Dronedarone  
(DROE-NEH-dah-rone)

CLASSIFICATION(S):  
Antiarrhythmic agent.

PREGNANCY CATEGORY: X

Rx: Multaq.

USES
Reduce the risk of CV hospitalization in clients with paroxysmal or persistent atrial fibrillation or atrial flutter, with a recent episode of atrial fibrillation/atrial flutter and associated with CV risk factors (i.e., >70 years of age, hypertension, diabetes, prior CVA, left atrial diameter 50 mm or more or left ventricular ejection fraction < 40%), who are in sinus rhythm or who will be cardioverted.

ACTION/KINETICS

Action  
Mechanism is unknown. Has antiarhythmic properties belonging to all 4 Vaughan–Williams classes; the contribution of each of these activities to the clinical effect is not known.

Pharmacokinetics  
Peak plasma levels: 3–6 hr. Steady state: 4–8 days after repeated administration of 400 mg twice a day. Bioavailability is increased by food; absolute bioavailability of about 4% but increases to about 15% when given with a high fat meal. Extensively metabolized by CYP3A. Most excreted in the feces (84%) with a small amount excreted in the urine (6%). $t_1/2$, elimination: 13–19 hr.

CONTRAINDICATIONS  
NYHA class IV heart failure or NYHA class II or III heart failure with a recent decompensation requiring hospitalization or referral to a specialized heart failure clinic. Second- or third-degree heart AV block or sick sinus syndrome (except when used in conjunction with a functioning pacemaker); bradycardia less than 50 beats/min; concomitant use of strong CYP3A inhibitors (e.g., clarithromycin, cyclosporine, itraconazole, ketoconazole, nefazodone, ritonavir, telithromycin, voriconazole); concomitant use of drugs or herbal products that prolong the QT interval and might increase the risk of torsades de pointes (e.g., phenothiazines, antipsychotics, tricyclic antidepressants, certain oral macrolide antibiotics, class I and III antiarrhythmics); QTc Bazett interval 500 ms or more or PR interval more than 280 ms; severe hepatic impairment; pregnancy; lactation.

SPECIAL CONCERNS

■ (1) Dronedarone is contraindicated in clients with New York Heart Association (NYHA) class IV heart failure or NYHA class II to III heart failure with a recent decompensation requiring hospitalization or referral to a specialized heart failure clinic. (2) In a placebo-controlled study in clients with severe heart failure requiring recent hospitalization or referral to a specialized heart failure clinic for worsening symptoms, clients given dronedarone had a greater than 2-fold increase in mortality. Do not give such clients dronedarone.  

SAFETY AND EFFICACY

Safety and efficacy not established in children less than 18 years of age.

SIDE EFFECTS

Most Common  
Diarrhea, asthenia, nausea, rashes.

GI: Diarrhea, N&V, abdominal pain, dyspeptic signs and symptoms, dysgeusia.
CV: Bradycardia, QT prolongation. Dermatologic: Rashes, including generalized, macular, maculopapular, erythematous; pruritus, eczema, dermatitis, allergic dermatitis. **Body as a whole:** Asthenia, photosensitivity reactions.

LABORATORY TEST CONSIDERATIONS  
↑ Serum creatinine levels; reaches a plateau in 7 days (use the increased value as a new baseline).

OD OVERDOSE MANAGEMENT

Treatment: Monitor cardiac rhythm and BP. Provide supportive treatment based on symptoms. There is no specific antidote.

DRUG INTERACTIONS

NOTE: It is possible an additive effect can occur with other drugs that prolong the QT interval. Amiodarone / Potential risk of torsades de pointes–type ventricular tachycardia; use together contraindicated

Beta–blockers (metoprolol, propranolol) / ↑ Frequency of bradycardia; possible ↑ dronedarone exposure; give lower

**Bold Italic** = life threatening side effect  
■ = black box warning  
* = Available in Canada
initial beta-blocker dosage and ↑ only after ECG verification of good tolerance

Calcium channel blockers (e.g., diltiazem, verapamil) / Possible ↑ dronedarone and calcium channel blocker exposure; give lower initial calcium channel blocker dosage and ↑ only after ECG verification of good tolerance

Carbamazepine / Possible ↓ dronedarone exposure; use together contraindicated

Cyclosporine / Possible ↑ dronedarone exposure R/T inhibition of CYP3A

Digoxin / Potential of the electrophysiologic effects of dronedarone; ↓ digoxin dose by 50%; monitor serum levels and observe for toxicity

