

## Burosumab-twza

(Crysvita<sup>®</sup>) J0584 (1mg)

### Covered with prior authorization

Requests for Crysvita<sup>®</sup> (burosumab-twza) may be approved if one of the following criteria are met:

- Diagnosis of Tumor-Induced Osteomalacia **AND**
  - Individual meets ALL of the following criteria:
    - Individual is 2 years of age or older.
    - Individual has a phosphaturic mesenchymal tumor that cannot be curatively resected or identified/localized.
    - According to the prescriber, the individual is currently exhibiting one or more signs or symptoms of tumor-induced osteomalacia (i.e., bone pain, impaired mobility, muscle weakness, and fatigue).
    - Individual has had a baseline serum phosphorus level that was below the normal range for age. Note: “Baseline” is defined as prior to receiving any tumor-induced osteomalacia treatment, such as Crysvita, oral phosphate, or vitamin D therapy.
    - Pretreatment tubular reabsorption of phosphate corrected for glomerular filtration rate (TmP/GFR) was below the normal range for age and gender.
    - The medication is prescribed by or in consultation with an endocrinologist, nephrologist, oncologist or a physician who specializes in tumor-induced osteomalacia.
    - Documented inadequate response, contraindication per FDA label, significant intolerance, or is not a candidate\* for management with oral phosphate therapy, calcitriol therapy, or both.

**\*Note:** Not a candidate due to being subject to a warning per the prescribing information (labeling), having a disease characteristic, individual clinical factor[s], or other attributes/conditions, or is unable to administer and requires this dosage formulation.

- Diagnosis of X-Linked Hypophosphatemia **AND**
  - Individual meets ALL of the following criteria:
    - 6 months of age or older **AND**
    - Individual has had a baseline serum phosphorus level that was below the normal range for age. Note: “Baseline” is defined as prior to receiving any X-linked hypophosphatemia treatment, such as Crysvita, oral phosphate, or vitamin D.

- Documented diagnosis confirmed by ONE of the following:
  - Genetic test confirming pathogenic or likely pathogenic variant in PHEX gene
  - Elevated serum fibroblast growth factor 23 (FGF23) levels consistent with X-linked hypophosphatemia (i.e., above the normal reference range for the testing laboratory ex. > 30 pg/mL)
  - Pretreatment tubular reabsorption of phosphate corrected for glomerular filtration rate (TmP/GFR) below the normal range for age and gender
- Medication is prescribed by, or in consultation with, an endocrinologist, geneticist, nephrologist, or a physician who specializes in X-linked hypophosphatemia
- If the individual is 18 years of age or older, the individual meets **BOTH** of the following additional criteria:
  - According to the prescriber, the individual is currently exhibiting one or more signs or symptoms of X-linked hypophosphatemia (for example fractures/pseudofractures, bone and joint pain, muscle weakness, and impaired mobility)
  - Documented inadequate response, contraindication per FDA label, significant intolerance, or is not a candidate\* for management with oral phosphate therapy, calcitriol therapy, or both

**\*Note:** Not a candidate due to being subject to a warning per the prescribing information (labeling), having a disease characteristic, individual clinical factor[s], or other attributes/conditions, or is unable to administer and requires this dosage formulation.

Requests for burosumab-twza may **not** be approved if the above criteria are not met and for all other indications not included above.

**Initial authorization is up to 12 months except for use for Tumor-Induced Osteomalacia, which can be approved for up to 6 months for initial authorization.**

When coverage is available and medically necessary, the dosage, frequency, duration of therapy, and site of care should be reasonable, clinically appropriate, and supported by evidence-based literature, and adjusted based upon severity, alternative available treatments, and previous response to therapy.

**Annual reauthorizations will require medical chart documentation that the patient has been seen within the past 12 months and that markers of disease are improved by therapy.**

**Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.**

**Exclusion criteria:**

- Chronic Kidney Disease, Severe Renal Impairment or End Stage Renal Disease (ex. eGFR<30 mL/min/1.73 m<sup>2</sup>).
  - Crysvita is contraindicated in individuals with severe renal impairment or end stage renal disease.<sup>1</sup> These individuals often have abnormal mineral metabolism which may be associated with FGF23. However, Crysvita has not been studied for the treatment of individuals with chronic kidney disease who have elevations of FGF23 impacting phosphate regulation.<sup>1,9,2</sup>
- Epidermal Nevus Syndrome.
  - More data are necessary to establish the efficacy and safety of Crysvita in individuals with epidermal nevus syndrome. Individuals with epidermal nevus syndrome were eligible to enroll in one of the Phase II tumor-induced osteomalacia studies of Crysvita. However, no individuals with epidermal nevus syndrome enrolled.
- Doses, durations, or dosing intervals that exceed FDA maximum limits for any FDA-approved indication or are not supported by industry-accepted practice guidelines or peer-reviewed literature for the relevant off-label use.
- Individuals with significant known risk factors unless the record provides an assessment of clinical benefit that outweighs the risk.

**U.S. Food and Drug Administration:**

This section is to be used for informational purposes. FDA approval alone is not a basis for coverage. Crysvita, a fibroblast growth factor 23 (FGF23) blocking antibody, is indicated for Tumor-induced osteomalacia (TIO), for treatment of FGF-related hypophosphatemia associated with phosphaturic mesenchymal tumors that cannot be curatively resected or localized in patients ≥ 2 years of age OR X-linked hypophosphatemia (XLH) in patients ≥ 6 months of age.

Crysvita injection is available as 10 mg/mL, 20 mg/mL, or 30 mg/mL single-dose vials.

**Key References Accessed 8/2022:**

1. Crysvita<sup>®</sup> injection [prescribing information]. Novato, CA: Ultragenyx Pharmaceuticals Inc.; June 2020.
2. Carpenter TO, Imel EA, Holm IA, et al. A clinician's guide to x-linked hypophosphatemia. *J Bone Miner Res.* 2011;26(7):1381-1388.
3. Scheinman SJ, Drezner MK. Hereditary hypophosphatemia rickets and tumor-induced osteomalacia. UpToDate, Inc. Available at: [www.uptodate.com](http://www.uptodate.com). Updated February 16, 2021.
4. Bacon S, Crowley R. Developments in rare bone diseases and mineral disorders. *Ther Adv Chronic Dis.* 2018;9:51-60.
5. Florenzano P, Hartley IR, Jimenez M, et al. Tumor-induced osteomalacia. *Calcif Tissue Int.* 2021;108(1):128-142.

6. Carpenter TO, Whyte MP, Imel EA, et al. Burosumab therapy in children with X-linked hypophosphatemia. *N Engl J Med*. 2018;378(21):1987-1998.
7. Whyte MP, Carpenter TO, Gottesman GS, et al. Efficacy and safety of burosumab in children aged 1-4 years with X-linked hypophosphatemia: a multicenter, open-label, phase 2 trial. *Lancet Diabetes Endocrinol*. 2019;7(3):189-199.
8. Insogna KL, Briot K, Imel EA, et al. A randomized, double-blind, placebo-controlled, phase 3 trial evaluating the efficacy of burosumab, an anti-FGF23 antibody, in adults with X-linked hypophosphatemia: week 24 primary analysis. *J Bone Miner Res*. 2018;33(8):1383-1393.
9. Portale AA, Carpenter TO, Brandi ML, et al. Continued beneficial effects of burosumab in adults with X-linked hypophosphatemia: results from a 24-week treatment continuation period after a 24-week doubleblind placebo-controlled period. *Calcif Tissue Int*. 2019;105(3):271-284.
10. Jan de Beur SM, Miller PD, Weber TJ, et al. Burosumab for the treatment of tumor-induced osteomalacia. *J Bone Miner Res*. 2021;36(4):627-635.
11. Imanishi Y, Ito N, Rhee Y, et al. Interim analysis of a phase 2 open-label trial assessing burosumab efficacy and safety in patients with tumor-induced osteomalacia. *J Bone Miner Res*. 2021;36(2):262-270.

<b>Date</b>	<b>Summary of Changes</b>
August 2022	Criteria for use summary developed by the Ascension Medical Specialty Prior Authorization Team.
September 2022	Criteria for use summary approved by the Ascension Ambulatory Care Expert Review Panel.
October 2022	Criteria for use summary approved by the Ascension Therapeutic Affinity Group.

If you have questions, call [833-980-2352](tel:833-980-2352) to speak to a member of the Ascension Rx prior authorization team, or email your questions to [smarthealthspecialty@ascension.org](mailto:smarthealthspecialty@ascension.org).