

## UTILIZATION MANAGEMENT MEDICAL POLICY

**POLICY:** Bone Modifiers – Zoledronic Acid (Reclast) Utilization Management Medical Policy

- Reclast<sup>®</sup> (zoledronic acid intravenous infusion – Novartis, generic)

**REVIEW DATE:** 03/22/2023

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### OVERVIEW

Zoledronic acid (Reclast), a bisphosphonate given intravenously, is indicated for the following uses:<sup>1</sup>

- **Glucocorticoid-induced osteoporosis**, for treatment and prevention in men and women who are either initiating or continuing systemic glucocorticoids (e.g., prednisone 7.5 mg or greater) and who are anticipated to remain on glucocorticoids for at least 12 months.
- **Osteoporosis, prevention in postmenopausal women.**
- **Osteoporosis, treatment in men** to increase bone mass.
- **Osteoporosis, treatment in postmenopausal women.**
- **Paget’s disease of bone**, treatment in men and women.

Another zoledronic acid injection product (Zometa<sup>®</sup>) is indicated for hypercalcemia of malignancy; and for multiple myeloma and bone metastases from solid tumors.<sup>2</sup> Although not indicated, zoledronic acid injection (Reclast) has been used in patients, mainly children, with osteogenesis imperfecta and benefits were noted, such as increases in bone mineral density.<sup>1,3-8</sup>

### POLICY STATEMENT

Prior Authorization is recommended for medical benefit coverage of zoledronate acid (Reclast). Approval is recommended for those who meet the **Criteria** and **Dosing** for the listed indications. 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. Regarding the approval duration of one dose, the approval is for 30 days, which is an adequate duration for the patient to receive one dose. In the approval indication for zoledronic acid injection (Reclast), as appropriate, an asterisk (\*) is noted next to the specified gender. In this context, the specified gender is defined as follows: men are defined as individuals with the biological traits of a man, regardless of the individual’s gender identity or gender expression.

**Automation:** None.

### RECOMMENDED AUTHORIZATION CRITERIA

Coverage of zoledronate acid (Reclast) is recommended in those who meet one of the following criteria:

#### FDA-Approved Indications

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- 1. Glucocorticoid-Induced Osteoporosis – Prevention and Treatment.** Approve for 1 year if the patient meets the following criteria (A and B):
    - A) Patient is either initiating or continuing systemic glucocorticoids; AND**  
Note: An example of a systemic glucocorticoid is prednisone.
    - B) Patient meets ONE of the following (i, ii, iii, or iv):**

- i. Patient has tried zoledronic acid intravenous infusion (Reclast); OR
- ii. Patient has tried at least one oral bisphosphonate or oral bisphosphonate-containing product and meets one of the following (a or b):  
Note: Examples of oral bisphosphonate products include Fosamax (alendronate tablets and oral solution), Fosamax Plus D (alendronate/cholecalciferol tablets), Actonel (risedronate tablets), Atelvia (risedronate delayed-release tablets), and Boniva (ibandronate tablets).
  - a) According to the prescriber, patient has experienced inadequate efficacy to oral bisphosphonate therapy after a trial duration of 12 months; OR  
Note: Examples of inadequate efficacy are ongoing and significant loss of bone mineral density (BMD), lack of a BMD increase, and/or an osteoporotic fracture or a fragility fracture.
  - b) Patient has experienced significant intolerance to an oral bisphosphonate; OR  
Note: Examples of significant intolerance include severe gastrointestinal related adverse events, severe musculoskeletal related adverse events, and femoral fracture.
- iii. Patient cannot take an oral bisphosphonate due to one of the following circumstances (a, b, or c):
  - a) Patient cannot swallow or has difficulty swallowing; OR
  - b) Patient cannot remain in an upright position post-oral bisphosphonate administration; OR
  - c) Patient has a pre-existing gastrointestinal medical condition in which intravenous bisphosphonate therapy may be warranted; OR  
Note: Examples of pre-existing gastrointestinal medical conditions include esophageal lesions, esophageal ulcers, and abnormalities of the esophagus that delay esophageal emptying (stricture, achalasia).
- iv. Patient has had an osteoporotic fracture or a fragility fracture.

