

Supplementary Appendix [posted as supplied by author]

Table A. Quality of included studies assessed with Newcastle-Ottawa Scale.

Study	Selection			Comparability of cohorts	Outcome		
	Representativeness of exposed cohort	Selection of non-exposed cohort	Ascertainment of exposure		Outcome not present at baseline	Assessment of outcome	Sufficient follow-up duration
Andersson et al. 2014 [1]		*	*	*	*	*	*
Bejot et al. 2009[2]		*	*	*	**	*	*
Benjamin et al. 1998 [3]	*	*	*	*	**	*	*
Bouzas-Mosquera et al. 2010[4]		*	*	*	**	*	*
Chamberlain et al. 2011 [5]	*	*	*	*	**	*	*
Chao et al. 2012 [6]	*	*	*	*	**	*	*
Chen et al. 2013 [7]	*	*	*	*	**	*	*
D'Agostino et al. 1994 [8]	*	*	*	*	**	*	*
Friberg et al. 2004 [9]	*	*	*	*	**	*	*
Genovesi et al. 2009 [10]		*	*	*	**	*	*
Guize 2007 [11]	*	*	*	*	**	*	*
Hamaguchi 2009 [12]		*	*	*	**	*	*
Hermann et al. 2013[13]	*	*	*	*	**	*	*
Hippisley-Cox et al. 2010[14]	*	*	*	*	**	*	*
Hippisley-Cox 2013 [15]	*	*	*	*	**	*	*
Hippisley-Cox et al. 2015 [16]	*	*	*	*	**	*	*
Iwahana 2011 [17]	*	*	*	*	**	*	*
Kaarisalo 1997 [18]		*	*	NA	**	*	*
Nakayama 1997 [19]	*	*	*	*	**	*	*

Ohsawa 2007 [20]	*	*	*	*	**	*	*	*
Ruigomez et al. 2002 [21]	*	*	*	*	**	*	*	*
Saposnik et al. 2011 [22]		*	*	*	**	*	*	*
Siontis et al. 2014 [23]		*	*	*	**	*	*	*
Soliman et al. 2014 [24]	*	*		*	**	*	*	*
Soliman et al. 2015 [25]	*	*	*	*	**	*	*	*
Stewart et al. 2002 [26]	*	*	*	*	**	*	*	*
Stordecky et al. 2013 [27]		*	*	*	**	*	*	*
van Wijk et al. 2007[28]		*	*	*	**	*	*	*
Wolf et al. 1998 [29]	*	*	*		**	*	*	*
Wolfe et al. 2006 [30]		*	*	*	**	*	*	*

NA: Not applicable; A study can receive a maximum of one star for selection and outcome and two star for comparability of cohorts.

Table B. Pooled event rate in entire cohort (per 1000 patient years) in men and women for all-cause mortality, CVD (cardiovascular) mortality, stroke, cardiac events and heart failure.

	Men	Women
All Cause Mortality	18.2	18.0
Cardiovascular Mortality	10.2	5.9
Stroke	3.1	3.1
Coronary Heart Disease	5.6	3.1
Heart Failure	2.6	2.0

