

Government-approved Drugs for Postmenopausal Osteoporosis in the United States and Canada

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Generic (Brand name)	Dose and Route	Indication	Contraindications
Bisphosphonates (oral unless otherwise specified)			
Alendronate (Fosamax)	5 mg/d or 35 mg/wk tablet or oral solution*; 10 mg/d or 70 mg/wk tablet or oral solution*	Prevention; Prevention + Treatment	<ul style="list-style-type: none"> • Abnormalities of the esophagus • Inability to stand or sit upright for at least 30 minutes • Hypersensitivity to any component of this product • Hypocalcemia • Patients at increased risk of aspiration should not receive FOSAMAX oral solution
Alendronate + vitamin D ₃ (Fosamax Plus D*, Fosavance**)	70 mg + 2,800 IU/wk; 70 mg + 5,600 IU/wk	Treatment	
Risedronate (Actonel)	5 mg/day; 35 mg/wk; 75 mg in 2 consecutive d/mo; 150 mg/mo	Prevention + Treatment	
Risedronate (Atelvia)	35 mg/wk (delayed release)	Prevention	
Risedronate + calcium carbonate (Actonel with Calcium)	35 mg/wk (day 1) + 1,250 mg Ca for no-risedronate days (days 2-7 of 7-d treatment cycle)	Prevention + Treatment	
Ibandronate (Boniva*)	150 mg/mo; 2.5 mg/d 3 mg every 3 mo I.V.	Prevention + Treatment; Treatment	
Etidronate (Didrocal**)	400 mg/d for 14 d every 3 mo, with calcium taken between cycles	Prevention + Treatment	<ul style="list-style-type: none"> • Allergy to etidronate disodium or any ingredients of the medication • Osteomalacia (softening of the bones)
Zoledronic acid (Reclast*)	5 mg/2 y I.V.	Prevention + Treatment	<ul style="list-style-type: none"> • Hypocalcemia • Creatinine clearance < 35 mL/min and acute renal impairment • Hypersensitivity to Zoledronic acid or any components of this product
Zoledronic acid (Aclasta**)	5 mg/y I.V.	Prevention + Treatment	
Estrogen agonist/antagonist			
Raloxifene (Evista)	60 mg/d	Prevention + Treatment	<ul style="list-style-type: none"> • Venous thromboembolism • Pregnancy, women who may become pregnant, and nursing mothers
Calcitonin			
Calcitonin-salmon (Fortical)	200 IU/d nasal spray	Treatment (>5 y postmenopause)	Allergy to calcitonin-salmon
Calcitonin-salmon (Miacalcin)	200 IU/d nasal spray	Treatment (>5 y postmenopause)	Allergy to synthetic calcitonin-salmon
Parathyroid hormone			
Teriparatide (recombinant human PTH 1-34) (Forteo)	20 µg/d s.c.	Treatment (high Fx risk)	<ul style="list-style-type: none"> • Hypersensitivity to teriparatide or to any of its excipients • Reactions have included angioedema and anaphylaxis

RANK ligand inhibitor			
Denosumab (Prolia)	60 mg every 6 months s.c.	Treatment	Hypocalcemia
Estrogen-only prescription drugs approved for prevention of postmenopausal osteoporosis			
Conjugated estrogens (Premarin)	0.3, 0.45*, 0.625, 0.9, 1.25 mg/d	Prevention	<ul style="list-style-type: none"> • Undiagnosed abnormal genital bleeding • Known, suspected, or history of cancer of the breast except in appropriately selected patients being treated for metastatic disease • Known or suspected estrogen-dependent neoplasia • Active deep vein thrombosis, pulmonary embolism or a history of these conditions • Active or recent (within the past year) arterial thromboembolic disease (for example, stroke, myocardial infarction) • Liver dysfunction or disease • Known thrombophilic disorders (e.g., protein C, protein S, or antithrombin deficiency) • Known hypersensitivity to any of the ingredients in this product • Known or suspected pregnancy
Estropipate (Ogen)	0.625 (0.75 estropipate, calculated as sodium estrone sulfate 0.625), 1.25 (1.5), 2.5 (3.0) mg/d (in Canada, only approved for treatment)	Prevention	
17 β -estradiol (Alora*)	0.025, 0.05, 0.075, 0.1 mg/d matrix patch (twice weekly)	Prevention	
17 β -estradiol (Climara)	0.025, 0.0375*, 0.05, 0.075, 0.1 mg/d (0.025 dose not approved in Canada) matrix patch (once weekly)	Prevention	
17 β -estradiol (Estrace)	0.5, 1.0, 2.0 mg/d	Prevention	
17 β -estradiol (Menostar*)	0.014 mg/d matrix patch (once weekly)	Prevention	
17 β -estradiol (Vivelle*)	0.025, 0.0375, 0.05, 0.075, 0.1 mg/d matrix patch (twice weekly)	Prevention	
17 β -estradiol (Vivelle-Dot*, Estradot**)	0.025, 0.0375, 0.05, 0.075, 0.1 mg/d matrix patch (twice weekly)	Prevention	
17 β -estradiol (Estraderm)	0.05, 0.1 mg/d reservoir patch (twice weekly)	Prevention	
Estrogen-progestin prescription drugs approved for prevention of postmenopausal osteoporosis			
Conjugated estrogens + medroxyprogesterone acetate (continuous-cyclic) (Premphase*)	0.625 mg E + 5.0 mg P/day (2 tablets: E and E+P)	Prevention	<ul style="list-style-type: none"> • Undiagnosed abnormal genital bleeding • Known, suspected, or history of breast cancer • Known or suspected estrogen-dependent neoplasia • Active deep vein thrombosis, pulmonary embolism or a history of these conditions • Active arterial thromboembolic disease (for example, stroke and myocardial infarction), or a history of these conditions • Known liver dysfunction or disease • Known thrombophilic disorders (e.g., protein C, protein S, or antithrombin deficiency) • Known or suspected pregnancy
Conjugated estrogens + medroxyprogesterone acetate (continuous-combined) (Prempro*)	0.3 or 0.45 mg E + 1.5 mg P/day (1 tablet); 0.625 mg E + 2.5 mg or 5.0 mg P/day (1 tablet)	Prevention	
Conjugated estrogens + medroxyprogesterone acetate (continuous-combined) (Premplus**)	0.625 mg E + 2.5 or 5.0 mg P/day (2 tablets: E and P)	Prevention	
Conjugated estrogens + medroxyprogesterone acetate (continuous-combined) (Premplus Cycle**)	0.625 mg E daily with 10 mg P taken for the last 14 days each month	Prevention	
Ethinyl estradiol + norethindrone acetate (femhrt*, femHRT**)	2.5 μ g E + 0.5 mg P/day (1 tablet); 5 μ g E + 1 mg P/day (1 tablet)	Prevention	
17 β -estradiol + norethindrone acetate (Activella*)	0.5 mg E + 0.1 mg P/day (1 tablet); 1 mg E + 0.5 mg P/day (1 tablet)	Prevention	

17 β -estradiol + norgestimate (intermittent-combined) (Prefest*)	1 mg E + 0.09 mg P (2 tablets: E and E+P)	Prevention
17 β -estradiol + levonorgestrel (continuous-combined) (Climara Pro*)	0.045 mg E + 0.015 mg P (22 cm ² patch, once/wk)	Prevention

* Available in the United States but not Canada.

** Available in Canada but not the United States.

Products not marked are available in both the United States and Canada.

I.V. = intravenous, s.c. = subcutaneous