

## Supplemental Material

**Table A1.** Characteristics of Gene Variants of Controls, Hardy Weinberg Equilibrium (HWE) Evaluated Using HaploView Program (N=104)

| Gene Symbol | dbSNP ID    | Position | Reference Allele <sup>a</sup> | Call Rate % | MAF <sup>b</sup> | HWE P-value |
|-------------|-------------|----------|-------------------------------|-------------|------------------|-------------|
| ABCB1       | rs1045642   | 7586657  | G                             | 100         | 0.46             | 0.63        |
| ABCB1       | rs1128503   | 7586662  | G                             | 100         | 0.44             | 0.96        |
| ABCB1       | rs2032582   | 11711719 | C                             | 99.1        | 0.42             | 0.09        |
| ABCB1       | rs2032582   | 11711720 | C                             | 82          | 0.06             | <0.01       |
| ABCC2       | rs56199535  | 2864     | C                             | 98.2        | <0.01            | 1.00        |
| ABCC2       | rs717620    | 2814642  | C                             | 98.2        | 0.14             | 0.86        |
| ABCC2       | rs3740066   | 11214910 | C                             | 98.2        | 0.34             | 0.23        |
| ABCC2       | rs2273697   | 22272980 | G                             | 98.2        | 0.17             | 0.39        |
| ABCG2       | rs2231142   | 15854163 | G                             | 100         | 0.15             | 0.92        |
| CYP1A1      | rs1799814   | 8879531  | G                             | 99.1        | 0.03             | 1.00        |
| CYP1A1      | rs1048943   | 25624888 | T                             | 99.1        | 0.22             | <0.01       |
| CYP1A1      | rs41279188  | 30634152 | G                             | 99.1        | <0.01            | 1.00        |
| CYP1A2      | rs762551    | 8881221  | A                             | 100         | 0.29             | 0.02        |
| CYP1A2      | rs2069514   | 15859191 | G                             | 94.6        | 0.22             | <0.01       |
| CYP2A6      | rs1801272   | 27861808 | A                             | 95.5        | 0.02             | 1.00        |
| CYP2A6      | rs4986891   | 30534060 | C                             | 92.8        | 0.05             | 1.00        |
| CYP2A6      | rs28399433  | 30634332 | A                             | 98.2        | 0.08             | 0.29        |
| CYP2A6      | hCV33845966 | 33845966 | T                             | 99.1        | <0.01            | 1.00        |
| CYP2A6      | rs28399454  | 34816076 | C                             | 95.5        | 0.01             | 1.00        |
| CYP2B6      | rs3745274   | 7817765  | G                             | 87.4        | 0.26             | 0.71        |
| CYP2B6      | rs12721655  | 30634236 | A                             | 100         | <0.01            | 1.00        |
| CYP2B6      | rs28399499  | 60732328 | T                             | 98.2        | 0.01             | 1.00        |
| CYP2C19     | rs12248560  | 469857   | C                             | 84.7        | 0.17             | 1.00        |
| CYP2C19     | rs3758580   | 1329163  | C                             | 97.3        | 0.11             | 0.13        |
| CYP2C19     | rs17878459  | 11383554 | G                             | 100         | 0.02             | 1.00        |
| CYP2C19     | rs4244285   | 25986767 | G                             | 100         | 0.12             | 0.62        |
| CYP2C19     | rs41291556  | 30634130 | T                             | 95.5        | 0.02             | 1.00        |
| CYP2C19     | rs17885098  | 30634133 | T                             | 97.3        | 0.03             | 1.00        |
| CYP2C19     | rs28399504  | 30634136 | A                             | 98.2        | 0.01             | 1.00        |
| CYP2C19     | rs17886522  | 34816135 | A                             | 99.1        | 0.01             | 1.00        |
| CYP2C8      | rs10509681  | 25625782 | T                             | 99.1        | 0.10             | 0.05        |
| CYP2C8      | rs11572080  | 25625794 | C                             | 98.2        | 0.08             | 0.59        |
| CYP2C8      | rs1058930   | 25761568 | G                             | 100         | 0.04             | 1.00        |
| CYP2C8      | rs11572103  | 30634034 | T                             | 99.1        | 0.01             | 1.00        |
| CYP2C9      | rs7900194   | 25625804 | G                             | 100         | <0.01            | 1.00        |
| CYP2C9      | rs1799853   | 25625805 | C                             | 99.1        | 0.07             | 0.52        |
| CYP2C9      | rs1057910   | 27104892 | A                             | 100         | 0.04             | 0.52        |
| CYP2C9      | rs28371686  | 27859817 | C                             | 97.3        | 0.01             | 0.01        |
| CYP2C9      | rs9332239   | 30634125 | C                             | 99.1        | 0.02             | 0.07        |

