

Supplementary Table 1. SNPs and weights used for the three different genetic risk models: GRS_10, GRS_26 and GRS_57.

| Locus | Chr. | GRS_10 | | | GRS_26 | | | GRS_57 | | |
|-----------------------------------|------|------------|-------------|------------------------|------------|-------------|------------------------|---------------------|-------------|---------|
| | | SNP | Risk allele | $\beta=\ln(\text{OR})$ | SNP | Risk allele | $\beta=\ln(\text{OR})$ | SNP | Risk allele | |
| <i>C1orf93, TNFRSF14, MMEL1</i> | 1 | | | | rs3748816 | A | 0.06217 | rs4445406 | T | 0.07356 |
| <i>RUNX3</i> | 1 | | | | rs10903122 | G | 0.08316 | rs72657048 | G | 0.087 |
| <i>FASLG</i> | 1 | | | | | | | rs12068671 | T | 0.1605 |
| | | | | | | | | rs859637 | T | 0.1825 |
| <i>RGS1</i> | 1 | rs2816316 | A | 0.2142 | rs2816316 | A | 0.2142 | rs72734930## | A | 0.3622 |
| | | | | | | | | rs1359062 | G | 0.206 |
| <i>KIF21B, C1orf106</i> | 1 | | | | rs296547 | C | 0.1103 | rs10800746 | C | 0.1155 |
| <i>PUS10</i> | 2 | | | | rs13003464 | G | 0.09383 | rs13003464 | G | 0.09383 |
| <i>PLEK, FBX048</i> | 2 | | | | rs17035378 | T | 0.09479 | rs10167650 | T | 0.1098 |
| <i>IL18RAP, IL18R1</i> | 2 | rs917997 | G | 0.2253 | rs917997 | G | 0.2253 | rs990171 | A | 0.2231 |
| <i>ITGA4, UBE2E3</i> | 2 | | | | rs4667121 | C | 0.05532 | rs1018326 | C | 0.09917 |
| <i>STAT4</i> | 2 | | | | | | | rs6715106# | A | 0.3624 |
| | | | | | | | | rs12998748 | G | 0.1372 |
| | | | | | | | | rs6752770 | G | 0.06202 |
| <i>CTLA4, ICOS, CD28</i> | 2 | | | | rs4675374 | T | 0.1544 | rs10207814## | T | 0.1509 |
| | | | | | | | | rs1980422 | C | 0.1568 |
| | | | | | | | | rs34037980 | A | 0.05851 |
| <i>CCR4, GLB1</i> | 3 | | | | rs13314993 | G | 0.1289 | rs4678523 | C | 0.1435 |
| <i>CCR1-3, LTF</i> | 3 | rs6441961 | T | 0.1255 | rs13098911 | T | 0.1845 | rs7616215 | C | 0.1031 |
| | | | | | | | | rs2097282 | C | 0.1299 |
| | | | | | | | | rs60215663# | A | 0.2788 |
| <i>ARHGAPI</i> | 3 | | | | rs11712165 | G | 0.03233 | rs61579022 | A | 0.03245 |
| <i>SCHIP1, IL12A</i> | 3 | rs9811792 | C | 0.1556 | | | | rs1353248 | C | 0.1579 |
| | | rs17810546 | G | 0.2642 | rs17810546 | G | 0.2642 | imm_3_161120372 | A | 0.2937 |
| | | | | | | | | rs2561288 | T | 0.1773 |
| <i>LPP</i> | 3 | rs1464510 | A | 0.1794 | rs1464510 | A | 0.1794 | rs2030519 | A | 0.2107 |
| <i>KIAA1109, ADAD1, IL2, IL21</i> | 4 | | | | | | | rs62323881# | A | 0.2048 |
| | | rs6822844 | G | 0.3911 | rs13151961 | A | 0.3658 | rs13132308 | A | 0.3895 |

