VENTURA COUNTY
HEALTH CARE PLAN

PRIOR AUTHORIZATION POLICY

POLICY: Chenodiol Products Prior Authorization Policy
- Chenodal™ (chenodiol tablets – Travere)
- Ctexli™ (chenodiol tablets – Mirum)

REVIEW DATE: 03/19/2025

OVERVIEW

Chenodiol products are naturally occurring bile acids. **Chenodal** is indicated for patients with **radiolucent stones** in well-opacifying gallbladders, in whom selective surgery would be undertaken except for the presence of increased surgical risk due to systemic disease or age.[1] **Ctexli** is indicated for the treatment of of **cerebrotendinous xanthomatosis** in adults.[2]

Disease Overview

Gallstones

The most widely used treatment for symptomatic gallstones is cholecystectomy.[3] Two naturally occurring bile acids are used in the treatment of gallstones: ursodeoxycholic acid (UrsoForte®, Urso-250®, [ursodiol tablets, generic], Actigall® [ursodiol capsules, generic]) and chenodeoxycholic acid/chenodiol (Chenodal).[4] These agents reduce biliary cholesterol; however, their exact mechanisms differ. Both Chenodal and ursodiol promote the gradual dissolution of radiolucent gallstones over a period of 6 months to 2 years.[3]

Cerebrotendinous xanthomatosis (CTX)

CTX is a lipid storage and bile acid synthesis disorder with various clinical manifestations including juvenile cataracts, tendon xanthomas, premature atherosclerosis, and progressive neurologic disturbance (e.g., ataxia, seizures, psychiatric disorders, and peripheral neuropathy).[5] Other conditions associated with CTX include osteoarthritis, skeletal fractures, pulmonary insufficiency, renal and hepatic calculi, and childhood chronic diarrhea. CTX is caused by pathogenic variants in the cytochrome P450 (*CYP)27A1* gene.[7] This gene encodes for sterol 27-hydroxylase, an enzyme responsible for the conversion of cholesterol to cholic acid and chenodeoxycholic acid (primary bile acids). Mutations in this gene lead to 27-hydroxylase deficiency and a subsequent reduction in primary bile acid synthesis. In CTX, reduced synthesis of cholic and chenodeoxycholic acids results in failed feedback inhibition of cholesterol production, in turn leading to hallmark laboratory findings of the disorder: increased serum cholestanol, a cholesterol metabolite, and elevated urinary bile alcohols, like 23S-pentol.[6] Replacement therapy with chenodiol inhibits abnormal bile acid synthesis and is most effective in reducing elevated plasma cholestanol concentrations and eliminating bile alcohols.[5] As such, a CTX expert treatment panel concluded that treatment with chenodiol is necessary to improve/stabilize prognosis in the majority of patients, regardless of age or the presence of symptoms.[7] Alongside the clinical manifestations, biochemical and molecular genetic tests are typically used to diagnose CTX. Diagnostic biochemical tests include detection of elevated serum cholestanol levels while genetic tests include identification of pathogenic variants in the *CYP27A1* gene.

POLICY STATEMENT

Prior Authorization is recommended for prescription benefit coverage of chenodiol products. All approvals are provided for the duration noted below. Because of the specialized skills required for evaluation and diagnosis of patients treated with chenodiol products as well as the monitoring required for adverse events

and long-term efficacy, approval requires chenodiol products to be prescribed by or in consultation with a physician who specializes in the condition being treated.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

I. Coverage of **Chenodal** is recommended in those who meet the following criteria:

FDA-Approved Indication

1. **Gallstones.** Approve for 1 year if the patient meets ONE of the following (A or B):
   - **A)** Patient has tried an ursodiol product; OR
   - **B)** Patient is currently receiving an ursodiol product.

II. Coverage of **Ctexli** is recommended in those who meet the following criteria:

FDA-Approved Indication

1. **Cerebrotendinous Xanthomatosis.** Approve for 1 year if the patient meets BOTH of the following (A and B):
   - **A)** The diagnosis is established by ONE of the following (i or ii):
     - **i.** Patient has a molecular genetic test demonstrating a pathogenic variant in the cytochrome P450 27A1 *(CYP27A1)* gene; OR
     - **ii.** Patient has a laboratory test demonstrating elevated serum cholestanol levels; AND
   - **B)** The medication is prescribed by or in consultation with a geneticist, neurologist, ophthalmologist, metabolic specialist who treats patients with cerebrotendinous xanthomatosis or a specialist who focuses in the treatment of cerebrotendinous xanthomatosis.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of chenodiol products is not recommended in the following situations:

1. **Combination Therapy with Cholbam (cholic acid capsules)**. There are no efficacy data available to support concomitant use.

2. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES

1. Chenodal™ tablets [prescribing information]. San Diego, CA: Travere; May 2021.
2. Ctexli™ tablets [prescribing information]. Foster City, CA: Mirum; February 2025.
3. Gaby AR. Nutritional approaches to prevention and treatment of gallstones. *Altern Med Rev.* 2009;14(3):258-267.
4. Abraham S, Rivero HG, Erlikh IV, Griffith LF, and Hondamudi VK. Surgical and nonsurgical management of gallstones. *Am Fam Physician*. 2014;89(10):795-802.
5. Moghadasian MH, Salen G, Frohlich JJ, et al. Cerebrotendinous xanthomatosis. *Arch Neurol*. 2002;59:527-529.
6. Lorincz MT, Rainier S, Thomas D and Fink JK. Cerebrotendinous xanthomatosis: possible higher prevalence than previously recognized. *Arch Neurol.* 2005;62:1459-1463.

7. Stelten B, Dotti M., Verrips A, et al. Expert opinion on diagnosing, treating and managing patients with cerebrotendinous xanthomatosis (CTX): a modified Delphi study. *Orphanet J Rare Dis* 16, 353 (2021). Available at: https://doi.org/10.1186/s13023-021-01980-5. Accessed on: March 12, 2025.

HISTORY

Type of Revision	Summary of Changes	Review Date
Annual Revision	No criteria changes.	08/23/2023
Annual Revision	No criteria changes.	08/28/2024
Early Annual Revision	The policy name was changed from "Chenodal" to "Chenodiol Products," with the addition of Ctexli tablets to the policy. Also, divided criteria based on specific agent intended for approval. **Chenodal:** Removed condition of approval for cerebrotendinous xanthomatosis (CTX) from other uses with supportive evidence. **Ctexli:** Added new condition of approval for CTX.	03/19/2025