|         |             |          |      |      |       |       |
|---------|-------------|----------|------|------|-------|-------|
| CYP2C9  | rs28371685  | 30634132 | C    | 99.1 | 0.01  | 1.00  |
| CYP2C9  | rs9332130   | 30634137 | A    | 100  | <0.01 | 1.00  |
| CYP2C9  | rs9332131   | 32287221 | A    | 97.3 | 0.02  | <0.01 |
| CYP2C9  | hCV72649992 | 72649992 | I/D  | 93.7 | 0.01  | 0.02  |
| CYP2C9  | rs72558190  | 72649995 | C    | 98.2 | 0.01  | 0.01  |
| CYP2D6  | rs28371706  | 2222771  | G    | 93.7 | 0.02  | 0.08  |
| CYP2D6  | rs3892097   | 27102431 | C    | 99.1 | 0.13  | 1.00  |
| CYP2D6  | rs5030862   | 27531552 | C    | 96.4 | 0.02  | 0.07  |
| CYP2D6  | rs72549349  | 32407228 | C    | 98.2 | 0.01  | <0.01 |
| CYP2D6  | rs72549350  | 32407229 | TCT  | 98.2 | 0.01  | 1.00  |
| CYP2D6  | rs35742686  | 32407232 | T    | 96.4 | 0.03  | <0.01 |
| CYP2D6  | rs72549353  | 32407233 | AGTT | 98.2 | 0.01  | 1.00  |
| CYP2D6  | hCV32407240 | 32407240 | -    | 100  | 0.02  | <0.01 |
| CYP2D6  | rs5030655   | 32407243 | A    | 88.3 | 0.01  | 1.00  |
| CYP2D6  | rs72549346  | 72649935 | -    | 94.6 | 0.04  | <0.01 |
| CYP2D6  | rs5030865   | 30634117 | C    | 93.7 | 0.02  | 1.00  |
| CYP2D6  | rs5030865   | 30634118 | C    | 93.7 | 0.05  | 1.00  |
| CYP3A4  | rs55785340  | 30634204 | A    | 98.2 | 0.02  | <0.01 |
| CYP3A5  | rs10264272  | 30203950 | C    | 99.1 | 0.01  | 1.00  |
| CYP3A5  | rs55965422  | 30633867 | A    | 99.1 | 0.01  | 1.00  |
| CYP3A5  | rs41303343  | 32287188 | -    | 99.1 | 0.01  | 1.00  |
| DPYD    | rs1801267   | 8393589  | C    | 97.3 | 0.01  | 0.01  |
| DPYD    | rs1801265   | 9491497  | A    | 99.1 | 0.24  | 0.20  |
| DPYD    | rs3918290   | 30633851 | C    | 98.2 | 0.01  | 1.00  |
| DPYD    | hCV32287186 | 32287186 | ATGA | 100  | 0.01  | 1.00  |
| GSTP1   | rs1695      | 3237198  | A    | 96.4 | 0.42  | 0.69  |
| NAT1    | rs4986782   | 1204334  | G    | 99.1 | 0.01  | 1.00  |
| NAT1    | rs4986988   | 27530743 | C    | 99.1 | 0.03  | 1.00  |
| NAT1    | rs55793712  | 30633845 | A    | 100  | 0.01  | 1.00  |
| NAT2    | rs1208      | 572769   | A    | 100  | 0.37  | 0.63  |
| NAT2    | rs1799931   | 572770   | G    | 98.2 | 0.08  | 0.62  |
| NAT2    | rs1799930   | 1204091  | G    | 95.5 | 0.26  | 0.29  |
| NAT2    | rs1799929   | 1204092  | C    | 99.1 | 0.34  | 0.85  |
| NAT2    | rs1801280   | 1204093  | T    | 94.6 | 0.37  | 0.37  |
| NAT2    | rs1041983   | 8684085  | C    | 100  | 0.31  | 1.00  |
| SLC15A2 | rs2293616   | 385910   | G    | 100  | 0.39  | 0.89  |
| SLC15A2 | rs2257212   | 385920   | C    | 100  | 0.38  | 1.00  |
| SLC15A2 | rs1143671   | 385930   | C    | 99.1 | 0.39  | 0.78  |
| SLC15A2 | rs1143672   | 7504282  | G    | 92.8 | 0.39  | 1.00  |
| SLC22A1 | rs628031    | 8709275  | G    | 98.2 | 0.28  | 1.00  |
| SLC22A1 | rs2282143   | 15877554 | C    | 100  | 0.04  | 1.00  |
| SLC22A1 | rs34059508  | 30634080 | G    | 100  | 0.01  | 1.00  |
| SLC22A1 | rs55918055  | 30634094 | T    | 100  | 0.01  | 1.00  |
| SLC22A1 | rs72552763  | 34211613 | GAT  | 99.1 | 0.22  | 0.01  |
| SLC22A2 | rs316019    | 3111809  | C    | 97.3 | 0.08  | 1.00  |
| SLC22A2 | rs8177507   | 25621236 | C    | 100  | <0.01 | 1.00  |

