



AF-SCREEN

Single time-point, incidental clinical detection, patient activated

How much more do we find, and is it worth the effort?

Emma Svennberg
Karolinska Institutet
Danderyd Hospital, Sweden

Conflict of Interest: Lecture fees from MSD, BMS-Pfizer, Boehringer-Ingelheim, Bayer, Sanofi



AF-SCREEN

Single time point screening/ Incidental clinical detection



Recommendation



Recommendation...

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.

Class	Level of Evidence	References
I	B	14, 15

AF = atrial fibrillation; ECG = electrocardiogram.

^aClass of recommendation.

^bLevel of evidence.

^cReferences.



Single time point screening

	Author	n	Undetected AF	Age	
Pulse palpation	Fitzmaurice et al	3 278	1,6 %	75	
12-lead ECG	Tveit et al	916	1,1 %	75	
HANDHELD ECG					
AliveCor	Lowres et al	1 000	1,5 %	76	
Zenicor	Doliwa et al	606	1 %		
MyDiagnostick	Kaasenbrood et al	3 269	1,1 %	69,4	0% < 60
META-ANALYSIS					
Pulse/ECG	Lowres et al	18 189	1,4 %	>65	1% < 65



AF-SCREEN

Single time point screening





Single time-point screening vs patient activated

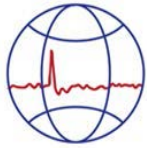
	Author	n	Age	Single time	Intermittent
SINGLE TIME -POINT					
Pulse/ECG	Lowres et al	18 189	>65	1,4 %	
1-lead ECG	Svennberg et al	7137	75/76	0.5%	
12-lead ECG	Engdahl et al	848	75/76	1%	
PATIENT ACTIVATED					
2 weeks BID					
Zenicor	Svennberg et al	7137	75/6		3.0%



