

Orphan Drugs (Rare Diseases)

PAM – 034

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|------------------------------|--------------------------------------|-----------------------|------------|
| Iowa Medicaid Program | Prior Authorization | Effective Date | 07/16/2021 |
| Revision Number | 6 | Last Reviewed | 01/16/2026 |
| Reviewed By | Medicaid Medical Director | Next Review | 01/15/2027 |
| Approved By | Medicaid Clinical Advisory Committee | Approved Date | 07/16/2021 |

Overview

The purpose of this policy is to support medically appropriate use of select orphan drugs based on FDA-approved labeling. Medications included in this policy are listed here in alphabetical order (drug-specific information is located in [Appendix A](#)).

| Brand | HCPCS | Code Description | Indication | Effective Date |
|-----------|-------|------------------------------------|---|----------------|
| Brineura® | J0567 | Injection, cerliponase alfa, 1 mg | CLN2: neuronal ceroid lipofuscinosis type 2 | 01/21/2022 |
| Cablivi® | C9047 | Injection, caplacizumab-yhdp, 1 mg | aTTP: acquired thrombotic thrombocytopenic purpura | 07/01/2021 |
| Givlaari® | J0223 | Injection, givosiran, 0.5 mg | AHP: acute hepatic porphyria | 07/01/2021 |

Descriptive Narrative

The 1983 Orphan Drug Act amended the Federal Food, Drug, and Cosmetic Act to facilitate the development of drugs for rare diseases and conditions. The Orphan Drug Designation Program provides orphan status to drugs and biologics which are defined as those intended for the safe and effective treatment, diagnosis, or prevention of rare diseases/disorders that affect fewer than 200,000 people in the United States, or that affect more than 200,000 persons but are not expected to recover the costs of developing and marketing a treatment drug.¹

An orphan designation may be assigned by the FDA if criteria are met, as outlined in 21 CFR 316.20 and 316.21.² The granting of an orphan drug designation does not alter the standard regulatory requirements and process for obtaining market approval. Safety and effectiveness of a drug must be established through adequate and well-controlled studies.

The FDA Office of Orphan Products Development (OOPD) supports and advances the development and evaluation of new treatments for rare diseases by:

- Working with sponsors to determine if their products meet the criteria for certain categories (e.g., orphan drug, rare pediatric disease, or humanitarian use device designations).
- Provides orphan status to drugs and biologics which are intended to treat, diagnose or prevent rare diseases that affect fewer than 200,000 people in the U.S.
- Designates medical devices that intend to benefit patients in treating or diagnosing a disease or condition that affects fewer than 8,000 individuals in the U.S. per year.
- Works with the Office of Pediatric Therapeutics and product centers to determine rare pediatric disease designation for drugs or biologics that meet certain criteria. Sponsors of such product applications may qualify for a priority review voucher, which can be redeemed to receive a priority review of a subsequent marketing application for a different product.
- Awards grants to provide funding for clinical trials and natural history studies that advance rare disease medical product development.
- Awards grants that provide funding to develop nonprofit consortia to facilitate pediatric medical device development.
- Awards grants and contracts to use in the development of tools, methods and processes to characterize the natural history of rare neurodegenerative diseases, to identify molecular targets for these diseases, and to increase efficiency and productivity of new treatment development.³

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Criteria

Prior authorization is required. Criteria are specific to the individual medication.

