

Amiodarone (Cordarone, Pacerone)

► INDICATIONS (See sidebar for CONTRAINDICATIONS)

Amiodarone treats a variety of arrhythmias, including supraventricular and ventricular. However, it is associated with a variety of adverse effects and requires careful follow-up and monitoring.

► INTRAVENOUS DOSING AND ADMINISTRATION

Table 1 - Intravenous Amiodarone

| SITUATION | IV PUSH or BOLUS | MAINTENANCE INFUSION* | NOTES |
|---|---|---|--|
| Cardiac Arrest: unresponsive to CPR, shock or vasopressors | <ul style="list-style-type: none"> IV/IO push: 300 mg (dilution in 20–30 mL D5W) Can follow with ONE 150mg IV/IO push (dilution in 10–20 mL D5W) in 3–5 minutes | After return of spontaneous circulation: <ul style="list-style-type: none"> 1 mg/min for 6 hrs Decrease to 0.5 mg/min for next 18 hours (can be restored to 1 mg/min as clinically indicated) | <ul style="list-style-type: none"> May repeat IV bolus (150 mg in 100 mL D5W over 10 minutes) as needed for breakthrough episodes. |
| Non-Arrest Situations: v-fib, a-fib | <ul style="list-style-type: none"> IV bolus: 150 mg in 100 mL D5W over 10 minutes (v-fib) or 20 minutes (a-fib) | <ul style="list-style-type: none"> 1 mg/min for 6 hrs Decrease to 0.5 mg/min for next 18 hours (can be restored to 1 mg/min as clinically indicated) | <ul style="list-style-type: none"> May repeat 150 mg bolus (over 10 minutes) as needed for breakthrough episodes. Switch to oral dosing as soon as possible. |

*Maintenance infusion requires a 0.22 micron in-line filter.

► ORAL DOSING

Table 2 - Oral Amiodarone

| SITUATION | HIGH LOADING DOSE | LOWER LOADING DOSE* |
|--|--|---|
| Ventricular Tachycardia or Urgent Arrhythmias | <ul style="list-style-type: none"> Initial loading dose of 800–1200 mg per day for 1 to 3 weeks Dose tapered to 400–800 mg per day over 1 month, then transition to maintenance dose of 200–400 mg per day (usually 400 mg 3 times a day for 1 week, then 400 mg twice a day for 1 week, then 200–400 mg once a day) | <ul style="list-style-type: none"> Initial loading dose of 800 mg per day for 1 week Switch to maintenance dose of 200–400 mg per day |
| Atrial Fibrillation Prevention | <ul style="list-style-type: none"> Initiation dose of 400 mg per day (200 mg, twice daily) for all patients Reduce to 200 mg per day after 8 grams have been administered (see <i>Atrial Fibrillation CPM</i> for details) | |

*Lower loading dose is preferable in women and patients with low body weight.

CONTRAINDICATIONS

- Severe sinus node dysfunction
- Sinus bradycardia
- 2nd or 3rd degree AV block without functioning pacemaker
- Iodine hypersensitivity

ADVERSE EFFECTS

- Pulmonary:** Hypersensitivity pneumonitis, pulmonary alveolitis, infiltrates (0.5%–10%). Reduce dose or discontinue.
- Thyroid:** Hypothyroid (1%–32%). Prescribe thyroid supplements. Hyperthyroid (1%–23%). Prescribe methimazole or stop nesiritide.
- GI:** Nausea, vomiting, anorexia, constipation (33%). Reduce dose, use divided dosing, or have patients take nesiritide with food.
- Hepatic:** Elevated LFTs (5–20%). Reduce dose; discontinue if LFTs remain >3 times baseline.
- Dermatologic:** Photosensitivity (2%–57%); blue-gray skin (1%–7%). Use total block sunscreen (i.e. zinc).
- Neurologic:** Tremor, ataxia, peripheral neuropathy (20%). Reduce dose; can treat neuropathy if diabetes-induced.
- Ophthalmologic:** Corneal microdeposits (98%); optic neuropathy/neuritis (<2%). Ophthalmologic exam if patient is symptomatic.

DRUG INTERACTIONS

- Statins:** Increased risk of myopathy or rhabdomyolysis. Max dose: simvastatin 20 mg/day; lovastatin 40 mg/day.
- Warfarin:** Metabolism inhibited; increased protime and INR.
- Digoxin:** Concentrations increased.
- Antiarrhythmic drugs:** Levels increased, with potential proarrhythmia and heart block.
- Cyclosporine, tacrolimus:** Clearance decreased by 50%; toxicity increased.
- Phenytoin, phenobarbitol:** Concentrations and toxicity increased.

GUIDANCE FOR MANAGEMENT OF ATRIAL FIBRILLATION

See Intermountain's care process model *Guide to Outpatient Management of Atrial Fibrillation* for guidance



on when to pursue DC cardioversion, recommended oral antiarrhythmic medications, rate control medications, and chronic anticoagulation for AF patients.

► RECOMMENDED FOLLOW-UP

Short-term monitoring during initiation:

- **Drug interactions:** Assess for drug interactions and adjust medications accordingly.
- **Basic lab tests:** Liver function tests, pulmonary function tests, and thyroid function tests.
- **Skin discoloration:** Check for skin discoloration (bluish tint); if it occurs, reduce dose or discontinue.

Long-term monitoring:

- **Drug interactions:** Reassess for drug interactions at every appointment.
- **Liver function:** Liver panel every 6 months.
- **Thyroid function:** Thyroid function test every 12 months, or if patient has symptoms.
- **Pulmonary function:** Pulmonary physical exam every 12 months; additional testing (PFT and consider DLCO) if patient shows signs or symptoms of pulmonary toxicity.
- **Eye exams:** Periodic ophthalmologic exams; monitor for visual acuity changes.

These guidelines apply to common clinical circumstances, and may not be appropriate for certain patients and situations. The treating clinician must use judgment in applying guidelines to the care of individual patients.

