Clinical Policy: Triheptanoin (Dojolvi)

Reference Number: PA.CP.PHAR.509
Effective Date: 10/2020
Last Review Date: 10/2023

Coding Implications
Revision Log

Description
Triheptanoin (Dojolvi™) is medium-chain triglyceride.

FDA Approved Indication(s)
Dojolvi is indicated as a source of calories and fatty acids for the treatment of pediatric and adult patients with molecularly confirmed long-chain fatty acid oxidation disorders (LC-FAOD).

Policy/Criteria
Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with PA Health & Wellness® that Dojolvi is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Long-Chain Fatty Acid Oxidation Disorders (must meet all)**:**

1. Diagnosis of a LC-FAOD (*see Appendix D for example of diagnostic criteria*);
2. Prescribed by or in consultation with an endocrinologist, geneticist, or metabolic disease specialist;
3. Documentation of member's daily caloric intake (DCI);
4. Total daily dose does not exceed 35% of the member's DCI (*see Appendix D*).

Approval duration: 6 months

B. Other diagnoses/indications

1. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53

II. Continued Therapy

A. Long-Chain Fatty Acid Oxidation Disorders (must meet all)**:**

1. Currently receiving medication via PA Health & Wellness benefit and documentation supports positive response to therapy or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;
2. Member is responding positively to therapy (*see Appendix E*);
3. If request is for a dose increase, new total daily dose does not exceed 35% of the member's DCI (*see Appendix D*).

Approval duration: 12 months

B. Other diagnoses/indications (must meet 1 or 2)**:**

1. Currently receiving medication via PA Health & Wellness benefit and documentation supports positive response to therapy or the Continuity of Care policy (PA.LTSS.PHAR.01) applies.

Approval duration: Duration of request or 6 months (whichever is less); or

2. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53

III. Diagnoses/Indications for which coverage is NOT authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – PA.CP.PMN.53

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

DCI: daily caloric intake
FDA: Food and Drug Administration
LC-FAOD: long-chain fatty acid oxidation disorders
MCT: medium-chain triglycerides

Appendix B: Therapeutic Alternatives

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
MCT oil	0.5 g/kg/day in three divided doses, which can be gradually increased to 1.0 to 1.5 g/kg per day	Varies

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.

Appendix C: Contraindications/Boxed Warnings

None reported

Appendix D: General Information

- Diagnosis of LC-FAOD may be confirmed when at least 2 of the following 3 criteria are met:
  - Disease specific elevations of acylcarnitines on a newborn blood spot or in plasma,
  - Low enzyme activity in cultured fibroblasts,
  - One or more known pathogenic gene mutations
- LC-FAOD examples and associated genetic mutation locations:

LC-FAOD examples	Associated Genes
trifunctional protein deficiency (TFPD)	*HADHA, HADHB*
long-chain 3-hydroxyacyl CoA dehydrogenase deficiency (LCHADD)	*HADHA*
very long-chain acyl CoA dehydrogenase deficiency (VLCADD)	*ACADVL*
carnitine palmitoyltransferase-1 or 2 deficiency (CPT1/2D)	*CPT1A, CPT2*
carnitine-acylcarnitine translocase deficiency (CACTD)	*SLC25A20*

- Dosage calculation:
  - Caloric value of Dojolvi = 8.3 kcal/mL

- Round the total daily dosage to the nearest whole number
- Total Daily Dose (___ mL) = $\frac{\text{Patient's DCI (\# kcal) x Target \# \% dose of DCI}}{\text{8.3 kcal/mL of Dojolvi}}$

Appendix E: Response to Therapy

- In adults, examples may include but are not limited to a reduced incidence of muscle myalgias, rhabdomyolysis, exercise intolerance, cardiac symptoms, hypoglycemia, hepatomegaly symptoms, or vomiting and dehydration precipitated by infections.
- In pediatrics, early treatment may not prevent symptomatology. Positive response can be demonstrated by continued tolerance to Dojolvi administration.

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
LC-FAOD	Target daily dosage of Doljovi is up to 35% of the patient's total prescribed DCI divided into at least four doses and administered at mealtimes or with snacks	35% of patient's DCI

VI. Product Availability

Oral liquid: 500 mL (100% w/w of triheptanoin)

VII. References

1. Dojolvi Prescribing Information. Novato, CA: Ultragenyx Pharmaceutical Inc. November 2021. Available at: https://www.ultragenyx.com/wp-content/uploads/2021/11/DOJOLVI-USPI.pdf#page=1. Accessed July 31, 2023.
2. Gillingham MB, Heitner SB, Martin J, et al. Triheptanoin versus trioctanoin for long-chain fatty acid oxidation disorders: a double blinded, randomized controlled trial. J Inherit Metab Dis. 2017;40(6):831-843.
3. Yamada K and Taketani T. Management and diagnosis of mitochondrial fatty acid oxidation disorders: focus on very-long-chain acyl-CoA dehydrogenase deficiency. Journal of Human Genetics 2019; 64:73-85.
4. Merrit JL 3rd, Norris M, and Kanungo S. Fatty Acid Oxidation Disorders. Ann Transl Med 2018; 6(24):473.

Reviews, Revisions, and Approvals	Date
Policy created	10/2020
4Q 2021 annual review: no significant changes; references reviewed and updated.	10/2021
4Q 2022 annual review: no significant changes; references reviewed and updated.	10/2022
4Q 2023 annual review: no significant changes; references reviewed and updated.	10/2023