Table S1. OATP4A1 variants. Allele frequencies of rs34419428 (R70Q) and rs1047099 (V78I) in different ethnic groups.

### A, Variant rs34419428

| Molecule type          | Sequence change | Amino acid change | Allele frequency |
|------------------------|-----------------|-------------------|------------------|
| SLCO4A1 transcript     | NM_016354.4: c.209G>A | R [CGG] > Q [CAG] | -                |
| OATP4A1 protein        | NP_057438.4: p.R70Q | -                 | -                |
| Population             | -               | -                 | -                |
| Overall                | -               | -                 | 0.021-0.058      |
| European (mixed)       | -               | -                 | 0.047            |
| East-Asian (mixed)     | -               | -                 | 0.002            |
| Africa (LWK, ESN)      | -               | -                 | 0.033            |
| Tokyo, Japan (JPT)     | -               | -                 | 0.0              |

The OATP4A1 minor alleles rs1047099 and rs34419428 are detectable in European and East-Asians populations. The rs1047099 variant is not present in the African populations Luhya (Webuye, Kenya, LWK) and Esan (Nigeria, ESN). The rs34419428 variant was not observed in the Japanese population of Tokyo (JPT). OATP4A1, solute carrier organic anion transporter family member 4A1.

### B, Variant rs1047099

| Molecule type          | Sequence change | Amino acid change | Allele frequency |
|------------------------|-----------------|-------------------|------------------|
| SLCO4A1 transcript     | NM_016354.4: c.232G>A | V [GTC] > I [ATC] | -                |
| OATP4A1 protein        | NP_057438.4: p.V78I | -                 | -                |
| Population             | -               | -                 | -                |
| Overall                | -               | -                 | 0.149-0.311      |
| European (mixed)       | -               | -                 | 0.290            |
| East-Asian (mixed)     | -               | -                 | 0.168            |
| Africa (LWK, ESN)      | -               | -                 | 0.0              |
| Asia (JPT)             | -               | -                 | 0.178            |

The OATP4A1 minor allele rs1047099 is not present in the African populations Luhya (Webuye, Kenya, LWK) and Esan (Nigeria, ESN).
Table SII. OATP4A1 variants rs34419428 (R70Q) and rs1047099 (V78I) in populations of different ethnic origin.

A, European population (mixed)

| SNP   | Mutation | Statistics (n=1006) |
|-------|----------|---------------------|
| G_G: 0.710 | Wt       | D'=1.0 |
| G_A: 0.244 | V78I     | R^2=0.1198 |
| A_A: 0.047 | V78I/R70Q | $\chi^2=120.557$ |
| A_G: 0.0 | R70Q     | P<0.0001 |

B, East-Asian population (mixed)

| SNP   | Mutation | Statistics (n=1008) |
|-------|----------|---------------------|
| G_G: 0.838 | Wt       | D'=0.3993 |
| G_A: 0.167 | V78I     | R^2=0.0016 |
| A_A: 0.001 | V78I/R70Q | $\chi^2=1.5861$ |
| A_G: 0.001 | R70Q     | P<0.2079 |

C, Africa (LWK, ESN)

| SNP   | Mutation | Statistics (n=396) |
|-------|----------|---------------------|
| G_G: 0.967 | Wt       | n.a. |
| A_G: 0.033 | R70Q     | n.a. |
| A_A: 0.0 | V78I/R70Q | n.a. |
| G_A: 0.0 | V78I     | n.a. |

D, Asia (JPT)

| SNP   | Mutation | Statistics (n=208) |
|-------|----------|---------------------|
| G_G: 0.822 | Wt       | n.a. |
| G_A: 0.178 | V78I     | n.a. |
| A_A: 0.0 | V78I/R70Q | n.a. |
| A_G: 0.0 | R70Q     | n.a. |

The rs34419428 allele is non-randomly associated with the rs1047099 allele. The two alleles are in linkage disequilibrium. The rs34419428 (A) allele and the rs1047099(A) allele are in linkage equilibrium (they are randomly associated). Statistical differences for the random association of the two alleles in the different populations are given. Wt, wild-type; n.a., not applicable.