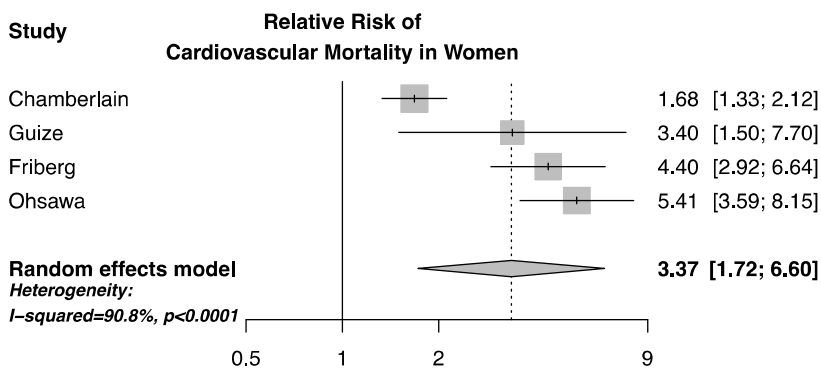
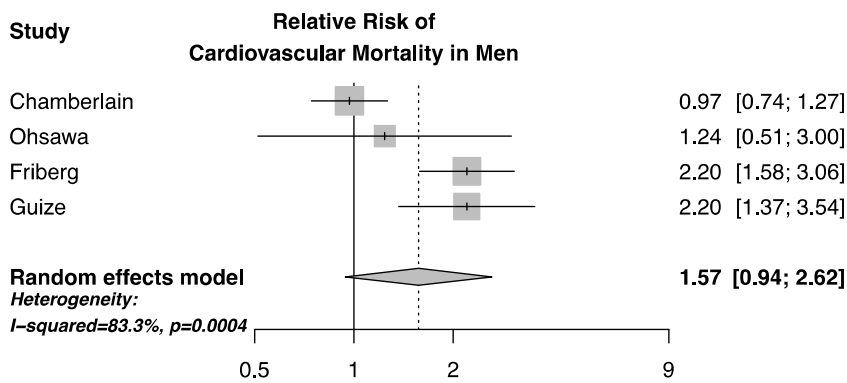
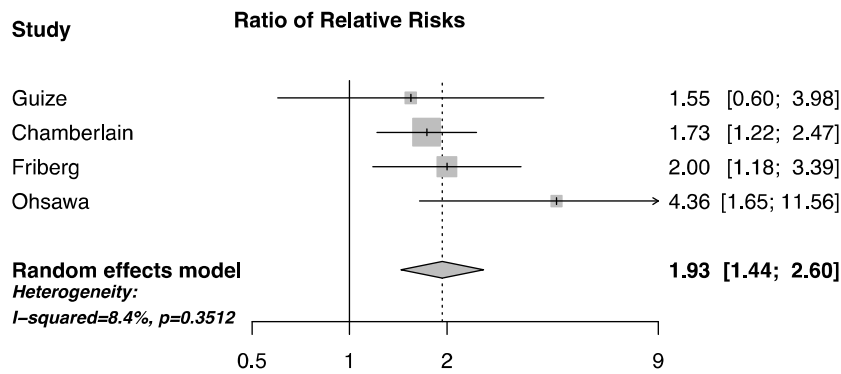
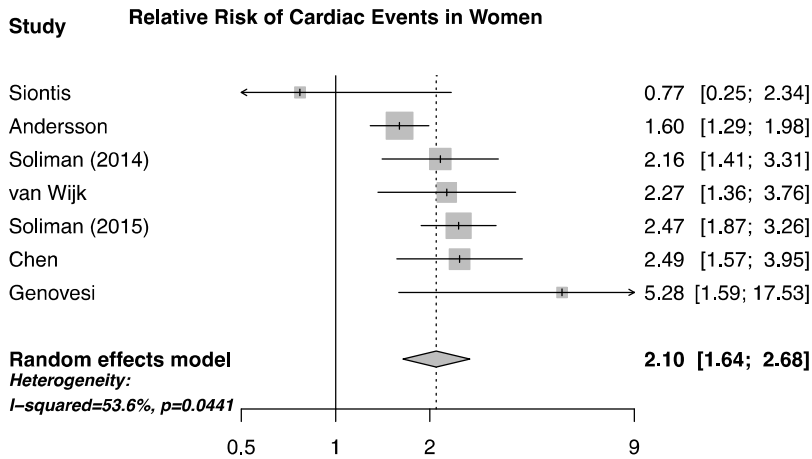
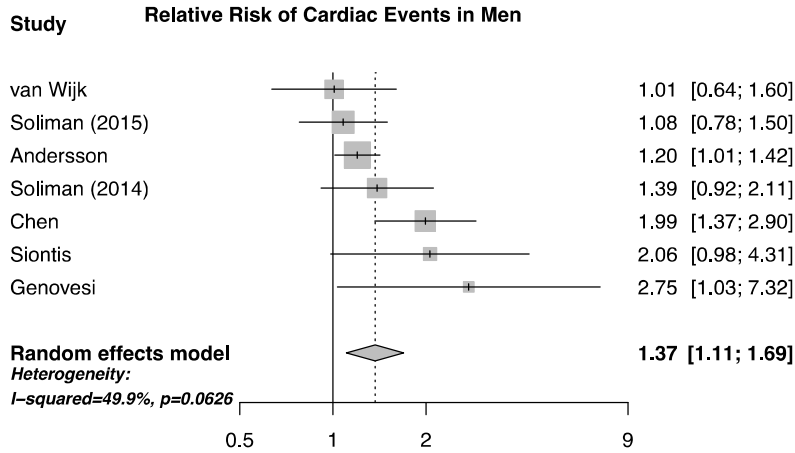
A**B**

Figure A. (A) Maximally-adjusted relative risk for cardiovascular mortality, comparing individuals with AF to those without AF, by sex. (B) Maximally-adjusted women-to-men ratio of relative risks for cardiovascular mortality, comparing individuals with AF to those without AF. Area of each square is proportional to the inverse variance of the estimate. Horizontal lines indicate 95% confidence intervals.

