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Evenity® (Romosozumab-Aqqg)

Policy Number: CS2019D0080D
Effective Date: **TBD**

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Table of Contents	Page	Commercial Policy
Application	1	• Evenity® (Romosozumab-Aqqg)
Coverage Rationale	1	
Applicable Codes	2	
Background	2	
Clinical Evidence	16	
U.S. Food and Drug Administration	18	
Centers for Medicare and Medicaid Services	18	
References	18	

Application

This Medical Benefit Drug Policy only applies to the state of Louisiana.

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Coverage Rationale

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Evenity is proven and medically necessary for the treatment of osteoporosis in postmenopausal patients at high risk for fracture when all of the following criteria are met:

- Diagnosis of osteoporosis; and
- One of the following:¹⁻⁷
 - BMD T-score ≤-2.5 based on BMD measurements from lumbar spine (at least two vertebral bodies), hip (femoral neck, total hip), or radius (one-third radius site); or
 - History of one of the following resulting from minimal trauma:
 - Vertebral compression fracture
 - Fracture of the hip
 - Fracture of the distal radius
 - Fracture of the pelvis
 - Fracture of the proximal humerus
 - or
 - Both of the following:
 - BMD T-score between -1 and -2.5 (BMD T-score greater than -2.5 and less than or equal to -1) based on BMD measurements from lumbar spine (at least two vertebral bodies), hip (femoral neck, total hip), or radius (one-third radius site)
 - One of the following:

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FRAX 10-year fracture probabilities: major osteoporotic fracture at 20% or more
 and
 FRAX 10-year fracture probabilities: hip fracture at 3% or more

- History of failure, contraindication, or intolerance to oral or intravenous bisphosphonate therapy; **and**
- Patient is not receiving Evenity in combination with any of the following:
 - o Parathyroid hormone analogs (e.g., Forteo, Tymlos)
 - o RANK ligand inhibitors (e.g., Prolia, Xgeva)**and**
- Evenity dosing is in accordance with the United States Food and Drug Administration approved labeling: ~~210mg once monthly~~; **and**
- Authorization is for no more than 12 months

Reauthorization/Continuation of Care Criteria

The clinical benefit of Evenity has not been demonstrated beyond 12 months in phase 3 clinical trials. The continued use of Evenity beyond 12 months is unproven and not medically necessary.¹⁰⁻¹³

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state, or contractual requirements and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

HCPCS Code	Description
J3111	Injection, romosozumab-aqqg, 1 mg

Diagnosis Code	Description
<u>M80.0AXA</u>	<u>Age-related osteoporosis with current pathological fracture, other site, initial encounter for fracture</u>
<u>M80.0AXD</u>	<u>Age-related osteoporosis with current pathological fracture, other site, subsequent encounter for fracture with routine healing</u>
<u>M80.0AXG</u>	<u>Age-related osteoporosis with current pathological fracture, other site, subsequent encounter for fracture with delayed healing</u>
<u>M80.0AXK</u>	<u>Age-related osteoporosis with current pathological fracture, other site, subsequent encounter for fracture with nonunion</u>
<u>M80.0AXP</u>	<u>Age-related osteoporosis with current pathological fracture, other site, subsequent encounter for fracture with malunion</u>
<u>M80.0AXS</u>	<u>Age-related osteoporosis with current pathological fracture, other site, sequela</u>

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Diagnosis Code	Description
M80.00XA	Age-related osteoporosis with current pathological fracture, unspecified site, initial encounter for fracture
M80.00XD	Age-related osteoporosis with current pathological fracture, unspecified site, subsequent encounter for fracture with routine healing
M80.00XG	Age-related osteoporosis with current pathological fracture, unspecified site, subsequent encounter for fracture with delayed healing
M80.00XK	Age-related osteoporosis with current pathological fracture, unspecified site, subsequent encounter for fracture with nonunion
M80.00XP	Age-related osteoporosis with current pathological fracture, unspecified site, subsequent encounter for fracture with malunion
M80.00XS	Age-related osteoporosis with current pathological fracture, unspecified site, sequela
M80.011A	Age-related osteoporosis with current pathological fracture, right shoulder, initial encounter for fracture
M80.011D	Age-related osteoporosis with current pathological fracture, right shoulder, subsequent encounter for fracture with routine healing
M80.011G	Age-related osteoporosis with current pathological fracture, right shoulder, subsequent encounter for fracture with delayed healing
M80.011K	Age-related osteoporosis with current pathological fracture, right shoulder, subsequent encounter for fracture with nonunion
M80.011P	Age-related osteoporosis with current pathological fracture, right shoulder, subsequent encounter for fracture with malunion
M80.011S	Age-related osteoporosis with current pathological fracture, right shoulder, sequela
M80.012A	Age-related osteoporosis with current pathological fracture, left shoulder, initial encounter for fracture
M80.012D	Age-related osteoporosis with current pathological fracture, left shoulder, subsequent encounter for fracture with routine healing
M80.012G	Age-related osteoporosis with current pathological fracture, left shoulder, subsequent encounter for fracture with delayed healing
M80.012K	Age-related osteoporosis with current pathological fracture, left shoulder, subsequent encounter for fracture with nonunion
M80.012P	Age-related osteoporosis with current pathological fracture, left shoulder, subsequent encounter for fracture with malunion
M80.012S	Age-related osteoporosis with current pathological fracture, left shoulder, sequela
M80.019A	Age-related osteoporosis with current pathological fracture, unspecified shoulder, initial encounter for fracture
M80.019D	Age-related osteoporosis with current pathological fracture, unspecified shoulder, subsequent encounter for fracture with routine healing
M80.019G	Age-related osteoporosis with current pathological fracture, unspecified shoulder, subsequent encounter for fracture with delayed healing
M80.019K	Age-related osteoporosis with current pathological fracture, unspecified shoulder, subsequent encounter for fracture with nonunion

