

## atorvastatin calcium

### Lipitor

**Pharmacologic class:** 3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase inhibitor

**Therapeutic class:** Lipid-lowering agent

**Pregnancy risk category X**

### Action

Inhibits HMG-CoA reductase, which catalyzes first step in cholesterol synthesis pathway; this action reduces concentrations of serum cholesterol and low-density lipoproteins (LDLs), linked to higher risk of coronary artery disease (CAD). Also increases concentration of high-density lipoproteins (HDLs), linked to decreased CAD risk.

### Availability

Tablets: 10 mg, 20 mg, 40 mg, 80 mg

### Indications and dosages

➤ Adjunct to diet for controlling LDL, total cholesterol, apo-lipoprotein B, and triglyceride levels and to increase HDL levels in patients with primary hypercholesterolemia and mixed dyslipidemia; primary dysbetalipoproteinemia in patients unresponsive to diet alone. Adjunct to diet to reduce elevated triglyceride levels.

**Adults:** Initially, 10 mg P.O. daily; increase to 80 mg P.O. daily if needed. Adjust dosage according to patient's cholesterol level.

➤ Adjunct to other lipid-lowering treatments in patients with homozygous familial hypercholesterolemia

**Adults:** 10 to 80 mg P.O. daily

➤ Adjunct to diet to decrease total cholesterol, LDL, and apo-lipoprotein B levels in boys and postmenarchal girls ages 10 to 17 who have familial

and nonfamilial heterozygous hypercholesterolemia

**Boys and girls:** Initially, 10 mg P.O. daily; adjust dosage upward or downward based on lipid levels. Maximum dosage is 20 mg daily.

### Off-label uses

- To lower total cholesterol levels

### Contraindications

- Hypersensitivity to drug
- Active hepatic disease
- Females of childbearing age
- Pregnancy or breastfeeding

### Administration

- Give with or without food.
- Don't give with grapefruit juice or antacids.

Route	Onset	Peak	Duration
P.O.	Unknown	1-2 hr	Unknown

### Adverse reactions

**CNS:** amnesia, abnormal dreams, emotional lability, headache, hyperactivity, poor coordination, malaise, paresthesia, peripheral neuropathy, drowsiness, syncope, weakness

**CV:** arrhythmias, orthostatic hypotension, palpitations, phlebitis, vasodilation, increased creatine kinase level

**EENT:** amblyopia, altered refraction, glaucoma, dry eyes, eye hemorrhage, hearing loss, tinnitus, epistaxis, sinusitis, pharyngitis

**GI:** nausea, vomiting, diarrhea, constipation, abdominal cramps, abdominal or biliary pain, colitis, indigestion, dyspepsia, flatulence, stomach ulcers, gastroenteritis, melena, tenesmus, rectal hemorrhage, glossitis, mouth sores, gingival bleeding, dry mouth, taste loss, dysphagia, esophagitis, appetite changes, **pancreatitis**

**GU:** hematuria, nocturia, dysuria, urinary frequency or urgency, urinary retention, nephritis, renal calculi, abnor-

mal ejaculation, cystitis, decreased libido, impotence, epididymitis

**Hematologic:** thrombocytopenia, anemia

**Hepatic:** jaundice, **hepatic failure, hepatitis**

**Metabolic:** hyperglycemia, hypoglycemia

**Musculoskeletal:** bursitis, joint pain, back pain, leg cramps, gout, muscle pain or aches, myositis, myasthenia gravis, neck rigidity, torticollis

**Respiratory:** dyspnea, pneumonia, bronchitis

**Skin:** alopecia, acne, contact dermatitis, eczema, dry skin, pruritus, rash, urticaria, skin ulcers, seborrhea, photosensitivity, diaphoresis

**Other:** allergic reaction, fever, facial paralysis, facial or generalized edema, flulike symptoms, infection, weight gain

## Interactions

**Drug-drug.** *Antacids, colestipol:* decreased atorvastatin level

*Azole antifungals, cyclosporine, erythromycin, fibric acid derivatives, niacin, other HMG-CoA inhibitors:* increased risk of myopathy

*Digoxin:* increased digoxin level, greater risk of toxicity

*Hormonal contraceptives:* increased estrogen level

**Drug-diagnostic tests.** *Alanine aminotransferase, aspartate aminotransferase:* increased levels

**Drug-food.** *Grapefruit juice:* increased drug level, greater risk of adverse effects

**Drug-herb.** *Red yeast rice:* increased risk of adverse effects

## Precautions

Use cautiously in:

- renal impairment, hypotension, uncontrolled seizures, myopathy, alcoholism

- severe metabolic, endocrine, or electrolyte disorders

- women of childbearing age
- children younger than age 18.

## Patient monitoring

- Monitor patient for signs and symptoms of allergic response.
- Evaluate for muscle weakness, a symptom of myositis.
- Monitor liver function test results and lipid blood levels.

## Patient teaching

- Teach patient to immediately report allergic response.
- Tell patient he may take drug with or without food.
- Caution patient to avoid driving and other hazardous activities until he knows how drug affects concentration, alertness, and vision.
- Instruct patient to avoid grapefruit juice during therapy.
- Teach patient to minimize GI upset by eating small, frequent servings of food and drinking plenty of fluids.
- Inform patient taking hormonal contraceptives that drug increases estrogen levels; instruct her to tell all prescribers she's taking drug.
- Inform men that drug may cause erectile dysfunction and abnormal ejaculation; encourage them to discuss these issues with prescriber.
- Tell patient he'll undergo regular blood testing during therapy.