A



B

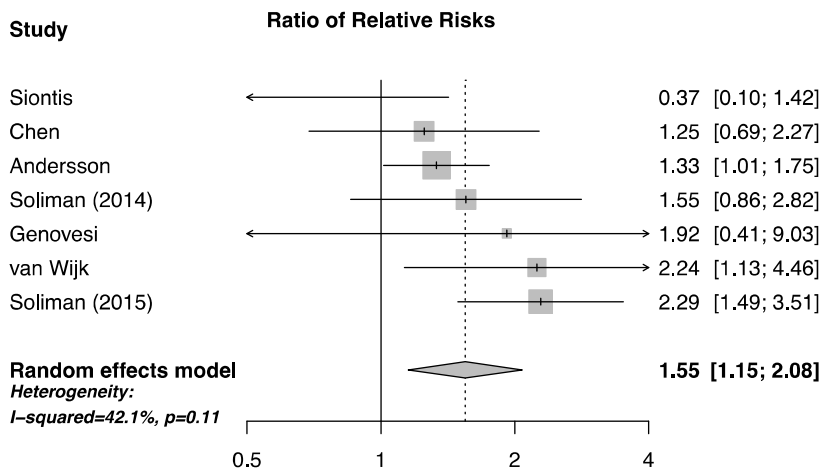
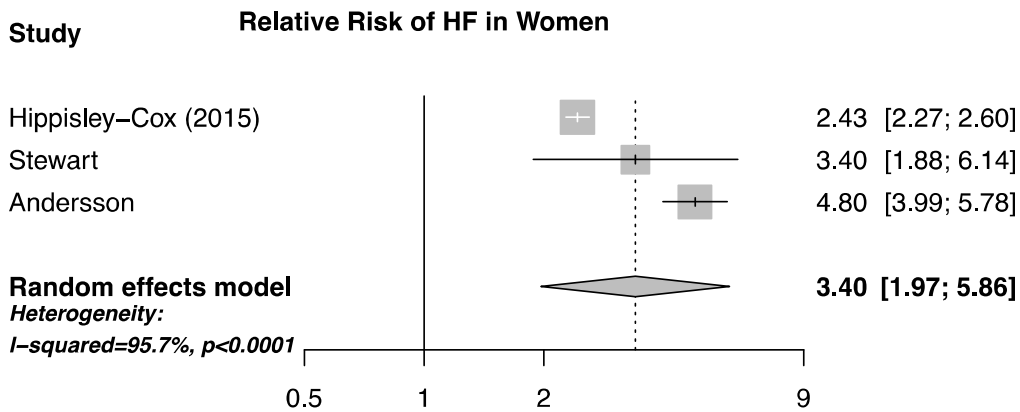
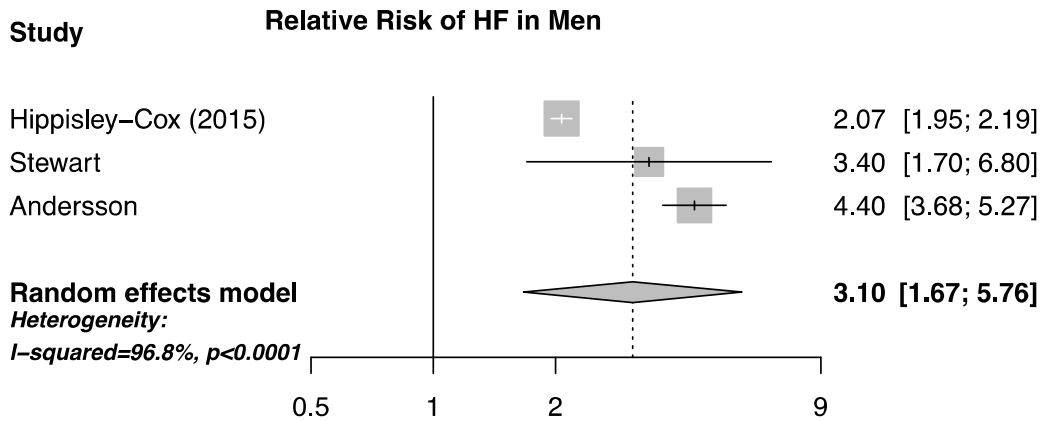


Figure B. (A) Maximally-adjusted relative risk for cardiac events, comparing individuals with AF to those without AF, by sex. (B) Maximally-adjusted women-to-men ratio of relative risks for cardiac events, comparing individuals with AF to those without AF. Area of each square is proportional to the inverse variance of the estimate. Horizontal lines indicate 95% confidence intervals.

