
5.50.032

Section:	Prescription Drugs	Effective Date:	July 1, 2023
Subsection:	Gastrointestinal Agents	Original Policy Date:	October 22, 2021
Subject:	Livmarli	Page:	1 of 4

Last Review Date: June 15, 2023

Livmarli

Description

Livmarli (maralixibat)

Background

Livmarli (maralixibat) is an inhibitor of the ileal bile acid transporter (IBAT). IBAT is almost completely responsible for the reabsorption of bile acid from the ileum, returning biliary products to systemic circulation. Inhibition of this process promotes elimination of bile acid and reduces pruritus associated with cholestatic disease (1).

Regulatory Status

FDA-approved indication: Livmarli is an ileal bile acid transporter (IBAT) inhibitor indicated for the treatment of cholestatic pruritus in patients with Alagille syndrome (ALGS) 3 months of age and older (1).

Livmarli was not studied in ALGS patients with cirrhosis. Patients should be monitored during treatment for elevations in liver tests. Patients who progress to portal hypertension or experience a hepatic decompensation event should stop taking Livmarli (1).

Livmarli has warnings regarding the following: gastrointestinal adverse reactions, liver test abnormalities, and fat-soluble vitamin (FSV) deficiency. Patients should obtain baseline levels of liver function and fat-soluble vitamins and be monitored for abnormalities in liver function and for FSV deficiency throughout treatment (1).

The Rare Disease Database includes diagnostic criteria for Alagille syndrome, including characteristic symptoms, bile duct paucity, and genetic testing (2).

Section:	Prescription Drugs	Effective Date:	July 1, 2023
Subsection:	Gastrointestinal Agents	Original Policy Date:	October 22, 2021
Subject:	Livmarli	Page:	2 of 4

The safety and effectiveness of Livmarli in patients less than 3 months of age have not been established (1).

Related policies

Bylvay

Policy

This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Livmarli may be considered **medically necessary** if the conditions indicated below are met.

Livmarli may be considered **investigational** for all other indications.

Prior-Approval Requirements

Age 3 months of age or older

Diagnosis

Patient must have the following:

1. Cholestatic pruritus associated with Alagille syndrome (ALGS)
 - a. Diagnosis has been confirmed by **ONE** of the following:
 - i. Genetic testing (e.g., JAGGED1 mutation)
 - ii. Patient has bile duct paucity **AND** at least 3 major clinical features of ALGS (e.g., cholestasis, cardiac defect, skeletal abnormality, ophthalmic abnormality, or characteristic facial features)

AND ALL of the following:

1. **NO** cirrhosis, clinically significant portal hypertension, or hepatic decompensation
2. Inadequate treatment response, intolerance, or contraindication to **ONE** of the following:
 - a. Cholestyramine
 - b. Rifampicin
 - c. Ursodeoxycholic acid (UDCA)

Section:	Prescription Drugs	Effective Date:	July 1, 2023
Subsection:	Gastrointestinal Agents	Original Policy Date:	October 22, 2021
Subject:	Livmarli	Page:	3 of 4

3. Patient has had baseline liver function tests (LFTs) and serum fat-soluble vitamin (FSV) levels performed
4. Prescriber agrees to monitor liver function tests (LFTs) and serum fat-soluble vitamin (FSV) levels during treatment

Prior-Approval *Renewal* Requirements

Age 3 months of age or older

Diagnosis

Patient must have the following:

1. Cholestatic pruritus associated with Alagille syndrome (ALGS)

AND ALL of the following:

1. Improvement in pruritus symptoms, or observed improvement in scratching
2. **NO** cirrhosis, clinically significant portal hypertension, or hepatic decompensation
3. Prescriber agrees to monitor LFTs and serum FSV levels during treatment

Policy Guidelines

Pre-PA Allowance

None

Prior - Approval Limits

Quantity 28.5 mg (3 mL) per day

Duration 12 months

Prior-Approval *Renewal* Limits

Same as above

Rationale

5.50.032

Section:	Prescription Drugs	Effective Date:	July 1, 2023
Subsection:	Gastrointestinal Agents	Original Policy Date:	October 22, 2021
Subject:	Livmarli	Page:	4 of 4

Summary

Livmarli is an ileal bile acid transport (IBAT) inhibitor indicated for the treatment of cholestatic pruritus in patients with Alagille syndrome (ALGS). Current warnings include gastrointestinal adverse reactions, liver test abnormalities, and fat-soluble vitamin deficiency. Livmarli was not evaluated in patients with cirrhosis and treatment should be discontinued permanently if patient progresses to portal hypertension or has a hepatic decompensation event. The safety and effectiveness of Livmarli have not been established in pediatric patients less than 3 months of age (1).

Prior approval is required to ensure the safe, clinically appropriate, and cost-effective use of Livmarli while maintaining optimal therapeutic outcomes.

References

1. Livmarli [package insert]. Foster City, CA: Mirum Pharmaceuticals, Inc.; March 2023.
2. National Organization for Rare Disorders (NORD). Alagille syndrome. Rare Disease Database. <https://rarediseases.org>. Published 2020. Accessed on April 20, 2023.

Policy History

Date	Action
October 2021	Addition to PA
December 2021	Annual review
March 2022	Annual editorial review and reference update. To match Bylvay: Added rifampicin to list of medication options, and added requirement that patient must not have cirrhosis, clinically significant portal hypertension, or hepatic decompensation for approval and renewal requirements. Per SME, added initiation requirement for the diagnosis to be confirmed by genetic testing or by bile duct paucity and at least 3 major clinical features
April 2023	Per PI update, reduced age requirement from 1 year and older to 3 months and older. Changed policy number to 5.50.032
June 2023	Annual review and reference update

Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on June 15, 2023 and is effective on July 1, 2023.