**Indinavir (in-din-a-veer)**

Class: Antiretroviral

**Pharmacologic: protease inhibitors**

**Pregnancy Category C.**

## Indications

HIV infection (with other antiretrovirals). Unlabeled use: Prevention of HIV infection after known exposure (with other antiretrovirals).

## Action

Inhibits the action of HIV protease and prevents the cleavage of viral polyproteins.

## Therapeutic Effects:

Slowing of the progression of HIV infection and its sequelae.

## Uses:

- Prevention of HIV infection (with other antiretrovirals).
- Treatment of HIV infection (with other antiretrovirals).
- Prevention of HIV infection after known exposure (with other antiretrovirals).

## Contraindications/Precautions

- **Contraindicated in:**
  - Hypersensitivity; Dehydration; Concurrent amiodarone, ergot derivatives, lovastatin, midazolam (PO), pimozide, rifamycin, simvastatin, triazolam, or sildenafil (Revatio).

- **Use Cautiously in:**
  - Diabetes mellitus;
  - Severe hepatic insufficiency caused by cirrhosis; Hemophilia (use lowest possible dose of statin; risk of hypercholesterolemia with atorvastatin or rosuvastatin).

- **Hepatic Impairment:** Dose reduction recommended in moderate to severe impairment.

## Drug Interactions

- **Drug-Dose:**
  - Blood levels and risk of toxicity from amiodarone, alprazolam, ergot derivatives, lovastatin, midazolam, or sildenafil (Revatio).

- **Drug-Food:**
  - High-fat meals

- **Drug-Natural Products:**
  - St. John's wort

- **Drug-Drug:**
  - **Interactions:**
    - **Rifampin:** Indinavir dose to 600 mg q 8 hr; also reduce dose of rifabutin by 50%
    - **Ritonavir:** Indinavir dose to 1000 mg q 8 hr
    - **Ketoconazole, erythromycin, clarithromycin, and atazanavir:** Indinavir dose to 2000 mg q 8 hr
    - **Efavirenz:** Blood levels; concurrent use is not recommended.
    - **Atorvastatin, simvastatin, and rosuvastatin:** Blood levels; concurrent use is contraindicated.
    - **Sildenafil (Revatio):** Indinavir dose to 1000 mg q 8 hr
    - **Salmeterol, atorvastatin, and midazolam (PO):** Indinavir dose to 800 mg q 8 hr

## Pharmacokinetics

- **Absorption:** Rapidly absorbed after oral administration.
- **Distribution:** Unknown.
- **Metabolism and Excretion:** Mostly metabolized by the liver; 20% excreted unchanged by the kidneys.
- **Half-life:** 1.8 hr.
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- **PO (Adults):**
  - **Route/Dosage**
  - **ONSET PEAK DURATION**
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  - **Route/ACTION PROFILE (blood levels)**
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## Adverse Reactions/Side Effects

- **CNS:** dizziness, drowsiness, fatigue, headache, insomnia, weakness
- **GI:** abdominal pain, anorexia, nausea, vomiting
- **GU:** nephrolithiasis
- **MS:** back pain
- **MR:** immune reconstitution syndrome, edema, abcesses of body fat.

## Overdose

- **PO (Adults):** 800 mg q 8 hr.
- **PO (Adults):** 1600 mg q 8 hr.
- **PO (Adults):** 2400 mg q 8 hr.

## Contraindications:

- **Contraindicated in:**
  - Hypersensitivity; Dehydration; Concurrent amiodarone, ergot derivatives, lovastatin, midazolam (PO), pimozide, rifabutin, simvastatin, triazolam, or sildenafil (Revatio).

## Natural Drug Products

- **St. John's wort**

## Route/Dosage

- **PO (Adults):**
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## Natural Drug Products

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## Discontinued

- **Indinavir (in-din-a-veer)**

## Classifications

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- Diabetes mellitus;
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**NURSING IMPLICATIONS**

**Assessment**
- Assess for changes in severity of symptoms of HIV infection and for symptoms of opportunistic infections throughout therapy.
- **Lab Test Considerations:** Monitor viral load and CD4 cell count periodically during therapy.
- May cause hyperglycemia.
- May cause decreased AST, ALT, total bilirubin, and amylase concentrations.

**Potential Nursing Diagnoses**
- Risk for infection (Indications)
- Noncompliance (Patient/Family Teaching)

**Implementation**
- Do not confuse indinavir with Denavir (penciclovir).
- PO: Administer with water 1 hr before or 2 hr after a meal. May be taken with other liquids (watermelon, juice, coffee, tea) or a light meal (dry toast with jelly, coffee with skim milk and sugar, cereals with skim milk and sugar). Avoid high-fat, high-protein meals within 2 hr of administration.
- Patients on concurrent didanosine therapy should take didanosine and indinavir at least 1 hr apart.

**Patient/Family Teaching**
- Emphasize the importance of taking indinavir as directed, at evenly spaced times throughout day. Do not take more than prescribed amount and do not stop taking without consulting health care professional. Take missed doses as soon as remembered; if more than 2 hr from scheduled dose, skip dose and take next scheduled dose; do not double doses.
- Instruct patient that indinavir should not be shared with others.
- Instruct patients to store indinavir in original container with desiccant in bottle; indinavir is sensitive to moisture.
- Indinavir may cause kidney stones. Advise patient to drink at least 1.5 L of water each day. Kidney stones may require 1–3 day interruption of therapy.
- Inform patient that indinavir may cause hyperglycemia. Advise patient to notify health care professional if increased thirst or hunger; unexplained weight loss; increased urination; fatigue; or dry, itchy skin occurs.
- Advise patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken and to consult with health care professional before taking other medications.
- Advise patients concurrently taking diazoxide that both medications must be taken on an empty stomach, 1 hr apart.
- Inform patient that indinavir does not cure AIDS and does not reduce the risk of transmission of HIV to others through sexual contact or blood contamination. Caution patients to use a condom and avoid sharing needles or donating blood to prevent spreading HIV to others.
- May cause diarrhea and constipation. Advise patients to avoid diarrhea and constipation by avoiding medication is known.
- Inform patient that red blood cell count and platelet count may occur, causing central obesity, decreased renal function (renal failure), peripheral neuropathy, bone enlargement, and endocrinopathy. The cause of these effects is not known.
- Advise female patients to avoid breast feeding while taking indinavir.
- Emphasize the importance of regular follow-up exams and blood counts to determine progress and monitor for side effects.

**Evaluation/Desired Outcomes**
- Delayed progression of AIDS and decreased opportunistic infections in patients with HIV.
- Improved CD4 cell count and decrease in viral load.

*Why was this drug prescribed for your patient?*