A



B

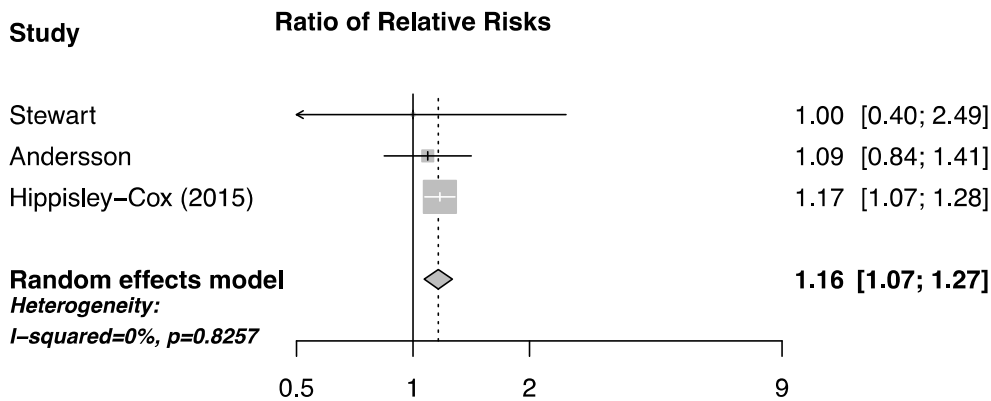


Figure C. (A) Maximally-adjusted relative risk for heart failure, comparing individuals with AF to those without AF, by sex. (B) Maximally-adjusted women-to-men ratio of relative risks for heart failure, comparing individuals with AF to those without AF. Area of each square is proportional to the inverse variance of the estimate. Horizontal lines indicate 95% confidence intervals.

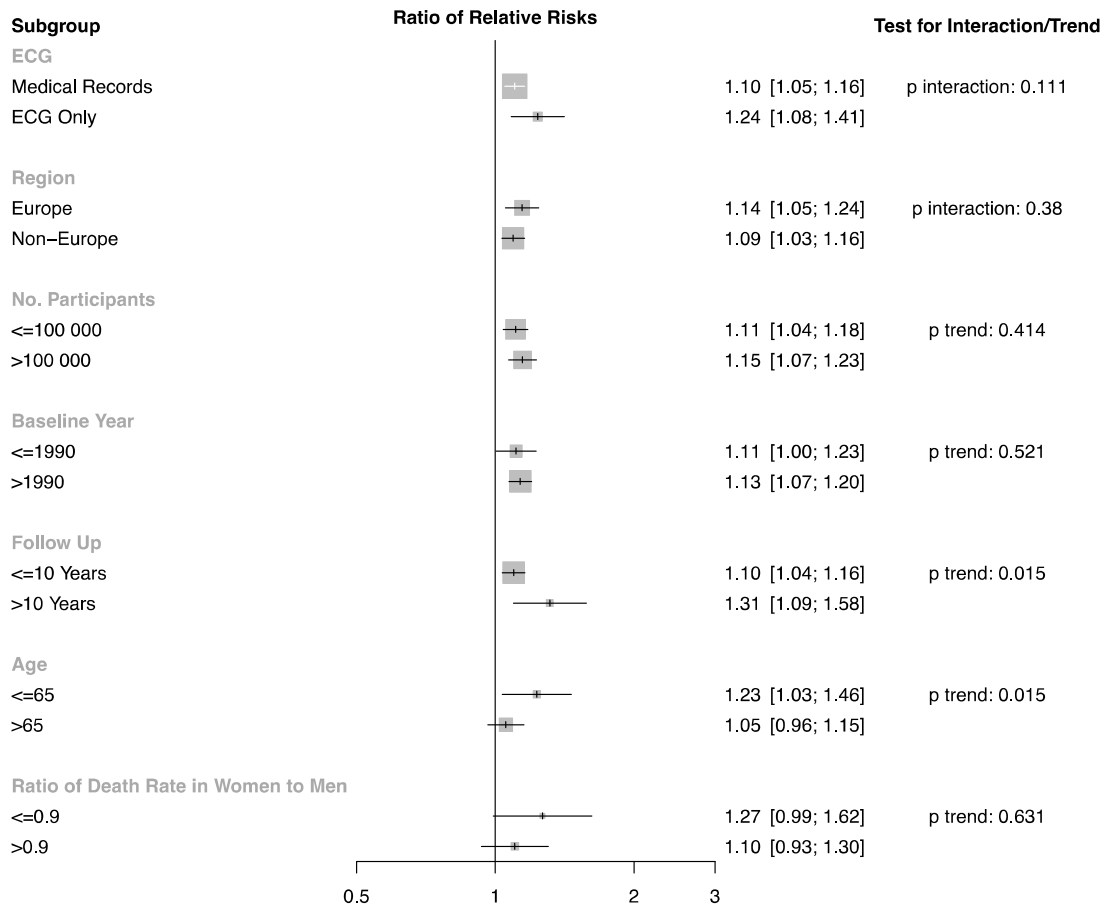


Figure D. Maximally-adjusted women-to-men ratio of relative risks for all-cause mortality, comparing individuals with AF to those without AF, in five sensitivity analyses. Area of each square is proportional to the inverse variance of the estimate. Horizontal lines indicate 95% confidence intervals.

