

Twenty-Year Predictors of Peripheral Arterial Disease Compared With Coronary Heart Disease in the Scottish Heart Health Extended Cohort (SHHEC)

In the article by Tunstall-Pedoe, et al, “Twenty-Year Predictors of Peripheral Arterial Disease Compared With Coronary Heart Disease in the Scottish Heart Health Extended Cohort (SHHEC),” which published online September 18, 2017, and appeared in the September 2017 issue of the journal (*J Am Heart Assoc.* 2017; 6:e005967. DOI: 10.1161/JAHA.117.005967), the results in Table 4 for Apolipoprotein A and Apolipoprotein B were inconsistent and incorrect between pages 8 and 9. The age-adjusted hazard ratios on page 8 were correctly shown as their reciprocal for Apolipoprotein A and

not so for Apolipoprotein B. Those additionally adjusted for ASSIGN variables on page 9 erroneously showed Apolipoprotein B as the reciprocal and not Apolipoprotein A. The corrected Table is presented below with the hazard ratio for Apolipoprotein A shown as the reciprocal for both its appearances, and that for Apolipoprotein B not so for both.

The publisher regrets the errors.

The online version of the article has been updated and is available at <http://jaha.ahajournals.org/content/6/9/e005967>

Table 4. Hazard Ratios and 95% Confidence Limits by Individual Factors for CHD and PAD, Adjusted First for Age and Then Additionally for ASSIGN Factors (Which are Excluded), for the Sexes Separately

Adjusted for Age		Coronary Heart Disease			Peripheral Arterial Disease	
		Men 1847	Women 1251		Men 291	Women 208
Personal						
Age [†]		1.57 (1.50; 1.65)*	1.84 (1.73; 1.95)*		1.75 (1.54; 1.99)*	1.96 (1.69; 2.28)*
Years of education	R	1.16 (1.11; 1.22)*	1.32 (1.23; 1.43)*	R	1.27 (1.11; 1.45)*	1.35 (1.12; 1.61)*
Family history CHD [†]		1.45 (1.31; 1.60)*	1.69 (1.51; 1.89)*		1.57 (1.23; 2.01)*	1.48 (1.12; 1.95)*
SIMD score (SES) [†]		1.18 (1.12; 1.23)*	1.30 (1.23; 1.37)*		1.48 (1.33; 1.65)*	1.56 (1.38; 1.77)*
ASSIGN CV risk score [†]		1.44 (1.39; 1.50)*	1.50 (1.44; 1.56)*		1.76 (1.62; 1.92)*	1.79 (1.66; 1.93)*
Smoking						
Current smoker Y/N		1.60 (1.46; 1.76)*	1.86 (1.66; 2.07)*		3.96 (3.01; 5.21)*	7.08 (5.07; 9.88)*
Cigs/day equivalent [†]		1.29 (1.24; 1.34)*	1.40 (1.33; 1.48)*		1.68 (1.54; 1.82)*	2.01 (1.85; 2.19)*
Expired CO		1.26 (1.22; 1.31)*	1.28 (1.21; 1.34)*		1.61 (1.49; 1.73)*	1.88 (1.73; 2.04)*
Thiocyanate		1.28 (1.22; 1.34)*	1.30 (1.22; 1.37)*		2.05 (1.81; 2.33)*	2.44 (2.09; 2.85)*
Cotinine		1.33 (1.27; 1.38)*	1.37 (1.30; 1.44)*		1.76 (1.59; 1.95)*	2.09 (1.87; 2.34)*
Physical						
Height	R	1.15 (1.08; 1.22)*	1.28 (1.19; 1.41)*	R	1.18 (1.01; 1.37)*	1.20 (0.98; 1.49)
Weight		1.14 (1.08; 1.20)*	1.21 (1.14; 1.28)*		0.93 (0.81; 1.07)	1.15 (0.99; 1.33)
Body mass index		1.24 (1.17; 1.30)*	1.24 (1.18; 1.29)*		0.99 (0.86; 1.14)	1.17 (1.04; 1.31)*
Waist circumference.		1.27 (1.19; 1.36)*	1.36 (1.27; 1.45)*		1.09 (0.93; 1.29)	1.37 (1.16; 1.61)*
Waist-to-hip ratio		1.16 (1.09; 1.22)*	1.27 (1.18; 1.37)*		1.14 (0.98; 1.33)	1.42 (1.17; 1.71)*
Systolic BP [†]		1.23 (1.18; 1.29)*	1.26 (1.19; 1.32)*		1.47 (1.33; 1.63)*	1.44 (1.28; 1.61)*

