Evenity (romosozumab-aqqg) Medical Drug Criteria with Quantity Limit Program Summary

POLICY REVIEW CYCLE

Effective Date 1/1/2023 **Date of Origin**

FDA APPROVED INDICATIONS AND DOSAGE

Agent(s)	FDA Indication(s)	Notes	Ref#
Evenity™ (romosozumab-aqqg) Injection	The treatment of osteoporosis in postmenopausal women 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 Limitations of Use: Limit duration of use to 12 monthly doses. If osteoporosis therapy remains warranted, continued therapy with an anti-resorptive agent should be considered		1

See package insert for FDA prescribing information: https://dailymed.nlm.nih.gov/dailymed/index.cfm

CLINICAL RATIONALE

Diagnosis of Osteoporosis	The National Osteoporosis Foundation states that the diagnosis of osteoporosis (OP) can be established by either measurement of bone mineral density (BMD) or by the occurrence of adulthood hip or vertebral fracture in the absence of major trauma (such as a motor vehicle accident or multiple story fall). For evaluation, BMD measurement should be taken by central dual-energy X-ray absorptiometry at the lumbar spine and femoral neck (hip). A BMD taken at the one-third (33%) radius site can be used for diagnosing osteoporosis when the hip and lumbar spine cannot be measured or are unusable or uninterpretable. In postmenopausal women and men age 50 and older, WHO diagnostic T-score criteria is applied to the BMD measurement. For those patients that are not postmenopausal women and not men age 50 and older, WHO BMD classification should not be applied, and the diagnosis of osteoporosis should not be made on densitometric criteria alone.(2)

WHO Definitions of bone density(2)

Normal	T-score ≥ -1.0
Low bone mass (osteopenia)	T-score between -1.0 and -2.5
Osteoporosis	T-score ≤ -2.5

	The WHO absolute fracture risk model (Fracture Risk Algorithm, FRAX) was developed to calculate the 10-year probability of a hip fracture and the 10-year probability of a major osteoporotic fracture, taking into account femoral neck BMD and clinical risk factors.(2)
Treatment	According to the National Osteoporosis Foundation, postmenopausal women and men age 50 and older presenting with the following should be considered for treatment: • A hip or vertebral fracture • T-score of -2.5 or lower at the femoral neck, total hip, or lumbar spine (or at the 33% radius site if necessary) • Low bone mass (T-score between -1 and -2.5) and a 10-year probability of a hip fracture greater than or equal to 3% or a 10-year probability of a major osteoporosis-related fracture greater than or equal to 20% based on the US-adapted WHO algorithm(2) The 2020 AACE Guidelines created a 'very high' risk category for post-menopausal women with osteoporosis. The following patients are considered to be a very high fracture risk: • Patients with a recent fracture (within the past 12 months), fractures while on approved osteoporosis therapy multiple fractures, or fractures while on drugs causing skeletal harm (e.g., long-term glucocorticoids), • Patients with a very low T-score (less than -3.0), • Patients with a high risk for falls or history of injurious falls, • Patients with very high fracture probability by FRAX (e.g., major osteoporosis fracture greater than 30%, hip fracture greater than 4.5%) or other validated fracture risk algorithm. Patients who have been diagnosed with osteoporosis but do not meet the above definition of very high fracture risk are to be considered to be at high risk.(3) The AACE recommends alendronate, denosumab, risedronate, and zoledronate as appropriate initial therapy for most osteoporotic patients with high fracture risk. Abaloparatide, denosumab, romosozumab, teriparatide, and zoledronate should be considered for patients unable to use oral therapy and as initial therapy for patients at very high fracture risk.(3) Due to the lack of evidence on the effect on fracture risk, concomitant use of osteoporosis agents is not recommended.(3)
Clinical Studies	Evenity Study 1 was a randomized double-blind, placebo-controlled study of postmenopausal women age 55 to 90 years with BMD T-scores less than or equal to 2.5 at the total hip or femoral neck. Women were randomized to receive either Evenity or placebo for 12 months. After the 12-month treatment period, women in both arms transitioned to denosumab for 12 months. Evenity was shown to significantly reduce the incidence of new vertebral fractures through 12 months compared to placebo. In addition, the significant reduction in fracture risk persisted through the second year in women who received Evenity and were transitioned to denosumab. Evenity also significantly increased BMD at the lumbar spine, total hip, and femoral neck compared with placebo at month 12. Following the transition to denosumab at month 12, BMD continued to increase through month 24. BMD also increased with patients transitioned from placebo to denosumab. The differences in BMD achieved at month 12 between Evenity and placebo patients were overall maintained at month 24 when comparing patients who transitioned from Evenity to those that transitioned from placebo.