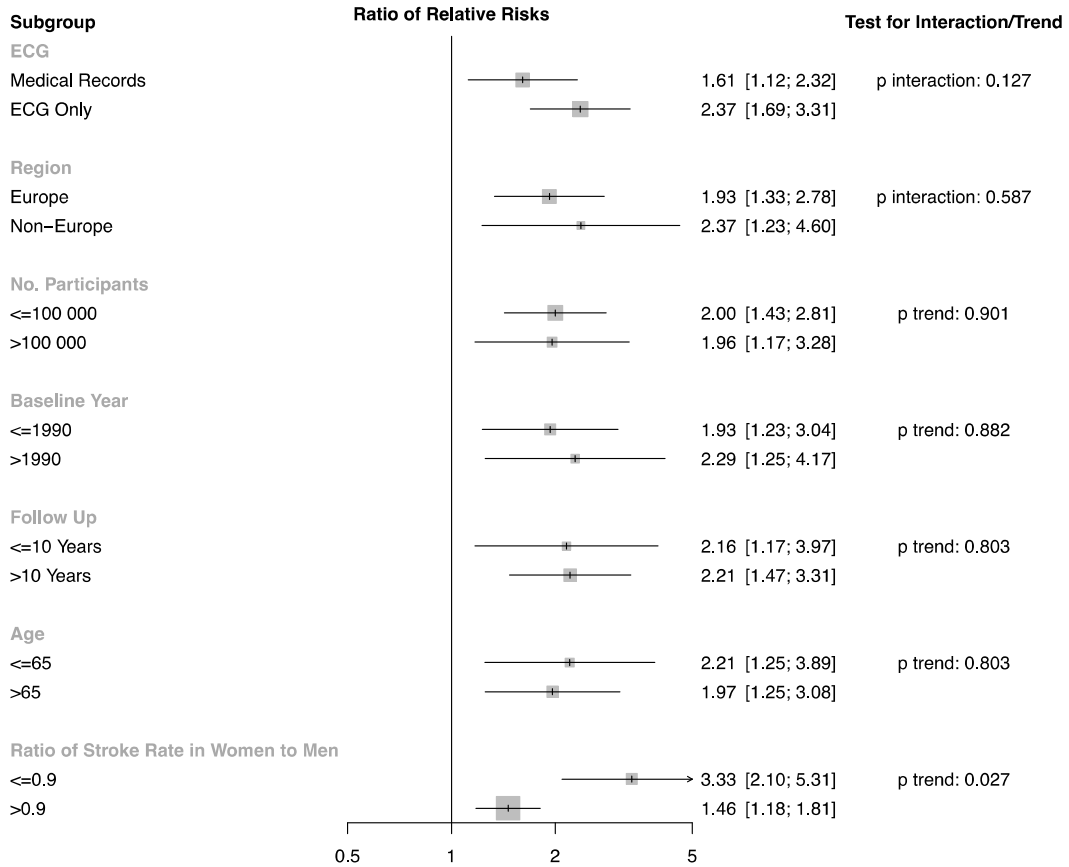


Figure E. Maximally-adjusted women-to-men ratio of relative risks for stroke, comparing individuals with AF to those without AF, in five sensitivity analyses. Area of each square is proportional to the inverse variance of the estimate. Horizontal lines indicate 95% confidence intervals.

