

PHARMACY POLICY STATEMENT

Ohio Medicaid

DRUG NAME	Crysvita (burosumab-twza)
BILLING CODE	J0584
BENEFIT TYPE	Medical
SITE OF SERVICE ALLOWED	Office
COVERAGE REQUIREMENTS	Prior Authorization Required (Non-Preferred Product) QUANTITY LIMIT— up to 90 mg per month
LIST OF DIAGNOSES CONSIDERED NOT MEDICALLY NECESSARY	Click Here

Crysvita (burosumab-twza) is a **non-preferred** product and will only be considered for coverage under the **medical** benefit when the following criteria are met:

Members must be clinically diagnosed with one of the following disease states and meet their individual criteria as stated.

X-LINKED HYPOPHOSPHATEMIA (XLH)

For **initial** authorization:

1. Member is 6 months old or older; AND
2. Medication must be prescribed by or in consultation with an endocrinologist or nephrologist; AND
3. Member has diagnosis of XLH confirmed by ONE of the following:
 - a) Phosphate regulating gene with homology to endopeptidases located on the X chromosome (PHEX) mutation;
 - b) Family history of XLH (i.e., a directly related family member with appropriate X-linked inheritance); AND
4. Member has baseline serum phosphorus concentration below the normal range for age; AND
5. Member has chart notes documentation of ONE of the following:
 - a) Radiographic evidence of active bone disease including rickets in the wrists and/or knees, AND/OR femoral/tibial bowing (e.g., chart notes from provider confirming previous radiological assessment, radiographic images, radiologist's interpretation of images, etc.);
 - b) Clinical findings such as:
 - i) For pediatric members: rickets, osteomalacia, short stature/loss of growth potential, progressive skeletal deformity, lower-extremity deformity, bone pain joint pain and stiffness, Chiari malformation, craniosynostosis, tooth abscesses, excessive dental caries, delayed walking, gait abnormalities, etc.;
 - ii) For adult members: short stature, lower-extremity deformity, osteomalacia, bone pain, joint pain and stiffness, muscle pain, muscle weakness, fractures (including pseudofractures & Looser zones), osteoarthritis, extraosseous calcifications including: enthesopathy, spinal stenosis, Chiari malformation, hearing loss, tooth abscesses, excessive dental caries, gait abnormalities, etc.; AND
6. Member does **not** have any of the following:
 - a) Hepatitis B or Hepatitis C (member must be treated prior to initiating Crysvita);
 - b) History of recurrent infection or predisposition to infection, or of known immunodeficiency;
 - c) Use oral phosphate and active vitamin D analogs (contraindicated with Crysvita). *Note: oral phosphate and active vitamin D analogs should be discontinued 1 week prior to initiation of treatment;*

- d) Severe renal impairment or end stage renal disease (i.e., pediatric patients with eGFR 15-29 mL/min/1.73m² or end stage renal disease eGFR < 15 mL/min/1.73m²; adult patients with creatinine clearance (CrCl) 15 - 29 mL/min or end stage renal disease CrCl < 15 mL/min).
7. **Dosage allowed:** Adult XLH (18 years of age and older): Dose regimen is 1 mg/kg body weight rounded to the nearest 10 mg up to a maximum dose of 90 mg administered SQ every four weeks.

Pediatric XLH (6 months and older): For members who weigh < 10 kg, starting dose regimen is 1 mg/kg of body weight rounded to the nearest 1 mg, administered SQ every two weeks. For members who weigh > 10 kg, starting dose regimen is 0.8 mg/kg of body weight rounded to the nearest 10 mg, administered SQ every two weeks. The minimum starting dose is 10 mg up to a maximum dose of 90 mg.

Dose may be increased up to approximately 2 mg/kg (maximum 90 mg), administered every two weeks to achieve normal serum phosphorus.

If member meets all the requirements listed above, the medication will be approved for 12 months.

For **reauthorization**:

1. Member's serum phosphorus concentration increased from baseline; AND
2. Chart notes have been provided that show the member has shown improvement of signs and symptoms of disease.

If member meets all the reauthorization requirements above, the medication will be approved for an additional 12 months.

CareSource considers Crysvita (burosumab-twza) not medically necessary for the treatment of the diseases that are not listed in this document.

DATE	ACTION/DESCRIPTION
05/16/2018	New policy for Crysvita created.
09/26/2019	Kainos assay requirement for XLH diagnosis was removed. RSS score requirement was replaced with clinical finding requirement. Criteria about HIV presence, presence of hypocalcemia or hypercalcemia were removed.

