

SUPPLEMENTARY MATERIAL

Supplementary Table 1: Definition of the coronary artery disease index (CADi)²¹

| Extent of CAD | CADi |
|--|-------------|
| No CAD \geq 50% | 0 |
| One-VD 50% to 74% | 19 |
| One-VD 75% | 23 |
| One-VD \geq 95% | 32 |
| Two-VD | 37 |
| Two-VD (both \geq 95%) | 42 |
| One-VD \geq 95%, proximal (LAD) | 48 |
| Two-VD \geq 95% LAD | 48 |
| Two-VD \geq 95% proximal LAD | 56 |
| Three-VD | 56 |
| Three-VD \geq 95% in at least one vessel | 63 |
| Three-VD 75% proximal LAD | 67 |
| Three-VD \geq 95% proximal LAD | 74 |
| Left main (75%) | 82 |
| Left main (\geq 95%) | 100 |

CAD =coronary artery disease; LAD=left anterior descending coronary artery; VD=vessel disease.

Supplementary Table 2. Association tests in the initial dataset

| SNP | Chr | NCBI35 | Old Affected | | Left Main Case | |
|------------|-----|-------------|--------------|-----|----------------|-----|
| | | | p value | OR | p value | OR |
| rs9822311 | 3 | 117,021,341 | 0.623 | 1.1 | 0.509 | 1.2 |
| rs3821560 | 3 | 117,054,054 | 0.062 | 0.5 | 0.390 | 0.7 |
| rs11719516 | 3 | 117,067,985 | 0.252 | 0.7 | 0.886 | 1.0 |
| rs10511352 | 3 | 117,125,967 | 0.886 | 1.0 | 0.530 | 0.8 |
| rs9872913 | 3 | 117,183,885 | 0.389 | 1.2 | 0.360 | 1.2 |
| rs1920384 | 3 | 117,250,752 | 0.270 | 1.3 | 0.274 | 1.3 |
| rs9866658 | 3 | 117,331,906 | 0.703 | 1.1 | 0.952 | 1.0 |
| rs7641464 | 3 | 117,368,960 | 0.047 | 1.5 | 0.112 | 1.4 |
| rs10934326 | 3 | 117,469,033 | 0.130 | 1.6 | 0.012 | 2.2 |
| rs1461131 | 3 | 117,483,362 | 0.280 | 1.3 | 0.850 | 1.0 |
| rs9809878 | 3 | 117,515,131 | 0.254 | 0.8 | 0.580 | 0.9 |
| rs2033406 | 3 | 117,547,823 | 0.506 | 0.9 | 0.382 | 1.2 |
| rs9822445 | 3 | 117,644,224 | 0.501 | 1.2 | 0.229 | 1.3 |
| rs10934345 | 3 | 117,692,305 | 0.721 | 1.1 | 0.912 | 1.0 |
| rs9834065 | 3 | 117,730,574 | 0.184 | 1.3 | 0.259 | 1.3 |
| rs1795293 | 3 | 117,761,199 | 0.474 | 1.2 | 0.805 | 1.1 |
| rs1467213 | 3 | 117,805,164 | 0.424 | 1.2 | 0.288 | 1.2 |
