**Novel insights into causal effects of lipid and lipid-lowering targets with autoimmune thyroid disease: A Mendelian randomization study**

**Supplementary Tables**

**Supplementary Table 1.** **Instrumental variables for lipid traits**

**Supplementary Table 2.** **Instrumental variables for lipid-lowering drug targets**

**Supplementary Table 3.** **Results of two-sample MR analysis of lipid traits and AITD**

**Supplementary Table 4. MR analysis of the effect of lipid-lowering drug targets on inflammatory factors**

**Supplementary Table 5. MR analysis of the effect of inflammatory factors on AITD**

**Supplementary Table 6. The specific information of the genetic variants for the 30 inflammatory factors**

**Supplementary Table 1.** **Instrumental variables for lipid traits**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SNP** | **Effect allele** | **Other allele** | **BETA** | **SE** | ***F*-statistics** | ***p*-value** |
| **ApoB** |  |  |  |  |  |  |
| rs10096633 | T | C | -0.040 | 0.007 | 31.584 | 1.92E-08 |
| rs102275 | C | T | -0.042 | 0.005 | 71.248 | 3.20E-17 |
| rs10774624 | G | A | -0.026 | 0.005 | 30.346 | 3.62E-08 |
| rs11206517 | G | T | 0.091 | 0.013 | 47.181 | 6.51E-12 |
| rs112875651 | A | G | -0.069 | 0.005 | 195.908 | 1.82E-44 |
| rs115478735 | T | A | 0.060 | 0.006 | 95.690 | 1.38E-22 |
| rs11591147 | T | G | -0.323 | 0.018 | 318.405 | 4.30E-71 |
| rs11671606 | T | C | 0.035 | 0.005 | 51.974 | 5.67E-13 |
| rs117310449 | T | C | 0.220 | 0.022 | 101.970 | 5.81E-24 |
| rs11755689 | G | A | 0.045 | 0.005 | 70.928 | 3.76E-17 |
| rs118147862 | A | G | -0.400 | 0.012 | 1187.540 | 1.00E-200 |
| rs12151108 | A | G | -0.162 | 0.007 | 492.834 | 6.85E-109 |
| rs12740374 | T | G | -0.113 | 0.006 | 395.952 | 6.54E-88 |
| rs12916 | C | T | 0.059 | 0.005 | 150.898 | 1.18E-34 |
| rs147711004 | A | G | 0.125 | 0.013 | 93.808 | 3.57E-22 |
| rs1611747 | C | T | 0.030 | 0.005 | 34.915 | 3.46E-09 |
| rs1883711 | C | G | 0.122 | 0.014 | 77.002 | 1.74E-18 |
| rs1973174 | T | C | 0.030 | 0.005 | 30.025 | 4.28E-08 |
| rs2264778 | A | C | 0.028 | 0.005 | 29.963 | 4.41E-08 |
| rs261290 | T | C | 0.054 | 0.005 | 118.807 | 1.20E-27 |
| rs2721961 | G | T | -0.032 | 0.005 | 37.527 | 9.05E-10 |
| rs28550459 | A | T | -0.099 | 0.014 | 51.148 | 8.63E-13 |
| rs34042070 | G | C | 0.049 | 0.006 | 65.432 | 6.09E-16 |
| rs3798167 | T | G | -0.045 | 0.006 | 56.083 | 7.01E-14 |
| rs4299376 | G | T | 0.049 | 0.005 | 92.338 | 7.49E-22 |
| rs4307732 | A | G | 0.055 | 0.008 | 51.315 | 7.93E-13 |
| rs4665972 | T | C | 0.040 | 0.005 | 66.331 | 3.86E-16 |
| rs4704834 | A | G | -0.047 | 0.005 | 92.008 | 8.85E-22 |
| rs472495 | G | T | -0.033 | 0.005 | 45.368 | 1.64E-11 |
| rs55714927 | T | C | -0.033 | 0.006 | 29.926 | 4.50E-08 |
| rs56325564 | A | G | 0.032 | 0.005 | 45.343 | 1.66E-11 |
| rs58542926 | T | C | -0.113 | 0.009 | 156.718 | 6.33E-36 |
| rs61679753 | A | T | -0.408 | 0.014 | 878.755 | 3.59E-192 |
| rs633695 | G | A | 0.042 | 0.005 | 63.566 | 1.57E-15 |
| rs693 | G | A | -0.091 | 0.005 | 367.810 | 8.24E-82 |
| rs72631343 | G | C | -0.046 | 0.007 | 42.400 | 7.48E-11 |
| rs72694391 | C | T | 0.026 | 0.005 | 30.440 | 3.45E-08 |
| rs73013176 | C | T | -0.167 | 0.023 | 54.021 | 2.00E-13 |
| rs7323938 | C | T | 0.027 | 0.005 | 30.250 | 3.81E-08 |
| rs7534572 | C | G | -0.038 | 0.005 | 60.185 | 8.73E-15 |
| rs77542162 | G | A | 0.145 | 0.016 | 82.910 | 8.76E-20 |
| rs79915079 | A | G | -0.091 | 0.015 | 36.586 | 1.47E-09 |
| rs822928 | A | C | -0.032 | 0.005 | 45.536 | 1.51E-11 |
| rs964184 | G | C | 0.078 | 0.007 | 124.023 | 8.70E-29 |
| **LDL-C** |  |  |  |  |  |  |
| rs10096633 | T | C | -0.042 | 0.007 | 34.731 | 3.80E-09 |
| rs10774624 | G | A | -0.026 | 0.005 | 30.346 | 3.62E-08 |
| rs11206517 | G | T | 0.092 | 0.013 | 47.944 | 4.42E-12 |
| rs112875651 | A | G | -0.066 | 0.005 | 180.240 | 4.71E-41 |
| rs115478735 | T | A | 0.057 | 0.006 | 86.971 | 1.13E-20 |
| rs11591147 | T | G | -0.319 | 0.018 | 310.829 | 1.90E-69 |
| rs11671606 | T | C | 0.035 | 0.005 | 51.565 | 6.98E-13 |
| rs117310449 | T | C | 0.224 | 0.022 | 105.063 | 1.22E-24 |
| rs11755689 | G | A | 0.044 | 0.005 | 70.715 | 4.19E-17 |
