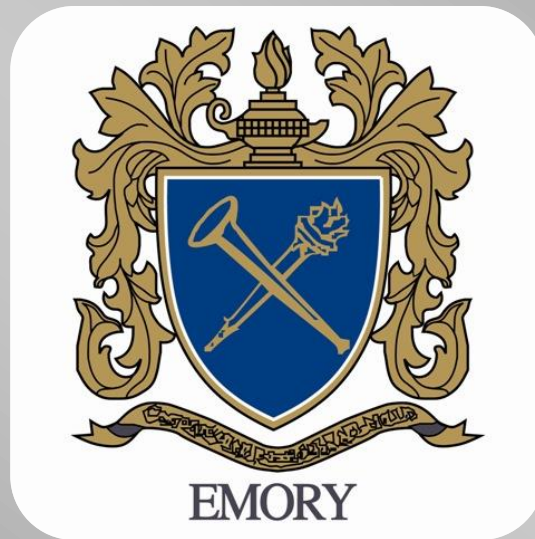


# I have atrial fibrillation, What now? 2016



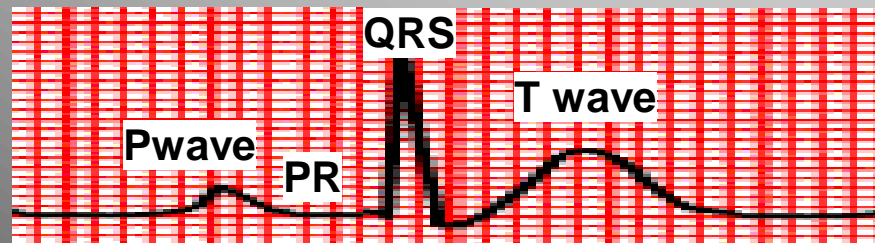
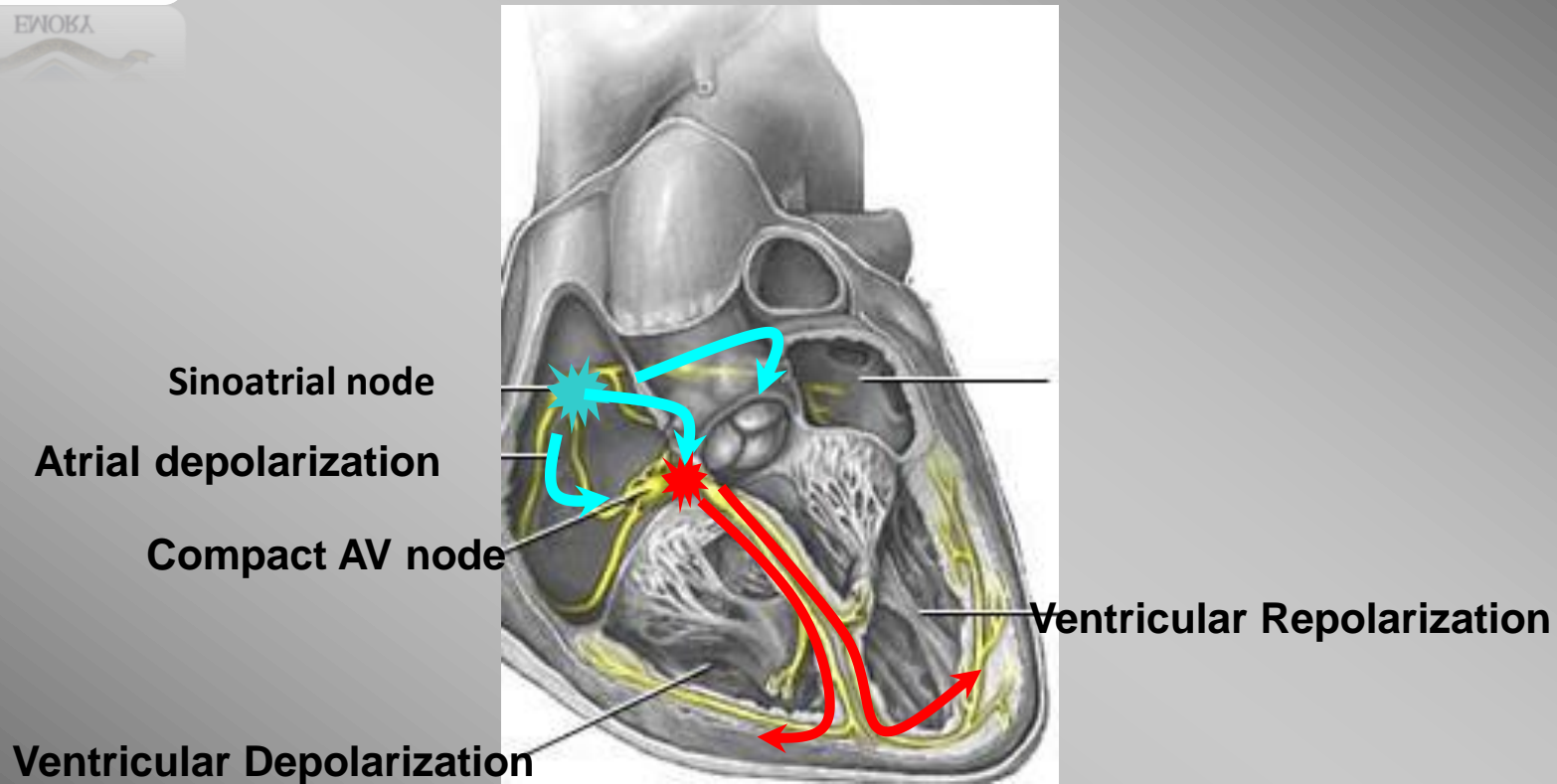
Michael S. Lloyd MD FACC FHRS  
Associate Professor  
Emory University Hospital  
mlloyd2@emory.edu

