

## Supplementary Material

**Table S1:** Linkage disequilibrium of single nucleotide polymorphisms (SNPs) in the two loci in Strong Heart Study participants by recruiting center. Numbers are r'/D' linkage disequilibrium metrics.

Recruiting Center	Arizona	The Dakotas	Oklahoma	Chromosome	Nearby Gene
SNPs					
rs7805747 - rs10224210	.86/.86	.84/.96	.84/.96	7	<i>PRKAG2</i>
rs3795058 - rs8101881	.70/.86	.31/.88	.23/.54	19	<i>SLC7A9</i>

**Table S2.** Center-specific and meta-analyses association results for eGFR in the Strong Heart Family Study

Nearby Gene	SNP	Effect allele	Other allele	Arizona				The Dakotas				Oklahoma				Meta-analysis	
				Freq	beta (se)	p	n	Freq	beta (se)	p	n	Freq	Beta (se)	p	n	p	pHet
<i>STC1</i>	rs10109414	A	G	0.19	-0.01 (0.06)	0.87	1020	0.26	-0.12 (0.05)	0.02	1041	0.26	-0.04 (0.05)	0.42	1091	0.05	0.34
<i>PRKAG2</i>	rs10224210	G	A	0.02	-0.15 (0.15)	0.32	1027	0.15	-0.20 (0.07)	0.005	1042	0.10	-0.18 (0.08)	0.03	1093	$2.2 \times 10^{-4}$	0.94
<i>CPS1</i>	rs1047891	A	C	0.29	-0.04 (0.05)	0.48	1024	0.37	-0.02 (0.05)	0.74	1040	0.29	-0.07 (0.05)	0.17	1092	0.17	0.73
<i>SLC6A13</i>	rs10774021	A	G	0.05	-0.31 (0.11)	0.005	1024	0.27	-0.12 (0.05)	0.03	1042	0.25	-0.16 (0.05)	0.002	1094	$8.8 \times 10^{-6}$	0.27
<i>WDR37</i>	rs10794720	A	G	0.06	0.02 (0.08)	0.81	1022	0.07	0.02 (0.10)	0.85	1040	0.07	-0.06 (0.09)	0.46	1072	0.85	0.74
<i>UMOD</i>	rs11647727	G	A	0.31	-0.02 (0.05)	0.65	1027	0.58	-0.08 (0.05)	0.08	1041	0.51	-0.11 (0.05)	0.02	1095	$7.5 \times 10^{-3}$	0.44
<i>DAB2</i>	rs11959928	T	A	0.49	0.04 (0.05)	0.36	1024	0.36	-0.03 (0.05)	0.57	1039	0.47	-0.05 (0.05)	0.29	1087	0.65	0.33
<i>GCKR</i>	rs1260326	A	G	0.08	-0.13 (0.09)	0.15	974	0.32	0.03 (0.05)	0.63	951	0.30	-0.02 (0.05)	0.73	1000	0.66	0.33
<i>UBE2Q2</i>	rs1394125	A	G	0.05	-0.13 (0.08)	0.12	1027	0.16	-0.31 (0.07)	$3.2 \times 10^{-6}$	1042	0.13	-0.04 (0.07)	0.60	1095	$4.6 \times 10^{-5}$	0.01
