## Supplemental Digital Content

## Table S1: Associations among 314 dolutegravir recipients between percentage weight gain at week 48 all polymorphisms in genes relevant to dolutegravir

|  |  |  |  |
| --- | --- | --- | --- |
| **SNPa** | **Geneb** | **Beta** | **P-valuec** |
| rs4148149 | *ABCG2* | -1.96 | 7.0 x 10-4 |
| rs12641369 | *ABCG2* | -1.88 | 0.00104 |
| rs28898593 | *UGT1A1* | -2.76 | 0.005 |
| rs11695770 | *UGT1A1* | -1.59 | 0.006 |
| rs17131983 | *ABCB1* | 3.45 | 0.006 |
| rs78903144 | *ABCB1* | -2.80 | 0.008 |
| rs4986911 | *CYP3A4* | 1.87 | 0.102 |
| rs28988604 | *CYP3A4* | -1.60 | 0.103 |

a SNP: Single nucleotide polymorphism.

b We considered polymorphisms in *ABCB1, ABCG2, CYP3A4* and *UGT1A1*  50 kB in each gene.

c Significance threshold was 2.9x10-5 for the subset of 1729 SNPs. For each gene, we show the two SNPs with the lowest P-values.

## Table S2: Association among 314 tenofovir (TAF or TDF) recipients between percentage weight gain at week 48 and selected polymorphisms relevant to tenofovir

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SNPa** | **Gene** | **MAFb** | **Beta** | **P-valuec** |
| rs3742106 | *ABCC4* | 0.42 | 1.59 | 0.05 |
| rs8187707 | *ABCC2* | 0.09 | -2.58 | 0.05 |
| rs3740066 | *ABCC2* | 0.15 | -1.99 | 0.06 |
| rs17222723 | *ABCC2* | 0.09 | -2.54 | 0.07 |
| rs11231809 | *SLC22A11* | 0.06 | -2.14 | 0.15 |
| rs11568655 | *ABCC4* | 0.08 | 1.69 | 0.25 |
| rs1751034 | *ABCC4* | 0.36 | 0.86 | 0.27 |
| rs2487663 | *ABCC10* | 0.04 | -0.74 | 0.3 |
| rs2274405 | *ABCC4* | 0.36 | 0.75 | 0.37 |
| rs7080681 | *ABCC2* | 0.13 | 0.66 | 0.54 |
| rs1557070 | *ABCC4* | 0.3 | -0.3 | 0.72 |
| rs1059751 | *ABCC4* | 0.19 | -0.31 | 0.74 |
| rs2273697 | *ABCC2* | 0.14 | -0.22 | 0.84 |
| rs8187710 | *ABCC2* | 0.26 | -0.14 | 0.87 |
| rs3127573 | *SLC22A2* | 0.2 | 0.15 | 0.87 |
| rs11568695 | *ABCC4* | 0.14 | -0.14 | 0.9 |
| rs2274407 | *ABCC4* | 0.2 | -0.12 | 0.9 |
| rs2274406 | *ABCC4* | 0.31 | 0.1 | 0.91 |
| rs899494 | *ABCC4* | 0.26 | -0.03 | 0.97 |

a SNP: Single nucleotide polymorphism.

b MAF: Minor allele frequency.

c Significance threshold was 3.0x10-3 for the subset of 19 SNPs.

**Table S3: Associations between percentage weight gain at week 48 in 314 tenofovir (TAF**

**or TDF) recipients and all polymorphisms in genes relevant to tenofovir**

|  |  |  |  |
| --- | --- | --- | --- |
| **SNPa** | **Geneb** | **Beta** | **P-valuec** |
| rs67861980 | *ABCC10* | 1.82 | 0.01 |
| rs116643428 | *ABCC4* | -2.25 | 0.03 |
| rs61965967 | *ABCC4* | 1.80 | 0.03 |
| rs751875927 | *ABCC10* | -2.07 | 0.04 |
| rs55804858 | *ABCC2* | -2.83 | 0.05 |
| rs113513789 | *ABCC2* | -2.58 | 0.05 |
| rs76078067 | *SLC22A11* | 1.49 | 0.18 |
| rs149563293 | *SLC22A11* | -2.30 | 0.19 |
| rs371552166 | *SLC22A6* | 0.51 | 0.54 |
| rs10792366 | *SLC22A6* | 0.47 | 0.55 |
| rs315991 | *SLC22A2* | -0.34 | 0.66 |
| rs1482124455 | *SLC22A2* | -0.31 | 0.69 |

a SNP: Single nucleotide polymorphism.

