propafenone (proe-paf-en-one)

**Indications**

Treatment of life-threatening ventricular arrhythmias, including ventricular tachycardia (immediate-release only); Prolongs the time to recurrence of symptomatic paroxysmal atrial fibrillation and paroxysmal supraventricular tachycardia (PVT). Unlabeled Use: Single dose treatment for atrial fibrillation.

**Pharmacokinetics**

**Absorption:** Although well absorbed following oral administration, undergoes extensive metabolic degradation, may be poor metabolizers and may have significantly lower peak levels and risk of nephrotoxicity.

**Distribution:** Widely distributed; crosses the placenta.

**Half-life:** 2–10 hr in extensive metabolizers, 10–32 hr in slow metabolizers.

**Metabolism and Excretion:** Extensively metabolized by the liver (CYP1A2, CYP2D6, and CYP3A4 enzyme systems; the CYP2D6 enzyme system exhibits genetic polymorphism), some metabolites have antiarrhythmic activity.

**TIME/ACTION PROFILE (antiarrhythmic effects**

**Therapeutic Effects:**

**Suppression of ventricular arrhythmias.**

**Contraindications/Precautions**

Contraindicated in:

†Chronic dosing

PO hr–days 4–5 days† hr

Unlabeled Use: Single dose treatment for atrial fibrillation.

**Adverse Reactions/Side Effects**

CNS: Dizziness, shakiness, EENT: Blurred vision, CV: Hypersensitive arrhythmias, ventricular arrhythmias, conduction disturbances, angina, bradycardia, hypertension, GI: Abdominal pain, constipation, diarrhea, dry mouth, Hemat: Agranulocytosis, Thrombocytopenia, PT, INR, and WBC may be abnormal.

**Interactions**

**Drug-Drug:** Any inhibitors of the CYP1A2, CYP2D6, or CYP3A4 enzyme systems may ↑ levels, including desipramine, paroxetine, ritonavir, sertraline, ketoconazole, saquinavir, cyclosporine (blood level monitoring recommended). Concurrent use with CYP2D6 inhibitor and CYP3A4 inhibitor should be avoided. Propafenone is a strong inhibitor of CYP2D6 and significantly ↑ levels of propafenone; concurrent use is not recommended. Propafenone is also an inhibitor of CYP2D6 and may ↑ levels of desipramine, imipramine, haloperidol, and valproic acid. Significantly ↑ serum digoxin levels (blood level monitoring recommended). Concurrent use of local anesthetics may ↑ risk of CNS adverse reactions. May ↑ levels of desipramine, paroxetine, sertraline, desipramine, and venlafaxine. Concurrent use with amiodarone can adversely affect conduction/repolarization and should be avoided. May ↑ risk of CNS adverse reactions with haloperidol. May ↑ cyclosporine trough blood levels and risk of nephrotoxicity. Rifampin may ↓ serum levels and effectiveness. Concomitant use may ↑ serum levels. Delirium may ↓ absorption.

Drug-Food: Grapefruit juice may ↑ levels.

**Route/Dosage**

**PO (Adults):** 150 mg q 4 hr; may be gradually ↑ to 300 mg q 4–6 hr single dose treatment of atrial fibrillation (unlabeled) — 450 or 600 mg; Initiation/reduction — 225 mg q 4 hr; may be gradually ↑ at intervals of 5–5 day intervals as required to 525 mg q 12 hr of further ↑ may be necessary, may ↑ to 625 mg q 12 hr.

**Contraindications/Precautions**

Contraindicated in: Hypersensitivity; Concurrent quinidine or amiodarone; Concurrent use with CYP2D6 inhibitors and CYP3A4 inhibitors should be avoided. Propafenone is also an inhibitor of CYP2D6 and may ↑ levels of desipramine, imipramine, haloperidol, and venlafaxine.

**Drug-Food:** Grapefruit juice may ↑ levels.

**Route/Dosage:**

**PO (Adults):** 150 mg q 4 hr; may be gradually ↑ to 300 mg q 4–6 hr single dose treatment of atrial fibrillation (unlabeled) — 450 or 600 mg; Initiation/reduction — 225 mg q 4 hr; may be gradually ↑ at intervals of 5–5 day intervals as required to 525 mg q 12 hr of further ↑ may be necessary, may ↑ to 625 mg q 12 hr.
NURSING IMPLICATIONS

Assessment

- Monitor ECG or use Holter monitor prior to and periodically during therapy. May cause PR and QT prolongation.
- Monitor BP and pulse periodically during therapy.
- Monitor intake and output ratios and daily weight. Assess patients for signs of HF (peripheral edema, rales/crackles, dyspnea, weight gain, jugular venous distention). May require reduction or discontinuation of therapy.
- Lab Test Considerations: May cause ↑ ANA titer, which is usually asymptomatic and reversible.
- Monitor prothrombin level in patients taking warfarin; may affect effects of warfarin.

Toxicity and Overdose: Signs of toxicity include hypotension, drowsiness, and decreased or abnormal heart rate. Notify health care professional if these signs occur.

Potential Nursing Diagnoses

Decreased cardiac output (Indications)

Implementation

- PO: Propafenone therapy should be initiated in a hospital with facilities for cardiac rhythm monitoring. Most serious proarrhythmic effects are seen in the first 2 wk of therapy.
- Swallow sustained-release capsules whole; do not open, crush or chew.
- Previous antiarrhythmic therapy should be withdrawn 2–5 half-lives before starting propafenone.
- Dose adjustments should be at least 3–4 days apart because of the long half-life of propafenone.
- Correct pre-existing hypokalemia or hyperkalemia prior to instituting therapy.

Patient/Family Teaching

- Instruct patient to take medication around the clock as directed, even if feeling better. Take missed doses as soon as remembered if within 4 hr; omit if remembered later. Gradual dosage reduction may be necessary.
- May cause dizziness. Caution patient to avoid driving and other activities requiring alertness until response to medication is known.
- Advise patient to notify health care professional of medication regimen prior to treatment or surgery.
- Instruct patient to notify health care professional if fever, sore throat, chills, or unusual bleeding or bruising occurs or if chest pain, shortness of breath, diaphoresis, palpitations, or visual changes become bothersome.
- Advise patient to carry identification describing disease process and medication regimen at all times.
- Emphasize the importance of follow-up exams to monitor progress.

Evaluation/Desired Outcomes

- Decrease in frequency of ventricular arrhythmias.
- Prolonged time to recurrence of symptomatic paroxysmal atrial arrhythmias, including paroxysmal atrial fibrillation/flutter and PSVT.

Why was this drug prescribed for your patient?