Pramipexole (pra-mi-pex-ole)

**Classification**
- Therapeutic: antiparkinson agents
- Pharmacologic: dopamine agonists

**Pregnancy Category C**

**Indications**
- Management of Parkinson’s disease.
- Restless leg syndrome (immediate-release only).

**Action**
- Stimulation of dopamine receptors in the striatum of the brain.

**Therapeutic Effects:**
- Decreased tremor and rigidity in Parkinson’s disease.
- Decreased leg restlessness.

**Pharmacokinetics**
- **Absorption:** 90% absorbed following oral administration.
- **Distribution:** Widely distributed.
- **Metabolism and Excretion:** 90% excreted unchanged in urine.
- **Half-life:** 8 hours (in geriatric patients and patients with renal impairment).

**TIME/ACTION PROFILE (blood levels)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>unknown</td>
<td>2 hr</td>
<td>8 hr</td>
</tr>
<tr>
<td>PO-ER</td>
<td>unknown</td>
<td>6 hr</td>
<td>24 hr</td>
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</tbody>
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**Contraindications/Precautions**

- **Contraindicated in:** Hypersensitivity.
- **Use Cautiously in:** Renal impairment (dosing interval recommended if CrCl 35–59 mL/min [immediate-release] or CrCl 15–34 mL/min [extended-release]); OB, Lactation, Pedi: Safety not established; Geri: Risk of hallucinations.

**Adverse Reactions/Side Effects**

- **CNS:** Sleep attacks, amnesia, dizziness, drowsiness, hallucinations, weakness, abnormal dreams, confusion, extrapyramidal syndrome, tardive dyskinesia, mania, urges (gambling, sexual), CV: orthostatic hypotension, Derm: melanoma, pruritis.

**Interactions**
- **Drug-Drug:** Concurrent levodopa ↑ risk of hallucinations and dyskinesia. Efficacy may be ↓ by cimetidine. Efficacy may be ↓ by dopamine antagonists, including butyrophenones, metoclopramide, phenothiazines, or thioxanthenes.

**Route/Dosage**

**Parkinson’s Disease**
- **PO (Adults):** Immediate-release—0.125 mg 3 times daily initially; may be ↑ q5–7 days (range 1.5–4.5 mg/day in 3 divided doses); Extended-release—0.175 mg once daily initially; may be ↑ to 0.75 mg once daily in 5–7 days, and then ↑ q5–7 days by 0.75 mg/day (max dose = 4.5 mg/day).

**Renal Impairment**
- **PO (Adults Immediate-release):** CrCl 35–59 mL/min—0.125 mg twice daily initially; may be ↑ q5–7 days up to 1.5 mg twice daily; CrCl 15–34 mL/min—0.125 mg daily initially; may be ↑ q5–7 days up to 1.5 mg daily.

- **PO (Adults Extended-release):** CrCl 30–50 mL/min—0.375 mg every other day; may consider ↓ dose to 0.375 mg once daily after 1 wk based on response and tolerability; may ↑ in 0.375 mg increments after 1 wk (max dose = 2.25 mg daily).

**Restless Leg Syndrome**
- **PO (Adults):** 0.125 mg daily 1–3 hr before bedtime. May be ↑ q4–7 day intervals to 0.25 mg daily, then up to 0.5 mg daily.

**Renal Impairment**
- **PO (Adults Immediate-release):** CrCl 30–60 mL/min—0.125 mg daily 1–3 hr before bedtime. May be ↑ q4–7 day intervals to 0.25 mg daily, then up to 0.5 mg daily.
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NURSING IMPLICATIONS
Assessment
- Assess patient for confusion or hallucinations. Notify health care professional if these occur.
- Monitor ECG and BP frequently during dosage adjustment and periodically throughout therapy.
- Assess patient for drowsiness and sleep attacks. Drowsiness is a common side effect of pramipexole, but sleep attacks or episodes of falling asleep during activities that require active participation may occur without warning. Assess patient for concomitant medications that have sedating effects or may increase serum pramipexole levels (see Interactions). May require discontinuation of therapy.
- Parkinson’s Disease: Assess patient for signs and symptoms of Parkinson’s disease (tremor, muscle weakness and rigidity, ataxia) before and throughout therapy.
- Restless Leg Syndrome: Assess sleep patterns and frequency of restless leg disturbances.

Potential Nursing Diagnoses
Impaired physical mobility (Indications)
Risk for injury (Indications) (Side Effects)

Implementation
- Do not confuse Mirapex (pramipexole) with Miralax (polyethylene glycol).
- An attempt to reduce the dose of levodopa/carbidopa may be made cautiously during pramipexole therapy.
- PO: Administer with meals to minimize nausea; usually resolves with continued therapy. Swallow extended-release tablets whole; do not crush, break, or chew.

Patient/Family Teaching
- Instruct patient to take medication as directed. Take missed doses or immediate-release product as soon as remembered if it is not almost time for next dose. Extended-release tablets are missed; skip dose and take next regular dose. Do not double doses. Consult health care professional before reducing dose or discontinuing medication. Advise patient to read the Patient Information Sheet before taking and with each Rx refill, changes may occur.
- May cause drowsiness and unexpected episodes of falling asleep. Caution patient to avoid driving or other activities requiring alertness until response to medication is known. Advise patient to notify health care professional if episodes of falling asleep occur.
- Advise patient to change positions slowly to minimize orthostatic hypotension. May occur more frequently during initial therapy.
- 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 patient to have periodic skin exams to check for lesions that may be melanoma.
- Advise patient to notify health care professional if new or increased gambling, sexual, or other impulsive urges occur.
- Advise female patient to notify health care professional if pregnancy is planned or suspected or if breast feeding or planning to breast feed.

Evaluation/Desired Outcomes
- Decreased tremor and rigidity in Parkinson’s disease.
- Decrease in restless legs and improved sleep.

Why was this drug prescribed for your patient?