

# TB101: RIFAMYCIN DOSING IN TB/HIV CO-INFECTION

## Rifamycin Dosing in TB/HIV Co-infection Non-Nucleoside Reverse Transcriptase Inhibitors

	Efavirenz (EFV)	Delavirdine (DLV)	Nevirapine (NVP)
<b>Rifampin</b>	<p>Consider increasing EFV to 800 mg QHS</p> <p>No change necessary for Rifampin</p> <p>Levels: EFV decreased by 25%</p>	<p>Contraindicated</p> <p>Levels: DLV decreased by 95%</p>	<p>Not recommended</p> <p>Levels: NVP decreased by 37-58%</p> <p>Note: If alternative therapy not available, administer standard doses of NVP and Rifampin and monitor antiviral response and liver function tests closely as</p>
<b>Rifabutin</b>	<p>Increase Rifabutin to 450 mg daily</p> <p>No dosing change necessary for EFV</p> <p>Levels: Rifabutin decreased by 35%</p>	<p>Contraindicated</p> <p>Levels: DLV decreased by 80%</p>	<p>No dosing change necessary for Rifabutin or NVP</p> <p>Levels: NVP decreased by 16%</p>

# TB101: RIFAMYCIN DOSING IN TB/HIV CO-INFECTION (CONT.)

## Rifamycin Dosing in TB/HIV Co-infection Protease Inhibitors

	Indinavir (IDV)	Ritonavir Full dose (RTV)	Saquinavir (SQV)	Nelfinavir (NFV)	Fosamprenavir (f-APV)	Atazanavir (ATV)	Lopinavir* (LPV)	Tipranavir* (TPV)
<b>Rifabutin</b>	<p>If NOT RTV boosted: Decrease Rifabutin to 150 mg daily or 300 mg 3x/week;</p> <p>Increase IDV to 1000 mg every 8 hours</p> <p>Levels: Rifabutin increased by 2-fold</p> <p>IDV decrease by 32%</p> <p>If RTV boosted: Decrease Rifabutin 150 mg QOD or 150 mg 3x/week; No IDV dose adjustments are necessary</p> <p>Levels: No Data</p>	<p>Decrease rifabutin to 150 mg QOD or dose 3x/week.</p> <p>Levels: Rifabutin concentrations increase 4-fold.</p>	<p>If NOT boosted: Contraindicated</p> <p>If RTV boosted: Decrease Rifabutin 150 mg QOD or 150 mg 3x/week.</p> <p>No SQV dose adjustments are necessary</p> <p>Levels: No Data</p>	<p>With NFV 1250 mg Q12H decrease Rifabutin to 150 mg QD or 300 mg 3x/week.</p> <p>No NFV dose adjustments are necessary</p> <p>Levels: No Data</p>	<p>If RTV NOT concomitantly administered: Decrease Rifabutin to 150 mg QD or 300 mg 3x/week.</p> <p>No f-APV dose adjustments are necessary</p> <p>Levels: Rifabutin increased 1.9-fold</p> <p>If RTV boosted: Decrease Rifabutin to 150 mg QOD or 3x/week.</p> <p>Levels: Rifabutin increased</p>	<p>Decrease Rifabutin dose to 150 mg QOD or 3x/week</p> <p>No ATV dose adjustments are necessary</p> <p>Levels: Rifabutin increased 2.5-fold</p>	<p>Decrease Rifabutin dose to 150 mg QOD or 3x/week.</p> <p>No dose adjustments are necessary for LPV/r</p> <p>Levels: Rifabutin increased 3-fold.</p>	<p>Decrease Rifabutin to 150 mg QOD or 3x/week.</p> <p>Levels: Rifabutin increased 2.9-fold.</p>
<b>Rifampin</b>	<p>Contraindicated</p> <p>Levels: IDV (unboosted) decreased 89%</p> <p>IDV (boosted) decreased 87%</p>	<p>Alternate antimicrobial should be considered.</p> <p>Levels: RTV decreased by 35%.</p>	<p>Contraindicated</p> <p>Levels: SQV levels decreased by 84%.</p> <p>Note: Severe hepatotoxicity observed with Saquinavir 1000 mg/RTV 100 mg Q12 hours + Rifampin 600 mg daily</p>	<p>Contraindicated</p> <p>Levels: NFV decreased by 82%</p>	<p>Contraindicated</p> <p>Levels: APV decreased by 82%;</p>	<p>Contraindicated</p> <p>Levels: No data</p>	<p>Contraindicated</p> <p>Levels: LPV decreased by 75%</p> <p>Limited clinical experience suggests LPV/r 3 SGC + RTV 300 mg BID may overcome interaction. Hepatotoxicity may be associated with increase RTV dose. Rifabutin is recommended instead of Rifampin</p>	<p>No data</p> <p>Should NOT be co-administered</p>

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**Disclosures:** TC: Consultant: Pfizer, Speaker's Bureau: Gilead Sciences, Abbott Laboratories; NK: Speaker's Bureau: Gilead, Boehringer-Ingelheim  
NK: Assumes ATV, LPV and TPV boosted with RTV

### Notes:

NRTIs not expected to have clinically significant interactions with rifamycins. For patients with CD4 cell counts <100 cells/mm<sup>3</sup>, daily or three times weekly TB regimens are preferred. If patients are not receiving NNRTI- or PI-based antiretroviral therapy, Rifampin can be used in place of Rifabutin. If a three times weekly TB regimen is preferred, Rifabutin does not require dose alteration when concomitantly administered with a RTV boosted PI-based antiretroviral regimen (i.e. if on ATZ/RTV the Rifabutin dose would be 150 mg every other day or three times per week). Please see recommendation in above table for Rifabutin dosing recommendations when co-administered with a PI.

If an Efavirenz-based regimen is used, Rifabutin 600 mg three times weekly is recommended.

INH, PZA and EMB require escalation in doses if a three times weekly regimen is preferred.