| rs9847048 | 3 | 117,838,700 | 0.709 | 1.1 | 0.838 | 0.9 |
| rs10934364 | 3 | 117,896,600 | 0.598 | 1.1 | 0.981 | 1.0 |
| rs1106851 | 3 | 117,943,999 | 0.919 | 1.0 | 0.088 | 0.6 |
| rs1835856 | 3 | 117,974,362 | 0.682 | 0.9 | 0.936 | 1.0 |
| rs6785331 | 3 | 117,990,316 | 0.784 | 1.1 | 0.415 | 0.8 |
| rs7433070 | 3 | 118,042,925 | 0.644 | 0.9 | 0.199 | 0.8 |
| rs6438359 | 3 | 118,071,957 | 0.933 | 1.0 | 0.985 | 1.0 |
| rs2037009 | 3 | 118,110,689 | 0.185 | 0.8 | 0.149 | 0.7 |
| rs1133603 | 3 | 118,133,470 | 0.777 | 0.9 | 0.327 | 1.3 |
| rs1589182 | 3 | 118,186,282 | 0.751 | 0.9 | 0.688 | 0.9 |
| rs1518898 | 3 | 118,211,238 | 0.389 | 1.2 | 0.492 | 0.8 |
| rs4855909 | 3 | 118,212,508 | 0.717 | 1.1 | 0.743 | 0.9 |
| rs938115 | 3 | 118,257,964 | 0.928 | 1.0 | 0.495 | 1.1 |
| rs1850719 | 3 | 118,284,215 | 0.967 | 1.0 | 0.538 | 1.1 |
| rs7633227 | 3 | 118,313,302 | 0.357 | 1.2 | 0.818 | 1.1 |
| rs733527 | 3 | 118,347,424 | 0.306 | 1.2 | 0.822 | 1.0 |
| rs6788787 | 3 | 118,353,538 | 0.767 | 1.1 | 0.745 | 1.1 |
| rs1915585 | 3 | 118,391,522 | 0.432 | 0.8 | 0.396 | 0.8 |
| rs1462845 | 3 | 118,425,700 | 0.619 | 0.9 | 0.136 | 0.7 |
| rs4855900 | 3 | 118,477,957 | 0.331 | 0.8 | 0.247 | 0.7 |
| rs1513172 | 3 | 118,494,578 | 0.700 | 1.1 | 0.092 | 1.4 |
| rs6438389 | 3 | 118,532,507 | 0.548 | 0.9 | 0.788 | 0.9 |
| rs1513156 | 3 | 118,549,311 | 0.345 | 0.8 | 0.254 | 0.7 |
| rs11716267 | 3 | 118,586,537 | 0.603 | 1.1 | 0.312 | 1.3 |
| rs1398626 | 3 | 118,616,293 | 0.178 | 1.3 | 0.544 | 1.1 |
| rs1513162 | 3 | 118,617,776 | 0.519 | 1.1 | 0.669 | 1.1 |
| rs4075039 | 3 | 118,645,474 | 0.361 | 0.8 | 0.057 | 0.5 |
| rs7427839 | 3 | 118,648,013 | 0.218 | 1.3 | 0.245 | 1.3 |
| rs6790819 | 3 | 118,659,480 | 0.073 | 7.6 | 0.098 | 6.8 |
| rs4356827 | 3 | 118,661,434 | 0.284 | 0.8 | 0.314 | 0.8 |
| rs2927275 | 3 | 118,666,759 | 0.421 | 0.8 | 0.851 | 1.0 |
| rs1698042 | 3 | 118,667,838 | 0.110 | 0.5 | 0.433 | 0.7 |
| rs1910040 | 3 | 118,673,682 | 0.203 | 0.7 | 0.100 | 0.7 |