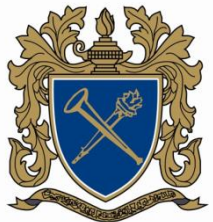


EMORY

EMORY

# What exactly is Afib?



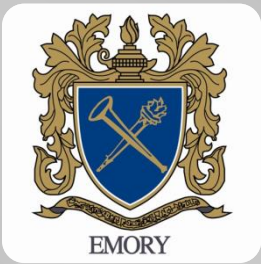


EMORY

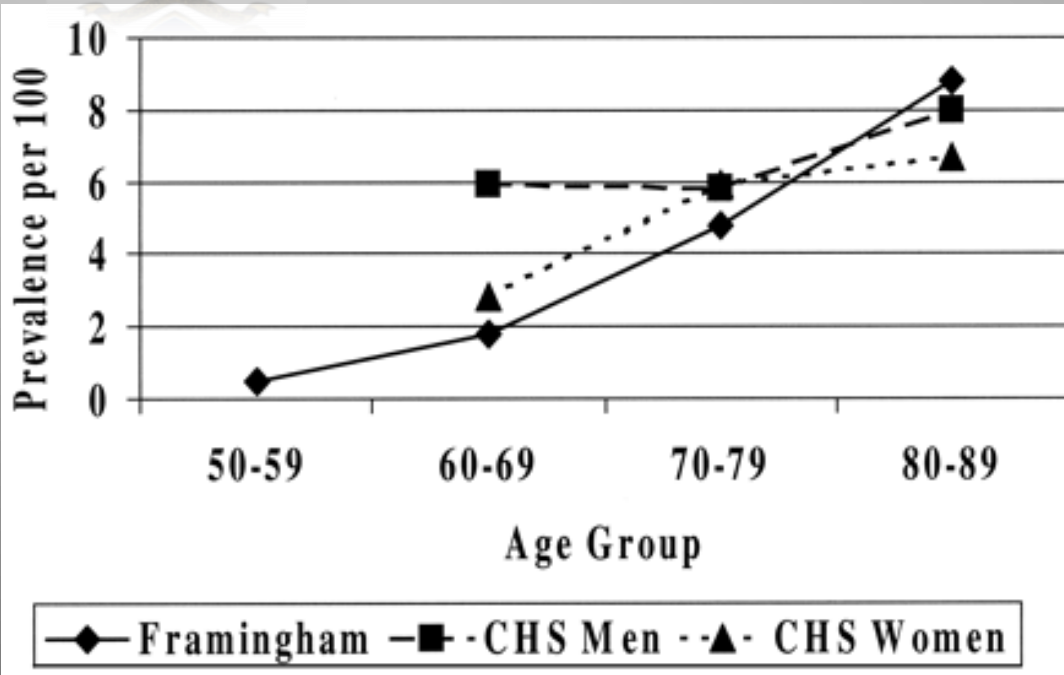
EMORY

# What exactly is Afib?

<http://www.blaufuss.org/SVT/index2.html>



# Why Me?



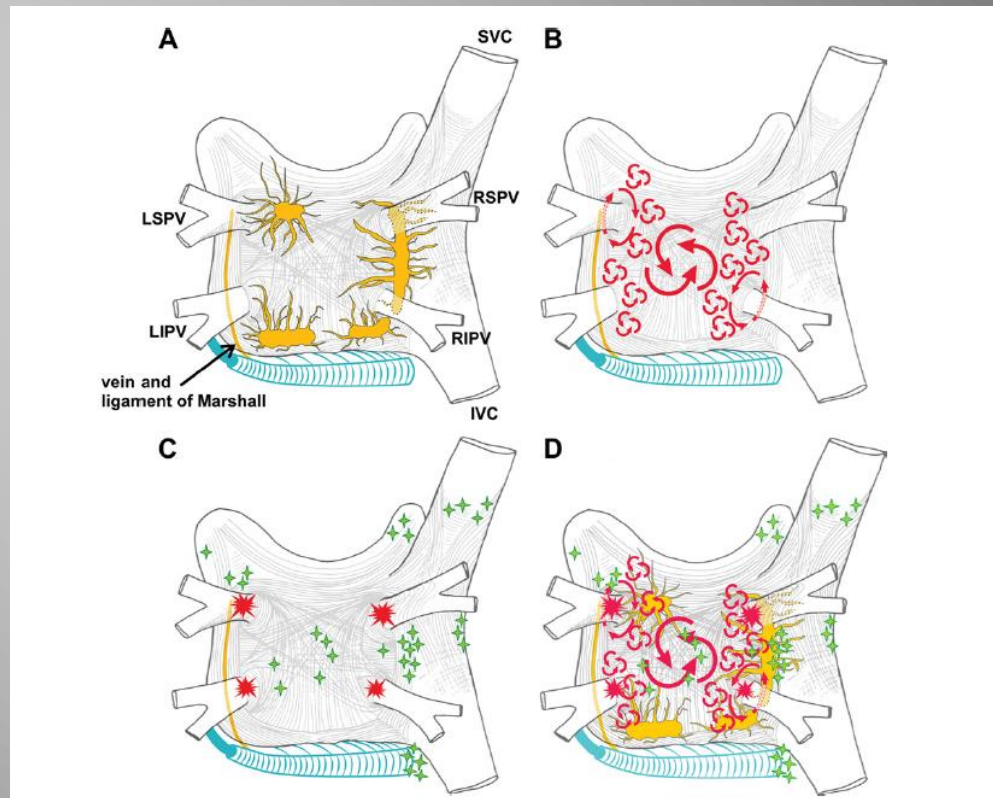
## Risk factors for developing AF

- Age over 60
- Alcohol
- Weight
- Family history
- Sleep apnea
- Diabetes
- High Blood Pressure
- Valve problems
- Lung Disease
- \*\*Long distance running
- Childhood second hand smoke

# THERE ARE MANY TYPES OF ATRIAL FIBRILLATION!



Lone atrial fibrillation, afib with no other known heart problems.



