**Supplementary Table 2. Effect estimates of the associations between genetically predicted exposures and risk of liver fibrosis**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SNP** | **Chr.** | **Position** | **Gene** | **Effect**  **allele** | **Other**  **allele** | **Association with exposure** | | | **Association with liver fibrosis** | | |
| **Beta** | **SE** | ***P*** | **Beta** | **SE** | ***P*** |
| *Butyricicoccus* |  |  |  |  |  |  |  |  |  |  |  |
| *rs10084203* | 2 | 191304149 | *MFSD6* | G | A | −0.055 | 0.012 | 8.59E-06 | −0.082 | 0.075 | 0.275 |
| *rs12034718* | 1 | 67379595 | *WDR78* | G | A | −0.070 | 0.016 | 9.58E-06 | 0.068 | 0.060 | 0.2600 |
| *rs12585793* | 13 | 27018240 | *CDK8* | T | C | −0.262 | 0.056 | 5.79E-06 | 0.204 | 0.151 | 0.177 |
| *rs2017189* | 4 | 7460153 | *SORCS2* | T | G | 0.051 | 0.011 | 3.87E-06 | −0.031 | 0.050 | 0.540 |
| *rs4962426* | 10 | 126908208 | *MRPS21P6* | T | G | −0.061 | 0.014 | 7.38E-06 | 0.037 | 0.064 | 0.565 |
| *rs56221232* | 2 | 153453410 | *FMNL2* | T | C | 0.083 | 0.017 | 7.62E-07 | −0.091 | 0.084 | 0.277 |
| *rs62478070* | 7 | 157688150 | *PTPRN2* | T | G | 0.224 | 0.049 | 5.94E-06 | −0.361 | 0.161 | 0.025 |
| *rs7322368* | 13 | 100213990 | *TM9SF2* | C | T | −0.082 | 0.018 | 5.52E-06 | 0.108 | 0.087 | 0.216 |
| *Marvinbryantia* |  |  |  |  |  |  |  |  |  |  |  |
| *rs11620597* | 13 | 86079090 | *LINC00351* | T | C | 0.119 | 0.027 | 7.80E-06 | 0.199 | 0.162 | 0.220 |
| *rs1187983* | 1 | 58441860 | *DAB1* | C | T | −0.094 | 0.019 | 2.02E-06 | 0.133 | 0.083 | 0.108 |
| *rs146541147* | 19 | 4542097 | *LRG1* | G | A | 0.119 | 0.027 | 6.86E-06 | −0.093 | 0.141 | 0.508 |
| *rs2724813* | 10 | 12516924 | *CAMK1D* | G | A | 0.084 | 0.017 | 6.28E-07 | −0.063 | 0.059 | 0.285 |
| *rs2842896* | 6 | 132881664 | *TAAR7P* | C | T | −0.065 | 0.013 | 7.25E-07 | 0.103 | 0.051 | 0.044 |
| *rs2863363* | 3 | 166039765 | *SLC2A2* | G | A | −0.063 | 0.014 | 3.11E-06 | 0.091 | 0.058 | 0.118 |
| *rs3125832* | 1 | 211400180 | *AC092017.1* | A | C | 0.068 | 0.015 | 5.03E-06 | −0.068 | 0.060 | 0.261 |
| *rs61884471* | 11 | 45826561 | *SLC35C1* | G | A | 0.124 | 0.025 | 1.01E-06 | −0.039 | 0.081 | 0.629 |
| *rs72948274* | 11 | 79518683 | *AP000478.1* | A | C | −0.126 | 0.027 | 3.26E-06 | −0.055 | 0.103 | 0.594 |
| *rs8006832* | 14 | 21577837 | *ZNF219* | G | T | −0.095 | 0.022 | 6.58E-06 | 0.109 | 0.088 | 0.215 |

SE, standard error; SNP, single nucleotide polymorphism.