RXADVANCE
2 Park Central Drive
Southborough, MA 01772

Clinical Policy Title: **Burosumab-twza (Crysvita)**
Policy Number: **RxA.80**
Drug(s) Applied: **Burosumab-twza (Crysvita®)**
Last Review Date: **04/2020**
Line of Business: **Commercial, Medicaid, HIM-Medical Benefit**

Background

Burosumab-twza (Crysvita®) is a fibroblast growth factor 23 (FGF23) blocking antibody.

Crysvita is indicated for the treatment of X-linked hypophosphatemia (XLH) in adult and pediatric patients 6 months of age and older.

Indication	Dosing Regimen	Maximum Dose
XLH	**Pediatric XLH** • Weight < 10 kg: 1 mg/kg rounded to the nearest 1 mg, SC every two weeks • Weight ≥ 10 kg: 0.8 mg/kg rounded to the nearest 10 mg, SC every two weeks Increase dose up to approximately 2 mg/kg, SC every two weeks to achieve normal serum phosphorus. **Adult XLH** 1 mg/kg body weight rounded to the nearest 10 mg SC every four weeks. Crysvita should only be administered by a healthcare professional.	Pediatric XLH: 90 mg every two weeks Adult XLH: 90 mg every four weeks

Single-dose vials for injection: 10 mg/mL, 20 mg/mL, 30 mg/mL

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. X-Linked Hypophosphatemia (must meet all)**:**

1. Diagnosis of XLH confirmed by one of the following (a or b):
   a. DNA testing confirms the presence of mutations in the *PHEX* gene;
   b. Elevated serum FGF23 levels;
2. Prescribed by or in consultation with an endocrinologist or metabolic disease specialist;
3. Age ≥ 6 months;
4. Current (within the last 30 days) serum phosphorus level is below the reference range for age and gender (*use laboratory-specific reference ranges if available; otherwise, see Appendix D for ranges*);
5. Presence of clinical signs and symptoms of the disease (e.g., rickets, growth impairment, musculoskeletal pain, bone fractures);
6. Dose does not exceed 90 mg every two weeks (pediatrics) or 90 mg every four weeks (adults).

Approval duration:
Medicaid/HIM – 6 months
Commercial – 6 months or to the member's renewal date, whichever is longer

II. Continued Therapy

A. X-Linked Hypophosphatemia (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 as evidenced by both of the following (a and b):
   a. An increase in serum phosphorus levels from baseline and/or maintenance within the normal range for age and gender, not to exceed the upper limit of that normal range (*use laboratory-specific reference ranges if available; otherwise, see Appendix D for ranges*);
   b. A positive clinical response including any of the following: enhanced height velocity, improvement in skeletal deformities, reduction of fractures, reduction of generalized bone pain;
3. If request is for a dose increase, new dose does not exceed 90 mg every two weeks (pediatrics) or 90 mg every four weeks (adults).

Approval duration:
Medicaid/HIM – 12 months
Commercial – 6 months or to member's renewal date, whichever is longer

III. Appendices

Appendix A: Abbreviation/Acronym Key

FDA: Food and Drug Administration FGF23: fibroblast growth factor 23 XLH: X-linked hypophosphatemia

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s): concomitant use with oral phosphates and active vitamin D analogs, initiation of Crysvita therapy when serum phosphorus is within or above the normal range for age, severe renal impairment or end stage renal disease because these conditions are associated with abnormal mineral metabolism.
- Boxed warning(s): none.

Appendix D: General Information

- Laboratory-specific reference ranges for serum phosphorus levels should be used when available; otherwise, the age- and gender-based reference ranges found below may be used:

Females	Males
1-7 years: 4.3-5.4 mg/dL	1-4 years: 4.3-5.4 mg/dL
8-13 years: 4.0-5.2 mg/dL	5-13 years: 3.7-5.4 mg/dL
14-15 years: 3.5-4.9 mg/dL	14-15 years: 3.5-5.3 mg/dL
16-17 years: 3.1-4.7 mg/dL	16-17 years: 3.1-4.7 mg/dL
≥ 18 years: 2.5-4.5 mg/dL	≥ 18 years: 2.5-4.5 mg/dL

- For pediatric patients continuing on Crysvita therapy, if serum phosphorus is > 5 mg/dL, it is recommended to withhold the dose until the serum phosphorus level falls below the reference range per age.
- For adult patients continuing on Crysvita therapy, if serum phosphorus is above the upper limit of the normal range, it is recommended to withhold the dose until the serum phosphorus level falls below the reference range.

References

1. Crysvita Prescribing Information. Novato, CA: Ultragenyx Pharmaceutical Inc; September 2019. Available at: www.crysvita.com. Accessed October 9, 2019.
2. Carpenter TO, et al. A clinician's guide to X-linked hypophosphatemia. JBMR 2011; 26(7):1381-8. Available at: https://onlinelibrary.wiley.com/doi/epdf/10.1002/jbmr.340.

Review/Revision History	Review/Revised Date	P&T Approval Date
Policy was established	01/2020	02/07/2020
No changes	04/2020	05/21/2020