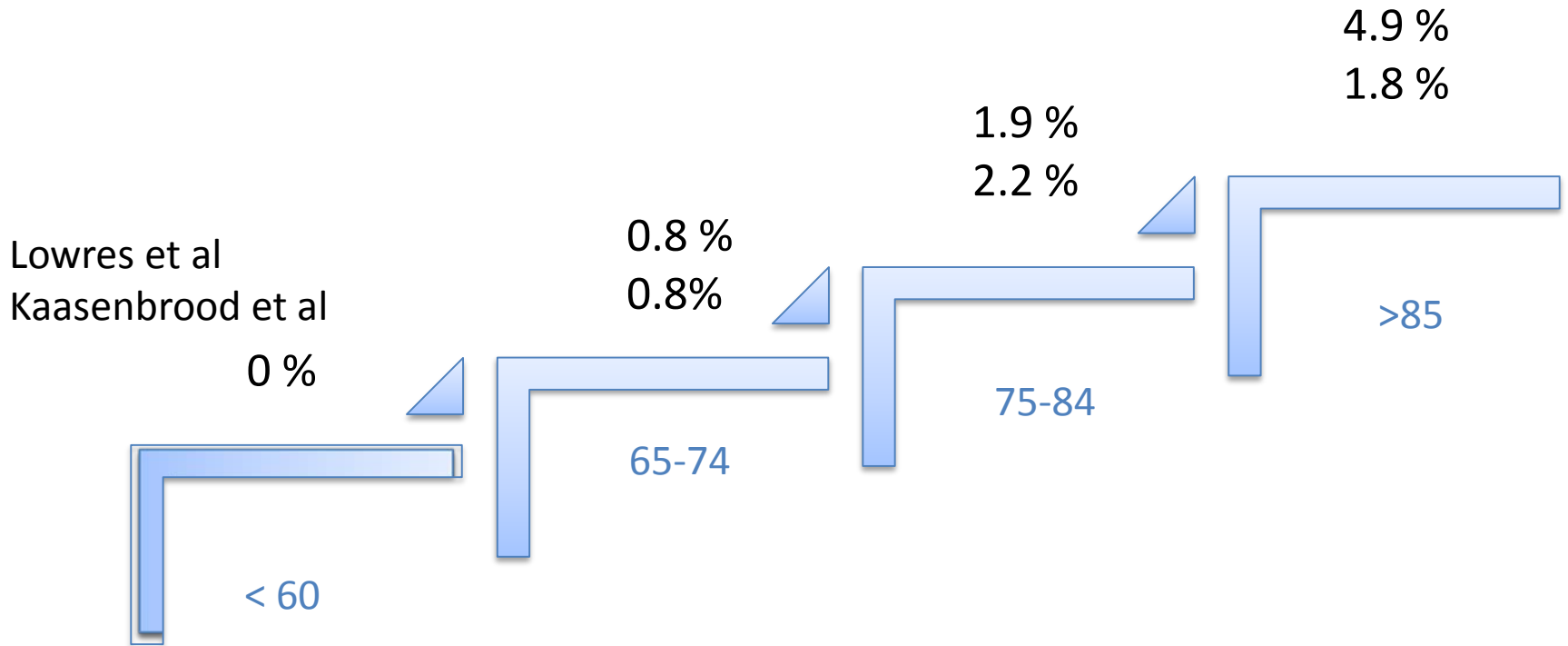


Key points

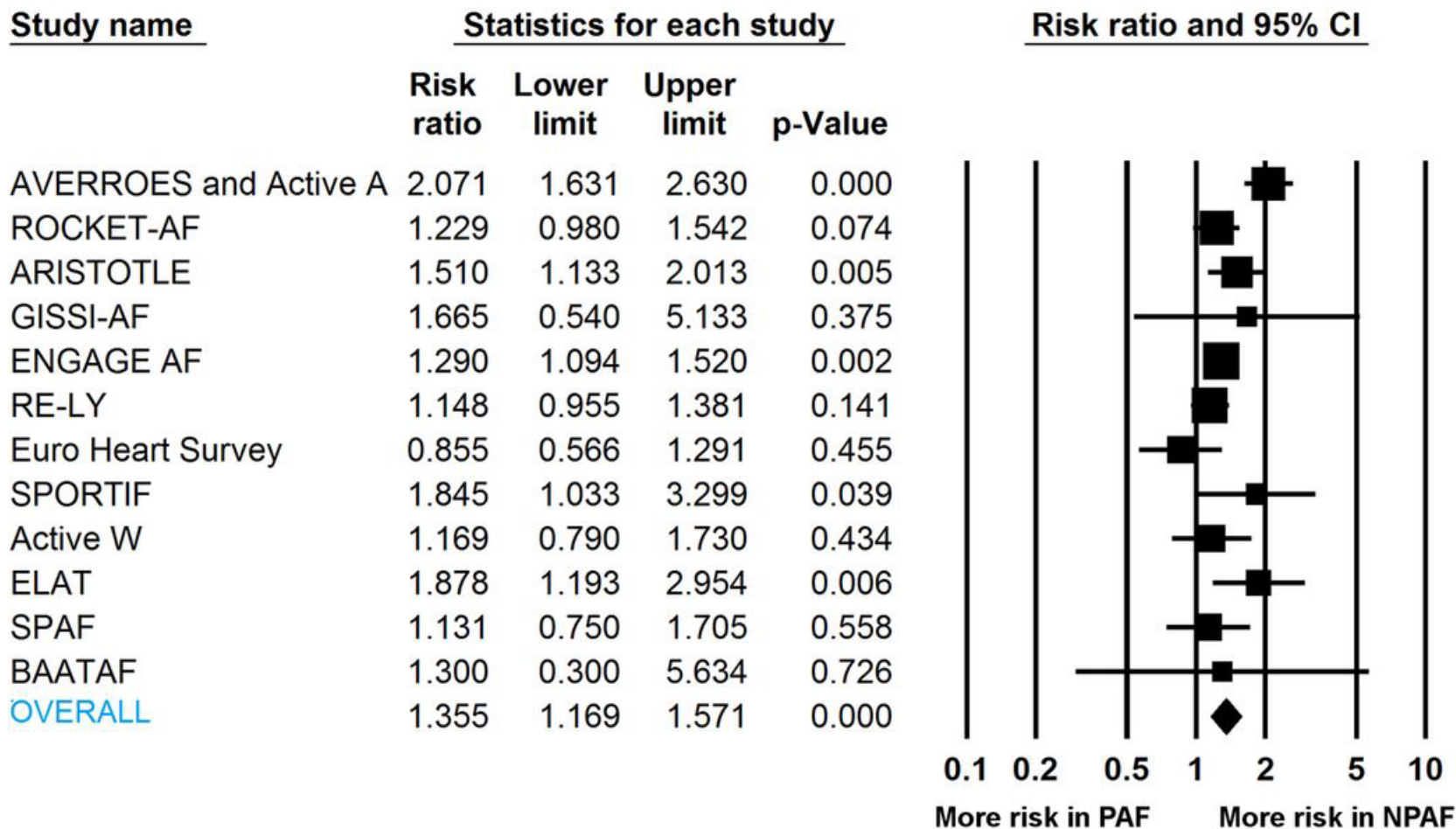
- **Single time-point screening in >65 will identify non-paroxysmal atrial fibrillation in approx 1.4%**
 - what is the mean age or numbers per age bracket found
- **Patient activated (intermittent) ECG recording 2 weeks BID in individuals at increased risk of stroke increases yield significantly**
 - 3% with age 75 only, to 7.4% age + 1 other CHADS₂
 - ? more if age > 75/76
 - ? what % age 65 – 74, or ... + another CHA₂DS₂VASc RF
 - Is this similar risk as single timepoint?



Single time point screening



A Stroke or Systemic Embolism (unadjusted)



Ganesan et al EHJ, 2016



Single time-point screening vs patient activated

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PATIENT ACTIVATED					
2 weeks BID					
Zenikor	Svennberg et al	7137	75/6		3.0%
Zenikor	Engdahl	403	75		7.4% + 1 non-age CHADS ₂ RF





Single time-point screening vs patient activated

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