**Dosing.** Approve one 5 mg infusion given intravenously (IV) up to once every year.

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**2. Osteoporosis – Prevention for a Postmenopausal Patient.** Approve for 1 year if the patient meets the following criteria (A, B, and C):

- A) Patient meets ONE of the following conditions (i or ii):
- i. Patient has had a T-score (current or at any time in the past) between -1.0 and -2.5 at the lumbar spine, femoral neck, total hip, and/or 33% (one-third) radius (wrist); OR
  - ii. Patient has had an osteoporotic fracture or a fragility fracture; AND
- B) Patient meets ONE of the following (i, ii, iii, or iv):
- i. Patient has tried zoledronic acid intravenous infusion (Reclast); OR
  - ii. Patient has tried at least one oral bisphosphonate or oral bisphosphonate-containing product and meets one of the following (a or b):  
Note: Examples of oral bisphosphonate products include Fosamax (alendronate tablets and oral solution), Fosamax Plus D (alendronate/cholecalciferol tablets), Actonel (risedronate tablets), Atelvia (risedronate delayed-release tablets), and Boniva (ibandronate tablets).
    - a) According to the prescriber, patient has experienced inadequate efficacy to oral bisphosphonate therapy after a trial duration of 12 months; OR  
Note: Examples of inadequate efficacy are ongoing and significant loss of bone mineral density (BMD), lack of a BMD increase, and/or an osteoporotic fracture or a fragility fracture.
    - b) Patient has had an osteoporotic fracture or a fragility fracture while receiving oral bisphosphonate therapy; OR
    - c) Patient has experienced significant intolerance to an oral bisphosphonate; OR

Note: Examples of significant intolerance include severe gastrointestinal related adverse events, severe musculoskeletal related adverse events, and femoral fracture.

- iii. Patient cannot take an oral bisphosphonate due to one of the following circumstances (a, b, or c):

- a) Patient cannot swallow or has difficulty swallowing; OR
- b) Patient cannot remain in an upright position post oral bisphosphonate administration; OR
- c) Patient has a pre-existing gastrointestinal medical condition in which intravenous bisphosphonate therapy may be warranted; OR

Note: Examples of pre-existing gastrointestinal medical conditions include esophageal lesions, esophageal ulcers, and abnormalities of the esophagus that delay esophageal emptying (stricture, achalasia).

- iv. Patient has had an osteoporotic fracture or a fragility fracture; AND

- C) If the patient has received Reclast previously, at least 24 months has elapsed since the last dose.

**Dosing.** Approve one 5 mg infusion given intravenously (IV) up to once every 2 years.

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**3. Osteoporosis – Treatment for a Man\*.** Approve for 1 year if the patient meets the following criteria (A and B):

- A) The patient meets ONE of the following conditions (i, ii, or iii):

- i. Patient has had a T-score (current or at any time in the past) at or below -2.5 at the lumbar spine, femoral neck, total hip and/or 33% (one-third) radius (wrist); OR

- ii. Patient has had an osteoporotic fracture or a fragility fracture; OR

- iii. Patient meets both of the following (a and b):

- a) Patient has low bone mass; AND

Note: An example of low bone mass includes a T-score (current or at any time in the past) between -1.0 and -2.5 at the lumbar spine, femoral neck, total hip and/or 33% (one-third) radius (wrist).

- b) According to the prescriber, patient is at high risk of fracture; AND

- B) Patient meets ONE of the following (i, ii, iii, or iv):

- i. Patient has tried zoledronic acid intravenous infusion (Reclast); OR

- ii. Patient has tried at least one oral bisphosphonate or oral bisphosphonate-containing product and meets one of the following (a or b):

Note: Examples of oral bisphosphonate products include Fosamax (alendronate tablets and oral solution), Fosamax Plus D (alendronate/cholecalciferol tablets), Actonel (risedronate tablets), Atelvia (risedronate delayed-release tablets), and Boniva (ibandronate tablets).

- a) According to the prescriber, patient has experienced inadequate efficacy to oral bisphosphonate therapy after a trial duration of 12 months; OR

Note: Examples of inadequate efficacy are ongoing and significant loss of bone mineral density (BMD), lack of a BMD increase, and/or an osteoporotic fracture or a fragility fracture.

- b) The patient has experienced significant intolerance to an oral bisphosphonate; OR

Note: Examples of significant intolerance include severe gastrointestinal related adverse events, severe musculoskeletal related adverse events, and femoral fracture.

