

Table S1. SNPs in homozygous regions associated with AD in Wadi Ara at $P \leq 0.05$

| Chr | BP | SNP | MAF case | MAF control | OR | P | Gene | SNP Type |
|-----|----------|------------|-------------|----------------|------|-------|----------|----------|
| 6 | 32259972 | rs1800684 | 0.09 | 0.03 | 4.36 | 0.002 | AGER | synon |
| 6 | 32255739 | rs3134943 | 0.10 | 0.04 | 3.61 | 0.002 | RNF5 | intron |
| 9 | 71799485 | rs1027284 | 0.17 | 0.10 | 0.41 | 0.002 | NA | NA |
| 9 | 71806161 | rs4418399 | 0.17 | 0.10 | 2.42 | 0.002 | NA | NA |
| 9 | 71801754 | rs4744583 | 0.17 | 0.10 | 0.41 | 0.002 | NA | NA |
| 9 | 71808349 | rs7035415 | 0.17 | 0.10 | 2.42 | 0.002 | NA | NA |
| 9 | 71804632 | rs8700111 | 0.17 | 0.10 | 2.42 | 0.002 | NA | NA |
| 9 | 71805689 | rs953372 | 0.17 | 0.10 | 2.42 | 0.002 | NA | NA |
| 9 | 71801500 | rs10868358 | 0.17 | 0.10 | 2.42 | 0.002 | NA | NA |
| 9 | 71808783 | rs7863229 | 0.17 | 0.10 | 2.42 | 0.002 | NA | NA |
| 9 | 71797023 | rs4574911 | 0.17 | 0.10 | 2.42 | 0.002 | NA | NA |
| 9 | 72292644 | rs3923699 | 0.44 | 0.33 | 0.56 | 0.002 | NA | NA |
| 9 | 72289023 | rs7875663 | 0.44 | 0.33 | 1.77 | 0.002 | NA | NA |
| 6 | 32246523 | rs3130283 | 0.11 | 0.06 | 3.13 | 0.002 | AGPAT1 | intron |
| 9 | 71806885 | rs4403478 | 0.17 | 0.11 | 0.43 | 0.002 | NA | NA |
| 9 | 71703997 | rs10868248 | 0.12 | 0.07 | 2.49 | 0.002 | C9orf135 | intron |
| 9 | 71764547 | rs7863165 | 0.18 | 0.11 | 0.48 | 0.01 | NA | NA |
| 9 | 72292598 | rs3923700 | 0.48 | 0.38 | 1.61 | 0.02 | NA | NA |
| 9 | 71856948 | rs12352964 | 0.09 | 0.14 | 0.41 | 0.02 | MAMDC2 | intron |
| 6 | 32127747 | rs12333245 | 0.19 | 0.28 | 0.56 | 0.02 | TNXB | intron |
| 6 | 32298006 | rs3132946* | 0.06 | 0.02 | 4.02 | 0.02 | NOTCH4 | intron |
| 9 | 71949873 | rs4744983 | 0.11 | 0.17 | 1.94 | 0.02 | MAMDC2 | intron |
| 9 | 71954693 | rs10868610 | 0.11 | 0.17 | 0.52 | 0.02 | MAMDC2 | intron |
| 9 | 71992354 | rs11794396 | 0.11 | 0.17 | 1.92 | 0.02 | MAMDC2 | intron |
| 9 | 71992659 | rs11142019 | 0.11 | 0.17 | 0.52 | 0.02 | MAMDC2 | intron |

