suppl. Table 3. 53 SNPs which were significantly different between sICAS patients with WMH and sICAS patients without WMH

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Gene | SNP ID | Ref allele | Alt allele | P value | Freq\_Alt (1000g) | HWE in sICAS with WMH (P) | HWE in sICAS without WMH (P) |
|
| *ADGRG3* | rs12444859 | C | T | 0.04966 | 0.347444 | 0.1138 | 0.1596 |
| *ADRB2* | rs5051 | C | T | 0.04741 | 0.710463 | 1 | 0.4356 |
| *ALDH2* | rs886205 | A | G | 0.03649 | 0.508786 | 0.2801 | 0.08575 |
| *ARAP1* | rs12802369 | A | G | 0.01351 | 0.416134 | 0.2452 | 0.1027 |
|  | rs12805218 | G | A | 0.02912 | 0.413538 | 0.6623 | 0.3045 |
|  | rs2306609 | G | A | 0.001643 | 0.421326 | 0.2814 | 0.09243 |
| *ARL15* | rs40211 | C | T | 0.008207 | 0.760982 | 0.8248 | 0.2347 |
| *CDH13* | rs75527425 | A | T | 0.03085 | 0.1248 | 0.06895 | 0.2337 |
|  | rs76964433 | G | T | 0.03085 | 0.0854633 | 0.06895 | 0.2337 |
|  | rs77405883 | G | C | 0.03085 | 0.0852636 | 0.06895 | 0.2337 |
| *CETP* | rs11076174 | T | C | 0.04292 | 0.107029 | 0.2329 | 0.4989 |
| *COL18A1* | rs1556329 | C | T | 0.04595 | 0.127396 | 1 | 0.5149 |
|  | rs1556331 | C | T | 0.04118 | 0.161941 | 1 | 0.6765 |
|  | rs2236457 | C | T | 0.03596 | 0.227037 | 0.7509 | 0.1868 |
|  | rs2236463 | T | C | 0.03002 | 0.151358 | 0.7147 | 0.1023 |
|  | rs749626 | C | G | 0.01146 | 0.269169 | 0.6987 | 0.4421 |
| *COL4A1* | rs2241966 | T | C | 0.01018 | 0.26877 | 0.6209 | 1 |
|  | rs9521643 | A | G | 0.009597 | 0.270168 | 0.6485 | 1 |
|  | rs16861582 | A | G | 0.00519 | 0.342252 | 0.8497 | 0.0796 |
| *CP* | rs17838831 | T | C | 0.03197 | 0.203874 | 0.3375 | 1 |
|  | rs17838833 | A | - | 0.03033 | 0.13778 | 0.162 | 0.8637 |
|  | rs17847023 | G | A | 0.006905 | 0.139377 | 0.2561 | 0.5243 |
| *CPS1* | rs3213785 | G | A | 0.007925 | 0.11881 | 0.3573 | 0.1176 |
|  | rs3755182 | T | G | 0.02289 | 0.464657 | 0.02231 | 0.4231 |
| *CRYGB* | rs796287 | T | G | 0.04244 | 0.644569 | 0.4308 | 0.8846 |
| *ERAP2* | rs1056893 | C | T | 0.04761 | 0.275759 | 0.1036 | 0.5292 |
| *FBN1* | rs17361868 | C | T | 0.001406 | 0.0756789 | 1 | 0.6573 |
|  | rs1991330 | G | A | 0.002907 | 0.0876597 | 0.5689 | 1 |
|  | rs28730794 | A | C | 0.006489 | 0.560903 | 0.8494 | 0.07583 |
|  | rs28730795 | T | G | 0.006602 | 0.461861 | 0.848 | 0.5377 |
| *HDAC9* | rs2073974 | T | C | 0.03665 | 0.51877 | 0.6974 | 0.8683 |
|  | rs2285431 | T | C | 0.03581 | 0.495208 | 0.07713 | 0.5604 |
| *HNF4A* | rs4812832 | G | A | 0.01751 | 0.0427316 | 1 | 0.37 |
| *HPS3* | rs34511277 | G | A | 0.01746 | 0.116214 | 0.3524 | 0.5494 |
| *ICAM1* | rs281436 | G | A | 0.02609 | 0.265176 | 1 | 0.2611 |
|  | rs281437 | C | T | 0.03475 | 0.264776 | 1 | 0.2627 |
|  | rs5491 | A | T | 0.04056 | 0.0844649 | 0.5938 | 1 |
| *IGFALS* | rs3764345 | G | A | 0.03328 | 0.227436 | 0.6184 | 0.1689 |
|  | rs3764348 | C | T | 0.04482 | 0.233826 | 0.2679 | 0.07585 |
|  | rs9924224 | T | C | 0.04734 | 0.239217 | 0.3936 | 0.3857 |
| *INSR* | rs35434645 | G | - | 0.04134 | 0.439497 | 0.1151 | 0.1045 |
| *JMJD1C* | rs41274074 | G | C | 0.03863 | 0.071885 | 0.07351 | 0.1508 |
| *LEP* | rs11761556 | C | A | 0.01015 | 0.460064 | 1 | 0.2283 |
| *MMP9* | rs17576 | A | G | 0.04255 | 0.455471 | 0.8274 | 0.4197 |
|  | rs3787268 | G | A | 0.009517 | 0.188498 | 1 | 0.7669 |
| *PCSK9* | rs505151 | G | A | 0.01505 | 0.898962 | 1 | 0.2245 |
|  | rs630431 | G | A | 0.04854 | 0.674521 | 0.1788 | 0.4576 |
| *PON1* | rs2074351 | G | A | 0.01893 | 0.32488 | 0.3409 | 1 |
|  | rs3917541 | G | A | 0.04297 | 0.132588 | 1 | 0.3829 |
| *SNORD100* | rs9389034 | T | C | 0.02993 | 0.448283 | 1 | 0.4704 |
| *SPAG17* | rs10754367 | A | G | 0.007324 | 0.563898 | 0.05684 | 0.1038 |
| *ZC3HC1* | rs11556924 | C | T | 0.04001 | 0.155751 | 1 | 0.6057 |
| *ZFPM1* | rs2279777 | C | T | 0.03509 | 0.275759 | 0.6222 | 0.7481 |

Footnotes: P value﹤0.05 was considered as significant; Allele frequency was ≥ 0.05 in 1000 Genome Project; Weinberg equilibrium (HWE) test P value >0.05. Allele frequency was ≥ 0.05 in 1000 Genome Project.