# 3-P's OF ATRIAL FIBRILLATION!



Paroxysmal, starting and stopping



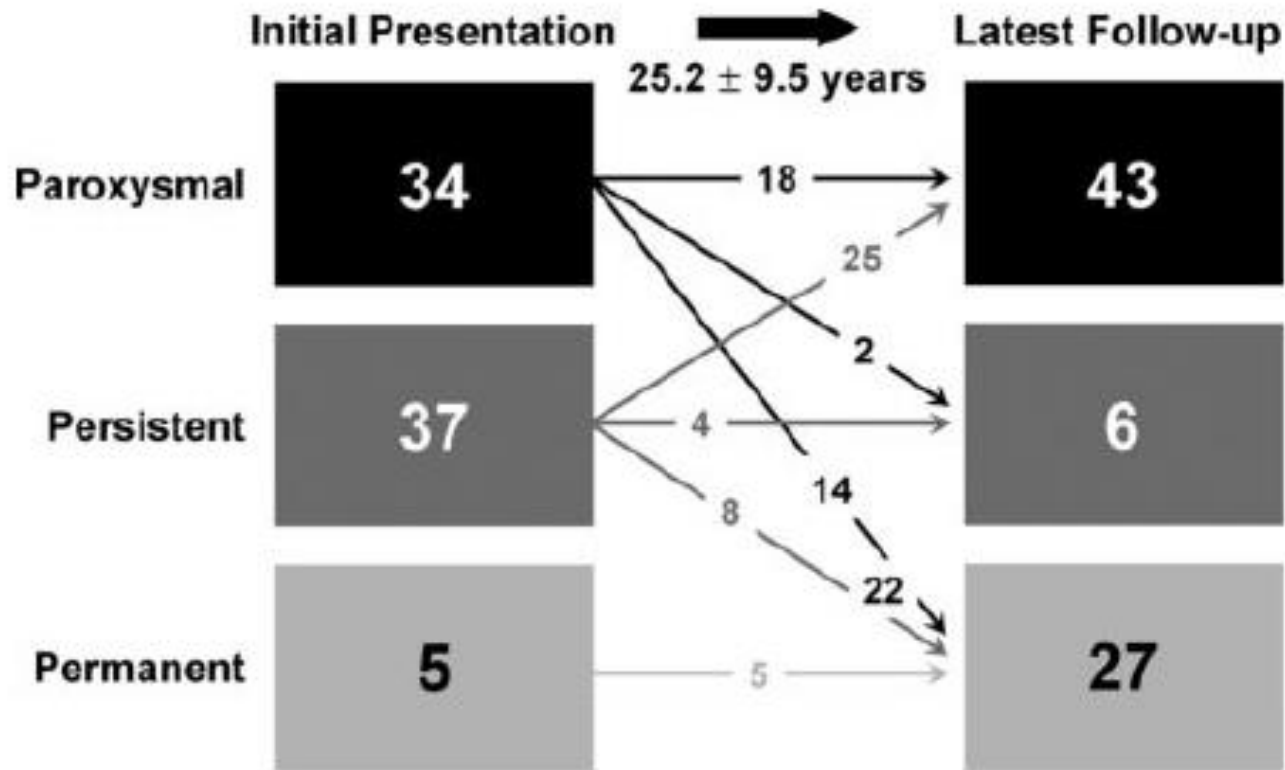
Persistent, requiring intervention



Permanent, staying there



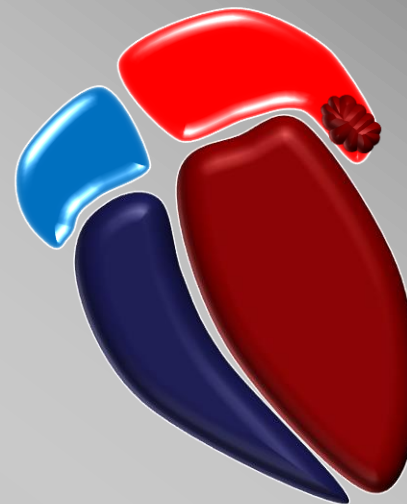
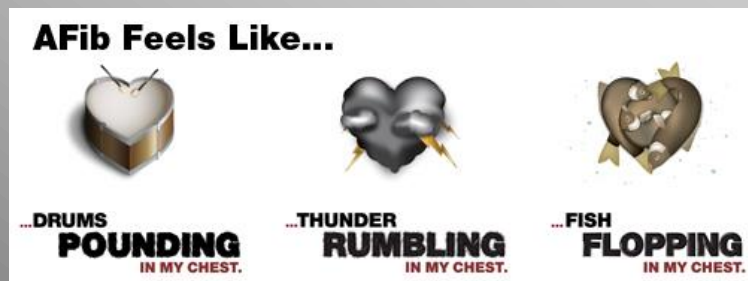
# What Does That Mean for My Life?



# A Stepwise Approach to Living With Atrial Fibrillation

1. What's my risk for stroke?

2. Do I have symptoms?



Rate control (controlling the ventricle's response to the fibrillating atrium)

Rhythm control (trying to keep the atrium in regular rhythm)



# What can your doctor do?

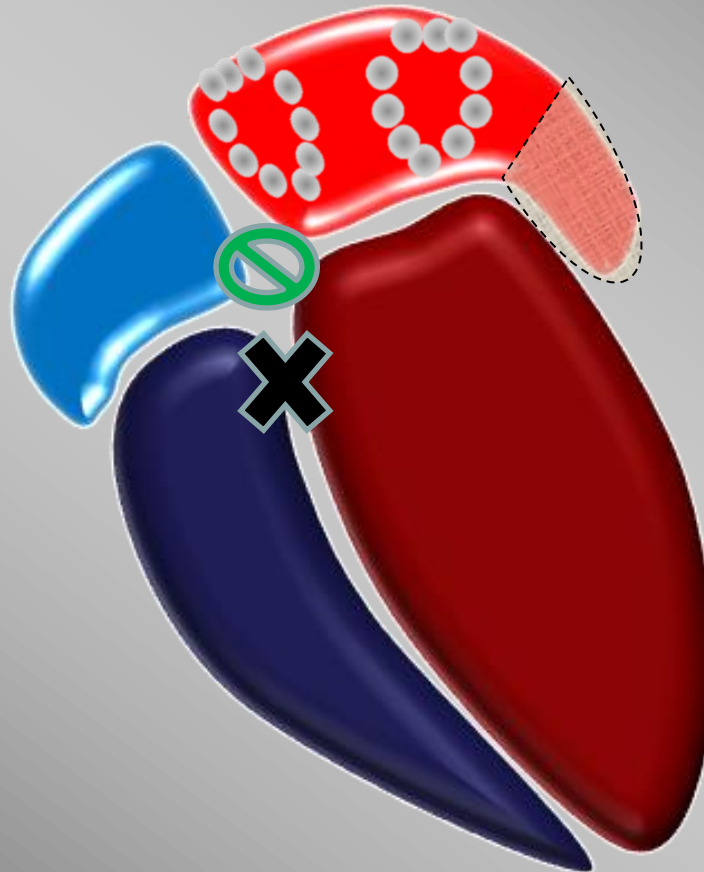


ablation

medications

pacemakers

other devices



# Make A Plan With Your MD



## Call your doctor if:

**You are usually in sinus rhythm, but have AF “attacks” for >12 hours**

**You have an a very high heart rate at rest >140 bpm**

**You are having symptoms of Afib after an ablation**

**You are taking special rhythm medicines and are prescribed another prescription medicine.**

# Make A Plan With Your MD



## Go to the ER if:

**You are having signs of stroke, especially if not on blood thinners**

**You are having emergency symptoms:**

**severe shortness of breath**

**severe chest pain**

**worst headache of your life**

**profuse bleeding**

# Make A Plan With Your MD



## Ask your doctor about:

The pros and cons of other blood thinners

Left atrial occlusion devices

New ablation techniques

pacemakers and AV node ablation

# Figure out your stroke risk

	<b>Condition</b>	<b>Points</b>
C	<b>Congestive heart failure</b> (or LV dysfunction) <sup>⊕</sup>	1
H	<b>Hypertension</b> BP>140/90 or treated hypertension on medication <sup>⊕</sup>	1
A <sub>2</sub>	<b>Age</b> ≥ 75 years	2
D	<b>Diabetes Mellitus</b>	1
S <sub>2</sub>	<b>Prior Stroke</b> or <b>TIA</b> or <b>Thromboembolism</b> <sup>⊕</sup>	2
V	<b>Vascular disease</b> (e.g. MI, PVD, Aortic plaque)	1
A	<b>Age 65-74 years</b>	1
S <sub>c</sub>	<b>Sex category</b> (female gender)	1

>2, blood thinner probably needed

# What Can I Do To Live Healthy With Afib?

## 1. Weight

30 minutes at a time, five times a week



## 2. Diet/Exercise

Reduce alcohol, reduce sodium



## 3. Sleep

Exclude sleep apnea!



