

Drug Interactions with Tuberculosis Agents

	rifabutin (RFB)		rifampin (RFP)		
Antiretroviral	ARV Dose	RFB dose	ARV Dose	RFP dose	Details
atazanavir (ATV)	400mg QD	150mg QOD (i.e. 75% reduction of standard dose)	Contraindicated	Contraindicated	ATV increases RFB levels Limited data with RFP
fosamprenavir (APV)	1400mg BID	150mg QD or 300mg 3 times a week	Contraindicated	Contraindicated	APV increases RFB by 204% RFB reduces APV by 15% RFP reduces APV by 82%
indinavir (IDV)	1000-1200mg Q8H	150mg QD	Contraindicated	Contraindicated	IDV increases RFB by 60% IDV increases RFP by 73% RFB reduces IDV by 32% RFP reduces IDV by 89%
lopinavir/RTV (LPV/r)	400mg/100mg BID	150mg QOD or 3 times a week	400mg/400mg ¹ BID 800mg/200mg BID	600mg QD	LPV/r increases RFB RFB has no effect on LPV/r RFP reduces LPV/r by 75%
nelfinavir (NFV)	1250mg BID	150mg QD	Contraindicated	Contraindicated	NFV increases RFB by 200% RFB reduces NFV by 32% RFP reduces NFV by 82%

Antiretroviral	ARV Dose	RFB dose	ARV Dose	RFP dose	Details
saquinavir/RTV (SQV)	400mg/400mg BID	150mg QOD or 3 times a week	400/400mg ² BID 1000/100mg ² BID	600mg QD	RFB reduces SQV by 40% RFP reduces SQV by 84% Limited data for use with RFP
IDV/RTV	800mg/100mg 800mg/200mg (both BID)	150mg QOD or 3 times a week	Contraindicated ³	Contraindicated	No data on IDV/RTV with RFB RTV is likely to overcome Induction by RFB Questionable levels with RFP ³
ATV/RTV	300mg/100mg QD	150mg QOD or 3 times a week	No Data	No Data	No formal studies have been done with ATV/RTV with RFB or RFP
APV/RTV ⁴	700mg/100mg BID 1400mg/200mg QD	150mg QOD or 3 times a week	No Data	No Data	No data currently on the use of RFP with FAPV/RTV.
efavirenz (EFV)	600mg QD	450mg QD or 600mg 3 times a week	800mg QD ⁵	600mg QD	EFV decreases RFB by 32% RFB has no effect on EFV RFP decreases EFV by 26% More data needed for RFP/EFV
nevirapine (NVP)	200mg BID	300mg QD	200mg BID ⁶	600mg QD	Minor interaction with RFB/NVP RFP reduces NVP by 31-58% ⁵ Caution is warranted
delavirdine (DLV)	Contraindicated	Contraindicated	Contraindicated	Contraindicated	RFB decreases DLV by 82% RFB decreases DLV by 97% DLV increases RFB by 230%

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2. Ritonavir enables combined therapy with rifampin and saquinavir. Veldkamp AI, Hoetelmans RMW, Beijnen JH, et al. Clin Infect Dis, 1999, 29:1586.
3. Pharmacokinetic Interaction between Rifampin and the Twice-Daily Combination of Indinavir and Low Dose Ritonavir in HIV-Infected Patients. Justesen US, et al. 10th Retroconference, February 10-14, 2003. Boston, MA. Abstract 542.
4. Rifabutin Given Twice Weekly With Ritonavir-Boosted Amprenavir in a Once-Daily HAART Regimen May Result in Sub-Therapeutic Levels of Rifabutin Despite Directly Observed Treatment. [Abstract 58] 4th International Workshop on the Clinical Pharmacology of HIV Therapy, Cannes, France March 27-29, 2003
5. Pharmacokinetic interaction between efavirenz and rifampicin healthy volunteers. Benedek I, Joshi A, Fiske WD, et al. 12th World AIDS Conference, 1998, abstract 42280.
6. Pharmacokinetic interaction between nevirapine and rifampicin in HIV-infected patients with tuberculosis. Ribera E, Pou L, Lopez RM, et al. J Acquir Immune Defic Syndr, 2001, 28:450-453.