Brineura® (cerliponase alfa)

Brineura® is considered medically necessary when **ALL** of the following are met:

1. Diagnosis of neuronal ceroid lipofuscinosis type 2 (CLN2), as documented by **AT LEAST ONE** of the following:
 - a. Both of the following:
 - i. Demonstration of deficient tripeptidyl peptidase-1 (TPP1) enzyme activity (in leukocytes, fibroblasts, or dried blood spots); **AND**
 - ii. Molecular analysis that detects one pathogenic variant on each parent allele of the TPP1/CLN2 gene; **OR**
 - b. If it is not possible to perform both analyses, either demonstration of deficient TPP1 enzyme activity in leukocytes or fibroblasts, or detection of two pathogenic variants *in trans* is diagnostic for CLN2 disease; **AND**
2. Treatment is being given to slow the loss of ambulation; **AND**
3. Member weighs \geq 2.5 kg (physiologic immaturity may increase risk of serious and clinically significant adverse reactions); **AND**
4. Member meets **BOTH** of the following criteria on the CLN2 Clinical Rating Scale (see [Appendix A](#)):
 - a. A combined score of 3 to 6 on the motor and language domains; **AND**
 - b. A score of at least 1 in each of these two domains; **AND**
5. Prescribed by, or in consultation with, a neurologist; **AND**
6. Request meets one of the following (a or b):
 - a. Regimen prescribed is based on member's current age and does not exceed 300 mg every 2 weeks; or
 - b. Regimen is supported by clinical practice guidelines. Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

Brineura® is considered medically necessary for continuation of therapy when **ALL** of the following are met:

1. Member is currently receiving medication through the Iowa Medicaid benefit or has previously met initial approval criteria; **AND**
2. Member demonstrates a positive clinical response to therapy as evidenced by a score of 1 or higher in the motor domain of the CLN2 Clinical Rating Scale (see [Appendix A](#)); **AND**
3. Treatment is being given to slow the loss of ambulation; **AND**
4. Prescribed by, or in consultation with, a neurologist; **AND**
5. Request meets one of the following (a or b):
 - a. Regimen prescribed is based on member's current weight and does not exceed 300 mg every 2 weeks; or
 - b. Regimen is supported by clinical practice guidelines. Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

Cablivi® (caplacizumab-yhdp)

Cablivi® is considered medically necessary when **ALL** of the following are met:

1. Diagnosis of acquired thrombotic thrombocytopenic purpura (aTTP); **AND**
2. Prescribed by, or in consultation with, a hematologist; **AND**
3. Member meets **ONE** of the following (a or b):
 - a. Cablivi® will be used in combination with plasma exchange (PEX) and immuno-suppressant therapy (e.g., corticosteroids, rituximab) for the duration of the daily PEX; **OR**
 - b. Member is using for 30 days after completion of daily PEX and has not had more than two recurrences of aTTP while on Cablivi® therapy; **AND**
4. Regimen prescribed is supported by clinical practice guidelines.

Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

Cablivi® is considered medically necessary for continuation of therapy when **ALL** of the following are met:

1. Member is currently receiving medication through the Iowa Medicaid benefit or has previously met initial approval criteria; **AND**
2. Member has completed the initial treatment course with Cablivi for treatment of acquired thrombotic thrombocytopenic purpura (aTTP) [daily treatment during plasma exchange (PEX)/immunosuppressive therapy, followed by 30 days of daily treatment after the last day of PEX with no more than two recurrences/exacerbations of aTTP while on therapy with Cablivi®]; **AND**
3. Member displays positive response to therapy but has confirmed signs of persistent underlying disease; **AND**
4. Member has not received more than 58 days of Cablivi® therapy after the last dose of daily PEX; **AND**
5. Prescribed by, or in consultation with, a hematologist; **AND**
6. Regimen prescribed is supported by clinical practice guidelines.

Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

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Givlaari® (givosiran)

Givlaari® is considered medically necessary when **ALL** of the following are met:

