

acetazolamide

Warnings

Classification

carbonic anhydrase inhibitor, diuretic

Alternate Names

DIAMOX
acetazolamide sodium

Indications

- rapid reduction of intraocular pressure (IOP) in glaucoma
- treatment of metabolic alkalosis when oral route is not feasible
- diuretic for congestive heart failure (CHF) or drug induced edema

Reconstitution and Stability

- store vials at room temperature
- 500 mg vial: reconstitute with sterile water for injection 5 mL to provide 100 mg/mL solution

Compatibility

- compatible with dextrose, sodium chloride 0.9%, dextrose-sodium chloride combination, ringers, and lactated ringers.

Preparation and Administration

- *peripheral IV: use large vein in forearm; if possible, avoid hand, wrist or antecubital fossa

Administration Route	Approved	Preparation and Administration Instructions	Required Monitoring
Subcutaneous	NO		
Intramuscular	NO		
IV direct*	YES	<i>preferred route</i> give undiluted, over 1 to 3 minutes <u>maximum rate</u> : 500 mg/minute	Basic Monitoring
IV intermittent*	YES	dilute dose in 50 mL; give over 15 to 30 minutes	Basic Monitoring
Continuous IV infusion	NO		

acetazolamide

Dosage

treatment of acute or secondary closed-angle glaucoma:

- 250 to 500 mg IV direct or IV intermittent; then 125 to 250 mg IV Q4H
 - maximum: 1 g/24 hours
- creatinine clearance 10 to 50 mL/minute: 125 to 250 mg Q12H

metabolic alkalosis:

- 500 mg IV direct once, improvement should occur within 2 hours

CHF or drug induced edema:

- 250 to 375 mg IV direct or IV intermittent once daily
- if diuretic effect declines after initially responding, hold acetazolamide for 1 day; then, administer on alternate days or once daily for 2 days, then one day off

Potential Hazards of Parenteral Administration

- pain on injection
- hypersensitivity: fever, rash, anaphylaxis
- Extravasation risk: irritant
 - **refer to:** [Extravasation Management \(Non-Antineoplastic Vesicant/ Irritant Medications\) – Adults](#)

Important Implications

Contraindications/Cautions

- contraindicated if severe renal or hepatic impairment, hypokalemia or hyponatremia, adrenocorticoid insufficiency and hyperchloremic acidosis
- contraindicated for long-term treatment of chronic non-congestive closed angle glaucoma
- caution if patient receiving concomitant high dose aspirin (anorexia, tachypnea, lethargy, coma and death have been reported)
- caution in patients with sulfonamide allergy (acetazolamide is a sulfonamide derivative)
- Pregnancy/Lactation: refer to Lexicomp or Micromedex

Side effects

- *CNS*: drowsiness, paresthesia, dizziness, confusion (usually dose related)
- *GI*: altered taste/smell, nausea, diarrhea, anorexia (common)
- *renal*: polyuria (common), crystalluria, renal stones (uncommon)
- *hematopoietic*: bone marrow depression, haemolytic anaemia, leukopenia, thrombocytopenia
- *metabolic/endocrine*: metabolic acidosis, hypokalemia

Monitoring

- CBC and platelets: baseline and during therapy, serum electrolytes
- acetazolamide is ineffective if creatinine clearance less than 10 mL/min

Other

- onset of action: reduction in intraocular pressure occurs in 2 minutes