| rs118147862 | A | G | -0.405 | 0.012 | 1215.392 | 1.00E-200 |
| rs12151108 | A | G | -0.161 | 0.007 | 488.935 | 4.77E-108 |
| rs12740374 | T | G | -0.119 | 0.006 | 438.485 | 3.98E-97 |
| rs12916 | C | T | 0.060 | 0.005 | 151.639 | 8.11E-35 |
| rs147711004 | A | G | 0.132 | 0.013 | 104.638 | 1.51E-24 |
| rs1499279 | G | T | -0.065 | 0.012 | 30.112 | 4.09E-08 |
| rs1611747 | C | T | 0.031 | 0.005 | 36.370 | 1.64E-09 |
| rs174541 | C | T | -0.043 | 0.005 | 77.412 | 1.41E-18 |
| rs1883711 | C | G | 0.117 | 0.014 | 70.153 | 5.57E-17 |
| rs1973174 | T | C | 0.030 | 0.005 | 29.845 | 4.69E-08 |
| rs247616 | T | C | -0.045 | 0.005 | 78.025 | 1.04E-18 |
| rs261290 | T | C | 0.041 | 0.005 | 68.823 | 1.09E-16 |
| rs2721961 | G | T | -0.031 | 0.005 | 35.024 | 3.27E-09 |
| rs28550459 | A | T | -0.101 | 0.014 | 52.935 | 3.48E-13 |
| rs34042070 | G | C | 0.051 | 0.006 | 69.082 | 9.58E-17 |
| rs3798167 | T | G | -0.043 | 0.006 | 52.035 | 5.50E-13 |
| rs4299376 | G | T | 0.049 | 0.005 | 93.472 | 4.22E-22 |
| rs4307732 | A | G | 0.055 | 0.008 | 51.369 | 7.71E-13 |
| rs4665972 | T | C | 0.040 | 0.005 | 67.296 | 2.37E-16 |
| rs4704834 | A | G | -0.048 | 0.005 | 96.012 | 1.17E-22 |
| rs472495 | G | T | -0.035 | 0.005 | 48.899 | 2.71E-12 |
| rs4846922 | T | C | 0.028 | 0.005 | 31.377 | 2.13E-08 |
| rs55714927 | T | C | -0.033 | 0.006 | 30.468 | 3.40E-08 |
| rs56325564 | A | G | 0.032 | 0.005 | 45.610 | 1.45E-11 |
| rs58542926 | T | C | -0.111 | 0.009 | 151.729 | 7.75E-35 |
| rs61679753 | A | T | -0.415 | 0.014 | 905.013 | 8.02E-198 |
| rs633695 | G | A | 0.033 | 0.005 | 40.347 | 2.14E-10 |
| rs693 | G | A | -0.094 | 0.005 | 396.844 | 4.19E-88 |
| rs72631343 | G | C | -0.046 | 0.007 | 41.384 | 1.26E-10 |
| rs72694391 | C | T | 0.027 | 0.005 | 31.433 | 2.07E-08 |
| rs73013176 | C | T | -0.166 | 0.023 | 53.093 | 3.21E-13 |
| rs7323938 | C | T | 0.027 | 0.005 | 31.316 | 2.20E-08 |
| rs7534572 | C | G | -0.034 | 0.005 | 46.672 | 8.45E-12 |
| rs77542162 | G | A | 0.137 | 0.016 | 74.191 | 7.21E-18 |
| rs79915079 | A | G | -0.090 | 0.015 | 36.469 | 1.56E-09 |
| rs822928 | A | C | -0.034 | 0.005 | 49.464 | 2.04E-12 |
| rs964184 | G | C | 0.077 | 0.007 | 122.337 | 2.03E-28 |
| **TC** |  |  |  |  |  |  |
| rs102275 | C | T | -0.069 | 0.005 | 208.068 | 4.10E-47 |
| rs11065358 | T | C | 0.031 | 0.005 | 39.364 | 3.53E-10 |
| rs111278137 | A | G | -0.097 | 0.016 | 34.915 | 3.46E-09 |
| rs11206517 | G | T | 0.079 | 0.013 | 37.812 | 7.82E-10 |
| rs112875651 | A | G | -0.050 | 0.005 | 109.234 | 1.49E-25 |
| rs114863007 | A | G | -0.046 | 0.008 | 33.619 | 6.73E-09 |
| rs115478735 | T | A | 0.060 | 0.006 | 101.747 | 6.50E-24 |
| rs115740542 | C | T | -0.059 | 0.009 | 43.001 | 5.50E-11 |
| rs11591147 | T | G | -0.281 | 0.018 | 256.571 | 1.16E-57 |
| rs117310449 | T | C | 0.166 | 0.021 | 61.056 | 5.61E-15 |
| rs11749783 | C | T | 0.053 | 0.005 | 127.042 | 1.90E-29 |
| rs11789603 | T | C | 0.044 | 0.007 | 34.702 | 3.86E-09 |
| rs118147862 | A | G | -0.357 | 0.011 | 1001.209 | 1.00E-200 |
| rs11854242 | T | C | -0.032 | 0.005 | 37.125 | 1.11E-09 |
| rs12151108 | A | G | -0.133 | 0.007 | 353.466 | 1.06E-78 |
| rs12701220 | C | T | -0.031 | 0.006 | 30.792 | 2.88E-08 |
| rs12740374 | T | G | -0.093 | 0.006 | 284.375 | 1.05E-63 |
| rs1461729 | A | G | -0.083 | 0.008 | 102.218 | 5.13E-24 |
| rs1800961 | T | C | -0.078 | 0.013 | 34.018 | 5.48E-09 |
| rs1883711 | C | G | 0.095 | 0.014 | 49.498 | 2.00E-12 |
| rs261290 | T | C | 0.079 | 0.005 | 267.413 | 5.09E-60 |
| rs2642438 | A | G | -0.032 | 0.005 | 41.125 | 1.44E-10 |
| rs2740488 | C | A | -0.044 | 0.005 | 70.628 | 4.38E-17 |
| rs2792735 | G | A | 0.031 | 0.005 | 37.415 | 9.59E-10 |
| rs34042070 | G | C | 0.040 | 0.006 | 45.463 | 1.57E-11 |
| rs35135293 | C | T | 0.027 | 0.005 | 35.044 | 3.24E-09 |
| rs35237252 | A | C | 0.035 | 0.005 | 43.732 | 3.79E-11 |
| rs3816117 | C | T | 0.039 | 0.005 | 70.415 | 4.87E-17 |
| rs41289512 | G | C | 0.089 | 0.011 | 61.133 | 5.39E-15 |
| rs4299376 | G | T | 0.044 | 0.005 | 80.909 | 2.41E-19 |
| rs472495 | G | T | -0.029 | 0.005 | 36.842 | 1.29E-09 |
| rs4766578 | T | A | -0.030 | 0.005 | 43.770 | 3.71E-11 |
| rs514230 | A | T | -0.031 | 0.005 | 46.608 | 8.73E-12 |
| rs562338 | A | G | -0.099 | 0.006 | 276.507 | 5.39E-62 |