## 4. Education

Know your heart rate and your BP!



# Weight and Afib, What's the Big Deal?



Increases chance of diabetes

Increases chance of high blood pressure

Increases chance of sleep apnea

# Weight and Afib, What's the Big Deal?

Height in Feet and Inches

Weight in Pounds

	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250
4'	30.5	33.6	36.6	39.7	42.7	45.8	48.8	51.9	54.9	58.0	61.0	64.1	67.1	70.2	73.2	76.3
4' 2"	28.1	30.9	33.7	36.6	39.4	42.2	45.0	47.8	50.6	53.4	56.2	59.1	61.9	64.7	67.5	70.3
4' 4"	26.0	28.6	31.2	33.8	36.4	39.0	41.6	44.2	46.8	49.4	52.0	54.6	57.2	59.8	62.4	65.0
4' 6"	24.1	26.5	28.9	31.3	33.8	36.2	38.6	41.0	43.4	45.8	48.2	50.6	53.0	55.4	57.9	60.3
4' 8"	22.4	24.7	26.9	29.1	31.4	33.6	35.9	38.1	40.4	42.6	44.8	47.1	49.3	51.6	53.8	56.0
4' 10"	20.9	23.0	25.1	27.2	29.3	31.3	33.4	35.5	37.6	39.7	41.8	43.9	46.0	48.1	50.2	52.2
5'	19.5	21.5	23.4	25.4	27.3	29.3	31.2	33.2	35.2	37.1	39.1	41.0	43.0	44.9	46.9	48.8
5' 2"	18.3	20.1	21.9	23.8	25.6	27.4	29.3	31.1	32.9	34.7	36.6	38.4	40.2	42.1	43.9	45.7
5' 4"	17.2	18.9	20.6	22.3	24.0	25.7	27.5	29.2	30.9	32.6	34.3	36.0	37.8	39.5	41.2	42.9
5' 6"	16.1	17.8	19.4	21.0	22.6	24.2	25.8	27.4	29.0	30.7	32.3	33.9	35.5	37.1	38.7	40.3
5' 8"	15.2	16.7	18.2	19.8	21.3	22.8	24.3	25.8	27.4	28.9	30.4	31.9	33.4	35.0	36.5	38.0
5' 10"	14.3	15.8	17.2	18.7	20.1	21.5	23.0	24.4	25.8	27.3	28.7	30.1	31.6	33.0	34.4	35.9
6'	13.6	14.9	16.3	17.6	19.0	20.3	21.7	23.1	24.4	25.8	27.1	28.5	29.8	31.2	32.5	33.9
6' 2"	12.8	14.1	15.4	16.7	18.0	19.3	20.5	21.8	23.1	24.4	25.7	27.0	28.2	29.5	30.8	32.1
6' 4"	12.2	13.4	14.6	15.8	17.0	18.3	19.5	20.7	21.9	23.1	24.3	25.6	26.8	28.0	29.2	30.4
6' 6"	11.6	12.7	13.9	15.0	16.2	17.3	18.5	19.6	20.8	22.0	23.1	24.3	25.4	26.6	27.7	28.9
6' 8"	11.0	12.1	13.2	14.3	15.4	16.5	17.6	18.7	19.8	20.9	22.0	23.1	24.2	25.3	26.4	27.5
6' 10"	10.5	11.5	12.5	13.6	14.6	15.7	16.7	17.8	18.8	19.9	20.9	22.0	23.0	24.0	25.1	26.1
7'	10.0	11.0	12.0	13.0	13.9	14.9	15.9	16.9	17.9	18.9	19.9	20.9	21.9	22.9	23.9	24.9