<i>SOX11</i>	rs16864170	G	A	0.00	-0.25 (0.34)	0.47	1027	0.03	-0.13 (0.14)	0.38	1042	0.01	-0.06 (0.24)	0.80	1096	0.28	0.90
<i>SYPL2/PSMA5</i>	rs1933182	A	C	0.02	-0.27 (0.14)	0.04	1027	0.14	-0.12 (0.07)	0.07	1042	0.11	-0.17 (0.07)	0.02	1096	$5.4 \times 10^{-4}$	0.57
<i>SLC22A2</i>	rs2279463	G	A	0.01	-0.20 (0.18)	0.27	1026	0.07	-0.10 (0.10)	0.32	1042	0.05	-0.03 (0.10)	0.80	1094	0.22	0.68
<i>LASS2-ANXA9</i>	rs267734	G	A	0.08	-0.18 (0.11)	0.10	1027	0.11	-0.16 (0.08)	0.04	1041	0.09	0.02 (0.08)	0.78	1093	0.06	0.19
<i>TFDP2</i>	rs347685	C	A	0.03	-0.30 (0.14)	0.03	1026	0.13	-0.13 (0.07)	0.06	1042	0.12	0.002 (0.07)	0.98	1090	0.06	0.12
<i>SLC7A9</i>	rs3795058	G	C	0.42	-0.06 (0.05)	0.22	1024	0.38	-0.06 (0.05)	0.20	1040	0.38	-0.04 (0.05)	0.40	1091	0.05	0.95
<i>PIP5K1B</i>	rs4744712	A	C	0.04	-0.22 (0.13)	0.10	1027	0.28	-0.11 (0.06)	0.08	1041	0.15	-0.13 (0.06)	0.03	1092	$1.5 \times 10^{-3}$	0.75
<i>WDR72</i>	rs491567	C	A	0.45	0.08 (0.05)	0.09	1026	0.37	0.10 (0.05)	0.03	1040	0.45	0.09 (0.04)	0.04	1093	$4.5 \times 10^{-4}$	0.93
<i>DACH1</i>	rs626277	A	C	0.22	-0.01 (0.05)	0.86	1025	0.41	-0.07 (0.05)	0.11	1041	0.42	-0.12 (0.04)	0.007	1092	$6.3 \times 10^{-3}$	0.29
<i>SLC34A1</i>	rs6420094	G	A	0.15	-0.05 (0.07)	0.46	1025	0.22	-0.03 (0.06)	0.57	1040	0.16	-0.004 (0.06)	0.94	1092	0.44	0.87
<i>TMEM60</i>	rs6465825	G	A	0.38	0.01 (0.05)	0.89	1025	0.31	-0.05 (0.05)	0.31	1039	0.32	-0.05 (0.05)	0.29	1088	0.28	0.60
<i>PRKAG2</i>	rs7805747	A	G	0.02	-0.24 (0.15)	0.10	1027	0.16	-0.18 (0.07)	0.01	1042	0.09	-0.13 (0.08)	0.10	1095	$7.0 \times 10^{-4}$	0.79
<i>SLC7A9</i>	rs8101881	G	A	0.42	-0.09 (0.0454)	0.05	1025	0.32	0.01 (0.05)	0.82	1042	0.35	0.07 (0.05)	0.18	1092	0.75	0.06
<i>VEGFA</i>	rs881858	G	A	0.05	-0.24 (0.10)	0.01	1026	0.15	-0.01 (0.07)	0.83	1039	0.16	-0.08 (0.07)	0.21	1094	0.04	0.16
<i>BCAS3</i>	rs9895661	A	G	0.16	-0.06 (0.06)	0.24	1026	0.54	-0.07 (0.05)	0.10	1041	0.47	-0.028 (0.05)	0.54	1090	0.05	0.74

