Sporting Activity and the Risk of Atrial Fibrillation in Athletes: A Systematic Review and Meta-Analysis.

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Supplementary File

Table S1: Adjusted status of extracted odds ratios

Study Name	Adjusted status	Adjusted variables
Aizer et al[1]	Adjusted	Age, treatment assignment (aspirin or placebo, -carotene or placebo), BMI, diabetes, hypertension, hyperlipidaemia, parental history of MI, alcohol, smoking, fish consumption, multivitamin, vitamin C, vitamin E, LVH, CHF, CVD.
Andersen et al[2]	Adjusted	Age, occupation, and education level.
Baldesberger et al[3]	Unadjusted	N/A
Calvo et al[4]	Unadjusted	N/A
Claessen et al[5]	Unadjusted	N/A
Elosua et al[6]	Adjusted	Hypertension, age.
Karjalainen et al[7]	Unadjusted	N/A
Molina et al[8]	Adjusted	Age, systolic and diastolic blood pressure.
Mont et al[9]	Unadjusted	N/A
Myrstad et al[10]	Adjusted	CHD, hypertension, diabetes, age, height, BMI, education level, alcohol, smoking habits, leisure time physical activity.
Myrstad et al[11]	Adjusted	Age, sex, BMI, concomitant CVD, stroke, diabetes, number of race participations.
Schreiner et al[12]	Unadjusted	N/A
Van Buuren et al[13]	Unadjusted	N/A

Note: BMI, body mass index; MI, myocardial infarction; LVH, left ventricular hypertrophy; CHF, congestive heart failure; CVD, cardiovascular disease; CHD, coronary heart disease; N/A, not applicable.

Where ORs were not reported, they were calculated via the CMA in-built algorithm below:

- A = Developed AF Athletes
- B = Developed AF Controls
- C = Did Not Develop AF Athletes
- D = Did Not Develop AF Controls

LogOddsRatio = Log((A * D) / (B * C))
LogOddsVariance = (1 / A + 1 / B + 1 / C + 1 / D)
LogOddsSE = Sqr(LogOddsVariance)
OddsRatio = Exp(LogOddsRatio)
LogOddsRatio = Log((83 * 72) / (24 * 37)) = 1.907
LogOddsVariance = (1/83 + 1/24 + 1/37 + 1/72) = 0.095
LogOddsSE = Sqr(0.095) = 0.308
OddsRatio = Exp(1.907) = 6.730

Table S2: Meta-analysis output table displaying weightings, odds ratios, fixed and random effects.

Study Name	Odds Ratio	Lower Limit	Upper Limit	Z Value	P value	Weight (random)
Aizer et al[1]	1.200	1.021	1.411	2.207	0.027	12.976
Andersen et al[2]	1.200	0.930	1.549	1.399	0.162	12.475
Baldesberger et al[3]	14.381	0.792	261.055	1.802	0.071	1.348
Calvo et al[4]	3.880	1.548	9.723	2.893	0.004	7.046
Claessen et al[5]	4.778	2.270	10.054	4.120	0.000	8.410
Elosua et al[6]	3.100	1.376	6.984	2.730	0.006	7.854
Karjalainen et al[7]	5.833	1.290	26.378	2.291	0.022	3.912
Molina et al[8]	7.448	1.591	34.872	2.549	0.011	3.787
Mont et al[9]	6.730	3.683	12.298	6.198	0.000	9.632
Myrstad et al[10]	1.208	0.898	1.625	1.248	0.212	12.201
Myrstad et al[11]	1.054	0.819	1.355	0.408	0.683	12.499
Schreiner et al[12]	4.798	1.772	12.991	3.085	0.002	6.506
Van Buuren et al[13]	21.894	1.213	395.094	2.091	0.037	1.353
Random	2.460	1.725	3.509	4.970	0.000	
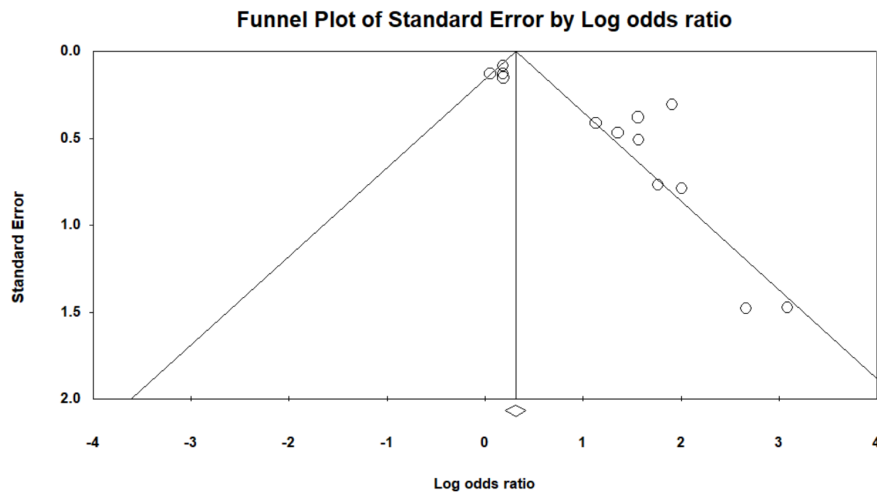
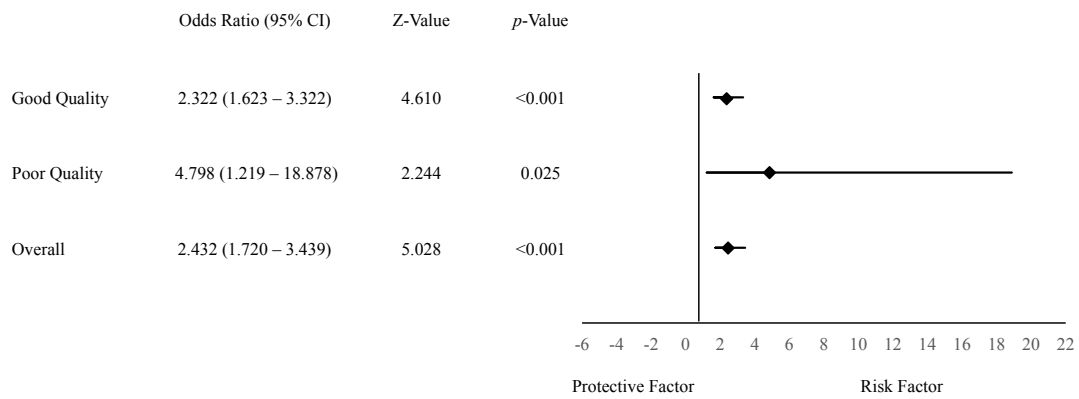Figure S1: Study quality funnel plot with standard error vs logarithmic odds ratio.