1. Diagnosis of an acute hepatic porphyria (AHP) (e.g., acute intermittent porphyria, hereditary coproporphyria, variegate porphyria, or ALA dehydratase-deficient porphyria); **AND**
2. Member is 18 years of age or older; **AND**
3. Documentation that member meets **AT LEAST ONE** of the following:
 - a. Has experienced a minimum of two porphyria attacks within the past 6 months which required hospitalization, an urgent healthcare visit, or intravenous (IV) hemin administration at home; **AND/OR**
 - b. Is currently on prophylactic hemin treatment due to history of severe or frequent porphyria attacks; **AND**
4. Member will not receive concomitant *prophylactic* hemin treatment while on Givlaari® (note: use of hemin for treatment of *acute* porphyria attacks is appropriate); **AND**
5. Prescribed by, or in consultation with, a gastroenterologist, hematologist, hepatologist, or neurologist; **AND**
6. Request meets one of the following (a or b):
 - a. Regimen prescribed does not exceed 2.5 mg/kg once monthly; or
 - b. Regimen is supported by clinical practice guidelines. Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

Givlaari® is considered medically necessary for continuation of therapy when **ALL** of the following are met:

1. Member is currently receiving medication through the Iowa Medicaid benefit or has previously met initial approval criteria; **AND**
2. Evidence of positive clinical response to therapy, as documented by:
 - a. A reduction in the rate and/or number of porphyria attacks; **AND**
 - b. Improvement of signs/symptoms of acute hepatic porphyrias; **AND**
 - c. Reduction in hemin administration requirements (treatment doses), if applicable; **AND**
3. Prescribed by, or in consultation with, a gastroenterologist, hematologist, hepatologist, or neurologist; **AND**
4. Member has not had a liver transplant or liver transplant is not anticipated; **AND**
5. Member will not receive concomitant *prophylactic* hemin treatment while on Givlaari® (note: use of hemin for treatment of *acute* porphyria attacks is appropriate); **AND**
6. Request meets one of the following (a or b):
 - a. Regimen prescribed does not exceed 2.5 mg/kg once monthly; or
 - b. Regimen is supported by clinical practice guidelines. Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

Approval Duration and Quantity Limits

| Brand | Quantity Limits | Approval Duration |
|-----------|--|--|
| Brineura® | Dosing based on age, not to exceed 300 mg every 2 weeks | Initial request and continuation: up to 12 months per request |
| Cablivi® | Daily limit: 22 mg on day 1, then 11 mg/day on subsequent days. Limited to no more than 58 days after last daily plasma exchange (PEX). | <u>Initial request:</u> may approve for one course of treatment (beginning at onset of PEX therapy and continuing for 30 days after last daily PEX). <u>Continuation:</u> up to 28 additional days (only approved if Member is responding to therapy but has confirmed signs of persistent underlying disease). |
| Givlaari® | Limited to 2.5 mg/kg once monthly, based on actual body weight. | <u>Initial request:</u> up to 6 months <u>Continuation:</u> up to 12 months per request. |

Coding and Product Information

The following list(s) of codes and product information are provided for reference purposes only and may not be all inclusive. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment, nor does the exclusion of a code imply that its association to the HCPCS code is inappropriate.

| Brand Name | HCPCS | Description |
|------------|-------|--|
| n/a | 85397 | Coagulation and fibrinolysis, functional activity, not otherwise specified (e.g., ADAMTS-13), each analyte |
| Brineura® | J0567 | Injection, cerliponase alfa, 1 mg |
| Cablivi® | C9047 | Injection, caplacizumab-yhdp, 1 mg |
| Givlaari® | J0223 | Injection, givosiran, 0.5 mg |

| Brand Name | ICD-10 | Description |
|------------|--------|---|
| Brineura® | E75.4 | Neuronal ceroid lipofuscinosis |
| Cablivi® | M31.1 | Thrombotic microangiopathy (there is no specific code for aTTP) |
| Givlaari® | E80.20 | Unspecified porphyria |
| | E80.21 | Acute intermittent (hepatic) porphyria |
| | E80.29 | Other porphyria |

| Brand Name | NDC (Strength) | Labeler | Dosage | Pkg Size | Pkg Qty | Units /Pkg |
|------------|--|---------------------------------|--------|----------|---------|------------|
| Brineura® | 68135-0811-02 (2 vials of 150 mg/5 mL) | BioMarin Pharmaceutical (68135) | 1 mg | 1 | EA | 300 |
| Cablivi® | 58468-0225-01 (carton) 58468-0227-01 (SDV, 11 mg) | Genzyme Corporation (58468) | 1 mg | 1 | EA | 11 |
| Givlaari® | 71336-1001-01 (SDV, 189 mg/mL) | Alnylam Pharmaceuticals (71336) | 0.5 mg | 1 | EA | 378 |

