

Givlaari® (Givosiran)

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[Instructions for Use](#)

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Related Commercial Policy
<ul style="list-style-type: none"> Provider Administered Drugs – Site of Care
Community Plan Policy
<ul style="list-style-type: none"> Givlaari® (Givosiran)

Coverage Rationale

[See Benefit Considerations](#)

Givlaari is proven and/or medically necessary for the treatment of acute hepatic porphyrias.

Initial Therapy

- Diagnosis of an acute hepatic porphyria (AHP) (i.e., acute intermittent porphyria, hereditary coproporphyria, variegate porphyria, ALA dehydratase deficient porphyria); **and**
- **One** of the following:
 - Patient has active disease as defined in the clinical trial by having at least 2 documented porphyria attacks within the past 6 months; **or**
 - Patient is currently receiving treatment with prophylactic hemin to prevent porphyria attacks**and**
- Provider attestation that the patient’s baseline (before givosiran is initiated) hemin administration requirements (prophylactic or treatment) and rate and/or number of porphyria attacks has been documented; **and**
- Patient has not had a liver transplant; **and**
- Patient will not receive concomitant prophylactic hemin treatment while on Givlaari; **and**
- Prescribed by, or in consultation with, a hematologist, or a specialist with expertise in the diagnosis and management of AHPs; **and**
- Givlaari dosing is in accordance with the United States Food and Drug Administration approved labeling; **and**
- Initial authorization will be for no more than 12 months

Continuation Therapy

- Patient has previously received Givlaari for the treatment of AHP; **and**
- Documentation that the patient has experienced a positive clinical response while on Givlaari; **and**
- Patient has not had a liver transplant; **and**
- Patient will not receive concomitant prophylactic hemin treatment while on Givlaari; **and**
- Prescribed by, or in consultation with, a hematologist, or a specialist with expertise in the diagnosis and management of AHPs; **and**
- Givlaari dosing is in accordance with the United States Food and Drug Administration approved labeling; **and**
- Reauthorization will be for no more than 12 months

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

HCPCS Code	Description
J0223	Injection, givosiran, 0.5 mg

Diagnosis Code	Description
E80.0	Hereditary erythropoietic porphyria
E80.1	Porphyria cutanea tarda
E80.20	Unspecified porphyria
E80.21	Acute intermittent (hepatic) porphyria
E80.29	Other porphyria

Background

Acute hepatic porphyria refers to a family of ultra-rare genetic diseases that lead to deficiency in one of the enzymes of the heme biosynthesis pathway in the liver. Severe, unexplained abdominal pain is the most common symptom, which can be accompanied by limb, back, or chest pain, nausea, vomiting, confusion, anxiety, seizures, weak limbs, constipation, diarrhea, or dark or reddish urine. Long-term complications and comorbidities of AHP can include hypertension, chronic kidney disease or liver disease including hepatocellular carcinoma. Currently, the population of AHP patients with diagnosed, active disease in the U.S. and Europe is estimated to be approximately 3,000.

Givosiran is a double-stranded small interfering RNA that causes degradation of aminolevulinic acid synthase 1 (ALAS1) mRNA in hepatocytes through RNA interference, reducing the elevated levels of liver ALAS1 mRNA. This leads to reduced circulating levels of neurotoxic intermediates aminolevulinic acid (ALA) and porphobilinogen (PBG), factors associated with attacks and other disease manifestations of AHP.

Benefit Considerations

Some Certificates of Coverage allow for coverage of experimental/investigational/unproven treatments for life-threatening illnesses when certain conditions are met. The member specific benefit plan document must be consulted to make coverage decisions for this service. Some states mandate benefit coverage for off-label use of medications for some diagnoses or under some circumstances when certain conditions are met. Where such mandates apply, they supersede language in the benefit document or in the medical or drug policy. Benefit coverage for an otherwise unproven service for the treatment of serious rare diseases may occur when certain conditions are met. Refer to the Policy and Procedure addressing the treatment of serious rare diseases.