| rs56325564 | A | G | 0.028 | 0.005 | 35.886 | 2.10E-09 |
| rs58542926 | T | C | -0.097 | 0.009 | 122.342 | 2.03E-28 |
| rs61679753 | A | T | -0.373 | 0.013 | 779.795 | 7.42E-171 |
| rs633695 | G | A | 0.061 | 0.005 | 144.213 | 3.39E-33 |
| rs6882345 | G | A | -0.038 | 0.005 | 62.448 | 2.77E-15 |
| rs688456 | T | G | 0.044 | 0.006 | 55.761 | 8.26E-14 |
| rs72631343 | G | C | -0.039 | 0.007 | 31.973 | 1.57E-08 |
| rs72836561 | T | C | -0.075 | 0.013 | 33.062 | 8.96E-09 |
| rs73013176 | C | T | -0.137 | 0.022 | 38.272 | 6.18E-10 |
| rs7534572 | C | G | -0.038 | 0.005 | 62.434 | 2.79E-15 |
| rs77542162 | G | A | 0.121 | 0.015 | 61.455 | 4.58E-15 |
| rs77960347 | G | A | 0.187 | 0.020 | 86.596 | 1.36E-20 |
| rs780094 | T | C | 0.038 | 0.005 | 65.159 | 7.00E-16 |
| rs8191852 | G | A | -0.032 | 0.005 | 43.988 | 3.32E-11 |
| rs9304381 | C | T | -0.048 | 0.006 | 66.216 | 4.09E-16 |
| **TG** |  |  |  |  |  |  |
| rs10455872 | G | A | -0.177 | 0.008 | 438.787 | 3.43E-97 |
| rs11057397 | T | C | -0.029 | 0.005 | 35.536 | 2.51E-09 |
| rs11122450 | T | G | 0.040 | 0.005 | 71.811 | 2.40E-17 |
| rs11207997 | T | C | -0.080 | 0.005 | 280.756 | 6.43E-63 |
| rs1128249 | T | G | -0.047 | 0.005 | 100.195 | 1.42E-23 |
| rs114165349 | C | G | 0.109 | 0.015 | 49.748 | 1.76E-12 |
| rs116843064 | A | G | -0.240 | 0.016 | 214.308 | 1.80E-48 |
| rs117733303 | G | A | -0.302 | 0.017 | 314.833 | 2.56E-70 |
| rs11976955 | G | C | 0.028 | 0.005 | 32.065 | 1.50E-08 |
| rs12263369 | C | T | -0.028 | 0.005 | 37.101 | 1.13E-09 |
| rs12601919 | G | A | 0.037 | 0.006 | 38.765 | 4.80E-10 |
| rs1260326 | T | C | 0.103 | 0.005 | 485.095 | 3.25E-107 |
| rs13108218 | A | G | 0.038 | 0.005 | 63.474 | 1.64E-15 |
| rs13423088 | A | T | -0.038 | 0.005 | 59.287 | 1.38E-14 |
| rs141469619 | G | A | 0.271 | 0.024 | 127.241 | 1.72E-29 |
| rs144503444 | C | T | 0.162 | 0.017 | 86.594 | 1.36E-20 |
| rs1471251 | T | A | 0.034 | 0.005 | 53.429 | 2.70E-13 |
| rs150844304 | C | A | 0.154 | 0.015 | 111.949 | 3.80E-26 |
| rs174560 | C | T | 0.046 | 0.005 | 85.247 | 2.69E-20 |
| rs17585915 | T | G | 0.041 | 0.005 | 76.965 | 1.77E-18 |
| rs187429064 | G | A | -0.131 | 0.021 | 39.543 | 3.22E-10 |
| rs1993453 | A | G | 0.027 | 0.005 | 29.940 | 4.47E-08 |
| rs2122982 | A | G | -0.029 | 0.005 | 29.946 | 4.45E-08 |
| rs2800709 | T | G | -0.035 | 0.005 | 58.789 | 1.77E-14 |
| rs28383314 | T | C | -0.047 | 0.005 | 85.567 | 2.29E-20 |
| rs28601761 | G | C | -0.091 | 0.005 | 376.294 | 1.19E-83 |
| rs28752924 | C | T | 0.029 | 0.005 | 32.733 | 1.06E-08 |
| rs2925979 | T | C | 0.032 | 0.005 | 40.069 | 2.46E-10 |
| rs328 | G | C | -0.194 | 0.008 | 652.599 | 2.03E-143 |
| rs34060476 | G | A | -0.123 | 0.007 | 338.753 | 1.65E-75 |
| rs34682685 | A | G | 0.044 | 0.008 | 34.445 | 4.40E-09 |
| rs3860846 | T | C | 0.036 | 0.005 | 49.237 | 2.28E-12 |
| rs3936511 | G | A | 0.056 | 0.006 | 93.828 | 3.53E-22 |
| rs4665710 | A | C | -0.103 | 0.006 | 332.799 | 3.24E-74 |
| rs4704834 | A | G | -0.036 | 0.005 | 56.262 | 6.40E-14 |
| rs5112 | C | G | -0.078 | 0.005 | 253.431 | 5.57E-57 |
| rs5117 | C | T | 0.062 | 0.005 | 133.250 | 8.39E-31 |
| rs59347135 | G | C | 0.079 | 0.011 | 48.286 | 3.71E-12 |
| rs6073958 | C | T | 0.044 | 0.006 | 58.475 | 2.08E-14 |
| rs60960031 | A | G | -0.027 | 0.005 | 32.476 | 1.21E-08 |
| rs6602911 | T | C | 0.028 | 0.005 | 35.365 | 2.74E-09 |
| rs684773 | A | C | -0.040 | 0.005 | 53.895 | 2.13E-13 |
| rs7177289 | T | C | 0.041 | 0.005 | 74.065 | 7.68E-18 |
| rs7205804 | A | G | -0.032 | 0.005 | 48.394 | 3.51E-12 |
| rs72555385 | G | A | 0.068 | 0.011 | 40.606 | 1.87E-10 |
| rs72836561 | T | C | 0.111 | 0.013 | 71.741 | 2.49E-17 |
| rs73596816 | A | G | -0.094 | 0.013 | 54.231 | 1.80E-13 |
| rs74434374 | A | C | 0.064 | 0.011 | 33.316 | 7.86E-09 |
| rs7924036 | G | T | 0.035 | 0.005 | 58.622 | 1.93E-14 |
| rs79293855 | A | G | -0.080 | 0.013 | 36.595 | 1.46E-09 |
| rs8107974 | T | A | -0.104 | 0.009 | 142.866 | 6.67E-33 |
| rs883863 | A | G | 0.029 | 0.005 | 34.684 | 3.89E-09 |
| rs964184 | G | C | 0.224 | 0.007 | 1102.884 | 1.00E-200 |
| rs9968117 | T | C | -0.040 | 0.007 | 32.790 | 1.03E-08 |
| rs998584 | A | C | 0.032 | 0.005 | 48.969 | 2.62E-12 |

