

Table. Substrates, Inducers, Inhibitors, and Genetics of Cytochrome P450 Enzymes. Adapted from <http://medicine.iupui.edu/flockhart/>

SELECTED CYTOCHROME P450 SUBSTRATES, INHIBITORS, INDUCERS, AND GENETICS						
1A2	2B6	2C19	2C9	2D6	2E1	3A4,5,7
SUBSTRATES						
Caffeine Clozapine Imipramine Naproxen Theophylline	Bupropion Cyclophosphamide Efavirnez Methadone	Proton pump (-) Amitriptyline Cyclophosphamide Diazepam Phenytoin Phenobarbital Progesterone Voriconazole	NSAIDs Celecoxib Diclofenac Ibuprofen Naproxen Piroxicam Oral Hypoglycem Tolbutamide Glipizide ARBs Irbesartan Losartan Fluvastatin Tamoxifen Warfarin	Antidepressants Beta-blockers Antipsychotics Chlorpheniramine Codeine Dextromethorphan Ondansetron Tamoxifen Tramadol	Acetaminophen Ethanol	Macrolide antibiotics Benzodiazepines Immune Modulators HIV Protease (-) Antihistamines Calcium channel blockers HMG CoA reductase (-) Steroids Opioids Many others
INHIBITORS						
Cimetidine Fluoroquinolones Fluvoxamine Ticlopidine	Ticlopidine	Fluoxetine Fluvoxamine Ketoconazole Lansoprazole Omeprazole Ticlopidine	Fluconazole Fluvastatin Isoniazide Lovaastatin Paroxetine Sertraline Zafirlukast	Bupropion Celecoxib Chlorpheniramine Cimetidine Clomipramine Fluoxetine Haloperidol Methadone Paroxetine Quinidine Ritonavir	Disulfiram	HIV Protease (-) Azole antifungals Some macrolides Cimetidine Some Fluoroquinolones Diltiazem Grapefruit juice Nefazodone Verapamil

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INDUCERS						
1A2	2B6	2C19	2C9	2D6	2E1	3A4,5,7
Broccoli Brussel sprouts Char-grilled meat Insulin 3-MC/tobacco Ompereazole	Phenobarbital Rifampin	Carbamazepine Norethindrone Prednisone Rifampin	Rifampin Secobarbital	Dexamethasone Rifampin	Ethanol Isoniazid	HIV antivirals Efavirenz Nevirapine Barbiturates Carbamazepine Glucocorticoids Phenytoin Rifampin St.John's wort Troglitazone Pioglitazone Rifabutin
GENETICS						
Chromosome 15	Chromosome 19 Polymorphic 3-4% Caucasian PMs	Chromosome 10 Polymorphic 2-4% African-Am; 3-5% Caucasian, 15-20% Asian PMs	Chromosome 10 Polymorphic 1-3% Caucasian PMs	Chromosome 22 Polymorphic 5-10% Caucasian PMs	Chromosome 10	Chromosome 7

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