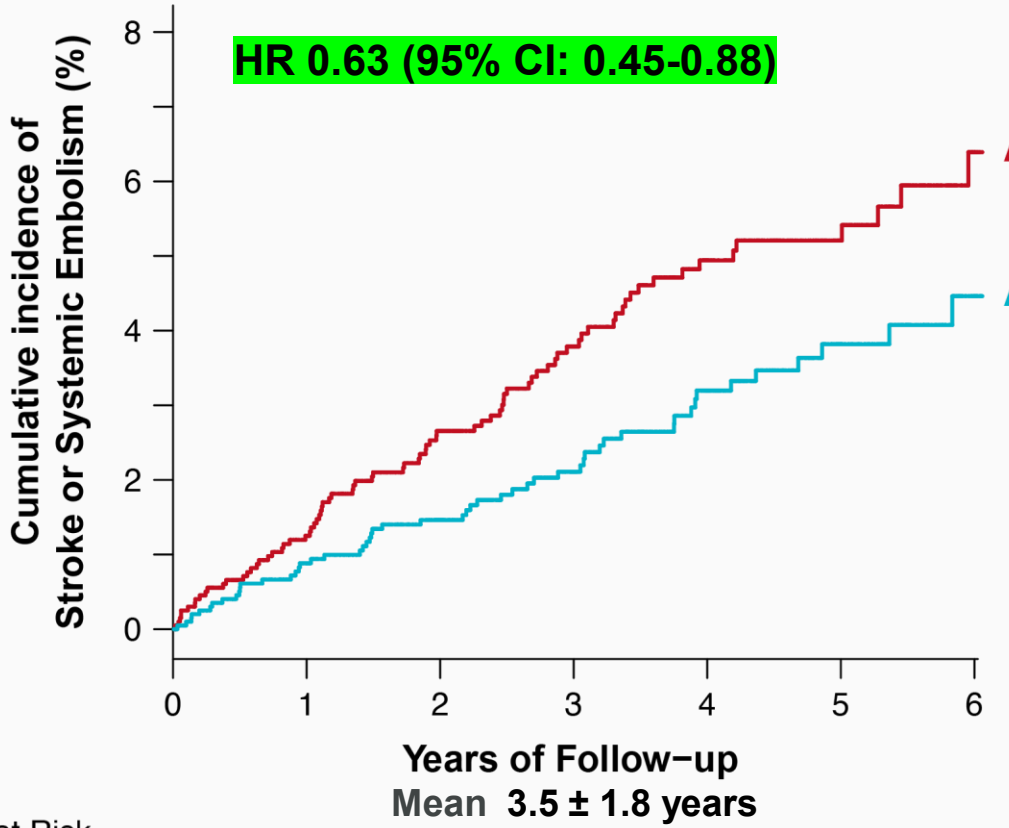
1. Are patients with device-detected AF at risk of stroke?
YES

2. Does OAC reduce stroke in these patients?

3. Is the risk of stroke sufficiently high to justify OAC?

4. Is the bleeding risk acceptable?

Apixaban Reduces Stroke in Device-detected AF



No. at Risk							
Aspirin	1997	1777	1539	1121	779	468	200
Apixaban	2015	1786	1556	1157	822	474	214

1.24% per year

0.78% per year

ARTESiA

Healey JS et al NEJM 204

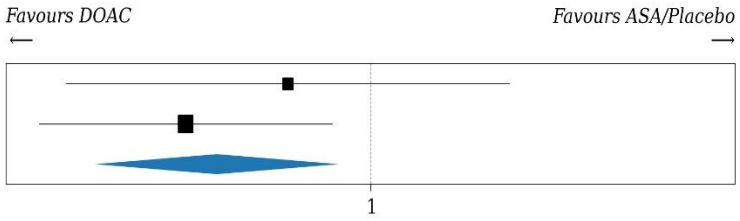
Direct Oral Anticoagulants for Stroke Prevention in Patients With Device-Detected Atrial Fibrillation: A Study-Level Meta-Analysis of the NOAH-AFNET 6 and ARTESiA Trials

Ischemic Stroke

Study	DOAC	(%)	ASA/Placebo	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	22/1,270	(1.7%)	27/1,266	(2.1%)	30.4%	0.81 [0.47, 1.42]
ARTESiA	45/2,015	(2.2%)	71/1,997	(3.6%)	69.6%	0.63 [0.43, 0.91]
Pooled Estimate	67/3,285	(2.0%)	98/3,263	(3.0%)	I^2: 0%	0.68 [0.5, 0.92]

Mantel-Haenszel, DerSimonian-Laird Random Effects — *p=0.01, z=2.47, τ^2=0.00*

RR: Risk Ratio
CI: Confidence Interval

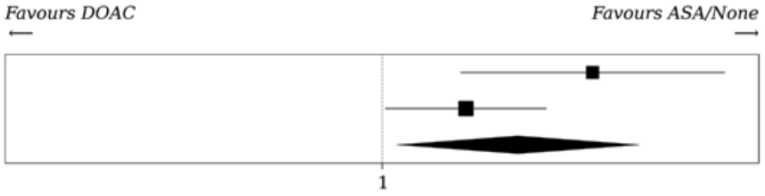


Major Bleeding

Study	DOAC	(%)	ASA/None	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	53/1,270	(4.2%)	25/1,266	(2.0%)	41.1%	2.11 [1.32, 3.38]
ARTESiA	106/2,015	(5.3%)	78/1,997	(3.9%)	58.9%	1.35 [1.01, 1.79]
Pooled Estimate	159/3,285	(4.8%)	103/3,263	(3.2%)	I^2: 61%	1.62 [1.05, 2.5]

Mantel-Haenszel, DerSimonian-Laird Random Effects — *p=0.03, z=2.18, τ^2=0.06*

RR: Risk Ratio
CI: Confidence Interval



McIntyre WF et al Circulation. 2024;149:981–988.

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Anticoagulation with Edoxaban in Patients with Atrial High-Rate Episodes

P. Kirchhof, T. Toennis, A. Goette, A.J. Camm, H.C. Diener, N. Becher, E. Bertaglia, C. Blomstrom Lundqvist, M. Borlich, A. Brandes, N. Cabanelas, M. Calvert, G. Chlouverakis, G.-A. Dan, J.R. de Groot, W. Dichtl, B. Kravchuk, A. Lubiński, E. Marijon, B. Merkely, L. Mont, A.-K. Ozga, K. Rajappan, A. Sarkozy, D. Scherr, R. Sznajder, V. Velchev, D. Wichterle, S. Sehner, E. Simantirakis, G.Y.H. Lip, P. Vardas, U. Schotten, and A. Zapf, for the NOAH-AFNET 6 Investigators*

The primary efficacy outcome was a composite of:

- *cardiovascular death*
- *stroke*
- *systemic embolism*

Kirchhof P et al NEJM 2023

In AF Patients, A Minority of Deaths are From DOAC Responsive Conditions

TABLE 2 Descriptive Analysis of Causes of Death as Total Numbers and as Percentage of Total Deaths

Cause of Death	All Patients	DOAC	Warfarin
All-cause death	6,206 (100)	3,579 (100)	2,627 (100)
Vascular death	3,970 (64)	2,297 (64)	1,673 (64)
Cardiac death	2,855 (46)	1,699 (47)	1,156 (44)
Sudden death/dysrhythmia	1,759 (28)	1,044 (29)	715 (27)
Heart failure	922 (15)	547 (15)	375 (14)
Myocardial infarction	174 (3)	108 (3)	66 (3)
Ischemic stroke/SE*	356 (6)	206 (6)	150 (6)
Hemorrhage (all)	350 (6)	148 (4)	202 (8)
Hemorrhagic stroke	202 (3)	77 (2)	125 (5)
Other intracranial hemorrhage	63 (1)	28 (1)	35 (1)
Extracranial hemorrhage	85 (1)	43 (1)	42 (2)
Other vascular death†	409 (7)	244 (7)	165 (6)
Nonvascular death	1,849 (30)	1,103 (31)	746 (28)
Malignancies	706 (11)	441 (12)	265 (10)
Infections	533 (9)	318 (9)	215 (8)
Respiratory	177 (3)	89 (2)	88 (3)
Trauma/accidental	72 (1)	34 (1)	38 (1)
Hepatobiliary/liver failure	17 (0.3)	9 (0.3)	8 (0.3)
All other	344 (6)	212 (6)	132 (5)
Undetermined death	387 (6)	179 (5)	208 (8)

