Clinical Policy: Non-Calcium Phosphate Binders

Reference Number: IL.ERX.PMN.04
Effective Date: 06.01.21
Last Review Date: 05.21
Line of Business: Illinois Medicaid

Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
The following are non-calcium containing phosphate binders requiring prior authorization: ferric citrate (Auryxia®), lanthanum (Fosrenol®), sevelamer carbonate (Renvela®), sevelamer hydrochloride (Renagel®), and sucroferric oxyhydroxide (Velphoro®).

FDA Approved Indication(s)
Non-calcium containing phosphate binders (Auryxia, Fosrenol, Renvela, Renagel, and Velphoro) are indicated for the control of serum phosphorus levels in patients with chronic kidney disease (CKD) on dialysis or with end stage renal disease (ESRD).

Auryxia is also indicated for the treatment of iron deficiency anemia in adult patients with CKD not on dialysis.

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

Health plan approved formularies should be reviewed for all coverage determinations. Requirements to use preferred alternative agents apply only when such requirements align with the health plan approved formulary.

It is the policy of health plans affiliated with Envolve Pharmacy Solutions™ that Auryxia, Fosrenol, Renagel, Renvela, and Velphoro are **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Hyperphosphatemia (must meet all)**:**

1. Diagnosis of hyperphosphatemia associated with CKD or ESRD;
2. Prescribed by or in consultation with a nephrologist, or member is on dialysis;
3. Member meets one of the following (a or b):
   a. Auryxia, Fosrenol, Renagel, Velphoro: age ≥ 18 years;
   b. Renvela: age ≥ 6 years;
4. Member meets one of the following (a, b, c, or d):
   a. Failure (e.g., serum phosphorus > 5.5 mg/dL) of a 4-week trial of calcium acetate at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced;
   b. Hypercalcemia as evidenced by recent (within the previous 30 days) corrected total serum calcium level > 10.2 mg/dL;
   c. Plasma parathyroid hormone (PTH) levels < 150 pg/mL on 2 consecutive measurements in the past 180 days;
   d. History of severe vascular and/or soft-tissue calcifications;
5. For Auryxia, Renvela, or Velphoro: failure (e.g., serum phosphorus > 5.5 mg/dL) of a 4-week trial of Fosrenol or Renagel at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced;
6. Dose does not exceed:
   a. Auryxia: 12 tablets (2,520 mg ferric iron) per day;
   b. Fosrenol: 4,500 mg per day;
   c. Renagel: 13 g per day;

d. Renvela: 14 g per day;
e. Velphoro: 3,000 mg (6 tablets) per day.

Approval duration: 12 months

B. Iron Deficiency Anemia (must meet all)**:**
1. Request is for Auryxia;
2. Diagnosis of iron deficiency anemia with CKD not on dialysis;
3. Failure of a 4-week, adherent trial of alternative oral iron therapy (e.g., ferrous sulfate, ferrous fumarate, ferrous gluconate), unless contraindicated or clinically significant adverse effects are experienced;
4. Dose does not exceed 12 tablets (2,520 mg ferric iron) per day.

Approval duration: 12 months

C. Other diagnoses/indications
1. Refer to ERX.PA.01 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

II. Continued Therapy

A. All Indications in Section I (must meet all)**:**
1. Currently receiving medication via a health plan affiliated with Envolve Pharmacy Solutions or member has previously met initial approval criteria;
2. Member is responding positively to therapy;
3. If request is for a dose increase, new dose does not exceed one of the following (a, b, c, d, or e):
   a. Auryxia: 12 tablets (2,520 mg ferric iron) per day;
   b. Fosrenol: 4,500 mg per day;
   c. Renagel: 13 g per day;
   d. Renvela: 14 g per day;
   e. Velphoro: 3,000 mg (6 tablets) per day.

Approval duration: 12 months

B. Other diagnoses/indications (must meet 1 or 2)**:**
1. Currently receiving medication via a health plan affiliated with Envolve Pharmacy Solutions and documentation supports positive response to therapy.
   Approval duration: Duration of request or 12 months (whichever is less); or
2. Refer to ERX.PA.01 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

III. Diagnoses/Indications for which coverage is NOT authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off-label use policy – ERX.PA.01 or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

CKD: chronic kidney disease
ESRD: end-stage renal disease
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
calcium acetate (PhosLo®)	Initial: 1,334 mg PO with each meal	8,004 mg/day

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
	Titrate dose every 2 to 3 weeks to acceptable serum phosphorus level, usual dose is 2,001-2,668 mg PO with each meal.	

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):
  - Auryxia: iron overload syndromes (e.g., hemochromatosis)
  - Fosrenol: bowel obstruction, ileus, and fecal impaction
  - Renagel: bowel onstruction; known hypersensitivity to sevelamer hydrochloride or to any of the excipients
  - Renvela: bowel obstruction
  - Velphoro: none reported
- Boxed warning(s): none reported

Appendix D: General Information

- Examples of positive response to therapy:
  - Reduction in serum phosphorus from pretreatment level
  - Maintenance of serum phosphorus level ≤ 5.5 mg/dL, increased hemoglobin

