risedronate (ris-ed-roe-nate) 

Actonel, Atelvia 

**Classification** 

Therapeutic: Bone resorption inhibitors 
Pharmacologic: Bisphosphonates 

**Pregnancy Category C** 

**Indications** 


**Action** 

Inhibits bone resorption by binding to bone hydroxyapatite, which inhibits osteoclast activity. 

**Therapeutic Effects:** 

Reversal of the progression of osteoporosis with decreased fractures and other sequelae. Reduced bone turnover and resorption; normalization of serum alkaline phosphatase with reduced complications of Paget's disease. 

**Pharmacokinetics** 

**Absorption:** Rapidly but poorly absorbed following oral administration (0.63% bioavailability). 

**Distribution:** 60% of absorbed dose distributes to bone. 

**Metabolism and Excretion:** 40% of absorbed dose is excreted unchanged by kidneys; unabsorbed drug is excreted in feces. 

**Half-life:** Initial—1.5 hr; terminal—220 hr (reflects dissociation from bone). 

**TIME/ACTION PROFILE (effects on serum alkaline phosphatase)** 

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**Contraindications/Precautions** 

Contraindicated in: Hypersensitivity, hypocalcemia, Abnormalities of the esophagus which delay esophageal emptying (i.e. strictures, achalasia). Reduced bone turnover and resorption; normalization of serum alkaline phosphatase with reduced complications of Paget's disease. 

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**NURSING IMPLICATIONS** 

**Assessment** 

- Osteoporosis: Assess patients via bone density study for low bone mass before and periodically during therapy. 
- Paget’s disease: Assess for symptoms of Paget’s disease (bone pain, headache, decreased visual and auditory acuity, increased skull size).
Lab Test Considerations:
- Osteoporosis: Assess serum calcium before and periodically during therapy. Hypocalcemia and vitamin D deficiency should be treated before initiating alendronate therapy. May cause mild, transient Q of calcium and phosphate.
- Paget’s disease: Monitor alkaline phosphatase prior to and periodically during therapy to monitor effectiveness of therapy.

Potential Nursing Diagnoses
- Risk for injury (Indications)

Implementation
- PO: Administer Actonel first thing in the morning with 6–8 oz of plain water, 30 min prior to other medications, beverages, or food. Waiting longer than 30 min will improve absorption. Administer Atelvia right after breakfast with 4 ounces of water. Tablet should be swallowed whole; do not crush, break, or chew.
- Calcium-, magnesium-, or aluminum-containing agents may interfere with absorption of risedronate and should be taken at a different time of day with food.
- Avoid administering delayed release product with proton pump inhibitors or H₂ antagonists; may allow a faster release and increased drug level.

Patient/Family Teaching
- Instruct patient on the importance of taking as directed. Risedronate should be taken with 6–8 oz of plain water (mineral water, orange juice, coffee, and other beverages decrease absorption). If a dose of Actonel 35 is missed, take 1 tablet the morning remembered; then return to the 1 tablet/wk on the originally scheduled day. Do not take 2 pills at once. If one or both tablets of Actonel 75 are missed and the next month’s scheduled dose is within 7 days, omit and return to schedule next month. If one or both tablets of Actonel 75 are missed and the next month’s scheduled dose is more than 7 days away, take the missed tablet on the morning of the day after you remember; then return to original schedule. Do not take more than two 150 mg tablets within 7 days. If one or both tablets of Actonel 75 are missed, and the next month’s scheduled dose is within 7 days, omit and return to schedule next month. If one or both tablets of Actonel 150 are missed, and the next month’s scheduled dose is more than 7 days away, take the missed tablet on the morning of the day after you remember; then return to original schedule. Do not take more than two 150 mg tablets within 7 days.

Evaluation/Desired Outcomes
- Reversal of the progression of osteoporosis with decreased fractures and other sequelae. For patients at low risk of fracture, discontinue after 3 to 5 years of use.
- Decrease in serum alkaline phosphatase and the progression of Paget’s disease.

Why was this drug prescribed for your patient?