

Clinical Policy Title:	Abaloparatide (Tymlos)
Policy Number:	RxA.531
Drug(s) Applied:	Abaloparatide (Tymlos®)
Original Policy Date:	01/2020
Last Review Date:	05/05/2020
Line of Business Policy Applies to:	Commercial, HIM, Medicaid

Background

Abaloparatide (Tymlos®) is a human parathyroid hormone (PTH)-related peptide analog. It is indicated for the treatment of postmenopausal women with osteoporosis at high risk for fracture defined as a history of osteoporotic fracture, multiple risk factors for fracture, or patients who have failed or are intolerant to other available osteoporosis therapy. In postmenopausal women with osteoporosis, Tymlos reduces the risk of vertebral fractures and nonvertebral fractures.

Limitation(s) of use: Because of the unknown relevance of rodent osteosarcoma findings to humans, cumulative use of Tymlos and PTH analogs (e.g., teriparatide) for more than 2 years during a patient's lifetime is not recommended.

Dosing Information

Drug Name	Indication	Dosing Regimen	Maximum Dose
Abaloparatide (Tymlos)	Osteoporosis	80 mcg SC QD	80 mcg/day for up to 2 years cumulative use of PTH analogs per lifetime

Dosage Forms

- Single-patient-use prefilled pen: 3120 mcg/1.56 mL (30 daily doses of 80 mcg)

Clinical Policy

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

I. Initial Approval Criteria

A. Osteoporosis (must meet all):

1. Diagnosis of osteoporosis;
2. Age ≥ 18 years or documentation of closed epiphyses (e.g., x-ray);
3. Member is a postmenopausal female;
4. Member meets one of the following (a or b):
 - a. Prescribed by or in consultation with one of the following specialists: gynecologist, endocrinologist, rheumatologist, geriatrician, orthopaedist, or physiatrist;

This clinical policy has been developed to authorize, modify, or determine coverage for individuals with similar conditions. Specific care and treatment may vary depending on individual need and benefits covered by the plan. This policy is not intended to dictate to providers how to practice medicine, nor does it constitute a contract or guarantee regarding payment or results. This document may contain prescription brand name drugs that are trademarks of pharmaceutical manufacturers that are not affiliated with RxAdvance.

- b. Failure of a 12-month trial of a bisphosphonate (*alendronate is preferred*) at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced;
- 5. Member has not received cumulative therapy on PTH analogs (e.g., Tymlos, Forteo) that exceeds 2 years;
- 6. Dose does not exceed 80 mcg per day (1 pen every 30 days).

Approval duration: 6 months (limited to 2 years cumulative use of PTH analogs per lifetime)

II. Continued Therapy

A. Osteoporosis (must meet all):

- 1. Currently receiving medication that has been authorized by RxAdvance or member has previously met initial approval criteria listed in this policy.
- 2. Member is responding positively to therapy;
- 3. Member has not received cumulative therapy on PTH analogs (e.g., Tymlos, Forteo) that exceeds 2 years;
- 4. If request is for a dose increase, dose does not exceed 80 mcg per day (1 pen every 30 days).

Approval duration: 12 months (limited to 2 years cumulative use of PTH analogs per lifetime)

III. Appendices

APPENDIX A: Abbreviation/Acronym Key

BMD: bone mineral density

FDA: Food and Drug Administration

PTH: parathyroid hormone

APPENDIX B: Therapeutic Alternatives

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/Maximum Dose
alendronate (Fosamax®)	Osteoporosis 10 mg PO QD or 70 mg PO q week	Osteoporosis 10 mg/day or 70 mg/week
	Glucocorticoid-induced osteoporosis 5 mg PO QD or 10 mg PO QD (in postmenopausal women not receiving estrogen)	Glucocorticoid-induced osteoporosis 5 mg/day or 10 mg/day (in postmenopausal women not receiving estrogen)
	Osteoporosis prophylaxis 5 mg PO QD or 35 mg PO q week	Osteoporosis prophylaxis 5 mg/day or 35 mg/week