~ 15% of All-cause death
~ 23% of Vascular death
~ 33% of Cardiac death

Consequence:
Including Death
in a trial endpoint
dilutes the effect of OAC

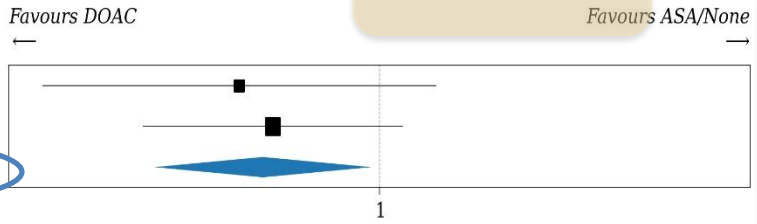
Gómez-Outes et al J Am Coll Cardiol 2016;68:2508–21

Direct Oral Anticoagulants for Stroke Prevention in Patients With Device-Detected Atrial Fibrillation: A Study-Level Meta-Analysis of the NOAH-AFNET 6 and ARTESiA Trials

Composite of All-cause Stroke, Peripheral Arterial Embolism, Myocardial Infarction, Pulmonary Embolism or Cardiovascular Death

Study	DOAC	(%)	ASA/None	(%)	Weight	RR [95% CI]
NOAH-AFNET 6	83/1,270	(6.5%)	101/1,266	(8.0%)	30.4%	0.82 [0.62, 1.08]
ARTESiA	189/2,015	(9.4%)	218/1,997	(10.9%)	69.6%	0.86 [0.71, 1.03]
Pooled Estimate	272/3,285	(8.3%)	319/3,263	(9.8%)	I^2: 0%	0.85 [0.73, 0.99]

Mantel-Haenszel, DerSimonian-Laird Random Effects
p=0.03, z=2.11
τ^2=0.00
RR: Risk Ratio
CI: Confidence Interval



McIntyre WF et al Circulation. 2024;149:981–988.

OAC for device-detected AF?
The Issues

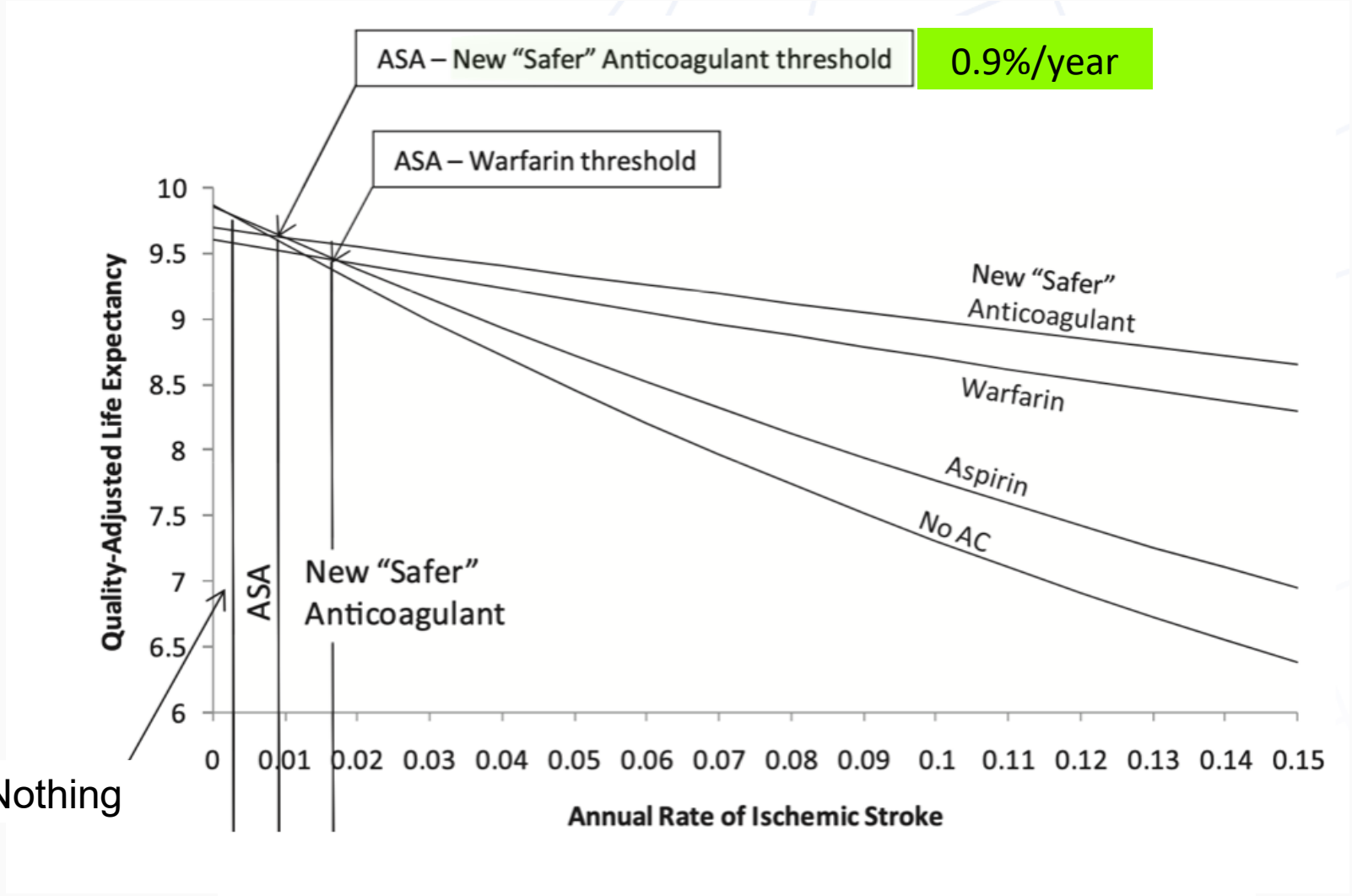
1. Are patients with device-detected AF at risk of stroke?
YES

2. Does OAC reduce stroke in these patients?
YES

3. Is the risk of stroke sufficiently high to justify OAC?

4. Is the bleeding risk acceptable?

What annual rate of stroke justifies OAC?



Eckman MH et al. Circulation Cardiovasc Qual Outcomes 2011;4:14–21

For Clinical AF
Annual Stroke Rates >1%
Warrant Consideration of OAC
Consistent Threshold in Europe and US

Recommendations for Antithrombotic Therapy
Referenced studies that support the recommendations are summarized in the Online Data Supplement.

COR	LOE	RECOMMENDATIONS
1	A	1. For patients with AF and an estimated annual thromboembolic risk of ≥2% per year (eg, CHA_2DS_2-VASc score of ≥2 in men and ≥3 in women), anticoagulation is recommended to prevent stroke and systemic thromboembolism.[1-7]
2a	A	3. For patients with AF and an estimated annual thromboembolic risk of ≥1% but <2% per year (equivalent to CHA_2DS_2-VASc score of 1 in men and 2 in women), anticoagulation is reasonable to prevent stroke and systemic thromboembolism.[1,3]

2023 ACC/AHA/ACCP/HRS Guideline for the Diagnosis and Management of Atrial Fibrillation

For Clinical AF
Annual Stroke Rates >1%
Warrant Consideration of OAC
Consistent Threshold in Europe and US

i.e. ≥2%	A CHA_2DS_2-VA score of 2 or more is recommended as an indicator of elevated thromboembolic risk for decisions on initiating oral anticoagulation.	I	C
i.e. ≥1%	A CHA_2DS_2-VA score of 1 should be considered an indicator of elevated thromboembolic risk for decisions on initiating oral anticoagulation.	IIa	C

....following a patient-centred and shared care approach....