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Diagnosis Code	Description
M80.019P	Age-related osteoporosis with current pathological fracture, unspecified shoulder, subsequent encounter for fracture with malunion
M80.019S	Age-related osteoporosis with current pathological fracture, unspecified shoulder, sequela
M80.021A	Age-related osteoporosis with current pathological fracture, right humerus, initial encounter for fracture
M80.021D	Age-related osteoporosis with current pathological fracture, right humerus, subsequent encounter for fracture with routine healing
M80.021G	Age-related osteoporosis with current pathological fracture, right humerus, subsequent encounter for fracture with delayed healing
M80.021K	Age-related osteoporosis with current pathological fracture, right humerus, subsequent encounter for fracture with nonunion
M80.021P	Age-related osteoporosis with current pathological fracture, right humerus, subsequent encounter for fracture with malunion
M80.021S	Age-related osteoporosis with current pathological fracture, right humerus, sequela
M80.022A	Age-related osteoporosis with current pathological fracture, left humerus, initial encounter for fracture
M80.022D	Age-related osteoporosis with current pathological fracture, left humerus, subsequent encounter for fracture with routine healing
M80.022G	Age-related osteoporosis with current pathological fracture, left humerus, subsequent encounter for fracture with delayed healing
M80.022K	Age-related osteoporosis with current pathological fracture, left humerus, subsequent encounter for fracture with nonunion
M80.022P	Age-related osteoporosis with current pathological fracture, left humerus, subsequent encounter for fracture with malunion
M80.022S	Age-related osteoporosis with current pathological fracture, left humerus, sequela
M80.029A	Age-related osteoporosis with current pathological fracture, unspecified humerus, initial encounter for fracture
M80.029D	Age-related osteoporosis with current pathological fracture, unspecified humerus, subsequent encounter for fracture with routine healing
M80.029G	Age-related osteoporosis with current pathological fracture, unspecified humerus, subsequent encounter for fracture with delayed healing
M80.029K	Age-related osteoporosis with current pathological fracture, unspecified humerus, subsequent encounter for fracture with nonunion
M80.029P	Age-related osteoporosis with current pathological fracture, unspecified humerus, subsequent encounter for fracture with malunion
M80.029S	Age-related osteoporosis with current pathological fracture, unspecified humerus, sequela
M80.031A	Age-related osteoporosis with current pathological fracture, right forearm, initial encounter for fracture
M80.031D	Age-related osteoporosis with current pathological fracture, right forearm, subsequent encounter for fracture with routine healing

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Diagnosis Code	Description
M80.031G	Age-related osteoporosis with current pathological fracture, right forearm, subsequent encounter for fracture with delayed healing
M80.031K	Age-related osteoporosis with current pathological fracture, right forearm, subsequent encounter for fracture with nonunion
M80.031P	Age-related osteoporosis with current pathological fracture, right forearm, subsequent encounter for fracture with malunion
M80.031S	Age-related osteoporosis with current pathological fracture, right forearm, sequela
M80.032A	Age-related osteoporosis with current pathological fracture, left forearm, initial encounter for fracture
M80.032D	Age-related osteoporosis with current pathological fracture, left forearm, subsequent encounter for fracture with routine healing
M80.032G	Age-related osteoporosis with current pathological fracture, left forearm, subsequent encounter for fracture with delayed healing
M80.032K	Age-related osteoporosis with current pathological fracture, left forearm, subsequent encounter for fracture with nonunion
M80.032P	Age-related osteoporosis with current pathological fracture, left forearm, subsequent encounter for fracture with malunion
M80.032S	Age-related osteoporosis with current pathological fracture, left forearm, sequela
M80.039A	Age-related osteoporosis with current pathological fracture, unspecified forearm, initial encounter for fracture
M80.039D	Age-related osteoporosis with current pathological fracture, unspecified forearm, subsequent encounter for fracture with routine healing
M80.039G	Age-related osteoporosis with current pathological fracture, unspecified forearm, subsequent encounter for fracture with delayed healing
M80.039K	Age-related osteoporosis with current pathological fracture, unspecified forearm, subsequent encounter for fracture with nonunion
M80.039P	Age-related osteoporosis with current pathological fracture, unspecified forearm, subsequent encounter for fracture with malunion
M80.039S	Age-related osteoporosis with current pathological fracture, unspecified forearm, sequela
M80.041A	Age-related osteoporosis with current pathological fracture, right hand, initial encounter for fracture
M80.041D	Age-related osteoporosis with current pathological fracture, right hand, subsequent encounter for fracture with routine healing
M80.041G	Age-related osteoporosis with current pathological fracture, right hand, subsequent encounter for fracture with delayed healing
M80.041K	Age-related osteoporosis with current pathological fracture, right hand, subsequent encounter for fracture with nonunion
M80.041P	Age-related osteoporosis with current pathological fracture, right hand, subsequent encounter for fracture with malunion
M80.041S	Age-related osteoporosis with current pathological fracture, right hand, sequela

