

The Medical Letter®

on Drugs and Therapeutics

Last updated: November 6, 2019

► **Inhibitors and Inducers of CYP Enzymes and P-Glycoprotein (online only)**

Table 1. Inhibitors and Inducers of CYP Enzymes				
	Strong Inhibitors	Moderate Inhibitors		Inducers
1A2	ciprofloxacin fluvoxamine	amiodarone cimetidine deferasirox estrogens (hormone replacement therapy and oral contraceptives) mexiletine	norfloxacin ofloxacin tacrine thiabendazole vemurafenib zileuton	carbamazepine* phenobarbital* primidone* rifampin* smoking
2B6		clopidogrel mifepristone ticlopidine		artemisinin carbamazepine* efavirenz isavuconazonium nevirapine phenobarbital phenytoin derivatives rifampin ritonavir
2C8	abiraterone clopidogrel gemfibrozil	deferasirox lapatinib mifepristone sorafenib	teriflunomide trimethoprim trimethoprim/ sulfamethoxazole	dabrafenib rifabutin rifampin* rifapentine*
2C9	fluconazole miconazole	abiraterone alcohol (intoxicating dose) amiodarone capecitabine ceritinib delavirdine efavirenz etravirine fenofibrate floxuridine fluorouracil fluvastatin	imatinib metronidazole mifepristone sorafenib sulfadiazine sulfamethoxazole sulfisoxazole trimethoprim/ sulfamethoxazole valproate voriconazole zafirlukast	aprepitant* bosentan carbamazepine* dabrafenib enzalutamide phenobarbital* phenytoin derivatives* primidone* rifabutin rifampin* rifapentine*
2C19	delavirdine fluconazole fluvoxamine ticlopidine	abiraterone armodafinil bortezomib cimetidine efavirenz eslicarbazepine esomeprazole etravirine	felbamate fluoxetine isoniazid modafinil omeprazole oxcarbazepine voriconazole	carbamazepine dabrafenib enzalutamide phenobarbital phenytoin derivatives rifampin* Saint John's wort tipranavir/ritonavir
2D6	bupropion cinacalcet fluoxetine paroxetine quinidine quinine terbinafine tipranavir/ritonavir	abiraterone amiodarone artemether/lumefantrine celecoxib chloroquine chlorpheniramine chlorpromazine cimetidine clobazam clomipramine cobicistat darifenacin darunavir diphenhydramine	dronedarone duloxetine eliglustat haloperidol imatinib lorcaserin mirabegron promethazine propafenone ritonavir rolapitant sertraline	
2E1	disulfiram			

Table 1. Inhibitors and Inducers of CYP Enzymes (continued)				
Strong Inhibitors		Moderate Inhibitors		Inducers
3A4	atazanavir boceprevir clarithromycin cobicistat conivaptan idelalisib imatinib indinavir isoniazid itraconazole ketoconazole lopinavir/ritonavir nefazodone nelfinavir posaconazole ritonavir telaprevir telithromycin tipranavir/ritonavir voriconazole	abiraterone amiodarone aprepitant ceritinib clotrimazole crizotinib cyclosporine darunavir delavirdine diltiazem dronedarone erythromycin fluconazole	fluvoxamine fosamprenavir grapefruit juice isavuconazonium ivacaftor lomitapide miconazole netupitant nilotinib quinupristin/dalfopristin saquinavir verapamil zafirlukast	armodafinil artemether/lumefantrine bexarotene bosentan carbamazepine* dabrafenib deferasirox dexamethasone efavirenz enzalutamide* etravirine mitotane* modafinil nafcillin nevirapine oxcarbazepine phenobarbital* phenytoin derivatives* primidone* rifabutin* rifampin* rifapentine* rufinamide Saint John's wort*
* = Strong inducer				

Table 2. Inhibitors and Inducers of P-Glycoprotein (P-gp)				
Inhibitors			Inducers	
P-gp	abiraterone amiodarone carvedilol clarithromycin cobicistat crizotinib cyclosporine daclatasvir darunavir diltiazem dipyridamole dronedarone eliglustat erythromycin	etravirine flibanserin itraconazole ivacaftor ketoconazole lapatinib ledipasvir lomitapide lopinavir/ritonavir mefloquine nelfinavir nicardipine progesterone propafenone	propranolol quinidine reserpine ritonavir rolapitant saquinavir simeprevir sofosbuvir/velpatasvir telaprevir telithromycin tolvaptan vemurafenib verapamil	carbamazepine dexamethasone doxorubicin nefazodone rifampin Saint John's wort tipranavir/ritonavir trazodone vinblastine