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

The ESC Device-detect AF Recommendation is Not Internally Consistent with the Rest of the Guideline Document

i.e. ≥1%	A CHA_2DS_2-VA score of 1 should be considered an indicator of elevated thromboembolic risk for decisions on initiating oral anticoagulation.	IIa	C
≥1%	Direct oral anticoagulant therapy may be considered in patients with asymptomatic device-detected subclinical AF and elevated thromboembolic risk to prevent ischaemic stroke and thromboembolism, excluding patients at high risk of bleeding.[281,282]	IIb	B

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

Stroke Rates in Device-Detected AF Exceed 1%/year
An Identified Important Threshold

ARTESiA

Outcome	Apixaban (N=2015)		Aspirin (N=1997)		Hazard Ratio (95% CI)	P Value
	no. of patients with event	*%/patient-yr*	*no. of patients with event*	*%/patient-yr*		
Stroke or systemic embolism	55	0.78	86	1.24	0.63 (0.45–0.88)	0.007
Stroke	55	0.78	84	1.21	0.64 (0.46–0.90)	
Ischemic or unknown type†	45	0.64	71	1.02	0.62 (0.43–0.91)	
Hemorrhagic	10	0.14	13	0.18	0.76 (0.33–1.73)	

≥1%

NOAH-AFNET 6

Outcome	Edoxaban (N=1270)	Placebo (N=1266)	Adjusted Hazard Ratio (95% CI)
	no. of patients with event/patient-yr (% per patient-yr)		
Primary composite efficacy outcome†	83/2557 (3.2)	101/2495 (4.0)	0.81 (0.60 to 1.08)‡
Ischemic stroke	22/2573 (0.9)	27/2519 (1.1)	0.79 (0.45 to 1.39)
Systemic embolism	14/2579 (0.5)	28/2515 (1.1)	0.51 (0.27 to 0.96)

≥1%

OAC for device-detected AF?
The Issues

1. Are patients with device-detected AF at risk of stroke?

YES

2. Does OAC reduce stroke in these patients?

YES

3. Is the risk of stroke sufficiently high to justify OAC?

YES

4. Is the bleeding risk acceptable?

ARTESiA Showed a Reduction in Fatal/Disabling Stroke at the Expense of Non-fatal Major Bleeds

	Apixaban (N = 2015)	Aspirin (N = 1997)	Hazard Ratio (95% CI)
Total Stroke	55 (0.78)	84 (1.21)	0.64 (0.46-0.90)
Modified Rankin Score 0-2	31 (0.44)	45 (0.65)	0.68 (0.43-1.07)
Modified Rankin Score 3-6	19 (0.27)	37 (0.53)	0.51 (0.29-0.88)
Major bleeding (ISTH)	*106 (1.53)*	*78 (1.12)*	*1.36 (1.01-1.82)*

Major Bleeding Events	Apixaban (N = 2015)	Aspirin (N = 1997)
Clinical course	n (% of major bleeds)	
1 - *conservative measures*	21 (22.6)	16 (32.7)
2 - *supportive care, transfusion*	54 (58.1)	22 (44.9)
3 - *immediate measures needed to avoid death*	9 (9.7)	4 (8.2)
4 - *death unavoidable*	3 (3.2)	6 (12.2)

Healey JS et al NEJM 204

Compared to Clinical AF, Device-Detected AF has *Similar Stroke to Bleed Ratio on OAC* *Lower Annual Rates of Bleeding on OAC*

Table 3 Selected outcomes of patients enrolled in trials of antithrombotic therapy in patients with atrial fibrillation—expressed as event rate per 100 patient-years

Clinical AF + risk factors				
	RE-LY[32a]		ROCKET AF[34b]	
	Dabigatran 150 mg bid	Warfarin (target INR 2.0-3.0)	Rivaroxaban 20 (15) mg daily[c]	Warfarin (target INR 2.0-3.0)
Ischaemic stroke	0.9	1.2	1.3	1.4
Major bleeding	3.1	3.4	3.6	3.4
Intracranial haemorrhage	0.3	0.7	0.5	0.7
Death	3.6	4.1	4.5	4.9
	ARISTOTLE[33]		ENGAGE AF-TIMI 48[35]	
	Apixaban 5 (2.5) mg bid[c]	Warfarin (target INR 2.0-3.0)	Edoxaban 60 (30) mg daily[c]	Warfarin (target INR 2.0-3.0)
Ischaemic stroke	1.0	1.1	1.3	1.3
Major bleeding	2.1	3.1	2.8	3.4
Intracranial haemorrhage	0.3	0.8	0.4	0.9
Death	3.5	3.9	4.0	4.4
Device-detected AF + risk factors				
	NOAH-AFNET 6[39a]		ARTESiA[40]	
	Edoxaban 60 (30) mg daily[c]	Aspirin 100 mg daily/placebo	Apixaban 5 (2.5) mg bid[c]	Aspirin 81 mg daily
Ischaemic stroke	0.8	1.0	0.6	1.0
Major bleeding[a]	2.3	1.2	1.7	0.9
Intracranial haemorrhage[a]	Not reported		0.2	0.3
Death	4.7	4.3	5.1	4.8

1 to 3.4

1 to 2.8

1 to 2.1

1 to 2.2

1 to 2.9

1 to 2.8

McIntyre WF et al Eur Heart J Supp 2024 26 iv4–iv11

Many Patients Value Stroke Prevention Over Bleeding Risk

"Patients at high risk for AF placed more value on the avoidance of stroke and less value on the avoidance of bleeding than did physicians who treat patients with AF."

"Patients were willing to endure 4.4 major bleeds in order to prevent one stroke."

Devereaux PJ et al BMJ 2001;323:1–7
SA LaHaye et al Thromb Haemost 2014 111(3):465-73.

OAC for device-detected AF?
The Issues

1. Are patients with device-detected AF at risk of stroke?
YES - Consistent Evidence

2. Does OAC reduce stroke in these patients?
YES - High Quality Evidence from 2 Concordant RCTs

3. Is the risk of stroke sufficiently high to justify OAC?
YES - Baseline risk >1%/yr,
identified as meaningful by patients, guidelines and Markov models

4. Is the bleeding risk acceptable?
YES - OAC stops fatal/disabling strokes at expense of non-fatal bleeds
Patients tend to value stroke prevention over bleeding risk
Same Stroke/Bleed Ratio as clinical AF

If you only want to initiate OAC based on Class I Recommendations *i.e. Annual Stroke Risk ≥ 2%*

i.e. ≥2%

A CHA_2DS_2-VA score of 2 or more is recommended as an indicator of elevated thromboembolic risk for decisions on initiating oral anticoagulation.	I	C

ESC 2024 AF GLs

Recommendations for Antithrombotic Therapy
Referenced studies that support the recommendations are summarized in the Online Data Supplement.

COR	LOE	RECOMMENDATIONS
1	A	1. For patients with AF and an estimated annual thromboembolic risk of ≥2% per year (eg, CHA_2DS_2-VASc score of ≥2 in men and ≥3 in women), anticoagulation is recommended to prevent stroke and systemic thromboembolism.[1-7]

AHA/ACC 2023 AF GLs

Patients with Device-Detected AF
And an Annual Stroke Risk > ~2%

1. Prior Stroke: 3.4%/year on Aspirin

Shoamanesh A et al Lancet Neurol 2025

2. CHA_2DS_2-VASc Score > 4: Risk 2.3%/year on Aspirin

Lopes et al JACC 2024

3. Implanted Cardiac Monitors: 2.6%/year on Aspirin

Xing L et al Heart Rhythm 2025 in Press

4. Meet DOAC Dose Reduction Criteria: 2.0%/year on Aspirin/Placebo

McIntyre et al ESC Congress Aug 29 2025

5. Vascular Disease: 1.9%/year on Aspirin/Placebo

Schnabel R et al European Heart Journal 2024

Assessing Net Benefit
Cost-effectiveness of Apixaban for Device-Detected AF

Lifetime Cost




	Canada	United Kingdom	Germany		United States	
Costs	Dominant Strategy	Dominant Strategy	$4937	$7560	$9314	$18424
Incremental Cost			**$2623**		**$9110**	
Incremental Cost (Discounted)			$2319		$8032	
QALYs			4.888	4.995	4.888	4.995
Incremental QALYs			**0.107**		**0.107**	
Incremental QALYs (Discounted)			0.086		0.086	
ICER			**$24,514/QALY**		**$85,140/QALY**	
ICER (Discounted)			$26,965/QALY		$93,395/QALY	

