aliskiren (a-lis-ki-re-n)  
- Brand: Tekturna  
- Trade: Rasilez, Tekturna

**Classification**  
Therapeutic: antihypertensives  
Pharmacologic: renin inhibitors

**Pregnancy Category** D

**Indications**  
Treatment of hypertension (alone or with other agents).

**Action**  
Inhibition of renin results in decreased formation of angiotensin II, a powerful vasoconstrictor.  
**Therapeutic Effects:** Decreased BP.

**Pharmacokinetics**  
**Absorption:** Poorly absorbed (bioavailability 2.5%).  
**Distribution:** Unknown.  
**Metabolism and Excretion:** 2% excreted unchanged in urine, remainder is probably metabolized (CYP3A4 enzyme system).  
**Half-life:** 24 hr.

**TIME/ACTION PROFILE** (antihypertensive effect)  
<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 wk</td>
<td>24 hr</td>
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</table>

**Contraindications/Precautions**  
Contraindicated in:  
- Hypersensitivity;  
- Concurrent use with cyclosporine or itraconazole;  
- Concurrent use with ACE inhibitors or ARBs in patients with diabetes or moderate-to-severe renal impairment (CCr \( \leq 60 \text{ mL/min} \));  
- OB: May cause fetal injury or death— if pregnancy occurs, discontinue immediately;  
- Lactation: Discontinue drug or use formula.  
- Use Cautiously in:  
  - Salt or volume depletion (correct before use);  
  - Severe renal impairment;  
  - Pedi: Safety and efficacy not established.

**Adverse Reactions/Side Effects**  
- Resp: cough.  
- CV: hypotension.  
- GI: abdominal pain, diarrhea (\( \approx \) in females and elderly), dyspepsia, reflux.  
- Misc: ANGIOEDEMA.

**Interactions**  
**Drug-Drug:**  
- Risk of hyperkalemia, renal impairment, and hypotension with concurrent use of ACE inhibitors or angiotensin II receptor blockers in patients with diabetes or moderate-to-severe renal impairment (\( \geq 60 \text{ mL/min} \)), concurrent use contraindicated. Blood levels are ↑ by atorvastatin, imatinib, ketoconazole, verapamil, and cyclosporine; avoid concurrent use with cyclosporine or imatinib. Max. effects of furosemide (diuretic effects may be ↑ by other antihypertensives, diuretics, and nitrates.) Risk of hyperkalemia with concurrent use of ACE inhibitors, angiotensin II receptor blockers, potassium supplements, potassium-sparing diuretics, or potassium-containing salt substitutes. NSAIDs and selective COX-2 inhibitors may blunt the antihypertensive effect and ↑ the risk of renal dysfunction.  
- Drug-Food: High fat meals significantly ↓ absorption.

**Route/Dosage**  
**PO (Adults):**  
- 150 mg/day initially; may be ↑ to 300 mg/day.

**NURSING IMPLICATIONS**  
**Assessment**  
- Monitor BP and pulse frequently during initial dose adjustment and periodically during therapy. Notify health care professional of significant changes. If an excessive fall in BP occurs, place patient in a supine position and administer IV 0.9% NaCl, if necessary. A transient hypotensive response does not contraindicate further therapy.  
- Monitor frequency of prescription refills to determine adherence.  
- Lab Test Considerations: May cause minor ↑ in BUN, serum creatinine, potassium, uric acid, and creatine kinase.  
- May cause small ↓ in hemoglobin and hematocrit.

**Potential Nursing Diagnoses**  
- Noncompliance (Patient/Family Teaching)

**Implementation**  
- Correct volume or sodium depletion prior to initiating therapy.  
- PO: Administer at the same time each day without regard to meals.

**Patient/Family Teaching**  
- Instruct patient to take aliskiren as directed at the same time each day, even if feeling better. Take missed doses as soon as remembered, but not if almost time for next dose.

**Evaluation**  
- Continued improvement in HTN control.
next dose. Do not double doses. Do not share medication with others, even with
same condition; may be harmful.

- May cause dizziness. Caution patient to lie down and notify health care profes-
sional. Also, avoid driving and other activities requiring alertness until response to
drugs is known.

- Advise patient to report signs and symptoms of angioedema (swelling of
face, extremities, eyes, lips, tongue, difficulty swallowing, or breathing)
to health care professional immediately.

- Advise patient to notify health care professional of all Rx or OTC medications,
utamin s, or herbal products being taken and to consult with health care professional
before taking other medications.

- Advise female patients to notify health care professional if pregnancy is planned or
suspected or if breast feeding. If pregnancy is detected, discontinue aliskiren as
soon as possible.

**Evaluation/Desired Outcomes**

- Decrease in BP without appearance of side effects. Antihypertensive effect is 90%
attained by 1 wk.

**Why was this drug prescribed for your patient?**