	Evenity Study 2 was a randomized, double-blind, alendronate-controlled study of postmenopausal women age 55 to 90 years with BMD T-scores less than or equal to -2.5 at the total hip or femoral neck and either two moderate or severe vertebral fractures or a history of a proximal femur fracture. Women were randomized to either receive monthly injections of Evenity or oral alendronate 70 mg weekly for 12 months. After the 12-month period, both arms were transitioned to alendronate 70 mg weekly. Evenity significantly reduced the risk of clinical fracture through the end of the primary analysis period with a 50% risk reduction compared to a 4% reduction in the alendronate arm. Evenity followed by alendronate also significantly reduced the risk of nonvertebral fracture through the primary analysis period, with a hazard ratio of 0.81 compared to alendronate alone.(1) The anabolic effect of Evenity wanes after 12 monthly doses of therapy. Therefore, the duration of Evenity use should be limited to 12 monthly doses. If osteoporosis therapy remains warranted, continued therapy with an anti-resorptive agent should be considered.(1)
Safety	Evenity carries several black box warnings. Evenity may increase the risk of myocardial infarction, stroke and cardiovascular death. Evenity should not be initiated in patients who have had a myocardial infarction or stroke within the preceding year. Consider whether the benefits outweigh the risks in patients with other cardiovascular risk factors. If a patient experiences a myocardial infarction or stroke during therapy, Evenity should be discontinued. Evenity carries the following contraindications: • Hypocalcemia • Known hypersensitivity to Evenity or to any component of the product formulation Pre-existing hypocalcemia must be corrected prior to initiating therapy with Evenity.(1)

REFERENCES

Number	Reference
1	Evenity prescribing information. Amgen Pharmaceuticals. April 2020.
2	Cosman F, de Beur SJ, LeBoff MS, et. al. Clinician's Guide to Prevention and Treatment of Osteoporosis. National Osteoporosis Foundation, Osteoporosis Int 25:2359-2381, 2014. https://my.nof.org/bone-source/education/clinicians-guide-to-the-prevention-and-treatment-of-osteoporosis
3	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 – 2020 update. https://www.endocrinepractice.org/article/S1530-891X(20)42827-7/fulltext
4	Eastell R, Rosen CL, Black DM, et. al. Pharmacological Management of Osteoporosis in Postmenopausal Women: An Endocrine Society Clinical Practice Guideline. J ClinEndocrinol Metab 104: 1595-1622, 2019. https://academic.oup.com/jcem/article/104/5/1595/5418884

Number	Reference
5	~~North American Menopause Society. Management of osteoporosis in postmenopausal women: 2010 position statement of the North American Menopause Society. *Menopause.* 2010;17(1):25-54.~~
6	~~Endocrine Society Guideline: Osteoporosis in Men: An Endocrine Society Clinical Practice Guideline 2012. https://academic.oup.com/jcem/article/97/6/1802/2536476~~

POLICY AGENT SUMMARY PRIOR AUTHORIZATION

Agent Names	Strength	Targeted MSC	Available MSC	Preferred Status	Effective Date
EVENITY (romosozumab-aqqg inj soln prefilled syringe)	105 MG/1.17ML	M ; N ; O ; Y	N		

