



AperTO - Archivio Istituzionale Open Access dell'Università di Torino

Association of menopausal characteristics and risk of coronary heart disease: a pan-European case-cohort analysis

This is a pre print version of the following article:

Original Citation:

Availability:

This version is available <http://hdl.handle.net/2318/1704686> since 2020-02-28T16:46:59Z

Published version:

DOI:10.1093/ije/dyz016

Terms of use:

Open Access

Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.

(Article begins on next page)

Table 1. Number of cases and controls by study, stratified by sex.

Study	Women		Men		Total	
	Cases	Controls	Cases	Controls	Cases	Controls
UK Biobank	13,671	185,202	11,681	157,089	25,352	342,291
m-CARDIoGRAMplusC4D	2,970	5,282	10,215	6,218	13,185	11,500
EPIC-CVD*	3,528	8,637	5,501	5,388	9,029	14,025
Total	20,169	199,121	27,397	168,695	47,566	367,816

*The column ‘controls’ encompasses the subcohort.

Table 2. Relative risk estimates of the association between genetically determined reproductive aging and coronary heart disease for individual studies and the pooled cohorts

	UK Biobank OR (95%CI)	m-CARDIoGRAM plusC4D OR (95%CI)	EPIC-CVD HR (95%CI)	Pooled relative risk estimates
Women				
Simple median	0.99 (0.96;1.02)	0.97 (0.89;1.06)	0.97 (0.78;1.21)	0.99 (0.96;1.02)
Weighted median	0.99 (0.96;1.02)	0.97 (0.89;1.06)	1.08 (0.88;1.33)	0.99 (0.96;1.02)
IVW*	0.99 (0.97;1.02)	0.98 (0.91;1.05)	1.02 (0.89;1.17)	0.99 (0.97;1.01)
MR-Egger	0.98 (0.94;1.02)	0.88 (0.76;1.02)	1.29 (0.91;1.83)	0.97 (0.94;1.02)
Men				
Simple median	0.99 (0.95;1.02)	1.05 (0.99;1.12)	0.98 (0.81;1.18)	1.01 (0.98;1.04)
Weighted median	0.99 (0.96;1.03)	1.05 (0.99;1.12)	0.84 (0.71;1.01)	1.01 (0.98;1.04)
IVW*	0.99 (0.96;1.01)	1.03 (0.99;1.08)	0.93 (0.82;1.05)	1.00 (0.97;1.02)
MR-Egger	0.98 (0.93;1.03)	1.02 (0.92;1.12)	0.85 (0.62;1.16)	1.00 (0.95;1.05)

*Inverse-variance weighted

Table 3. Estimates of IVW analyses for the association between genetically determined reproductive aging and cardiovascular risk factors. Results for individual studies and the pooled cohorts.

	Women	Men	Sex-combined		
	EPIC-CVD* beta (95%CI)	EPIC-CVD* beta (95%CI)	EPIC-CVD* beta (95%CI)	Publicly available data** beta (95%CI)	Pooled estimate beta (95%CI)
Total cholesterol (mmol/L)	-0.025 (-0.056;0.005)	0.024 (-0.011;0.059)	-0.010 (-0.035;0.014)	0.007 (-0.006;0.020)	0.005 (-0.007;0.017)
HDL cholesterol (mmol/L)	-0.006 (-0.018;0.006)	0.001 (-0.012;0.014)	-0.003 (-0.014;0.008)	0.008 (-0.006;0.022)	0.003 (-0.007;0.013)
Triglycerides (mmol/L)	0.006 (-0.014;0.025)	0.045 (0.010;0.080)	0.020 (0.000;0.040)	0.007 (-0.006;0.020)	0.001 (-0.016;0.018)
Apolipoprotein A1 (g/L)	-0.005 (-0.013;0.003)	0.006 (-0.002;0.014)	-0.001 (-0.008;0.006)	/	/
Apolipoprotein B (g/L)	-0.002 (-0.009;0.005)	0.003 (-0.006;0.012)	-0.001 (-0.006;0.005)	/	/
C-reactive protein (mg/L)	0.023 (-0.089;0.135)	0.075 (-0.060;0.211)	0.072 (-0.056;0.199)	/	/
Glucose*** (mmol/L)	0.011 (-0.024;0.047)	0.020 (-0.036;0.076)	0.015 (-0.018;0.048)	0.002 (-0.004;0.008)	0.003 (-0.003;0.008)
HbA1c (%)	-0.004 (-0.018;0.011)	0.015 (-0.005;0.035)	0.003 (-0.008;0.015)	0.000 (-0.007;0.007)	0.000 (-0.006;0.007)

*Subcohort only

**Global Lipids Genetics Consortium for total cholesterol, HDL cholesterol and triglycerides; MAGIC consortium for glucose and HbA1c

***EPIC-CVD non-fasting glucose pooled with summary statistics of fasting glucose.