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Diagnosis Code	Description
M80.042A	Age-related osteoporosis with current pathological fracture, left hand, initial encounter for fracture
M80.042D	Age-related osteoporosis with current pathological fracture, left hand, subsequent encounter for fracture with routine healing
M80.042G	Age-related osteoporosis with current pathological fracture, left hand, subsequent encounter for fracture with delayed healing
M80.042K	Age-related osteoporosis with current pathological fracture, left hand, subsequent encounter for fracture with nonunion
M80.042P	Age-related osteoporosis with current pathological fracture, left hand, subsequent encounter for fracture with malunion
M80.042S	Age-related osteoporosis with current pathological fracture, left hand, sequela
M80.049A	Age-related osteoporosis with current pathological fracture, unspecified hand, initial encounter for fracture
M80.049D	Age-related osteoporosis with current pathological fracture, unspecified hand, subsequent encounter for fracture with routine healing
M80.049G	Age-related osteoporosis with current pathological fracture, unspecified hand, subsequent encounter for fracture with delayed healing
M80.049K	Age-related osteoporosis with current pathological fracture, unspecified hand, subsequent encounter for fracture with nonunion
M80.049P	Age-related osteoporosis with current pathological fracture, unspecified hand, subsequent encounter for fracture with malunion
M80.049S	Age-related osteoporosis with current pathological fracture, unspecified hand, sequela
M80.051A	Age-related osteoporosis with current pathological fracture, right femur, initial encounter for fracture
M80.051D	Age-related osteoporosis with current pathological fracture, right femur, subsequent encounter for fracture with routine healing
M80.051G	Age-related osteoporosis with current pathological fracture, right femur, subsequent encounter for fracture with delayed healing
M80.051K	Age-related osteoporosis with current pathological fracture, right femur, subsequent encounter for fracture with nonunion
M80.051P	Age-related osteoporosis with current pathological fracture, right femur, subsequent encounter for fracture with malunion
M80.051S	Age-related osteoporosis with current pathological fracture, right femur, sequela
M80.052A	Age-related osteoporosis with current pathological fracture, left femur, initial encounter for fracture
M80.052D	Age-related osteoporosis with current pathological fracture, left femur, subsequent encounter for fracture with routine healing
M80.052G	Age-related osteoporosis with current pathological fracture, left femur, subsequent encounter for fracture with delayed healing
M80.052K	Age-related osteoporosis with current pathological fracture, left femur, subsequent encounter for fracture with nonunion

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Diagnosis Code	Description
M80.052P	Age-related osteoporosis with current pathological fracture, left femur, subsequent encounter for fracture with malunion
M80.052S	Age-related osteoporosis with current pathological fracture, left femur, sequela
M80.059A	Age-related osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture
M80.059D	Age-related osteoporosis with current pathological fracture, unspecified femur, subsequent encounter for fracture with routine healing
M80.059G	Age-related osteoporosis with current pathological fracture, unspecified femur, subsequent encounter for fracture with delayed healing
M80.059K	Age-related osteoporosis with current pathological fracture, unspecified femur, subsequent encounter for fracture with nonunion
M80.059P	Age-related osteoporosis with current pathological fracture, unspecified femur, subsequent encounter for fracture with malunion
M80.059S	Age-related osteoporosis with current pathological fracture, unspecified femur, sequela
M80.061A	Age-related osteoporosis with current pathological fracture, right lower leg, initial encounter for fracture
M80.061D	Age-related osteoporosis with current pathological fracture, right lower leg, subsequent encounter for fracture with routine healing
M80.061G	Age-related osteoporosis with current pathological fracture, right lower leg, subsequent encounter for fracture with delayed healing
M80.061K	Age-related osteoporosis with current pathological fracture, right lower leg, subsequent encounter for fracture with nonunion
M80.061P	Age-related osteoporosis with current pathological fracture, right lower leg, subsequent encounter for fracture with malunion
M80.061S	Age-related osteoporosis with current pathological fracture, right lower leg, sequela
M80.062A	Age-related osteoporosis with current pathological fracture, left lower leg, initial encounter for fracture
M80.062D	Age-related osteoporosis with current pathological fracture, left lower leg, subsequent encounter for fracture with routine healing
M80.062G	Age-related osteoporosis with current pathological fracture, left lower leg, subsequent encounter for fracture with delayed healing
M80.062K	Age-related osteoporosis with current pathological fracture, left lower leg, subsequent encounter for fracture with nonunion
M80.062P	Age-related osteoporosis with current pathological fracture, left lower leg, subsequent encounter for fracture with malunion
M80.062S	Age-related osteoporosis with current pathological fracture, left lower leg, sequela
M80.069A	Age-related osteoporosis with current pathological fracture, unspecified lower leg, initial encounter for fracture
M80.069D	Age-related osteoporosis with current pathological fracture, unspecified lower leg, subsequent encounter for fracture with routine healing

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Diagnosis Code	Description
M80.069G	Age-related osteoporosis with current pathological fracture, unspecified lower leg, subsequent encounter for fracture with delayed healing
M80.069K	Age-related osteoporosis with current pathological fracture, unspecified lower leg, subsequent encounter for fracture with nonunion
M80.069P	Age-related osteoporosis with current pathological fracture, unspecified lower leg, subsequent encounter for fracture with malunion
M80.069S	Age-related osteoporosis with current pathological fracture, unspecified lower leg, sequela
M80.071A	Age-related osteoporosis with current pathological fracture, right ankle and foot, initial encounter for fracture
M80.071D	Age-related osteoporosis with current pathological fracture, right ankle and foot, subsequent encounter for fracture with routine healing
M80.071G	Age-related osteoporosis with current pathological fracture, right ankle and foot, subsequent encounter for fracture with delayed healing
M80.071K	Age-related osteoporosis with current pathological fracture, right ankle and foot, subsequent encounter for fracture with nonunion
M80.071P	Age-related osteoporosis with current pathological fracture, right ankle and foot, subsequent encounter for fracture with malunion
M80.071S	Age-related osteoporosis with current pathological fracture, right ankle and foot, sequela
M80.072A	Age-related osteoporosis with current pathological fracture, left ankle and foot, initial encounter for fracture
M80.072D	Age-related osteoporosis with current pathological fracture, left ankle and foot, subsequent encounter for fracture with routine healing
M80.072G	Age-related osteoporosis with current pathological fracture, left ankle and foot, subsequent encounter for fracture with delayed healing
M80.072K	Age-related osteoporosis with current pathological fracture, left ankle and foot, subsequent encounter for fracture with nonunion
M80.072P	Age-related osteoporosis with current pathological fracture, left ankle and foot, subsequent encounter for fracture with malunion
M80.072S	Age-related osteoporosis with current pathological fracture, left ankle and foot, sequela
M80.079A	Age-related osteoporosis with current pathological fracture, unspecified ankle and foot, initial encounter for fracture
M80.079D	Age-related osteoporosis with current pathological fracture, unspecified ankle and foot, subsequent encounter for fracture with routine healing
M80.079G	Age-related osteoporosis with current pathological fracture, unspecified ankle and foot, subsequent encounter for fracture with delayed healing
M80.079K	Age-related osteoporosis with current pathological fracture, unspecified ankle and foot, subsequent encounter for fracture with nonunion
M80.079P	Age-related osteoporosis with current pathological fracture, unspecified ankle and foot, subsequent encounter for fracture with malunion
M80.079S	Age-related osteoporosis with current pathological fracture, unspecified ankle and foot, sequela

