



Commercial/Healthcare Exchange PA Criteria

Effective: December 9th 2021

Prior Authorization: Livmarli™

Products Affected: Livmarli (maralixibat) oral solution

Medication Description: Alagille syndrome is a rare liver disease defined by genetic deletion or mutation affecting bile acid transporters (e.g., deletion or mutation of the *JAG1* gene or *NOTCH2* gene). Main clinical manifestations include cholestasis, pruritus, and jaundice. Progression of the disease can cause liver fibrosis, cirrhosis, or end-stage liver disease and leads to death at an early age in life (infancy to adolescence). Pruritus is a common symptom in patients with Alagille syndrome and the pathophysiology of pruritus in these patients is not completely understood. Although the complete mechanism by which Livmarli improves pruritus in patients with Alagille syndrome is unknown, it may involve inhibition of the IBAT, which results in decreased reuptake of bile salts, as observed by a decrease in serum bile acids. Livmarli is an ileal bile acid transporter (IBAT) inhibitor. Cholestyramine, rifampicin, and ursodeoxycholic acid (ursodiol) have been used off-label for decades to alleviate symptoms related to Alagille syndrome.

Covered Uses: Livmarli is indicated for the treatment of cholestatic pruritus in patients ≥ 1 year of age with Alagille syndrome.

Exclusion Criteria: N/A

Required Medical Information:

1. Diagnosis
2. Previous medications tried and failed

Age Restrictions: ≥ 1 year of age

Prescriber Restrictions: None

Coverage Duration:

1. Initial: 6 months
2. Reauthorization: 12 months

Other Criteria:

I. Initial Criteria

1. **Alagille Syndrome.** Approve for the duration noted if the patient meets one of the following:
 - A. Initial Therapy. Approve for 6 months if the patient meets all of the following (i, ii, iii, iv, v, vi **and** vii):
 - i. Patient is ≥ 1 year of age; **AND**
 - ii. Patient has moderate-to-severe pruritus, according to prescriber; **AND**
 - iii. Diagnosis of Alagille syndrome was confirmed by genetic testing demonstrating a *JAG1* or *NOTCH2* deletion or mutation; **AND**

Last Rev. December 2021



Confidential Information

This document is confidential and proprietary to ConnectiCare. Unauthorized use and distribution are prohibited.

- iv. Patient has a serum bile acid concentration above the upper limit of the normal reference range for the reporting laboratory; **AND**
- v. Patient has tried at least one systemic medication for Alagille syndrome, unless contraindicated; **AND**
Note: Systemic medications for Alagille syndrome include cholestyramine, rifampicin, and ursodeoxycholic acid (ursodiol).
- vi. Patient does not have any of the following (a, b, **or** c):
 - a. Cirrhosis; **OR**
 - b. Portal hypertension; **OR**
 - c. History of a hepatic decompensation event; **AND**
Note: Examples of a hepatic decompensation event include variceal hemorrhage, ascites, and hepatic encephalopathy.
- vii. The medication is prescribed by or in consultation with a hepatologist, gastroenterologist, or a physician who specializes in Alagille syndrome.

II. Continuation Criteria

- A. Patient is Currently Receiving Livmarli. Approve for 1 year if the patient meets all of the following (i, ii, **and** iii):
 - i. Patient does not have any of the following (a, b, **or** c):
 - a. Cirrhosis; **OR**
 - b. Portal hypertension; **OR**
 - c. History of a hepatic decompensation event; **AND**
Note: Examples of a hepatic decompensation event include variceal hemorrhage, ascites, and hepatic encephalopathy.
 - ii. Patient had response to therapy, as determined by the prescriber; **AND**
Note: Examples of response to therapy include decrease in serum bile acids and decrease in pruritus.
 - iii. The medication is prescribed by or in consultation with a hepatologist, gastroenterologist, or a physician who specializes in Alagille syndrome.

References:

1. Livmarli™ oral solution [prescribing information]. Foster City, CA: Mirum; September 2021.
2. Livmarli. IBM Micromedex® [database online]. Greenwood Village, CO. Truven Health Analytics. Available at: <https://www.micromedexsolutions.com>. Updated Nov 1, 2021. Accessed November 5, 2021.
3. Livmarli. LexiComp [database online]. Waltham, MA, Available at <https://online.lexi.com>. Accessed November 5th 2021.

Policy Revision history:

Rev #	Type of Change	Summary of Change	Sections Affected	Date
1	New Policy	New Policy	All	12/9/2021