| | | | | | | |
|------------|---|-------------|--------------|-----|--------------|-----|
| rs11713954 | 3 | 118,699,690 | 0.580 | 0.8 | 0.117 | 0.5 |
| ss70458782 | 3 | 118,709,990 | 0.062 | 0.6 | 0.091 | 0.6 |
| rs1875518 | 3 | 118,712,470 | 0.079 | 1.4 | 0.008 | 1.8 |
| rs1676232 | 3 | 118,717,529 | 0.044 | 0.7 | 0.022 | 0.6 |
| rs4855952 | 3 | 118,717,715 | 0.506 | 1.5 | 0.410 | 1.6 |
| rs1501874 | 3 | 118,720,007 | 0.501 | 0.8 | 0.426 | 0.7 |
| rs2937670 | 3 | 118,720,251 | 0.844 | 1.1 | 0.122 | 0.6 |
| rs1979868 | 3 | 118,722,031 | 0.744 | 1.1 | 0.760 | 1.1 |
| rs1381801 | 3 | 118,723,585 | 0.750 | 0.9 | 0.929 | 1.0 |
| rs2937666 | 3 | 118,729,388 | 0.231 | 1.3 | 0.910 | 1.0 |
| rs1910044 | 3 | 118,733,409 | 0.504 | 1.2 | 0.917 | 1.0 |
| rs4855955 | 3 | 118,738,784 | 0.434 | 0.8 | 0.399 | 0.8 |
| rs6778437 | 3 | 118,746,628 | 0.552 | 2.3 | 0.534 | 2.4 |
| rs6795971 | 3 | 118,751,683 | 0.552 | 2.3 | 0.534 | 2.4 |
| rs1393192 | 3 | 118,752,560 | 0.418 | 0.8 | 0.581 | 0.9 |
| rs1466416 | 3 | 118,753,496 | 0.979 | 0.0 | 0.175 | 0.2 |
| rs2869787 | 3 | 118,791,508 | 0.645 | 1.1 | 0.738 | 1.1 |
| rs869851 | 3 | 118,804,008 | 0.998 | 1.0 | 0.707 | 1.1 |
| rs2904196 | 3 | 118,829,308 | 0.524 | 0.9 | 0.968 | 1.0 |
| rs6774738 | 3 | 118,849,617 | 0.291 | 0.8 | 0.165 | 0.7 |
| rs4234669 | 3 | 118,851,827 | 0.583 | 0.9 | 0.448 | 0.9 |
| rs4290831 | 3 | 118,856,228 | 0.447 | 0.7 | 0.731 | 0.9 |
| rs4404477 | 3 | 118,857,458 | 0.206 | 0.7 | 0.106 | 0.6 |
| rs9877923 | 3 | 118,862,230 | 0.635 | 1.1 | 0.522 | 1.2 |
| rs4440150 | 3 | 118,863,334 | 0.843 | 1.0 | 0.635 | 1.1 |
| rs6784348 | 3 | 118,892,675 | 0.499 | 0.9 | 0.719 | 0.9 |
| rs7646668 | 3 | 118,914,350 | 0.075 | 1.4 | 0.290 | 1.2 |
| rs6438404 | 3 | 118,918,128 | 0.449 | 0.8 | 0.634 | 0.9 |
| rs4367097 | 3 | 118,922,408 | 0.207 | 0.4 | 0.255 | 0.5 |
| rs9861188 | 3 | 118,932,645 | 0.023 | 1.6 | 0.111 | 1.4 |
| rs7647501 | 3 | 118,939,388 | 0.212 | 0.8 | 0.556 | 0.9 |
| rs4687991 | 3 | 118,947,921 | 0.246 | 0.8 | 0.339 | 0.8 |
| rs4687996 | 3 | 118,956,667 | 0.186 | 0.8 | 0.356 | 0.8 |
| rs6796552 | 3 | 118,967,152 | 0.281 | 0.8 | 0.378 | 0.8 |
| rs4687889 | 3 | 119,020,129 | 0.295 | 1.2 | 0.586 | 1.1 |
| rs7427162 | 3 | 119,069,371 | 0.191 | 1.3 | 0.285 | 1.3 |
| rs1378834 | 3 | 119,102,092 | 0.149 | 0.5 | 0.575 | 0.8 |
| rs1456186 | 3 | 119,110,095 | 0.763 | 0.9 | 0.715 | 1.1 |
| rs817508 | 3 | 119,168,266 | 0.978 | 1.0 | 0.571 | 1.2 |
| rs17723301 | 3 | 119,198,278 | 0.452 | 1.2 | 0.569 | 1.1 |