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Diagnosis Code	Description
M80.08XA	Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture
M80.08XD	Age-related osteoporosis with current pathological fracture, vertebra(e), subsequent encounter for fracture with routine healing
M80.08XG	Age-related osteoporosis with current pathological fracture, vertebra(e), subsequent encounter for fracture with delayed healing
M80.08XK	Age-related osteoporosis with current pathological fracture, vertebra(e), subsequent encounter for fracture with nonunion
M80.08XP	Age-related osteoporosis with current pathological fracture, vertebra(e), subsequent encounter for fracture with malunion
M80.08XS	Age-related osteoporosis with current pathological fracture, vertebra(e), sequela
<u>M80.8AXA</u>	<u>Other osteoporosis with current pathological fracture, other site, initial encounter for fracture</u>
<u>M80.8AXD</u>	<u>Other osteoporosis with current pathological fracture, other site, subsequent encounter for fracture with routine healing</u>
<u>M80.8AXG</u>	<u>Other osteoporosis with current pathological fracture, other site, subsequent encounter for fracture with delayed healing</u>
<u>M80.8AXK</u>	<u>Other osteoporosis with current pathological fracture, other site, subsequent encounter for fracture with nonunion</u>
<u>M80.8AXP</u>	<u>Other osteoporosis with current pathological fracture, other site, subsequent encounter for fracture with malunion</u>
<u>M80.8AXS</u>	<u>Other osteoporosis with current pathological fracture, other site, sequela</u>
M80.811A	Other osteoporosis with current pathological fracture, right shoulder, initial encounter for fracture
M80.811D	Other osteoporosis with current pathological fracture, right shoulder, subsequent encounter for fracture with routine healing
M80.811G	Other osteoporosis with current pathological fracture, right shoulder, subsequent encounter for fracture with delayed healing
M80.811K	Other osteoporosis with current pathological fracture, right shoulder, subsequent encounter for fracture with nonunion
M80.811P	Other osteoporosis with current pathological fracture, right shoulder, subsequent encounter for fracture with malunion
M80.811S	Other osteoporosis with current pathological fracture, right shoulder, sequela
M80.812A	Other osteoporosis with current pathological fracture, left shoulder, initial encounter for fracture
M80.812D	Other osteoporosis with current pathological fracture, left shoulder, subsequent encounter for fracture with routine healing
M80.812G	Other osteoporosis with current pathological fracture, left shoulder, subsequent encounter for fracture with delayed healing
M80.812K	Other osteoporosis with current pathological fracture, left shoulder, subsequent encounter for fracture with nonunion

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Diagnosis Code	Description
M80.812P	Other osteoporosis with current pathological fracture, left shoulder, subsequent encounter for fracture with malunion
M80.812S	Other osteoporosis with current pathological fracture, left shoulder, sequela
M80.819A	Other osteoporosis with current pathological fracture, unspecified shoulder, initial encounter for fracture
M80.819D	Other osteoporosis with current pathological fracture, unspecified shoulder, subsequent encounter for fracture with routine healing
M80.819G	Other osteoporosis with current pathological fracture, unspecified shoulder, subsequent encounter for fracture with delayed healing
M80.819K	Other osteoporosis with current pathological fracture, unspecified shoulder, subsequent encounter for fracture with nonunion
M80.819P	Other osteoporosis with current pathological fracture, unspecified shoulder, subsequent encounter for fracture with malunion
M80.819S	Other osteoporosis with current pathological fracture, unspecified shoulder, sequela
M80.821A	Other osteoporosis with current pathological fracture, right humerus, initial encounter for fracture
M80.821D	Other osteoporosis with current pathological fracture, right humerus, subsequent encounter for fracture with routine healing
M80.821G	Other osteoporosis with current pathological fracture, right humerus, subsequent encounter for fracture with delayed healing
M80.821K	Other osteoporosis with current pathological fracture, right humerus, subsequent encounter for fracture with nonunion
M80.821P	Other osteoporosis with current pathological fracture, right humerus, subsequent encounter for fracture with malunion
M80.821S	Other osteoporosis with current pathological fracture, right humerus, sequela
M80.822A	Other osteoporosis with current pathological fracture, left humerus, initial encounter for fracture
M80.822D	Other osteoporosis with current pathological fracture, left humerus, subsequent encounter for fracture with routine healing
M80.822G	Other osteoporosis with current pathological fracture, left humerus, subsequent encounter for fracture with delayed healing
M80.822K	Other osteoporosis with current pathological fracture, left humerus, subsequent encounter for fracture with nonunion
M80.822P	Other osteoporosis with current pathological fracture, left humerus, subsequent encounter for fracture with malunion
M80.822S	Other osteoporosis with current pathological fracture, left humerus, sequela
M80.829A	Other osteoporosis with current pathological fracture, unspecified humerus, initial encounter for fracture
M80.829D	Other osteoporosis with current pathological fracture, unspecified humerus, subsequent encounter for fracture with routine healing