- cost-effective

- cost-effective at $4.35/day
- cost-saving at $3.59/day

Sandhu et al ESC Congress Aug 31 2025
Simultaneous Publication Europace Lamy et al

Device-Detected AF: The Same OAC Decision As for Clinical AF

1. Baseline risk/benefit of OAC could be acceptable to anyone
   - Worth discussing with every patient (~ Class IIa)

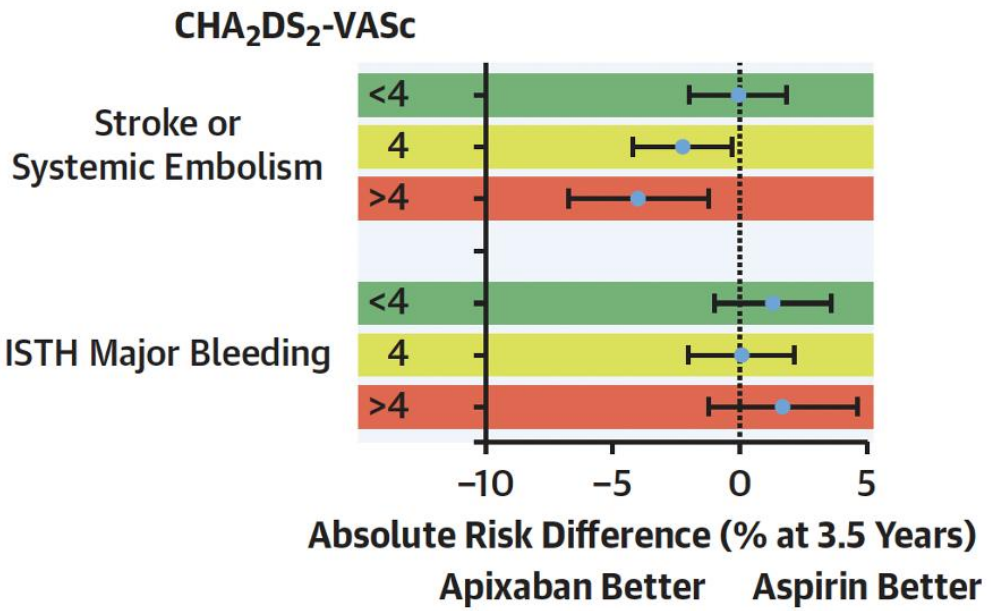
2. Subgroups at high risk (≥ 2.0% annual) of stroke (~ Class I)
   - Prior Stroke
   - CHA_2DS2-VASc Score > 4
   - Implantable Cardiac Monitors
   - Meeting Dose Reduction criteria
   - Vascular disease


ESC TV Today - Season 3 - Episode 22
Oral anticoagulation in afib - The smartwatch ECG
Oral Anticoagulation in Atrial Fibrillation: FAQ
ESC TV TODAY
I'm now delighted to be joined by Paulus Kirchhof,

Subgroups of Patients with Device-detected AF With a High Baseline Risk of Stroke

CHA_2DS2-VASc Score > 4: 2.25%/year on Aspirin

Patients With Device-Detected Subclinical Atrial Fibrillation in the ARTESiA Trial



CHA_2DS_2-VASc <4	CHA_2DS_2-VASc =4	CHA_2DS_2-VASc >4
Low risk of stroke	Intermediate risk of stroke	High risk of stroke
Bleeding risk outweighs benefit	Similar risk and benefit	Stroke benefit outweighs risk

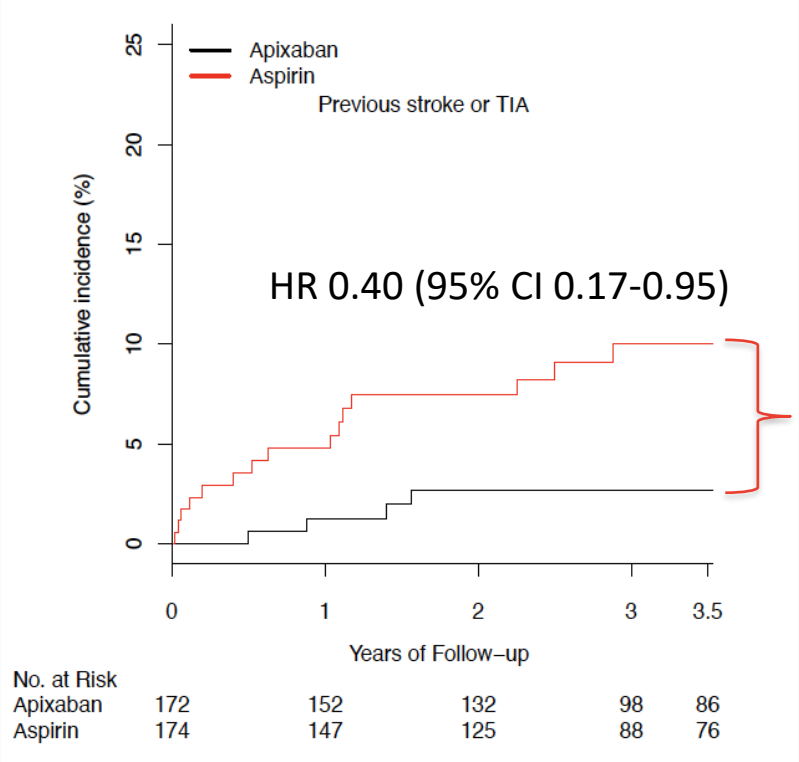
Lopes RD, et al. J Am Coll Cardiol. 2024;84(4):354-364.

Lopes et al

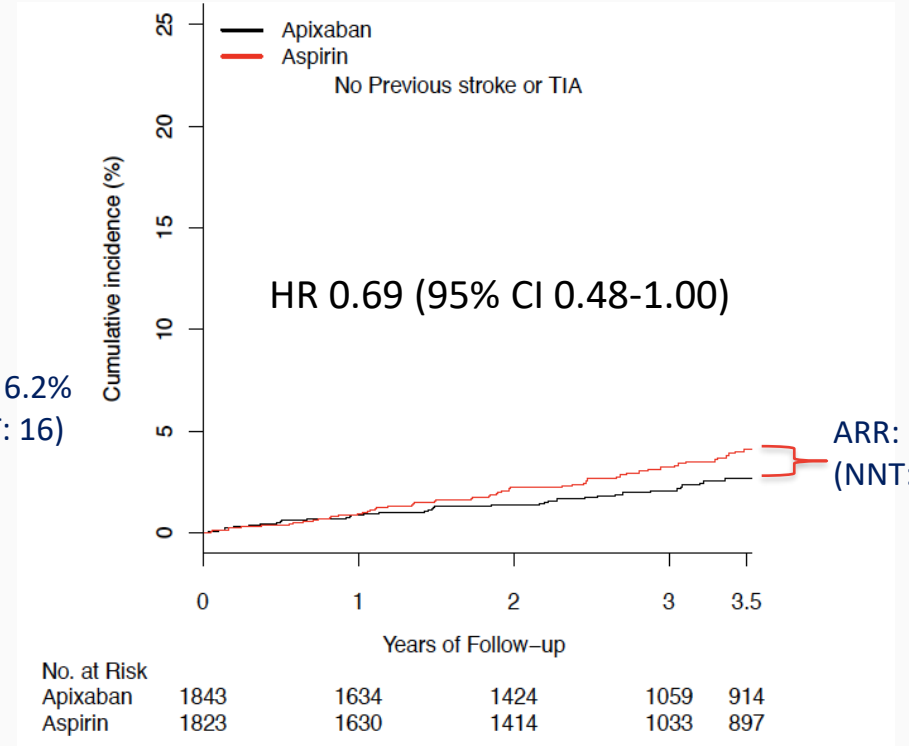
Subgroups of Patients with Device-detected AF With a High Baseline Risk of Stroke

Prior Stroke: 3.4%/year on Aspirin

Patients with Previous stroke or TIA (n=346)



No Previous stroke or TIA (n=3666)

