# Pharmacy Medical Necessity Guidelines: Nityr™ and Orfadin® (nitisinone)

*Effective: November 10, 2026*

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| Prior Authorization Required | √ | Type of Review – Care Management | |
| Not Covered | | Type of Review – Clinical Review | √ |
| Pharmacy (RX) or Medical (MED) Benefit | Rx | Department to Review | RxUM |
| These pharmacy medical necessity guidelines apply to the following:<br>☒ Tufts Health RITogether – A Rhode Island Medicaid Plan | | **Fax Numbers:**<br>RXUM: 617.673.0988 | |

**Note:** This guideline does not apply to Medicare Members (includes dual eligible Members).

## OVERVIEW

Hereditary tyrosinemia type 1 (HT-1) is a rare genetic metabolic disorder that causes progressive liver disease and renal tubular dysfunction. The disorder is caused by fumarylacetoacetate hydrolase deficiency, the last enzyme in the degradation pathway of the amino acid tyrosine, resulting in the accumulation of toxic metabolites. HT-1 is present at birth and manifests within weeks or months in the failure of the infant to thrive and by symptoms of hepatomegaly, edema, ascites, melena, and hemorrhagic diathesis.

**Nityr** and **Orfadin (nitisinone)** inhibit 4-hydroxyphenylpyruvate dioxygenase and prevent the formation of toxic metabolites involved in hepatic and renal lesions. Because these medications inhibit the breakdown of tyrosine which leads to increase plasma levels of tyrosine, patients receiving therapy must restrict their dietary intake of tyrosine and phenylalanine.

## FOOD AND DRUG ADMINISTRATION-APPROVED INDICATIONS

Nityr tablets and Orfadin capsules and oral solution (nitisinone) are indicated for the treatment of HT-1 in combination with dietary restriction of tyrosine and phenylalanine. Orfadin 2, 5, and 10 mg capsules are available generically and are covered without Prior Authorization. Nitisinone (Orfadin) 20 mg capsules, 4 mg/mL oral solution, and Nitry tablets are nonpreferred.

## COVERAGE GUIDELINES

The plan may authorize coverage of nitisonone (Orfadin) 20 mg capsule and 4 mg/mL solution or Nityr tablets when the following criteria are met and limitations do not apply:

1. Documentation of genetic tyrosinemia Type–1 (hereditary tyrosinemia Type-1)

**AND**

2. Clinical rationale why the Member cannot take nitisinone 2 mg, 5 mg, or 10 mg capsules

## LIMITATIONS

1. Orfadin and Nityr (nitisinone) will not be covered for any indication other than tyrosinemia Type-1 (hereditary tyrosinemia Type-1).
2. Requests for brand-name products, which have AB-rated generics, will be also reviewed according to Brand Name criteria.

## CODES

None

## REFERENCES


1. Barkaoui E, Debray D, Habes D, et al. Favorable outcome of treatment with NTBC of acute liver insufficiency disclosing hereditary tyrosinemia type I. *Arch Pediatr.* 1999 May;6(5):540-4.
2. Holme E, Lindstedt S. Tyrosinaemia type I and NTBC. *J Inherit Metab Dis*. 1998 Aug;21(5):507-17.
3. Lindblad B, Lindstedt S, Steen G. On the enzymic defects in hereditary tryosinemia. *Proc Natl Acad Sci USA*. 1977 Oct;74(10):4641-5.
4. Nityr (nitisinone) [package insert]. Cycle Pharmaceuticals, Ltd: Cambridge, UK; May 2024.
5. Orfadin (nitisinone) [package insert]. Sobi Inc: Waltham, MA; November 2021.


## APPROVAL HISTORY

October 11, 2022: Reviewed by Pharmacy & Therapeutics Committee.

Subsequent endorsement date(s) and changes made:

1. September 12, 2023: No changes.
2. November 4, 2025: No changes.
3. November 10, 2026: No changes.

## BACKGROUND, PRODUCT AND DISCLAIMER INFORMATION

Pharmacy Medical Necessity Guidelines have been developed for determining coverage for plan benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. The plan makes coverage decisions on a case-by-case basis considering the individual member's health care needs. Pharmacy Medical Necessity Guidelines are developed for selected therapeutic classes or drugs found to be safe, but proven to be effective in a limited, defined population of patients or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations. The plan revises and updates Pharmacy Medical Necessity Guidelines annually, or more frequently if new evidence becomes available that suggests needed revisions.

For self-insured plans, coverage may vary depending on the terms of the benefit document. If a discrepancy exists between a Pharmacy Medical Necessity Guideline and a self-insured Member's benefit document, the provisions of the benefit document will govern.

Treating providers are solely responsible for the medical advice and treatment of members. The use of this policy is not a guarantee of payment or a final prediction of how specific claim(s) will be adjudicated. Claims payment is subject to member eligibility and benefits on the date of service, coordination of benefits, referral/authorization and utilization management guidelines when applicable, and adherence to plan policies and procedures and claims editing logic.

Provider Services