References:

1. Crysvita [package insert]. Novato, CA: Ultragenyx Pharmaceutical Inc.; April, 2018.
2. ClinicalTrials.gov. Identifier: NCT 02163577. Study of KRN23, a Recombinant Fully Human Monoclonal Antibody Against FGF23, in Pediatric Subjects With X-linked Hypophosphatemia (XLH). Available at: <https://clinicaltrials.gov/ct2/show/NCT02163577?term=02163577&rank=1>.
3. ClinicalTrials.gov. Identifier: NCT 02750618. Study of the Safety, Pharmacodynamics (PD) and Efficacy of KRN23 in Children From 1 to 4 Years Old With X-linked Hypophosphatemia (XLH). Available at: <https://clinicaltrials.gov/ct2/show/NCT02750618?term=02750618&rank=1>.
4. ClinicalTrials.gov. Identifier: NCT 02526160. Study of KRN23 in Adults With X-linked Hypophosphatemia (XLH). Available at: <https://clinicaltrials.gov/ct2/show/NCT02526160?term=02526160&rank=1>.
5. ClinicalTrials.gov. Identifier: NCT 02537431. Open Label Study of KRN23 on Osteomalacia in Adults With X-linked Hypophosphatemia (XLH). Available at: <https://clinicaltrials.gov/ct2/show/NCT02537431?term=02537431&rank=1>.
6. Carpenter TO, Whyte MP, Imel EA, et al. Burosumab Therapy in Children with X-Linked Hypophosphatemia. N Engl J Med 2018; 378:1987-1998. DOI: 10.1056/NEJMoa1714641.
7. Ruppe MD. X-Linked Hypophosphatemia. (Adam M, Ardinger H, Pagon R, eds.). University of Washington, Seattle; 2017.
8. Linglart A, Bissio-Duplan M, Briot K, et al. Therapeutic management of hypophosphatemic rickets from infancy to adulthood. Endocr Connect. 2014;3(1):R13-R30. doi:10.1530/EC-13-0103
9. Carpenter TO. New perspectives on the biology and treatment of X-linked hypophosphatemic rickets. [Review] [109 refs]. Pediatr Clin North Am. 1997;44(2):443-466.
10. Foster BL, Ramnitz MS, Gafni RI, et al. Rare Bone Diseases and Their Dental, Oral, and Craniofacial Manifestations. J Dent Res. 2014;93(7):7S-19S. doi:10.1177/0022034514529150

11. Linglart A, Dvorak-Ewell M, Marshall A, Martin JS, Skrinar A. Impaired mobility and pain significantly impact the quality of life of children with X-linked hypophosphatemia (XLH). *Int Conf Child Bone Heal*. 2015:P198. doi:10.1530/boneabs.4.P198
12. Skrinar A, Marshall A, Martin JS, Dvorak-Ewell M. X-Linked hypophosphatemia (XLH) impairs skeletal health outcomes and physical function in affected adults. *Endocr Soc Meet*. 2015:SAT-244. doi:doi:10.1210/endo-meetings.2015.BCHVD.11.SAT-244
13. Veilleux LN, Cheung M, Amor M Ben, Rauch F. Abnormalities in muscle density and muscle function in hypophosphatemic rickets. *J Clin Endocrinol Metab*. 2012;97(8). doi:10.1210/jc.2012-1336
14. Looser zones. Radiopaedia Website. <https://radiopaedia.org/articles/looser-zones-1>. Accessed October 9, 2017.
15. Ultragenyx Pharmaceutical Inc. UX023-CL201. Study of KRN23, a Recombinant Fully Human Monoclonal Antibody Against Fibroblast Growth Factor 23 (FGF23), in Pediatric Subjects With X-linked Hypophosphatemia (XLH) [NCT02163577]. <https://clinicaltrials.gov/ct2/show/NCT02163577>.
16. Ultragenyx Pharmaceutical Inc. UX023-CL301. Efficacy and Safety of KRN23 Versus Oral Phosphate and Active Vitamin D Treatment in Pediatric Patients With X Linked Hypophosphatemia (XLH) [NCT02915705]. <https://clinicaltrials.gov/ct2/show/NCT02915705>.
17. Beck-Nielsen SS, Mughal Z, Haffner D, et al. FGF23 and its role in X-linked hypophosphatemia-related morbidity. *Orphanet J Rare Dis*. 2019;14(1):58. doi:10.1186/s13023-019-1014-8.
18. Linglart A, Biosse-Duplan M, Briot K, et al. Therapeutic management of hypophosphatemic rickets from infancy to adulthood. *Endocr Connect*. 2014;3(1). doi:10.1530/EC-13-0103.
19. FDA approval documentation. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/nda/2018/761068Orig1s000MultidisciplineR.pdf. Accessed 11/16/19.

Effective date: 04/01/2020

Revised date: 09/26/2019