

TABLE 9. Antiretroviral anti-infective drug combinations that should be avoided

First drug	Second drug	Reason
Ribavirin	Didanosine	Increased intracellular levels of ddA-TP; increase in ddl-associated mitochondrial toxicities (e.g., lactic acidosis, pancreatitis, and peripheral neuropathy)
Rifabutin	Atovaquone	Atovaquone concentration (conc.) decreased 34%; rifabutin conc. decreased 19%
	Delavirdine	Delavirdine area under the concentration curve (AUC) decreased 90%; rifabutin AUC increased 100%
	Itraconazole	Itraconazole conc. decreased 70%; potential for inhibition of rifabutin metabolism and increased rifabutin conc.
	Saquinavir (as sole protease inhibitor)	Saquinavir AUC decreased 43%; if used, consider addition of ritonavir and/or monitor saquinavir concentration; no change in rifabutin conc.
	Voriconazole	Voriconazole AUC decreased 79%; rifabutin AUC increased three-fold
Rifampin	Amprenavir	Amprenavir AUC decreased 82%, minimum concentration (Cmin) decreased 92%; no change in rifampin conc.
	Atazanavir	Pharmacokinetic study not available; expect rifampin to decrease atazanavir concentrations substantially (up to 90%), as seen with other protease inhibitors
	Atovaquone	Atovaquone conc. decreased 52%; rifampin conc. increased 37%
	Clarithromycin	Decreased mean clarithromycin conc. 87%
	Delavirdine	Delavirdine AUC decreased 95%; no change in rifampin conc.
	Fosamprenavir	No study done with fosamprenavir; amprenavir AUC decreased 82%; Cmin decreased 92%
	Indinavir	Indinavir AUC decreased 89%; rifampin conc. slightly increased
	Itraconazole	Itraconazole AUC decreased 64%–88%; no change in rifampin conc.
	Ketoconazole	Ketoconazole levels decreased 50%; rifampin maximum concentration (Cmax) decreased 40%–50% probably because of impaired rifampin oral absorption
	Lopinavir/ritonavir	Lopinavir AUC decreased 75% and Cmin decreased 99%; rifampin AUC might be increased
	Nelfinavir	Nelfinavir AUC decreased 82%; no change in rifampin conc.
	Nevirapine	Nevirapine Cmax and AUC decreased 50%; no change in rifampin concentration
	Saquinavir (as sole PI)	Saquinavir AUC decreased 82%; no change in rifampin concentration
	Voriconazole	Voriconazole AUC decreased 96%
Voriconazole	Efavirenz	Voriconazole Cmax decreased 61%; AUC decreased 77%; efavirenz Cmax increased 38% and AUC increased 44%
	Ritonavir 400 mg twice a day	Voriconazole Cmax decreased 66%; AUC decreased 82%