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| 9 | 72057147 | rs1180085 | 0.11 | 0.17 | 0.52 | 0.02 | NA | NA |
| 9 | 72001259 | rs2148856 | 0.11 | 0.17 | 1.92 | 0.02 | MAMDC2 | intron |
| 9 | 71900928 | rs12341763 | 0.11 | 0.17 | 1.92 | 0.02 | MAMDC2 | intron |
| 6 | 32280043 | rs1044506* | 0.08 | 0.04 | 0.27 | 0.02 | NOTCH4 | synon |
| 9 | 72020229 | rs11142141 | 0.11 | 0.17 | 1.91 | 0.02 | MAMDC2 | intron |
| 9 | 72293046 | rs7018675 | 0.48 | 0.38 | 0.64 | 0.02 | NA | NA |
| 9 | 72292961 | rs3901151 | 0.48 | 0.38 | 0.64 | 0.02 | NA | NA |
| 9 | 72294703 | rs4472581 | 0.48 | 0.38 | 0.64 | 0.02 | NA | NA |
| 9 | 72295317 | rs6560139 | 0.48 | 0.38 | 0.64 | 0.02 | NA | NA |
| 9 | 72296173 | rs7856642 | 0.49 | 0.38 | 0.64 | 0.02 | NA | NA |
| 9 | 72034009 | rs7873075 | 0.11 | 0.17 | 0.52 | 0.02 | NA | NA |
| 9 | 71843256 | rs7859880 | 0.20 | 0.27 | 1.82 | 0.02 | NA | NA |
| 9 | 72289908 | rs6560138 | 0.48 | 0.38 | 0.64 | 0.02 | NA | NA |
| 9 | 72289274 | rs7849735 | 0.52 | 0.62 | 0.64 | 0.02 | NA | NA |
| 6 | 32022914 | rs1048709 | 0.07 | 0.03 | 3.11 | 0.02 | CFB | reference |
| 9 | 71750691 | rs11140986 | 0.04 | 0.01 | 5.02 | 0.02 | NA | NA |
| 6 | 32024379 | rs537160 | 0.12 | 0.06 | 2.37 | 0.02 | CFB | intron |
| 9 | 72075087 | rs1180109 | 0.10 | 0.17 | 0.54 | 0.02 | SMC5 | intron |
| 6 | 32253685 | rs2269423 | 0.31 | 0.23 | 1.63 | 0.03 | AGPAT1 | intron |
| 9 | 72100553 | rs11142355 | 0.11 | 0.17 | 0.54 | 0.03 | SMC5 | intron |
| 9 | 72095224 | rs1180131 | 0.89 | 0.83 | 1.86 | 0.03 | SMC5 | intron |
| 6 | 32244525 | rs1061808 | 0.67 | 0.74 | 0.60 | 0.03 | AGPAT1 | UTR-3 |
| 6 | 32244525 | rs1061808 | 0.67 | 0.74 | 0.60 | 0.03 | EGFL8 | nearGene-3 |
| 6 | 32137161 | rs2269429 | 0.18 | 0.26 | 0.58 | 0.03 | TNXB | missense |
| 9 | 72092323 | rs10868798 | 0.11 | 0.17 | 0.54 | 0.03 | SMC5 | intron |
| 9 | 72300708 | rs9969768 | 0.50 | 0.39 | 1.54 | 0.03 | NA | NA |
| 9 | 71859460 | rs3015237 | 0.13 | 0.20 | 0.57 | 0.03 | MAMDC2 | intron |
| 9 | 72300995 | rs7847938 | 0.50 | 0.61 | 0.65 | 0.03 | NA | NA |

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| 9 | 71861470 | rs4744970 | 0.13 | 0.20 | 0.57 | 0.03 | MAMDC2 | intron |
| 9 | 71861846 | rs4744972 | 0.13 | 0.20 | 0.57 | 0.03 | MAMDC2 | intron |
| 9 | 72304099 | rs7871523 | 0.50 | 0.39 | 1.53 | 0.03 | NA | NA |
| 9 | 72298171 | rs11792173 | 0.51 | 0.62 | 0.65 | 0.03 | NA | NA |
| 9 | 72309535 | rs10868843 | 0.50 | 0.61 | 0.65 | 0.03 | NA | NA |
| 9 | 72309852 | rs7032346 | 0.50 | 0.61 | 0.65 | 0.03 | NA | NA |
| 9 | 71766818 | rs7037671 | 0.06 | 0.04 | 3.32 | 0.03 | NA | NA |
| 9 | 71862722 | rs3015239 | 0.11 | 0.16 | 0.51 | 0.03 | MAMDC2 | intron |
| 9 | 71765581 | rs10735572 | 0.06 | 0.0 | 0.30 | 0.03 | NA | NA |
| 6 | 32030233 | rs630379 | 0.09 | 0.04 | 2.63 | 0.03 | RDBP | intron |
| 9 | 72337348 | rs4744600 | 0.30 | 0.22 | 1.62 | 0.03 | NA | NA |
| 9 | 72311118 | rs7037072 | 0.50 | 0.39 | 0.65 | 0.03 | NA | NA |
| 6 | 32235455 | rs3134950 | 0.34 | 0.26 | 0.61 | 0.03 | PPT2 | intron |
| 9 | 72496209 | rs12378618 | 0.22 | 0.15 | 1.76 | 0.03 | TRPM3 | intron |
| 6 | 32140399 | rs9469079 | 0.18 | 0.25 | 1.72 | 0.03 | TNXB | intron |
| 9 | 71875979 | rs7035878 | 0.13 | 0.20 | 0.57 | 0.03 | MAMDC2 | intron |
| 6 | 32299559 | rs396960 | 0.28 | 0.36 | 0.61 | 0.03 | NOTCH4 | intron |
| 9 | 72087254 | rs1180116 | 0.10 | 0.17 | 0.53 | 0.03 | SMC5 | missense |
| 9 | 72478076 | rs1011308 | 0.26 | 0.18 | 1.65 | 0.03 | TRPM3 | intron |
| 9 | 72477527 | rs4540466 | 0.25 | 0.18 | 1.66 | 0.03 | TRPM3 | intron |
| 6 | 32143405 | rs9469080 | 0.19 | 0.26 | 0.60 | 0.03 | TNXB | intron |
| 6 | 32288124 | rs3131294* | 0.10 | 0.05 | 2.82 | 0.03 | NOTCH4 | intron |
| 6 | 32134085 | rs1009382 | 0.25 | 0.18 | 1.77 | 0.03 | TNXB | missense |
| 6 | 32144335 | rs3749962 | 0.19 | 0.26 | 0.60 | 0.03 | TNXB | synon |
| 9 | 72474803 | rs11142539 | 0.26 | 0.18 | 1.65 | 0.03 | TRPM3 | intron |
| 9 | 72475275 | rs4131069 | 0.26 | 0.18 | 0.61 | 0.03 | TRPM3 | intron |
| 9 | 72471178 | rs7027906 | 0.26 | 0.18 | 1.65 | 0.03 | TRPM3 | intron |
| 9 | 72423141 | rs11142509 | 0.20 | 0.14 | 1.83 | 0.04 | TRPM3 | intron |