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Diagnosis Code	Description
M80.829G	Other osteoporosis with current pathological fracture, unspecified humerus, subsequent encounter for fracture with delayed healing
M80.829K	Other osteoporosis with current pathological fracture, unspecified humerus, subsequent encounter for fracture with nonunion
M80.829P	Other osteoporosis with current pathological fracture, unspecified humerus, subsequent encounter for fracture with malunion
M80.829S	Other osteoporosis with current pathological fracture, unspecified humerus, sequela
M80.831A	Other osteoporosis with current pathological fracture, right forearm, initial encounter for fracture
M80.831D	Other osteoporosis with current pathological fracture, right forearm, subsequent encounter for fracture with routine healing
M80.831G	Other osteoporosis with current pathological fracture, right forearm, subsequent encounter for fracture with delayed healing
M80.831K	Other osteoporosis with current pathological fracture, right forearm, subsequent encounter for fracture with nonunion
M80.831P	Other osteoporosis with current pathological fracture, right forearm, subsequent encounter for fracture with malunion
M80.831S	Other osteoporosis with current pathological fracture, right forearm, sequela
M80.832A	Other osteoporosis with current pathological fracture, left forearm, initial encounter for fracture
M80.832D	Other osteoporosis with current pathological fracture, left forearm, subsequent encounter for fracture with routine healing
M80.832G	Other osteoporosis with current pathological fracture, left forearm, subsequent encounter for fracture with routine healing
M80.832K	Other osteoporosis with current pathological fracture, left forearm, subsequent encounter for fracture with nonunion
M80.832P	Other osteoporosis with current pathological fracture, left forearm, subsequent encounter for fracture with malunion
M80.832S	Other osteoporosis with current pathological fracture, left forearm, sequela
M80.839A	Other osteoporosis with current pathological fracture, unspecified forearm, initial encounter for fracture
M80.839D	Other osteoporosis with current pathological fracture, unspecified forearm, subsequent encounter for fracture with routine healing
M80.839G	Other osteoporosis with current pathological fracture, unspecified forearm, subsequent encounter for fracture with delayed healing
M80.839K	Other osteoporosis with current pathological fracture, unspecified forearm, subsequent encounter for fracture with nonunion
M80.839P	Other osteoporosis with current pathological fracture, unspecified forearm, subsequent encounter for fracture with malunion
M80.839S	Other osteoporosis with current pathological fracture, unspecified forearm, sequela

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Diagnosis Code	Description
M80.841A	Other osteoporosis with current pathological fracture, right hand, initial encounter for fracture
M80.841D	Other osteoporosis with current pathological fracture, right hand, subsequent encounter for fracture with routine healing
M80.841G	Other osteoporosis with current pathological fracture, right hand, subsequent encounter for fracture with delayed healing
M80.841K	Other osteoporosis with current pathological fracture, right hand, subsequent encounter for fracture with nonunion
M80.841P	Other osteoporosis with current pathological fracture, right hand, subsequent encounter for fracture with malunion
M80.841S	Other osteoporosis with current pathological fracture, right hand, sequela
M80.842A	Other osteoporosis with current pathological fracture, left hand, initial encounter for fracture
M80.842D	Other osteoporosis with current pathological fracture, left hand, subsequent encounter for fracture with routine healing
M80.842G	Other osteoporosis with current pathological fracture, left hand, subsequent encounter for fracture with delayed healing
M80.842K	Other osteoporosis with current pathological fracture, left hand, subsequent encounter for fracture with nonunion
M80.842P	Other osteoporosis with current pathological fracture, left hand, subsequent encounter for fracture with malunion
M80.842S	Other osteoporosis with current pathological fracture, left hand, sequela
M80.849A	Other osteoporosis with current pathological fracture, unspecified hand, initial encounter for fracture
M80.849D	Other osteoporosis with current pathological fracture, unspecified hand, subsequent encounter for fracture with routine healing
M80.849G	Other osteoporosis with current pathological fracture, unspecified hand, subsequent encounter for fracture with delayed healing
M80.849K	Other osteoporosis with current pathological fracture, unspecified hand, subsequent encounter for fracture with nonunion
M80.849P	Other osteoporosis with current pathological fracture, unspecified hand, subsequent encounter for fracture with malunion
M80.849S	Other osteoporosis with current pathological fracture, unspecified hand, sequela
M80.851A	Other osteoporosis with current pathological fracture, right femur, initial encounter for fracture
M80.851D	Other osteoporosis with current pathological fracture, right femur, subsequent encounter for fracture with routine healing
M80.851G	Other osteoporosis with current pathological fracture, right femur, subsequent encounter for fracture with delayed healing
M80.851K	Other osteoporosis with current pathological fracture, right femur, subsequent encounter for fracture with nonunion

