

Table 14. Drugs That Should Not Be Used With PI, NNRTI, or CCR5 Antagonist
(Updated January 10, 2011)

This table lists only drugs that should not be coadministered at any dose and regardless of RTV boosting. See [Tables 15 and 16](#) for more detailed pharmacokinetic interaction data and dosage adjustments.

Drug Categories										
Antiretroviral Agents ^{1,2}	Cardiac Agents	Lipid-lowering Agents	Antimycobacterials	Gastro-intestinal Drugs	Neuroleptics	Psychotropics	Ergot Derivatives (vasoconstrictors)	Herbs	Antiretroviral Agents	Others
ATV +/- RTV	none	lovastatin pitavastatin simvastatin	rifampin rifapentine ³	cisapride ⁵	pimozide	midazolam ⁶ triazolam	dihydroergotamine ergonovine ergotamine methylethergonovine	St. John's wort	ETR NVP	alfuzosin irinotecan salmeterol sildenafil for PAH
DRV/r	none	lovastatin pitavastatin simvastatin	rifampin rifapentine ³	cisapride ⁵	pimozide	midazolam ⁶ triazolam	dihydroergotamine ergonovine ergotamine methylethergonovine	St. John's wort	none	alfuzosin salmeterol sildenafil for PAH
FPV +/- RTV	flecainide propafenone	lovastatin pitavastatin simvastatin	rifampin rifapentine ³	cisapride ⁵	pimozide	midazolam ⁶ triazolam	dihydroergotamine ergonovine ergotamine methylethergonovine	St. John's wort	ETR	alfuzosin salmeterol sildenafil for PAH
LPV/r	none	lovastatin pitavastatin simvastatin	rifampin ⁴ rifapentine ³	cisapride ⁵	pimozide	midazolam ⁶ triazolam	dihydroergotamine ergonovine ergotamine methylethergonovine	St. John's wort	none	alfuzosin salmeterol sildenafil for PAH
RTV	amiodarone flecainide propafenone quinidine	lovastatin pitavastatin simvastatin	rifapentine ³	cisapride ⁵	pimozide	midazolam ⁶ triazolam	dihydroergotamine ergonovine ergotamine methylethergonovine	St. John's wort	none	alfuzosin sildenafil for PAH
SQV/r	amiodarone dofetilide flecainide lidocaine propafenone quinidine	lovastatin pitavastatin simvastatin	rifampin ⁴ rifapentine	cisapride ⁵	pimozide	midazolam ⁶ triazolam trazodone	dihydroergotamine ergonovine ergotamine methylethergonovine	St. John's wort garlic supplements	none	alfuzosin salmeterol sildenafil for PAH
TPV/r	amiodarone flecainide propafenone quinidine	lovastatin pitavastatin simvastatin	rifampin rifapentine ³	cisapride ⁵	pimozide	midazolam ⁶ triazolam	dihydroergotamine ergonovine ergotamine methylethergonovine	St. John's wort	ETR	alfuzosin salmeterol sildenafil for PAH
EFV	none	none	rifapentine ³	cisapride ⁵	pimozide	midazolam ⁶ triazolam	dihydroergotamine ergonovine ergotamine methylethergonovine	St. John's wort	other NNRTIs	none
ETR	none	none	rifampin rifapentine ³	none	none	none	none	St. John's wort	unboosted PIs ATV/r, FPV/r, or TPV/r other NNRTIs	carbamazepine phenobarbital phenytoin clopidogrel
NVP	none	none	rifapentine ³	none	none	none	none	St. John's wort	ATV +/- RTV other NNRTIs	ketoconazole
MVC	none	none	rifapentine ³	none	none	none	none	St. John's wort	none	none

- DLV, IDV, and NFV are not included in this table. Refer to the FDA package insert for information regarding DLV-, IDV-, and NFV-related drug interactions.
- Certain listed drugs are contraindicated based on theoretical considerations. Thus, drugs with narrow therapeutic indices and suspected metabolic involvement with CYP450 3A, 2D6, or unknown pathways are included in this table. Actual interactions may or may not occur in patients.
- HIV-infected patients treated with rifapentine have a higher rate of TB relapse than those treated with other rifamycin-based regimens; an alternative agent is recommended.
- A high rate of Grade 4 serum transaminase elevation was seen when a higher dose of RTV was added to LPV/r or SQV or when double-dose LPV/r was used with rifampin to compensate for rifampin's induction effect, so these dosing strategies should not be used.
- The manufacturer of cisapride has a limited-access protocol for patients who meet specific clinical eligibility criteria.
- Use of oral midazolam is contraindicated. Parenteral midazolam can be used with caution as a single dose and can be given in a monitored situation for procedural sedation.

Suggested alternatives to:

Lovastatin, simvastatin: Pravastatin and fluvastatin have the least potential for drug-drug interactions (except for pravastatin with DRV/r, see [Table 15a](#)). Use atorvastatin and rosuvastatin with caution; start with the lowest possible dose and titrate based on tolerance and lipid-lowering efficacy.

Rifampin: Rifabutin (with dosage adjustment – see [Tables 15a and 15b](#))

Midazolam, triazolam: temazepam, lorazepam, oxazepam

Acronyms: ATV +/- RTV = atazanavir +/- ritonavir, DLV = delavirdine, DRV/r = darunavir/ritonavir, EFV = efavirenz, ETV = etravirine, FDA = Food and Drug Administration, FPV +/- RTV = fosamprenavir +/- ritonavir, HIV = human immunodeficiency virus, IDV = indinavir, LPV/r = lopinavir/ritonavir, MVC = maraviroc, NFV = nelfinavir, NNRTI = non-nucleoside reverse transcriptase inhibitor, NVP = nevirapine, PAH = pulmonary arterial hypertension, PI = protease inhibitor, RTV = ritonavir, SQV/r = saquinavir/ritonavir, TPV/r = tipranavir/ritonavir