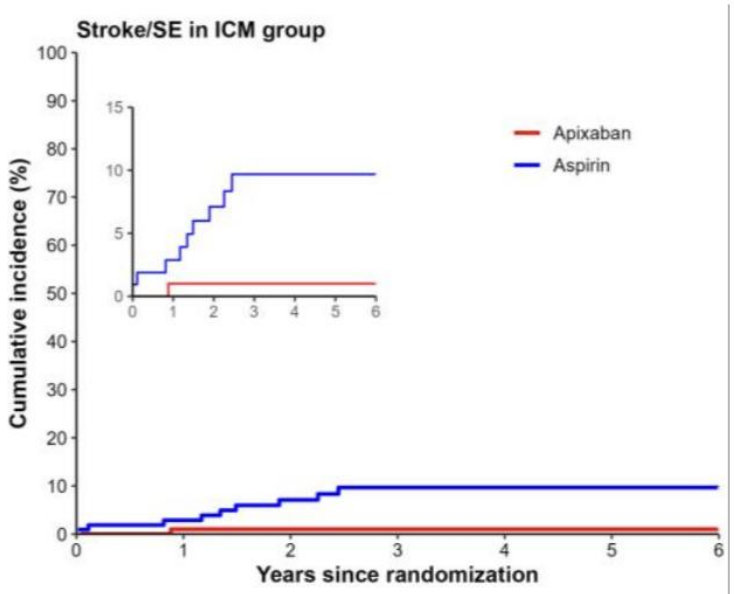


P-interaction for absolute risk =0.03

Shoamanesh A et al Lancet Neurol 2025

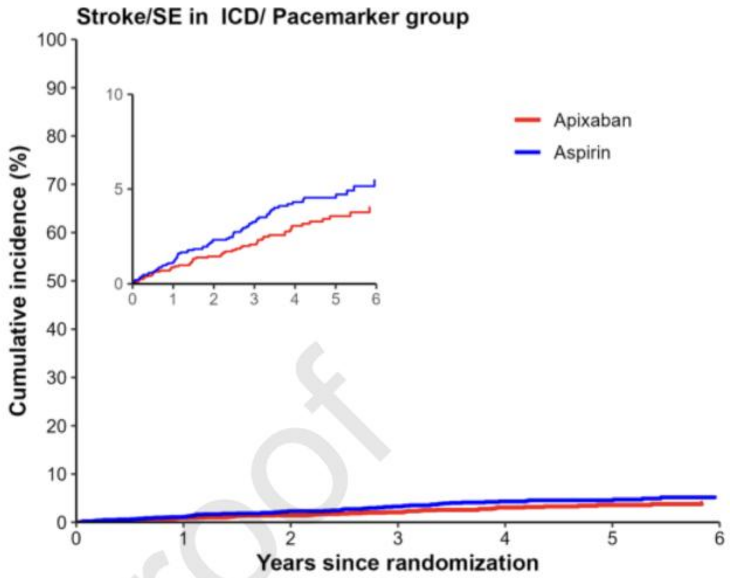
Subgroups of Patients with Device-detected AF With a High Baseline Risk of Stroke

Implanted Cardiac Monitors: 2.6%/year on Aspirin



Number at risk							
Apixaban	103	95	86	69	43	24	10
Aspirin	106	94	79	52	38	22	14

25% with prior stroke



Number at risk							
Apixaban	1912	1691	1470	1088	779	450	204
Aspirin	1891	1683	1460	1069	741	446	186

9% with prior stroke

P interaction for absolute risk =0.002

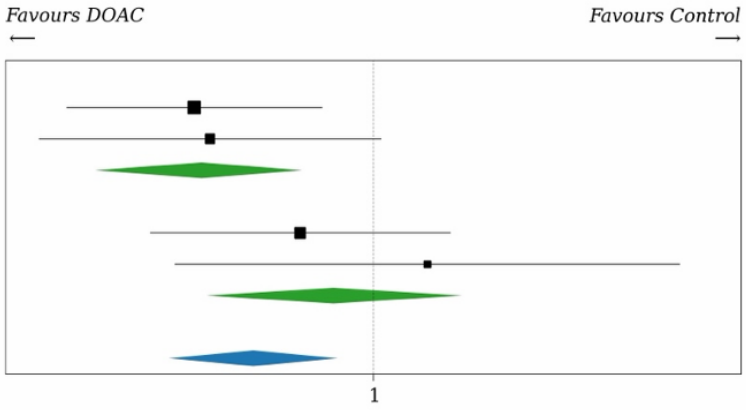
Xing L et al Heart Rhythm 2025 in Press

Subgroups of Patients with Device-detected AF With a High Baseline Risk of Stroke

Vascular Disease: 1.9%/year on Aspirin/Placebo

Study	DOAC	(%)	Control	(%)	Weight	RR [95% CI]
Vascular Disease						
ARTESiA	30/3,140	(1.0%)	54/3,030	(1.8%)	38.1%	0.54 [0.34, 0.84]
NOAH-AFNET 6	17/1,371	(1.2%)	29/1,325	(2.2%)	22.5%	0.57 [0.31, 1.03]
Subgroup Estimate	47/4,511	(1.0%)	83/4,355	(1.9%)	I^2: 0%	0.55 [0.38, 0.78]
No Vascular Disease						
ARTESiA	25/3,919	(0.6%)	32/3,888	(0.8%)	28.6%	0.78 [0.46, 1.31]
NOAH-AFNET 6	11/1,116	(1.0%)	9/1,101	(0.8%)	10.8%	1.21 [0.5, 2.9]
Subgroup Estimate	36/5,035	(0.7%)	41/4,989	(0.8%)	I^2: 0%	0.87 [0.56, 1.36]
					: 8%	0.66 [0.49, 0.88]

RR: Risk Ratio
CI: Confidence Interval



Stroke or systemic embolism

Incidence Rate Ratio

$p_{interaction}$=0.13

Schnabel R et al European Heart Journal 2024

Subgroups of Patients with Device-detected AF With a High Baseline Risk of Stroke

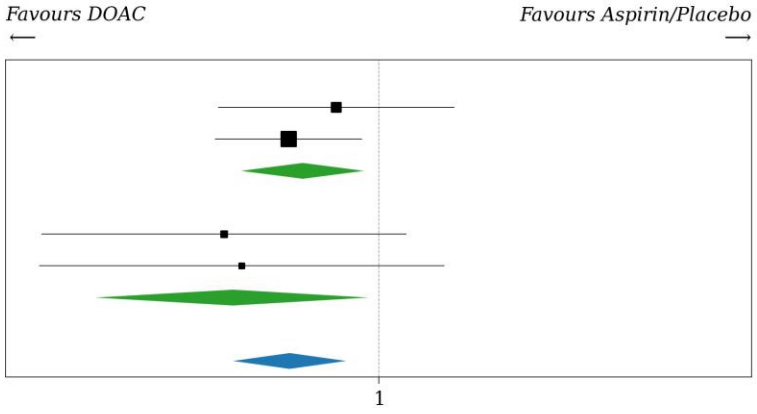
Meeting Dose Reduction Criteria: 2.0%/year on Aspirin/Placebo

Composite of All-cause Stroke or Systemic Embolism According to Trial's Own Dose Reduction Criteria

Study	DOAC	(%)	Aspirin/Placebo	(%)	Weight	RR [95% CI]
Standard Dose						
NOAH-AFNET-6	21/1,902	(1.1%)	25/1,839	(1.4%)	23.0%	0.81 [0.46, 1.45]
ARTESiA	49/6,361	(0.8%)	75/6,264	(1.2%)	59.5%	0.64 [0.45, 0.92]
Subgroup Estimate	70/8,263	(0.8%)	100/8,103	(1.2%)	I^2: 0%	0.69 [0.51, 0.93]
Reduced Dose						
NOAH-AFNET-6	7/665	(1.1%)	15/669	(2.2%)	9.6%	0.47 [0.19, 1.14]
ARTESiA	6/698	(0.9%)	11/655	(1.7%)	7.8%	0.51 [0.19, 1.38]
Subgroup Estimate	13/1,363	(1.0%)	26/1,324	(2.0%)	I^2: 0%	0.49 [0.25, 0.95]
Pooled Estimate					I^2: 0%	0.65 [0.49, 0.85]

