Supplementary Material

Systematic Analysis of Candidate Genes for Alzheimer's Disease in a French, Genome-Wide Association Study

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| | | | | - | | |
|------------|---------|------|---------------|---------|------|---------------|
| | | Mode | 11 | | Mode | 12 |
| | p value | OR | CI 95% | p value | OR | CI 95% |
| rs4968647 | 0.61 | 1.02 | [0.95-1.10] | 0.46 | 1.03 | [0.95–1.12] |
| rs8076157 | 0.67 | 0.98 | [0.91–1.07] | 0.25 | 0.95 | [0.87–1.04] |
| rs4459609 | 0.95 | 1.00 | [0.93-1.08] | 0.90 | 0.99 | [0.92 - 1.08] |
| rs4305 | 0.58 | 0.98 | [0.91–1.05] | 0.64 | 0.98 | [0.91–1.06] |
| rs4309 | 0.51 | 1.03 | [0.95–1.11] | 0.46 | 1.03 | [0.95 - 1.12] |
| rs4311 | 0.18 | 1.05 | [0.98–1.13] | 0.14 | 1.06 | [0.98 - 1.15] |
| rs4329 | 0.22 | 1.05 | [0.97–1.13] | 0.24 | 1.05 | [0.97 - 1.14] |
| rs4343 | 0.20 | 1.05 | [0.97–1.13] | 0.25 | 1.05 | [0.97 - 1.14] |
| rs4353 | 0.27 | 1.04 | [0.97 - 1.12] | 0.33 | 1.04 | [0.96–1.13] |
| rs4362 | 0.17 | 1.05 | [0.98–1.14] | 0.22 | 1.05 | [0.97 - 1.14] |
| rs4461142 | 0.57 | 0.98 | [0.91-1.05] | 0.44 | 0.97 | [0.90 - 1.05] |
| rs4267385 | 0.71 | 0.99 | [0.91–1.06] | 0.75 | 0.99 | [0.91 - 1.07] |
| rs8066276 | 0.98 | 1.00 | [0.93–1.08] | 0.93 | 1.00 | [0.92 - 1.08] |
| rs12451328 | 0.24 | 1.05 | [0.97–1.13] | 0.40 | 1.04 | [0.96–1.12] |
| rs867640 | 0.88 | 1.01 | [0.93-1.09] | 0.88 | 1.01 | [0.93-1.09] |
| rs9914151 | 0.36 | 1.04 | [0.96–1.12] | 0.53 | 1.03 | [0.95–1.11] |
| rs7221979 | 0.65 | 1.02 | [0.94–1.10] | 0.62 | 1.02 | [0.94–1.11] |
| rs4968656 | 0.97 | 1.00 | [0.92 - 1.08] | 0.84 | 0.99 | [0.91 - 1.08] |
| rs6504165 | 0.60 | 0.98 | [0.90-1.07] | 0.73 | 0.98 | [0.90-1.08] |
| rs9906903 | 0.62 | 0.98 | [0.90–1.07] | 0.75 | 0.98 | [0.90-1.08] |

Supplementary Table 1 Association of SNPs with AD risk in the ACE gene on chromosome 17

Model 1: adjusted for age, gender, and principal components. Model 2: adjusted for age, gender, principal components, *APOE* ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), *CLU* (rs11136000), *CR1* (rs6656401), and *PICALM* (rs541458).

| | | Model 1 | | | Model 2 | | |
|------------|---------|---------|---------------|---------|---------|---------------|--|
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs4923461 | 0.23 | 1.06 | [0.97–1.15] | 0.17 | 1.07 | [0.97–1.17] | |
| rs11030094 | 0.01 | 0.91 | [0.85-0.98] | 0.02 | 0.91 | [0.84-0.98] | |
| rs925946 | 0.30 | 1.04 | [0.96–1.14] | 0.36 | 1.04 | [0.95–1.14] | |
| rs10501087 | 0.22 | 1.06 | [0.97–1.15] | 0.15 | 1.07 | [0.97–1.18] | |
| rs2203877 | 0.06 | 0.93 | [0.87 - 1.00] | 0.06 | 0.93 | [0.86 - 1.00] | |
| rs6265 | 0.21 | 1.06 | [0.97–1.16] | 0.15 | 1.07 | [0.97–1.18] | |
| rs11030104 | 0.12 | 1.07 | [0.98–1.17] | 0.10 | 1.08 | [0.99–1.19] | |
| rs11030108 | 0.34 | 1.04 | [0.96–1.13] | 0.40 | 1.04 | [0.95–1.13] | |
| rs10835211 | 0.77 | 1.01 | [0.93–1.11] | 0.97 | 1.00 | [0.91–1.10] | |
| rs7934165 | 0.05 | 0.93 | [0.86 - 1.00] | 0.04 | 0.92 | [0.85 - 1.00] | |
| rs12273363 | 0.44 | 1.04 | [0.94–1.14] | 0.60 | 1.03 | [0.93–1.14] | |
| rs908867 | 0.54 | 1.04 | [0.91–1.19] | 0.41 | 1.06 | [0.92-1.22] | |
| rs1491850 | 0.24 | 1.05 | [0.97–1.13] | 0.31 | 1.04 | [0.96–1.13] | |
| rs1157659 | 0.30 | 0.96 | [0.89–1.04] | 0.22 | 0.95 | [0.88-1.03] | |
| rs12291186 | 0.87 | 1.05 | [0.62–1.77] | 0.88 | 0.96 | [0.54–1.69] | |
| rs12291063 | 0.85 | 1.06 | [0.58–1.94] | 0.80 | 0.92 | [0.48–1.77] | |

Supplementary Table 2

Association of SNPs with AD risk in the BDNF gene on chromosome 11

Model 1: adjusted for age, gender, and principal components.

| | | | | U | | |
|------------|---------|------|---------------|---------|------|---------------|
| | | Mode | 11 | | Mode | 12 |
| | p value | OR | CI 95% | p value | OR | CI 95% |
| rs10509567 | 0.72 | 0.98 | [0.87–1.10] | 0.73 | 0.98 | [0.86–1.11] |
| rs10788637 | 0.21 | 1.05 | [0.97 - 1.14] | 0.30 | 1.05 | [0.96–1.14] |
| rs7091822 | 0.17 | 0.93 | [0.83-1.03] | 0.11 | 0.91 | [0.81 - 1.02] |
| rs17117126 | 0.74 | 0.98 | [0.86–1.11] | 0.78 | 0.98 | [0.86 - 1.12] |
| rs4417181 | 0.52 | 0.96 | [0.85 - 1.09] | 0.76 | 0.98 | [0.86-1.12] |
| rs4933497 | 0.61 | 1.02 | [0.94–1.11] | 0.95 | 1.00 | [0.92 - 1.10] |
| rs11594137 | 0.60 | 1.03 | [0.92–1.16] | 0.25 | 1.07 | [0.95-1.21] |
| rs10749600 | 0.31 | 1.04 | [0.96-1.12] | 0.47 | 1.03 | [0.95 - 1.12] |
| rs11203038 | 0.61 | 0.97 | [0.86-1.09] | 0.19 | 0.92 | [0.81 - 1.04] |
| rs7908760 | 0.96 | 1.00 | [0.91–1.09] | 0.86 | 0.99 | [0.90-1.09] |
| rs6586174 | 0.49 | 1.03 | [0.94–1.13] | 0.59 | 1.03 | [0.93–1.13] |
| rs12780342 | 0.32 | 1.06 | [0.95–1.18] | 0.11 | 1.10 | [0.98 - 1.24] |
| rs7922269 | 0.32 | 1.05 | [0.95–1.17] | 0.47 | 1.04 | [0.93–1.16] |
| rs6586175 | 0.17 | 1.06 | [0.97–1.16] | 0.31 | 1.05 | [0.96–1.16] |
| rs12358054 | 0.66 | 0.97 | [0.87 - 1.09] | 0.27 | 0.93 | [0.82 - 1.06] |
| rs1556478 | 0.19 | 1.06 | [0.97–1.15] | 0.47 | 1.03 | [0.95–1.13] |
| rs2297472 | 0.03 | 1.12 | [1.01-1.23] | 0.03 | 1.12 | [1.01-1.25] |
| rs2254670 | 0.61 | 1.02 | [0.95-1.10] | 0.81 | 1.01 | [0.93-1.09] |
| rs2254636 | 0.80 | 0.99 | [0.88–1.10] | 0.89 | 1.01 | [0.89–1.14] |

Supplementary Table 3 Association of SNPs with AD risk in the CH25H gene on chromosome 10

Model 1: adjusted for age, gender, and principal components.

Model 2: adjusted for age, gender, principal components, APOE ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), CLU (rs11136000), CR1 (rs6656401), and PICALM (rs541458).

Supplementary Table 4

Association of SNPs with AD risk in the CHRNB2 gene on chromosome 1

| | Model 1 | | | _ | Model 2 | | |
|------------|---------|------|---------------|---------|---------|---------------|--|
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs7543174 | 0.38 | 0.96 | [0.87–1.05] | 0.33 | 0.95 | [0.86–1.05] | |
| rs4845652 | 0.03 | 0.87 | [0.76–0.99] | 0.01 | 0.83 | [0.72-0.96] | |
| rs3811450 | 0.72 | 1.03 | [0.89–1.19] | 0.82 | 1.02 | [0.87–1.19] | |
| rs11264222 | 0.89 | 1.01 | [0.93-1.09] | 0.64 | 1.02 | [0.94–1.11] | |
| rs1127314 | 0.97 | 1.00 | [0.92-1.09] | 0.71 | 1.02 | [0.93–1.11] | |
| rs9427097 | 0.93 | 1.00 | [0.91 - 1.10] | 0.83 | 1.01 | [0.91 - 1.12] | |

Model 1: adjusted for age, gender and principal components.