V. Dosage and Administration

Drug Name	Indication	Dosing Regimen	Maximum Dose
ferric citrate (Auryxia)	Iron deficiency anemia	1 tablet PO TID with meals. Adjust dose as needed to achieve and maintain hemoglobin goal.	12 tablets/day
ferric citrate (Auryxia)	Hyper-phosphatemia	2 tablets PO TID with meals; titrate by 1 to 2 tabs/day at 1-week or longer intervals based on serum phosphorus level	12 tablets/day
lanthanum (Fosrenol)	Hyper-phosphatemia	1,500 mg PO daily in divided doses; titrate by 750 mg/day every 2 to 3 weeks based on serum phosphorus level	4,500 mg/day
sevelamer carbonate (Renvela)	Hyper-phosphatemia	*Starting dose for adult dialysis patients based on serum phosphorus level* If serum phosphorus is: > 5.5 to < 7.5 mg/dL: 0.8 g PO TID w/ meals ≥ 7.5 mg/dL: 1.6 g PO TID w/ meals *Starting dose for pediatric patients (6 years and older) based on body surface area (BSA)* > 0.75 to < 1.2: 0.8 mg PO TID w/ meals > 1.2: 1.6 g PO TID w/ meals *Starting dose for patients switching from calcium acetate to Renvela based on calcium acetate 667 mg/capsule dosing schedule* • Calcium acetate 1 cap PO TID: Renvela 0.8 g PO TID w/ meals	14 g/day

Drug Name	Indication	Dosing Regimen	Maximum Dose
		• Calcium acetate 2 caps PO TID: Renvela 1.6 g PO TID w/ meals • Calcium acetate 3 caps PO TID: Renvela 2.4 g PO TID w/ meals	
sevelamer hydrochloride (Renagel)	Hyper-phosphatemia	*Starting dose based on serum phosphorus level* • 5.5 to < 7.5 mg/dL: Renagel 800 mg - 1 tab PO TID; 400 mg - 2 tabs PO TID w/meals • 7.5 to < 9 mg/dL: Renagel 800 mg - 2 tabs PO TID; 400 mg - 3 tabs PO TID w/meals • ≥ 9 mg/dL: Renagel 800 mg - 2 tabs PO TID; 400 mg - 4 tabs PO TID w/meals *Starting dose for patients switching from calcium acetate to Renagel based on calcium acetate 667 mg/capsule dosing schedule* • Calcium acetate 1 cap PO TID: Renagel 800 mg - 1 tab PO TID; 400 mg - 2 tabs PO TID • Calcium acetate 2 caps PO TID: Renagel 800 mg - 2 tabs PO TID; 400 mg - 3 tabs PO TID • Calcium acetate 3 caps PO TID: Renagel 800 mg - 3 tabs PO TID; 400 mg - 5 tabs PO TID	13 g/day
sucroferric oxyhydroxide (Velphoro)	Hyper-phosphatemia	500 mg PO TID with meals	3,000 mg/day

VI. Product Availability

Drug Name	Availability
ferric citrate (Auryxia)	Tablets: 210 mg ferric iron (equivalent to 1 g ferric citrate)
lanthanum (Fosrenol)	Tablets, chewable: 500 mg, 750 mg, 1,000 mg Oral powder: 750 mg, 1,000 mg
sevelamer carbonate (Renvela)	Tablets: 800 mg Oral powder, packet: 0.8 g, 2.4 g
sevelamer hydrochloride (Renagel)	Tablets: 400 mg, 800 mg
sucroferric oxyhydroxide (Velphoro)	Tablets, chewable: 500 mg iron

VII. References

1. Auryxia Prescribing Information. Boston, MA: Keryx Biopharmaceuticals, Inc.; November 2017. Available at: https://www.auryxia.com/. Accessed October 30, 2018.
2. Renagel Prescribing Information. Cambridge, MA: Genzyme Corporation; March 2016. Available at: https://www.renassist.com/media/pdf/GEN- Renagel%20PI%202011%20NEW.pdf. Accessed October 30, 2018.

3. Velphoro Prescribing Information. Waltham, MA: Fresenius Medical Care North America; April 2018. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2018/205109s006lbl.pdf. Accessed October 30, 2018.
4. Fosrenol Prescribing Information. Lexington, MA: Shire US, Inc.; February 2016. Available at: https://pi.shirecontent.com/PI/PDFs/Fosrenol_USA_ENG.pdf. Accessed October 30, 2018.
5. Renvela Prescribing Information. Cambridge, MA: Genzyme Corporation; March 2017. Available at http://products.sanofi.us/renvela/renvela.pdf. Accessed October 30, 2018.
6. National Kidney Foundation. K/DOQI Clinical Practice Guidelines for Bone Metabolism and Disease in Chronic Kidney Disease. Am J Kidney Dis 42:S1-S202, 2003 (suppl 3).
7. Kidney Disease: Improving Global Outcomes (KDIGO) CKD–MBD Work Group. KDIGO clinical practice guideline for the diagnosis, evaluation, prevention, and treatment of chronic kidney disease–mineral and bone disorder (CKD–MBD). Kidney International 2009; 76 (Suppl 113): S1–S130.
8. Kidney Disease: Improving Global Outcomes (KDIGO) CKD–MBD Work Group. KDIGO clinical practice guideline for the diagnosis, evaluation, prevention, and treatment of chronic kidney disease–mineral and bone disorder (CKD–MBD). Kidney International 2017; 92(1):26-36.
9. Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc.; 2018. Available at http://www.clinicalpharmacology-ip.com/.
10. Kidney Disease: Improving Global Outcomes (KDIGO) Anemia Work Group. Clinical practice guideline for anemia in chronic kidney disease. Kidney Inter., Supp. 2012; 2(4):279- 335. doi:10.1038/kisup.2012.39.

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy created	04.21.21	05.21

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information.

This Clinical Policy is not intended to dictate to providers how to practice medicine, nor does it constitute a contract or guarantee regarding payment or results. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members.