Mantel-Haenszel, DerSimonian-Laird Random Effects Subgroup Effect: $p=0.00$, $z=3.09$, $\tau^2=0.00$, $\chi^2=0.84$, $p=0.36$, $I^2=0.0\%$

RR: Risk Ratio
CI: Confidence Interval



Stroke or systemic embolism

Incidence Rate Ratio

$p_{interaction}=0.36$

McIntyre et al ESC Congress Aug 29 2025

ESC European Society of Cardiology
European Heart Journal (2024) **00**, 1–10
https://doi.org/10.1093/eurheartj/ehae365

GREAT DEBATE
Arrhythmias

Great debate: device-detected subc fibrillation should be treated like cl fibrillation

Prashanthan Sanders [1]*, Emma Svennberg [2], Søren Z. Die Harry J. G. M. Crijns [4], Pier D. Lambiase [5], Giuseppe Boria and Isabelle C. Van Gel

Viewpoint

Contents lists available at ScienceDirect
European Journal of Internal Medicine
journal homepage: www.elsevier.com/locate/ejim

Clinical Insights

Detection of subclinical atrial fibrillation with cardiac implanted electronic devices: What decision making on anticoagulation after the NOAH and ARTESiA trials?☆

…rco Vitolo [a,b],

April 8, 2024

Toward More Personalized Management of Device-Detected Atrial Fibrillation

James E. Siegler, MD[1]; Luciano A. Sposato, MD, MBA[2]; Shadi Yaghi, MD[3]

» Author Affiliations

JAMA Neurol. 2024;81(6):573-574. doi:10.1001/jamaneurol.2024.0673

Articles Publish Topics About Contact

Journal of *Clinical Medicine*

COMMENTARY · Volume 137, Issue 5, P383-385, May 2024

Should Patients with Subclinical Atrial Fibrillation Receive Anticoagulation?

James A. Reiffel, MD [a] · Peter R. Kowey, MD [b] · Gerald V. Naccarelli, MD [c]

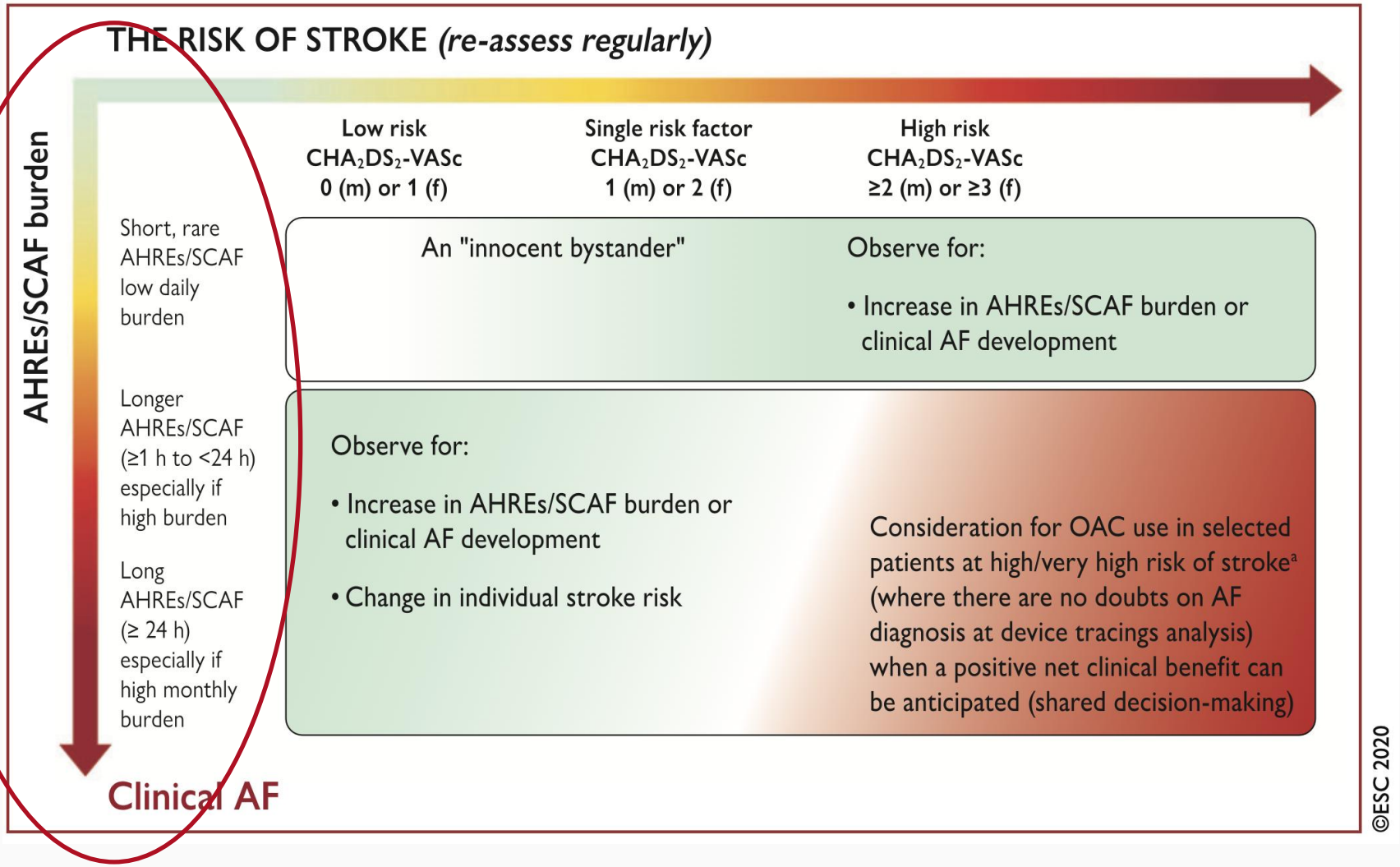
Affiliations & Notes Article Info

Opinion

Subclinical Atrial Fibrillation: To Anticoagulate or Not?

Sharath Kommu [1,2,*] and Param P. Sharma [3]

AF Duration and CHA_2DS_2-VASc: Roles in risk stratification?



2020 ESC AF Guidelines

Canadian Institutes of Health Research | Instituts de recherche en santé du Canada

PROTECTED WHEN COMPLETED

Application Details

Funding Opportunity:
Project Grant: Fall 2024 and Spring 2025 (2024-09-11)

Applicant:

Surname	Given Names	Participant Type
McIntyre	William	Independent Researcher - New/Early Career Investigator