* SDV = single-dose vial

Appendix A: Product-specific indications, dosing, categories, and packaging

| Brineura® (cerliponase alfa) ⁴ | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-----------|---------------|-----------|---------------|---------------------|--------|--------|------------|----------------------|--------|------|-----------|----------------------|---------------|--------|--------|-----------|--|------------------|--------|-------|-------------------|--------|-------|-----------|
| Pharmacologic Category: | Hydrolytic lysosomal n-terminal tripeptidyl peptidase | | | | | | | | | | | | | | | | | | | | | | | | | |
| FDA-Approved Indication(s): | Indicated to slow the loss of ambulation in pediatric patients with neuronal ceroid lipofuscinosis type 2 (CLN2 disease), also known as tripeptidyl peptidase 1 (TPP1) deficiency | | | | | | | | | | | | | | | | | | | | | | | | | |
| How Supplied: | Supplied as a part of a kit containing 2 vials of Brineura® injection (150 mg/5 mL each) and 1 vial (5 mL) of an intraventricular electrolytes injection | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dosage and Administration: | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> Administration should be supervised by a healthcare provider knowledgeable in the management of hypersensitivity reactions, including anaphylaxis. Initiate in a healthcare setting with appropriate medical monitoring and support measures, including access to cardiopulmonary resuscitation equipment. Should be administered by or under the supervision of a physician experienced in intraventricular administration via a surgically implanted intraventricular access device system which consists of the reservoir and catheter components. Dose is based on patient age and is administered once every other week by intraventricular infusion. Intraventricular access device reservoir should be replaced prior to 4 years of single-puncture administrations. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Brineura Dose, Volume, and Infusion Rate by Age</p> <ul style="list-style-type: none"> Dose is administered once every other week by intraventricular infusion. Administer Brineura® first followed by infusion of the Intraventricular Electrolytes. <table border="1"> <thead> <tr> <th>Age Group</th> <th>Dose</th> <th>Volume</th> <th>Infusion Rate</th> </tr> </thead> <tbody> <tr> <td>Birth to < 6 months</td> <td>100 mg</td> <td>3.3 mL</td> <td>1.25 mL/hr</td> </tr> <tr> <td>6 months to < 1 year</td> <td>150 mg</td> <td>5 mL</td> <td>2.5 mL/hr</td> </tr> <tr> <td>1 year to < 2 years:</td> <td>First 4 doses</td> <td>200 mg</td> <td>6.7 mL</td> <td rowspan="2">2.5 mL/hr</td> </tr> <tr> <td></td> <td>Subsequent doses</td> <td>300 mg</td> <td>10 mL</td> </tr> <tr> <td>2 years and older</td> <td>300 mg</td> <td>10 mL</td> <td>2.5 mL/hr</td> </tr> </tbody> </table> | | Age Group | Dose | Volume | Infusion Rate | Birth to < 6 months | 100 mg | 3.3 mL | 1.25 mL/hr | 6 months to < 1 year | 150 mg | 5 mL | 2.5 mL/hr | 1 year to < 2 years: | First 4 doses | 200 mg | 6.7 mL | 2.5 mL/hr | | Subsequent doses | 300 mg | 10 mL | 2 years and older | 300 mg | 10 mL | 2.5 mL/hr |
| Age Group | Dose | Volume | Infusion Rate | | | | | | | | | | | | | | | | | | | | | | | |
| Birth to < 6 months | 100 mg | 3.3 mL | 1.25 mL/hr | | | | | | | | | | | | | | | | | | | | | | | |
| 6 months to < 1 year | 150 mg | 5 mL | 2.5 mL/hr | | | | | | | | | | | | | | | | | | | | | | | |
| 1 year to < 2 years: | First 4 doses | 200 mg | 6.7 mL | 2.5 mL/hr | | | | | | | | | | | | | | | | | | | | | | |
| | Subsequent doses | 300 mg | 10 mL | | | | | | | | | | | | | | | | | | | | | | | |
| 2 years and older | 300 mg | 10 mL | 2.5 mL/hr | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Age Precautions</p> <ul style="list-style-type: none"> Not recommended for patients < 37 weeks post-menstrual age (gestational age at birth plus post-natal age) or those weighing < 2.5 kg due to physiologic immaturity which may increase risk of serious and clinically significant adverse reactions. Patients less than 3 years of age may be at increased risk for developing hypersensitivity reactions with Brineura® use compared to patients 3 years of age and older. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benefit Category: Medical | | | | | | | | | | | | | | | | | | | | | | | | | | |