<http://www.freebmiccalculator.net>

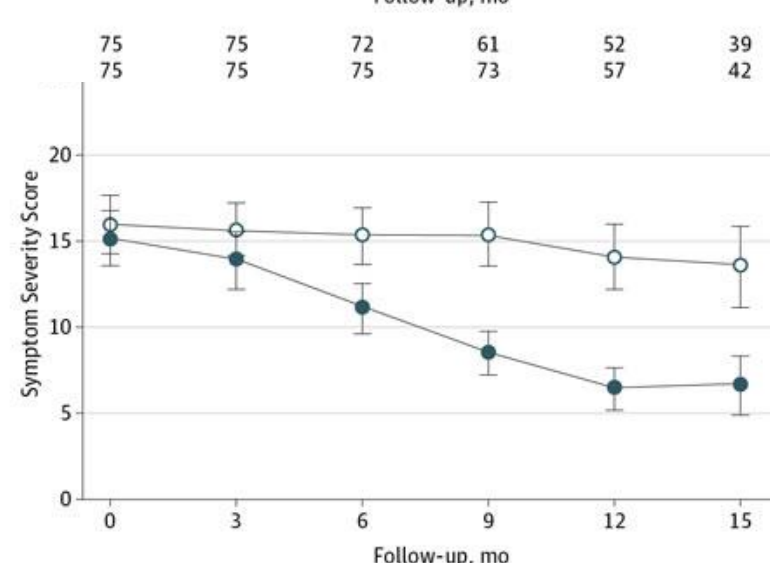
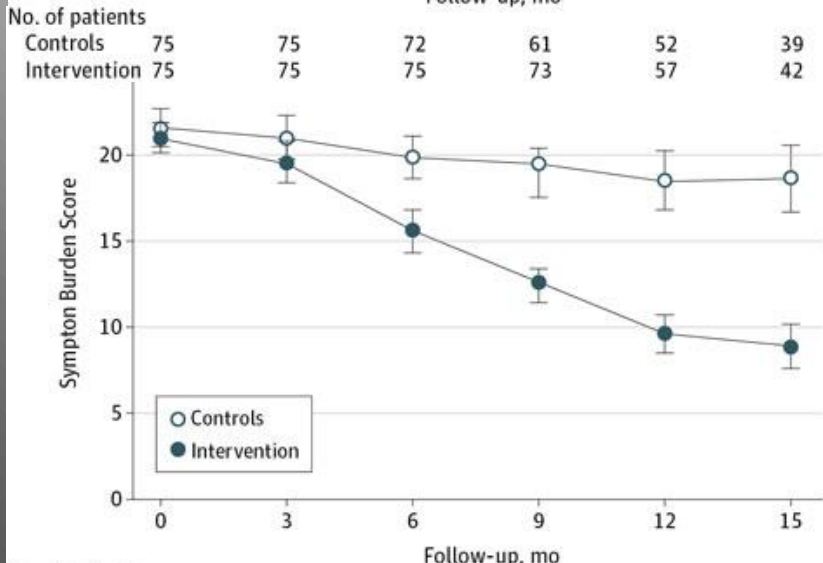
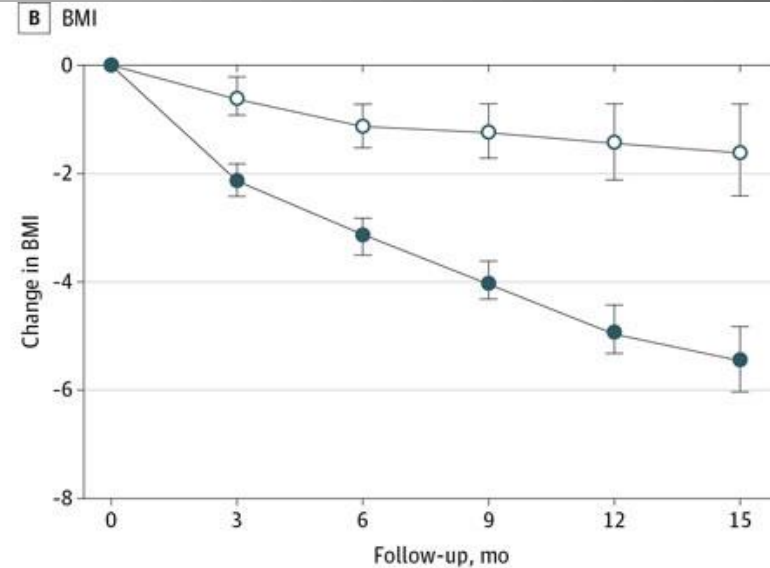
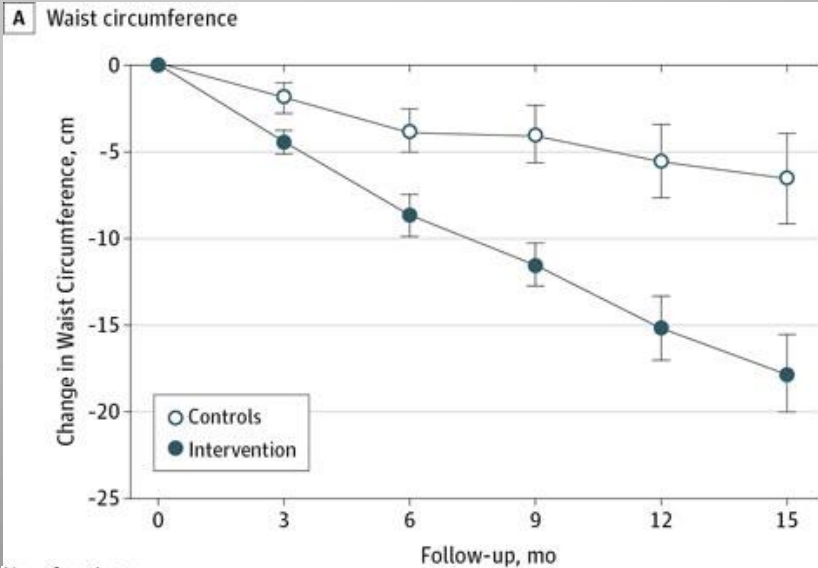
Underweight
  Normal
  Overweight
  Obesity

BMI Chart

BMI < 18.50	Underweight
BMI < 16.00	Severe Thinness
BMI 16.00 - 16.99	Moderate Thinness
BMI 17.00 - 18.49	Mild Thinness
BMI 18.50 - 24.99	Normal Weight
BMI 18.50 - 22.99	Lower Range
BMI 23.00 - 24.99	Upper Range
BMI 25.00 - 29.99	Overweight / Pre-Obese
BMI 25.00 - 27.49	Lower Range
BMI 27.50 - 29.99	Upper Range
BMI ≥ 30	Obese
BMI 30.00 - 34.99	Obese Class I
BMI 35.00 - 39.99	Obese Class II
BMI ≥ 40.00	Obese Class III