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Diagnosis Code	Description
M80.851P	Other osteoporosis with current pathological fracture, right femur, subsequent encounter for fracture with malunion
M80.851S	Other osteoporosis with current pathological fracture, right femur, sequela
M80.852A	Other osteoporosis with current pathological fracture, left femur, initial encounter for fracture
M80.852D	Other osteoporosis with current pathological fracture, left femur, subsequent encounter for fracture with routine healing
M80.852G	Other osteoporosis with current pathological fracture, left femur, subsequent encounter for fracture with delayed healing
M80.852K	Other osteoporosis with current pathological fracture, left femur, subsequent encounter for fracture with nonunion
M80.852P	Other osteoporosis with current pathological fracture, left femur, subsequent encounter for fracture with malunion
M80.852S	Other osteoporosis with current pathological fracture, left femur, sequela
M80.859A	Other osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture
M80.859D	Other osteoporosis with current pathological fracture, unspecified femur, subsequent encounter for fracture with routine healing
M80.859G	Other osteoporosis with current pathological fracture, unspecified femur, subsequent encounter for fracture with delayed healing
M80.859K	Other osteoporosis with current pathological fracture, unspecified femur, subsequent encounter for fracture with nonunion
M80.859P	Other osteoporosis with current pathological fracture, unspecified femur, subsequent encounter for fracture with malunion
M80.859S	Other osteoporosis with current pathological fracture, unspecified femur, sequela
M80.861A	Other osteoporosis with current pathological fracture, right lower leg, initial encounter for fracture
M80.861D	Other osteoporosis with current pathological fracture, right lower leg, subsequent encounter for fracture with routine healing
M80.861G	Other osteoporosis with current pathological fracture, right lower leg, subsequent encounter for fracture with delayed healing
M80.861K	Other osteoporosis with current pathological fracture, right lower leg, subsequent encounter for fracture with nonunion
M80.861P	Other osteoporosis with current pathological fracture, right lower leg, subsequent encounter for fracture with malunion
M80.861S	Other osteoporosis with current pathological fracture, right lower leg, sequela
M80.862A	Other osteoporosis with current pathological fracture, left lower leg, initial encounter for fracture
M80.862D	Other osteoporosis with current pathological fracture, left lower leg, subsequent encounter for fracture with routine healing

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Diagnosis Code	Description
M80.862G	Other osteoporosis with current pathological fracture, left lower leg, subsequent encounter for fracture with delayed healing
M80.862K	Other osteoporosis with current pathological fracture, left lower leg, subsequent encounter for fracture with nonunion
M80.862P	Other osteoporosis with current pathological fracture, left lower leg, subsequent encounter for fracture with malunion
M80.862S	Other osteoporosis with current pathological fracture, left lower leg, sequela
M80.869A	Other osteoporosis with current pathological fracture, unspecified lower leg, initial encounter for fracture
M80.869D	Other osteoporosis with current pathological fracture, unspecified lower leg, subsequent encounter for fracture with routine healing
M80.869G	Other osteoporosis with current pathological fracture, unspecified lower leg, subsequent encounter for fracture with delayed healing
M80.869K	Other osteoporosis with current pathological fracture, unspecified lower leg, subsequent encounter for fracture with nonunion
M80.869P	Other osteoporosis with current pathological fracture, unspecified lower leg, subsequent encounter for fracture with malunion
M80.869S	Other osteoporosis with current pathological fracture, unspecified lower leg, sequela
M80.871A	Other osteoporosis with current pathological fracture, right ankle and foot, initial encounter for fracture
M80.871D	Other osteoporosis with current pathological fracture, right ankle and foot, subsequent encounter for fracture with routine healing
M80.871G	Other osteoporosis with current pathological fracture, right ankle and foot, subsequent encounter for fracture with delayed healing
M80.871K	Other osteoporosis with current pathological fracture, right ankle and foot, subsequent encounter for fracture with nonunion
M80.871P	Other osteoporosis with current pathological fracture, right ankle and foot, subsequent encounter for fracture with malunion
M80.871S	Other osteoporosis with current pathological fracture, right ankle and foot, sequela
M80.872A	Other osteoporosis with current pathological fracture, left ankle and foot, initial encounter for fracture
M80.872D	Other osteoporosis with current pathological fracture, left ankle and foot, subsequent encounter for fracture with routine healing
M80.872G	Other osteoporosis with current pathological fracture, left ankle and foot, subsequent encounter for fracture with delayed healing
M80.872K	Other osteoporosis with current pathological fracture, left ankle and foot, subsequent encounter for fracture with nonunion
M80.872P	Other osteoporosis with current pathological fracture, left ankle and foot, subsequent encounter for fracture with malunion
M80.872S	Other osteoporosis with current pathological fracture, left ankle and foot, sequela

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Diagnosis Code	Description
M80.879A	Other osteoporosis with current pathological fracture, unspecified ankle and foot, initial encounter for fracture
M80.879D	Other osteoporosis with current pathological fracture, unspecified ankle and foot, subsequent encounter for fracture with routine healing
M80.879G	Other osteoporosis with current pathological fracture, unspecified ankle and foot, subsequent encounter for fracture with delayed healing
M80.879K	Other osteoporosis with current pathological fracture, unspecified ankle and foot, subsequent encounter for fracture with nonunion
M80.879P	Other osteoporosis with current pathological fracture, unspecified ankle and foot, subsequent encounter for fracture with malunion
M80.879S	Other osteoporosis with current pathological fracture, unspecified ankle and foot, sequela
M80.88XA	Other osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture
M80.88XD	Other osteoporosis with current pathological fracture, vertebra(e), subsequent encounter for fracture with routine healing
M80.88XG	Other osteoporosis with current pathological fracture, vertebra(e), subsequent encounter for fracture with delayed healing
M80.88XK	Other osteoporosis with current pathological fracture, vertebra(e), subsequent encounter for fracture with nonunion
M80.88XP	Other osteoporosis with current pathological fracture, vertebra(e), subsequent encounter for fracture with malunion
M80.88XS	Other osteoporosis with current pathological fracture, vertebra(e), sequela

