rifabutin (rif-a-byoo-tin)

**Mycolytic agents for atypical mycobacterium**

**Pregnancy Category B**

**Indications**

Prevention of disseminated Mycobacterium avium complex (MAC) disease in patients with advanced HIV infection. *Unlabeled Use:* Treatment of Helicobacter pylori ulcer disease which has failed on other regimens (with pantoprazole and amoxicillin).

**Action**

Appears to inhibit DNA-dependent RNA polymerase in susceptible organisms. Therapeutic Effects: Antimycobacterial action against susceptible organisms.

**Pharmacokinetics**

Absorption: Well absorbed following oral administration (50–85%). Absorption is decreased in HIV-positive patients (20%).

Distribution: Widely distributed to body tissues and fluids.

Metabolism and Excretion: Mostly metabolized by the liver; 5% excreted unchanged by the kidneys.

Half-life: 45 hr.

**Contraindications/Precautions**

Contraindicated in: Hypersensitivity. Cross-sensitivity with other rifamycins (rifampin) may occur; Active tuberculosis; Concurrent ritonavir or delavirdine.

Use Cautiously in: OB, Lactation, Pedi: Safety not established.

**Adverse Reactions/Side Effects**

**EENT:** Brown-orange discoloration of tears, ocular disturbances. **Resp:** Dyspnea. **CV:** Chest pain, chest pressure. **GI:** Pseudomembranous colitis, brown-orange discoloration of saliva, drug-induced hepatitis, GU: brown-orange discoloration of urine, erectile dysfunction, Ms: arthralgia, myositis. **Misc:** Brown-orange discoloration of body fluids, flu-like syndrome.

**Interactions**

Drug-Drug: Increases metabolism and may decrease the effectiveness of other drugs, including efavirenz, indinavir, nelfinavir, nevirapine, saquinavir, (dosage adjustment may be necessary); delavirdine; corticosteroids, disopyramide, quinidine, opioid analgesics, oral hypoglycemic agents, warfarin, estrogens, estrogen-containing contraceptives, phenytoin, rifampin, fluconazole, theophylline, zidovudine, and chloramphenicol. Ritonavir increases blood levels of rifabutin (concurrent use is contraindicated), similar effects occur with efavirenz and nevirapine.

**Route/Dosage**

**PO (Adults):** 300 mg once daily. If GI upset occurs, may give as 150 mg twice daily with food. *H. pylori*—300 mg/day (unlabeled).

**NURSING IMPLICATIONS**

**Assessment**

- Monitor patient for signs of active tuberculosis (purified protein derivative [PPD], chest x-ray, sputum culture, blood culture, urine culture, biopsy of suspicious lymph nodes) prior to and throughout therapy. Rifabutin must not be administered to patients with active tuberculosis.
- Monitor bowel function. Diarrhea, abdominal cramping, fever, and bloody stools should be reported to health care professional promptly as a sign of pseudomembranous colitis. May begin up to several weeks following cessation of therapy.
- **Lab Test Considerations:** Monitor CBC periodically during therapy. May cause neutropenia and thrombocytopenia.

**Potential Nursing Diagnoses**

- Risk for infection (Indications)
- Noncompliance (Patient/Family Teaching)

**Patient/Family Teaching**

- Explain purpose of treatment.
- As appropriate, review self-administration techniques for home monitoring of PPD skin test.
- Rifabutin may cause temporary discoloration of urine. This is a normal effect and will resolve.
- Take with food to decrease GI irritation.
- May cause discoloration of body fluids; may stain clothing, linens, and toothbrush.
- Do not breastfeed during therapy or until 1 month after last dose.
- Rifabutin is not to be taken for sexually transmitted diseases; it is not a cure.
- Rifaximin — Discontinued.
Implementation

● Do not confuse rifabutin with rifampin.

● PO: May be administered without regard to meals. High-fat meals slow rate but not extent of absorption. May be mixed with foods such as applesauce. If GI upset occurs, administer with food.

Patient/Family Teaching

● Advise patient to take medication as directed. Do not skip doses or double up on missed doses. Emphasize the importance of continuing therapy even if asymptomatic.

● Advise patient to notify health care professional promptly if signs and symptoms of neutropenia (sore throat, fever, signs of infection), thrombocytopenia (unusual bleeding or bruising), or hepatitis (yellow eyes and skin, nausea, vomiting, anorexia, unusual tiredness, weakness) occur.

● Caution patient to avoid the use of alcohol during this therapy, because this may increase the risk of hepatotoxicity.

● Instruct patient to notify health care professional immediately if diarrhea, abdominal cramping, fever, or bloody stools occur and not to treat with antidiarrheals without consulting health care professionals.

● Instruct patient to report symptoms of myositis (myalgia, arthralgia) or uveitis (intraocular inflammation) to health care professional promptly.

● Instruct patient that saliva, sputum, sweat, tears, urine, and feces may become reddish orange to red-brown and that soft contact lenses may become permanently discolored.

● Advise patient that the medication has teratogenic properties and may decrease the effectiveness of oral contraceptives. Counsel patient to use a nonhormonal form of contraception throughout therapy.

● Emphasize the importance of regular follow-up exams to monitor progress and to check for side effects.

Evaluation/Desired Outcomes

● Prevention of disseminated MAC in patients with advanced HIV infection.