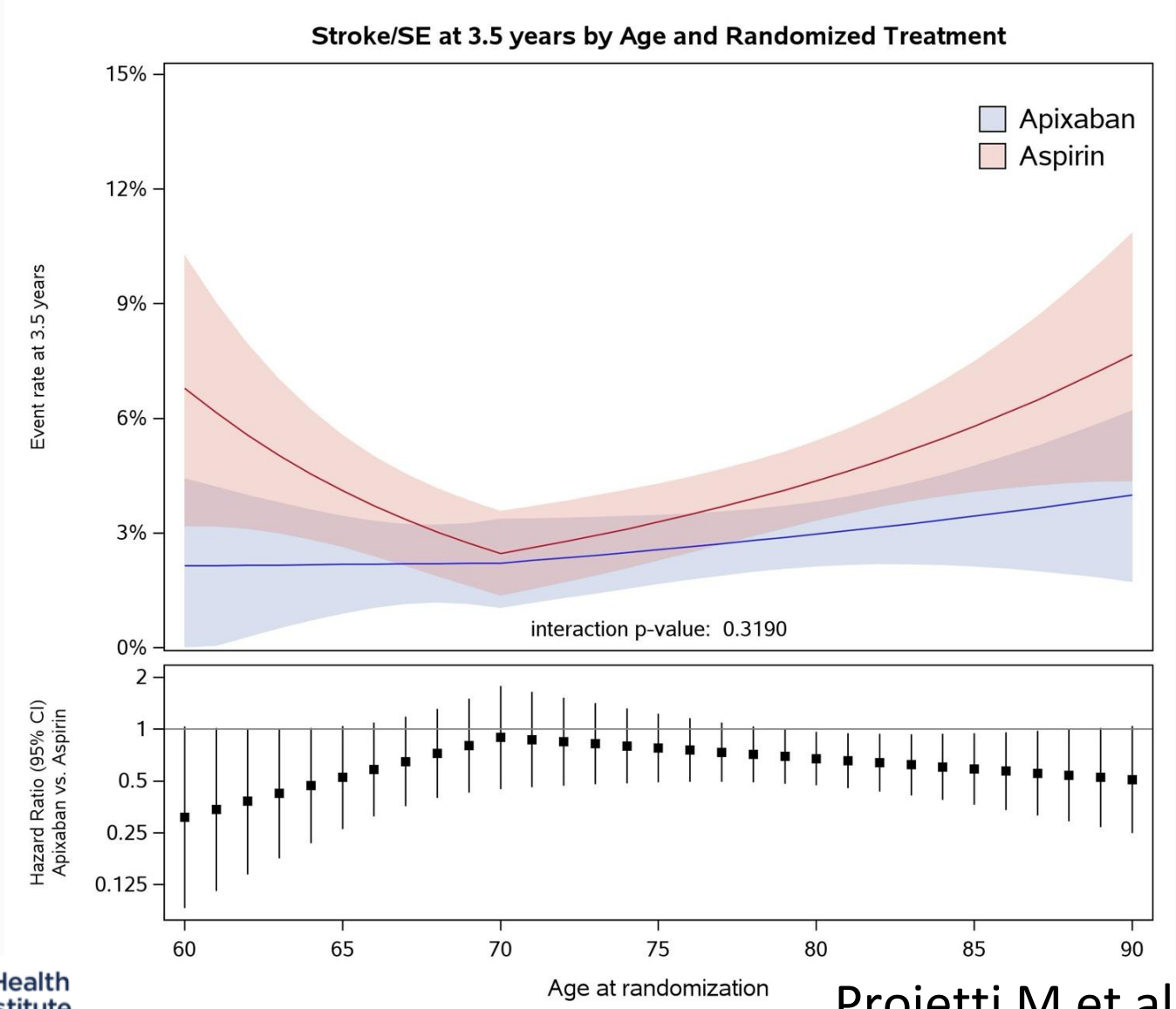
Institution	Faculty	Department
McMaster University		

Telephone	Fax	E-mail
905-521-2100		William.McIntyre@phri.ca

Title:
An Individual Participant Data Meta-Analysis of Two Randomized Controlled Trials Assessing Oral Anticoagulation for Device-detected Atrial Fibrillation: Apixaban for the Reduction of Thrombo-Embolism in Patients With Device-Detected Sub-Clinical Atrial Fibrillation (ARTESiA) and Non-vitamin K antagonist Oral anticoagulants in patients with Atrial High rate episodes (NOAH AFNET 6) (ARTESiA-NOAH IPDMA)

Population Health Research Institute
HEALTH THROUGH KNOWLEDGE

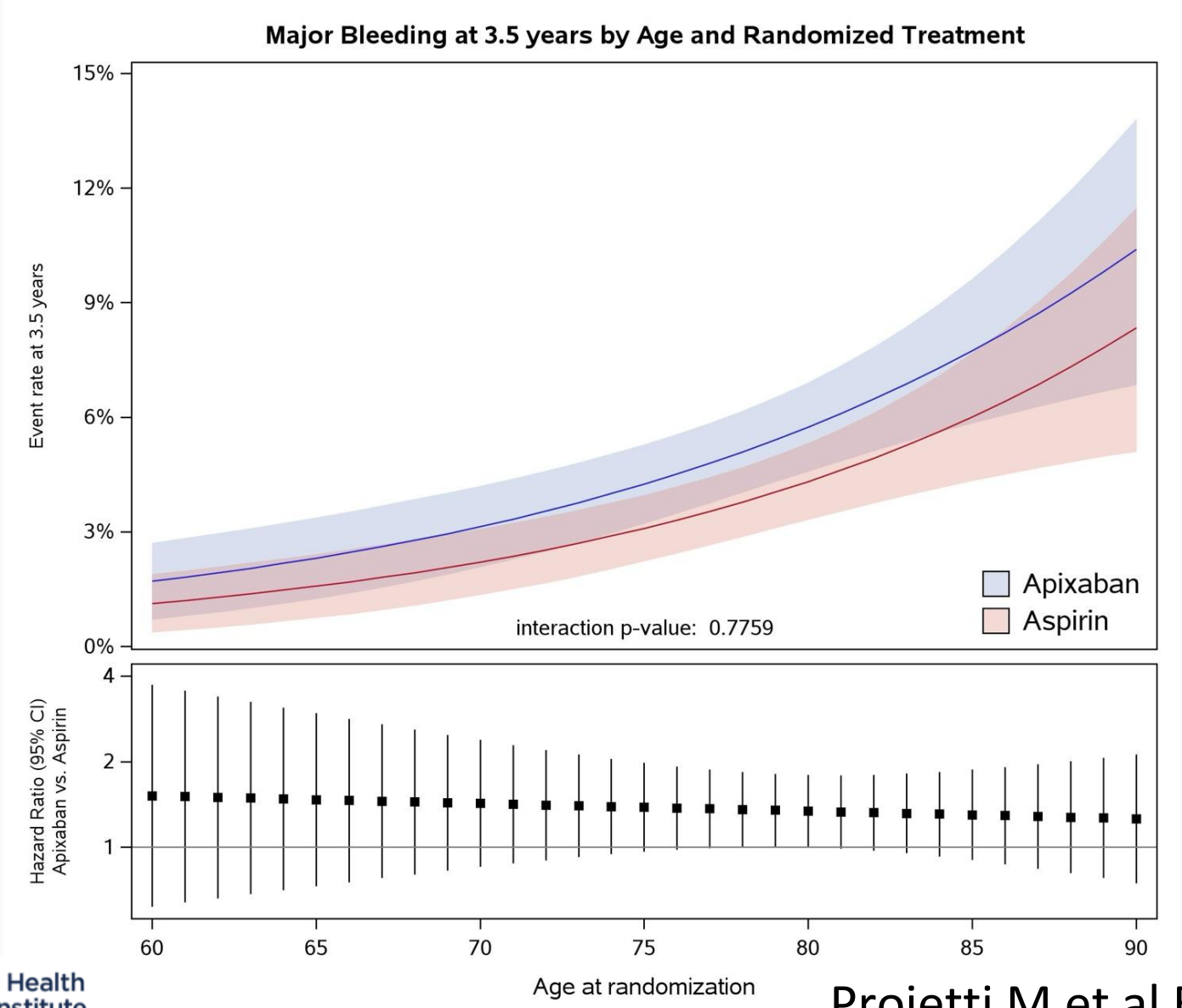
SCAF-Associated Stroke Risk Increases with Age: The Treatment Effect is Consistent



Population Health Research Institute
HEALTH THROUGH KNOWLEDGE

Proietti M et al ESC 2024

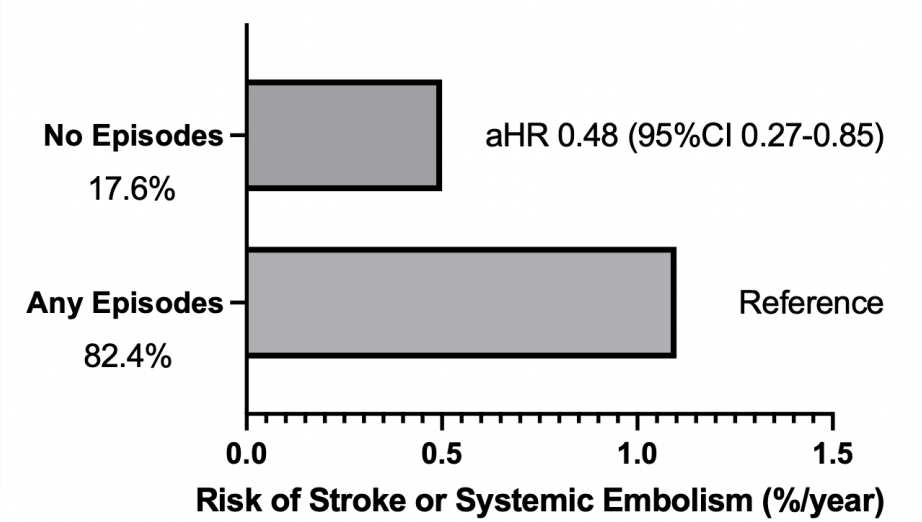
SCAF-Associated Bleed Risk Increases with Age: The Treatment Effect is Consistent

