

# **Medical Policy:**

# Prolia® and Xgeva® (denosumab)

| POLICY NUMBER | LAST REVIEW   | ORIGIN DATE |
|---------------|---------------|-------------|
| MG.MM.PH.100  | April 8, 2024 |             |

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The treating physician or primary care provider must submit to EmblemHealth, or ConnectiCare, as applicable (hereinafter jointly referred to as "EmblemHealth"), the clinical evidence that the member meets the criteria for the treatment or surgical procedure. Without this documentation and information, EmblemHealth will not be able to properly review the request preauthorization or post-payment review. The clinical review criteria expressed below reflects how EmblemHealth determines whether certain services or supplies are medically necessary. This clinical policy is not intended to pre-empt the judgment of the reviewing medical director or dictate to health care providers how to practice medicine. Health care providers are expected to exercise their medical judgment in rendering appropriate care.

EmblemHealth established the clinical review criteria based upon a review of currently available clinical information (including clinical outcome studies in the peer reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). EmblemHealth expressly reserves the right to revise these conclusions as clinical information changes and welcomes further relevant information. Each benefit program defines which services are covered. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered and/or paid for by EmblemHealth, as some programs exclude coverage for services or supplies that EmblemHealth considers medically necessary.

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# **Length of Authorization**

Coverage is provided for 12 months and may be renewed.

# **Dosing Limits [Medical Benefit]**

## Max Units (per dose and over time):

| <u>Prolia</u> | All indications:  • 60 billable units every 6 months  |
|---------------|---|
| <u>Xgeva</u>  | Giant Cell Tumor of Bone; Hypercalcemia of malignancy  - Loading Dose:  • 120 billable units on days 1, 8, 15, and 29  - Maintenance:  • 120 billable units every 4 weeks  Bone metastases from solid tumors; Multiple Myeloma: |

### 120 billable units every 4 weeks

### Guideline

\*\*For Medicare members: Prolia/Xgeva- please refer to our separate LCD/NCD Medicare criteria

#### I. INITIAL APPROVAL CRITERIA

## 1. Prolia

- A. Patient must be supplementing with 1,000 mg of calcium and at least 400 IU of vitamin D daily; AND
- B. Patient is at least 18 years of age; AND
- C. Patient must not have hypocalcemia; AND
- D. Patient must be at a high risk for fracture\*\*; AND
- E. Pregnancy ruled out prior to starting therapy in women of child-bearing potential; **AND** Coverage is provided in the following conditions:

## A. Osteoporosis in Men and Women †

- i. Women only: Patient must be post-menopausal; AND
- ii. Patient has a documented diagnosis of osteoporosis indicated by one or more of the following:
- a. Hip DXA (femoral neck or total hip) or lumbar spine T-score ≤-2.5 and/or forearm DXA 33% (one-third) radius; **OR**
- b. T-score ≤-1 or low bone mass <u>and</u> a history of fragility fracture to the hip or spine; **OR**
- c. T-score between -1 and -2.5 with a FRAX 10-year probability for major fracture ≥20% or hip fracture ≥3%; **AND**
- iii. Patient has one of the following:
- a. Documented treatment failure or ineffective response<sup>±</sup> to a minimum (12) month trial on previous therapy with bisphosphonates (oral or IV) such as alendronate, risedronate, ibandronate, or zoledronic acid; **OR**
- b. Patient has a documented contraindication\* or intolerance to **BOTH** oral bisphosphonates **AND** intravenous (IV) bisphosphonates such as alendronate, risedronate, ibandronate, or zoledronic acid

## B. Glucocorticoid-Induced Osteoporosis †

- i. Patient will be initiating or is continuing systemic glucocorticoid therapy at a daily dosage equivalent to ≥
   7.5 mg of prednisone and is expected to remain on glucocorticoid therapy for at least 6 months;
   AND
  - a. Documented treatment failure or ineffective response<sup>±</sup> to a minimum (12) month trial on previous therapy with bisphosphonates (oral or IV) such as alendronate, risedronate, ibandronate, or zoledronic acid; **OR**
  - b. Patient has a documented contraindication\* or intolerance to **BOTH** oral bisphosphonates **AND** intravenous (IV) bisphosphonates such as alendronate, risedronate, ibandronate, or zoledronic acid

## C. Osteoporosis treatment and prevention in prostate cancer patients †

- i. Documented Hip DXA (femoral neck or total hip) or lumbar spine T-score ≤-1 (or patient meets the diagnostic criteria for osteoporosis above); **AND**
- ii. Patient must be receiving androgen deprivation therapy for nonmetastatic prostate cancer

## D. Osteoporosis treatment and prevention in breast cancer patients †

i. Patient must be receiving adjuvant aromatase inhibitor therapy for breast cancer