Abbreviations: ApoB, Apolipoprotein B; LDL-C, Low-Density Lipoprotein Cholesterol; TC, Total cholesterol; TG, Total triglyceride.

**Supplementary Table 2.** **Instrumental variables for lipid-lowering drug targets**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SNP** | **Effect Allele** | **Other Allele** | **EAF** | **BETA** | **SE** | ***p*-value** | **Samplesize** | ***R2*** | ***F*-statistics** |
| ***APOB*** |  |  |  |  |  |  |  |  |  |
| rs1801701 | T | C | 0.097 | 0.039 | 2.34E-03 | 1.23E-60 | 1231262 | 2.61E-04 | 321.080 |
| rs1042023 | C | G | 0.012 | 0.136 | 6.75E-03 | 3.56E-90 | 1225443 | 4.24E-04 | 519.370 |
| rs693 | G | A | 0.492 | -0.080 | 1.38E-03 | 1.00E-200 | 1231262 | 3.18E-03 | 3928.943 |
| rs533617 | C | T | 0.041 | -0.126 | 3.48E-03 | 1.00E-200 | 1231260 | 1.25E-03 | 1540.954 |
| rs11680233 | A | C | 0.290 | -0.032 | 1.54E-03 | 4.29E-94 | 1228640 | 4.11E-04 | 505.615 |
| rs72653066 | G | C | 0.010 | -0.077 | 6.86E-03 | 1.78E-29 | 1226671 | 1.19E-04 | 146.556 |
| rs12720838 | T | C | 0.163 | -0.052 | 1.88E-03 | 1.37E-169 | 1231188 | 7.40E-04 | 911.654 |
| rs12720807 | T | A | 0.111 | 0.071 | 2.40E-03 | 1.81E-190 | 1098185 | 9.89E-04 | 1087.347 |
| rs184507838 | T | C | 0.010 | -0.126 | 6.87E-03 | 5.84E-75 | 1224315 | 3.22E-04 | 394.926 |
| rs12720793 | T | C | 0.021 | 0.063 | 5.15E-03 | 2.81E-34 | 1227836 | 1.60E-04 | 195.957 |
| rs579826 | T | C | 0.083 | -0.083 | 2.51E-03 | 1.00E-200 | 1231261 | 1.05E-03 | 1293.548 |
| rs12714264 | T | A | 0.128 | -0.113 | 2.09E-03 | 1.00E-200 | 1231203 | 2.88E-03 | 3550.249 |
| ***CETP*** |  |  |  |  |  |  |  |  |  |
| rs708272 | A | G | 0.435 | -0.030 | 1.40E-03 | 2.21E-100 | 1219914 | 4.36E-04 | 532.704 |
| rs7499892 | T | C | 0.178 | 0.029 | 1.81E-03 | 1.19E-59 | 1230294 | 2.54E-04 | 312.561 |
| rs289717 | A | G | 0.342 | 0.016 | 1.46E-03 | 2.21E-28 | 1230435 | 1.18E-04 | 145.049 |
| rs736274 | A | T | 0.112 | -0.017 | 2.22E-03 | 1.28E-14 | 1230334 | 5.84E-05 | 71.907 |
| rs56208677 | T | C | 0.068 | -0.024 | 2.79E-03 | 3.98E-18 | 1222976 | 7.39E-05 | 90.360 |
| rs5880 | C | G | 0.052 | 0.021 | 3.14E-03 | 1.72E-11 | 1230345 | 4.37E-05 | 53.787 |
| ***HMGCR*** |  |  |  |  |  |  |  |  |  |
| rs4704209 | G | A | 0.054 | 0.018 | 3.03E-03 | 4.91E-09 | 1231254 | 3.22E-05 | 39.622 |
| rs17244792 | A | G | 0.017 | -0.036 | 5.99E-03 | 1.24E-09 | 1224791 | 4.38E-05 | 53.618 |
| rs2303152 | A | G | 0.097 | 0.036 | 2.33E-03 | 3.73E-55 | 1231250 | 2.33E-04 | 287.317 |
| rs17244855 | G | A | 0.097 | 0.053 | 2.33E-03 | 1.37E-116 | 1231264 | 5.01E-04 | 616.833 |
| rs17238596 | T | C | 0.034 | -0.040 | 4.26E-03 | 2.22E-21 | 1216997 | 1.07E-04 | 129.780 |
| rs10474435 | C | T | 0.014 | 0.046 | 6.02E-03 | 3.62E-14 | 1230275 | 5.54E-05 | 68.151 |
| ***LDLR*** |  |  |  |  |  |  |  |  |  |
| rs146335137 | T | C | 0.009 | 0.062 | 7.74E-03 | 1.41E-15 | 1216239 | 7.09E-05 | 86.205 |
| rs17242353 | T | C | 0.032 | 0.109 | 4.26E-03 | 2.49E-144 | 1225193 | 7.46E-04 | 914.571 |
| rs17242367 | T | C | 0.069 | 0.028 | 2.90E-03 | 1.78E-22 | 1223783 | 1.02E-04 | 124.679 |
| rs17248748 | T | C | 0.018 | -0.075 | 5.59E-03 | 4.91E-41 | 1218883 | 1.95E-04 | 238.114 |
| rs73015030 | A | G | 0.032 | -0.133 | 4.03E-03 | 1.00E-200 | 1228641 | 1.10E-03 | 1348.637 |
| rs10423288 | C | T | 0.013 | 0.076 | 6.12E-03 | 3.69E-35 | 1222406 | 1.47E-04 | 179.904 |
| rs41301949 | G | A | 0.036 | 0.039 | 4.04E-03 | 3.38E-22 | 1220092 | 1.07E-04 | 130.775 |
| rs147223423 | T | A | 0.010 | 0.100 | 7.10E-03 | 4.93E-45 | 1220852 | 2.00E-04 | 243.730 |
| rs7247905 | A | G | 0.026 | -0.090 | 4.33E-03 | 1.30E-96 | 1231131 | 4.11E-04 | 505.756 |
| rs117955899 | T | C | 0.012 | -0.059 | 6.69E-03 | 1.61E-18 | 1226972 | 7.85E-05 | 96.334 |
| rs2569540 | C | G | 0.234 | -0.012 | 1.64E-03 | 4.22E-14 | 1226709 | 5.50E-05 | 67.472 |
| rs3826810 | A | G | 0.043 | 0.038 | 3.43E-03 | 5.32E-28 | 1231261 | 1.15E-04 | 141.498 |
| rs143587805 | T | A | 0.012 | 0.063 | 6.69E-03 | 4.04E-21 | 1221439 | 9.05E-05 | 110.569 |
| ***NPC1L1*** |  |  |  |  |  |  |  |  |  |
| rs217412 | T | C | 0.248 | 0.017 | 1.62E-03 | 1.65E-24 | 1225535 | 1.02E-04 | 125.419 |
| rs77826622 | C | T | 0.022 | 0.031 | 4.94E-03 | 2.26E-10 | 1227078 | 4.22E-05 | 51.743 |
| rs7808003 | T | C | 0.287 | -0.019 | 1.61E-03 | 3.71E-31 | 1186130 | 1.42E-04 | 168.656 |
| rs7808295 | T | C | 0.041 | -0.023 | 3.72E-03 | 5.33E-10 | 1224449 | 4.20E-05 | 51.414 |
| rs2072183 | C | G | 0.229 | 0.033 | 1.69E-03 | 1.81E-83 | 1190814 | 3.76E-04 | 448.475 |
| ***PCSK9*** |  |  |  |  |  |  |  |  |  |
| rs2479410 | A | G | 0.338 | -0.041 | 1.53E-03 | 1.90E-161 | 1189801 | 7.63E-04 | 908.927 |
| rs41294821 | T | C | 0.021 | -0.043 | 5.02E-03 | 1.65E-17 | 1227301 | 7.37E-05 | 90.401 |
| rs7546522 | T | C | 0.150 | -0.022 | 2.02E-03 | 1.93E-28 | 1223783 | 1.27E-04 | 155.216 |
| rs7552350 | A | C | 0.144 | 0.016 | 2.27E-03 | 3.45E-12 | 1074405 | 6.12E-05 | 65.793 |
| rs45613943 | C | T | 0.047 | -0.040 | 3.33E-03 | 1.89E-33 | 1223128 | 1.43E-04 | 175.469 |
| rs45508296 | G | A | 0.018 | -0.065 | 5.36E-03 | 2.03E-33 | 1223941 | 1.48E-04 | 181.137 |
| rs693668 | G | A | 0.359 | -0.056 | 1.46E-03 | 1.00E-200 | 1210683 | 1.47E-03 | 1778.705 |
| rs12136600 | T | C | 0.078 | -0.042 | 2.65E-03 | 5.02E-56 | 1223129 | 2.50E-04 | 306.173 |
| rs7525503 | T | G | 0.023 | 0.071 | 4.99E-03 | 2.51E-46 | 1221608 | 2.27E-04 | 277.862 |
| rs137886411 | A | G | 0.010 | 0.052 | 7.46E-03 | 2.53E-12 | 1224261 | 5.41E-05 | 66.214 |
| rs11206517 | G | T | 0.037 | 0.089 | 3.71E-03 | 1.00E-126 | 1231228 | 5.64E-04 | 694.976 |
| ***PPARα*** |  |  |  |  |  |  |  |  |  |
| rs7364220 | G | A | 0.187 | 0.011 | 1.79E-03 | 2.55E-09 | 1251820 | 3.47E-05 | 43.480 |
| rs62225958 | A | G | 0.089 | 0.014 | 2.45E-03 | 2.54E-08 | 1252332 | 3.02E-05 | 37.860 |
| rs6007662 | G | A | 0.248 | 0.013 | 1.69E-03 | 1.25E-14 | 1236283 | 6.36E-05 | 78.677 |

