

Prolia® (denosumab)

When requesting Prolia® (denosumab) for non-oncology osteoporosis, the individual requiring treatment must be diagnosed with an FDA-approved indication and meet the specific coverage guidelines and applicable safety criteria for the covered indication.

FDA-Approved Non-Oncology Indications

Treatment of postmenopausal women with osteoporosis at high risk for fracture

Prolia is indicated for the treatment of postmenopausal women with osteoporosis at high risk for fracture, defined as a history of osteoporotic fracture, or multiple risk factors for fracture; or patients who have failed or are intolerant to other available osteoporosis therapy.

Treatment to increase bone mass in men with osteoporosis

Prolia is indicated for treatment to increase bone mass in men with osteoporosis at high risk for fracture, defined as a history of osteoporotic fracture, or multiple risk factors for fracture; or patients who have failed or are intolerant to other available osteoporosis therapy.

Treatment of glucocorticoid-induced osteoporosis

Prolia is indicated for the treatment of glucocorticoid-induced osteoporosis in men and women at high risk of fracture who are either initiating or continuing systemic glucocorticoids in a daily dosage equivalent to 7.5 mg or greater of prednisone and expected to remain on glucocorticoids for at least 6 months.

Coverage Guidelines

Treatment of osteoporosis in postmenopausal women and men

An individual has had an osteoporotic fracture or a fragility fracture

OR

An individual must meet **BOTH** of the following criteria for approval:

- Must have one of the following criteria:
 - o Has had a T-score at or below -2.5 at the lumbar spine, femoral neck, total hip and/or 33% radius (wrist) **OR**
 - o Has low bone mass (T-score between -1.0 and -2.5 at the lumbar spine, femoral neck, total hip, and/or 33% radius [wrist]) and is at high risk for fracture

AND

- Must have one of the following criteria:

- o Has had an inadequate response to oral bisphosphonate therapy after a 12-month trial (e.g., ongoing and significant loss of bone mineral density [BMD], lack of BMD increase) OR
- o Has experienced intolerance to an oral bisphosphonate (e.g., severe gastrointestinal related adverse events, severe musculoskeletal-related adverse events, a femoral fracture) OR
- o Is unable to take an oral bisphosphonate due to one of the following conditions: 1) cannot swallow or has difficulty swallowing, 2) cannot remain in an upright position post oral bisphosphonate administration; 3) has a pre-existing gastrointestinal medical condition (e.g., esophageal lesions, esophageal ulcers, abnormalities of the esophagus that delay esophageal emptying [stricture, achalasia]) OR
- o Has tried IV bisphosphonate agent (e.g., ibandronate injection [Boniva] , zoledronic acid injection [Reclast]) OR
- o Has severe renal impairment (creatinine clearance [CrCl] less than 35 mL/min) OR
- o Has chronic kidney disease

Treatment of glucocorticoid-induced osteoporosis

An individual must meet **BOTH** of the following criteria for approval:

- Is initiating or continuing systemic glucocorticoids (e.g. prednisone)

AND

- Must have one of the following criteria:
 - o Has had an inadequate response to oral bisphosphonate therapy after a 12-month trial (e.g., ongoing and significant loss of bone mineral density [BMD], lack of BMD increase) OR
 - o Has experienced intolerance to an oral bisphosphonate (e.g., severe gastrointestinal related adverse events, severe musculoskeletal-related adverse events, a femoral fracture) OR
 - o Is unable to take an oral bisphosphonate due to one of the following conditions: 1) cannot swallow or has difficulty swallowing, 2) cannot remain in an upright position post oral bisphosphonate administration; 3) has a pre-existing gastrointestinal medical condition (e.g., esophageal lesions, esophageal ulcers, abnormalities of the esophagus that delay esophageal emptying [stricture, achalasia]) OR
 - o Has tried IV bisphosphonate agent (e.g., ibandronate injection [Boniva] , zoledronic acid injection [Reclast]) OR
 - o Has severe renal impairment (creatinine clearance [CrCl] less than 35 mL/min) OR

- o Has chronic kidney disease OR
- o Had an osteoporotic fracture or a fragility fracture

Approval duration: 12 months

Dosing Recommendation

The recommended dose is 60 mg administered as a single subcutaneous injection once every 6 months.

References

1. Prolia® injection for subcutaneous use [prescribing information]. Thousand Oaks, CA: Amgen; March 2020.
2. Xgeva® injection for subcutaneous use [prescribing information]. Thousand Oaks, CA: Amgen; May 2019.
3. Eastell R, Rosen CJ, Black DM, et al. Pharmacological management of osteoporosis in postmenopausal women: an Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2019;104(5):1595-1622. Available at: <https://www.endocrine.org/guidelines-and-clinical-practice/clinical-practice-guidelines/osteoporosis-in-postmenopausal-women>. Accessed on July 5, 2019.
4. Camacho PM, Petak SM, Binkley N, et al. American Association of Clinical Endocrinologists and American College of Endocrinology clinical practice guidelines for the diagnosis and treatment of postmenopausal osteoporosis. *Endocrin Pract*. 2016;22(Suppl 4):1-42. Available at: <http://journals.aace.com/doi/pdf/10.4158/EP161435.GL>. Accessed on July 5, 2019.
5. Watts NB, Adler RA, Bilezikian JP, et al. Osteoporosis in men: an endocrine society clinical practice guideline. *J Clin Endocrinol Metab*. 2012;97(6):1802-1822.
6. Buckley L, Guyatt G, Fink HA, et al. 2017 American College of Rheumatology guideline for the prevention and treatment of glucocorticoid-induced osteoporosis. *Arthritis Rheumatol*. 2017;69(8):1521-1537. Available at: <https://www.rheumatology.org/Portals/0/Files/Guideline-for-the-Prevention-and-Treatment-of-GIOP.pdf>. Accessed on June 5, 2019.