b We considered polymorphisms in *ABCC2, ABCC4, ABCC10, SLC22A2, SLC22A6* and *SLC22A11*  50 kB for each gene.

c Significance threshold was 1.3x10-5 for the subset of 3945 SNPs. We selected the top two SNPs with the lowest P-values for each gene.

**Table S4: Associations between percentage weight gain at week 48 in 314 tenofovir (TAF**

**or TDF) recipients and all polymorphisms in SNPs previously associated with obesity**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SNPa** | **Gene** | **MAFb** | **Beta** | **P-valuec** |
| rs1516725 | *ETV5* | 0.26 | -1.58 | 0.01 |
| rs10423928 | *GIPR* | 0.19 | 1.68 | 0.02 |
| rs476828 | *MC4R* | 0.42 | 1.14 | 0.05 |
| rs16933812 | *PAX5* | 0.21 | -1.28 | 0.06 |
| rs538656 | *MC4R* | 0.36 | 1.11 | 0.06 |
| rs2568958 | *NEGR1* | 0.44 | 1.03 | 0.07 |
| rs3101336 | *NEGR1* | 0.44 | 1.03 | 0.07 |
| rs9816226 | *ETV5* | 0.22 | -1.19 | 0.08 |
| rs10182181 | *ADCY3, POMC* | 0.08 | -1.71 | 0.10 |
| rs1993709 | *NEGR1* | 0.11 | -1.24 | 0.13 |
| rs1800437 | *GIPR* | 0.12 | 1.08 | 0.20 |
| rs7989336 | *HS6ST3* | 0.37 | 0.97 | 0.20 |
| rs11109072 | *RMST* | 0.23 | -0.80 | 0.20 |
| rs7503807 | *RPTOR* | 0.48 | 0.67 | 0.23 |
| rs1957894 | *NRXN3* | 0.24 | -0.79 | 0.24 |
| rs12446554 | *LOC105371116* | 0.11 | -1.04 | 0.26 |
| rs12446632 | *LOC105371116* | 0.11 | -1.04 | 0.26 |
| rs564343 | *PACS1* | 0.20 | 0.94 | 0.27 |
| rs11639988 | *GPRC5B* | 0.22 | -0.67 | 0.31 |
| rs2531995 | *ADCY9* | 0.09 | 0.90 | 0.32 |
| rs10938397 | *GNPDA2* | 0.23 | -0.67 | 0.33 |
| rs13130484 | *GNPDA2* | 0.23 | -0.67 | 0.33 |
| rs7579427 | *NR* | 0.09 | 0.53 | 0.35 |
| rs2370983 | *NRXN3* | 0.10 | 0.82 | 0.36 |
| rs1424233 | *NR* | 0.27 | 0.52 | 0.39 |
| rs2060457 | *TDH* | 0.12 | 0.70 | 0.41 |
| rs1514177 | *TNNI3K* | 0.34 | -0.51 | 0.41 |
| rs2605100 | *LYPLAL1* | 0.05 | 1.00 | 0.43 |
| rs11088859 | *NCAM2* | 0.10 | 0.72 | 0.44 |
| rs56094641 | *FTO* | 0.05 | 0.93 | 0.45 |
| rs2943650 | *IRS1* | 0.38 | 0.43 | 0.45 |
| rs10493544 | *NR* | 0.11 | -0.64 | 0.49 |
| rs10189761 | *TMEM18* | 0.15 | 0.53 | 0.49 |
| rs12463617 | *TMEM18* | 0.19 | 0.73 | 0.52 |
| rs7132908 | *FAIM2* | 0.12 | 0.32 | 0.53 |