- iii. Patient cannot take an oral bisphosphonate due to one of the following circumstances (a, b, or c):

- a) Patient cannot swallow or has difficulty swallowing; OR

- b) Patient cannot remain in an upright position post oral bisphosphonate administration; OR

- c) Patient has a pre-existing gastrointestinal medical condition in which intravenous bisphosphonate therapy may be warranted; OR

Note: Examples of pre-existing gastrointestinal medical conditions include esophageal lesions, esophageal ulcers, and abnormalities of the esophagus that delay esophageal emptying (stricture, achalasia).

- iv. Patient has had an osteoporotic fracture or a fragility fracture.

\* Refer to the Policy Statement.

**Dosing.** Approve one 5 mg infusion given intravenously up to once every year.

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**4. Osteoporosis – Treatment for a Postmenopausal Patient.** Approve for 1 year if the patient meets the following criteria (A and B):

**A)** Patient meets ONE of the following conditions (i, ii, or iii):

- i. Patient has had a T-score (current or at any time in the past) at or below -2.5 at the lumbar spine, femoral neck, total hip, and/or 33% (one-third) radius (wrist); OR
- ii. Patient has had an osteoporotic fracture or a fragility fracture; OR
- iii. Patient meets both of the following (a and b):

- a) Patient has low bone mass; AND

- Note: An example of low bone mass includes a T-score (current or at any time in the past) between -1.0 and -2.5 at the lumbar spine, femoral neck, total hip and/or 33% (one-third) radius (wrist).

- b) According to the prescriber, patient is at high risk for fracture; AND

**B)** Patient meets ONE of the following (i, ii, iii or iv):

- i. Patient has tried ibandronate intravenous infusion (Boniva IV) or zoledronic acid intravenous infusion (Reclast); OR
- ii. Patient has tried at least one oral bisphosphonate or oral bisphosphonate-containing product and meets one of the following (a, b, or c):

- Note: Examples of oral bisphosphonate products include Fosamax (alendronate tablets and oral solution), Fosamax Plus D (alendronate/cholecalciferol tablets), Actonel (risedronate tablets), Atelvia (risedronate delayed-release tablets), and Boniva (ibandronate tablets).

- a) According to the prescriber, patient has experienced inadequate efficacy to oral bisphosphonate therapy after a trial duration of 12 months; OR

- Note: Examples of inadequate efficacy are ongoing and significant loss of bone mineral density (BMD), lack of a BMD increase, and/or an osteoporotic fracture or a fragility fracture.

- b) Patient has experienced significant intolerance to an oral bisphosphonate; OR

- Note: Examples of significant intolerance include severe gastrointestinal related adverse events, severe musculoskeletal related adverse events, and femoral fracture.

- iii. Patient cannot take an oral bisphosphonate due to one of the following circumstances (a, b, or c):

- a) Patient cannot swallow or has difficulty swallowing; OR

- b) Patient cannot remain in an upright position post oral bisphosphonate administration; OR

- c) Patient has a pre-existing gastrointestinal medical condition in which intravenous bisphosphonate therapy may be warranted; OR

- Note: Examples of pre-existing gastrointestinal medical conditions include esophageal lesions, esophageal ulcers, and abnormalities of the esophagus that delay esophageal emptying (stricture, achalasia).

- iv. Patient has had an osteoporotic fracture or a fragility fracture.

**Dosing.** Approve one 5 mg infusion given intravenously up to once every year.

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- 5. Paget's Disease of Bone.** Approve for one dose if the patient meets one of the following criteria (A, B, or C):
- A) Patient has elevations in serum alkaline phosphatase of two times higher than the upper limit of the age-specific normal reference range; OR
  - B) Patient is symptomatic; OR  
Note: Examples of symptoms include bone pain, hearing loss, or osteoarthritis.
  - C) Patient is at risk for complications from their disease.  
Note: Examples of disease complications include immobilization, bone deformity, fractures, and nerve compression syndrome.

**Dosing.** Approve one 5 mg intravenous (IV) infusion.

### Other Uses with Supportive Evidence

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- 6. Osteogenesis Imperfecta.** Approve for 1 year.

**Dosing.** Dosing information is limited. Approve up to 0.05 mg per kg intravenous (IV) given no more frequently than once every 3 months.

