

SUPPLEMENTAL MATERIAL

HDL Subclasses, Lipid Content, and Function trajectories across the Menopause Transition: SWAN-HDL Study

Running title: HDL metric changes over the menopause transition

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Supplemental Table I. Longitudinal associations of HDL conventional and composition metrics with HDL-CEC% by menopause stage

HDL metrics	HDL-CEC%						P value for Interaction with menopause stage †
	Premenopause stage*		Perimenopause stage*		Postmenopause stage*		
	β(SE) ‡	P value	β(SE) ‡	P value	β(SE) ‡	P value	
HDL-C, mg/dL	0.028(0.002)	<.0001	0.024(0.002) ?	<.0001	0.029(0.002)	<.0001	0.08
apoA1, mg/dL	0.016(0.001)	<.0001	0.012(0.001) §	<.0001	0.012(0.001)	<.0001	0.01
Total HDL-P, umol/L	0.051(0.005)	<.0001	0.044(0.005)	<.0001	0.042(0.004)	<.0001	0.34
Large HDL-P, umol/L	0.107(0.009)	<.0001	0.076(0.009) §?	<.0001	0.099(0.007)	<.0001	0.02
Medium HDL-P, umol/L	0.027(0.005)	<.0001	0.034(0.005)	<.0001	0.033(0.005)	<.0001	0.29
Small HDL-P, umol/L	-0.012(0.005)	0.0139	-0.012(0.005)	0.0312	-0.015(0.004)	0.0009	0.34
HDL size, nm	0.565(0.062)	<.0001	0.370(0.064) ?	0.0001	0.496(0.056)	<.0001	0.03
HDL-PL, mg/dL	0.045(0.002)	<.0001	0.038(0.003)	<.0001	0.042(0.002)	<.0001	0.76
HDL-Tg (log-transformed), mg/dL	0.534(0.105)	<.0001	0.592(0.121)	0.0004	0.531(0.095)	<.0001	0.71

* Menopause stages were identified based on the following cut points of years relative to the FMP for HDL-CEC as identified by LOESS plots [Premenopause: 0.5 years before FMP; Perimenopause: 0.5 years before FMP to 1.5 years after FMP; Postmenopause: 1.5 years after FMP]

† Significant interaction indicate that longitudinal associations of HDL metric with HDL-CEC vary by menopause stage relative to FMP.

‡ Models adjusted for study site, race/ethnicity, time varying age, body mass index, and C3

§ Significantly differs from premenopause stage from the model with interaction term

? Significantly differs from postmenopause stage from the model with interaction term

apoA1: apolipoprotein A1; C3: complement protein C3; FMP: final menstrual period; HDL-C: high-density lipoprotein cholesterol; HDL-CEC: high-density lipoprotein cholesterol efflux capacity; HDL-P: high-density lipoprotein particles; HDL-PL: high-density lipoprotein phospholipids; HDL-Tg: high-density lipoprotein triglycerides

Major Resources Table

NA