#### ±Ineffective response is defined as one or more of the following:

- Decrease in T-score in comparison with baseline T-score from DXA scan
- Patient has a new fracture while on bisphosphonate therapy

## \*\*High risk for fractures include, but are not limited to, one or more of the following:

- History of an osteoporotic fracture as an adult
- Parental history of hip fracture
- Low BMI
- Rheumatoid arthritis
- Alcohol intake (3 or more drinks per day)
- Current smoking
- History of oral glucocorticoids ≥5 mg/d of prednisone (or equivalent) for >3 months (ever)

### \*Examples of contraindications to oral bisphosphonate therapy include the following:

- Documented inability to sit or stand upright for at least 30 minutes
- Documented pre-existing gastrointestinal disorder such as inability to swallow, Barrett's esophagus, esophageal stricture, dysmotility, or achalasia
- Surgical anastomoses are present in the GI tract after certain types of bariatric surgery (e.g., Roux-en-Y gastric bypass).

### \*Examples of contraindications to injectable bisphosphonate therapy include the following:

- Documented pre-existing hypocalcemia and disturbances of mineral metabolism
- Documented pre-existing renal insufficiency defined as creatinine clearance < 35 mL/min</li>

# 2. Xgeva

- A. Administer calcium and vitamin D as necessary to treat or prevent hypocalcemia; AND
- B. Patient must not have hypocalcemia; AND

Coverage is provided in the following conditions:

# C. <u>Prevention of skeletal-related events in patients with multiple myeloma OR bone metastases from solid tumors †</u>

- i. Patient is at least 18 years of age; AND
  - a. Patient must try and have an inadequate response, contraindication, or intolerance to at least a three (3) month trial of Zoledronic Acid; **OR**
  - b. Patient has metastatic breast cancer or metastatic castration-resistant prostate cancer, or metastatic lung cancer (both SCLC and NSCLC)

## D. Giant Cell Tumor of the Bone †

- i. Patient must be an adult or at least 12 years of age and skeletally mature; AND
- ii. Disease is unresectable or surgical resection is likely to result in severe morbidity; OR
- iii. Disease is localized, recurrent, or metastatic ‡; AND
  - a. Used as a single agent; **OR**
  - b. Used in combination with serial embolizationor radiation therapy

# E. Hypercalcemia of malignancy †

- i. Patient is at least 18 years of age; AND
- ii. Patient must have a diagnosis of cancer (malignancy); AND
  - a. Patient must have a diagnosis of refractory hypercalcemia of malignancy defined as an albumincorrected calcium of >12.5 mg/dL (3.1 mmol/L) despite treatment with a minimum seven (7) day trial on previous therapy with intravenous (IV) bisphosphonates such as ibandronate or zoledronic acid; OR

- b. Patient has a documented contraindication or intolerance to intravenous (IV) bisphosphonates such as ibandronate or zoledronic acid
- † FDA Approved Indication(s); ‡ Compendia recommended indication(s)

### II. RENEWAL CRITERIA

Coverage can be renewed based on the following criteria:

A. Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include the following: severe symptomatic hypocalcemia, osteonecrosis of the jaw, atypical femoral fractures, dermatological adverse reactions, severe infection, etc.; **AND** 

### 1. Prolia

Disease response as indicated by one or more of the following:

- i. Absence of fractures
- ii. Increase in bone mineral density compared to pretreatment baseline; AND
- iii. Osteoporosis in Men and Women ONLY:
  - a. After 5 years of treatment, patient will have a repeat DXA performed; AND
    - (1) Patients with low-to moderate risk disease will have therapy changed to an oral or IV bisphosphonate unless there is a contraindication or intolerance to both dosage forms

# 2. Xgeva

Disease response as indicated by the following:

- i. <u>Multiple Myeloma OR Bone metastases from solid tumors</u>: absence/delay in skeletal-related events (e.g., pathologic fracture, radiation therapy to bone, surgery to bone, or spinal cord compression)
- ii. <u>Giant Cell Tumor of the Bone</u>: tumor response with disease stabilization or decrease in size or spread of tumor
- iii. Hypercalcemia of Malignancy: corrected serum calcium ≤ 11.5 mg/dL

#### **Limitations/Exclusions**

Prolia and Xgeva are not considered medically necessary for indications other than those listed above due to insufficient evidence of therapeutic value.