Disopyramide / Potential risk of torsades de points-type ventricular tachycardia; use together contraindicated

Dofetilide / Potential risk of torsades de points-type ventricular tachycardia; use together contraindicated

Flecainide / Potential risk of torsades de points-type ventricular tachycardia; use together contraindicated

Itraconazole / Possible ↑ dronedarone exposure R/T inhibition of CYP3A

Ketoconazole / Possible ↑ dronedarone exposure R/T inhibition of CYP3A

Midazolam / Possible ↑ plasma levels of midazolam; dosage adjustment may be needed

Nefazodone / Possible ↑ dronedarone exposure R/T inhibition of CYP3A

Phenobarbital / Possible ↓ dronedarone exposure; use together contraindicated

Phenothiazine antipsychotics (e.g., chlorpromazine, thioridazine) / Potential risk of torsades de points-type ventricular tachycardia; use together contraindicated

Pimozide / Possible ↑ plasma levels of pimozide; dosage adjustment may be needed

Propafenone / Potential risk of torsades de points-type ventricular tachycardia; use together contraindicated

Quinidine / Potential risk of torsades de points-type ventricular tachycardia; use together contraindicated

Rifampin / Possible ↓ dronedarone exposure; use together contraindicated

Ritonavir / Possible ↑ dronedarone exposure R/T inhibition of CYP3A

Selective serotonin reuptake inhibitors (fluoxetine) / Possible ↑ plasma levels of SSRIs; dosage adjustment may be needed

Simvastatin / ↑ Simvastatin and simvastatin exposure

Siroliimus / Possible ↑ plasma levels of sirolimus; dosage adjustment may be needed

Sotalol / Potential risk of torsades de points-type ventricular tachycardia; use together contraindicated

St. John's wort / Possible ↓ dronedarone exposure; use together contraindicated

Tacrolimus / Possible ↑ plasma levels of tacrolimus; dosage adjustment may be needed

Tricyclic antidepressants (e.g., amitriptyline) / Potential risk of torsades de points-type ventricular tachycardia; use together contraindicated; also possible ↑ TCA exposure

Variconazole / Possible ↑ dronedarone exposure R/T inhibition of CYP3A

Warfarin / Possible ↑ S-warfarin exposure; monitor INR

HOW SUPPLIED

DOSAGE

• TABLETS

Paroxysmal or persistent atrial fibrillation or atrial flutter.

Adults, usual: 400 mg twice a day with the morning and evening meals. NOTE: Treatment with class I or III antiarrhythmics (e.g., amiodarone, disopyramide, dofetilide, flecainide, propafenone, quinidine, or sotalol) or drugs that are strong inhibitors of CYP3A4 (e.g., ketoconazole) must be discontinued before taking dronedarone.

NURSING CONSIDERATIONS

ADMINISTRATION/STORAGE

1. Potassium levels should be within the normal range prior to dronedarone administration and maintained in the normal range during administration.

2. Premenopausal women who have not undergone a hysterectomy or oophorectomy must use effective contraception while using dronedarone.

**ASSESSMENT**
1. Note reasons for therapy, frequency of hospitalizations, other agents trialed and outcome.
2. List drugs prescribed to ensure none interact.
3. Identify CV risk factors (i.e., >70 y.o., hypertension, prior CVA, diabetes, left atrial diameter at least 50 mm or LVEF less than 40%).
4. Obtain EKG, note NYHA class, assess for CHF, QT prolongation, heart block; monitor electrolytes, Mg⁺⁺, renal and LFTs.
5. Note last hospitalization, treatments and any referrals to heart failure clinics.

**CLIENT/FAMILY TEACHING**
1. Take each dose twice a day with food; avoid grapefruit juice.
2. Report any S&S of worsening heart failure such as rapid weight gain (>3 lb/day or >5 lb/week), swelling of feet or legs, ↑ shortness of breath.
3. May experience N&V, stomach pain, diarrhea, fatigue or skin changes; report if persistent or bothersome.
4. Practice reliable contraception and avoid pregnancy during therapy.
5. Record HR, BP and weight for provider review.
6. Keep all F/U to assess response, labs, EKG, and for adverse SE.

**OUTCOMES/EVALUATE**
1. Risk of hospitalization with Paroxysmal AFib/Flutter