Rx

10 years of experience in postmenopausal osteoporosis

QUESTIONS-ANSWERS

ABOUT Pr prolia® denosumab

PROLIA is covered by all provincial formularies (special authorization) and almost all private plans in Canada.†

What is PROLIA?

PROLIA (denosumab) is a RANK Ligand (RANKL) inhibitor.[1]

PROLIA (denosumb) is recommended by Osteoporosis Canada as a 1st-line treatment for menopausal women requiring treatment of osteoporosis. Pharmacologic therapy should be offered to patients at high absolute risk (>20% probability for major osteoporotic fracture over 10 years).[2]

PROLIA is indicated:[1]

- 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. In postmenopausal women with osteoporosis, PROLIA reduces the incidence of vertebral, nonvertebral and hip fractures.
- As a 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.
- As a treatment to increase bone mass in men with nonmetastatic prostate cancer receiving androgen deprivation therapy (ADT), who are at high risk for fracture.
- As a treatment to increase bone mass in women with nonmetastatic breast cancer receiving adjuvant aromatase inhibitor (AI) therapy, who have low bone mass and are at high risk for fracture.
- As a treatment to increase bone mass in women and men at high risk for fracture due to sustained systemic glucocorticoid therapy.
- As a treatment to increase bone mass in women and men at high risk for fracture who are starting or have recently started long-term glucocorticoid therapy.

What is the mechanism of action of PROLIA?

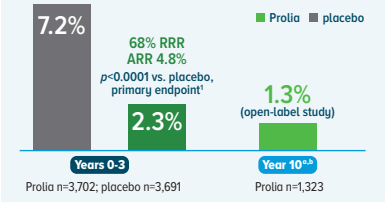
PROLIA:[1‡]

- Binds to RANK Ligand. RANKL is essential for the formation, function and survival of osteoclasts, the cells that are responsible for bone resorption.
- Inhibits osteoclast formation, function and survival.
- Decreases bone resorption and increases bone mass and strength in both cortical and trabecular bone throughout the skeleton.

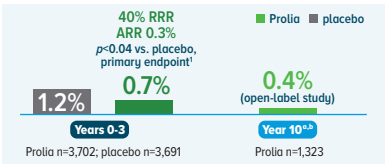
What was the fracture incidence efficacy data for PROLIA in postmenopausal osteoporosis (PMO)?

PROLIA demonstrated sustained low fracture rates over 10 years in PMO for new vertebral, hip and nonvertebral fractures.[1¶]

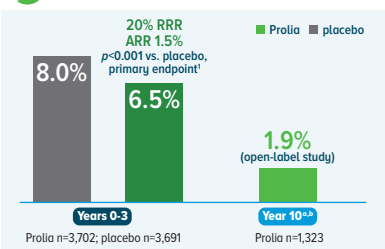
NEW VERTEBRAL FRACTURES



HIP FRACTURES

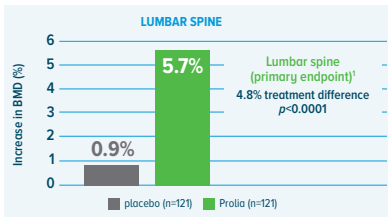


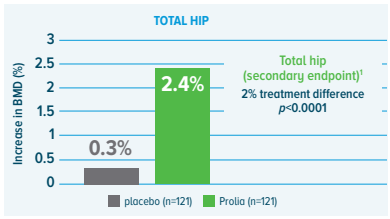
NONVERTEBRAL FRACTURES

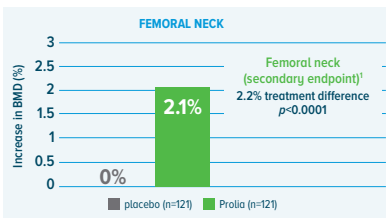


What was the efficacy data for PROLIA in increasing BMD in men?

Treatment with PROLIA significantly increased BMD in men at 1 year for lumbar spine, total hip and femoral neck.[1£]







- The correlation between increased bone density and reduction of bone fracture in men with osteoporosis has not been established.[1]

ARR=absolute risk reduction
RRR=relative risk reduction

† 93% of Canadian lives covered under National Private Drug Plans. Based on the 2019 Applied Management Census of Insurers data.
‡ Clinical significance has not been established.
¶ A randomized, double-blind, placebo-controlled study in postmenopausal patients with osteoporosis receiving 60 mg PROLIA (n=3,902) or placebo (n=3,906) subcutaneously once every 6 months for 3 years. In the long-term, open-label extension study, women received PROLIA for up to 10 years. Subjects were between the ages of 60 and 91 years and had BMD T-scores <-2.5 and ≥-4.0. All women received at least 1000 mg calcium and at least 400 IU vitamin D supplementation per day.[1]
a Annualized yearly subject incidence.
b In women who received PROLIA in the 3-year placebo controlled phase and continued on therapy in the open-label extension.

What was the tolerability profile of PROLIA in women?