BOXED WARNING: HYPERSENSITIVITY REACTIONS INCLUDING ANAPHYLAXIS

Patients treated with enzyme replacement therapies have experienced life-threatening hypersensitivity reactions, including anaphylaxis. Anaphylaxis has occurred during the early course of enzyme replacement therapy and after extended duration of therapy.

Initiate Brineura® in a healthcare setting with appropriate medical monitoring and support measures, including access to cardiopulmonary resuscitation equipment. If a severe hypersensitivity reaction (e.g., anaphylaxis) occurs, discontinue Brineura® and immediately initiate appropriate medical treatment, including use of epinephrine. Inform patients of the symptoms of life-threatening hypersensitivity reactions, including anaphylaxis and to seek immediate medical care should symptoms occur.

CLN2 disease (Neuronal Ceroid Lipofuscinosis Type 2), previously referred to as late-infantile neuronal ceroid lipofuscinosis (LINCL) (OMIM # 204500) due to its usual presentation, is an autosomal recessive, ultra-rare, neurodegenerative lysosomal storage disease caused by deficiency of the lysosomal enzyme tripeptidyl peptidase 1 (TPP1). Mutations associated with CLN2 disease result in either reduced activity or inactivation of TPP1, causing the accumulation of lysosomal storage materials normally metabolized by this enzyme in the central nervous system. Early symptoms include new-onset seizures and ataxia, typically in combination with a history of language delay, but over time, these accumulations result in neurodegeneration, loss of neurological function, and ultimately death.

Multiple forms of CLN2 disease exist. In the more common form of the disease patients present with slowing of development and psychomotor regression, language delay and typically followed by epilepsy between the ages of 2 and 4, subsequently developing retinal degeneration and blindness by 5 or 6 years of age. Life expectancy is between 6 years to the early teenage years. Around 13 percent of patients have a later symptom onset, more protracted or mild disease course (sometimes with the absence of epilepsy and preservation of visual function), and a longer life expectancy.

To confirm a clinical suspicion of CLN2 disease, the recommended gold standard for laboratory diagnosis is the demonstration of deficient TPP1 enzyme activity (in leukocytes, fibroblasts, or dried blood spots) and the identification of pathogenic variants in both alleles of the TPP1/CLN2 gene. When it is not possible to perform both analyses, either demonstration of deficient TPP1 enzyme activity in leukocytes or fibroblasts, or detection of two pathogenic variants *in trans* is diagnostic for CLN2 disease.^{5,6}

Cerliponase alfa (rhTPP1) (Brineura[®]), a proenzyme, slows the decline of motor and language function in CLN2 patients. It is taken up by target cells in the CNS and translocated to the lysosomes, where it is activated. The activated proteolytic form of rhTPP1 cleaves peptides from the N-terminus of proteins.

