

Supplementary table 2. *DPYD* and *UGT1A1* variants included in the pharmacogenetic testing panels recommended by different international clinical guidelines and expert consensus groups (CPIC, DPWG, SIF-AIOM, AMP Tier 1, and RNPGx)

(Source: ClinPGx database: <https://www.clinpgx.org/>; AMP Tier 1 alleles: <https://www.clinpgx.org/ampAllelesToTest>).

	CPIC	DPWG	SIF-AIOM	AMP Tier 1	RNPGx
<i>DPYD</i>	c.1905+1G>A	c.1905+1G>A	c.1905+1G>A	c.1905+1G>A	c.1905+1G>A
	c.1679T>G	c.1679T>G	c.1679T>G	c.1679T>G	c.1679T>G
	c.2846A>T	c.2846A>T	c.2846A>T	c.2846A>T	c.2846A>T
	c.1129-5923C>G	c.1236G>A	c.1236G>A	c.1129-5923C>G	-
	-	-	c.2194G>A [§]	-	-
	-	-	-	c.557A>G	-
	-	-	-	c.868A>G	-
	-	-	-	c.2279C>T	-
<i>UGT1A1</i>		*28	*28		*28
		*6	*6		-
	-	*36	-	-	*36
		*37	-		*37

Variants are reported using HGVS nomenclature, with the corresponding star (*) allele designation and dbSNP reference identifier (rs number) where available: *DPYD* c.1905+1G>A (*2A; rs3918290), c.1679T>G (*13; rs55886062), c.2846A>T (rs67376798), c.1236G>A (rs56038477; in linkage disequilibrium with c.1129-5923C>G), c.1129-5923C>G (rs75017182), c.557A>G (rs115232898), c.868A>G (rs146356975), and c.2279C>T (rs112766203). *UGT1A1* variants include *28 (rs8175347), *6 (rs4148323), 36 (rs8175347), and 37 (rs8175347).

[§] Guidelines suggest testing this variant in a post-toxicity setting.

Supplementary table 3. Adoption of CE-IVD–certified kits by pharmacogene, showing the number of laboratories and distinct commercial assays used.

Gene	Number of centers not using CE-IVD kits	Number of centers using CE-IVD kits	Number of distinct CE-IVD kits reported
<i>DPYD</i>	2	38	11
<i>UGT1A1</i>	3	31	7
<i>CYP2C19</i>	3	3	2
<i>CYP2C9</i>	2	2	2
<i>HLA-B</i>	0	2	1
<i>TPMT</i>	5	2	2
<i>ABCB1</i>	0	1	1
<i>CYP2D6</i>	2	1	1
<i>HLA</i>	0	1	1
<i>F5L</i>	1	0	0
<i>NAT2</i>	1	0	0

Supplementary table 4. Bioinformatics software employed for pharmacogenetic data analysis and interpretation across participating laboratories.

Gene	Number of centers not using software	Number of centers using software	Number of distinct tools reported
DPYD	9	31	10
UGT1A1	7	28	10
TPMT	4	3	3
CYP2D6	1	2	2
HLA-B	1	2	2
CYP2C19	5	1	1
CYP2C9	3	1	1
HLA	0	1	1
ABCB1	1	0	0
NAT2	1	0	0