Model 2: adjusted for age, gender, principal components, APOE ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), CLU (rs11136000), CR1 (rs6656401), and PICALM (rs541458).

| | Model 1 | | | Model 2 | | | |
|-----------|---------|------|-------------|---------|------|---------------|--|
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs6036478 | 0.87 | 1.01 | [0.92-1.10] | 0.99 | 1.00 | [0.91–1.10] | |
| rs2424577 | 0.40 | 1.03 | [0.96–1.12] | 0.38 | 1.04 | [0.96–1.13] | |
| rs2145231 | 0.35 | 1.05 | [0.95–1.16] | 0.30 | 1.06 | [0.95 - 1.18] | |
| rs911122 | 0.47 | 1.03 | [0.95–1.11] | 0.66 | 1.02 | [0.94–1.11] | |
| rs8122922 | 0.98 | 1.00 | [0.91–1.09] | 0.60 | 0.97 | [0.88 - 1.07] | |
| rs2424590 | 0.75 | 1.02 | [0.92-1.13] | 0.68 | 1.02 | [0.92 - 1.14] | |

Supplementary Table 5

Association of SNPs with AD risk in the CST3 gene on chromosome 20

Model 1: adjusted for age, gender and principal components.

| 1650014 | | Mode | Model 2 | | | |
|-------------------------|--------------|--------------|--------------------------------|--------------|----------------|--------------------------------|
| | p value | OR | CI 95% | p value | OR | CI 95% |
| 10700040 | | | | | | |
| rs10780842 | 0.21 0.22 | 1.05 | [0.97-1.13] [0.97-1.13] | 0.06 0.07 | 1.08 | [1.00–1.17] [0.99–1.17] |
| rs10868605 rs3758308 | 0.22 | 1.05 1.06 | [0.97 - 1.13] [0.98 - 1.14] | 0.07 | $1.08 \\ 1.06$ | [0.99-1.17] [0.98-1.15] |
| rs1964911 | 0.13 | 1.00 | [0.98-1.14] [0.98-1.13] | 0.15 | 1.00 | [0.98 - 1.15] [0.98 - 1.15] |
| rs1329600 | 0.18 | 0.97 | [0.98-1.15] [0.90-1.05] | 0.13 | 0.96 | [0.98-1.03] |
| rs2058882 | 0.32 | 0.97 | [0.86 - 1.03] | 0.32 | 0.90 | [0.85 - 1.04] |
| rs868265 | 0.21 | 1.02 | [0.91 - 1.15] | 0.22 | 1.04 | [0.92 - 1.18] |
| rs10125534 | 0.75 | 0.98 | [0.89–1.09] | 0.71 | 0.98 | [0.88–1.09] |
| rs10868609 | 0.77 | 0.99 | [0.89–1.09] | 0.74 | 0.98 | [0.88–1.09] |
| rs1316489 | 0.79 | 0.99 | [0.89–1.09] | 0.72 | 0.98 | [0.88–1.09] |
| rs1475525 | 0.35 | 0.96 | [0.89–1.04] | 0.22 | 0.95 | [0.87–1.03] |
| rs1475524 | 0.44 | 0.97 | [0.90-1.05] | 0.29 | 0.96 | [0.88–1.04] |
| rs1554 | 0.30 | 0.96 | [0.89–1.04] | 0.20 | 0.95 | [0.87-1.03] |
| rs17399090 | 0.31 | 0.96 | [0.88-1.04] | 0.23 | 0.95 | [0.86–1.04] |
| rs913778 | 0.93 | 1.00 | [0.91–1.11] | 0.42 | 1.05 | [0.94–1.17] |
| rs871495 | 0.40 | 0.97 | [0.89–1.04] | 0.51 | 0.97 | [0.89-1.06] |
| rs10780849 | 0.33 | 1.04 | [0.96-1.13] | 0.56 | 1.03 | [0.94–1.12] |
| rs10746816 | 0.49 | 0.97 | [0.90-1.05] | 0.98 | 1.00 | [0.92-1.09] |
| rs913782 | 0.95 | 1.01 | [0.85 - 1.18] | 0.44 | 0.93 | [0.78–1.11] |
| rs17477673 | 0.81 | 0.99 | [0.92-1.07] | 0.59 | 1.02 | [0.94–1.11] |
| rs4877361 | 0.27 | 0.94 | [0.84–1.05] | 0.29 | 0.94 | [0.83-1.06] |
| rs17477827 | 0.35 | 0.95 | [0.85 - 1.06] | 0.37 | 0.95 | [0.84–1.07] |
| rs4878089 | 0.94 | 1.00 | [0.93–1.08] | 0.73 | 0.99 | [0.91 - 1.07] |
| rs10512186 | 0.85 | 1.01 | [0.93–1.09] | 0.82 | 0.99 | [0.91–1.07] |
| rs4878094 | 0.64 | 1.02 | [0.93–1.12] | 0.54 | 1.03 | [0.93 - 1.14] |
| rs1558889 | 0.68 | 1.02 | [0.92 - 1.14] | 0.34 | 1.06 | [0.94–1.19] |
| rs3028 | 0.43 | 1.03 | [0.95–1.12] | 0.75 | 1.01 | [0.93–1.10] |
| rs981292 | 0.98 | 1.00 | [0.93–1.08] | 0.63 | 0.98 | [0.90–1.06] |
| rs1014306 | 0.90 | 0.99 | [0.92–1.08] | 0.87 | 1.01 | [0.93–1.10] |
| rs1421001 | 0.78 | 1.01 | [0.93–1.11] | 0.70 | 1.02 | [0.92 - 1.12] |
| rs7036781 rs7036598 | 0.92 0.27 | 1.00 0.96 | [0.92-1.07] [0.89-1.03] | 0.87 0.45 | 0.99 0.97 | [0.92–1.08] [0.90–1.05] |
| rs12378686 | 0.27 | 1.00 | [0.89-1.03] [0.93-1.09] | 0.43 | 1.02 | [0.90-1.03] [0.93-1.11] |
| rs1983973 | 0.92 | 0.97 | [0.83 - 1.13] | 0.25 | 0.91 | [0.77 - 1.07] |
| rs11141878 | 1.00 | 1.00 | [0.93–1.08] | 0.25 | 1.00 | [0.92 - 1.08] |
| rs11141879 | 0.66 | 0.98 | [0.93 - 1.06] | 0.89 | 1.00 | [0.92 - 1.00] |
| rs7855635 | 0.72 | 1.01 | [0.94 - 1.10] | 0.92 | 1.00 | [0.92–1.08] |
| rs1861832 | 0.33 | 1.04 | [0.96-1.13] | 0.65 | 1.02 | [0.94–1.11] |
| rs1571515 | 0.41 | 0.97 | [0.90-1.05] | 0.48 | 0.97 | [0.89–1.05] |
| rs11141889 | 0.83 | 1.01 | [0.93-1.10] | 0.58 | 1.03 | [0.94–1.12] |
| rs12001404 | 0.78 | 1.01 | [0.93-1.10] | 0.54 | 1.03 | [0.94–1.12] |
| rs6560006 | 0.67 | 1.02 | [0.93–1.13] | 0.32 | 1.06 | [0.95–1.17] |
| rs3128519 | 0.42 | 1.03 | [0.96–1.11] | 0.38 | 1.04 | [0.96–1.12] |
| rs11141899 | 0.21 | 0.94 | [0.86–1.03] | 0.09 | 0.92 | [0.83–1.01] |
| rs3128521 | 0.91 | 1.00 | [0.93–1.09] | 0.75 | 1.01 | [0.93–1.11] |
| rs4878104 | 0.56 | 1.02 | [0.95–1.11] | 0.74 | 0.99 | [0.91–1.07] |
| rs12685372 | 0.31 | 0.95 | [0.85 - 1.05] | 0.47 | 0.96 | [0.86–1.07] |
| rs4877367 | 0.61 | 1.03 | [0.91–1.18] | 0.54 | 1.04 | [0.91 - 1.20] |
| rs7046290 | 0.78 | 0.98 | [0.82–1.16] | 0.84 | 0.98 | [0.82–1.18] |
| rs1473180 | 0.23 | 1.05 | [0.97–1.14] | 0.20 | 1.06 | [0.97–1.16] |
| rs3095748 | 0.56 | 1.04 | [0.91 - 1.19] | 0.59 | 1.04 | [0.90-1.20] |
| rs3124236 | 0.36 | 1.05 | [0.95–1.16] | 0.34 | 1.06 | [0.95 - 1.18] |
| rs3739784 rs3124237 | 0.48 0.38 | 0.94 1.05 | [0.8–1.11] [0.94–1.19] | 0.67 0.39 | 0.96 1.06 | [0.81 - 1.15] [0.93 - 1.20] |
| rs5124257 rs7027958 | 0.38 | 1.05 | [0.94 - 1.19] [0.96 - 1.12] | 0.39 | 1.06 | [0.93 - 1.20] [0.96 - 1.13] |
| rs3095747 | 0.33 0.02 | 0.91 | [0.90-1.12] [0.84-0.98] | 0.32 | 0.92 | [0.90-1.13] [0.85-1.00] |
| rs13288561 | 0.02 | 1.07 | [0.96 - 1.20] | 0.33 | 1.06 | [0.94 - 1.20] |
| rs11141911 | 0.33 | 1.09 | [0.92 - 1.28] | 0.33 | 1.06 | [0.89-1.27] |
| | | / | [=0] | 5 | | [0:05 1:00] |

