

SUPPLEMENTAL MATERIAL

Table S1: Patient characteristics

	All n=643		Premenopausal n=178		Postmenopausal n=426		Men n=217		P-value
Age, years	49.7	(11.4)	43.8	(9.1)	56.9	(8.6)	46.6	(11.7)	<0.001
Body Mass Index, kg/m ²	29.1	(6.2)	29.1	(7.0)	29.1	(6.6)	28.9	(4.7)	0.91
% change CAd (Ach)	-15.1	(21.2)	-12.0	(20.4)	-14.9	(20.1)	-17.9	(22.7)	0.022
Risk Factor									
Diabetes Mellitus	52	(8%)	12	(7%)	16	(7%)	24	(11%)	0.16
Hypertension	264	(41%)	52	(29%)	112	(46%)	98	(45%)	<0.001
Dyslipidemia	353	(55%)	72	(41%)	145	(60%)	135	(62%)	<0.001
Family History	409	(65%)	113	(65%)	156	(66%)	138	(66%)	0.96
LipoProtein A	24.0	(31.0)	22.2	(28.2)	25.1	(32.7)	24.6	(32.3)	0.68
hsCRP, mg/dL	2.7	(24.0)	5.3	(43.5)	1.9	(2.8)	1.4	(3.5)	0.30
Homocysteine, umol/L	8.0	(4.4)	7.5	(4.7)	8.0	(5.3)	8.4	(2.9)	0.19
Smoking									
Never	326	(51%)	98	(55%)	142	(59%)	84	(39%)	<0.001
Former	232	(36%)	60	(34%)	84	(35%)	86	(40%)	
Current	83	(13%)	20	(11%)	16	(7%)	46	(21%)	
Drugs									
Aspirin	326	(51%)	82	(46%)	123	(51%)	120	(55%)	0.19
Calcium Channel Blockers	239	(37%)	60	(34%)	88	(36%)	89	(41%)	0.30

Angiotensin-converting enzyme – inhibitor/ Angiotensin II receptor blocker	104	(16%)	28	(16%)	34	(14%)	42	(19%)	0.29
Beta-blocker	186	(29%)	55	(31%)	71	(29%)	58	(27%)	0.65
Diuretics	106	(16%)	29	(16%)	56	(23%)	21	(10%)	<0.001
Lipid-lowering drugs	248	(39%)	53	(30%)	96	(40%)	97	(45%)	0.008
Estrogen Replacement Therapy	117	(27%)	9	(5%)	108	(44%)	-	(-)	<0.001

Values are given as n (%) or mean (standard deviation). P-value shows women vs. men.

Table S2: SNPs associated with Macrovascular/ Epicardial Endothelial dysfunction significant only among Females

Chr.	Significant SNP in females			Risk Allele	Overall allele X frequency	OR Overall	P-value Overall	OR Men	P-value Men	OR Premeno	P-value Premeno	OR Postmeno	P-value Postmeno
	SNP in	Position	Gene region	X/Y									
1	rs12038000	111859362	<i>ADORA3</i>	A/G	0.61	1.30	0.0357	0.93	0.7307	1.37	0.1832	1.73	0.0097
1	rs16851008	201387919	<i>ADORA1</i>	G/A	0.87	1.33	0.1066	0.79	0.3910	2.48	0.0792	1.77	0.0424
1	k1_20139534	201395343	<i>ADORA1/</i>	A/G	0.87	1.28	0.1549	0.73	0.2538	2.88	0.0619	1.74	0.05
1	rs16851020	201400275	<i>MYBPH/</i> <i>ADORA1</i>	C/A	0.87	1.29	0.1502	0.70	0.2132	2.48	0.0792	1.77	0.0424
6	rs7767084	160882493	<i>LPA</i>	G/A	0.16	1.32	0.0780	0.71	0.2483	2.35	0.0058	1.48	0.1085
6	rs9365171	160901726	<i>LPA</i>	A/C	0.35	1.37	0.0118	0.99	0.9691	1.79	0.0213	1.61	0.0224
6	rs3798221	160918138	<i>LPA</i>	T/G	0.19	1.58	0.0023	0.80	0.4244	1.94	0.0115	2.21	0.0017
6	rs9364564	160919030	<i>LPA</i>	A/G	0.18	1.50	0.0134	0.77	0.3854	1.94	0.0206	2.09	0.0077
6	rs7453899	160930756	<i>LPA</i>	T/A	0.35	1.35	0.0167	1.00	1.0000	1.68	0.0357	1.58	0.0269
6	rs35600881	160946754	<i>LPA</i>	A/G	0.23	1.50	0.0046	0.95	0.8481	1.63	0.0521	2	0.0029
6	rs13202636	160949718	<i>LPA</i>	G/A	0.23	1.49	0.0053	0.95	0.8481	1.62	0.057	1.99	0.0032
6	rs1321195	161004146	<i>LPA</i>	T/C	0.13	1.48	0.0256	0.80	0.4877	1.82	0.0475	2.03	0.0148
7	rs2237583	94788113	<i>PON1</i>	G/A	0.70	1.15	0.3002	0.70	0.0898	1.33	0.3269	2.02	0.0034
11	rs757092	2455754	<i>KCNQ1</i>	A/G	0.64	1.2	0.1337	1.05	0.8214	2.05	0.0058	1.02	0.9126
11	rs11022996	2458902	<i>KCNQ1</i>	A/G	0.61	1.15	0.2288	1.17	0.3798	1.93	0.0068	1.08	0.7061
11	rs1080017	2468376	<i>KCNQ1</i>	G/A	0.64	1.23	0.0935	1.03	0.8661	2.1	0.0046	1.06	0.7654
11	rs594942	63762868	<i>FKBP2</i>	T/C	0.35	1.18	0.1757	1.02	0.9067	1.9	0.0093	1.02	0.9413

Table S3: SNPs associated with Macrovascular/ Epicardial Endothelial dysfunction significant only among Males

Chr.	Significant SNP in males	Position	Gene region	Risk Allele X/Y	Overall allele X frequency	OR Overall	P-value Overall	OR Men	P-value Men	OR Premeno	P-value Premeno	OR Postmeno	P-value Postmeno
1	rs17511046	201376668	<i>ADORA1</i>	G/A	0.93	1.17	0.5066	3.88	0.0068	0.79	0.5397	0.55	0.132
4	rs3774933	103645369	<i>NFKB1</i>	G/A	0.39	1.06	0.6362	1.72	0.0085	0.81	0.4177	0.78	0.2167
4	rs1599961	103662599	<i>NFKB1</i>	A/G	0.39	1.06	0.6362	1.72	0.0085	0.81	0.4177	0.78	0.2167
6	rs20456	39432901	<i>LOC100124373/ KIF6</i>	C/T	0.43	1.31	0.0283	1.70	0.0069	1.35	0.2205	0.98	0.7137
6	k6_39474093	39474093	<i>KIF6</i>	T/A	0.06	1.95	0.0060	4.00	0.0047	1.35	0.5081	1.55	0.2736