

**SUPPORTING INFORMATION FOR THE ARTICLE:**

**Long-read single-molecule real-time (SMRT) full gene sequencing of cytochrome P450-2D6 (CYP2D6)**

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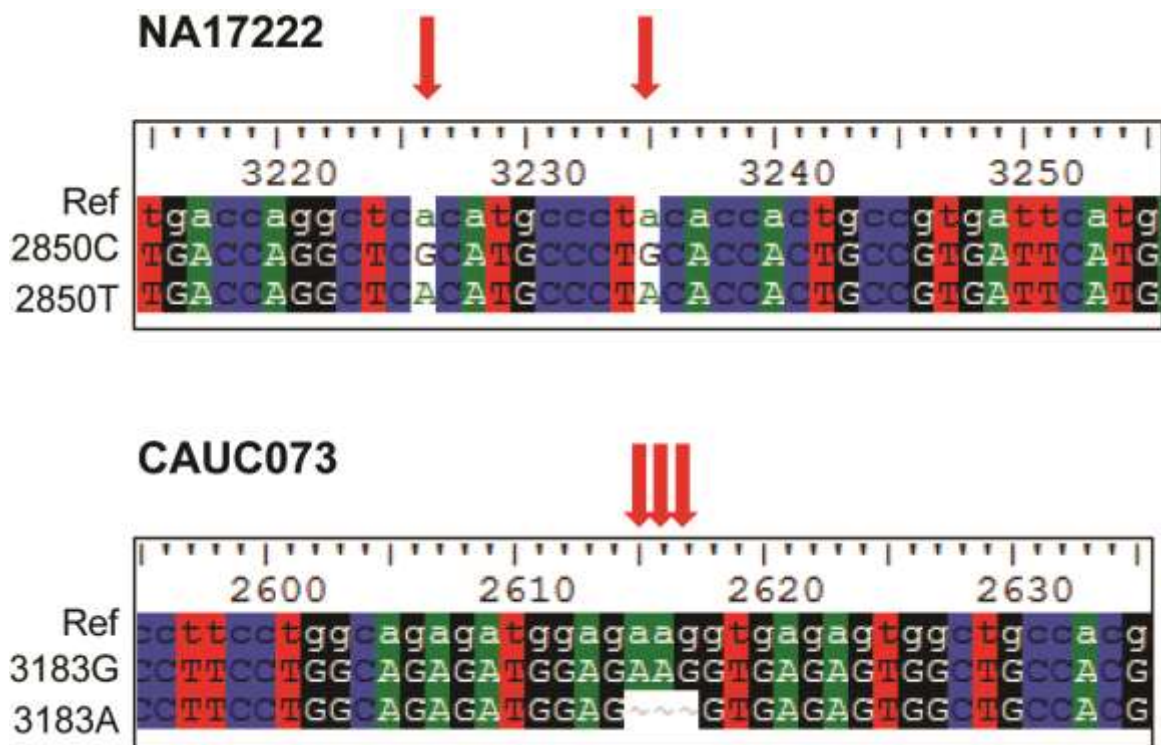
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**Supp. Figure S1.** Allele-specific PCR and Sanger sequencing results of NA17222 and CAUC073 based on 2850C>T and 3183G>A, respectively. Red arrows denote the locations of interrogated variants by Sanger sequencing. The 3226A>G (rs61736517; p.H352R) and 3235A>G (rs202102799; p.Y355C) variants detected in NA17222 by *CYP2D6* SMRT sequencing were found in *cis* with 2850C (classified as \*108), and the 3183G>A (rs59421388; p.V338M) variant detected in CAUC073 was on the same haplotype as the 2615\_2617delAAG (rs5030656; p.K281del) allele (classified as \*109).

**Supp. Tables S1-S5** are available in a separate Excel file under the Supporting Information for this article.

**Supp. Table S1.** *CYP2D6* variant coordinates according to common M33388.1 GenBank reference and HGVS nomenclature

**Supp. Table S2.** *CYP2D6* variants and diplotypes identified by SMRT sequencing in the positive control samples

**Supp. Table S3.** *CYP2D6* Allele-specific PCR (AS-PCR) results and phased diplotype determination for NA17222 and CAUC073

**Supp. Table S4.** *CYP2D6* variants and diplotypes identified by SMRT sequencing in the duplication control samples

**Supp. Table S5.** *CYP2D6* variants and diplotypes identified by SMRT sequencing in the discordant control samples