Supplementary Table 6 Association of SNPs with AD risk in the DAPK1 gene on chromosome 9

| Supplementary Table 6, continued | | | | | | | |
|----------------------------------|--------------|------|--------------------------------|---------|------|--------------------------------|--|
| | | Mode | 11 | | Mode | 12 | |
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs4129632 | 0.72 | 0.99 | [0.91-1.06] | 0.39 | 0.96 | [0.89-1.05] | |
| rs2111554 | 0.88 | 1.01 | [0.93-1.09] | 0.90 | 1.01 | [0.92 - 1.10] | |
| rs1015477 | 0.66 | 0.98 | [0.91–1.06] | 0.33 | 0.96 | [0.88–1.04] | |
| rs4877368 | 0.01 | 0.88 | [0.80-0.97] | 0.004 | 0.86 | [0.78-0.95] | |
| rs11141914 | 0.38 | 1.05 | [0.94-1.18] | 0.60 | 1.03 | [0.91–1.17] | |
| rs13283404 | 0.30 | 0.95 | [0.86-1.05] | 0.33 | 0.95 | [0.86–1.05] | |
| rs11141915 | 0.83 | 1.01 | [0.92 - 1.11] | 0.55 | 0.97 | [0.88-1.07] | |
| rs4878112 | 0.59 | 0.98 | [0.89–1.07] | 0.53 | 0.97 | [0.88–1.07] | |
| rs12235641 | 0.49 | 0.97 | [0.90-1.05] | 0.21 | 0.95 | [0.87-1.03] | |
| rs1861828 | 0.51 | 0.97 | [0.90–1.05] | 0.21 | 0.95 | [0.87–1.03] | |
| rs3124238 | 0.11 | 0.94 | [0.86–1.02] | 0.22 | 0.95 | [0.87–1.03] | |
| rs11141918 | 0.52 | 0.97 | [0.89–1.06] | 0.52 | 0.97 | [0.89–1.06] | |
| rs3118846 | 0.14 | 0.94 | [0.88 - 1.02] | 0.28 | 0.96 | [0.88 - 1.04] | |
| rs1927976 | 0.99 | 1.00 | [0.93–1.08] | 0.64 | 1.02 | [0.94 - 1.10] | |
| rs2274606 | 0.84 | 0.99 | [0.88 - 1.11] | 0.77 | 0.98 | [0.87 - 1.11] | |
| rs4878115 | 0.65 | 0.98 | [0.91–1.06] | 0.60 | 0.98 | [0.90–1.06] | |
| rs10512188 | 0.05 | 0.88 | [0.78 - 1.00] | 0.07 | 0.89 | [0.78 - 1.00] | |
| rs943855 | 0.80 | 0.99 | [0.92 - 1.07] | 0.76 | 0.99 | [0.91 - 1.07] | |
| rs3128471 | 0.64 | 0.98 | [0.88 - 1.08] | 0.68 | 0.98 | [0.97 - 1.09] | |
| rs3128477 | 0.31 | 1.04 | [0.96–1.13] | 0.22 | 1.05 | [0.97 - 1.15] | |
| rs721936 | 0.33 | 1.04 | [0.96 - 1.13] | 0.22 | 1.05 | [0.97 - 1.13] | |
| rs11141937 | 0.33 | 1.11 | [0.98 - 1.25] | 0.24 | 1.12 | [0.98 - 1.28] | |
| rs4878117 | 0.10 | 1.05 | [0.97 - 1.13] | 0.14 | 1.06 | [0.98 - 1.15] | |
| rs10868644 | 0.17 | 1.08 | [0.97 - 1.13] | 0.09 | 1.12 | [0.98 - 1.26] | |
| rs3118853 | 0.90 | 1.00 | [0.97 - 1.22] | 0.54 | 0.97 | [0.90 - 1.20] | |
| rs3128479 | 0.90 | 1.00 | [0.92 - 1.07] [0.94 - 1.10] | 0.34 | 1.01 | [0.93 - 1.00] | |
| rs3128479 | 0.04 | 1.02 | [0.94-1.10] [0.95-1.11] | 0.64 | 1.01 | [0.93-1.09] [0.94-1.11] | |
| rs7025760 | 0.48 | 1.03 | [0.93-1.11] [0.93-1.12] | 0.04 | 1.02 | [0.94-1.11] [0.91-1.11] | |
| rs3793647 | 0.84 | 0.99 | [0.93-1.12] [0.89-1.09] | 0.95 | 0.98 | [0.91-1.11] [0.87-1.09] | |
| rs3118860 | 0.84 | 1.01 | [0.89 - 1.09] [0.94 - 1.09] | 0.03 | 1.00 | [0.93 - 1.09] | |
| rs3118862 | 0.77 | 1.01 | [0.94-1.09] [0.93-1.08] | 0.92 | 0.99 | [0.93 - 1.09] [0.91 - 1.07] | |
| rs1056719 | 0.90 | 1.00 | [0.93-1.08] [0.94-1.09] | 0.83 | 1.04 | [0.91 - 1.07] [0.96 - 1.13] | |
| rs3118866 | 0.72 | 1.01 | [0.94 - 1.09] | 0.38 | 1.04 | [0.93 - 1.09] | |
| rs4877369 | 0.83 | 0.94 | [0.94-1.10] [0.83-1.05] | 0.80 | 0.90 | | |
| rs4877370 | 0.27 | 1.02 | [0.85 - 1.05] | 0.11 | 1.05 | [0.80–1.02] [0.96–1.14] | |
| rs3128501 | 0.37 | 1.02 | [0.93-1.10] [0.94-1.09] | 0.27 | 1.03 | [0.96-1.14] [0.95-1.12] | |
| | | | . , | | | | |
| rs3128506 | 0.62 | 0.98 | [0.91 - 1.06] | 0.90 | 1.00 | [0.92 - 1.08] | |
| rs2274611 | 0.22 0.74 | 1.05 | [0.97–1.13] | 0.22 | 1.05 | [0.97 - 1.14] | |
| rs1105384 | | 1.01 | [0.94 - 1.10] | 0.90 | 0.99 | [0.91–1.08] | |
| rs7869944 | 0.03 | 0.79 | [0.64-0.98] | 0.004 | 0.71 | [0.57 - 0.90] | |
| rs11998833 | 0.23 | 1.73 | [0.71 - 4.21] | 0.34 | 1.59 | [0.61-4.17] | |
| rs3793646 | 0.67 | 1.38 | [0.32–5.93] | 0.72 | 0.75 | [0.16-3.56] | |
| rs12338700 | 0.38 | 1.26 | [0.76-2.08] | 0.14 | 1.50 | [0.87 - 2.60] | |

Supplementary Table 6, continued

Model 1: adjusted for age, gender, and principal components. Model 2: adjusted for age, gender, principal components, *APOE* ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), *CLU* (rs11136000), *CR1* (rs6656401), and *PICALM* (rs541458).

| | | Mode | 11 | | Model 2 | | | |
|------------|---------|------|---------------|---------|---------|---------------|--|--|
| · | p value | OR | CI 95% | p value | OR | CI 95% | | |
| rs2450132 | 0.26 | 0.95 | [0.87-1.04] | 0.27 | 0.95 | [0.87-1.04] | | |
| rs2510044 | 0.85 | 0.99 | [0.89–1.10] | 0.58 | 0.97 | [0.86–1.09] | | |
| rs2511188 | 0.48 | 0.97 | [0.88–1.06] | 0.15 | 0.93 | [0.84-1.03] | | |
| rs2450135 | 0.49 | 0.94 | [0.78 - 1.12] | 0.61 | 0.95 | [0.78 - 1.16] | | |
| rs1318241 | 0.63 | 0.98 | [0.88 - 1.08] | 0.35 | 0.95 | [0.85 - 1.06] | | |
| rs2450129 | 0.57 | 0.97 | [0.88 - 1.07] | 0.32 | 0.95 | [0.85 - 1.05] | | |
| rs731600 | 0.51 | 0.97 | [0.87 - 1.07] | 0.24 | 0.94 | [0.84 - 1.04] | | |
| rs1893447 | 0.56 | 0.97 | [0.88 - 1.07] | 0.26 | 0.94 | [0.84 - 1.05] | | |
| rs2511175 | 0.65 | 0.98 | [0.88 - 1.08] | 0.38 | 0.95 | [0.85 - 1.06] | | |
| rs1981405 | 0.64 | 0.97 | [0.87–1.09] | 0.37 | 0.95 | [0.84 - 1.07] | | |
| rs7927923 | 0.40 | 0.96 | [0.88-1.05] | 0.22 | 0.94 | [0.85 - 1.04] | | |
| rs4945261 | 0.62 | 0.97 | [0.88 - 1.08] | 0.36 | 0.95 | [0.85 - 1.06] | | |
| rs7107174 | 0.67 | 0.98 | [0.88 - 1.08] | 0.40 | 0.95 | [0.86 - 1.06] | | |
| rs4944196 | 0.61 | 0.97 | [0.88 - 1.08] | 0.36 | 0.95 | [0.85 - 1.06] | | |
| rs6592772 | 0.62 | 0.97 | [0.88 - 1.08] | 0.34 | 0.95 | [0.85 - 1.06] | | |
| rs10899469 | 0.61 | 0.97 | [0.88 - 1.08] | 0.35 | 0.95 | [0.85 - 1.06] | | |
| rs11237451 | 0.43 | 0.96 | [0.88–1.06] | 0.25 | 0.95 | [0.86 - 1.04] | | |
| rs2292572 | 0.44 | 0.96 | [0.87–1.06] | 0.25 | 0.94 | [0.84 - 1.04] | | |
| rs10501426 | 0.74 | 0.98 | [0.89–1.09] | 0.42 | 0.96 | [0.86–1.06] | | |
| rs11601726 | 0.88 | 1.01 | [0.90-1.13] | 0.36 | 1.06 | [0.94 - 1.20] | | |
| rs11603112 | 0.12 | 0.92 | [0.84-1.02] | 0.06 | 0.90 | [0.81 - 1.00] | | |
| rs7112234 | 0.68 | 0.98 | [0.89–1.08] | 0.40 | 0.96 | [0.86 - 1.06] | | |
| rs7941639 | 0.58 | 0.97 | [0.88 - 1.07] | 0.33 | 0.95 | [0.85 - 1.05] | | |
| rs10899496 | 0.63 | 0.98 | [0.88 - 1.08] | 0.32 | 0.95 | [0.85-1.05] | | |

Supplementary Table 7 Association of SNPs with AD risk in the GAB2 gene on chromosome 11

Model 1: adjusted for age, gender, and principal components. Model 2: adjusted for age, gender, principal components, *APOE* ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), *CLU* (rs11136000), CR1 (rs6656401), and PICALM (rs541458).