| CLN2 Clinical Rating Scale ⁷ | |
|--|---|
| Scale Domain | Description |
| Motor | 3 Grossly normal gait. No prominent ataxia, no pathologic falls. |
| | 2 Independent gait, as defined by ability to walk without support for 10 steps. Will have obvious instability and may have intermittent falls. |
| | 1 Requires external assistance to walk or can crawl only. |
| | 0 Can no longer walk or crawl. |
| Language | 3 Apparently normal language. Intelligible and grossly age appropriate. No decline noted yet. |
| | 2 Language has become recognizably abnormal: some intelligible words may form short sentences to convey concepts, requests, or needs. This score signifies a decline from a previous level of ability (from the individual maximum reached by the child). |
| | 1 Hardly understandable. Few intelligible words. |
| | 0 No intelligible words or vocalizations. |

| Cablivi® (caplacizumab-yhdp) ⁸ | |
|---|---|
| Pharmacologic Category: | Blood Products and Modifiers; Platelet Modifying Agents; von Willebrand factor (vWF)-directed antibody fragment |
| FDA-Approved Indication(s): | Treatment of adult patients with acquired thrombotic thrombocytopenic purpura (aTTP), in combination with plasma exchange (PEX) and immunosuppressive therapy |
| How Supplied: | <ul style="list-style-type: none"> • Lyophilized powder in a single-dose vial (11 mg per vial) • Packaging includes a 1 mL sterile water for injection diluent |
| Dosage and Administration: | <ul style="list-style-type: none"> • Day 1: 11 mg IV bolus at least 15 minutes prior to plasma exchange (PEX) and 11 mg SC injection after completion of PEX • Subsequent (during daily PEX): 11 mg SC injection once daily following PEX • Treatment after PEX period: 11 mg SC injection once daily continuing for 30 days following the last daily PEX. If after initial treatment course, signs of persistent underlying disease remain present, treatment may be extended for a maximum of 28 days. |
| Benefit Category: | Medical |

Thrombotic thrombocytopenic purpura (TTP) is a rare but potentially fatal blood disorder. TTP may be caused by inherited severe deficiency of plasma ADAMTS13 activity resulting from mutations in *ADAMTS13*, referred to as hereditary or congenital TTP (or cTTP); more commonly, TTP is acquired and due to autoantibodies that inhibit plasma ADAMTS13 activity, referred to as immune-mediated or acquired TTP (aTTP or iTTP). More than 95 percent of all TTP cases are iTTP, whereas cTTP accounts for less than 5 percent of cases.⁹

Cablivi® is a von Willebrand Factor (vWF)-directed antibody fragment. It targets the A1-domain of vWF and inhibits the interaction between vWF and platelets, thereby reducing both vWF-mediated platelet adhesion and platelet consumption.

| Givlaari® (givosiran) ¹⁰ | |
|-------------------------------------|---|
| Pharmacologic Category: | Aminolevulinate synthase 1-directed small interfering ribonucleic acid (siRNA) |
| FDA-Approved Indication(s): | Treatment of adults with acute hepatic porphyria (AHP) |
| How Supplied: | 1 mL single-dose vial, containing 189 mg/mL of givosiran |
| Dosage and Administration: | 2.5 mg/kg SC injection once monthly (administration by a healthcare professional only, with medical support to appropriately manage anaphylactic reactions) |
| Benefit Category: | Medical |

Acute hepatic porphyrias (AHPs) are a family of rare inherited disorders characterized by enzyme dysfunctions in the hepatic pathway of heme biosynthesis. In AHPs, accumulation of the neurotoxic porphyrin precursors delta-aminolevulinic acid and porphobilinogen, caused by enhanced activity of hepatic aminolevulinate synthase 1 (ALAS1), is associated with acute, potentially life-threatening neurovisceral attacks.¹¹ The four types of AHPs are 5-aminolevulinic acid (ALA) dehydratase deficiency porphyria, acute intermittent porphyria, hereditary coproporphyria, and variegate porphyria. Their diagnoses are often missed or delayed because the clinical symptoms mimic other more common disorders.¹²

Givlaari® is a small interfering RNA (siRNA) therapeutic that reduces hepatic activity of ALAS1 and decreases accumulation of neurotoxic porphyrin precursors in patients with AHPs, ultimately reducing the number of acute attacks and improving symptoms and quality of life between attacks.