Abbreviations: *ApoB*, Apoprotein B; *CETP*, Cholesteryl Ester Transfer Protein; *HMGCR*, 3-hydroxy-3-methylglutaryl coenzyme A reductase; *LDLR*, Low-Density Lipoprotein Receptor; *NPC1L1*, Niemann-Pick C1-like 1; *PCKS9*, Proprotein Convertase Subtilisin/Kexin Type 9; *PPARα*, Peroxisome ProliferatorActivated Receptor-alpha.

**Supplementary Table 3.** **Results of two-sample MR analysis of lipid traits and AITD**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Outcome** | **Method** | **nSNP** | **BETA** | **SE** | ***p*-value** | **OR\_95%CI** | **Egger\_intercept** | ***p*-heterogeneity** | **Q statistic** | **Q\_*pval*** |
| **ApoB** |  |  |  |  |  |  |  |  |  |  |
| AIH | MR Egger | 34 | 0.050 | 0.050 | 0.323 | 1.052(0.953-1.161) |  |  | 59.710 | 0.002 |
| AIH | IVW | 34 | -0.010 | 0.033 | 0.764 | 0.99(0.929-1.056) | -5.38E-03 | 0.129 | 64.242 | 0.001 |
| AT | MR Egger | 36 | 0.271 | 0.426 | 0.529 | 1.311(0.569-3.020) |  |  | 70.770 | 2.18E-04 |
| AT | IVW | 36 | -0.107 | 0.273 | 0.695 | 0.898(0.526-1.534) | -3.30E-02 | 0.256 | 73.546 | 1.49E-04 |
| GD | MR Egger | 34 | -0.079 | 0.130 | 0.546 | 0.924(0.716-1.192) |  |  | 35.285 | 0.316 |
| GD | IVW | 34 | -0.038 | 0.082 | 0.646 | 0.963(0.819-1.131) | 3.71E-03 | 0.681 | 35.475 | 0.352 |
| GO | MR Egger | 36 | 0.080 | 0.418 | 0.849 | 1.084(0.478-2.456) |  |  | 74.459 | 7.51E-05 |
| GO | IVW | 36 | -0.153 | 0.264 | 0.563 | 0.858(0.512-1.440) | -2.01E-02 | 0.474 | 75.605 | 8.21E-05 |
| **LDL** |  |  |  |  |  |  |  |  |  |  |
| AIH | MR Egger | 36 | 0.039 | 0.050 | 0.441 | 1.039(0.943-1.145) |  |  | 63.435 | 0.002 |
| AIH | IVW | 36 | -0.003 | 0.032 | 0.928 | 0.997(0.937-1.061) | -3.67E-03 | 0.284 | 65.648 | 0.001 |
| AT | MR Egger | 38 | 0.310 | 0.410 | 0.454 | 1.364(0.610-3.048) |  |  | 71.603 | 3.79E-04 |
| AT | IVW | 38 | -0.105 | 0.265 | 0.693 | 0.901(0.536-1.514) | -3.59E-02 | 0.197 | 75.047 | 2.16E-04 |
| GD | MR Egger | 36 | -0.077 | 0.127 | 0.549 | 0.926(0.723-1.187) |  |  | 36.633 | 0.348 |
| GD | IVW | 36 | -0.060 | 0.080 | 0.456 | 0.942(0.805-1.102) | 1.48E-03 | 0.865 | 36.665 | 0.392 |
| GO | MR Egger | 38 | 0.043 | 0.403 | 0.916 | 1.043(0.474-2.298) |  |  | 75.422 | 1.31E-04 |
| GO | IVW | 38 | -0.147 | 0.255 | 0.565 | 0.864(0.524-1.423) | -1.62E-02 | 0.546 | 76.201 | 1.57E-04 |
| **TC** |  |  |  |  |  |  |  |  |  |  |
| AIH | MR Egger | 35 | 0.086 | 0.049 | 0.092 | 1.089(0.989-1.200) |  |  | 42.272 | 0.129 |
| AIH | IVW | 35 | 0.024 | 0.029 | 0.402 | 1.024(0.968-1.084) | -5.04E-03 | 0.138 | 45.233 | 0.094 |
| AT | MR Egger | 40 | 0.241 | 0.344 | 0.488 | 1.272(0.648-2.497) |  |  | 32.959 | 0.701 |
| AT | IVW | 40 | 0.049 | 0.199 | 0.804 | 1.051(0.712-1.551) | -1.51E-02 | 0.500 | 33.423 | 0.722 |
| GD | MR Egger | 40 | -0.105 | 0.159 | 0.513 | 0.900(0.660-1.229) |  |  | 46.889 | 0.153 |
| GD | IVW | 40 | 0.099 | 0.093 | 0.288 | 1.104(0.920-1.326) | 1.60E-02 | 0.124 | 49.946 | 0.112 |
| GO | MR Egger | 40 | 0.177 | 0.352 | 0.618 | 1.194(0.599-2.379) |  |  | 43.666 | 0.243 |
| GO | IVW | 40 | 0.019 | 0.201 | 0.925 | 1.019(0.687-1.511) | -1.24E-02 | 0.586 | 44.013 | 0.268 |
| **TG** |  |  |  |  |  |  |  |  |  |  |
| AIH | MR Egger | 43 | 0.064 | 0.071 | 0.377 | 1.066(0.927-1.226) |  |  | 95.162 | 3.41E-06 |
| AIH | IVW | 43 | -0.003 | 0.039 | 0.929 | 0.997(0.923-1.076) | -4.57E-03 | 0.267 | 98.097 | 2.20E-06 |
| AT | MR Egger | 44 | 0.070 | 0.485 | 0.886 | 1.072(0.414-2.777) |  |  | 68.059 | 0.007 |
| AT | IVW | 44 | -0.057 | 0.261 | 0.829 | 0.945(0.566-1.577) | -8.60E-03 | 0.758 | 68.215 | 0.008 |
| GD | MR Egger | 44 | 0.160 | 0.196 | 0.418 | 1.174(0.799-1.724) |  |  | 64.809 | 0.013 |
| GD | IVW | 44 | 0.020 | 0.108 | 0.853 | 1.020(0.826-1.260) | -9.48E-03 | 0.396 | 65.944 | 0.014 |
| GO | MR Egger | 43 | 0.228 | 0.363 | 0.534 | 1.256(0.616-2.558) |  |  | 33.841 | 0.778 |
| GO | IVW | 43 | -0.004 | 0.200 | 0.984 | 0.996(0.673-1.474) | -1.59E-02 | 0.449 | 34.425 | 0.791 |

Abbreviations: GD, Graves’ disease; GO, Graves' ophthalmopathy; AT, Autoimmune thyroiditis; AIH, Autoimmune hypothyroidism.

