

Table S1. CPIC Level A active ingredients, therapeutic classes, and mapped pharmacogenes used in the final analysis.

Active ingredient	Therapeutic class	CPIC pharmacogene(s)
Abacavir	Antiviral	HLA-B
allopurinol	Gout medication	HLA-B
amikacin	Antibiotic	MT-RNR1
amitriptyline	Antidepressant	CYP2C19; CYP2D6
atorvastatin	Statin	SLCO1B1
azathioprine	Immunosuppressant	NUDT15; TPMT
capecitabine	Oncology	DPYD
carbamazepine	Anticonvulsant	HLA-A; HLA-B
celecoxib	NSAID	CYP2C9
citalopram	Antidepressant	CYP2C19
clopidogrel	Antiplatelet	CYP2C19
codeine	Opioid	CYP2D6
dapsone	Antileprotic drug	G6PD
desflurane	Anesthetic	CACNA1S; RYR1
efavirenz	Antiviral	CYP2B6
enflurane	Anesthetic	CACNA1S; RYR1
escitalopram	Antidepressant	CYP2C19
fluorouracil	Oncology	DPYD
flurbiprofen	NSAID	CYP2C9
fluvastatin	Statin	CYP2C9; SLCO1B1
gentamicin	Antibiotic	MT-RNR1
hydralazine	Antihypertensive	NAT2
ibuprofen	NSAID	CYP2C9
isoflurane	Anesthetic	CACNA1S; RYR1
kanamycin	Antibiotic	MT-RNR1
lansoprazole	PPI	CYP2C19
lornoxicam	NSAID	CYP2C9
lovastatin	Statin	SLCO1B1
meloxicam	NSAID	CYP2C9
omeprazole	PPI	CYP2C19
ondansetron	Antiemetic	CYP2D6
oxcarbazepine	Anticonvulsant	HLA-B
pantoprazole	PPI	CYP2C19
paroxetine	Antidepressant	CYP2D6
phenytoin	Anticonvulsant	CYP2C9; HLA-B
piroxicam	NSAID	CYP2C9
pitavastatin	Statin	SLCO1B1
pravastatin	Statin	SLCO1B1
primaquine	Antimalarial drug	G6PD
rosuvastatin	Statin	ABCG2; SLCO1B1
sertraline	Antidepressant	CYP2C19
sevoflurane	Anesthetic	CACNA1S; RYR1
simvastatin	Statin	SLCO1B1
streptomycin	Antibiotic	MT-RNR1
succinylcholine	Muscle relaxant	CACNA1S; RYR1
tacrolimus	Immunosuppressant	CYP3A5
tamoxifen	Oncology	CYP2D6
thioguanine	Immunosuppressant	NUDT15; TPMT
tobramycin	Antibiotic	MT-RNR1
tramadol	Opioid	CYP2D6
tropisetron	Antiemetic	CYP2D6
voriconazole	Antifungal	CYP2C19
warfarin	Anticoagulant	CYP2C9; CYP4F2; VKORC1