|         |            |          |   |      |       |      |
|---------|------------|----------|---|------|-------|------|
| SLC22A2 | rs8177517  | 25621260 | T | 100  | <0.01 | 1.00 |
| SLC22A2 | rs8177516  | 30633923 | G | 100  | 0.01  | 0.07 |
| SLCO1B1 | rs2306283  | 1901697  | A | 95.5 | 0.42  | 0.60 |
| SLCO1B1 | rs56061388 | 30633903 | T | 100  | 0.01  | 1.00 |
| SLCO1B1 | rs72559745 | 30633905 | A | 95.5 | <0.01 | 1.00 |
| SLCO1B1 | rs4149056  | 30633906 | T | 99.1 | 0.11  | 0.50 |
| SLCO1B1 | rs55737008 | 30633912 | A | 99.1 | <0.01 | 1.00 |
| SLCO1B3 | rs4149117  | 25639181 | G | 96.4 | 0.19  | 0.26 |
| SLCO1B3 | rs7311358  | 25765587 | A | 96.4 | 0.19  | 0.30 |
| SLCO2B1 | rs2306168  | 16193013 | C | 98.2 | 0.09  | 0.93 |
| TPMT    | rs1142345  | 19567    | T | 93.7 | 0.05  | 1.00 |
| TPMT    | rs56161402 | 19569    | C | 100  | <0.01 | 1.00 |
| TPMT    | rs1800460  | 30634116 | C | 98.2 | 0.05  | 1.00 |
| UGT1A1  | rs4148323  | 559715   | G | 98.2 | 0.02  | 1.00 |
| UGT1A1  | rs4124874  | 1432134  | T | 100  | 0.48  | 0.96 |
| UGT2B15 | rs1902023  | 27028164 | C | 97.3 | 0.42  | 0.40 |
| UGT2B7  | rs7668258  | 27827970 | C | 91   | 0.36  | 0.43 |
| UGT2B7  | rs7662029  | 30720663 | G | 92.8 | 0.36  | 0.16 |
| VKORC1  | rs8050894  | 2847860  | C | 98.2 | 0.48  | 0.77 |

<sup>a</sup> I/D – insertion/deletion variant

<sup>b</sup> MAF – minor allele frequency