**dabigatran (da-bye-gat-ran)**

**Pradaxa**

**Classification**
Therapeutic: anticoagulants
Pharmacologic: thrombin inhibitors

**Pregnancy Category C**

**Indications**
To reduce the risk of stroke/systemic embolization associated with non-valvular atrial fibrillation.

**Action**
Acts as a direct inhibitor of thrombin. **Therapeutic Effects:** Lowered risk of thrombotic sequelae (stroke and systemic embolization) of non-valvular atrial fibrillation.

**Pharmacokinetics**
- **Absorption:** 3–7% absorbed following oral administration.
- **Distribution:** Unknown.
- **Metabolism and Excretion:** Of the amount absorbed, mostly excreted by kidneys (80%); 86% of ingested dose is eliminated in feces due to poor bioavailability.
- **Half-life:** 12–17 hr.

**TIME/ACTION PROFILE (effects on coagulation)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
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<tbody>
<tr>
<td>PO</td>
<td>unknown</td>
<td>2 days†</td>
<td>2 days†</td>
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†Following discontinuation, 3–5 days in renal impairment.

**Contraindications/Precautions**
- Contraindicated in: Hypersensitivity; Active pathological bleeding; Concurrent use of P-gp inducers; Prosthetic heart valves (mechanical or bio-prosthetic).
- Use Cautiously in: Concurrent medications/pre-existing conditions that provoke bleeding risk (other anticoagulants, antiplatelet agents, antifibrinolytics, heparins, chronic NSAID use, labor and delivery); Renal impairment; Surgical procedures (discontinue 1–2 days prior if GFR <50 mL/min or 3–4 days prior if GFR <30 mL/min). 
- Geri: ↑ risk of bleeding, ↓ efficacy; Use cautiously during severe bleeding; Pruritus, ↓ safety and effectiveness of anticoagulation.

**Adverse Reactions/Side Effects**
- **GI:** abdominal pain, diarrhea, dyspepsia, gastritis, nausea.
- **Hemat:** BLEEDING, thrombocytopenia.
- **Misc:** ANGIOEDEMA, hypersensitivity reactions including ANAPHYLAXIS.

**Interactions**
- **Drug-Drug:** Concurrent use of other anticoagulants, antiplatelet agents, antifibrinolytics, heparins, prasugrel, clopidogrel, or chronic use of NSAIDs ↑ risk of bleeding; Concurrent use of P-gp inducers including rifampin ↑ levels and effectiveness; Avoid concurrent use. 
- P-gp inhibitors, including dronedarone and ketoconazole (systemic) may ↓ levels and the risk of bleeding; concurrent use should be avoided in patients with GFR 15–30 mL/min.

**Route/Dosage**

<table>
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<th>PO (Adults)</th>
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<td>150 mg twice daily</td>
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**Renal Impairment**

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<th>PO (Adults)</th>
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<td>CCr 30–50 mL/min and taking dronedarone or systemic ketoconazole—75 mg twice daily; CCr 15–30 mL/min—75 mg twice daily; CCr 15–30 mL/min and taking P-gp inhibitor—Avoid concomitant use; CCr &lt;15 mL/min—Not recommended.</td>
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**NURSING IMPLICATIONS**

**Assessment**
- Assess for symptoms of stroke or peripheral vascular disease periodically during therapy.
- Assess for symptoms of bleeding and blood loss; may be fatal.
- Monitor renal function prior to and periodically during therapy. Patients with renal impairment may require dose reduction or discontinuation.

**Potential Nursing Diagnoses**
- Activity intolerance

**(client needs) -- discontinued.**
Implementation

- When converting from warfarin, discontinue warfarin and start dabigatran when INR is 2.0.
- When converting from dabigatran to warfarin, discontinue dabigatran 2 days before discontinuing warfarin. For CCr 31–50 mL/min, start warfarin 3 days before discontinuing dabigatran. For CCr <31 mL/min, no recommendations can be made. INR will better reflect warfarin’s effect after dabigatran has been stopped for at least 2 days.
- When converting to dabigatran from parenteral anticoagulants, start dabigatran up to 2 hrs before next dose of parenteral drug is due or at time of discontinuation of parenteral therapy.
- For surgery, discontinue dabigatran 1–2 days (CCr ≥50 mL/min) or 3–5 days (CCr <50 mL/min) before invasive or surgical procedures; consider longer times for major surgery, spinal puncture, or placement of a spinal or epidural catheter. If surgery cannot be delayed, bleeding risk is q.

Patient/Family Teaching

- Instruct patient to take dabigatran as directed. Take missed doses as soon as remembered within 6 hrs. If >6 hr until next dose, skip dose and take next dose when scheduled; do not double doses. Do not discontinue without consulting health care professional. Stop immediately if rash occurs. If surgery cannot be delayed, bleeding risk is q.
- Inform patient that they may bleed more easily or longer than usual. Advise patient to notify health care professional immediately if signs of bleeding (unusual bruising, pain or brown urine, red or black tarry stools, coughing up blood, vomiting blood, pain or swelling in a joint, headache, dizziness, weakness, recurring nose bleeds, unusual bleeding from gums, heavier than normal menstrual bleeding, dysuria, abdominal pain, epigastric pain) occur.
- Advise patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken and consult health care professional before taking any new medications.
- Advise female patient to notify health care professional if pregnancy is planned or suspected or if breastfeeding.

Evaluation/Desired Outcomes

- Reduction in the risk of stroke and systemic embolism.

Why was this drug prescribed for your patient?