| | _ | Model 1 | | | Mode | 12 |
|------------|---------|---------|---------------|---------|------|-------------|
| | p value | OR | CI 95% | p value | OR | CI 95% |
| rs17826697 | 0.47 | 0.97 | [0.90-1.05] | 0.59 | 0.98 | [0.90-1.06] |
| rs12889978 | 0.03 | 1.09 | [1.01 - 1.18] | 0.01 | 1.11 | [1.02-1.21] |
| rs12891726 | 0.02 | 1.09 | [1.01–1.18] | 0.01 | 1.11 | [1.03-1.21] |
| rs10148982 | 0.06 | 1.08 | [1.00-1.17] | 0.09 | 1.08 | [0.99–1.17] |
| rs11846253 | 0.86 | 1.01 | [0.91–1.12] | 0.92 | 1.01 | [0.90-1.13] |
| rs6575454 | 0.82 | 1.01 | [0.92–1.12] | 0.56 | 1.03 | [0.93–1.15] |
| rs7142288 | 0.79 | 1.01 | [0.91–1.13] | 0.83 | 1.01 | [0.901.14] |
| rs7146876 | 0.07 | 1.09 | [0.99–1.20] | 0.10 | 1.09 | [0.98–1.21] |
| rs7148204 | 0.77 | 1.01 | [0.93-1.10] | 0.57 | 1.03 | [0.94–1.12] |
| rs9323913 | 0.29 | 0.96 | [0.88 - 1.04] | 0.38 | 0.96 | [0.88-1.05] |
| rs742893 | 0.98 | 1.00 | [0.93-1.08] | 0.80 | 0.99 | [0.91–1.07] |
| rs9323914 | 0.24 | 1.06 | [0.96–1.16] | 0.62 | 1.03 | [0.93–1.13] |
| rs737566 | 0.002 | 1.20 | [1.07–1.34] | 0.01 | 1.17 | [1.03-1.32] |
| rs1884076 | 0.90 | 1.00 | [0.93-1.08] | 0.75 | 0.99 | [0.91–1.07] |
| rs17826925 | 0.95 | 1.00 | [0.93-1.08] | 0.71 | 0.99 | [0.91–1.07] |
| rs11845214 | 0.74 | 0.99 | [0.92–1.06] | 0.50 | 0.97 | [0.90-1.05] |
| rs11851301 | 0.82 | 0.99 | [0.92–1.07] | 0.79 | 1.01 | [0.93-1.10] |
| rs12437220 | 0.24 | 0.47 | [0.13–1.66] | 0.21 | 0.43 | [0.11-1.60] |
| rs11623661 | 0.34 | 0.96 | [0.89–1.04] | 0.37 | 0.96 | [0.89-1.05] |

Supplementary Table 8

association of SNPs with AD risk in the GWA14q32.13 gene on chromosome $14\,$

Model 1: adjusted for age, gender, and principal components.

| | | Model 1 | | | Model 2 | | |
|------------|---------|---------|---------------|---------|---------|---------------|--|
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs11193420 | 0.77 | 0.99 | [0.91–1.07] | 0.72 | 0.98 | [0.90-1.08] | |
| rs17122604 | 0.94 | 1.01 | [0.87–1.16] | 0.94 | 1.01 | [0.86–1.17] | |
| rs1338965 | 0.68 | 1.03 | [0.89–1.19] | 0.92 | 1.01 | [0.86-1.18] | |
| rs11193430 | 0.80 | 1.02 | [0.87 - 1.20] | 0.80 | 0.98 | [0.82 - 1.17] | |
| rs10509835 | 0.88 | 1.01 | [0.87 - 1.18] | 0.76 | 1.03 | [0.87 - 1.21] | |
| rs7915045 | 0.66 | 1.02 | [0.92–1.14] | 0.72 | 1.02 | [0.91–1.15] | |
| rs10787025 | 0.79 | 1.02 | [0.88 - 1.18] | 0.88 | 0.99 | [0.84–1.16] | |
| rs7098468 | 0.50 | 0.97 | [0.90-1.05] | 0.70 | 0.98 | [0.91 - 1.07] | |
| rs17122679 | 0.98 | 1.00 | [0.72–1.37] | 0.97 | 1.01 | [0.71 - 1.42] | |

Supplementary Table 9 Association of SNPs with AD risk in the hCG2039140 gene on chromosome 10

Model 1: adjusted for age, gender, and principal components.

Model 2: adjusted for age, gender, principal components, APOE ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), CLU (rs11136000), CR1 (rs6656401), and PICALM (rs541458).

Supplementary Table 10

Association of SNPs with AD risk in the IL1A gene on chromosome 2

| | | Model 1 | | | Model 2 | | |
|------------|---------|---------|-------------|---------|---------|---------------|--|
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs6731822 | 0.79 | 1.02 | [0.87–1.21] | 0.48 | 1.07 | [0.89–1.27] | |
| rs2048874 | 0.98 | 1.00 | [0.89–1.12] | 0.86 | 0.99 | [0.88 - 1.12] | |
| rs4848300 | 0.91 | 1.00 | [0.93-1.09] | 0.80 | 1.01 | [0.93–1.11] | |
| rs17561 | 0.94 | 1.00 | [0.92-1.09] | 0.83 | 1.01 | [0.92–1.10] | |
| rs3783526 | 0.99 | 1.00 | [0.92-1.09] | 0.86 | 1.01 | [0.92-1.10] | |
| rs4848304 | 0.84 | 1.01 | [0.93-1.10] | 0.74 | 1.02 | [0.93–1.11] | |
| rs6746923 | 0.98 | 1.00 | [0.93-1.08] | 0.81 | 0.99 | [0.91–1.07] | |
| rs10496444 | 0.96 | 1.00 | [0.92-1.08] | 0.90 | 1.01 | [0.92-1.10] | |
| rs11687624 | 0.91 | 1.00 | [0.93-1.08] | 0.84 | 1.01 | [0.93-1.09] | |
| rs17042407 | 0.66 | 1.02 | [0.94–1.11] | 0.89 | 1.01 | [0.92-1.10] | |
| rs4849122 | 0.20 | 0.89 | [0.76–1.06] | 0.19 | 0.89 | [0.74–1.06] | |

Model 1: adjusted for age, gender, and principal components.

Model 2: adjusted for age, gender, principal components, APOE ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), CLU (rs11136000), CR1 (rs6656401), and PICALM (rs541458).

Supplementary Table 11

| Association of S | SNPs with AF | risk in the IL1B | gene on chromosome 2 |
|--------------------|--------------|-------------------|----------------------|
| 1 issociation of c | | max in the in the | zene on emonosome z |

| | Model 1 | | | Model 2 | | |
|------------|---------|------|-------------|---------|------|-------------|
| | p value | OR | CI 95% | p value | OR | CI 95% |
| rs4849123 | 0.79 | 0.99 | [0.91–1.07] | 0.60 | 0.98 | [0.90-1.06] |
| rs11680809 | 0.55 | 0.98 | [0.91–1.05] | 0.32 | 0.96 | [0.89–1.04] |
| rs12469600 | 0.59 | 1.02 | [0.94–1.12] | 0.40 | 1.04 | [0.95–1.14] |
| rs4849124 | 0.51 | 1.03 | [0.95–1.11] | 0.48 | 1.03 | [0.95–1.13] |
| rs3917368 | 0.76 | 0.99 | [0.92–1.07] | 0.67 | 0.98 | [0.91–1.07] |
| rs1143634 | 0.89 | 1.01 | [0.92–1.10] | 0.60 | 1.03 | [0.93–1.13] |
| rs12621220 | 0.32 | 1.04 | [0.96–1.14] | 0.35 | 1.05 | [0.95-1.15] |
| rs4849127 | 0.32 | 1.08 | [0.93-1.24] | 0.79 | 1.02 | [0.87–1.19] |
| rs10169916 | 0.11 | 1.07 | [0.99–1.16] | 0.26 | 1.05 | [0.96–1.14] |
| rs4447608 | 0.36 | 0.97 | [0.90-1.04] | 0.46 | 0.97 | [0.90-1.05] |

Model 1: adjusted for age, gender, and principal components.

| Supp | lementary | Tabl | le 12 |
|------|-----------|------|-------|
|------|-----------|------|-------|

Association of SNPs with AD risk in the Loc651924 gene on chromosome 6

| | Model 1 | | | Model 2 | | |
|-----------|---------|------|---------------|---------|------|---------------|
| | p value | OR | CI 95% | p value | OR | CI 95% |
| rs9389972 | 0.50 | 0.97 | [0.88-1.06] | 0.54 | 0.97 | [0.88-1.07] |
| rs9373333 | 0.58 | 0.97 | [0.89-1.07] | 0.58 | 0.97 | [0.88 - 1.07] |
| rs7776318 | 0.43 | 0.97 | [0.89–1.05] | 0.36 | 0.96 | [0.88 - 1.05] |
| rs9376669 | 0.47 | 0.97 | [0.90-1.05] | 0.54 | 0.98 | [0.90-1.06] |
| rs4896574 | 0.62 | 1.02 | [0.95 - 1.10] | 0.64 | 1.02 | [0.94 - 1.10] |
| rs7742164 | 0.46 | 0.97 | [0.90-1.05] | 0.56 | 0.98 | [0.90-1.06] |

Model 1: adjusted for age, gender and principal components.

