

Table S1: An example of an operationalized panel fit for genotyping platforms, for a subset of genes in the PGx -Passport

Genes	Defining variant dbSNP RS ID	Genomic position	Allele	Effect on protein	Allele Functional Status	Drug for which actionable DPWG guideline is available
<i>CYP2B6</i>	rs2279343; rs3745274	NC_000019.9:g.41515263A>G; NC_000019.9:g.41512841G>T	*6		Decreased function or No function	Efavirenz
<i>CYP2B6</i>	rs3745274	NC_000019.9:g.41512841G>T	*9	Q172H	Decreased function or No function	
<i>CYP2B6</i>	rs2279343	NC_000019.9:g.41515263A>G	*4	K262R	Decreased function or No function	
<i>CYP2B6</i>	rs2279343; rs28399499	NC_000019.9:g.41515263A>G; NC_000019.9:g.41518221T>C	*16		Decreased function or No function	
<i>CYP2B6</i>	rs28399499	NC_000019.9:g.41518221T>C	*18	I328T	Decreased function or No function	
<i>CYP2B6</i>	rs3211371	NC_000019.9:g.41522715C>T	*5		Decreased function or Full function	
<i>CYP2C9</i>	rs1799853	NC_000010.10:g.96702047C>T	*2	R144C	Decreased function	Phenytoin Warfarin
<i>CYP2C9</i>	rs1057910	NC_000010.10:g.96741053A>C	*3	I359L	Decreased function	
<i>CYP2C9</i>	rs28371686	NC_000010.10:g.96741058C>G	*5	D360E	Decreased function	
<i>CYP2C9</i>	rs28371685	NC_000010.10:g.96740981C>T	*11	R335W	Decreased function	
<i>CYP2C19</i>	rs4244285	NC_000010.10:g.96541616G>A	*2	Splicing defect	No function	Clopidogrel Citalopram Escitalopram Sertraline Imipramine Lansoprazole Omeprazole Pantoprazole Voriconazole
<i>CYP2C19</i>	rs4986893	NC_000010.10:g.96540410G>A	*3	W212X	No function	
<i>CYP2C19</i>	rs28399504	NC_000010.10:g.96522463A>G	*4A/B	M1V	No function	
<i>CYP2C19</i>	rs56337013	NC_000010.10:g.96612495C>T	*5	R433W	No function	
<i>CYP2C19</i>	rs72552267	NC_000010.10:g.96535210G>A	*6	R132Q	No function	
<i>CYP2C19</i>	rs41291556	NC_000010.10:g.96535173T>C	*8	W120R	Decreased function or No function	
<i>CYP2C19</i>	rs17884712	NC_000010.10:g.96535246G>A	*9	R144H	Decreased function	
<i>CYP2C19</i>	rs6413438	NC_000010.10:g.96541615C>T	*10	P227L	Decreased function	
<i>CYP2C19</i>	rs12248560	NC_000010.10:g.96521657C>T	*17	X	Increased function	
<i>CYP2D6</i>	X		*xN	X	Increased function	
<i>CYP2D6</i>	rs35742686	NC_000022.10:g.42524244delT	*3	259Frameshift	No function	
<i>CYP2D6</i>	rs3892097; (rs1065852)	NC_000022.10:g.42524947C>T; (NC_000022.10:g.42526694G>A)	*4	Splicing defect	No function	
<i>CYP2D6</i>	X	X	*5	Gene deletion	No function	
<i>CYP2D6</i>	rs5030655	NC_000022.10:g.42525086delA	*6	118Frameshift	No function	
<i>CYP2D6</i>	rs5030865	NC_000022.10:g.42525035C>A	*8	G169X	No function	

<i>CYP2D6</i>	rs5030656	NC_000022.10:g.42524176delCTT	*9	K281 deletion	Decreased function	Metoprolol Nortriptyline Paroxetine Pimozide Propafenone Tamoxifen Tramadol Venlafaxine Zuclopenthixol
<i>CYP2D6</i>	rs1065852	NC_000022.10:g.42526694G>A	*10	P34S	Decreased function	
<i>CYP2D6</i>	rs5030865; rs1065852	NC_000022.10:g.42525035C>T; NC_000022.10:g.42526694G>A	*14A	G169R	Decreased function	
<i>CYP2D6</i>	rs5030865	NC_000022.10:g.42525035C>T	*14B		Decreased function	
<i>CYP2D6</i>	rs28371706	NC_000022.10:g.42525772G>A	*17	T107I	Decreased function	
<i>CYP2D6</i>	rs28371725	NC_000022.10:g.42523805C>T	*41	Splicing	Decreased function	
<i>CYP3A5</i>	rs776746	NC_000007.13:g.99270539C>T	*3	Splicing defect	No function	Tacrolimus
<i>CYP3A5</i>	rs10264272	NC_000007.13:g.99262835C>T	*6	Splicing defect	No function	
<i>CYP3A5</i>	rs41303343	NC_000007.13:g.99250393_99250394insA	*7	346Frameshift	No function	
<i>DPYD</i>	rs3918290	NC_000001.10:g.97915614C>T	*2A	X	No function	5-Fluorouracil Capecitabine Tegafur
<i>DPYD</i>	rs55886062	NC_000001.10:g.97981343A>C	*13	I560S	No function	
<i>DPYD</i>	rs67376798	NC_000001.10:g.97547947T>A	X	D949V	Decreased function	
<i>DPYD</i>	rs56038477	NC_000001.10:g.98039419C>T	X	E412E	Decreased function	
<i>F5</i>	rs6025	NC_000001.10:g.169519049T>C	X	R506Q	Decreased function	Estrogen contraceptive agents
<i>HLA-B</i>	rs2395029	NC_000006.11:g.31431780T>G	*57:01	Tagging SNP	High-risk allele	Abacavir Flucloxacillin
<i>SLCO1B1</i>	rs4149056	NC_000012.11:g.21331549T>C	*5/*15/*17	V174A	Decreased function	Atorvastatin Simvastatin
<i>TPMT</i>	rs1800462	NC_000006.11:g.18143955C>G	*2	A80P	No function	6-Mercaptopurine Azathioprine Thioguanine
<i>TPMT</i>	rs1142345; rs1800460	NC_000006.11:g.18130918T>C; NC_000006.11:g.18139228C>T	*3A	Y240C A154T	No function	
<i>TPMT</i>	rs1800460	NC_000006.11:g.18139228C>T	*3B	A154T	No function	
<i>TPMT</i>	rs1142345	NC_000006.11:g.18130918T>C	*3C	Y240C	No function	
<i>UGT1A1</i>	rs4148323	NC_000002.11:g.234669144G>A	*6	G71R	Decreased function	Irinotecan
<i>UGT1A1</i>	rs35350960	NC_000002.11:g.234669619C>A	*27	P229Q	Decreased function	
<i>UGT1A1</i>	rs8175347	NC_000002.11:g.234668881_234668882TA[7]	*28	X	Decreased function	
<i>UGT1A1</i>	rs8175347	NC_000002.11:g.234668881_234668882TA[8]	*37	X	Decreased function	
<i>VKORC1</i>	rs9934438	NC_000016.9:g.31104878G>A	X		Decreased expression	Acenocoumarol Phenprocoumon Warfarin