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
Fosamax® Plus D (alendronate/ cholecalciferol)	Osteoporosis 70 mg alendronate/2,800 units cholecalciferol or 70 mg alendronate/5,600 units cholecalciferol PO q week	Osteoporosis 70 mg alendronate/5,600 units cholecalciferol/week
risedronate (Actonel® , Atelvia®)	Osteoporosis (including prophylaxis) 5 mg PO QD or 35 mg PO q week or 75 mg PO QD for 2 consecutive days for 2 doses/month or 150 mg PO q month Glucocorticoid-induced osteoporosis 5 mg PO QD	Osteoporosis (including prophylaxis) 5 mg/day or 35 mg/week or 75 mg/day for 2 days per month or 150 mg/month Glucocorticoid-induced osteoporosis 5 mg/day
zoledronic acid (Reclast®)	Postmenopausal osteoporosis, men with osteoporosis, glucocorticoid- induced osteoporosis 5 mg IV q year Postmenopausal osteoporosis prophylaxis 5 mg IV q 2 years	Postmenopausal osteoporosis, men with osteoporosis, glucocorticoid- induced osteoporosis 5 mg/year Postmenopausal osteoporosis prophylaxis 5 mg/2 years
ibandronate (Boniva®)	Postmenopausal osteoporosis 150 mg PO q month or 3 mg IV every 3 months Postmenopausal osteoporosis prophylaxis 150 mg PO q month	150 mg/month or 3 mg/3 months

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.

APPENDIX C: Contraindications/Boxed Warnings

- Contraindication(s):
 - none reported
- Boxed warning(s):
 - risk of osteosarcoma

APPENDIX D: General Information

The World Health Organization uses the following classifications for osteoporosis and osteopenia:

Category	T-score
Normal	-1.0 or above
Low bone mass (osteopenia)	Between -1.0 and -2.5
Osteoporosis	-2.5 or below

References

1. Tymlos Prescribing Information. Waltham, MA: Radius Health, Inc. October 2018. Available at https://www.accessdata.fda.gov/drugsatfda_docs/label/2018/208743s003lbl.pdf. Accessed 4/30/2020.
2. Miller PD, Hattersley G, Riis BJ et al. Effect of abaloparatide vs placebo on new vertebral fractures in postmenopausal women with osteoporosis. JAMA 2016; 316 (7):722-733.
3. Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc.; 2017. Available at: <http://www.clinicalpharmacology-ip.com/>.
4. National Osteoporosis Foundation Clinician’s Guide to Prevention and Treatment of Osteoporosis. Osteoporosis International 2014. Available at: <https://my.nof.org/bone-source/education/clinicians-guide-to-the-prevention-and-treatment-of-osteoporosis>. Accessed May 1, 2020.
5. Watts NB, Bilezikian JP, Camacho PM, et al. American Association of Clinical Endocrinologists medical guidelines for clinical practice for the diagnosis and treatment of postmenopausal osteoporosis. Endocr Pract 2010;16(Suppl 3):1-37.
6. Watts NB, Adler RA, Bilezikian JP, et al. Osteoporosis in men: an Endocrine Society clinical practice guidelines. J Clin Endocrinol Metab 2012;97(6):1802-1822.
7. American College of Physicians. Treatment of low bone density or osteoporosis to prevent fractures in men and women: a clinical practice guideline update from the American College of Physicians. Ann intern Med. 2017; 166: 818-839. Camacho PM, Petak SM, Brinkley N et al. AACE/ACE Guidelines- American Association of Clinical Endocrinologists and American College of Endocrinology Clinical Practice Guidelines for Diagnosis and Treatment of Postmenopausal Osteoporosis. Endocrine Practice Vol 22 (suppl 4) September 2016.
8. Richard Eastell, Clifford J Rosen, Dennis M Black, Angela M Cheung, M Hassan Murad, Dolores Shoback, Pharmacological Management of Osteoporosis in Postmenopausal Women: An Endocrine Society Clinical Practice Guideline, *The Journal of Clinical Endocrinology & Metabolism*, Volume 104, Issue 5, May 2019, Pages 1595–1622, <https://doi.org/10.1210/jc.2019-00221>

Review/Revision History	Review/Revised Date	P&T Approval Date
Policy was established	01/2020	03/06/2020
Policy was reviewed: rephrased Continued Therapy criteria A.1. to “currently receiving medication that has been authorized by RxAdvance benefit”. References were reviewed and updated	05/2020	05/21/2020