Model 2: adjusted for age, gender and principal components, *APOE* ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), *CLU* (rs11136000), *CRI* (rs6656401), and *PICALM* (rs541458).

| Supp | lementary | Table | 13 |
|------|-----------|-------|----|
| | | | |

Association of SNPs with AD risk in the MTHFR gene on chromosome 1

| | | Mode | 11 | | Mode | 12 |
|------------|---------|------|---------------|---------|------|---------------|
| | p value | OR | CI 95% | p value | OR | CI 95% |
| rs6696752 | 0.16 | 0.94 | [0.87-1.02] | 0.17 | 0.94 | [0.86-1.03] |
| rs4846048 | 0.26 | 0.95 | [0.88-1.04] | 0.26 | 0.95 | [0.87 - 1.04] |
| rs2274976 | 0.87 | 1.02 | [0.85-1.21] | 0.26 | 1.12 | [0.92-1.35] |
| rs1476413 | 0.25 | 0.95 | [0.87–1.04] | 0.45 | 0.97 | [0.88-1.06] |
| rs6541003 | 0.31 | 0.96 | [0.89–1.04] | 0.65 | 0.98 | [0.90-1.06] |
| rs1801133 | 0.93 | 1.00 | [0.93-1.08] | 0.90 | 0.99 | [0.92 - 1.08] |
| rs1572151 | 0.35 | 1.07 | [0.93-1.23] | 0.43 | 1.06 | [0.92-1.23] |
| rs9651118 | 0.10 | 1.08 | [0.98-1.20] | 0.32 | 1.05 | [0.95–1.17] |
| rs17367504 | 0.80 | 0.99 | [0.89–1.10] | 0.59 | 1.03 | [0.92–1.16] |
| rs3737964 | 0.31 | 0.96 | [0.88-1.04] | 0.33 | 0.96 | [0.87 - 1.05] |
| rs12404124 | 0.19 | 0.95 | [0.88-1.03] | 0.48 | 0.97 | [0.90-1.05] |
| rs17376328 | 0.21 | 1.12 | [0.94–1.33] | 0.38 | 1.09 | [0.90-1.31] |
| rs2076003 | 0.69 | 1.04 | [0.87-1.23] | 0.17 | 1.14 | [0.95-1.38] |
| rs6540999 | 0.33 | 0.96 | [0.89–1.04] | 0.57 | 0.98 | [0.90-1.06] |
| rs4845881 | 0.04 | 0.92 | [0.85 - 1.00] | 0.11 | 0.93 | [0.86-1.02] |
| rs4846051 | 0.47 | 1.24 | [0.70-2.20] | 0.67 | 1.15 | [0.62-2.13] |
| rs2184226 | 0.32 | 1.07 | [0.93-1.23] | 0.34 | 1.08 | [0.93-1.25] |
| rs4846042 | 0.18 | 1.69 | [0.79–3.61] | 0.43 | 1.40 | [0.61-3.20] |

Model 1: adjusted for age, gender and principal components. Model 2: adjusted for age, gender, principal components, *APOE* ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), *CLU* (rs11136000), *CR1* (rs6656401), and *PICALM* (rs541458).

| Supplementary | Table 14 |
|---------------|----------|
|---------------|----------|

Association of SNPs with AD risk in the NEDD9 gene on chromosome 6

| | Model 1 | | | | Model 2 | | |
|------------|---------|------|---------------|---------|---------|---------------|--|
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs4713225 | 0.26 | 1.04 | [0.97-1.12] | 0.25 | 1.05 | [0.97–1.14] | |
| rs9368603 | 0.04 | 1.11 | [1.00-1.24] | 0.11 | 1.10 | [0.98-1.23] | |
| rs6456963 | 0.37 | 0.92 | [0.77 - 1.10] | 0.32 | 0.91 | [0.75 - 1.10] | |
| rs10484448 | 0.13 | 0.93 | [0.84-1.02] | 0.12 | 0.92 | [0.82 - 1.02] | |
| rs4713229 | 0.90 | 0.99 | [0.90-1.10] | 0.73 | 0.98 | [0.88 - 1.09] | |
| rs4526180 | 0.32 | 1.04 | [0.96-1.12] | 0.48 | 1.03 | [0.95 - 1.12] | |
| rs1465131 | 0.64 | 0.98 | [0.88-1.09] | 0.49 | 0.96 | [0.86 - 1.08] | |
| rs16871072 | 0.33 | 1.08 | [0.92-1.27] | 0.21 | 1.12 | [0.94–1.33] | |
| rs3798729 | 0.53 | 1.03 | [0.94–1.13] | 0.70 | 1.02 | [0.92 - 1.12] | |
| rs10947009 | 0.74 | 0.99 | [0.92-1.06] | 0.75 | 0.99 | [0.91 - 1.07] | |
| rs3798731 | 0.38 | 1.04 | [0.96-1.12] | 0.27 | 1.05 | [0.96–1.14] | |
| rs2146342 | 0.53 | 1.03 | [0.94–1.12] | 0.52 | 1.03 | [0.94–1.13] | |
| rs10947021 | 0.49 | 0.97 | [0.88–1.06] | 0.41 | 0.96 | [0.86–1.06] | |
| rs6912916 | 0.72 | 0.98 | [0.89–1.08] | 0.75 | 0.98 | [0.89–1.09] | |
| rs3734404 | 0.84 | 1.01 | [0.93–1.09] | 0.80 | 1.01 | [0.93–1.10] | |
| rs9295823 | 0.62 | 0.97 | [0.88 - 1.08] | 0.34 | 0.95 | [0.84–1.06] | |

| | | Supplen | nentary Table 14 | , continued | | |
|-------------------------|--------------|----------------|--------------------------------|--------------|--------------|--------------------------------|
| | | Mode | 11 | | Mode | 12 |
| | p value | OR | CI 95% | p value | OR | CI 95% |
| rs1009667 | 0.77 | 1.01 | [0.93-1.10] | 0.94 | 1.00 | [0.92-1.09] |
| rs2182335 | 0.67 | 0.98 | [0.90–1.07] | 0.65 | 0.98 | [0.89–1.07] |
| rs2018334 | 0.53 | 0.98 | [0.91–1.05] | 0.61 | 0.98 | [0.90–1.06] |
| rs943008 | 0.45 | 0.94 | [0.79–1.11] | 0.38 | 0.92 | [0.77 - 1.10] |
| rs17496379 | 0.68 | 1.04 | [0.86–1.26] | 0.90 | 1.01 | [0.83–1.24] |
| rs2025677 | 0.67 | 0.97 | [0.87 - 1.09] | 0.26 | 0.93 | [0.82 - 1.05] |
| rs7769173 | 0.67 | 1.02 | [0.94–1.10] | 0.90 | 1.01 | [0.93–1.09] |
| rs6457131 | 0.17 | 1.06 | [0.97–1.16] | 0.24 | 1.06 | [0.96–1.16] |
| rs9295828 | 0.60 | 0.98 | [0.91–1.06] | 0.78 | 0.99 | [0.91 - 1.07] |
| rs9380149 | 0.61 | 0.98 | [0.90–1.07] | 0.64 | 0.98 | [0.89–1.07] |
| rs1475345 | 0.62 | 1.02 | [0.95–1.10] | 0.91 | 1.00 | [0.93–1.09] |
| rs2182337 | 0.86 | 0.99 | [0.89 - 1.10] | 0.84 | 1.01 | [0.90-1.14] |
| rs9368621 | 0.65 | 0.98 | [0.88–1.08] | 0.78 | 1.02 | [0.91 - 1.13] |
| rs17496723 rs6457160 | 0.25 0.76 | 1.05 1.01 | [0.97 - 1.14] [0.94 - 1.09] | 0.42 0.75 | 1.04 1.01 | [0.95–1.13] [0.94–1.10] |
| rs9468690 | 0.70 | 1.01 | [0.94-1.09] | 0.73 | 1.01 | [0.94-1.10] [0.94-1.11] |
| rs9393992 | 0.89 | 0.99 | [0.94-1.10] [0.91-1.09] | 0.80 | 1.02 | [0.94-1.11] [0.92-1.11] |
| rs2025676 | 0.92 | 0.99 | [0.85 - 1.16] | 0.81 | 0.98 | [0.83 - 1.16] |
| rs2327389 | 0.88 | 0.99 | [0.88 - 1.12] | 0.90 | 1.01 | [0.89 - 1.15] |
| rs12209631 | 0.26 | 0.95 | [0.88–1.04] | 0.19 | 0.94 | [0.86–1.03] |
| rs9393994 | 0.75 | 0.98 | [0.86–1.11] | 0.46 | 0.95 | [0.83–1.09] |
| rs6908326 | 0.73 | 0.98 | [0.90-1.08] | 0.67 | 0.98 | [0.89-1.08] |
| rs16871157 | 0.16 | 0.90 | [0.78–1.04] | 0.45 | 0.94 | [0.81–1.10] |
| rs6457200 | 0.62 | 1.02 | [0.95-1.10] | 0.57 | 1.02 | [0.94–1.11] |
| rs2142741 | 0.67 | 1.02 | [0.93–1.13] | 0.53 | 1.03 | [0.93–1.15] |
| rs6932615 | 0.59 | 0.98 | [0.91–1.06] | 0.50 | 0.97 | [0.90-1.05] |
| rs16871166 | 0.91 | 0.99 | [0.92–1.08] | 0.86 | 0.99 | [0.91–1.08] |
| rs11964334 | 0.28 | 0.95 | [0.85 - 1.05] | 0.32 | 0.95 | [0.85 - 1.06] |
| rs6905101 | 0.30 | 0.94 | [0.83–1.06] | 0.28 | 0.93 | [0.82 - 1.06] |
| rs11967989 | 0.71 | 0.97 | [0.81–1.15] | 0.81 | 0.98 | [0.81–1.18] |
| rs1018374 | 0.02 | 1.13 | [1.02–1.25] | 0.01 | 1.16 | [1.04–1.30] |
| rs7748486 | 0.58 0.99 | $0.98 \\ 1.00$ | [0.90-1.06] | 0.72 0.76 | 0.98 1.01 | [0.90-1.08] |
| rs2327394 rs760680 | 0.99 | 0.99 | [0.92–1.09] [0.91–1.08] | 0.78 | 1.01 | [0.92-1.12] [0.92-1.11] |
| rs2142742 | 0.87 | 0.99 | [0.91-1.08] [0.85-1.13] | 0.89 | 0.98 | [0.92 - 1.11] [0.84 - 1.14] |
| rs2072834 | 0.70 | 0.98 | [0.85-1.15] [0.87-1.05] | 0.78 | 0.96 | [0.87 - 1.06] |
| rs4713379 | 0.78 | 1.01 | [0.91–1.13] | 0.51 | 1.04 | [0.93 - 1.16] |
| rs16871236 | 0.14 | 0.94 | [0.87 - 1.02] | 0.14 | 0.94 | [0.86–1.02] |
| rs16871247 | 0.08 | 0.93 | [0.86–1.01] | 0.13 | 0.93 | [0.86–1.02] |
| rs2064111 | 0.22 | 0.95 | [0.88-1.03] | 0.32 | 0.96 | [0.88 - 1.04] |
| rs10484451 | 0.67 | 0.97 | [0.83–1.13] | 0.73 | 0.97 | [0.82–1.15] |
| rs1883240 | 0.28 | 0.96 | [0.89–1.03] | 0.47 | 0.97 | [0.90-1.05] |
| rs9791189 | 0.06 | 0.91 | [0.83 - 1.00] | 0.11 | 0.92 | [0.83 - 1.02] |
| rs967473 | 0.92 | 1.01 | [0.90–1.13] | 0.76 | 1.02 | [0.90–1.15] |
| rs1883238 | 0.90 | 0.99 | [0.90 - 1.10] | 0.91 | 1.01 | [0.91 - 1.12] |
| rs11757904 | 0.72 | 0.98 | [0.86–1.11] | 0.85 | 0.99 | [0.86–1.13] |
| rs7738900 | 0.50 | 0.97 | [0.89–1.06] | 0.23 | 0.94 | [0.86–1.04] |
| rs2064112 | 0.29 | 0.96 | [0.89–1.04] | 0.35 | 0.96 | [0.89–1.04] |
| rs2179179 | 0.51 | 1.03 | [0.94–1.13] | 0.42 | 1.04 | [0.94–1.15] |
| rs2950 | 0.19 | 0.95 | [0.87–1.03] | 0.54 | 0.97 | [0.89–1.06] |
| rs1883235 | 0.84 | 1.01 | [0.92 - 1.10] | 0.75 | 0.98 1.04 | [0.90-1.08] |
| rs9348868 rs7775262 | 0.25 0.20 | 1.05 0.95 | [0.97–1.13] [0.88–1.03] | 0.38 0.46 | 1.04 0.97 | [0.96–1.13] [0.89–1.05] |
| rs10484453 | 0.20 | 1.03 | [0.88 - 1.03] [0.88 - 1.20] | 0.46 | 1.04 | [0.89 - 1.03] [0.88 - 1.23] |
| rs9296000 | 0.72 | 1.03 | [0.88-1.20] [0.97-1.12] | 0.00 | 1.04 | [0.86-1.23] [0.95-1.12] |
| rs17507384 | 0.31 | 1.04 | [0.97-1.12] [0.86-1.22] | 1.00 | 1.00 | [0.93-1.12] [0.83-1.21] |
| rs6932496 | 0.54 | 1.02 | [0.95 - 1.11] | 0.61 | 1.00 | [0.94 - 1.11] |
| rs11964176 | 0.63 | 0.76 | [0.25–2.30] | 0.87 | 0.91 | [0.27–3.05] |
| rs16871253 | 0.34 | 1.08 | [0.92–1.27] | 0.29 | 1.10 | [0.92–1.31] |