# Losing Weight Helps Afib



No. of patients

Controls	75	75	72	61	52	39
Intervention	75	75	75	73	57	42

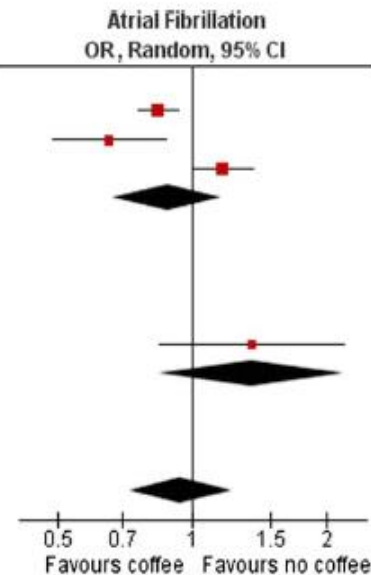
No. of patients

Controls	75	75	72	61	52	39
Intervention	75	75	75	73	57	42



# Diet and Afib

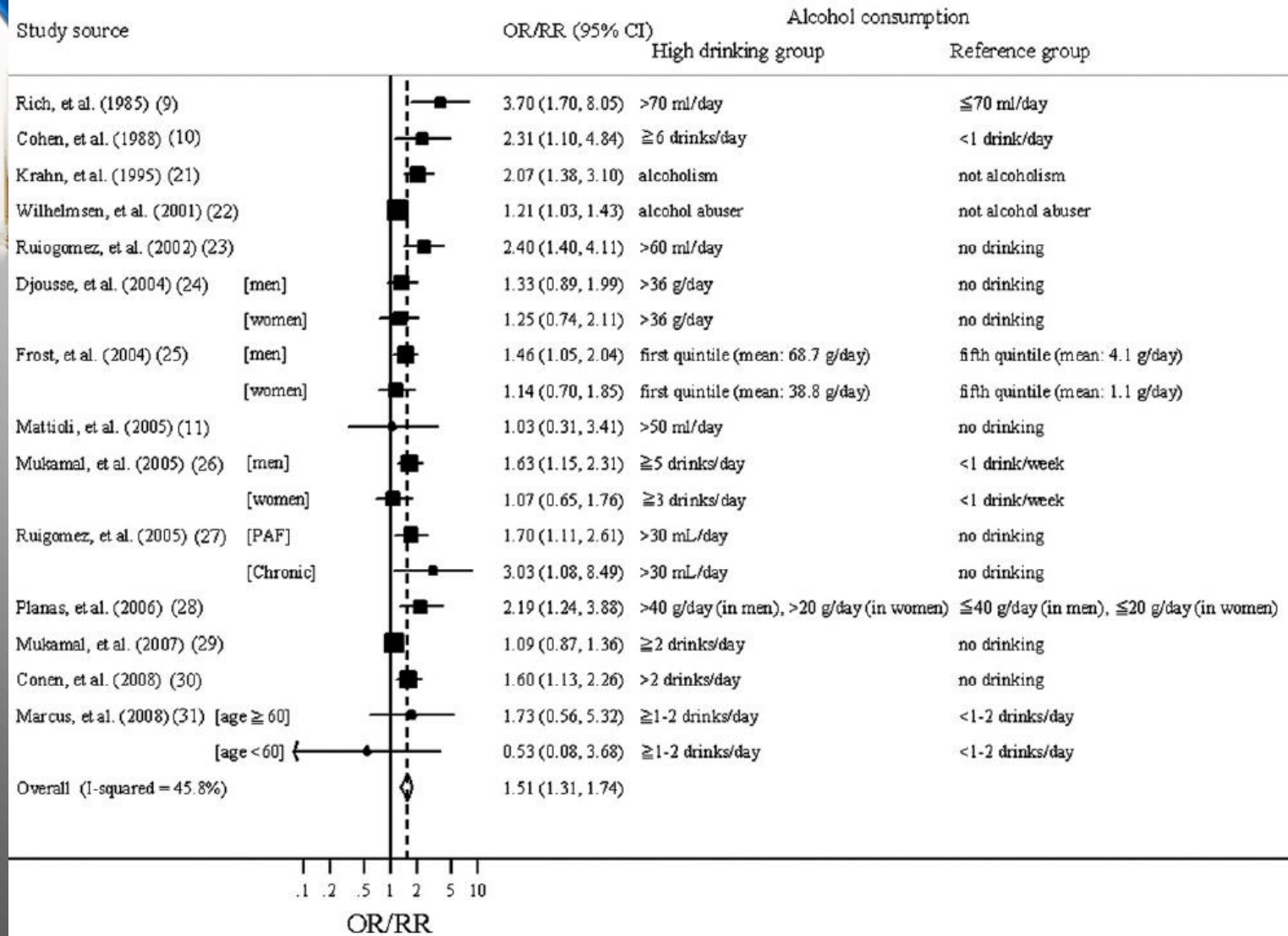
Coffee studies	Weight	Odds Ratio IV, Random, 95% CI
<b>Cohort studies</b>		
Klatsky 2011	31.3%	0.84 [0.76, 0.93]
Mukamal 2009	23.4%	0.65 [0.49, 0.87]
Wilhelmsen 2001	29.4%	1.17 [1.00, 1.37]
<b>Subtotal (95% CI)</b>	<b>84.2%</b>	<b>0.88 [0.66, 1.17]</b>
Heterogeneity: Tau <sup>2</sup> = 0.05; Chi <sup>2</sup> = 17.18, df = 2 (P = 0.0002); I <sup>2</sup> = 88%		
Test for overall effect: Z = 0.90 (P = 0.37)		
<b>Case-control study</b>		
Mattioli 2005	15.8%	1.36 [0.84, 2.19]
<b>Subtotal (95% CI)</b>	<b>15.8%</b>	<b>1.36 [0.84, 2.19]</b>
Test for overall effect: Z = 1.26 (P = 0.21)		
<b>Total (95% CI)</b>	<b>100.0%</b>	<b>0.94 [0.72, 1.22]</b>
Heterogeneity: Tau <sup>2</sup> = 0.06; Chi <sup>2</sup> = 19.98, df = 3 (P = 0.0002); I <sup>2</sup> = 85%		
Test for overall effect: Z = 0.45 (P = 0.65)		



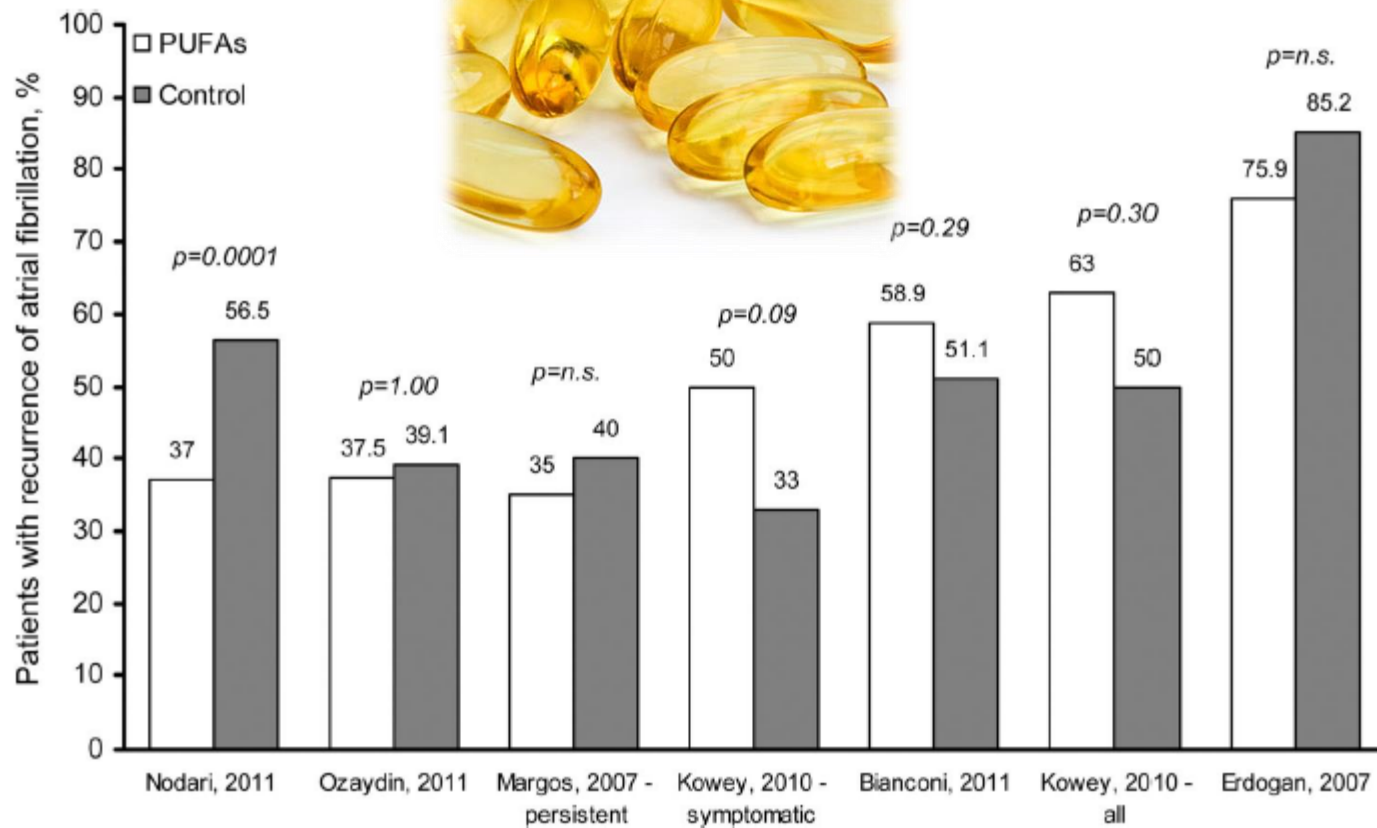
Caffeine does not increase the risk of atrial fibrillation: a systematic review and meta-analysis of observational studies