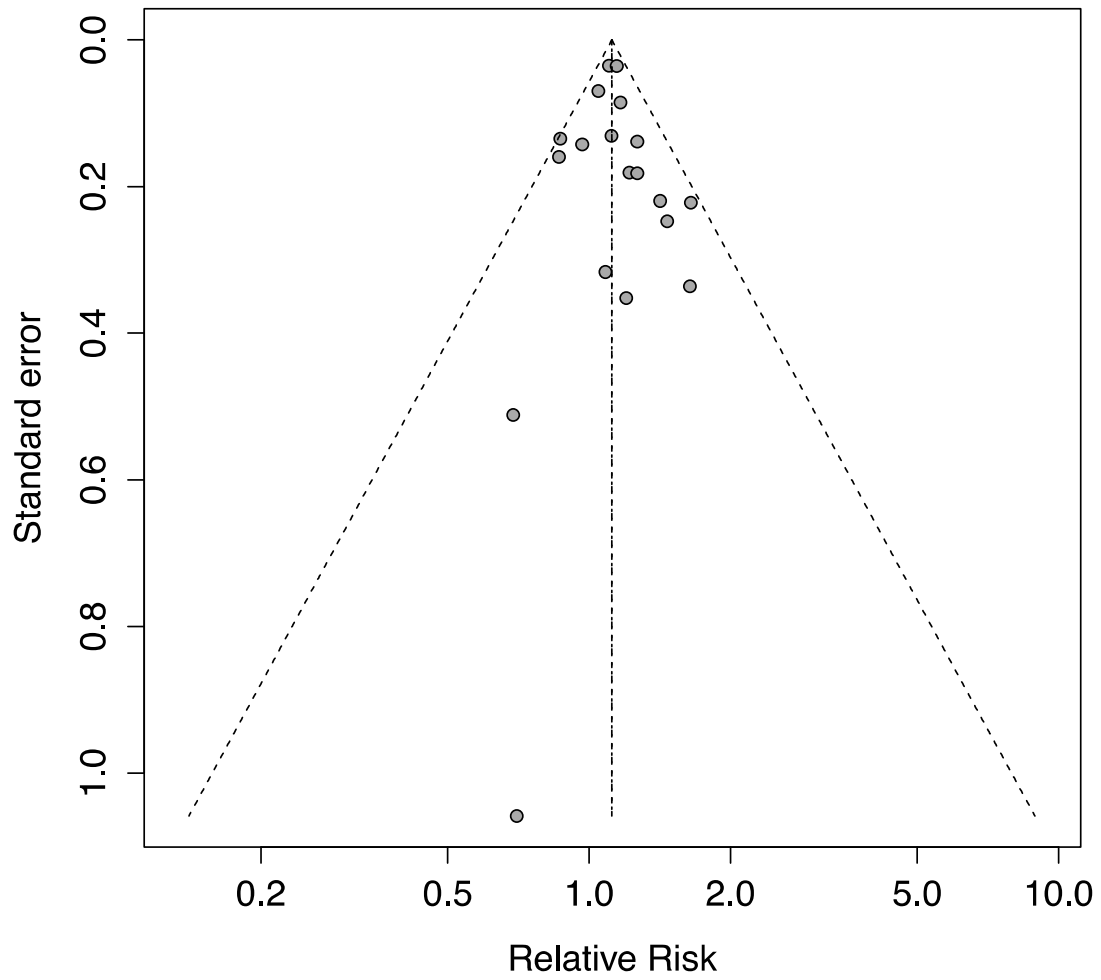


Figure F. Funnel plot of maximally-adjusted pooled women-to-men ratio of relative risks for all-cause mortality, comparing individuals with AF to those without AF. Egger's test for interaction was not significant ($p = 0.72$).