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| 6 | 32148909 | rs9469082 | 0.19 | 0.26 | 1.67 | 0.04 | TNXB | intron |
| 6 | 31972283 | rs659445 | 0.15 | 0.07 | 2.01 | 0.04 | EHMT2 | intron |
| 9 | 72485540 | rs7874138 | 0.74 | 0.82 | 0.61 | 0.04 | TRPM3 | intron |
| 9 | 71850379 | rs755778 | 0.19 | 0.26 | 0.59 | 0.04 | MAMDC2 | intron |
| 9 | 71852509 | rs2997657 | 0.19 | 0.26 | 1.70 | 0.04 | MAMDC2 | intron |
| 9 | 72147361 | rs12346675 | 0.11 | 0.17 | 1.78 | 0.04 | SMC5 | intron |
| 9 | 72122702 | rs7849942 | 0.11 | 0.16 | 0.55 | 0.04 | SMC5 | intron |
| 6 | 32155414 | rs204877 | 0.19 | 0.26 | 1.65 | 0.04 | TNXB | intron |
| 9 | 72383191 | rs10868854 | 0.41 | 0.33 | 1.49 | 0.04 | TRPM3 | intron |
| 9 | 72410553 | rs7865398 | 0.20 | 0.14 | 1.80 | 0.04 | TRPM3 | intron |
| 9 | 71780270 | rs10511977 | 0.05 | 0.01 | 3.80 | 0.04 | NA | NA |
| 9 | 72383357 | rs10780951 | 0.42 | 0.33 | 0.67 | 0.04 | TRPM3 | intron |
| 9 | 72497811 | rs12344255 | 0.24 | 0.17 | 0.60 | 0.04 | TRPM3 | intron |
| 6 | 32150300 | rs3130286* | 0.17 | 0.12 | 0.53 | 0.04 | TNXB | intron |
| 15 | 88349309 | rs1256841 | 0.05 | 0.08 | 0.45 | 0.04 | ZNF710 | intron |
| 9 | 71927401 | rs12349576 | 0.15 | 0.21 | 1.65 | 0.05 | MAMDC2 | intron |
| 9 | 71925881 | rs7853094 | 0.15 | 0.21 | 1.65 | 0.05 | MAMDC2 | intron |
| 9 | 71922475 | rs4744979 | 0.15 | 0.21 | 0.60 | 0.05 | MAMDC2 | intron |
| 9 | 71918553 | rs1927107 | 0.15 | 0.21 | 1.65 | 0.05 | MAMDC2 | intron |
| 9 | 71917562 | rs6559970 | 0.15 | 0.21 | 0.61 | 0.05 | MAMDC2 | intron |
| 9 | 72424704 | rs3829095 | 0.24 | 0.17 | 1.68 | 0.05 | TRPM3 | intron |
| 8 | 49526732 | rs13271711* | 0.04 | 0.07 | 4.16 | 0.05 | NA | NA |
| 9 | 71903716 | rs4237239 | 0.14 | 0.21 | 0.61 | 0.05 | MAMDC2 | intron |
| 9 | 71885934 | rs11141566 | 0.14 | 0.20 | 0.61 | 0.05 | MAMDC2 | intron |
| 9 | 72162634 | rs7847861 | 0.11 | 0.16 | 1.72 | 0.05 | NA | NA |

* SNPs were nominally associated with AD in the meta-analysis, OR = odds ratio