Supplementary Table 14, continued

 Instruction
 0.05
 0.70
 [0.23-2.50] 0.87
 0.91
 [0.27-3.05]

 rs16871253
 0.34
 1.08
 [0.92-1.27] 0.29
 1.10
 [0.92-1.31]

 Model 1: adjusted for age, gender and principal components.

 Model 2: adjusted for age, gender, principal components, APOE ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), CLU (rs11136000), CR1 (rs6656401), and PICALM (rs541458).

| | Model 1 | | | | Model 2 | | |
|------------|---------|------|---------------|---------|---------|---------------|--|
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs2025115 | 0.57 | 1.02 | [0.95–1.10] | 0.61 | 1.02 | [0.94–1.11] | |
| rs6139516 | 0.47 | 0.97 | [0.88 - 1.06] | 0.55 | 0.97 | [0.87 - 1.07] | |
| rs2859720 | 0.48 | 1.03 | [0.95–1.11] | 0.63 | 1.02 | [0.94–1.11] | |
| rs6052761 | 0.91 | 1.01 | [0.89 - 1.14] | 0.67 | 1.03 | [0.90-1.17] | |
| rs2756271 | 0.28 | 0.96 | [0.89–1.04] | 0.37 | 0.96 | [0.89–1.05] | |
| rs6084833 | 0.88 | 0.99 | [0.83-1.17] | 0.86 | 0.98 | [0.82-1.18] | |
| rs6107516 | 0.83 | 0.99 | [0.91 - 1.08] | 0.48 | 0.97 | [0.88–1.06] | |
| rs12625444 | 0.76 | 0.99 | [0.90 - 1.08] | 0.97 | 1.00 | [0.90-1.11] | |
| rs6116477 | 0.80 | 1.01 | [0.92–1.11] | 0.85 | 0.99 | [0.90-1.09] | |
| rs2855412 | 0.27 | 1.06 | [0.95–1.19] | 0.40 | 1.05 | [0.94–1.18] | |
| rs6052778 | 0.92 | 0.99 | [0.87 - 1.14] | 0.74 | 1.02 | [0.89–1.18] | |
| rs6037938 | 0.56 | 0.92 | [0.70-1.21] | 0.88 | 1.02 | [0.76–1.37] | |
| rs6052787 | 0.42 | 1.05 | [0.94–1.17] | 0.52 | 1.04 | [0.92–1.17] | |
| rs926106 | 0.76 | 0.99 | [0.90–1.08] | 0.73 | 0.98 | [0.90-1.08] | |

Supplementary Table 15 Association of SNPs with AD risk in the PRNP gene on chromosome 20

Model 1: adjusted for age, gender, and principal components. Model 2: adjusted for age, gender, principal components, *APOE* ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), *CLU* (rs11136000), *CR1* (rs6656401), and *PICALM* (rs541458).

| Supplementary Table 16 | Supp | lementary | Table | 16 |
|------------------------|------|-----------|-------|----|
|------------------------|------|-----------|-------|----|

Association of SNPs with AD risk in the SORCS1 gene on chromosome 10

| | | Mode | 11 | | Mode | 12 |
|------------|---------|------|---------------|---------|------|---------------|
| | p value | OR | CI 95% | p value | OR | CI 95% |
| rs2418811 | 0.86 | 0.99 | [0.90-1.10] | 0.91 | 1.01 | [0.90-1.12] |
| rs11814111 | 0.08 | 1.09 | [0.99–1.19] | 0.06 | 1.10 | [1.00-1.22] |
| rs11814145 | 0.31 | 1.05 | [0.96-1.15] | 0.28 | 1.05 | [0.96-1.16] |
| rs1269918 | 0.85 | 1.01 | [0.93-1.09] | 0.68 | 1.02 | [0.94 - 1.10] |
| rs7074484 | 0.40 | 1.04 | [0.95–1.15] | 0.33 | 1.05 | [0.95–1.17] |
| rs10491052 | 0.08 | 1.10 | [0.99-1.22] | 0.06 | 1.12 | [1.00-1.25] |
| rs11192998 | 0.15 | 1.08 | [0.97-1.20] | 0.08 | 1.10 | [0.99–1.23] |
| rs7068978 | 0.08 | 1.13 | [0.98-1.29] | 0.006 | 1.22 | [1.06–1.41] |
| rs11193007 | 0.09 | 1.12 | [0.98–1.29] | 0.006 | 1.22 | [1.06-1.41] |
| rs7095427 | 0.42 | 1.05 | [0.94–1.17] | 0.16 | 1.09 | [0.97 - 1.23] |
| rs821927 | 0.94 | 1.01 | [0.87–1.17] | 0.50 | 0.95 | [0.81–1.11] |
| rs821936 | 0.84 | 1.02 | [0.87–1.18] | 0.63 | 0.96 | [0.82-1.13] |
| rs821962 | 0.09 | 1.07 | [0.99–1.15] | 0.07 | 1.08 | [0.99–1.17] |
| rs821950 | 0.37 | 0.9 | [0.71 - 1.14] | 0.39 | 0.89 | [0.69–1.15] |
| rs911580 | 0.92 | 1.01 | [0.87–1.17] | 0.59 | 0.96 | [0.81 - 1.12] |
| rs10748924 | 0.12 | 1.06 | [0.99–1.14] | 0.06 | 1.08 | [1.00 - 1.17] |
| rs2756251 | 0.003 | 1.17 | [1.05–1.31] | 0.004 | 1.18 | [1.05–1.33] |
| rs10786972 | 0.002 | 1.18 | [1.06–1.31] | 0.003 | 1.19 | [1.06–1.33] |
| rs1890457 | 0.05 | 1.08 | [1.00-1.16] | 0.04 | 1.09 | [1.00-1.18] |
| rs878183 | 0.90 | 1.01 | [0.92 - 1.10] | 0.71 | 1.02 | [0.93-1.12] |
| rs2184796 | 0.13 | 1.06 | [0.98–1.14] | 0.07 | 1.08 | [0.99 - 1.17] |
| rs12256169 | 0.97 | 0.99 | [0.78 - 1.27] | 0.41 | 0.90 | [0.69 - 1.17] |
| rs2245123 | 0.003 | 1.20 | [1.06–1.35] | 0.0007 | 1.25 | [1.10–1.42] |
| rs10509823 | 0.69 | 0.98 | [0.90-1.07] | 0.89 | 0.99 | [0.91–1.09] |
| rs2486154 | 0.28 | 1.04 | [0.97–1.12] | 0.28 | 1.05 | [0.96–1.13] |
| rs12248379 | 0.15 | 1.07 | [0.98–1.18] | 0.43 | 1.04 | [0.94–1.15] |
| rs4918255 | 0.91 | 1.00 | [0.92–1.08] | 0.99 | 1.00 | [0.92 - 1.09] |
| rs2243454 | 0.61 | 0.98 | [0.91–1.06] | 0.73 | 0.99 | [0.91 - 1.07] |
| rs10786978 | 0.52 | 1.03 | [0.95–1.11] | 0.66 | 1.02 | [0.94–1.10] |
| rs11594752 | 0.93 | 1.00 | [0.93–1.08] | 0.64 | 0.98 | [0.90-1.06] |
| rs6584766 | 0.63 | 1.02 | [0.95–1.10] | 0.85 | 0.99 | [0.92 - 1.07] |
| rs2152676 | 0.16 | 0.92 | [0.81-1.03] | 0.13 | 0.90 | [0.79–1.03] |
| rs2418828 | 0.12 | 1.06 | [0.98–1.14] | 0.36 | 1.04 | [0.96–1.12] |
| rs10884374 | 0.90 | 1.00 | [0.93–1.09] | 0.83 | 1.01 | [0.93-1.10] |