Daniel Caldeira,<sup>1,2</sup> Cristina Martins,<sup>2</sup> Luís Brandão Alves,<sup>2</sup> Hélder Pereira,<sup>2</sup>  
Joaquim J Ferreira,<sup>1,3</sup> João Costa<sup>1,4,5</sup>

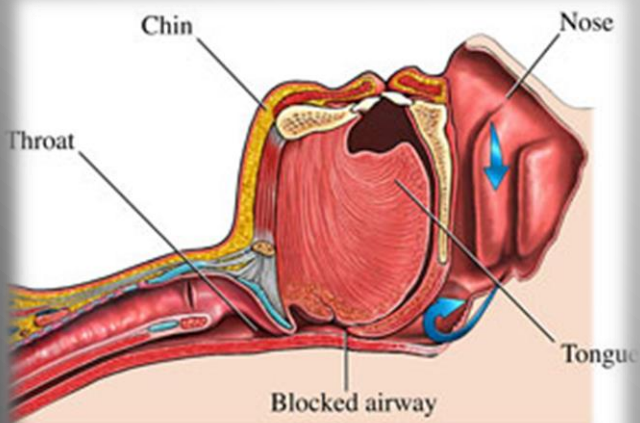
# Diet and Afib



# Diet and Afib



# Sleep, Snoring and Afib



	Arrhythmias Included In Each Analysis	Odds Ratio (95% CI)
Primary overall analysis	62	17.5 (5.3–58.4)
<b>Subanalysis by arrhythmia type</b>		
PAF	15	17.9 (2.2–144.2)
NSVT	47	17.4 (4.0–75.7)
<b>Subanalysis by sleep stage</b>		
NREM	42	14.2 (4.2–48.0)
REM	20	*
<b>Subanalysis by respiratory disturbance subtype</b>		
No respiratory disturbance	18	Reference
Respiratory disturbance without hypoxia (nadir SpO <sub>2</sub> ≤92%) or arousal	14	24.1 (5.4–106.6)
Respiratory disturbance with hypoxia	20	13.6 (3.7–50.6)
Respiratory disturbance with arousal	10	21.8 (4.5–106.3)

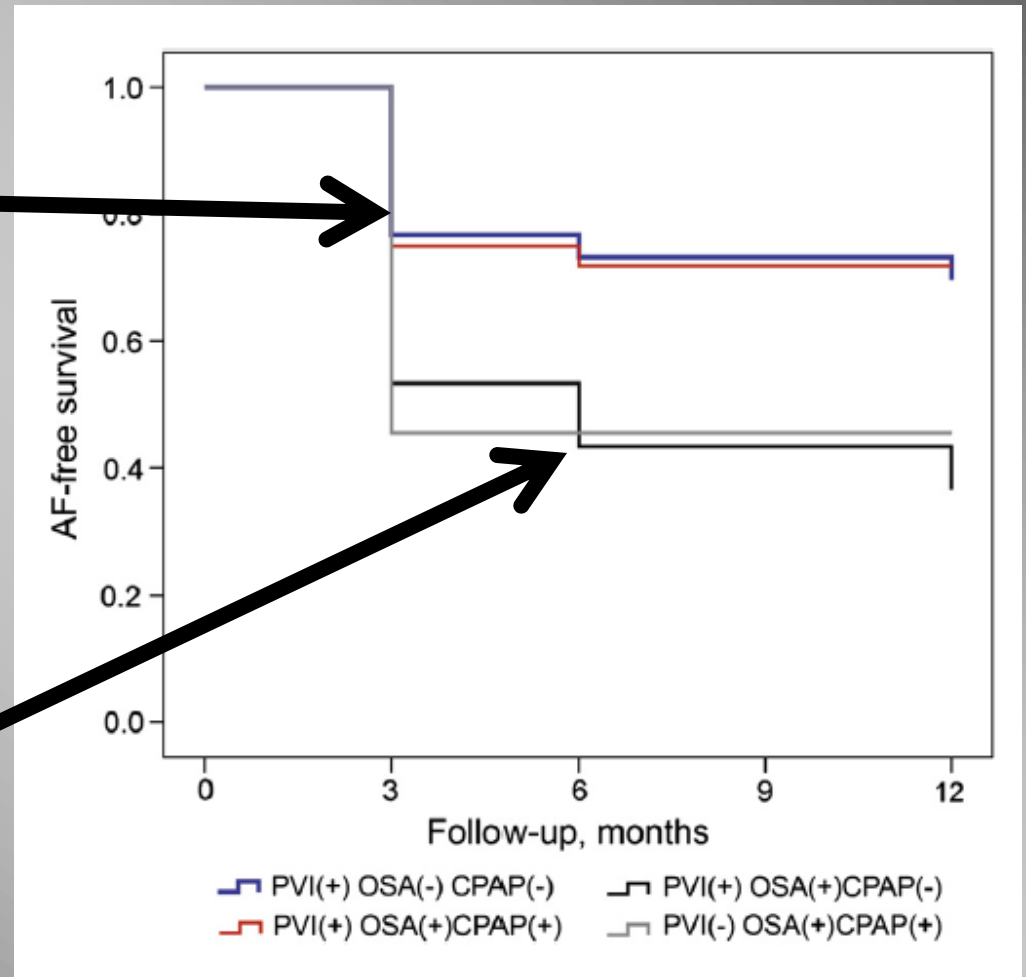
\*Unable to be calculated.

