

SPECIALTY GUIDELINE MANAGEMENT

LIVMARLI (maralixibat)

POLICY

I. INDICATIONS

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

FDA-Approved Indication

Livmarli is indicated for the treatment of cholestatic pruritus in patients with Alagille syndrome (ALGS) 1 year of age and older.

All other indications are considered experimental/investigational and not medically necessary.

II. DOCUMENTATION

Submission of the following information is necessary to initiate the prior authorization review:

- A. Initial requests: Current weight, genetic testing results confirming a diagnosis of Alagille syndrome (ALGS) (if applicable), and chart notes or medical records documenting cholestasis.
- B. Continuation requests: Current weight and chart notes or medical records documenting a benefit from therapy (e.g., improvement in pruritus and reduction in serum bile acid).

III. PRESCRIBER SPECIALTIES

This medication must be prescribed by or in consultation with a hepatologist.

IV. CRITERIA FOR INITIAL APPROVAL

Cholestatic pruritus in Alagille syndrome (ALGS)

Authorization of 6 months may be granted for treatment of cholestatic pruritus in Alagille syndrome (ALGS) when all of the following criteria are met:

- A. Member is 1 year of age or older
- B. Member has moderate to severe pruritus and drug-induced pruritus has been ruled out
- C. Member has a diagnosis of ALGS confirmed by either of the following:
 - 1. Genetic testing (i.e., presence of mutation in the *JAG1* or *NOTCH2* gene)
 - 2. Member has both of the following:
 - i. Bile duct paucity
 - ii. Three of the five major clinical features of ALGS:
 - a. Cholestasis
 - b. Cardiac defect (e.g., stenosis of the peripheral pulmonary artery and its branches)

- c. Skeletal abnormality (e.g., butterfly vertebrae)
- d. Ophthalmologic abnormality (e.g., posterior embryotoxon)
- e. Characteristic facial features (e.g., triangular-shaped face with a broad forehead and a pointed chin, bulbous tip of the nose, deeply set eyes, and hypertelorism)
- D. Member has evidence of cholestasis defined as the presence of one or more of the following:
 - 1. Total serum bile acid greater than 3 times the upper limit of normal (ULN) for age
 - 2. Conjugated bilirubin greater than 1 mg/dL
 - 3. Fat soluble vitamin deficiency otherwise unexplainable
 - 4. Gamma-glutamyl transferase (GGT) greater than 3 times ULN for age
 - 5. Intractable pruritis explainable only by liver disease
- E. Member does not have any other concomitant liver disease (e.g., cirrhosis, liver cancer) or history of a hepatic decompensation event (e.g., variceal hemorrhage, ascites, hepatic encephalopathy, portal hypertension)
- F. Member has not received a liver transplant or surgical interruption of the enterohepatic circulation (e.g., partial external biliary diversion surgery)
- G. Member experienced an inadequate treatment response or intolerance to at least two systemic medications for ALGS-related pruritus (e.g., ursodiol at a dose of 20-30 mg/kg/day, rifampin, cholestyramine, naltrexone)
- H. Member's dose will not exceed 380 mcg/kg/day. Member's current weight and prescribed dose must be provided.

V. CONTINUATION OF THERAPY

Authorization of 6 months may be granted for all members (including new members) requesting continuation of therapy when the member is experiencing benefit from therapy (e.g., improvement in pruritis and reduction in serum bile acid). Member's dose will not exceed 380 mcg/kg/day.

VI. QUANTITY LIMIT

Livmarli oral solution 9.5mg/ml has a quantity limit of 28.5mg/3ml per day (90 ml per 30 days).

VII. REFERENCES

1. Livmarli [package insert]. Foster City, CA: Mirum Pharmaceuticals, Inc.; September 2021.
2. Spinner NB, Gilbert MA, Loomes KM, Krantz ID. Alagille syndrome. GeneReviews® [Internet]. December 12, 2019. Last updated December 12, 2019. Accessed October 19, 2021. https://www.ncbi.nlm.nih.gov/books/NBK1273/#__NBK1273_dtls__.
3. Genetic and Rare Diseases Information Center. Alagille syndrome. Rare Disease Database. <https://rarediseases.info.nih.gov>. Updated October 20, 2017. Accessed October 18, 2021.
4. National Organization for Rare Disorders (NORD). Alagille syndrome. Rare Disease Database. <https://rarediseases.org>. Published 2020. Accessed October 18, 2021.