| | | Supplem | entary Table 16 | 6, continued | | |
|-------------------------|---------------------|----------------|--------------------------------|---------------------|----------------|--------------------------------|
| | | Model | 1 | | Mode | 12 |
| | p value | OR | CI 95% | p value | OR | CI 95% |
| rs9630080 | 0.91 | 1.01 | [0.84–1.21] | 0.93 | 0.99 | [0.82-1.21] |
| rs7079264 | 0.91 | 1.00 | [0.92–1.07] | 0.97 | 1.00 | [0.92-1.08] |
| rs7097380 | 0.89 | 0.99 | [0.92–1.07] | 0.93 | 1.00 | [0.92-1.08] |
| rs10509825 | 0.67 | 1.02 | [0.94–1.10] | 0.63 | 1.02 | [0.94–1.11] |
| rs10884381 | 0.97 | 1.00 | [0.93-1.08] | 0.99 | 1.00 | [0.92-1.09] |
| rs10884387 | 0.76 | 0.99 | [0.91 - 1.07] | 0.92 | 1.00 | [0.91–1.08] |
| rs822095 | 0.94 | 1.00 | [0.93–1.09] | 0.75 | 1.01 | [0.93–1.11] |
| rs10786998 | 0.98 | 1.00 | [0.93–1.08] | 0.75 | 1.01 | [0.93–1.10] |
| rs822097 | 0.54 | 1.05 | [0.91 - 1.20] | 0.49 | 1.05 | [0.91–1.23] |
| rs822094 | 0.50 | 1.05 | [0.91 - 1.21] | 0.34 | 1.08 | [0.92–1.25] |
| rs11193130 | 0.98 | 1.00 | [0.93–1.08] | 0.72 | 1.02 | [0.94–1.10] |
| rs10786999 | 0.91 | 1.00 | [0.93–1.09] | 0.86 | 1.01 | [0.92–1.10] |
| rs719965 | 0.83 | 0.99 | [0.92–1.07] | 0.94 | 1.00 | [0.92–1.08] |
| rs1023024 | 0.99 | 1.00 | [0.92–1.09] | 0.65 | 1.02 | [0.93–1.12] |
| rs4918274 | 0.93 | 1.00 | [0.92–1.08] | 0.51 | 0.97 | [0.89–1.06] |
| rs7897726 | 0.96 | 1.00 | [0.92 - 1.09] | 0.87 | 0.99 | [0.91 - 1.08] |
| rs17121852 | 0.98 0.81 | 1.00 | [0.74–1.34] | 0.97 | 0.99 | [0.72 - 1.36] |
| rs6584777 rs1887635 | | 0.99 | [0.91 - 1.07] | 0.61 | 0.98 | [0.90–1.07] |
| | 0.05 0.90 | 1.10 0.99 | [1.00-1.20] [0.92-1.08] | 0.06 0.66 | 1.10 | [1.00-1.21] [0.90-1.07] |
| rs10884399 rs7920985 | 0.90 | 0.99 | [0.92 - 1.08] [0.90 - 1.04] | 0.66 | 0.98 0.97 | [0.90-1.07] [0.90-1.06] |
| rs6584784 | 0.58 | 0.97 | [0.90-1.04] [0.90-1.06] | 0.33 | 0.97 | [0.90-1.00] [0.89-1.05] |
| rs10884402 | 0.38 | 1.00 | [0.90-1.00] [0.92-1.08] | 0.41 | 1.01 | [0.89 - 1.03] [0.93 - 1.09] |
| rs7078098 | 0.54 | 0.98 | [0.92 - 1.03] [0.90 - 1.05] | 0.35 | 0.96 | [0.93-1.09] [0.88-1.04] |
| rs950809 | 0.28 | 0.96 | [0.89 - 1.03] | 0.19 | 0.95 | [0.83-1.04] [0.87-1.03] |
| rs717751 | 0.91 | 1.00 | [0.93 - 1.09] | 0.78 | 0.99 | [0.90 - 1.08] |
| rs10509826 | 0.44 | 0.97 | [0.89–1.05] | 0.45 | 0.97 | [0.89–1.05] |
| rs17195022 | 0.54 | 1.03 | [0.94–1.13] | 0.40 | 1.04 | [0.95–1.15] |
| rs10748932 | 0.95 | 1.00 | [0.91 - 1.11] | 0.85 | 1.01 | [0.91–1.12] |
| rs11193190 | 0.93 | 1.00 | [0.93–1.08] | 0.85 | 0.99 | [0.92-1.08] |
| rs10884409 | 0.77 | 1.01 | [0.94–1.09] | 0.99 | 1.00 | [0.92-1.08] |
| rs2418834 | 0.43 | 1.04 | [0.95–1.14] | 0.20 | 1.07 | [0.97-1.18] |
| rs6584791 | 0.99 | 1.00 | [0.93–1.08] | 0.84 | 1.01 | [0.93-1.09] |
| rs17209374 | 0.47 | 1.04 | [0.94–1.14] | 0.29 | 1.06 | [0.95–1.17] |
| rs12240854 | 0.40 | 0.97 | [0.89–1.05] | 0.46 | 0.97 | [0.89–1.06] |
| rs12240947 | 0.85 | 1.01 | [0.94–1.09] | 0.82 | 0.99 | [0.91-1.07] |
| rs1556758 | 0.69 | 0.98 | [0.91–1.06] | 0.94 | 1.00 | [0.92-1.08] |
| rs2149196 | 0.94 | 1.00 | [0.93–1.08] | 0.82 | 0.99 | [0.91 - 1.07] |
| rs7073924 | 0.53 | 1.03 | [0.93–1.14] | 0.55 | 1.03 | [0.93–1.15] |
| rs1336978 | 0.38 | 1.03 | [0.96–1.11] | 0.57 | 1.02 | [0.94–1.11] |
| rs11193198 | 0.29 | 0.96 | [0.89–1.04] | 0.43 | 0.97 | [0.89–1.05] |
| rs822326 | 0.27 | 0.93 | [0.82 - 1.06] | 0.16 | 0.91 | [0.79–1.04] |
| rs7089127 | 0.24 | 1.09 | [0.94–1.27] | 0.38 | 1.07 | [0.92–1.26] |
| rs607437 | 0.47 | 1.03 | [0.95–1.11] | 0.44 | 1.03 | [0.95 - 1.12] |
| rs7083707 | 0.99 | 1.00 | [0.87 - 1.15] | 0.60 | 0.96 | [0.82 - 1.12] |
| rs12248564 | 0.88 | 1.01 | [0.89–1.15] | 0.95 | 1.00 | [0.87–1.16] |
| rs685316 | 0.62 | 0.98 | [0.91–1.06] | 0.73 | 0.99 | [0.91 - 1.07] |
| rs7897974 | 0.80 | 1.01 | [0.94–1.09] | 0.92 | 1.00 | [0.93–1.09] |
| rs1251753 | 0.88 | 1.01 | [0.92 - 1.10] | 0.77 | 0.99 | [0.89–1.09] |
| rs610785 | 0.43 | 1.05 | [0.94–1.17] | 0.36 | 1.06 | [0.94–1.20] |
| rs12781860 | 0.70 | 1.03 | [0.90-1.17] | 0.68 | 1.03 | [0.89 - 1.19] |
| rs7896669 | 0.51 | 1.13 | [0.79–1.63] | 0.55 | 1.13 | [0.76–1.67] |
| rs661319 | 0.74 | 1.02 | [0.91 - 1.14] | 0.63 | 1.03 | [0.91 - 1.17] |
| rs11815967 rs2243581 | 0.96 0.26 | $1.00 \\ 1.08$ | [0.88 - 1.13] | 0.64 | 0.97 | [0.84–1.11] [0.95–1.24] |
| rs2243581 rs7076316 | | | [0.95–1.22] [0.88–1.06] | 0.23 | 1.09 | [0.95-1.24] [0.87-1.06] |
| rs7922128 | 0.45 0.04 | 0.97 0.89 | [0.88 - 1.06] [0.79 - 0.99] | 0.38 0.04 | $0.96 \\ 0.88$ | [0.87 - 1.06] [0.78 - 0.99] |
| 18/922120 | 0.04 | 0.07 | [0.79-0.99] | 0.04 | 0.00 | [0.70-0.99] |

Supplementary Table 16, continued

Model 1: adjusted for age, gender and principal components. Model 2: adjusted for age, gender, principal components, *APOE* ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), *CLU* (rs11136000), *CR1* (rs6656401), and *PICALM* (rs541458).