CI = confidence interval; other abbreviations as in Tables 1 and 2.

# Sleep, Snoring and Afib

People who didn't have sleep apnea and got an Afib ablation

People who DID have sleep apnea and got an Afib ablation, but DIDN'T use cpap

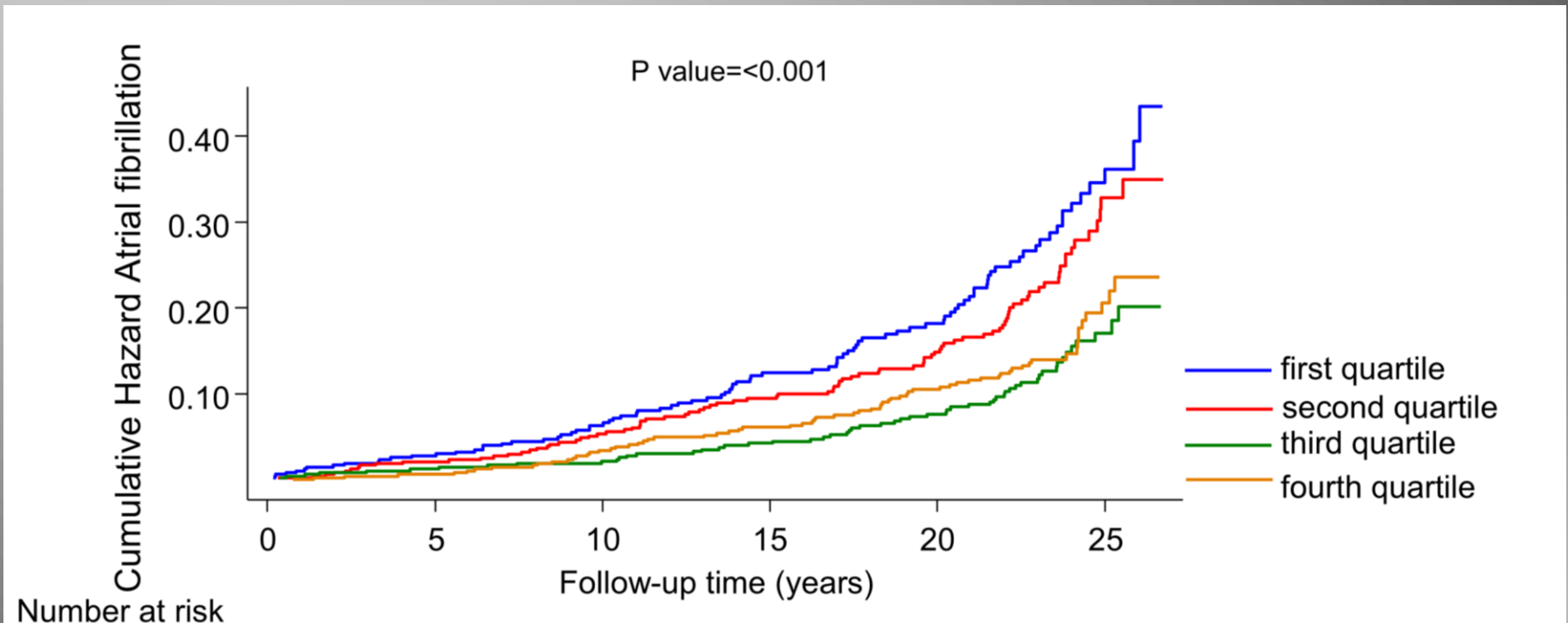


# Exercise and Atrial Fibrillation



Study	Athletic population	Age (mean $\pm$ SD, years)	Males (%)	AF in athletes (%)	AFi in athletes (%)	Relative risk (95% CI) for athletes
Pelliccia et al. <sup>19</sup>	Elite athletes ( $n = 1777$ )	24 $\pm$ 6	71	0.2 (all male, i.e. 0.3 in males)	0	–
Molina et al. <sup>7</sup>	Non-elite marathon runners ( $n = 183$ )	39 $\pm$ 9	100	4.9	0	8.8 (1.3–61.3)
	Controls ( $n = 290$ )	50 $\pm$ 13	100	0.7	0	
Wilhelm et al. <sup>23</sup>	Non-elite runners ( $n = 122$ )	42 $\pm$ 7	50	3.3 all male (i.e. 6.6 in males)	0	–
Karjalainen et al. <sup>12</sup>	Veteran elite orienteers ( $n = 262$ )	47 $\pm$ 5	100	5.3	0	5.5 (1.3–24.4)
	Controls ( $n = 373$ )	49 $\pm$ 5	100	0.9	0	
Baldesberger et al. <sup>6</sup>	Veteran elite cyclists ( $n = 62$ )	67 $\pm$ 7	100	3.2	6.5	14.4 (0.8–261.1)
	Golfers ( $n = 62$ )	66 $\pm$ 6	100	0	0	
Grimsmo et al. <sup>24</sup>	Veteran cross-country skiers ( $n = 78$ )	69 $\pm$ 10	100	16.7	0	–

# Exercise and Atrial Fibrillation



People who were more active had a lower risk of atrial fibrillation!  
(Just don't over-do it.)



# Educating Yourself



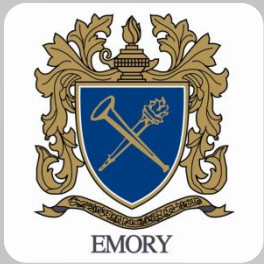
After 2-3 minutes of quiet sitting: 50bpm-100bpm

With exercise: <150bpm

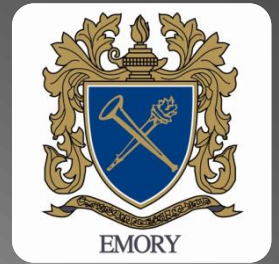
# Educating Yourself

<https://www.hrsonline.org/>

<http://www.emoryhealthcare.org/arrhythmia/ask-experts-videos-arrhythmia.html>



# Wrap-Up



**There is more than one type of atrial fibrillation**

**You can help manage Afib by attention to weight, exercise, sleep, and diet**

**Get a plan with your doctor**

**You can have a good quality of life with Afib, but keeping tabs on the pulse and your symptoms is key**