**Supplementary Table 4. MR analysis of the effect of lipid-lowering drug targets on inflammatory factors**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Outcome** | **Method** | **nSNP** | **BETA** | **SE** | ***p*-value** | **OR\_95%CI** | **Egger\_intercept** | ***p* -heterogeneity** | **Q statistic** | **Q\_*pval*** |
| ***APOB*** |  |  |  |  |  |  |  |  |  |  |
| GCST90274770 | MR Egger | 8 | 0.015 | 0.240 | 0.953 | 1.015(0.634-1.625) |  |  | 1.640 | 0.950 |
| GCST90274770 | IVW | 8 | 0.199 | 0.095 | 0.037 | 1.22(1.013-1.469) | 1.35E-02 | 0.437 | 2.334 | 0.939 |
| GCST90274774 | MR Egger | 8 | -0.228 | 0.238 | 0.375 | 0.796(0.5-1.269) |  |  | 2.350 | 0.885 |
| GCST90274774 | IVW | 8 | 0.261 | 0.096 | 0.007 | 1.298(1.075-1.567) | 3.59E-02 | 0.067 | 7.357 | 0.393 |
| GCST90274775 | MR Egger | 8 | 0.147 | 0.285 | 0.625 | 1.158(0.662-2.026) |  |  | 9.194 | 0.163 |
| GCST90274775 | IVW | 8 | 0.229 | 0.105 | 0.029 | 1.258(1.023-1.546) | 6.05E-03 | 0.764 | 9.345 | 0.229 |
| GCST90274786 | MR Egger | 8 | -0.145 | 0.288 | 0.633 | 0.865(0.491-1.522) |  |  | 8.642 | 0.195 |
| GCST90274786 | IVW | 8 | -0.300 | 0.109 | 0.006 | 0.741(0.599-0.917) | -1.14E-02 | 0.580 | 9.134 | 0.243 |
| GCST90274789 | MR Egger | 8 | 0.220 | 0.230 | 0.376 | 1.246(0.794-1.956) |  |  | 1.907 | 0.928 |
| GCST90274789 | IVW | 8 | 0.224 | 0.091 | 0.014 | 1.252(1.047-1.496) | 3.39E-04 | 0.983 | 1.908 | 0.965 |
| GCST90274790 | MR Egger | 8 | 0.256 | 0.253 | 0.351 | 1.291(0.786-2.121) |  |  | 3.290 | 0.772 |
| GCST90274790 | IVW | 8 | -0.263 | 0.109 | 0.016 | 0.769(0.621-0.953) | -3.82E-02 | 0.067 | 8.264 | 0.310 |
| GCST90274801 | MR Egger | 8 | -0.230 | 0.264 | 0.417 | 0.794(0.473-1.333) |  |  | 4.223 | 0.647 |
| GCST90274801 | IVW | 8 | -0.245 | 0.105 | 0.019 | 0.782(0.637-0.96) | -1.12E-03 | 0.952 | 4.227 | 0.753 |
| GCST90274816 | MR Egger | 8 | -0.141 | 0.239 | 0.578 | 0.869(0.544-1.389) |  |  | 3.110 | 0.795 |
| GCST90274816 | IVW | 8 | 0.205 | 0.094 | 0.030 | 1.227(1.02-1.477) | 2.54E-02 | 0.167 | 5.576 | 0.590 |
| GCST90274825 | MR Egger | 8 | 0.140 | 0.238 | 0.579 | 1.15(0.721-1.834) |  |  | 3.267 | 0.775 |
| GCST90274825 | IVW | 8 | 0.190 | 0.094 | 0.043 | 1.21(1.006-1.455) | 3.74E-03 | 0.824 | 3.321 | 0.854 |
| GCST90274838 | MR Egger | 8 | 0.076 | 0.238 | 0.761 | 1.079(0.676-1.72) |  |  | 4.024 | 0.673 |
| GCST90274838 | IVW | 8 | -0.197 | 0.094 | 0.036 | 0.821(0.683-0.988) | -2.00E-02 | 0.259 | 5.579 | 0.590 |
| GCST90274848 | MR Egger | 8 | -0.018 | 0.238 | 0.943 | 0.982(0.616-1.566) |  |  | 4.306 | 0.635 |
| GCST90274848 | IVW | 8 | 0.206 | 0.094 | 0.029 | 1.229(1.022-1.478) | 1.65E-02 | 0.345 | 5.355 | 0.617 |
| ***NPC1L1*** |  |  |  |  |  |  |  |  |  |  |
| GCST90274770 | MR Egger | 4 | -3.725 | 3.023 | 0.343 | 0.024(0-9.03) |  |  | 0.522 | 0.770 |
| GCST90274770 | IVW | 4 | -1.214 | 0.487 | 0.013 | 0.297(0.114-0.771) | 4.78E-02 | 0.489 | 1.230 | 0.746 |
| GCST90274797 | MR Egger | 4 | -1.093 | 4.792 | 0.841 | 0.335(0-4015.954) |  |  | 5.055 | 0.080 |
| GCST90274797 | IVW | 4 | -1.251 | 0.629 | 0.047 | 0.286(0.083-0.983) | -3.00E-03 | 0.976 | 5.058 | 0.168 |
| GCST90274805 | MR Egger | 4 | -4.193 | 3.324 | 0.334 | 0.015(0-10.186) |  |  | 1.354 | 0.508 |
| GCST90274805 | IVW | 4 | -1.620 | 0.544 | 0.003 | 0.198(0.068-0.574) | 4.91E-02 | 0.515 | 1.970 | 0.579 |
| GCST90274807 | MR Egger | 4 | -0.491 | 4.555 | 0.924 | 0.612(0-4616.332) |  |  | 3.766 | 0.152 |
| GCST90274807 | IVW | 4 | -1.210 | 0.613 | 0.048 | 0.298(0.09-0.992) | -1.37E-02 | 0.888 | 3.814 | 0.282 |
| GCST90274810 | MR Egger | 4 | -0.517 | 3.320 | 0.891 | 0.596(0.001-399.349) |  |  | 0.324 | 0.850 |
| GCST90274810 | IVW | 4 | -1.649 | 0.544 | 0.002 | 0.192(0.066-0.558) | -2.16E-02 | 0.762 | 0.444 | 0.931 |
| GCST90274813 | MR Egger | 4 | -1.758 | 3.320 | 0.649 | 0.172(0-115.474) |  |  | 0.136 | 0.934 |
| GCST90274813 | IVW | 4 | -1.172 | 0.544 | 0.031 | 0.31(0.107-0.899) | 1.12E-02 | 0.875 | 0.168 | 0.983 |
| GCST90274817 | MR Egger | 4 | -3.780 | 2.996 | 0.334 | 0.023(0-8.094) |  |  | 0.126 | 0.939 |
| GCST90274817 | IVW | 4 | -1.128 | 0.481 | 0.019 | 0.324(0.126-0.83) | 5.05E-02 | 0.464 | 0.931 | 0.818 |
| GCST90274824 | MR Egger | 4 | -1.920 | 3.014 | 0.589 | 0.147(0-53.898) |  |  | 0.360 | 0.835 |
| GCST90274824 | IVW | 4 | -0.956 | 0.485 | 0.049 | 0.384(0.149-0.994) | 1.84E-02 | 0.777 | 0.466 | 0.926 |
| GCST90274825 | MR Egger | 4 | 1.307 | 3.522 | 0.746 | 3.694(0.004-3673.166) |  |  | 2.761 | 0.251 |
| GCST90274825 | IVW | 4 | -1.025 | 0.511 | 0.045 | 0.359(0.132-0.976) | -4.44E-02 | 0.571 | 3.382 | 0.336 |
| GCST90274828 | MR Egger | 4 | -3.777 | 3.316 | 0.373 | 0.023(0-15.232) |  |  | 1.626 | 0.443 |
| GCST90274828 | IVW | 4 | -1.286 | 0.543 | 0.018 | 0.276(0.095-0.802) | 4.76E-02 | 0.526 | 2.206 | 0.531 |
| GCST90274829 | MR Egger | 4 | -4.941 | 3.028 | 0.244 | 0.007(0-2.701) |  |  | 0.081 | 0.960 |
| GCST90274829 | IVW | 4 | -1.308 | 0.486 | 0.007 | 0.27(0.104-0.702) | 6.92E-02 | 0.348 | 1.559 | 0.669 |
| GCST90274848 | MR Egger | 4 | -2.088 | 3.003 | 0.559 | 0.124(0-44.597) |  |  | 0.716 | 0.699 |
| GCST90274848 | IVW | 4 | -1.159 | 0.481 | 0.016 | 0.314(0.122-0.805) | 1.77E-02 | 0.784 | 0.814 | 0.846 |
| ***PCSK9*** |  |  |  |  |  |  |  |  |  |  |
| GCST90274760 | MR Egger | 11 | 0.492 | 0.419 | 0.270 | 1.636(0.72-3.717) |  |  | 5.546 | 0.784 |
| GCST90274760 | IVW | 11 | 0.360 | 0.155 | 0.020 | 1.434(1.059-1.941) | -6.70E-03 | 0.742 | 5.661 | 0.843 |
| GCST90274768 | MR Egger | 11 | -0.546 | 0.454 | 0.260 | 0.579(0.238-1.412) |  |  | 14.422 | 0.108 |
| GCST90274768 | IVW | 11 | -0.544 | 0.161 | 0.001 | 0.58(0.423-0.796) | 6.66E-05 | 0.998 | 14.422 | 0.155 |
| GCST90274777 | MR Egger | 11 | -0.193 | 0.358 | 0.602 | 0.824(0.409-1.661) |  |  | 8.913 | 0.445 |
| GCST90274777 | IVW | 11 | -0.301 | 0.134 | 0.025 | 0.74(0.569-0.962) | -5.48E-03 | 0.753 | 9.019 | 0.530 |
| GCST90274787 | MR Egger | 11 | -0.338 | 0.364 | 0.377 | 0.713(0.349-1.455) |  |  | 6.060 | 0.734 |
| GCST90274787 | IVW | 11 | -0.310 | 0.136 | 0.022 | 0.733(0.562-0.957) | 1.44E-03 | 0.935 | 6.067 | 0.810 |
| GCST90274810 | MR Egger | 11 | 0.172 | 0.421 | 0.692 | 1.188(0.52-2.712) |  |  | 9.082 | 0.430 |
| GCST90274810 | IVW | 11 | 0.375 | 0.155 | 0.015 | 1.455(1.074-1.971) | 1.03E-02 | 0.616 | 9.353 | 0.499 |
| GCST90274811 | MR Egger | 11 | 0.021 | 0.439 | 0.963 | 1.021(0.432-2.414) |  |  | 9.879 | 0.360 |
| GCST90274811 | IVW | 11 | 0.483 | 0.164 | 0.003 | 1.62(1.175-2.235) | 2.34E-02 | 0.287 | 11.283 | 0.336 |
| GCST90274814 | MR Egger | 11 | 0.527 | 0.419 | 0.240 | 1.693(0.745-3.848) |  |  | 5.890 | 0.751 |
| GCST90274814 | IVW | 11 | 0.364 | 0.155 | 0.019 | 1.44(1.063-1.95) | -8.25E-03 | 0.686 | 6.064 | 0.810 |
| GCST90274823 | MR Egger | 11 | 0.175 | 0.415 | 0.683 | 1.191(0.528-2.688) |  |  | 7.930 | 0.541 |
| GCST90274823 | IVW | 11 | -0.339 | 0.153 | 0.027 | 0.712(0.528-0.962) | -2.62E-02 | 0.215 | 9.710 | 0.466 |
| GCST90274830 | MR Egger | 11 | -0.743 | 0.449 | 0.132 | 0.476(0.197-1.147) |  |  | 14.924 | 0.093 |
| GCST90274830 | IVW | 11 | -0.376 | 0.165 | 0.023 | 0.686(0.496-0.949) | 1.87E-02 | 0.402 | 16.207 | 0.094 |
| GCST90274840 | MR Egger | 11 | 0.593 | 0.589 | 0.340 | 1.81(0.57-5.747) |  |  | 17.829 | 0.037 |
| GCST90274840 | IVW | 11 | -0.435 | 0.208 | 0.036 | 0.647(0.431-0.972) | -8.03E-03 | 0.779 | 17.994 | 0.055 |
| GCST90274845 | MR Egger | 11 | 0.224 | 0.420 | 0.607 | 1.251(0.549-2.847) |  |  | 3.423 | 0.945 |
| GCST90274845 | IVW | 11 | 0.504 | 0.155 | 0.001 | 1.656(1.222-2.244) | 1.43E-02 | 0.490 | 3.940 | 0.950 |