| rs35669975 | *FAM155A* | 0.20 | -0.63 | 0.54 |
| rs6711012 | *TMEM18* | 0.09 | 0.57 | 0.55 |
| rs7498665 | *SH2B1* | 0.28 | -0.34 | 0.57 |
| rs11208659 | *LEPR* | 0.41 | -0.29 | 0.62 |
| **SNPa** | **Gene**  | **MAFb** | **Beta** | **P-valuec** |
| rs2206277 | *TFAP2B* | 0.13 | -0.40 | 0.63 |
| rs1514174 | *TNNI3K* | 0.24 | -0.30 | 0.65 |
| rs4735692 | *HNF4G* | 0.37 | 0.25 | 0.66 |
| rs17024258 | *GNAT2* | 0.08 | 0.45 | 0.66 |
| rs13041126 | *LOC105372666* | 0.20 | 0.29 | 0.67 |
| rs7185735 | *FTO* | 0.45 | 0.23 | 0.67 |
| rs9299 | *HOXB5* | 0.20 | 0.30 | 0.67 |
| rs10875976 | *BCDIN3D-AS1* | 0.23 | 0.26 | 0.69 |
| rs633715 | *SEC16B* | 0.08 | 0.41 | 0.70 |
| rs17782313 | *MC4R* | 0.25 | 0.24 | 0.71 |
| rs9568856 | *OLFM4* | 0.46 | -0.28 | 0.71 |
| rs8028313 | *MAP2K5* | 0.27 | 0.23 | 0.73 |
| rs10871777 | *MC4R* | 0.26 | 0.22 | 0.73 |
| rs2307111 | *C5orf37* | 0.10 | 0.43 | 0.74 |
| rs887912 | *FANCL* | 0.07 | -0.36 | 0.75 |
| rs7184597 | *RABEP2* | 0.00 | 1.09 | 0.75 |
| rs2112347 | *C5orf37* | 0.43 | -0.23 | 0.76 |
| rs13078807 | *CADM2* | 0.02 | -0.57 | 0.76 |
| rs734597 | *TFAP2B* | 0.07 | 0.32 | 0.78 |
| rs17817449 | *FTO* | 0.38 | -0.13 | 0.82 |
| rs17150703 | *MSRA, TNKS* | 0.01 | 0.52 | 0.84 |
| rs11152213 | *MC4R* | 0.23 | 0.14 | 0.84 |
| rs6567160 | *NR* | 0.20 | -0.13 | 0.84 |
| rs987237 | *TFAP2B* | 0.08 | 0.21 | 0.85 |
| rs11624704 | *PRKCH* | 0.07 | 0.17 | 0.87 |
| rs539515 | *NR* | 0.24 | 0.09 | 0.88 |
| rs7141420 | *NRXN3* | 0.48 | 0.08 | 0.88 |
| rs7138803 | *NR* | 0.18 | -0.10 | 0.89 |
| rs6731302 | *FANCL* | 0.12 | 0.12 | 0.89 |
| rs9941349 | *FTO* | 0.13 | 0.05 | 0.91 |
| rs8050136 | *FTO* | 0.41 | 0.05 | 0.93 |
| rs11042023 | *RPL27A* | 0.39 | 0.07 | 0.93 |
| rs8043757 | *FTO* | 0.40 | 0.03 | 0.96 |
| rs7826222 | *MSRA* | 0.02 | -0.08 | 0.97 |
| rs10968576 | *LINGO2* | 0.13 | 0.01 | 0.99 |
| rs1412239 | *LINGO2* | 0.13 | 0.01 | 0.99 |
| rs1421085 | *FTO* | 0.06 | 0.36 | 1.07 |
| rs1558902 | *FTO* | 0.06 | 0.36 | 1.07 |

a SNP: Single nucleotide polymorphism.

b MAF: Minor allele frequency

c Significance threshold was 6,5 x10-4 for the subset of 77 SNPs.