

Crysvita™ (burosumab-twza injection)



When requesting Crysvita™ (burosumab-twa injection), the individual requiring treatment must be diagnosed with an FDA-approved indication and meet the specific coverage guidelines and applicable safety criteria for the covered indication.

FDA-approved indication

Crysvita™ is indicated for the treatment of X-linked hypophosphatemia (XLH) in adult and pediatric patients 1 year of age and older.

Coverage Guidelines

The individual must meet all of the following criteria for initial approval:

- Not taking (or discontinued at least 1 week prior) an oral phosphate supplement and vitamin D analogues (e.g. calcitriol, doxercalciferol, paricalcitol, cholecalciferol, and ergocalciferol).
- Fasting serum phosphorus levels below the normal range for age.
- No severe renal impairment or end-stage renal disease, defined as a CrCl<30ml/min.
- Must have a genetic blood test to confirm diagnosis (mutation in PHEX gene).

The individual must meet all of the following criteria for reauthorization:

- Must have a genetic blood test to confirm diagnosis (mutation in PHEX gene)
- Fasting serum phosphorus levels below the normal range for age.

Approval duration: 6 months

Dosing Recommendation

Crysvita™ subcutaneous administration

- **Pediatric** starting dose is 0.8mg/kg, rounded to the nearest 10mg, every two weeks. The minimum starting dose is 10mg subcutaneously up to a maximum of 90mg. Monitor fasting serum phosphorus every four weeks for three months and then as appropriate.
 - o If the serum phosphorus is below the reference range, the dose may be increased according to the following schedule.

Pediatric Dose Schedule for Stepwise Dose Increase

Body Weight (kg)	Starting dose (mg)	First Dose Increase to (mg)	Second Dose Increase to (mg)
10-14	10	15	20
15-18	10	20	30
19-31	20	30	40
32-43	30	40	60
44-56	40	60	80
57-68	50	70	90
69-80	60	90	90
81-93	70	90	90
94-105	80	90	90
106 and greater	90	90	90

- o If the serum phosphorus is above 5mg, withhold the next dose and reassess the fasting serum phosphorus level in four weeks. The patient must have fasting serum phosphorus below the reference range for age to reinitiate.

Pediatric Dose Schedule for Re-Initiation of Therapy

Previous Dose (mg)	Re-Initiation Dose (mg)
10	5
15	10
20	10
30	10
40	20
50	20
60	30
70	30
80	40
90	40

- **Adult** starting dose is 1mg/kg subcutaneously, rounded to the nearest 10mg, up to a maximum dose of 90mg, every four weeks. After initiation of treatment, measure fasting serum phosphorus two weeks post-dose for the first three months of treatment and then as appropriate. If fasting serum phosphorus is with the normal range continue with the same dose
 - o Do not adjust dose more frequently than every four weeks. If fasting serum phosphorus is above the normal range, withhold the next dose and reassess the fasting serum phosphorus level in four weeks. The patient must have a fasting serum phosphorus below the normal range to reinitiate. Once serum phosphorus is below the normal range, treatment may be restarted according to the below change. Reassess fasting serum phosphorus two weeks after any change in dose.

Adult dose schedule for Re-Initiation of Therapy

Previous dose	Re-initiation dose (mg)
40	20
50	20
60	30
70	30
80 and greater	40

References

1. Crysvita™ prescribing information. Novato, California; Ultragenyx Pharmaceutical Inc.. April 2018.
2. KDIGO 2017 Clinical Practice Guideline Update for the Diagnosis, Evaluation, Prevention, and Treatment of Chronic Kidney Disease-Mineral and Bone disorder (CKD-MBD). Kidney International Supplements 2017; 7(1):1-59.