Please note that the minor allele differ among centers for the SNPs rs11647727 and rs9895661. *SHROOM3* SNPs were not available.

**Table S3.** Center-specific associations and meta-analyses results for log-UACR in the Strong Heart Family Study

SNP	Effect allele	Other allele	Arizona			The Dakotas			Oklahoma			Meta-analysis	
			beta (se)	p	n	beta (se)	p	n	beta (se)	p	n	p	pHet
rs10109414	A	G	0.07 (0.06)	0.24	1176	-0.15 (0.05)	0.004	1171	-0.01 (0.05)	0.88	1200	0.25	0.02
rs10224210	G	A	0.02 (0.15)	0.87	1183	-0.19 (0.07)	0.007	1171	-0.09 (0.08)	0.27	1202	0.01	0.35
rs1047891	A	C	-0.04 (0.05)	0.43	1179	0.01 (0.05)	0.81	1169	-0.04 (0.05)	0.39	1199	0.44	0.67
rs10774021	A	G	-0.06 (0.10)	0.58	1180	-0.12 (0.05)	0.02	1172	-0.004 (0.05)	0.95	1203	0.06	0.27
rs10794720	A	G	-0.17 (0.08)	0.04	1177	-0.02 (0.10)	0.80	1169	-0.02 (0.08)	0.77	1181	0.12	0.37
rs11647727	G	A	0.04 (0.05)	0.41	1183	-0.09 (0.04)	0.05	1171	-0.07 (0.04)	0.12	1204	0.10	0.11
rs11959928	T	A	-0.03 (0.05)	0.50	1177	-0.06 (0.05)	0.16	1169	-0.02 (0.04)	0.61	1196	0.14	0.78
rs1260326	A	G	-0.16 (0.09)	0.07	1121	0.01 (0.05)	0.90	1074	-0.04 (0.05)	0.41	1104	0.26	0.27
rs1394125	A	G	-0.09 (0.08)	0.25	1183	-0.06 (0.06)	0.36	1172	-0.11 (0.07)	0.09	1204	0.03	0.84
rs16864170	G	A	-0.18 (0.33)	0.58	1181	-0.04 (0.14)	0.78	1172	0.10 (0.24)	0.67	1205	0.86	0.77
rs1801239	G	A	0.14 (0.07)	0.06	1182	-0.14 (0.11)	0.22	1172	0.14 (0.09)	0.15	1203	0.26	0.09
rs1933182	A	C	-0.26 (0.13)	0.05	1183	-0.16 (0.07)	0.01	1172	-0.05 (0.07)	0.49	1205	0.005	0.28
rs2279463	G	A	-0.16 (0.18)	0.38	1182	-0.27 (0.10)	0.008	1172	-0.06 (0.10)	0.56	1203	0.01	0.32
rs267734	G	A	-0.12 (0.10)	0.23	1183	-0.15 (0.08)	0.06	1171	0.06 (0.08)	0.43	1202	0.21	0.14
rs347685	C	A	-0.06 (0.14)	0.68	1181	-0.10 (0.07)	0.17	1172	-0.14 (0.07)	0.04	1199	0.01	0.82
rs3795058	G	C	-0.07 (0.04)	0.12	1180	-0.10 (0.04)	0.02	1170	-0.04 (0.04)	0.39	1200	0.006	0.59
rs4744712	A	C	-0.25 (0.12)	0.04	1183	-0.15 (0.06)	0.02	1170	-0.06 (0.06)	0.29	1201	0.003	0.33
rs491567	C	A	-0.03 (0.04)	0.47	1182	0.09 (0.04)	0.04	1170	0.02 (0.04)	0.68	1202	0.33	0.15
rs626277	A	C	-0.02 (0.05)	0.64	1180	-0.06 (0.05)	0.21	1171	0.03 (0.04)	0.46	1201	0.60	0.35
rs6420094	G	A	0.05 (0.07)	0.46	1181	0.06 (0.05)	0.31	1170	-0.07 (0.06)	0.22	1201	0.78	0.22
rs6465825	G	A	-0.04 (0.05)	0.41	1181	-0.002 (0.05)	0.97	1169	-0.03 (0.05)	0.53	1197	0.39	0.86
rs7805747	A	G	0.03 (0.14)	0.80	1183	-0.19 (0.07)	0.007	1172	-0.09 (0.08)	0.27	1204	0.01	0.29
rs8101881	G	A	-0.06 (0.04)	0.19	1181	-0.05 (0.05)	0.31	1172	0.02 (0.05)	0.65	1201	0.27	0.41
rs881858	G	A	-0.16 (0.09)	0.08	1181	0.16 (0.07)	0.02	1169	-0.07 (0.04)	0.09	1196	0.39	0.02
rs9895661	A	G	-0.09 (0.06)	0.12	1182	-0.13 (0.04)	0.005	1171	-0.10 (0.04)	0.02	1199	5.8 x10 <sup>-5</sup>	0.88