Clinical Evidence

The efficacy of Givlaari was established in the Phase 3 ENVISION trial, a randomized, double-blind, placebo-controlled multicenter study in 94 patients with AHP (89 patients with acute intermittent porphyria (AIP), 2 patients with variegate porphyria (VP), 1 patient with hereditary coproporphyrinemia (HCP), and 2 patients with no identified mutation). Inclusion criteria specified a minimum of 2 porphyria attacks requiring hospitalization, urgent healthcare visit, or intravenous hemin administration at home in the 6 months prior to study entry. Hemin use during the study was permitted for the treatment of acute porphyria attacks. Patients were randomized to receive Givlaari or placebo during the 6-month double-blind period. Efficacy in the 6-month double-blind period was measured by the rate of porphyria attacks that required hospitalizations, urgent healthcare visit, or intravenous hemin administration at home. The mean rate of porphyria attacks was 1.9 and 6.5 for Givlaari and placebo, respectively. This represented a 70% (95% CI: 60, 80) reduction in porphyria attacks for patients receiving Givlaari vs. placebo. The mean number of days of hemin use was 4.7 (95% CI: 2.8, 7.9) with Givlaari vs. 12.8 (95% CI: 7.6, 21.4) with placebo.¹

Professional Societies

In 2023, the American Gastroenterological Association (AGA) published a clinical practice update on the diagnosis and management of acute hepatic porphyrias. In regard to givosiran, a best practice advice statement in the expert review states that prophylactic heme therapy or givosiran, administered in an outpatient setting, should be considered in patients with recurrent attacks (4 or more per year).

U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Givlaari (givosiran) is an aminolevulinatase synthase 1-directed small interfering RNA indicated for the treatment of adults with acute hepatic porphyria (AHP). The recommended dose of Givlaari is 2.5 mg/kg administered via subcutaneous injection once monthly. Dosing is based on actual body weight.

References

1. Givlaari [package insert]. Cambridge, MA:Alnylam Pharmaceuticals, Inc. ,April 2024.
2. ENVISION: A Study to Evaluate the Efficacy and Safety of Givosiran (ALN-AS1) in Patients With Acute Hepatic Porphyrias (AHP). Clinicaltrials.gov website: <https://clinicaltrials.gov/ct2/show/NCT03338816?term=givosiran&cond=porphyria&draw=1&rank=5>. Accessed February 7, 2025.
3. Sardh E, Harper P, Balwani M, et al. Phase 1 Trial of an RNA Interference Therapy for Acute Intermittent Porphyria. *N Engl J Med*. 2019 Feb 7;380(6):549-558.
4. Balwani M, Wang B, Anderson KE, et al. Acute hepatic porphyrias: Recommendations for evaluation and long-term management. *Hepatology*. 2017 Oct;66(4):1314-1322.
5. Stölzel U, Doss MO, Schuppan D. Clinical Guide and Update on Porphyrias. *Gastroenterology*. 2019 Aug; 157(2):365-381.
6. Wang B, Bonkovsky HL, Lim JK, Balwani M. AGA Clinical Practice Update on Diagnosis and Management of Acute Hepatic Porphyrias: Expert Review. *Gastroenterology*. 2023;164(3):484-491. doi:10.1053/j.gastro.2022.11.034.

Policy History/Revision Information

Date	Summary of Changes
04/01/2025	Supporting Information <ul style="list-style-type: none">• Updated <i>Clinical Evidence</i> and <i>References</i> sections to reflect the most current information• Archived previous policy version 2024D0087G

Instructions for Use

This Medical Benefit Drug Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard plan. In the event of a conflict, the member specific benefit plan document governs. Before using this policy, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Benefit Drug Policy is provided for informational purposes. It does not constitute medical advice.

This Medical Benefit Drug Policy may also be applied to Medicare Advantage plans in certain instances. In the absence of a Medicare National Coverage Determination (NCD), Local Coverage Determination (LCD), or other Medicare coverage guidance, CMS allows a Medicare Advantage Organization (MAO) to create its own coverage determinations, using objective evidence-based rationale relying on authoritative evidence ([Medicare IOM Pub. No. 100-16, Ch. 4, §90.5](#)).

UnitedHealthcare may also use tools developed by third parties, such as the InterQual® criteria, to assist us in administering health benefits. UnitedHealthcare Medical Benefit Drug Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.