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Table 4. Continued

Adjusted for Age		Coronary Heart Disease			Peripheral Arterial Disease	
Diastolic BP		1.19 (1.14; 1.25)*	1.19 (1.13; 1.26)*		1.18 (1.06; 1.32)*	1.12 (0.97; 1.29)
Pulse pressure		1.05 (1.02; 1.08)*	1.05 (1.02; 1.08)*		1.09 (1.05; 1.14)*	1.08 (1.03; 1.12)*
Pulse rate		1.09 (1.05; 1.13)*	1.09 (1.05; 1.13)*		1.23 (1.14; 1.34)*	1.23 (1.14; 1.34)*
Diabetes						
Diabetes mellitus [†]		2.26 (1.72; 2.96)*	3.24 (2.42; 4.32)*		6.31 (4.08; 9.76)*	7.39 (4.55; 12.00)*
Glucose (non-fasting)		1.09 (1.04; 1.13)*	1.15 (1.09; 1.21)*		1.24 (1.17; 1.32)*	1.23 (1.13; 1.34)*
Insulin (non-fasting)		1.07 (1.03; 1.10)*	1.15 (1.11; 1.19)*		1.06 (0.96; 1.16)	1.20 (1.12; 1.29)*
C-peptide		1.05 (0.98; 1.13)*	1.01 (0.91; 1.12)		1.00 (0.86; 1.17)	0.98 (0.81; 1.18)
Lipids						
Total cholesterol [†]		1.30 (1.24; 1.36)*	1.23 (1.16; 1.29)*		1.13 (0.99; 1.28)	1.23 (1.07; 1.41)*
HDL cholesterol [†]	R	1.15 (1.09; 1.20)*	1.20 (1.14; 1.27)*	R	1.02 (0.91; 1.15)	1.37 (1.15; 1.64)*
Non-HDL cholesterol		1.36 (1.30; 1.43)*	1.31 (1.24; 1.38)*		1.14 (1.00; 1.28)*	1.37 (1.20; 1.56)*
LDL cholesterol		1.13 (1.08; 1.18)*	1.15 (1.09; 1.22)*		1.10 (0.98; 1.24)	1.11 (0.98; 1.26)
Triglycerides		1.30 (1.23; 1.36)*	1.45 (1.36; 1.55)*		1.26 (1.12; 1.42)*	1.85 (1.58; 2.18)*
Apolipoprotein A	R	1.18 (1.12; 1.25)*	1.27 (1.19; 1.35)*	R	1.20 (1.04; 1.39)*	1.28 (1.05; 1.54)*
Apolipoprotein B		1.38 (1.31; 1.46)*	1.29 (1.24; 1.35)*		1.28 (1.15; 1.44)*	1.35 (1.23; 1.50)*
Lipoprotein (a)		1.01 (0.97; 1.06)	1.10 (0.98; 1.24)		1.12 (0.94; 1.34)	1.59 (0.97; 2.61)
Inflammatory						
hsC-reactive protein		1.32 (1.24; 1.40)*	1.47 (1.37; 1.58)*		1.73 (1.53; 1.95)*	1.95 (1.70; 2.24)*
Fibrinogen		1.17 (1.12; 1.22)*	1.20 (1.13; 1.27)*		1.32 (1.23; 1.42)*	1.29 (1.15; 1.44)*
Homocysteine		1.16 (1.11; 1.21)*	1.14 (1.06; 1.22)*		1.20 (1.09; 1.32)*	1.22 (1.08; 1.39)*
		Men 1847	Women 1251		Men 291	Women 208
Ferritin		1.04 (0.98; 1.11)	1.12 (1.01; 1.23)*		1.21 (0.97; 1.50)	1.26 (0.83; 1.91)
Cardiac						
hsTroponin I		1.68 (1.39; 1.98)*	1.57 (1.41; 1.73)*		2.13 (1.12; 3.14)*	1.64 (1.04; 2.24)*
NT-pro-BNP		1.23 (1.17; 1.30)*	1.27 (1.17; 1.38)*		1.44 (1.27; 1.63)*	1.32 (1.07; 1.64)*
Diet related						
25OH-vitamin D raw	R	1.19 (1.10; 1.28)*	1.16 (1.09; 1.25)*	R	1.67 (1.43; 1.96)*	1.52 (1.14; 2.00)*
25OH-vitamin D adj	R	1.16 (1.09; 1.25)*	1.20 (1.11; 1.30)*	R	1.61 (1.37; 1.89)*	1.59 (1.16; 2.17)*
Vitamin B12		1.03 (0.97; 1.09)	1.00 (0.94; 1.06)		1.07 (0.95; 1.21)	1.03 (0.90; 1.18)
Gamma glutamyl TF		1.17 (1.11; 1.23)*	1.27 (1.19; 1.35)*		1.32 (1.18; 1.48)*	1.54 (1.36; 1.76)*
Renal related						
Uric Acid		1.02 (0.97; 1.09)	1.19 (1.11; 1.27)*		0.91 (0.78; 1.06)	1.21 (1.03; 1.42)*
Creatinine		0.99 (0.93; 1.06)	1.05 (0.97; 1.12)		0.99 (0.85; 1.15)	1.02 (0.82; 1.26)
Cystatin -C		1.20 (1.14; 1.26)*	1.14 (1.12; 1.17)*		1.26 (1.15; 1.40)*	1.17 (1.12; 1.23)*
Adjusted Additionally for ASSIGN Variables (Which are Omitted)						
		Coronary Heart Disease			Peripheral Artery Disease	
		Men 1847	Women 1251		Men 291	Women 208
Personal						
Years of education	R	1.10 (1.04; 1.16)*	1.15 (1.08; 1.23)*	R	1.11 (0.96; 1.28)	1.04 (0.87; 1.25)
Smoking						
Expired CO		1.09 (1.03; 1.14)*	1.08 (1.01; 1.15)*		1.33 (1.20; 1.47)*	1.56 (1.40; 1.73)*