POLICY AGENT SUMMARY QUANTITY LIMIT

Target Agent GPI	Agent Names	Strength	QL Amount	Dose Form	Days Supply	Duration	Addtl QL Info	Allowed Exceptions	Targeted NDCs When Exclusions Exist	Effective Date
3004486010E520	EVENITY (romosozumab-aqqg inj soln prefilled syringe)	105 MG/1.17 ML	2.0	SYRNGS	30	Days	One year cumulative maximum duration of therapy for Evenity			

CLIENT SUMMARY – PRIOR AUTHORIZATION

Agent Names	Strength	Client Formulary
EVENITY (romosozumab-aqqg inj soln prefilled syringe)	105 MG/1.17ML	Commercial ; HIM

CLIENT SUMMARY – QUANTITY LIMITS

Agent Names	Strength	Client Formulary
EVENITY (romosozumab-aqqg inj soln prefilled syringe)	105 MG/1.17ML	Commercial ; HIM

PRIOR AUTHORIZATION CLINICAL CRITERIA FOR APPROVAL

Module	Clinical Criteria for Approval
	PRIOR AUTHORIZATION CRITERIA FOR APPROVAL **Evaluation** **Target agent(s)** will be approved when ALL of the following are met: 1. The patient has a diagnosis of osteoporosis and ALL of the following: A. ONE of the following: 1. The patient is postmenopausal **OR** 2. The prescriber has provided information that the requested agent is medically appropriate for the patient's sex **AND** B. The patient's diagnosis was confirmed by ONE of the following: 1. A fragility fracture in the hip or spine **OR** 2. A T-score of -2.5 or lower **OR** 3. A T-score of -1.0 to -2.5 and ONE of the following: A. A fragility fracture of the proximal humerus, pelvis, or distal forearm **OR** B. A FRAX 10-year probability for major osteoporotic fracture of greater than or equal to 20% **OR**

Module	Clinical Criteria for Approval
	C. A FRAX 10-year probability of hip fracture of greater than or equal to 3% **AND** C. ONE of the following: 1. The patient is at a very high fracture risk as defined by ONE of the following: A. Patient had a recent fracture (within the past 12 months) **OR** B. Patient had fractures while on FDA approved osteoporosis therapy **OR** C. Patient has had multiple fractures **OR** D. Patient had fractures while on drugs causing skeletal harm (e.g., long-term glucocorticoids) **OR** E. Patient has a very low T-score (less than -3.0) **OR** F. Patient is at high risk for falls or has a history of injurious falls **OR** G. Patient has a very high fracture probability by FRAX (e.g., major osteoporosis fracture greater than 30%, hip fracture greater than 4.5%) or by other validated fracture risk algorithm **OR** 2. ONE of the following: A. The patient has tried and had an inadequate response to a bisphosphonate (medical records required) **OR** B. The patient has an intolerance or hypersensitivity to a bisphosphonate (medical records required) **OR** C. The patient has an FDA labeled contraindication to ALL bisphosphonates (medical records required) **AND** 2. ONE of the following: A. The patient is not hypocalcemic **OR** B. If the patient is hypocalcemic, it will be corrected prior to use of the requested agent **AND** 3. The patient will NOT be using the requested agent in combination with a bisphosphonate, denosumab (e.g., Prolia, Xgeva), or parathyroid hormone analog (e.g., abaloparatide, teriparatide) **AND** 4. The patient does not have any FDA labeled contraindications to the requested agent **AND** 5. ONE of the following: A. The requested quantity (dose) is less than or equal to the program limit **OR** B. ALL of the following: 1. The requested quantity (dose) is greater than the program quantity limit **AND** 2. The requested quantity (dose) does not exceed the maximum FDA labeled dose **AND** 3. The requested quantity (dose) cannot be achieved with a lower quantity of a higher strength that does not exceed the program quantity limit **AND** 6. The total duration of treatment with Evenity (romosozumab-aqqg) has not exceeded 12 months in lifetime **Length of approval:** Up to a total of 12 months of treatment per lifetime