


UCLA MEDICAL GROUP / Managed Care Operations		
DEPARTMENT:	Utilization Management	POLICY NUMBER: TBD
SECTION:	UM Program	
TITLE:	UCLA Medical Group Practice Guideline: Osteoporosis Treatment	ISSUE: 07-20-2022 EFFECTIVE: 07-20-2022
Date Revised: 7-19-2022		
APPROVED BY UMC: 07/20/2022		

PURPOSE: Provide an evidence based clinical policy for pharmacologic treatment of osteoporosis.

BACKGROUND: Osteoporosis is a condition defined by low bone mineral density or “brittle” bones which makes patients more susceptible to fractures.

Pharmacologic treatment of osteoporosis is indicated when there is evidence of bone fragility based on low trauma fractures and/or low bone mineral density (BMD) measurements, typically in post-menopausal women and men over 50 with certain clinical findings.

(See UCLA clinical guideline on BMD testing indications <https://mednet.uclahealth.org/n6-mednet/28a0d4c3efb1581b/uploads/sites/20/2021/09/Bone-Mineral-Density-AUG-2021.pdf>).

Bisphosphonates (oral and IV) and **Denosumab** (IV only) work by inhibiting osteoclastic bone resorption.

Anabolic Medications (Romosozumab Abaloparatide Teriparatide) work by increasing bone growth.

The choice of medication used to treat osteoporosis is determined by individual patient characteristics, severity of disease, treatment history, and the feasibility of specific treatments.

POLICY: view

Oral Bisphosphonate treatment (such as Alendronate, ibandronate, risendronate) is the most appropriate first line initial therapy for most patients requiring pharmacologic treatment of osteoporosis with no history of fractures.

IV Bisphosphonate such as Zoledronic acid is appropriate for patients with a contraindication or intolerance to oral bisphosphonates.

Denosumab is a second line treatment for patients who have completed a 3 year course of bisphosphonates or for patients with a bisphosphonate contraindication such as long-term glucocorticoid steroid use or CKD with GFR below 30-35.

Anabolic medication treatment for osteoporosis is appropriate as the initial medication treatment for certain patients with a very high fracture risk. It may also be the preferred agent in patients who have previously been on anti-resorptive medication but sustained a new fracture or still have osteoporosis range BMD (after at least 2 years of anti-resorptive therapy).

Romosozumab has the most evidence based support and is the most convenient medication with once monthly injection in the clinic setting but should not be used if the patient has had an acute myocardial infarction or thromboembolic stroke in the past 12 months.

Teriparatide is generally considered to be equally effective and is not contraindicated in the setting of AMI or stroke. Treatment is less convenient, requires refrigeration, and consists of self-administered daily injections for 2 years.

Abaloparatide also requires refrigeration, but only before the pen is open after which it may remain at room temperature. Treatment consists of self-injection daily for 18 months.

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It is the position of UCLA Health that the following “Very High Risk” patients (as defined below) with osteoporosis should be treated with an anabolic medication, including for initial treatment:

1. Osteoporosis range bone density (T score of -2.5 or lower) **AND** history of low trauma spine or hip fracture
OR
2. Multiple low trauma spinal fractures or a low trauma spine or hip fracture within the last year
OR
3. This form of treatment may also be indicated as first line for patients with a T score of less than -3 with significant comorbidities that increase the risk of trauma and/or have association with decreased bone strength.

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Approving Body: WW UMC Committee

Date Approved 07/20/2022

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