

• **Hepatotoxicity:** nausea, vomiting, abdominal pain/cramping, jaundice, anorexia, itching

• **Beers:** use in older adults cautiously; may exacerbate syncope

Evaluate:

• Therapeutic response: decrease in B/P; decreased shortness of breath

Teach patient/family:

- The importance of complying with dosage schedule even if feeling better
- The importance of follow-up with labs
- That sperm count may be decreased

Black Box Warning: To notify if pregnancy is planned or suspected (if pregnant, product will need to be discontinued, pregnancy test done monthly); to use 2 contraception methods while taking this product and for 1 month after concluding therapy

• Not to use OTC products, including herbs, supplements, unless approved by prescriber

• To take tablet whole; not to crush, chew

• **To report to prescriber immediately:** dizziness, faintness, chest pain, palpitations, uneven or rapid heart rate, headache, edema, weight gain

• **To report hepatic dysfunction:** nausea/vomiting, anorexia, fatigue, jaundice, right upper quadrant abdominal pain, itching, fever, malaise

amikacin (Rx)

(am-i-kay'sin)

Amikin , Arikayce

Func. class.: Antiinfective

Chem. class.: Aminoglycoside

Do not confuse:

amikacin/Kineret

ACTION: Interferes with protein synthesis in bacterial cells by binding to ribosomal subunits, which causes misreading of genetic code; inaccurate peptide sequence forms in protein chain, thereby causing bacterial death

USES: Severe systemic infections of CNS, respiratory tract, GI tract, urinary tract, bone, skin, soft tissues caused by *Staphylococcus aureus* (MSSA), *Pseudomonas aeruginosa*, *Escherichia coli*, *Enterobacter*, *Acinetobacter*, *Providencia*, *Citrobacter*, *Serratia*, *Proteus*, *Klebsiella pneumoniae*

Unlabeled uses: *Mycobacterium avium* complex (MAC) (intrathecal or intraventricular) in combination; actinomycotic mycetoma, febrile neutropenia, cystic fibrosis

CONTRAINDICATIONS: Pregnancy, hypersensitivity to aminoglycosides, sulfites

Precautions: Breastfeeding, neonates, geriatric patients, myasthenia gravis, Parkinson's disease, mild to moderate infections, dehydration

Black Box Warning: Hearing impairment, renal/neuromuscular disease

DOSAGE AND ROUTES

• **Adult/child:** **IV INFUSION** 15 mg/kg/day in 2-3 divided doses q8-12hr in 100-200 mL D₅W over 30-60 min, max 1.5 g/day; **pulse dosing** (once-daily dosing) may be used with some infections; **IM** 10-15 mg/kg/day in divided doses q8-12hr; or extended-interval dosing as an alternative dosing regimen

• **Neonate:** **IV/IM** 10 mg/kg initially, then 7.5 mg/kg q8-12hr

Renal dose (extended-interval dosing)

• **Adult:** **IV** CCr 40-59 mL/min 15 mg/kg q36hr; CCr 20-39 mL/min 15 mg/kg q48hr; <20 mL/min adjust based on serum concentrations and MIC (use traditional dosing)

Mycobacterium avium complex (MAC)

• **Adult and adolescent:** **IM/IV** 15-20 mg/kg/day or 5× per wk; **Neb (Arikayce)** 590 mg daily in combination

• **Child:** **IV** 15-30 mg/kg/day divided q12-24hr as part of multiple-drug regimen, max 1.5 g/day