Pharmacy Policy Bulletin: J-0243 Oxbryta (voxelotor) – Commercial and Healthcare Reform	
Number: J-0243	**Category:** Prior Authorization
Line(s) of Business: ☒ Commercial ☒ Healthcare Reform ☐ Medicare	**Benefit(s):** **Commercial:** **Prior Authorization (1.)** **1.** Miscellaneous Specialty Drugs Oral = Yes w/ Prior Authorization **Quantity Limits (1., 2., 3., or 4.)** **1.** Rx Mgmt Quantity Limits = Safety/Specialty **2.** Rx Mgmt Quantity Limits = Safety/Specialty + Dose Opt **3.** Rx Mgmt Quantity Limits = Safety/Specialty + Dose Opt + Watchful **4.** Quantity Limits = QPC = Yes **Healthcare Reform:** Not Applicable
Region(s): ☒ All ☐ Delaware ☐ New York ☐ Pennsylvania ☐ West Virginia	**Additional Restriction(s):**
Version: J-0243-009	**Original Date:** 01/29/2020
Effective Date: 02/14/2025	**Review Date:** 01/29/2025

Drugs Product(s):	• Oxbryta (voxelotor) oral tablets and tablets for oral suspension
FDA-Approved Indication(s):	• Treatment of sickle cell disease (SCD) in adults and pediatric patients 4 years of age and older.

Background:	• Hemoglobin S (HbS) is an abnormal type of hemoglobin (Hb) that causes red blood cells (RBCs) to become stiff and abnormally shaped. Oxbryta binds to HbS and increases the affinity for oxygen. It may also decrease the thickness of blood, inhibit RBC sickling, and increase RBC flexibility. Oxbryta demonstrates a dose-dependent inhibition of HbS polymerization. • SCD is a group of inherited red blood cell disorders. The red blood cells are C-shaped and are hard and sticky. The sickle cells die early, causing a constant shortage of RBCs. When the sickle cells travel through small blood vessels, they get stuck and clog blood flow and oxygen supply to the tissues causing pain, infection, acute chest syndrome and/or stroke. • Signs and symptoms of SCD include jaundice or icterus due to hemolysis, anemia, and dactylitis. Lab markers associated with hemolysis include bilirubin

	level, absolute reticulocyte count, percentage of reticulocytes, or lactate dehydrogenase level. • Complications of SCD include acute chest syndrome, acute pain crisis, brain complications (e.g., clinical or silent stroke), chronic pain, eye problems (e.g. retina damage), gallstones, heart problems (e.g. ischemic heart disease and pulmonary hypertension), infections, joint complications (e.g. avascular or aseptic necrosis), kidney problems (e.g. uncontrolled urination), leg ulcers, liver complications (e.g. sickle cell intrahepatic cholestasis), and priapism. Severe complications of SCD include vasoocclusive crisis (VOC), aplastic crisis, and splenic sequestration crisis. • In the HOPE clinical trial for Oxbryta, patients were included if they had a hemoglobin level ≥5.5 to ≤10.5 g/dL. Efficacy in the clinical trial was based on hemoglobin response defined as an increase of > 1g/dL. • Co-administration of strong or moderate CYP3A4 inducers may decrease Oxbryta plasma concentrations and may lead to reduced efficacy. Examples of strong or moderate CYP3A4 inducers include phenobarbital, phenytoin, carbamazepine, rifampicin, and St. John's Wort. • Prescribing Considerations: ○ Oxbryta may be given with or without hydroxyurea. ○ Concurrent use of Oxbryta with Adakveo has not been established. ○ Oxbryta may interfere with the measurement of Hb subtypes (HbA, HbS, and HbF) by high-performance liquid chromatography (HPLC). If precise quantitation of Hb species is required, chromatography should be performed when the patient is not receiving Oxbryta therapy.

Approval Criteria

I. Initial Authorization

When a benefit, coverage of Oxbryta may be approved when all of the following criteria are met **(A. through E.)**:

A. The member is 4 years of age or older.
B. The member has a diagnosis of SCD. (ICD-10: D57).
C. There is clinical documentation the member's hemoglobin level is ≤ 10.5 g/dL.
D. The member has experienced therapeutic failure, contraindication, or intolerance to plan-preferred, generic hydroxyurea.
E. If the request is for Oxbryta tablets for oral suspension, the member is 11 years of age or younger.

II. Reauthorization

When a benefit, reauthorization of Oxbryta may be approved when the following criterion is met **(A.)**:

A. The prescriber attests that the member has experienced a therapeutic response defined as one (1) of the following **(1., 2., or 3.)**:
1. Improvement in SCD signs, symptoms, or complications.
2. Hemoglobin increase of > 1 g/dL from baseline without the use of concurrent transfusions.
3. Decreased number of transfusions from baseline.

III. Quantity Limits

A. Oxbryta Oral Tablets

Coding of the quantity level limitation is at 3 tablets per day. When prior authorization is approved, Oxbryta may be authorized in quantities as follows when all of the following criteria are met **(1. and 2.)**:

1. The member is taking Oxbryta concomitantly with a strong or moderate CYP3A4 inducer.
2. The request is for a quantity of ≤ 5 tablets per day.

B. Oxbryta Tablets for Oral Suspension

Coding of the quantity level limitation is at 3 tablets for oral suspension per day. When prior authorization is approved, Oxbryta may be authorized in quantities as follows when one (1) of the following criteria are met **(1. or 2.)**:

1. The member meets all of the following **(a., b., and c.)**:
- **a.** The member weighs ≥ 40 kg.
- **b.** The member has an inability to swallow tablets.
- **c.** The request is for a quantity of 5 tablets for oral suspension per day.

2. If the member is taking Oxbryta concomitantly with a strong or moderate CYP3A4 inducer, all of the following criteria are met **(a. and b.)**:
- **a.** The request is for a quantity of ≤ 8 tablets for oral suspension per day.
- **b.** The member meets one (1) of the following **(i. or ii.)**:
  - **i.** The member is 4 to < 12 years of age.
  - **ii.** The member has an inability to swallow tablets.

IV. An exception to some or all of the criteria above may be granted for select members and/or circumstances based on state and/or federal regulations.

Limitations of Coverage

I. The member will not be using Oxbryta in combination with Adakveo (crizanlizumab-tmca).
II. Coverage of drug(s) addressed in this policy for disease states outside of the FDA-approved indications should be denied based on the lack of clinical data to support effectiveness and safety in other conditions unless otherwise noted in the approval criteria.
III. For Commercial or HCR members with a closed formulary, a non-formulary product will only be approved if the member meets the criteria for a formulary exception in addition to the criteria outlined within this policy.

Authorization Duration

- Commercial and HCR Plans: If approved, up to a 12 month authorization may be granted.

Automatic Approval Criteria

None

References:

1. Oxbryta [package insert]. South San Francisco, CA: Global Blood Therapeutics, Inc; August 2023.
2. Centers for Disease Control and Prevention. Sickle Cell Disease (SCD). Available at: https://www.cdc.gov/ncbddd/sicklecell/index.html. Accessed January 06, 2025.
3. National Heart, Lung, and Blood Institute. Sickle Cell Disease. Available at: https://www.nhlbi.nih.gov/health-topics/sickle-cell-disease. Accessed January 06, 2025.
4. U.S. Food and Drug Administration. Drug Development and Drug Interactions: Table of Substrates, Inhibitors and Inducers. Available at: https://www.fda.gov/drugs/drug-interactions-labeling/drug-development-and-drug-interactions-table-substrates-inhibitors-and-inducers#table3-3. Accessed January 06, 2025.