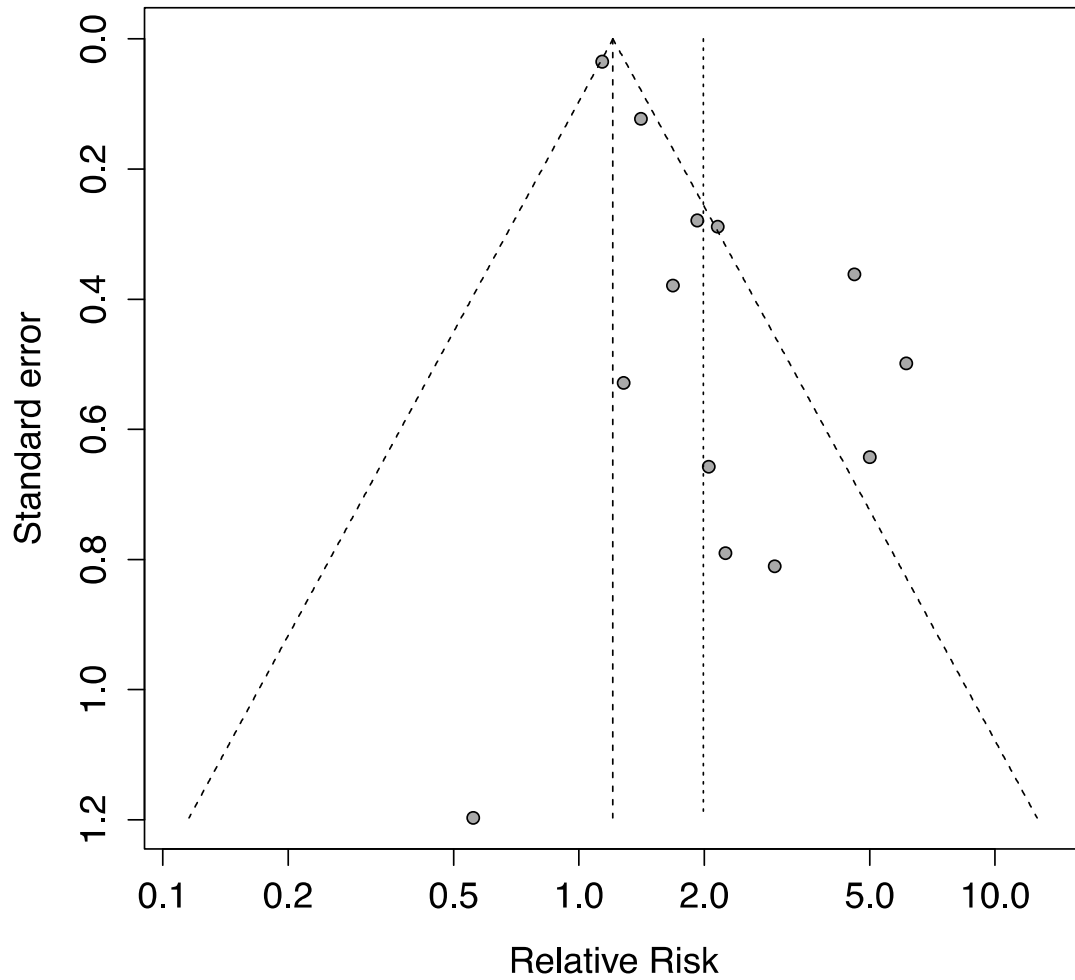


Figure G. Funnel plot of maximally-adjusted pooled women-to-men ratio of relative risks for stroke, comparing individuals with AF to those without AF. Egger's test for interaction was significant ($p = 0.002$).

Web References

- 1 Andersson T, Magnuson A, Bryngelsson I-L, *et al.* Gender-related differences in risk of cardiovascular morbidity and all-cause mortality in patients hospitalized with incident atrial fibrillation without concomitant diseases: a nationwide cohort study of 9519 patients. *Int J Cardiol* 2014;**177**:91–9. doi:10.1016/j.ijcard.2014.09.092
- 2 Béjot Y, Ben Salem D, Osseby GV, *et al.* Epidemiology of ischemic stroke from atrial fibrillation in Dijon, France, from 1985 to 2006. *Neurology* 2009;**72**:346–53. doi:10.1212/01.wnl.0000341280.31919.bd
- 3 Benjamin EJ, Wolf PA, D'Agostino RB, *et al.* Impact of atrial fibrillation on the risk of death: the Framingham Heart Study. *Circulation* 1998;**98**:946–52.
- 4 Bouzas-Mosquera A, Peteiro J, Broullón FJ, *et al.* Effect of atrial fibrillation on outcome in patients with known or suspected coronary artery disease referred for exercise stress testing. *The American Journal of Cardiology* 2010;**105**:1207–11. doi:10.1016/j.amjcard.2009.12.037
- 5 Chamberlain AM, Redfield MM, Alonso A, *et al.* Atrial fibrillation and mortality in heart failure: a community study. *Circ Heart Fail* 2011;**4**:740–6. doi:10.1161/CIRCHEARTFAILURE.111.962688
- 6 Chao T-F, Liu C-J, Chen S-J, *et al.* Atrial fibrillation and the risk of ischemic stroke: does it still matter in patients with a CHA2DS2-VASc score of 0 or 1? *Stroke* 2012;**43**:2551–5. doi:10.1161/STROKEAHA.112.667865
- 7 Chen LY, Sotoodehnia N, Bůžková P, *et al.* Atrial fibrillation and the risk of sudden cardiac death: the atherosclerosis risk in communities study and cardiovascular health study. *JAMA Internal Medicine* 2013;**173**:29–35. doi:10.1001/2013.jamainternmed.744
- 8 D'Agostino RB, Wolf PA, Belanger AJ, *et al.* Stroke risk profile: adjustment for antihypertensive medication. The Framingham Study. *Stroke* 1994;**25**:40–3. doi:10.1161/01.STR.25.1.40
- 9 Friberg J, Scharling H, Gadsbøll N, *et al.* Comparison of the impact of atrial fibrillation on the risk of stroke and cardiovascular death in women versus men (The Copenhagen City Heart Study). *The American Journal of Cardiology* 2004;**94**:889–94. doi:10.1016/j.amjcard.2004.06.023
- 10 Genovesi S, Valsecchi MG, Rossi E, *et al.* Sudden death and associated factors in a historical cohort of chronic haemodialysis patients. *Nephrol Dial Transplant* 2009;**24**:2529–36. doi:10.1093/ndt/gfp104
- 11 Guize L, Thomas F, Bean K, *et al.* [Atrial fibrillation: prevalence, risk factors and mortality in a large French population with 15 years of follow-up]. *Bull Acad Natl Med* 2007;**191**:791–803–discussion803–5.
- 12 Hamaguchi S, Yokoshiki H, Kinugawa S, *et al.* Effects of atrial fibrillation on

long-term outcomes in patients hospitalized for heart failure in Japan: a report from the Japanese Cardiac Registry of Heart Failure in Cardiology (JCARE-CARD). *Circ J* 2009;**73**:2084–90.

