Bretylium Tosylate Injection, USP

BRETYLIUM TOSYLATE INJECTION, USP
DOSING AND ADMINISTRATION GUIDE

Ventricular fibrillation (VF) / hemodynamically unstable ventricular tachycardia

- 5-10 mg/kg of bodyweight rapid IV bolus undiluted. Follow immediately with countershock, may repeat at a dose of 10 mg/kg every 15 to 30 minutes to a maximum dose of 30 mg/kg of body weight if ventricular fibrillation persists.

Refractory or recurrent stable ventricular tachycardia

- 5-10 mg/kg body weight in to 50-100 mL, IV over 8 minutes or more. May be repeated in 1 to 2 hour intervals if needed to a max of 30 mg/kg.

The maintenance dose (same dose used above)

- 5-10 mg/kg in 50-100 mL over 8 minutes or more every q 6-8 hours thereafter. It can be administered as an IV infusion at a rate of 1 to 2 mg/min.

Intramuscular injection (IM)

- Use undiluted solution.
- 5-10 mg/kg IM; may repeat dose at 1 to 2 hour intervals if arrhythmia persists.
- Rotate injection site with each subsequent dose and do not inject near a major nerve.
- Maintain: 5-10 mg/kg IM q 6-8 hours.

Dosage Adjustment in Renal Impairment

- Increase dosage interval in patients with renal impairment.

Note

- Limit use to intensive care units, coronary care units, or other facilities with equipment and personnel for constant monitoring of cardiac rhythm and blood pressure.
- The onset of antiarrhythmic action may be delayed by 20 minutes to 2 hours despite fast ventricular antifibrillatory response (within minutes).

Preparation and Administration Instructions for Continuous Infusion

Bretylium (mg/mL)	Volume of IV fluid (mL)	Final Volume (mL)	Final Concentration (mg/mL)	Dose (mg/min)	mL/hour
1000 mg (20 mL) **500 mg (10 mL)**	500 250	520 260	1.9 1.9	1 1.5 2	32 47 63
Fluid Restricted Patients					
500 mg (10 mL)	50	60	8.3	1 1.5 2	7 11 14
2000 mg (40 mL) **1000 mg (20 mL)**	500 250	540 270	3.7 3.7	1 1.5 2	16 24 32

Bretylium Tosylate Injection, USP

Indications and Usage

Bretylium Tosylate Injection, USP is indicated in the prophylaxis and therapy of ventricular fibrillation.

Bretylium Tosylate Injection, USP is also indicated in the treatment of life-threatening ventricular arrhythmias, such as ventricular tachycardia that have failed to respond to adequate doses of a first-line antiarrhythmic agent, such as lidocaine.

Use of Bretylium Tosylate Injection, USP should be limited to intensive care units, coronary care units or other facilities where equipment and personnel for constant monitoring of cardiac arrhythmias and blood pressure are available.

Following injection of Bretylium Tosylate there may be a delay of 20 minutes to 2 hours in the onset of antiarrhythmic action, although it appears to act within minutes in ventricular fibrillation. The delay in effect appears to be longer after intramuscular than after intravenous injection.

Bretylium Tosylate Injection, USP Important Safety Information

Contraindications

There are no contraindications to use bretylium tosylate in treatment of ventricular fibrillation or life-threatening refractory ventricular arrhythmias, except in the case of digitalis induced arrhythmias. If the arrhythmia is thought to be due to digitalis, bretylium tosylate should not be used.

Warnings and Precautions

- **Hypotension:** Postural hypotension, subjectively recognized by dizziness, lightheadedness, vertigo or faintness may occur. Some degree of hypotension is present in about 50% of patients while they are supine; patients over 65 years may be at greater risk. Keep patients supine until tolerance to the hypotensive effect of bretylium tosylate develops.
- **Transient Hypertension and Increased Frequency of Arrhythmias:** Transient hypertension or increased frequency of premature ventricular contractions and other arrhythmias may occur in some patients, especially after too vigorous a dosing.
- **Caution During Use with Digitalis Glycosides:** Bretylium tosylate may aggravate digitalis toxicity. In digitalized patients, bretylium tosylate should be used only if the etiology of the arrhythmia does not appear to be digitalis toxicity and other antiarrhythmic drugs are not effective. Avoid simultaneous initiation of therapy with digitalis glycosides and bretylium tosylate.
- **Patients with Fixed Cardiac Output:** Bretylium tosylate should be avoided in patients with fixed cardiac output since severe hypotension may result.
- **Hyperthermia:** Hyperthermia, characterized by temperature excess of 106°F, has been reported.
- **General Precautions:**
  - Bretylium Tosylate Injection, USP should be diluted prior to intravenous use, but may be given undiluted for immediately life-threatening ventricular arrythmias.
  - When injected intramuscularly, not more than 5 mL should be given in a site, and injection sites should be varied.
  - Dosage intervals should be increased in patients with impaired renal function.

Adverse Reactions

Hypotension and postural hypotension are the most frequently reported adverse reactions. Nausea and vomiting occurred in about three percent of patients. This is not a complete list of side effects and others may occur. Please see the full Prescribing Information for a complete list of adverse reactions.

To report SUSPECTED ADVERSE REACTIONS, contact ANI Pharmaceuticals, Inc. at 1-800-308-6755 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

This Important Safety Information does not include all the information needed to use Bretylium Tosylate Injection, USP safely and effectively. See full Prescribing Information for Bretylium Tosylate Injection, USP.