Background

Current guidelines define osteoporosis as a bone mineral density (BMD) T-score of -2.5 or below, and osteopenia as a T-score between -1 and -2.5. Additionally, guidelines state that osteoporosis can also be diagnosed by the history of a low-trauma spine or hip fracture regardless of BMD, a history of a fragility fracture in osteopenic patients, or in osteopenic patients with an elevated fracture risk as defined by the FRAX[®] fracture assessment tool.¹ Available literature defines high risk for fracture as bone mineral density (BMD) T-scores of -3.5 or less, while it defines severe osteoporosis as T-scores of -2.5 or less with at least one fragility fracture.²⁻⁶ The FRAX tool is designed to assist clinicians in predicting the ten-year probability of fracture with or without the addition of femoral neck bone mineral density (BMD).⁷

Romosozumab is a human monoclonal antibody that binds and inhibits sclerostin. Sclerostin is a negative regulator of bone formation that is secreted by osteocytes, inhibiting Wnt pathway signaling, down-regulating the stimulus for osteoblast development and function. When romosozumab binds to sclerostin, sclerostin cannot bind to the LRP-5 and LRP-6 receptors, preventing its inhibitory effect. The therapeutic effect of sclerostin inhibition promotes the dual effect of increasing bone formation and decreasing bone resorption.⁸⁻⁹

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Clinical Evidence

Cosman et al evaluated the efficacy and safety of romosozumab for the treatment of osteoporosis in postmenopausal women.^{1,10} The Fracture Study in Postmenopausal Women with Osteoporosis (FRAME) study was an international, randomized, double-blind, placebo-controlled parallel-group trial. The study enrolled 7,180 postmenopausal women (age 55 to 90 years of age) with the diagnosis of osteoporosis, who were randomly assigned, in a 1:1 ratio, to receive romosozumab (n=3589) subcutaneously once monthly for 12 months, or placebo (n=3591), followed by open-label denosumab, 60mg, once every 6 months for an additional 12 months. The primary end points were the cumulative incidences of new vertebral fractures at 12 months and 24 months. Secondary endpoints included clinical and nonvertebral fractures. At 12 months, new vertebral fractures had occurred in 16 of 3321 patients (0.5%) in the romosozumab group, as compared with 59 of 3322 (1.8%) in the placebo group (representing a 73% lower risk with romosozumab; P<0.001). Clinical fractures had occurred in 58 of 3589 patients (1.6%) in the romosozumab group, as compared with 90 of 3591 (2.5%) in the placebo group (a 36% lower risk with romosozumab; P=0.008). Nonvertebral fractures had occurred in 56 of 3589 patients (1.6%) in the romosozumab group and in 75 of 3591 (2.1%) in the placebo group (P=0.10). At 24 months, the rates of vertebral fractures were significantly lower in the romosozumab group than in the placebo group after each group made the transition to denosumab (0.6% [21 of 3325 patients] in the romosozumab group vs. 2.5% [84 of 3327] in the placebo group, a 75% lower risk with romosozumab; P<0.001). Adverse events, including instances of hyperostosis, cardiovascular events, osteoarthritis, and cancer, appeared to be balanced between the groups. One atypical femoral fracture and two cases of osteonecrosis of the jaw were observed in the romosozumab group. The authors concluded that in postmenopausal women with osteoporosis, romosozumab was associated with a lower risk of vertebral fracture than placebo at 12 months and, after the transition to denosumab, at 24 months. The lower risk of clinical fracture that was seen with romosozumab was evident at 1 year.

In the FRAME extension study, eligible women continued to receive denosumab, every 6 months for an additional 12 months. Of 7180 women enrolled, 5743 (80%) completed the 36-month study (2851 romosozumab-to-denosumab; 2892 placebo-to-denosumab). Through 36 months, fracture risk was reduced in subjects receiving romosozumab versus placebo for 12 months followed by 24 months of denosumab for both groups: new vertebral fracture (relative risk reduction [RRR], 66%; incidence, 1.0% versus 2.8%; p < 0.001), clinical fracture (RRR, 27%; incidence, 4.0% versus 5.5%; p = 0.004), and nonvertebral fracture (RRR, 21%; incidence, 3.9% versus 4.9%; p = 0.039). BMD continued to increase for the 2 years with denosumab treatment in both arms. The BMD difference achieved through 12 months of romosozumab treatment versus placebo was maintained through the follow-up period when both treatment arms received denosumab. The authors concluded that, in postmenopausal women with osteoporosis, 12 months of romosozumab led to persistent fracture reduction benefit and ongoing BMD gains when followed by 24 months of denosumab.

In a phase 3, multicenter, international, randomized, double-blind trial, Saag et al investigated the safety and efficacy of romosozumab in postmenopausal women with osteoporosis and a fragility fracture.^{1,12} The study enrolled 4,093 women, randomly assigned, in a 1:1 ratio, to receive monthly romosozumab 210mg subcutaneously or weekly oral alendronate for 12 months, followed by open-label alendronate in both groups. The primary end points were the cumulative incidence of new vertebral fracture at 23 months and the cumulative incidence of clinical fracture at the time of the primary analysis. Secondary end points included incidences of nonvertebral and hip fracture at the time of the primary analysis. At 24 months in the romosozumab-to-alendronate group, a 48% lower risk of new vertebral fractures was observed (6.2% [127 of 2046 patients]), than in the