PROLIA was generally well tolerated in the 3-year study of women with PMO.[1]

	Prolia (n=3,886)	placebo (n=3,876)
	no. (%)	
MOST COMMON OVERALL ADVERSE EVENTS	3,605 (93)	3,607 (93)
back pain	1,347 (34.7)	1,340 (34.6)
anthralgia	784 (20.2)	782 (20.2)
hypertension	614 (15.8)	636 (16.4)
MOST COMMON SERIOUS ADVERSE EVENTS	1,004 (25.8)	972 (25.1)
osteoarthritis	63 (1.6)	79 (2.0)
atrial fibrillation	36 (0.9)	33 (0.9)
pneumonia	34 (0.9)	36 (0.9)
death	70 (1.8)	90 (2.3)

Long-term tolerability profile in PMO

The incidence of adverse events in the extension study (n=4550), in which patients received up to 10 years (n=2,343) of continuous PROLIA therapy, were similar to those observed in the initial 3 years.[1]

See Product Monograph for details on the tolerability profile in men.

How is PROLIA dosed and administered?

PROLIA is taken twice a year by subcutaneous injection: **1** injection every **6** months Administration of PROLIA should only be performed by an adequately trained injector.

See the Product Monograph for complete dosing and administration.

What about risks associated with discontinuing PROLIA?

- Multiple vertebral fractures may occur following discontinuation of treatment with PROLIA, particularly in patients with a history of vertebral fracture.[1]
- Advise patients not to interrupt PROLIA therapy without their physician's advice.[1]
- Evaluate the individual benefit/risk before discontinuing treatment with PROLIA.[1]
- If PROLIA treatment is discontinued, consider transitioning to an alternative antiresorptive therapy.[1]

How is PROLIA stored?

- Store PROLIA in a refrigerator at 2°C to 8°C in the original carton. Do not freeze.
- If removed from the refrigerator, PROLIA should be kept at controlled room temperature (up to 25°C) in the original carton and must be used within 30 days.
- Protect PROLIA from light and do not expose to temperatures above 25°C.
- Avoid vigorous shaking of PROLIA.
- Do not use PROLIA beyond the expiry date stamped on the label.

What is the proVital® Support Program?

ProVital® is a reminder and education program to support patients with their PROLIA treatment. The Patient Support Program provides your patients with:

- Next injection reminder calls
- Educational newsletters
- Reimbursement support services

Enrol

√ phone: 1-877-776-1002
√ fax: 1-877-776-1022

What can pharmacists do to help manage osteoporosis treatment?

One of the most significant ways in which pharmacists can impact the management of osteoporosis treatment is to emphasize to patients the importance of treatment adherence.

- Understand the condition, risk factors and treatment options, and be prepared to counsel patients. Education can empower patients to make informed decisions.

➔ **Osteoporotic fractures represent 80% of all fractures in menopausal women over age 50—yet fewer than 20% receive therapies to help prevent fractures.[2▲]**

➔ **Men with osteoporosis can also be at high risk for fracture.[1§]**

Consider PROLIA for your patients at high risk of fracture

£ Randomized, double-blind, placebo-controlled study in men with osteoporosis receiving 60 mg PROLIA (n=121) subcutaneously once every 6 months for 1 year. Subjects were between the ages of 31 and 84 years and had BMD T-scores between -2 and -3.5 at the lumbar spine or femoral neck. Men with a BMD T-score between -1 and -3.5 at the lumbar spine or femoral neck and with history of prior fragility fracture were also enrolled. Patients also received at least 1000 mg calcium and at least 800 IU vitamin D supplement daily.[1]

▲ Osteoporosis Guidelines 2010.

§ Prolia can be used to increase bone mass in men with osteoporosis at high risk for fracture.

Clinical use:
Prolia is not indicated for use in pediatric patients.

Contraindications:

- Hypersensitivity to the drug or any component of the product Anaphylactic reactions have been reported.
- Hypocalcemia
- Patients who are pregnant or who are trying to become pregnant. Verify the pregnancy status of women of reproductive potential prior to initiating PROLIA treatment. Advise these patients of the potential of the risk of PROLIA use in pregnancy and to use effective contraception during therapy, and for at least 5 months after the last dose of PROLIA.

Relevant warnings and precautions:

- Contains same active ingredient as XGEVA®; do not use concurrently
- Adequate intake of calcium and vitamin D is important in all patients
- Hypocalcemia; clinical monitoring of calcium levels is recommended
- In severe renal impairment or dialysis, there is a greater risk of hypocalcemia; adequate intake of calcium and vitamin D is important
- Serious infections
- Epidermal and dermal adverse events
- Osteonecrosis of the jaw (ONJ); risk may increase with duration of exposure to Prolia; evaluate for ONJ risk factors before starting treatment; dental examination is recommended for those with risk factors; good oral hygiene practices should be maintained during treatment and invasive dental procedures should be avoided
- Atypical femoral fractures
- Multiple vertebral fractures following discontinuation of Prolia treatment
- Significant suppression of bone remodelling
- Potential for greater sensitivity in older patients
- Not recommended in nursing women
- Potential for female partner and fetal exposure unlikely when taken by men
- Latex sensitivity

For more information:
Please consult the Product Monograph at www.amgen.ca/Prolia_PM.pdf for important information relating to adverse reactions, drug interactions and dosing information which have not been discussed in this piece. The Product Monograph is also available by calling us at 1-866-502-6436.

References

1. Prolia Product Monograph. Amgen Canada Inc., June 25, 2019.
2. Papaioannou A, *et al*. 2010 Clinical practice guidelines for the diagnosis and management of osteoporosis in Canada: summary. *CMAJ* 2010;182(17):1864-73.

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