# **Applicable Procedure Codes**

| Code  | Description  |  |
|-------|--|--|
| J0897 | Injection, denosumab, 1 mg; 1 mg = 1 billable unit         |  |
| Q5136 | Injection, denosumab-bbdz (Jubbonti/Wyost) biosimilar, 1mg |  |

# **Applicable NDCs**

| Code          | Description                                    |  |
|---------------|--|--|
| 55513-0710-XX | Prolia 60 mg/1 mL single-use prefilled syringe |  |
| 55513-0730-XX | Xgeva 120 mg/1.7 mL single-use vial            |  |
| 61314-0240-63 | Jubbonti 60mg/mL single-dose prefilled syringe |  |
| 61314-0228-94 | Wyost 120mg/1.7 mL single-dose vial            |  |

# **ICD-10 Diagnoses**

| Code               | Description  |  |
|--------------------|--|--|
| C50.011- C50.929   | Malignant neoplasms of breast  |  |
| C61                | Malignant neoplasm of prostate   |  |
| M80.00XA- M80.08XS | Age-related osteoporosis with current pathological fracture                  |  |
| M80.80XA- M80.88XS | Other osteoporosis with current pathological fracture                        |  |
| M81.0              | Age-related osteoporosis without current pathological fracture               |  |
| M81.6              | Localized osteoporosis [Lequesne]  |  |
| M81.8              | Other osteoporosis without current pathological fracture                     |  |
| M85.80             | Other specified disorders of bone density and structure, unspecified site    |  |
| M85.851            | Other specified disorders of bone density and structure, right thigh         |  |
| M85.852            | Other specified disorders of bone density and structure, left thigh          |  |
| M85.859            | Other specified disorders of bone density and structure, unspecified thigh   |  |
| M85.88             | Other specified disorders of bone density and structure, other site          |  |
| M85.89             | Other specified disorders of bone density and structure, multiple sites      |  |
| T38.0X5A           | Adverse effect of glucocorticoids and synthetic analogues, initial encounter |  |
| T38.0X5S           | Adverse effect of glucocorticoids and synthetic analogues, sequela           |  |

## **Dual coding requirement**

- Osteoporosis treatment and prevention in breast cancer patients on aromatase inhibitors:
  - One code from the M80.00XA M80.88XS, M81.X, or M85.X series plus one code from the C50.X
- Treatment of bone loss in men with prostate cancer receiving androgen deprivation therapy:
  - One code from the M80.00XA M80.88XS, M81.X, or M85.X series plus C61

# Xgeva

| Code             | Description   |  |
|------------------|---|--|
| C00-C14          | Malignant neoplasms of lip, oral cavity and pharynx                         |  |
| C15-C26          | Malignant neoplasms of digestive organs                                     |  |
| C30-C39          | Malignant neoplasms of respiratory and intrathoracic organs                 |  |
| C40-C41          | Malignant neoplasms of bone and articular cartilage                         |  |
| C43-C44          | Melanoma and other malignant neoplasms of skin                              |  |
| C45-C49          | Malignant neoplasms of mesothelial and soft tissue                          |  |
| C50.011- C50.929 | Malignant neoplasms of breast   |  |
| C51-C58          | Malignant neoplasms of female genital organs                                |  |
| C60-C63          | Malignant neoplasms of male genital organs                                  |  |
| C64-C68          | Malignant neoplasms of urinary tract  |  |
| C69-C72          | Malignant neoplasms of eye, brain and other parts of central nervous system |  |
| C73-C75          | Malignant neoplasms of thyroid and other endocrine glands                   |  |

| C7A.00- C7A.8 | Malignant neuroendocrine tumors   |  |
|---------------|---|--|
| C7B.00- C7B.8 | Secondary neuroendocrine tumors   |  |
| C76-C80       | Malignant neoplasms of ill-defined, other secondary and unspecified sites               |  |
| C81           | Hodgkin lymphoma  |  |
| C82           | Follicular lymphoma   |  |
| C83           | Non-follicular lymphoma   |  |
| C84           | Mature T/NK-cell lymphomas  |  |
| C85           | Other specified and unspecified types of non-Hodgkin lymphoma                           |  |
| C86           | Other specified types of T/NK-cell lymphoma   |  |
| C88           | Malignant immunoproliferative diseases and certain other B-cell lymphomas               |  |
| C90.00        | Multiple myeloma not having achieved remission  |  |
| C90.02        | Multiple myeloma, in relapse  |  |
| C90.10        | Plasma cell leukemia not having reached remission                                       |  |
| C90.11        | Plasma cell leukemia in remission   |  |
| C90.12        | Plasma cell leukemia in relapse   |  |
| C90.20        | Extramedullary plasmacytoma not having reached remission                                |  |
| C90.21        | Extramedullary plasmacytoma in remission  |  |
| C90.22        | Extramedullary plasmacytoma in relapse  |  |
| C90.30        | Solitary plasmacytoma not having achieved remission                                     |  |
| C90.31        | Solitary plasmacytoma in remission  |  |
| C90.32        | Solitary plasmacytoma in relapse  |  |
| C94.30        | Mast cell leukemia not having achieved remission  |  |
| C94.31        | Mast cell leukemia, in remission  |  |
| C94.32        | Mast cell leukemia, in relapse  |  |
| C96           | Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue |  |
| C96.20        | Malignant mast cell neoplasm, unspecified   |  |
| C96.22        | Mast cell sarcoma   |  |
| C96.29        | Other malignant mast cell neoplasm  |  |
| D00-D09       | In situ neoplasms   |  |
| D10-D36       | Benign neoplasms, except benign neuroendocrine tumors                                   |  |
| D3A.00- D3A.8 | Benign neuroendocrine tumors  |  |
| D27 D44       | Neoplasm of uncertain behavior of oral cavity and digestive organs - Neoplasm of        |  |
| D37-D44       | uncertain behavior of endocrine glands  |  |
| D48           | Neoplasm of uncertain behavior of other and unspecified sites                           |  |
| D49.0- D49.9  | Neoplasms of unspecified behavior   |  |
| E83.52        | Hypercalcemia   |  |
| Z85           | Personal history of malignant neoplasm  |  |
| Z85.118       | Personal history of other malignant neoplasm of bronchus and lung                       |  |
| Z85.528       | Personal history of other malignant neoplasm of kidney                                  |  |