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alendronate-to-alendronate group (11.9% [243 of 2047 patients]) ($P < 0.001$). Clinical fractures occurred in 198 of 2046 patients (9.7%) in the romosozumab-to-alendronate group versus 266 of 2047 patients (13.0%) in the alendronate-to-alendronate group, representing a 27% lower risk with romosozumab ($P < 0.001$). The risk of nonvertebral fractures was lower by 19% in the romosozumab-to-alendronate group than in the alendronate-to-alendronate group (178 of 2046 patients [8.7%] vs. 217 of 2047 patients [10.6%]; $P = 0.04$), and the risk of hip fracture was lower by 38% (41 of 2046 patients [2.0%] vs. 66 of 2047 patients [3.2%]; $P = 0.02$). Overall adverse events and serious adverse events were similar between the two groups. During year 1, serious cardiovascular adverse events were observed more often with romosozumab than with alendronate (50 of 2040 patients [2.5%] vs. 38 of 2014 patients [1.9%]). During the open-label alendronate period, osteonecrosis of the jaw (1 event each in the romosozumab-to-alendronate and alendronate-to-alendronate groups) and atypical femoral fracture (2 events and 4 events, respectively) were observed. The authors concluded that for postmenopausal women with osteoporosis who were at high risk for fracture, romosozumab treatment for 12 months followed by alendronate resulted in a significantly lower risk of fracture than alendronate alone.

Langdahl et al evaluated the safety and efficacy of romosozumab versus teriparatide on bone mineral density (BMD) in women with postmenopausal osteoporosis after transitioning from bisphosphonate therapy.¹³ The randomized, phase 3, open-label, active-controlled enrolled postmenopausal osteoporosis ($n = 436$; age 55 through 90 years old) with previous therapy on oral bisphosphonate for at least 3 years before screening and alendronate the year before screening. BMD T score screening was performed. Women were randomly assigned (1:1 ratio) to receive either romosozumab 210 mg subcutaneously ($n = 218$), monthly, or subcutaneous teriparatide 20µg ($n = 218$) once daily. The primary endpoint was percentage change from baseline in areal BMD by dual-energy x-ray absorptiometry at the total hip through month 12 (mean of months 6 and 12). All randomized patients with a baseline measurement and at least one post-baseline measurement were included in the efficacy analysis. Through 12 months, the mean percentage change from baseline in total hip areal BMD was 2.6% (95% CI 2.2 to 3.0) in the romosozumab group and -0.6% (-1.0 to -0.2) in the teriparatide group; difference 3.2% (95% CI 2.7 to 3.8; $p < 0.0001$). The frequency of adverse events was generally balanced between treatment groups. The most frequently reported adverse events were nasopharyngitis (28 [13%] of 218 in the romosozumab group vs 22 [10%] of 214 in the teriparatide group), hypercalcaemia (two [$< 1\%$] vs 22 [10%]), and arthralgia (22 [10%] vs 13 [6%]). Serious adverse events were reported in 17 (8%) patients on romosozumab and in 23 (11%) on teriparatide; none were treatment related. There were six (3%) patients in the romosozumab group compared with 12 (6%) in the teriparatide group with adverse events leading to investigational product withdrawal. The authors concluded that patients transitioning from bisphosphonates to romosozumab experienced increases in hip BMD that were not observed with teriparatide.

McClung et al reported the results of the study extension of the randomized, double-blind, phase 2, parallel group study evaluating 24 months of treatment with romosozumab, discontinuation of romosozumab, alendronate followed by romosozumab, and romosozumab followed by denosumab.¹⁴⁻¹⁵ The study enrolled postmenopausal women aged 55 to 85 years with a lumbar spine (LS), total hip (TH), or femoral neck T-score ≤ -2.0 and ≥ -3.5 were enrolled and randomly assigned to placebo, one of five romosozumab regimens (70 mg, 140 mg, 210 mg monthly; 140 mg every 3 months; 210 mg every 3 months) for 24 months, or open-label alendronate for 12 months followed by romosozumab 140 mg monthly for 12 months. Eligible participants were then re-randomized 1:1 within original treatment groups to placebo or denosumab 60 mg every 6 months for an additional 12 months. Percentage change from baseline in BMD and bone turnover markers (BTMs) at months 24 and 36 and safety were evaluated. Of 364 participants initially randomized to romosozumab, placebo, or

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alendronate, 315 completed 24 months of treatment and 248 completed the extension. Romosozumab markedly increased LS and TH BMD through month 24, with largest gains observed with romosozumab 210 mg monthly (LS = 15.1%; TH = 5.4%). Women receiving romosozumab who transitioned to denosumab continued to accrue BMD, whereas BMD returned toward pretreatment levels with placebo. Romosozumab 210 mg monthly caused bone formation marker P1NP to initially increase after treatment initiation and gradually decrease to below baseline by month 12, remaining below baseline through month 24; bone resorption marker β -CTX rapidly decreased after treatment, remaining below baseline through month 24. Continuing romosozumab treatment for a second year resulted in further increases in BMD, however these increments were smaller than those observed during the first year, consistent with the BTMs. Although there was incremental benefit in the second year of treatment, the greatest benefit of romosozumab was achieved in the first year of therapy.

U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Evenity (romosozumab-aqgg) is a sclerostin inhibitor indicated for 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.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.

Centers for Medicare and Medicaid Services (CMS)

Medicare does not have a National Coverage Determination (NCD) for Evenity® (romosozumab-aqgg). Local Coverage Determinations (LCDs)/Local Coverage Articles (LCAs) do not exist at this time.

In general, Medicare covers outpatient (Part B) drugs that are furnished "incident to" a physician's service provided that the drugs are not usually self-administered by the patients who take them. Refer to the Medicare Benefit Policy Manual, Chapter 15, §50 - Drugs and Biologicals.

(Accessed October 8, 2020)

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Policy History/Revision Information

Date	Summary of Changes
<u>11/01/2020</u>	<u>Coverage Rationale</u> <ul style="list-style-type: none">• <u>Revised dosing to standard verbiage</u> <u>CMS</u> <ul style="list-style-type: none">• <u>Updated CMS statement</u> <u>References</u> <ul style="list-style-type: none">• <u>Updated references</u>

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