| | Model 1 | | | | Model 2 | | |
|------------|---------|------|---------------|---------|---------|---------------|--|
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs668053 | 0.59 | 0.98 | [0.91–1.06] | 0.77 | 0.99 | [0.91–1.07] | |
| rs4935774 | 0.50 | 1.03 | [0.94–1.12] | 0.36 | 1.04 | [0.95–1.15] | |
| rs661057 | 0.49 | 1.03 | [0.95 - 1.11] | 0.46 | 1.03 | [0.95-1.12] | |
| rs4936632 | 0.41 | 1.03 | [0.96–1.11] | 0.32 | 1.04 | [0.96–1.13] | |
| rs7945931 | 0.23 | 1.08 | [0.95-1.23] | 0.50 | 1.05 | [0.91-1.20] | |
| rs11218301 | 0.21 | 0.95 | [0.88-1.03] | 0.31 | 0.96 | [0.88 - 1.04] | |
| rs11600875 | 0.12 | 0.90 | [0.79–1.03] | 0.31 | 0.93 | [0.81 - 1.07] | |
| rs4631890 | 0.05 | 0.93 | [0.86 - 1.00] | 0.06 | 0.93 | [0.86 - 1.00] | |
| rs676759 | 0.51 | 1.03 | [0.95 - 1.11] | 0.34 | 1.04 | [0.96–1.13] | |
| rs2298525 | 0.22 | 1.08 | [0.96-1.22] | 0.38 | 1.06 | [0.93-1.21] | |
| rs689021 | 0.42 | 1.03 | [0.96–1.11] | 0.34 | 1.04 | [0.96–1.13] | |
| rs4935775 | 0.30 | 0.96 | [0.89–1.04] | 0.31 | 0.96 | [0.88 - 1.04] | |
| rs2298813 | 0.26 | 1.11 | [0.93-1.32] | 0.31 | 1.10 | [0.91–1.33] | |
| rs666004 | 0.22 | 1.05 | [0.97–1.13] | 0.21 | 1.05 | [0.97–1.14] | |
| rs11218322 | 0.19 | 0.92 | [0.81-1.04] | 0.41 | 0.95 | [0.83-1.08] | |
| rs3781827 | 0.87 | 1.01 | [0.93-1.08] | 0.77 | 0.99 | [0.91–1.07] | |
| rs11601559 | 0.29 | 0.93 | [0.82 - 1.06] | 0.54 | 0.96 | [0.84–1.10] | |
| rs2276346 | 0.23 | 0.95 | [0.88-1.03] | 0.21 | 0.95 | [0.87-1.03] | |
| rs10502262 | 0.50 | 0.97 | [0.89–1.06] | 0.62 | 0.98 | [0.89–1.07] | |
| rs556349 | 0.37 | 1.04 | [0.96–1.13] | 0.54 | 1.03 | [0.94–1.12] | |
| rs11605969 | 0.81 | 1.01 | [0.91–1.12] | 0.74 | 1.02 | [0.91–1.14] | |
| rs7124060 | 0.40 | 1.06 | [0.93-1.21] | 0.32 | 1.07 | [0.93-1.24] | |
| rs3781832 | 0.02 | 0.86 | [0.76-0.98] | 0.07 | 0.89 | [0.78 - 1.01] | |
| rs1790213 | 0.22 | 1.05 | [0.97–1.13] | 0.32 | 1.04 | [0.96–1.13] | |
| rs1699105 | 0.88 | 0.99 | [0.92 - 1.07] | 0.99 | 1.00 | [0.92-1.09] | |
| rs4420280 | 0.06 | 1.08 | [1.00 - 1.17] | 0.09 | 1.08 | [0.99–1.18] | |
| rs4936637 | 0.07 | 1.09 | [0.99–1.19] | 0.22 | 1.06 | [0.96–1.17] | |
| rs2070045 | 0.07 | 1.09 | [0.99–1.19] | 0.22 | 1.06 | [0.97 - 1.17] | |
| rs3781835 | 0.01 | 0.68 | [0.50-0.92] | 0.05 | 0.71 | [0.51-0.99] | |
| rs1699102 | 0.52 | 1.03 | [0.95–1.11] | 0.72 | 1.02 | [0.93–1.11] | |
| rs1620003 | 0.88 | 1.01 | [0.93–1.09] | 0.97 | 1.00 | [0.92-1.09] | |
| rs7101373 | 0.23 | 1.11 | [0.94–1.32] | 0.23 | 1.12 | [0.93–1.35] | |
| rs726601 | 0.51 | 1.03 | [0.95 - 1.12] | 0.86 | 1.01 | [0.92–1.10] | |
| rs1010158 | 0.55 | 1.03 | [0.94–1.11] | 0.92 | 1.00 | [0.92–1.10] | |
| rs1503415 | 0.58 | 1.02 | [0.94–1.11] | 0.99 | 1.00 | [0.92-1.09] | |
| rs1614735 | 0.53 | 0.98 | [0.91–1.05] | 0.54 | 0.98 | [0.90–1.06] | |
| rs1133174 | 0.40 | 0.97 | [0.90-1.04] | 0.17 | 0.95 | [0.87 - 1.02] | |
| rs1532763 | 0.62 | 0.98 | [0.91–1.06] | 0.28 | 0.96 | [0.88 - 1.04] | |
| rs4935777 | 0.58 | 0.98 | [0.91-1.06] | 0.26 | 0.95 | [0.88–1.03] | |
| rs11606903 | 0.79 | 1.09 | [0.58-2.03] | 0.74 | 1.12 | [0.57 - 2.20] | |

Supplementary Table 17 Association of SNPs with AD risk in the SORL1 gene on chromosome 11

Model 1: adjusted for age, gender and principal components.

| Association of SNPs with AD risk in the TF gene on chromosome 3 | | | | | | | |
|---|---------|------|-------------|---------|---------|-------------|--|
| | Model 1 | | | | Model 2 | | |
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs6439434 | 0.93 | 1.00 | [0.93-1.07] | 0.71 | 0.99 | [0.91–1.07] | |
| rs6787177 | 0.72 | 1.01 | [0.94–1.10] | 0.77 | 1.01 | [0.93–1.10] | |
| rs4854755 | 0.68 | 0.98 | [0.90-1.07] | 0.89 | 0.99 | [0.90–1.09] | |

0.35

0.92

0.73

0.64

0.19

0.80

0.33

0.86

0.22

0.86

1.09

1.01

1.02

1.03

0.93

0.99

1.07

1.01

1.07

1.01

[0.90 - 1.32]

[0.91-1.11]

[0.91–1.14] [0.91–1.17]

[0.84-1.03]

[0.91 - 1.08]

[0.94-1.22]

[0.92 - 1.10][0.96-1.19]

[0.93-1.09]

[0.84-1.04]

[0.90 - 1.08]

[0.90 - 1.08]

[0.90-1.28]

[0.89–1.09]

[0.90–1.11]

[0.89–1.12]

[0.86-1.04]

[0.90-1.06]

[0.95-1.21]

[0.93-1.09]

[0.97-1.18]

[0.93-1.08]

Supplementary Table 18

rs1049296 0.36 [0.86-1.05] 0.95 0.19 0.93 rs1115219 0.99 0.88 [0.91-1.08] 0.74 0.98 rs2715628 0.99 1.00 [0.92-1.09] 0.81 0.99

Model 1: adjusted for age, gender, and principal components.

rs8177313

rs8177184

rs4428180

rs8177190

rs8177191

rs8177213

rs1799852

rs3811647

rs1358024

rs2692695

0.42

0.77

0.95

0.97

0.26

0.61

0.28

0.96

0.16

0.97

1.08

0.99

1.00

1.00

0.95

0.98

1.07

1.00

1.07

1.00

Model 2: adjusted for age, gender, principal components, APOE ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), CLU (rs11136000), CR1 (rs6656401), and PICALM (rs541458).

| | | | | e | | | |
|------------|---------|------|---------------|---------|---------|---------------|--|
| | Model 1 | | | | Model 2 | | |
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs10826175 | 0.67 | 0.98 | [0.91-1.06] | 0.60 | 0.98 | [0.90-1.06] | |
| rs1994174 | 0.64 | 1.04 | [0.89 - 1.22] | 0.72 | 1.03 | [0.87 - 1.22] | |
| rs10826176 | 0.44 | 0.97 | [0.89 - 1.05] | 0.54 | 0.97 | [0.89-1.06] | |
| rs2279339 | 0.40 | 0.96 | [0.87 - 1.06] | 0.32 | 0.95 | [0.85 - 1.05] | |
| rs11006130 | 0.75 | 0.98 | [0.89 - 1.09] | 0.57 | 0.97 | [0.87 - 1.08] | |
| rs1049432 | 0.34 | 0.95 | [0.87 - 1.05] | 0.27 | 0.94 | [0.85 - 1.05] | |
| rs11006132 | 0.26 | 0.95 | [0.87 - 1.04] | 0.35 | 0.96 | [0.87 - 1.05] | |
| rs11006133 | 0.08 | 0.93 | [0.87 - 1.01] | 0.09 | 0.93 | [0.86-1.01] | |
| rs12245545 | 0.12 | 0.94 | [0.86 - 1.02] | 0.17 | 0.94 | [0.86-1.03] | |
| rs16912225 | 0.35 | 0.90 | [0.72 - 1.12] | 0.43 | 0.91 | [0.72 - 1.15] | |
| rs7905675 | 0.16 | 0.95 | [0.87 - 1.02] | 0.20 | 0.95 | [0.87 - 1.03] | |
| rs16912233 | 0.24 | 0.88 | [0.70 - 1.09] | 0.35 | 0.89 | [0.71 - 1.13] | |
| rs2306604 | 0.05 | 0.93 | [0.86 - 1.00] | 0.06 | 0.93 | [0.85 - 1.00] | |

Supplementary Table 19

Association of SNPs with AD risk in the TFAM gene on chromosome 10

Model 1: adjusted for age, gender, and principal components.

Model 2: adjusted for age, gender, principal components, APOE ($\varepsilon 2/\varepsilon 3/\varepsilon 4$), CLU (rs11136000), CR1 (rs6656401), and PICALM (rs541458).

Supplementary Table 20

| | Model 1 | | | | Model 2 | | |
|------------|---------|------|---------------|---------|---------|---------------|--|
| | p value | OR | CI 95% | p value | OR | CI 95% | |
| rs4796409 | 0.45 | 0.97 | [0.90-1.05] | 0.52 | 0.97 | [0.90-1.06] | |
| rs7214863 | 0.61 | 1.02 | [0.94–1.12] | 0.62 | 1.02 | [0.93 - 1.12] | |
| rs11655156 | 0.45 | 0.97 | [0.89–1.05] | 0.49 | 0.97 | [0.89–1.06] | |
| rs4796412 | 0.94 | 0.99 | [0.88–1.13] | 0.94 | 0.99 | [0.87 - 1.14] | |
| rs7219773 | 0.82 | 1.01 | [0.94–1.09] | 0.98 | 1.00 | [0.92 - 1.08] | |
| rs6503018 | 0.83 | 1.02 | [0.86-1.21] | 0.59 | 1.05 | [0.88 - 1.26] | |
| rs2075760 | 0.75 | 1.02 | [0.91 - 1.14] | 0.69 | 1.03 | [0.91–1.16] | |
| rs3744549 | 0.37 | 1.05 | [0.95–1.16] | 0.34 | 1.05 | [0.95 - 1.18] | |
| rs4613118 | 0.27 | 1.06 | [0.96–1.17] | 0.22 | 1.07 | [0.96 - 1.20] | |
| rs8075459 | 0.32 | 1.07 | [0.94–1.22] | 0.17 | 1.10 | [0.96–1.27] | |

Model 1: adjusted for age, gender, and principal components.