

Osteoporosis Drugs Compared

Class	Drug	Dosing	How It Works	Risks/Side Effects
Bisphosphonates	Alendronate (Fosamax, Binosto)	Daily or weekly tablet or weekly effervescent tablet that you dissolve in water	Strengthens bones by slowing the rate at which osteoclasts remove bone	<ul style="list-style-type: none"> ➤ Gastrointestinal problems, such as trouble swallowing, inflammation of the esophagus, and ulcers ➤ Osteonecrosis (death of bone tissue) in the jaw (rare)
	Ibandronate (Boniva)	Monthly tablet or injection every 3 months	Strengthens bones by slowing the rate at which osteoclasts remove bone	<ul style="list-style-type: none"> ➤ Fracture of the thighbone (femur) with more than 5 years of use (rare)
	Risedronate (Actonel, Atelvia)	Daily, weekly, or monthly tablet	Strengthens bones by slowing the rate at which osteoclasts remove bone	<ul style="list-style-type: none"> ➤ Fracture of the thigh bone (femur) with more than 5 years of use (rare) ➤ Not recommended for women with kidney problems
	Zoledronic Acid (Reclast)	Yearly intravenous infusion	Strengthens bone by slowing the rate at which osteoclasts remove bone	<ul style="list-style-type: none"> ➤ Irritation at the injection site ➤ Flu-like symptoms – headache, muscle aches, fever ➤ Fracture of the thigh bone (rare) ➤ Osteonecrosis of the jaw (rare)
Calcitonin	Calcitonin (Miacalcin, Fortical)	Daily nasal spray or injection	Inhibits bone removal by osteoclasts, and increases the rate of new bone formation by osteoblasts	<ul style="list-style-type: none"> ➤ Allergic reactions ➤ Small increase in cancer risk
Parathyroid Hormone	Teriparatide (Forteo)	Daily injection	Increases the number of bone-forming osteoblasts	<ul style="list-style-type: none"> ➤ Leg cramps ➤ Nausea ➤ Dizziness
Monoclonal Antibody	Denosumab (Prolia)	Injection given by a health care provider twice a year	Prevents the development of bone-removing osteoclasts	<ul style="list-style-type: none"> ➤ Low blood calcium ➤ Skin infections and rash ➤ Osteonecrosis of the jaw (rare) ➤ Fracture of the thighbone (rare)
Selective Estrogen Receptor Modulator (SERM)	Raloxifene (Evista)	Daily tablet	Acts like estrogen to strengthen bones	<ul style="list-style-type: none"> ➤ Hot flashes ➤ Muscle pain ➤ Blood clots