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### CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of zoledronic acid injection (Reclast) is not recommended in the following situations:

- 1. Concurrent Use of Zoledronic Acid Intravenous Infusion (Reclast) with Other Medications for Osteoporosis.**  
Note: Examples of medications for osteoporosis that zoledronic acid intravenous infusion (Reclast) should not be given with include oral bisphosphonates (alendronate, risedronate, ibandronate), other intravenous bisphosphonates (e.g., intravenous ibandronate [Boniva]), Evenity (romosozumab-aqqg subcutaneous injection), Prolia (denosumab subcutaneous injection), Forteo (teriparatide subcutaneous injection, generic), Tymlos (abaloparatide subcutaneous injection), and calcitonin nasal spray. This applies only to osteoporosis-related indications. However, this does NOT exclude use of calcium and/or vitamin D supplements in combination with zoledronic acid intravenous infusion (Reclast). This criterion applies only to osteoporosis-related indications.
- 2.** Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

### REFERENCES

1. Reclast® intravenous infusion [prescribing information]. East Hanover, NJ: Novartis; April 2020.
2. Zometa® intravenous infusion [prescribing information]. East Hanover, NJ: Novartis; December 2018.
3. Biggin A, Munns CF. Long-term bisphosphonate therapy in osteogenesis imperfecta. *Curr Osteoporos Rep.* 2017;15(5):412-418.
4. Barros ER, Saraiva GL, de Oliveira P, Lazaretti-Castro M. Safety and efficacy of a 1-year treatment with zoledronic acid compared with pamidronate in children with osteogenesis imperfecta. *J Pediatr Endocr Met.* 2012;25(5-6):485-491.
5. Panigrahi I, Das RR, Sharda S, et al. Response to zoledronic acid in children with type III osteogenesis imperfecta. *J Bone Miner Metab.* 2010;28:451-455.
6. Brown JJ, Zacharin MR. Safety and efficacy of intravenous zoledronic acid in paediatric osteoporosis. *J Pediatr Endocrinol Metab.* 2009;22(1):55-63.

7. Vuorimies I, Toiviainen-Salo S, Hero M, Makitie O. Zoledronic acid treatment in children with osteogenesis imperfecta. *Horm Res Paediatr.* 2011;75:346-353.
8. Dwan K, Phillipi CA, Steiner RD, Basel D. Bisphosphonate therapy for osteogenesis imperfecta. *Cochrane Database Syst Rev.* 2016;10:CD005088.

**HISTORY**

Type of Revision	Summary of Changes	Review Date
Annual Revision	No criteria changes.	03/09/2022
Annual Revision	<p><b>Glucocorticoid-Induced Osteoporosis – Prevention and Treatment:</b> The exception that the patient has had an osteoporotic fracture or a fragility fracture while receiving oral bisphosphonate therapy was removed. Instead, this exception was incorporated into a Note that lists osteoporotic fracture or a fragility fracture as an example of inadequate efficacy or significant intolerance to a trial of an oral bisphosphonate or an oral bisphosphonate-containing product.</p> <p><b>Osteoporosis – Prevention for a Postmenopausal Patient:</b> The exception that the patient has had an osteoporotic fracture or a fragility fracture while receiving oral bisphosphonate therapy was removed. Instead, this exception was incorporated into a Note that lists osteoporotic fracture or a fragility fracture as an example of inadequate efficacy or significant intolerance to a trial of an oral bisphosphonate or an oral bisphosphonate-containing product.</p> <p><b>Osteoporosis – Treatment for a Man:</b> The exception that the patient has had an osteoporotic fracture or a fragility fracture while receiving oral bisphosphonate therapy was removed. Instead, this exception was incorporated into a Note that lists osteoporotic fracture or a fragility fracture as an example of inadequate efficacy or significant intolerance to a trial of an oral bisphosphonate or an oral bisphosphonate-containing product.</p> <p><b>Osteoporosis – Treatment for a Postmenopausal Patient:</b> The exception that the patient has had an osteoporotic fracture or a fragility fracture while receiving oral bisphosphonate therapy was removed. Instead, this exception was incorporated into a Note that lists osteoporotic fracture or a fragility fracture as an example of inadequate efficacy or significant intolerance to a trial of an oral bisphosphonate or an oral bisphosphonate-containing product.</p> <p><b>Conditions Not Recommended for Approval:</b> Regarding <b>Concurrent Use of Zoledronic Acid Injection (Reclast) with Other Medications for Osteoporosis</b>, to the Note which lists the medications that should not be used with zoledronic acid injection (Reclast), it was clarified that this does NOT exclude use of calcium and/or vitamin D supplements in combination with zoledronic acid injection (Reclast).</p>	03/22/2023