Continued

Table 4. Continued

Adjusted Additionally for ASSIGN Variables (Which are Omitted)						
		Coronary Heart Disease		Peripheral Artery Disease		
Thiocyanate		1.05 (0.99; 1.12)	1.07 (1.00; 1.15)*		1.63 (1.38; 1.92)*	1.94 (1.62; 2.32)*
Cotinine		1.18 (1.11; 1.27)*	1.19 (1.12; 1.28)*		1.42 (1.22; 1.66)*	1.72 (1.48; 1.99)*
Physical						
Height	R	1.08 (1.01; 1.14)*	1.16 (1.08; 1.27)*	R	1.03 (0.89; 1.22)	1.00 (0.81; 1.23)
Weight		1.09 (1.04; 1.15)*	1.12 (1.05; 1.19)*		0.91 (0.80; 1.04)	1.03 (0.89; 1.19)
Body mass index		1.14 (1.09; 1.21)*	1.14 (1.09; 1.20)*		0.90 (0.79; 1.04)	1.02 (0.91; 1.15)
Waist circumference		1.17 (1.08; 1.26)*	1.20 (1.11; 1.30)*		0.97 (0.82; 1.15)	1.11 (0.93; 1.33)
Waist-to-hip ratio		1.07 (0.99; 1.16)	1.12 (1.02; 1.23)*		1.03 (0.87; 1.23)	1.17 (0.91; 1.51)
Diastolic BP		1.06 (1.00; 1.12)*	1.03 (0.97; 1.10)		0.91 (0.81; 1.03)	0.88 (0.78; 1.00)*
Pulse pressure	R	1.11 (1.00; 1.23)*	1.09 (0.99; 1.20)	R	0.99 (0.91; 1.09)	1.03 (0.94; 1.12)
Pulse rate		1.00 (0.96; 1.03)	1.00 (0.96; 1.03)		1.06 (0.97; 1.15)	1.06 (0.97; 1.15)
Diabetes						
Glucose (non-fasting)		1.03 (0.99; 1.07)	1.08 (1.03; 1.13)*		1.19 (1.10; 1.28)*	1.14 (1.04; 1.24)*
Insulin (non-fasting)		1.05 (1.01; 1.08)*	1.09 (1.04; 1.14)*		1.04 (0.93; 1.16)	1.09 (0.98; 1.20)
C-peptide		1.03 (0.98; 1.10)	1.01 (0.94; 1.08)		1.05 (0.93; 1.20)	1.01 (0.90; 1.13)
Lipids						
LDL cholesterol	R	1.00 (0.94; 1.05)	1.02 (0.95; 1.09)	R	1.00 (0.88; 1.15)	1.04 (0.90; 1.20)
Triglycerides		1.12 (1.06; 1.18)*	1.15 (1.07; 1.24)*		1.08 (0.95; 1.22)	1.41 (1.19; 1.67)*
Apolipoprotein A	R	1.11 (1.04; 1.18)*	1.18 (1.08; 1.27)*	R	1.11 (0.93; 1.32)	1.12 (0.92; 1.37)
Apolipoprotein B		1.21 (1.11; 1.31)*	1.10 (1.02; 1.18)*		1.14 (0.96; 1.36)	1.15 (0.98; 1.36)
		Men 1847	Women 1251		Men 291	Women 208
