

Isoniazid:

Class: Antitubercular Agent

Indications:

Treatment of susceptible tuberculosis infections; treatment of latent tuberculosis infection (LTBI)

Available dosage form in the hospital: 100MG TAB, 300MG TAB.

Trade Names:

Dosage:

Nontuberculous mycobacterium (*M. kansasii*) (unlabeled use): Oral, I.M.: 5 mg/kg/day (maximum: 300 mg/day) for duration to include 12 months of culture-negative sputum; typically used in combination with ethambutol and rifampin

Treatment of latent tuberculosis infection (LTBI): Oral, I.M.: CDC recommendations: 5 mg/kg (maximum: 300 mg/dose) once daily or 15 mg/kg (maximum: 900 mg/dose) twice weekly by directly observed therapy (DOT) for 6-9 months in patients who do not have HIV infection (9 months is optimal, 6 months may be considered to reduce costs of therapy) and 9 months in patients who have HIV infection. Extend to 12 months of therapy if interruptions in treatment occur (*MMWR*, 2000).

Treatment of active TB infection (drug susceptible): Oral, I.M.:

Daily therapy: CDC recommendations: 5 mg/kg/day once daily (usual dose: 300 mg/day) (*MMWR*, 2003)

Directly observed therapy (DOT): CDC recommendations: 15 mg/kg (maximum: 900 mg/dose) twice weekly or 3 times/week; **Note:** CDC guidelines state that once-weekly therapy (15 mg/kg/dose) may be considered, but only after the first 2 months of initial therapy in HIV-negative patients, and only in combination with rifapentine (*MMWR*, 2003).

Dosing: Renal Impairment

No adjustment necessary

Hemodialysis: Dialyzable (50% to 100%); administer dose postdialysis

Common side effect:

Cardiovascular: Hypertension, palpitation, tachycardia, vasculitis

Central nervous system: Depression, dizziness, encephalopathy, fever, lethargy, memory impairment, psychosis, seizure.

Dermatologic: Flushing, rash.

Endocrine & metabolic: Gynecomastia, hyperglycemia, metabolic acidosis, pellagra, pyridoxine deficiency

Gastrointestinal: Anorexia, epigastric distress, nausea, stomach pain, vomiting

Neuromuscular & skeletal: Arthralgia, hyper-reflexia, paresthesia, peripheral neuropathy

Pregnancy Risk Factor: C