Logistic regression analyses were performed adjusting for gender using genotype case-control statistics provided by SAS 9.0. *OR*=odds ratio estimates. P-values less than 0.05 are shown in bold.

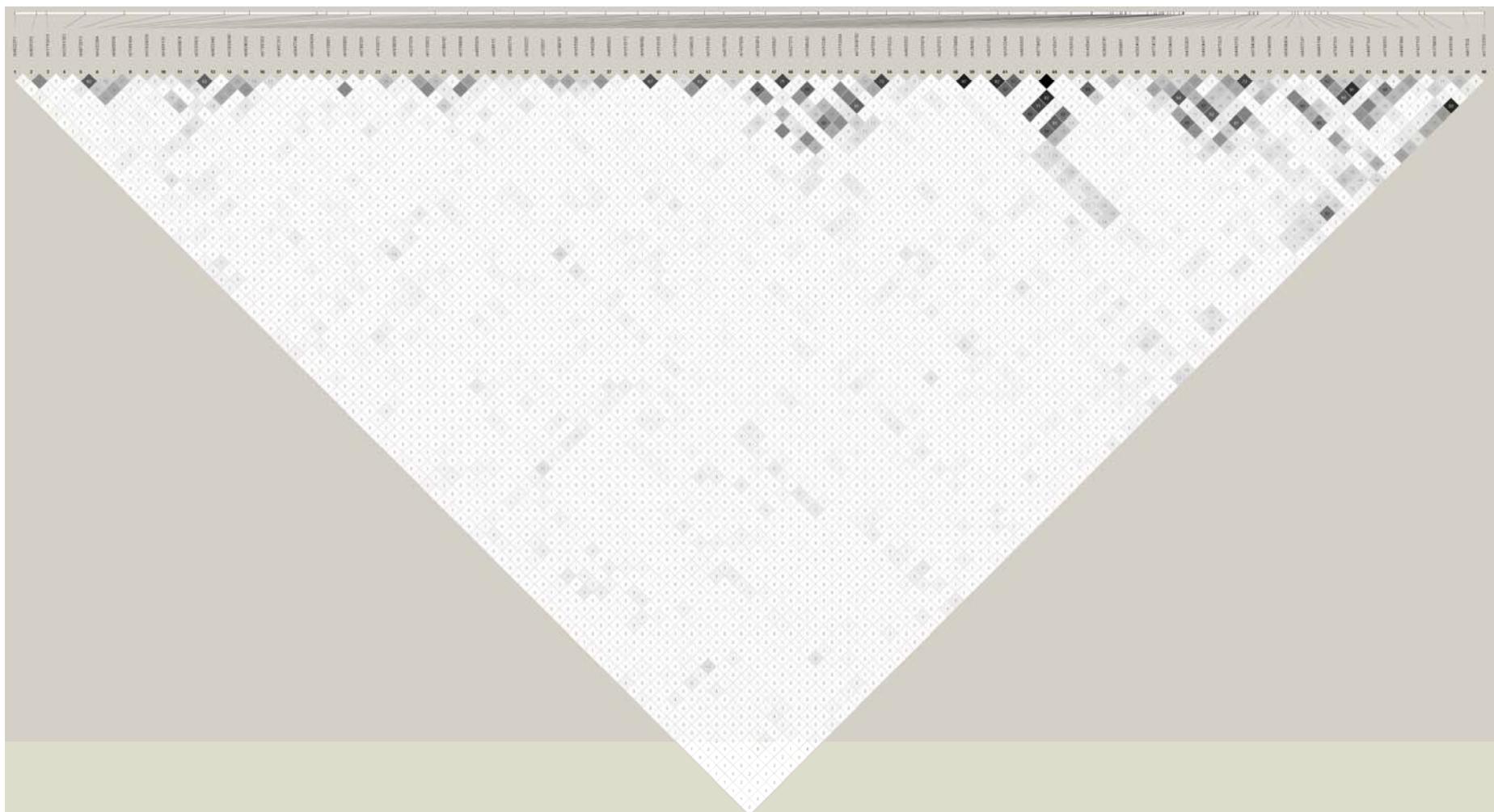
Supplementary Figure Legend

Supplementary Figure 1. Pairwise linkage disequilibrium analysis between SNPs. Pairwise r^2 was estimated in controls using the GOLD program and is displayed by HaploView.

Supplementary Figure 2. LSAMP is expressed in human aortic SMCs but not endothelial cells.

Total RNAs extracted from human aortic endothelial and SMCs were subjected to semi-quantitative RT-PCR. PCR cycle numbers used were as following: *LSAMP_1a* (35 cycles), *LSAMP_1b* (35 cycles), and *GAPDH* (25 cycles). PCR products and Low Mass DNA Ladder from Invitrogen were electrophoresised on 2.5% agarose gel.

Supplementary Figure 1



Supplementary Figure 2.

