OVERVIEW
Xgeva, a receptor activator of nuclear factor kappa-B ligand (RANKL) inhibitor, is indicated for the prevention of skeletal-related events in patients with multiple myeloma and in patients with bone metastases from solid tumors. Xgeva is also indicated for the treatment of adults and skeletally-mature adolescents with giant cell tumor of bone that is unresectable or where surgical resection is likely to result in severe morbidity. Xgeva is also indicated for the treatment of hypercalcemia of malignancy refractory to bisphosphonate therapy. Another injectable formulation of denosumab is available, Prolia®, but it is not included in this policy.

POLICY STATEMENT
Prior authorization is recommended for medical benefit coverage of Xgeva. Approval is recommended for those who meet the Criteria and Dosing for the listed indication(s). Extended approvals are allowed if the patient continues to meet the Criteria and Dosing. Requests for doses outside of the established dosing documented in this policy will be considered on a case-by-case basis by a clinician (i.e., Medical Director or Pharmacist). All approvals are provided for the duration noted below. Because of the specialized skills required for evaluation and diagnosis of patients treated with Xgeva as well as the monitoring required for adverse events and long-term efficacy approval requires Xgeva to be prescribed by or in consultation with a physician who specializes in the condition being treated.

RECOMMENDED AUTHORIZATION CRITERIA
Coverage of Xgeva is recommended in those who meet the following criteria:

FDA-Approved Indications

1. Prevention of Skeletal-Related Events in Patients with Bone Metastases from Solid Tumors (e.g., Breast Cancer, Prostate Cancer, Non-Small-Cell Lung Cancer). Approve for 1 year if the patient meets the following criteria (A, B, C and D):
   A) The patient is aged ≥ 18 years; AND
   B) The agent is prescribed by, or in consultation with, a hematologist or an oncologist; AND
   C) The patient has bone metastases; AND
   D) Patients with prostate cancer have received at least one hormonal therapy (e.g., Lupron Depot® [leuprolide for depot suspension], Eligard® [leuprolide acetate for injectable suspension], Trelstar® [triptorelin pamoate for injectable suspension], or Zoladex® [goserelin implant]).

   Dosing. Approve 120 mg administered as a subcutaneous (SC) injection once every 4 weeks.

2. Prevention of Skeletal-Related Events in Patients with Multiple Myeloma. Approve for 1 year if the patient meets the following criteria (A and B):
   A) The patient is aged ≥ 18 years; AND
   B) The agent is prescribed by, or in consultation with, a hematologist or an oncologist.
Bone Modifiers – Xgeva CC

Dosing. Approve 120 mg administered as a subcutaneous (SC) injection once every 4 weeks.

3. Giant Cell Tumor of Bone. Approve for 1 year.

Dosing. Approve 120 mg SC once every 4 weeks with loading doses on Day 8 and Day 15 of Month 1.1,7

4. Hypercalcemia of Malignancy. Approve for 2 months if the patient meets the following criteria (A, B, and C):
   A) The patient has a current malignancy; AND
   B) The patient meets one of the following (i or ii):
      i. The patient has tried intravenous (IV) bisphosphonate therapy (e.g., zoledronic acid injection [Zometa], pamidronate injection [Aredia]); OR
      ii. The patient has an estimated calculated creatinine clearance (CrCl) < 30 mL/min; AND
   C) The patient’s albumin-corrected calcium (cCa) is ≥ 11.5 mg/dL.

Dosing. Approve 120 mg SC once every 4 weeks with additional 120 mg doses on Days 8 and 15 of the first month of therapy.1

CONDITIONS NOT RECOMMENDED FOR APPROVAL
Xgeva has not been shown to be effective or there are limited or preliminary data, or potential safety concerns, that are not supportive of general approval for the following conditions. Rationale for non-coverage for these specific conditions are provided below.

1. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES
<table>
<thead>
<tr>
<th>Type of Revision</th>
<th>Summary of Changes*</th>
<th>Approval Date</th>
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</thead>
<tbody>
<tr>
<td>Annual revision</td>
<td>Changed the name to add the descriptor “Bone Modifiers” to Xgeva CC. Criteria were added for the new indication of the prevention of skeletal-related events in patients with multiple myeloma. This use was also removed from the “Conditions Not Recommended for Approval” section. Regarding the indication for giant cell tumor of bone, the dosing was changed from monthly (every 28 days) to once every 4 weeks.</td>
<td>01/25/2017</td>
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<tr>
<td>Annual revision</td>
<td>For the prevention of skeletal-related events in patients with bone metastases from solid tumors, the approval duration was changed from 6 months to 1 year. For the criteria regarding the prevention of skeletal-related events in patients with bone metastases from solid tumors the requirement that the patient have bone metastases which were “confirmed by radiographic or imaging studies” was removed from the criteria, as well as from the labs/diagnostic sections. For the prevention of skeletal-related events in patients with multiple myeloma, the approval duration was changed from 6 months to 1 year. For the prevention of skeletal related events in patients with bone metastases from solid tumor and in patients with multiple myeloma, the site for subcutaneous administration was removed from the dosing recommendations. For giant cell tumor of bone, the approval duration was changed from 6 months to 1 year. For the diagnosis of hypercalcemia of malignancy, the approval duration was changed from 6 months to 2 months. For all indications the following sections were removed: initial approval/extended approval, duration of therapy, and labs/diagnostics. The Waste Management section of the policy was deleted, as well as Appendix A and B that detailed calculating creatinine clearance (CrCl) and albumin-corrected calcium (cCa). Also, the criteria listed in the conditions not recommended for approval section that stated that concurrent use of Xgeva with the Prolia formulation of denosumab injection is not recommended was removed.</td>
<td>02/14/2018</td>
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<tr>
<td>Annual revision</td>
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<td>02/27/2019</td>
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