

Rifamycins and Psychotropic Drugs: Drug-Drug Interactions

General Tuberculosis (TB) Therapy Information

Many psychotropic drugs are metabolized via the Cytochrome P450 (CYP450) enzymatic system in the liver. Rifampin is a potent inducer of the Cytochrome P450 and accounts for many of the drug interactions that occur during TB therapy.

Rifabutin is a weaker inducer of the Cytochrome P450 system, potentially interacting with some of the same medications as Rifampin. Enzyme induction effects can last 2-4 weeks after discontinuation of a rifamycin. Medication should be readjusted after the discontinuation of Rifamycin treatment.

BRAND/GENERIC		CLINICAL USES	INTERACTIONS	RECOMMENDATIONS
Anti-Psychotics				
Abilify	Aripiprazole	Schizophrenia, Bi-Polar Disorder, Major Depressive Disorder	RIF: Theoretically ↓ Aripiprazole levels	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Clozarine	Clozapine	Schizophrenia	RIF: ↓ Clozapine to sub-therapeutic levels	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Geodon	Ziprasidone	Schizophrenia, Bi-Polar Disorder	RIF: May ↓ Ziprasidone levels	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Haldol	Haloperidol	Tourette's Disorder	RIF: May ↑ Haloperidol clearance	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Invega	Paliperidone	Schizophrenia	RIF: May slightly ↓ Paliperidone levels	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Risperdal	Risperidone	Schizophrenia, Bi-Polar Disorder, Major Depressive Disorder	RIF: ↓ Risperidone levels 43% - 51%	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin. Consider switching to alternate anti-psychotic agent. Alternate recommendation: (Co-administration of Risperidone with Rifampin avoided in clinical practice.)
Seroquel	Quetiapine	Schizophrenia, Bi-Polar Disorder, Alzheimer's Disease	RIF: Theoretically ↓ Quetiapine levels	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Zyprexa	Olanzapine	Schizophrenia, Bi-Polar Disorder	RIF: May ↑ Olanzapine clearance	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Anti-Anxiety Agents				
Ambien	Zolpidem	Insomnia	RIF: ↓ Zolpidem levels 63%	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin. Consider switching to alternate anxiolytic agent or anti-depressant.
Buspar	Buspirone	Anxiety Disorders	RIF: ↓ Anxiolytic effects of Buspirone; ↓ 83.7% - 89.6% levels	Buspirone should be avoided in patients receiving Rifampin. Buspirone should be used only with caution and consideration of appropriate dosage adjustment. Increase clinical monitoring.
Vallium	Diazepam	Anxiety Disorders, Muscle Spasms	RIF: ↓ Diazepam effectiveness	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Versed	Midazolam	Anxiety Disorders, Surgical Premedication	RIF: ↓ Anxiolytic effects of Midazolam; ↓ Plasma concentrations (95.9% decrease in AUC) and pharmacodynamic effects of Midazolam	Midazolam should be avoided in patients receiving Rifampin. Midazolam should be used only with caution and consideration of appropriate dosage adjustment. Increased clinical monitoring is recommended when a patient is concurrently receiving Midazolam and a Rifamycin.
Xanax	Alprazolam	Anxiety Disorders, Panic Disorders	RIF: Theoretically ↓ Alprazolam levels	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Anti-Depressants				
Aventyl	Nortriptyline	Depression	RIF: May ↓ to subtherapeutic levels	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Celexa	Citalopram	Depression	RIF: ↓ Citalopram levels	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Cymbalta	Duloxetine	Depression, Generalized Anxiety Disorder, Diabetic Neuropathy, Fibromyalgia, Osteoarthritis Pain	RIF: May ↓ effects of Duloxetine	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Desyrel	Trazodone	Depression	RIF: May ↓ effects of Trazodone	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Effexor XR	Venlafaxine	Depression, Social Anxiety Disorder, Panic Disorders	RIF: May ↓ effects of Venlafaxine	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Lexapro	Escitalopram	Depression, Generalized Anxiety Disorder	RIF: May ↓ Escitalopram (when co-administered with a potent CYP3A4 inhibitor [Ritonavir], it did not significantly affect the pharmacokinetics of Escitalopram)	Low likelihood of interaction, patient should be monitored for evidence of interactions. Consider dose adjustment at initiation of therapy with Rifampin and after cessation of Rifampin treatment. Consider switching to alternate anti-depressant.
Pristiq	Desvenlafaxine	Depression	RIF: May ↓ effects of Desvenlafaxine	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Wellbutrin XL	Bupropion HCl	Depression, Seasonal Affective Disorder, Smoking Cessation	RIF: May ↓ effects of Bupropion HCl	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.
Zoloft	Sertraline	Depression, Obsessive Compulsive Disorder, Post Traumatic Stress Disorder, Social Anxiety Disorder, Premenstrual Dysphoric Disorder	RIF: May bring about the loss of Sertraline efficacy; may double Sertraline clearance	Increase clinical monitoring; consider dose adjustment at initiation of therapy with a Rifamycin.

KEY:

RIF = Rifampin
CYP 3A4 = Cytochrome P450 3A4

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