**Supplementary Table 5. MR analysis of the effect of inflammatory factors on AITD**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Exposure** | **Method** | **nSNP** | **BETA** | **SE** | ***p*-value** | **OR\_95%CI** | **Egger\_intercept** | ***p*-heterogeneity** | **Q statistic** | **Q\_*pval*** |
| **AIH** | | |  |  |  |  |  |  |  |  |
| GCST90274813 | IVW | 19 | 0.112 | 0.047 | 0.018 | 1.119(1.02-1.228) |  |  | 52.408 | <0.001 |
| GCST90274813 | MR Egger | 19 | -0.043 | 0.111 | 0.703 | 0.958(0.77-1.191) | 1.51E-02 | 0.143 | 46.036 | <0.001 |
| GCST90274830 | IVW | 21 | -0.079 | 0.036 | 0.029 | 0.924(0.862-0.992) |  |  | 47.847 | <0.001 |
| GCST90274830 | MR Egger | 21 | -0.058 | 0.078 | 0.468 | 0.944(0.811-1.099) | -2.41E-03 | 0.763 | 47.613 | <0.001 |
| GCST90274787 | IVW | 29 | -0.068 | 0.025 | 0.006 | 0.934(0.89-0.98) |  |  | 37.834 | 0.102 |
| GCST90274787 | MR Egger | 29 | -0.163 | 0.057 | 0.008 | 0.85(0.76-0.951) | 1.13E-02 | 0.081 | 33.722 | 0.174 |
| **GD** | | |  |  |  |  |  |  |  |  |
| GCST90274840 | IVW | 35 | 0.133 | 0.053 | 0.012 | 1.142(1.029-1.268) |  |  | 55.987 | 0.010 |
| GCST90274840 | MR Egger | 35 | 0.246 | 0.079 | 0.004 | 1.278(1.095-1.492) | -2.89E-02 | 0.069 | 50.576 | 0.026 |