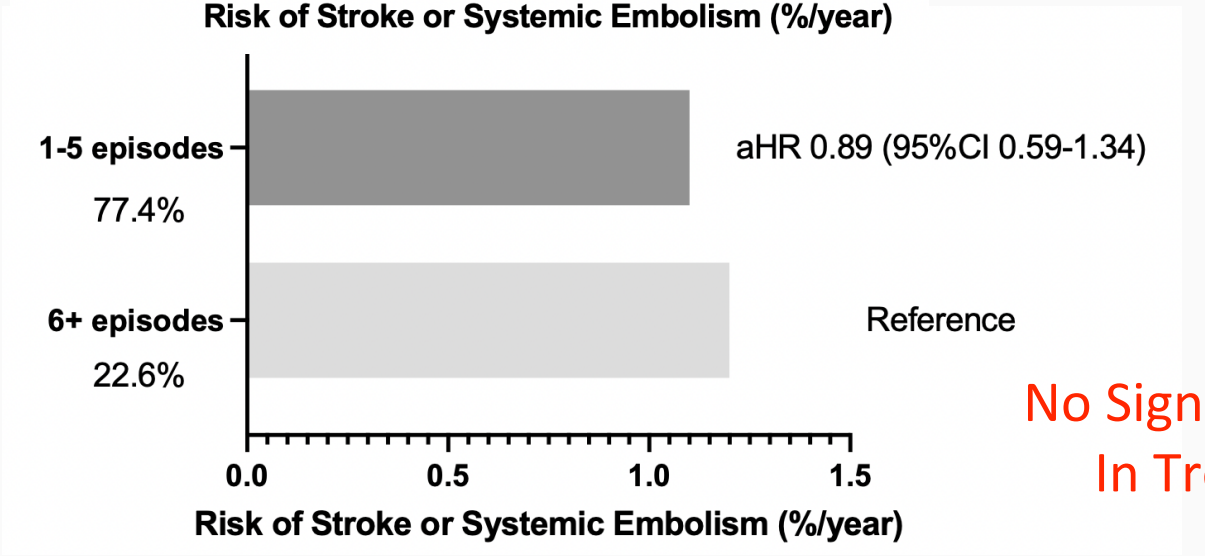


Population Health Research Institute
HEALTH THROUGH KNOWLEDGE

Proietti M et al ESC 2024

Absolute Risk: Subclinical AF Frequency





No Significant Difference
In Treatment Effect

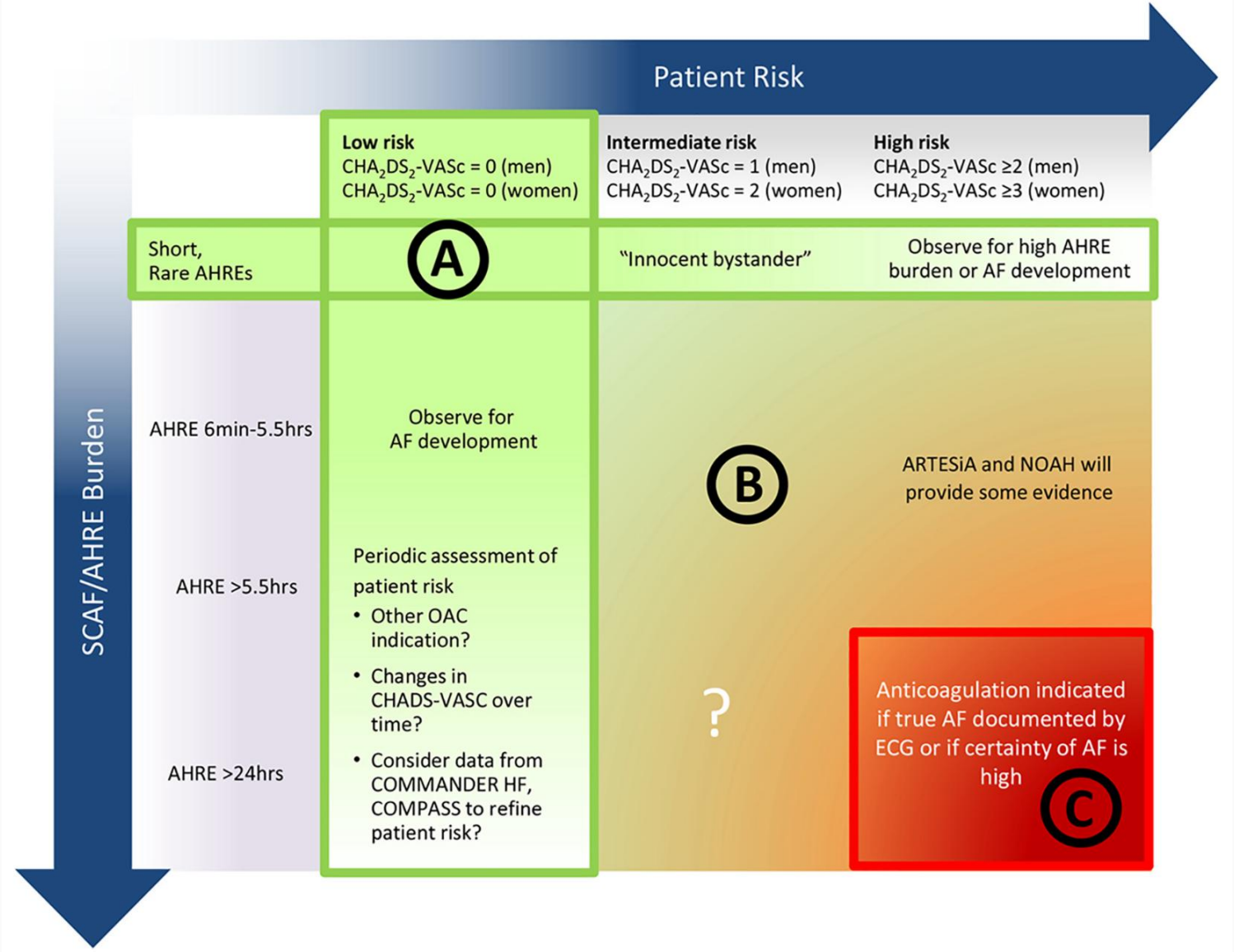
McIntyre WF et al Circulation. 2024

Stroke and Bleeding in ARTESiA patients who had SCAF Progression (observational)

	Oral Anticoagulation		*Aspirin*	Relative difference on Aspirin
	Open-label *Transitioned following progression*	**Blinded** *Continued on Blinded Apixaban following progression*	*Continued on Blinded Aspirin following progression*	
Stroke/ Systemic Embolism	14/678 0.84% /pt-year	5/281 0.81%/pt-year	8/252 1.42% /pt-year	**+ 71.1%**
	Overall 19/959 0.83 %/pt-year			
Major Bleeding	20/678 1.21% /pt-year	11/281 1.82% /pt-year	8/252 1.44% /pt-year	**+4.3%**
	Overall 31/959 1.38 % /pt-year			

Boriani et al ESC 2024

AF Duration and CHA_2DS_2-VASc: Roles in risk stratification?



2023 AHA/ACC/HRS Guidelines


ESC TV Today - Season 3 - Episode 22
Oral anticoagulation in afib - The smartwatch ECG
Oral Anticoagulation in Atrial Fibrillation: FAQ
ESC TV TODAY
I'm now delighted to be joined by Paulus Kirchhof,

Device-Detected AF: The Same OAC Decision As for Clinical AF

1. Baseline risk/benefit of OAC could be acceptable to anyone
   - Worth discussing with every patient (~ Class IIa)

2. Subgroups at high risk (≥ 2.0% annual) of stroke (~ Class I)
   - Prior Stroke
   - CHA_2DS2-VASc Score > 4
   - Implantable Cardiac Monitors
   - Meeting Dose Reduction criteria
   - Vascular disease