Lipoprotein (a)		1.01 (0.97; 1.05)	1.02 (0.93; 1.12)		1.13 (0.95; 1.33)	1.47 (0.89; 2.41)
Inflammatory						
hsC-reactive protein		1.17 (1.08; 1.26)*	1.28 (1.19; 1.38)*		1.41 (1.23; 1.62)*	1.57 (1.35; 1.82)*
Fibrinogen		1.09 (1.04; 1.14)*	1.09 (1.02; 1.16)*		1.21 (1.10; 1.34)*	1.12 (0.99; 1.27)
Homocysteine		1.10 (1.05; 1.14)*	1.05 (0.98; 1.13)		1.06 (0.96; 1.17)	1.08 (0.94; 1.25)
Ferritin		1.01 (0.95; 1.07)	1.03 (0.95; 1.12)		1.08 (0.90; 1.31)	1.07 (0.80; 1.43)
Cardiac						
hsTroponin I		1.33 (1.14; 1.41)*	1.28 (1.16; 1.40)*		1.51 (0.79; 2.23)	1.24 (0.85; 1.63)
NT-pro-BNP		1.21 (1.15; 1.27)*	1.23 (1.13; 1.34)*		1.27 (1.13; 1.44)*	1.20 (0.97; 1.49)
Diet related						
25OH-vitamin D raw	R	1.05 (0.99; 1.12)	1.04 (0.96; 1.11)	R	1.35 (1.12; 1.61)*	1.16 (0.89; 1.54)
25OH-vitamin D adj.	R	1.06 (1.00; 1.14)*	1.02 (0.94; 1.09)	R	1.28 (1.09; 1.52)*	1.20 (0.89; 1.61)
Vitamin B12	R	1.00 (0.93; 1.05)*	1.03 (0.97; 1.10)	R	0.97 (0.85; 1.10)	0.99 (0.86; 1.14)
Gamma glutamyl TF		1.05 (1.00; 1.11)*	1.11 (1.03; 1.20)*		1.13 (1.00; 1.28)*	1.30 (1.13; 1.49)*
Renal related						
Uric Acid		1.02 (0.96; 1.08)	1.08 (1.01; 1.16)*		0.96 (0.82; 1.13)	1.14 (0.96; 1.34)
Creatinine		1.03 (0.97; 1.10)	1.03 (0.96; 1.10)		1.09 (0.97; 1.22)	1.06 (0.87; 1.30)
Cystatin-C		1.14 (1.09; 1.20)*	1.12 (1.07; 1.16)*		1.18 (1.07; 1.30)*	1.18 (1.10; 1.27)*

These are sex-specific results equivalent to the sexes combined results in Table 3. Missing values are imputed using multiple imputation by chained equation ($m=5, i=10$). Hazard ratios are per standard deviation for continuous variables, some are log transformed (see Table 1). R-Hazard ratios <1.0 are converted to their reciprocal to facilitate comparison (using CHD both sexes as the criterion from Table 3).

*Hazard ratios significant at 5%. †ASSIGN risk score factors.