	Odds Ratio (95% CI)	Z-Value	*p*-Value
Good Quality	2.322 (1.623 – 3.322)	4.610	<0.001
Poor Quality	4.798 (1.219 – 18.878)	2.244	0.025
Overall	2.432 (1.720 – 3.439)	5.028	<0.001

Figure S2: Subgroup analysis of study quality and the risk of atrial fibrillation.

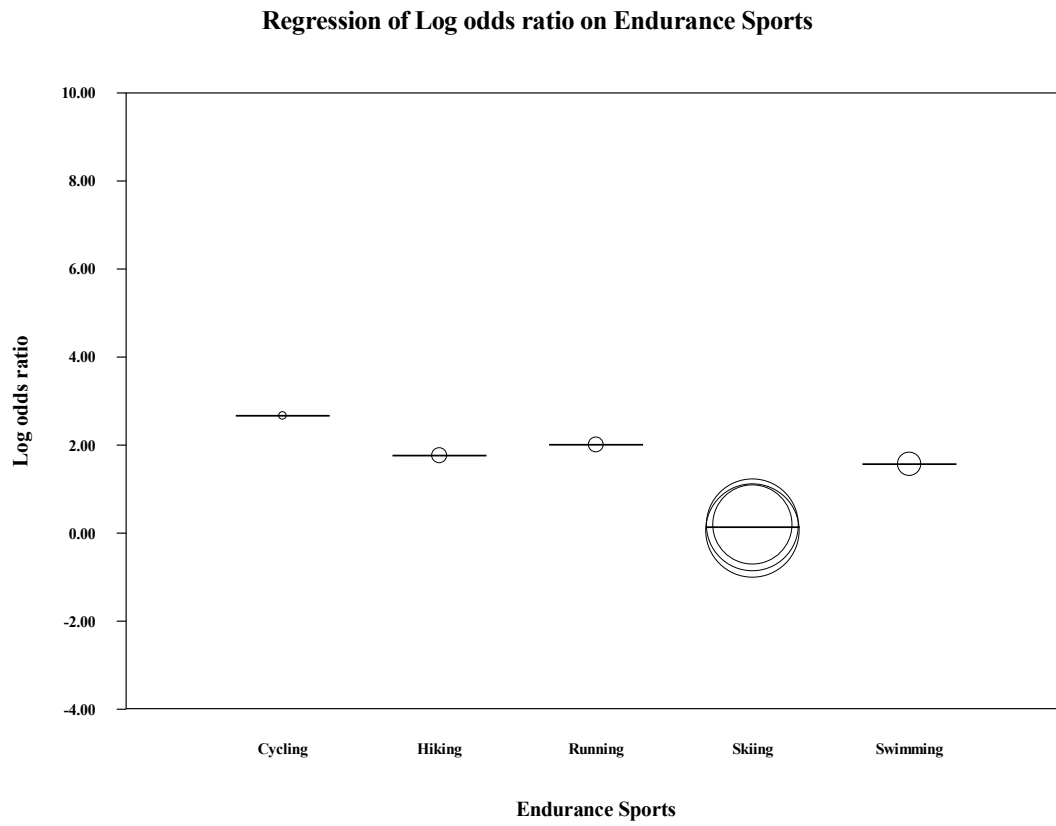**Regression of Log odds ratio on Endurance Sports**

Figure S3: Endurance sport meta-regression bubble plot outputs.

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