

## **Clinical Policy: Non-Calcium Phosphate Binders**

Reference Number: IL.PMN.04

Effective Date: 1.1.20

Last Review Date: 1.24.24

Line of Business: 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<sup>®</sup>), sevelamer carbonate (Renvela<sup>®</sup>), sevelamer hydrochloride (Renagel), and sucroferric oxyhydroxide (Velphoro<sup>®</sup>).

### **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.*

It is the policy of health plans affiliated with Centene Corporation<sup>®</sup> that Auryxia, Fosrenol, Renvela, Renagel, 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  $\geq$  18 years;
  - b. Renvela: age  $\geq$  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, Renagel or Velphoro: failure (e.g., serum phosphorus > 5.5 mg/dL) of a 4-week trial of lanthanum carbonate or Fosrenol, sevelamer carbonate, or sevelamer hydrochloride 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:**

**Medicaid** – 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:**

**Medicaid** – 12 months

**C. Other diagnoses/indications** (must meet 1 or 2)

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
  - a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.PMN.255 for Medicaid; or
  - b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.PMN.16 for Medicaid; or
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.PMN.53 for Medicaid.

**II. Continued Therapy**

**A. All Indications in Section I** (must meet all):

1. Member meets one of the following (a or b):
  - a. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
  - b. Member is currently receiving medication and is enrolled in a state and product with continuity of care regulations (*refer to state specific addendums for CC.PHARM.03A and CC.PHARM.03B*);

2. Member is responding positively to therapy (e.g., reduction in serum phosphorus from pretreatment level; maintenance of serum phosphorus level  $\leq 5.5$  mg/dL, increased hemoglobin);
3. If request is for a dose increase, new does not exceed one of the following (a, b, or c):
  - 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:**

**Medicaid** – 12 months

**B. Other diagnoses/indications** (must meet 1 or 2):

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
  - a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.PMN.255 for Medicaid; or
  - b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.PMN.16 for Medicaid; or
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.PMN.53 for Medicaid.

**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 policies – CP.PMN.53 for Medicaid 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: Contraindications/Boxed Warnings*

- Contraindication(s):
  - Auryxia: iron overload syndromes (e.g., hemochromatosis)
  - Fosrenol: bowel obstruction, ileus, and fecal impaction
  - Renagel: bowel obstruction; known hypersensitivity to sevelamer hydrochloride or to any of the excipients

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- Renvela: bowel obstruction; known hypersensitivity to sevelamer carbonate, sevelamer hydrochloride, or to any of the excipients
- Velphoro: none reported
- Boxed warning(s): none reported

**V. Dosage and Administration**

<b>Drug Name</b>	<b>Indication</b>	<b>Dosing Regimen</b>	<b>Maximum Dose</b>
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	<p><i>Starting dose for adult dialysis patients based on serum phosphorus level</i></p> <p>If serum phosphorus is:            &gt; 5.5 to &lt; 7.5 mg/dL: 0.8 g PO TID w/ meals            ≥ 7.5 mg/dL: 1.6 g PO TID w/ meals</p> <p><i>Starting dose for pediatric patients (6 years and older) based on body surface area (BSA)</i></p> <p>≥ 0.75 to &lt; 1.2: 0.8 mg PO TID w/ meals            ≥ 1.2: 1.6 g PO TID w/ meals</p> <p><i>Starting dose for patients switching from calcium acetate to Renvela based on calcium acetate 667 mg/capsule dosing schedule</i></p> <ul style="list-style-type: none"> <li>● Calcium acetate 1 cap PO TID: Renvela 0.8 g PO TID w/ meals</li> <li>● Calcium acetate 2 caps PO TID: Renvela 1.6 g PO TID w/ meals</li> <li>● Calcium acetate 3 caps PO TID: Renvela 2.4 g PO TID w/ meals</li> </ul>	14 g/day
sevelamer hydrochloride (Renagel)	Hyper-phosphatemia	<p><i>Starting dose based on serum phosphorus level</i></p> <ul style="list-style-type: none"> <li>● 5.5 to &lt; 7.5 mg/dL: Renagel 800 mg - 1 tab PO TID; 400 mg - 2 tabs PO TID w/meals</li> </ul>	13 g/day