Supplementary Table 1 (continued): SNPs and weights used for the three different genetic risk models: GRS_10, GRS_26 and GRS_57

| Locus | Chr. | GRS_10 | | | GRS_26 | | | GRS_57 | | |
|------------------------------|------|-----------|-------------|--------------------------|------------|-------------|--------------------------|-------------------------------------|-------------|--------------------------|
| | | SNP | Risk allele | $\beta = \ln(\text{OR})$ | SNP | Risk allele | $\beta = \ln(\text{OR})$ | SNP | Risk allele | $\beta = \ln(\text{OR})$ |
| <i>IRF4</i> | 6 | | | | | | | rs12203592 | C | 0.1242 |
| | | | | | | | | rs1050976 | C | 0.09018 |
| <i>BACH2</i> | 6 | | | | rs10806425 | A | 0.1215 | rs7753008 | C | 0.1386 |
| <i>PTPRK</i> | 6 | | | | rs802734 | G | 0.1338 | rs55743914 | T | 0.1858 |
| | | | | | | | | rs72975916 | C | 0.2027 |
| <i>TNFAIP3, OLIG3</i> | 6 | rs2327832 | G | 0.2037 | rs2327832 | G | 0.2037 | imm_6_138043754 | G | 0.1317 |
| | | | | | | | | rs17264332 | G | 0.2298 |
| <i>TAGAP</i> | 6 | rs1738074 | T | 0.1545 | rs1738074 | T | 0.1545 | rs182429 | A | 0.1566 |
| | | | | | | | | rs1107943[#] | C | 0.1342 |
| <i>ELMO1</i> | 7 | | | | | | | 1kg_7_37384979 | G | 0.1715 |
| <i>PVT1</i> | 8 | | | | rs9792269 | A | 0.08532 | rs10808568 | A | 0.08465 |
| <i>PFKFB3, PRKCQ</i> | 10 | | | | | | | rs2387397 | C | 0.08623 |
| <i>ZMIZ1</i> | 10 | | | | rs1250552 | A | 0.1472 | rs1250552 | A | 0.1472 |
| <i>POU2AF1, C11orf93</i> | 11 | | | | | | | rs7104791 | T | 0.1471 |
| <i>TREH, DDX6</i> | 11 | | | | | | | rs10892258 | G | 0.1234 |
| <i>ETS1</i> | 11 | | | | rs11221332 | T | 0.1378 | rs61907765 | T | 0.1415 |
| <i>SH2B3, ATXN2</i> | 12 | rs3184504 | T | 0.1516 | rs3184504 | T | 0.1516 | rs3184504 | T | 0.1516 |
| <i>ZFP36L1, C14orf181</i> | 14 | | | | | | | rs11851414 | C | 0.1599 |
| <i>CLK3, CSK</i> | 15 | | | | | | | rs1378938 | A | 0.1226 |
| <i>CIITA</i> | 16 | | | | | | | rs6498114 | G | 0.1431 |
| <i>SOCS1, PRMI, PRM2</i> | 16 | | | | rs12928822 | C | 0.1128 | rs243323 | A | 0.1001 |
| | | | | | | | | imm_16_11281298^{##} | G | 0.002075 |
| | | | | | | | | rs9673543 | G | 0.003185 |
| <i>PTPN2</i> | 18 | | | | rs1893217 | G | 0.2063 | rs11875687 | C | 0.1934 |
| | | | | | | | | rs62097857^{##} | A | 0.1095 |
| <i>UBASH3A</i> | 21 | | | | | | | rs1893592 | A | 0.07879 |
| <i>ICOSLG</i> | 21 | | | | rs4819388 | C | 0.1541 | rs58911644 | A | 0.118 |
| <i>UBE2L3, YDJC</i> | 22 | | | | | | | rs4821124 | C | 0.1328 |
| <i>HCFC1, TMEM187, IRAK1</i> | X | | | | | | | rs13397 | A | 0.08922 |

Chr. chromosome; SNP single nucleotide polymorphism; OR odds ratio. The genes mentioned are the most plausible genes reported. [#] SNPs with MAF = 5-10%, ^{##} SNPs with MAF <5%.