- 13 Hermann DM, Gronewold J, Lehmann N, *et al.* Coronary artery calcification is an independent stroke predictor in the general population. *Stroke* 2013;**44**:1008–13. doi:10.1161/STROKEAHA.111.678078
- 14 Hippisley-Cox J, Coupland C, Robson J, *et al.* Derivation, validation, and evaluation of a new QRISK model to estimate lifetime risk of cardiovascular disease: cohort study using QResearch database. *BMJ* 2010;**341**:c6624–4. doi:10.1136/bmj.c6624
- 15 Hippisley-Cox J, Coupland C, Brindle P. Derivation and validation of QStroke score for predicting risk of ischaemic stroke in primary care and comparison with other risk scores: a prospective open cohort study. *BMJ* 2013;**346**:f2573–3. doi:10.1136/bmj.f2573
- 16 Hippisley-Cox J, Coupland C. Development and validation of risk prediction equations to estimate future risk of heart failure in patients with diabetes: a prospective cohort study. *BMJ Open* 2015;**5**:e008503. doi:10.1136/bmjopen-2015-008503
- 17 Iwahana H, Ishikawa S, Ishikawa J, *et al.* Atrial fibrillation is a major risk factor for stroke, especially in women: the Jichi Medical School cohort study. *J Epidemiol* 2011;**21**:95–101.
- 18 Kaarisalo MM, Immonen-Räihä P, Marttila RJ, *et al.* Atrial fibrillation in older stroke patients: association with recurrence and mortality after first ischemic stroke. *J Am Geriatr Soc* 1997;**45**:1297–301.
- 19 Nakayama T, Date C, Yokoyama T, *et al.* A 15.5-year follow-up study of stroke in a Japanese provincial city. The Shibata Study. *Stroke* 1997;**28**:45–52.
- 20 Ohsawa M, Okayama A, Okamura T, *et al.* Mortality risk attributable to atrial fibrillation in middle-aged and elderly people in the Japanese general population: nineteen-year follow-up in NIPPON DATA80. *Circ J* 2007;**71**:814–9.
- 21 Ruigómez A, Johansson S, Wallander MA, *et al.* Risk of mortality in a cohort of patients newly diagnosed with chronic atrial fibrillation. *BMC Cardiovasc Disord* 2002;**2**:5.
- 22 Saposnik G, Kapral MK, Liu Y, *et al.* IScore: a risk score to predict death early after hospitalization for an acute ischemic stroke. *Circulation* 2011;**123**:739–49. doi:10.1161/CIRCULATIONAHA.110.983353
- 23 Siontis KC, Geske JB, Ong K, *et al.* Atrial fibrillation in hypertrophic cardiomyopathy: prevalence, clinical correlations, and mortality in a large high-risk population. *J Am Heart Assoc* 2014;**3**:e001002–2.

doi:10.1161/JAHA.114.001002

- 24 Soliman EZ, Safford MM, Muntner P, *et al.* Atrial fibrillation and the risk of myocardial infarction. *JAMA Internal Medicine* 2014;**174**:107–14.
doi:10.1001/jamainternmed.2013.11912
- 25 Soliman EZ, Lopez F, O'Neal WT, *et al.* Atrial Fibrillation and Risk of ST-Segment-Elevation Versus Non-ST-Segment-Elevation Myocardial Infarction: The Atherosclerosis Risk in Communities (ARIC) Study. *Circulation* 2015;**131**:1843–50.
doi:10.1161/CIRCULATIONAHA.114.014145
- 26 Stewart S, Hart CL, Hole DJ, *et al.* A population-based study of the long-term risks associated with atrial fibrillation: 20-year follow-up of the Renfrew/Paisley study. *Am J Med* 2002;**113**:359–64.
- 27 Stortecky S, Buellfeld L, Wenaweser P, *et al.* Atrial fibrillation and aortic stenosis: impact on clinical outcomes among patients undergoing transcatheter aortic valve implantation. *Circ Cardiovasc Interv* 2013;**6**:77–84. doi:10.1161/CIRCINTERVENTIONS.112.000124
- 28 van Wijk I, Koudstaal PJ, Kappelle LJ, *et al.* Long-term occurrence of death and cardiovascular events in patients with transient ischaemic attack or minor ischaemic stroke: comparison between arterial and cardiac source of the index event. *J Neurol Neurosurg Psychiatr* 2008;**79**:895–9.
doi:10.1136/jnnp.2007.133132
- 29 Wolf PA, Mitchell JB, Baker CS, *et al.* Impact of atrial fibrillation on mortality, stroke, and medical costs. *Archives of internal medicine* 1998;**158**:229–34.
- 30 Wolfe CDA, Corbin DOC, Smeeton NC, *et al.* Poststroke survival for black-Caribbean populations in barbados and South london. *Stroke* 2006;**37**:1991–6. doi:10.1161/01.STR.0000230647.77889.84