**Supplementary Table 6. The specific information of the genetic variants for the 30 inflammatory factors**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Inflammatory factors** | **SNP** | **Effect\_allele** | **Other\_allele** | **BETA** | **SE** | ***F*-statistics** | ***p*-value** |
| GCST90274760 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274760 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274760 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274760 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274760 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274760 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274760 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274760 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274760 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274760 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274760 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274768 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274768 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274768 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274768 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274768 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274768 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274768 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274768 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274768 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274768 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274768 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274770 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274770 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274770 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274770 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274770 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274770 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274770 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274770 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274770 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274770 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274770 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274770 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274770 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274770 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274770 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274770 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274770 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274774 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274774 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274774 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274774 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274774 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274774 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274774 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274774 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274774 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274774 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274774 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274774 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274775 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274775 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274775 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274775 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274775 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274775 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274775 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274775 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274775 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274775 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274775 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274775 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274777 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274777 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274777 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274777 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274777 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274777 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274777 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274777 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274777 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274777 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274777 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274786 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274786 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274786 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274786 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274786 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274786 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274786 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274786 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274786 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274786 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274786 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274786 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274787 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274787 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274787 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274787 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274787 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274787 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274787 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274787 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274787 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274787 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274787 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274789 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274789 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274789 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274789 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274789 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274789 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274789 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274789 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274789 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274789 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274789 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274789 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274790 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274790 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274790 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274790 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274790 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274790 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274790 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274790 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274790 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274790 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274790 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274790 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274797 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274797 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274797 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274797 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274797 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274801 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274801 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274801 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274801 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274801 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274801 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274801 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274801 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274801 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274801 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274801 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274801 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274805 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274805 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274805 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274805 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274805 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274807 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274807 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274807 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274807 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274807 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274810 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274810 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274810 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274810 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274810 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274810 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274810 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274810 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274810 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274810 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274810 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274810 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274810 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274810 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274810 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274810 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274811 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274811 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274811 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274811 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274811 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274811 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274811 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274811 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274811 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274811 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274811 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274813 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274813 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274813 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274813 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274813 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274814 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274814 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274814 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274814 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274814 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274814 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274814 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274814 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274814 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274814 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274814 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274816 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274816 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274816 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274816 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274816 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274816 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274816 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274816 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274816 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274816 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274816 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274816 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274817 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274817 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274817 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274817 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274817 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274823 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274823 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274823 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274823 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274823 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274823 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274823 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274823 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274823 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274823 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274823 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274824 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274824 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274824 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274824 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274824 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274825 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274825 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274825 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274825 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274825 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274825 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274825 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274825 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274825 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274825 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274825 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274825 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274825 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274825 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274825 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274825 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274825 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274828 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274828 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274828 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274828 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274828 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274829 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274829 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274829 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274829 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |
| GCST90274829 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274830 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274830 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274830 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274830 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274830 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274830 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274830 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274830 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274830 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274830 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274830 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274838 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274838 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274838 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274838 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274838 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274838 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274838 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274838 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274838 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274838 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274838 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274838 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274840 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274840 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274840 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274840 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274840 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274840 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274840 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274840 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274840 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274840 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274840 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274845 | rs41294821 | C | T | -0.043 | 0.005 | 72.524 | 1.65E-17 |
| GCST90274845 | rs45508296 | A | G | -0.065 | 0.005 | 145.113 | 2.03E-33 |
| GCST90274845 | rs45613943 | T | C | -0.040 | 0.003 | 145.250 | 1.89E-33 |
| GCST90274845 | rs2479410 | G | A | -0.041 | 0.002 | 733.100 | 1.90E-161 |
| GCST90274845 | rs137886411 | G | A | 0.052 | 0.007 | 49.020 | 2.53E-12 |
| GCST90274845 | rs7552350 | C | A | 0.016 | 0.002 | 48.414 | 3.45E-12 |
| GCST90274845 | rs7546522 | C | T | -0.022 | 0.002 | 122.353 | 1.93E-28 |
| GCST90274845 | rs693668 | A | G | -0.056 | 0.001 | 1490.587 | 0 |
| GCST90274845 | rs7525503 | G | T | 0.071 | 0.005 | 204.214 | 2.51E-46 |
| GCST90274845 | rs11206517 | T | G | 0.089 | 0.004 | 573.437 | 1.00E-126 |
| GCST90274845 | rs12136600 | C | T | -0.042 | 0.003 | 248.687 | 5.02E-56 |
| GCST90274848 | rs1801701 | C | T | 0.039 | 0.002 | 269.844 | 1.23E-60 |
| GCST90274848 | rs693 | A | G | -0.080 | 0.001 | 3336.249 | 0 |
| GCST90274848 | rs12720807 | A | T | 0.071 | 0.002 | 866.578 | 1.81E-190 |
| GCST90274848 | rs12720838 | C | T | -0.052 | 0.002 | 770.547 | 1.37E-169 |
| GCST90274848 | rs184507838 | C | T | -0.126 | 0.007 | 335.586 | 5.84E-75 |
| GCST90274848 | rs12720793 | C | T | 0.063 | 0.005 | 149.038 | 2.81E-34 |
| GCST90274848 | rs533617 | T | C | -0.126 | 0.003 | 1315.786 | 4.19E-288 |
| GCST90274848 | rs579826 | C | T | -0.083 | 0.003 | 1095.613 | 2.97E-240 |
| GCST90274848 | rs11680233 | C | A | -0.032 | 0.002 | 423.469 | 4.29E-94 |
| GCST90274848 | rs12714264 | A | T | -0.113 | 0.002 | 2947.936 | 0 |
| GCST90274848 | rs1042023 | G | C | 0.136 | 0.007 | 405.462 | 3.56E-90 |
| GCST90274848 | rs72653066 | C | G | -0.077 | 0.007 | 127.088 | 1.78E-29 |
| GCST90274848 | rs7808003 | C | T | -0.019 | 0.002 | 134.770 | 3.71E-31 |
| GCST90274848 | rs77826622 | T | C | 0.031 | 0.005 | 40.230 | 2.26E-10 |
| GCST90274848 | rs2072183 | G | C | 0.033 | 0.002 | 374.665 | 1.81E-83 |
| GCST90274848 | rs217412 | C | T | 0.017 | 0.002 | 104.403 | 1.65E-24 |
| GCST90274848 | rs7808295 | C | T | -0.023 | 0.004 | 38.551 | 5.33E-10 |