Drug Name	Indication	Dosing Regimen	Maximum Dose
		<ul style="list-style-type: none"> <li>7.5 to &lt; 9 mg/dL: Renagel 800 mg - 2 tabs PO TID; 400 mg - 3 tabs PO TID w/meals</li> <li>≥ 9 mg/dL: Renagel 800 mg - 2 tabs PO TID; 400 mg - 4 tabs PO TID w/meals</li> </ul> <p><i>Starting dose for patients switching from calcium acetate to Renagel based on calcium acetate 667 mg/capsule dosing schedule</i></p> <ul style="list-style-type: none"> <li>Calcium acetate 1 cap PO TID: Renagel 800 mg - 1 tab PO TID; 400 mg - 2 tabs PO TID</li> <li>Calcium acetate 2 caps PO TID: Renagel 800 mg - 2 tabs PO TID; 400 mg - 3 tabs PO TID</li> <li>Calcium acetate 3 caps PO TID: Renagel 800 mg - 3 tabs PO TID; 400 mg - 5 tabs PO TID</li> </ul>	
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.; March 2021. Available at: <https://www.auryxia.com/>. Accessed October 26, 2022.
2. Renagel Prescribing Information. Cambridge, MA: Genzyme Corporation; May 2021. Available at: <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=5e30120b-f2bf-43a0-86b2-44ae996dc681>. Accessed October 26, 2022.

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3. Velphoro Prescribing Information. Waltham, MA: Fresenius Medical Care North America; February 2020. Available at: <https://www.velphorohcp.com>. Accessed October 26, 2022.
4. Fosrenol Prescribing Information. Lexington, MA: Shire US, Inc.; August 2020. Available at: [https://pi.shirecontent.com/PI/PDFs/Fosrenol\\_USA\\_ENG.pdf](https://pi.shirecontent.com/PI/PDFs/Fosrenol_USA_ENG.pdf). Accessed October 26, 2022.
5. Renvela Prescribing Information. Cambridge, MA: Genzyme Corporation; May 2021. Available at: <https://www.revela.com>. Accessed October 26, 2022.
6. Sevelamer hydrochloride 400 mg tablets Prescribing Information. Mahwah, NJ: Glenmark Pharmaceuticals Inc.; June 2020. Available at <https://dailyed.nlm.nih.gov/dailyed/>. Accessed October 26, 2022.
7. 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).
8. 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
9. 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 Inter.* 2017; 92(1):26-36.
10. Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc.; 2020. Available at <http://www.clinicalpharmacology-ip.com/>.

Reviews, Revisions, and Approvals	Date	P&T Approval Date
New policy created, adapted CP.PMN.04 Non-Calcium Phosphate Binders (Auryxia, Fosrenol, Renegel, Renvela, Velphoro) policy.	12.11.19	
1Q 2020 annual review: no significant changes; moved examples of positive response from appendix to criterion 2 in section IIA; references reviewed and updated.	12.31.19	1.7.20
1Q 2021 annual review; added generic lanthanum carbonate (Fosrenol) or sevelamer hydrochloride (Renegel); reference reviewed and updated.	4.19.21	
2Q2022 Annual Review: added additional requirement for trial of generic sevelamer carbonate for the request of Auryxia, Renvela, Renegel or Velphoro; references reviewed and updated.	6.21.22	
1Q 2024 Annual Review: Template changes applied to other diagnoses/indications and continued therapy section. References reviewed and updated.	1.24.24	

#### **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

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organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

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This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. 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. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

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#### **Note:**

**For Medicaid members**, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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