# **Revision History**

| Company(ies)                | DATE     | REVISION  |
|-----------------------------|----------|---|
| EmblemHealth & ConnectiCare | 4/0/2024 | Added Statement: **For Medicare members: Prolia- please refer to our separate LCD/NCD Medicare criteria |

| EmblemHealth &                 | 1/16/2024       | Annual Review: Initial Criteria: Xgeva: Added" Patient must not have  |
|--------------------------------|-----------------|---|
| ConnectiCare                   | 1,10,2024       | hypocalcemia; AND" Giant Cell Tumor of the Bone Removed "interferon alpha" from the phrase "Used in combination with interferon alpha, serial embolization or radiation therapy " Renewal Criteria: Prolia: removed: "Documentation of improved or stable T- scores while on Prolia" Added: "Increase in bone mineral density compared to pretreatment baseline; AND Osteoporosis in Men and Women ONLY: After 5 years of treatment, patient will have a repeat DXA performed; AND Patients with low-to moderate risk disease will have therapy changed to an oral or IV bisphosphonate unless there is a contraindication or intolerance to both |
| 5 11 11 11 0                   | 5 /4 0 /2 0 2 2 | dosage forms  Annual Review:  |
| EmblemHealth & ConnectiCare    | 5/18/2023       | Examples of contraindications to oral bisphosphonate therapy: Added: "Surgical anastomoses are present in the GI tract after certain types of bariatric surgery (e.g., Roux-en-Y gastric bypass)"   |
|                                |                 | <u>Added "Examples of contraindications to injectable bisphosphonate therapy:</u>   |
|                                |                 | -Documented pre-existing hypocalcemia and disturbances of mineral metabolism  |
|                                |                 | -Documented pre-existing renal insufficiency defined as creatinine clearance < 35 mL/min"   |
|                                |                 | <u>Under Xgeva: Prevention of skeletal related events in patients with</u> <u>multiple myeloma or bone metastases:</u> added "metastatic lung cancer (both SCLC and NSCLC)"   |
|                                |                 | Under Xgeva- Giant Cell Tumor of the bone. Decreased age from 13 to 12 years of age.; removed "i. For metastatic disease ‡; AND Used as a single agent; OR For localized disease ‡; AND Used as a single agent; OR In combination with interferon alpha or radiation therapy" added "o Disease is localized, recurrent, or metastatic ‡; AND Used as a single agent; OR Used in combination with interferon alpha, serial embolization, or radiation Therapy"   |
|                                |                 | Added codes: C90.11, C90.21, C90.30, C90.31, C90.32, C94.30, C94.31, C94.32, C96.20, C96.22, C96.29, Z85.118, Z85.528   |
| EmblemHealth &<br>ConnectiCare | 09/27/2022      | Transferred policy to new template  |
| EmblemHealth & ConnectiCare    | 9/17/2020       | Removed the following from renewal criteria: Patient continues to meet the criteria indicated above and Increase in bone mineral density compared to pretreatment baseline  |
|                                |                 | Added the following statement to renewal criteria for Prolia:  Documentation of improved or stable T-scores while on Prolia   |

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- 3. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) for Denosumab. National Comprehensive Cancer Network, 2018. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc." To view the most recent and

- complete version of the Compendium, go online to NCCN.org. Accessed March 2018.
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- 12. Qaseem A, Forciea MA, McLean RM, Denberg TD; Clinical Guidelines Committee of the American College of Physicians. Treatment of Low Bone Density or Osteoporosis to Prevent Fractures in Men and Women: A Clinical Practice Guideline Update from the American College of Physicians. Ann Intern Med. 2017 May 9. doi: 10.7326/M15-1361.
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