Compliance

1. Should conflict exist between the policy and applicable statute, the applicable statute shall supersede.
2. Federal and State law, as well as contract language, including definitions and specific contract provisions or exclusions, take precedence over medical policy and must be considered first in determining eligibility for coverage.
3. Medical technology is constantly evolving, and Iowa Medicaid reserves the right to review and update medical policy on an annual or as-needed basis.

Medical necessity guidelines have been developed for determining coverage for member benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. Medical necessity guidelines are developed for selected physician-administered medications found to be safe and proven to be effective in a limited, defined population 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. Criteria are revised and updated annually, or more frequently if new evidence becomes available that suggests needed revisions.

References

¹ Designating an Orphan Product: Drugs and Biological Products. U.S. Food and Drug Administration (FDA). Available online: www.fda.gov/industry/medical-products-rare-diseases-and-conditions/designating-orphan-product-drugs-and-biological-products. Content current as of: August 12, 2024. Accessed November 14, 2025.

² Orphan Drugs, 21 C.F.R. §316.

³ U.S. Food and Drug Administration (FDA): Office of Orphan Products Development (OOPD). Available online: www.fda.gov/about-fda/office-chief-medical-officer/office-orphan-products-development. Content current as of: October 1, 2024. Accessed November 14, 2025.

⁴ Brineura® prescribing information (07/2024). BioMarin Pharmaceutical, Inc.: Novato, CA. Available online: hcp.biomarin.com/en-us/brineura. Accessed October 27, 2025.

⁵ Fietz M, AlSayed M, et al. Diagnosis of neuronal ceroid lipofuscinosis type 2 (CLN2 disease): Expert recommendations for early detection and laboratory diagnosis. *Mol Genet Metab.* 2016 Sep;119(1-2):160-7. Epub 2016 Jul 25. PMID: 27553878.

⁶ Mole SE, Schulz A, et al. Guidelines on the diagnosis, clinical assessments, treatment and management for CLN2 disease patients. *Orphanet J Rare Dis.* 2021 Apr 21;16(1):185. PMID: 33882967; PMCID: PMC8059011.

⁷ Wyrwich KW, Schulz A, Nickel M, et al. An Adapted Clinical Measurement Tool for the Key Symptoms of CLN2 Disease. *Journal of Inborn Errors of Metabolism and Screening.* January 2018.

⁸ Cablivi® prescribing information (04/2024). Genzyme Corporation: Cambridge, MA. Available online: pro.campus.sanofi/us. Accessed October 27, 2025.

⁹ Zheng XL, Vesely SK, et al. ISTH guidelines for the diagnosis of thrombotic thrombo-cytopenic purpura. *J Thromb Haemost.* 2020 Oct;18(10). Epub 2020 Sep 11. Erratum in: *J Thromb Haemost.* 2021 May;19(5): 1381. PMID: 32914582.

¹⁰ Givlaari® prescribing information (09/2025). Alnylam Pharmaceuticals, Inc.: San Diego, CA. Available online: www.givlaarihcp.com. Accessed October 27, 2025.

¹¹ Ricci A, Ventura P. Givosiran for the treatment of acute hepatic porphyria. *Expert Rev Clin Pharmacol.* 2022 Apr;15(4):383-393. Epub 2022 May 11. PMID: 35531651.

¹² Wang B, Rudnick S, Cengia B, Bonkovsky HL. Acute Hepatic Porphyrias: Review and Recent Progress. *Hepatol Commun.* 2018 Dec 20;3(2):193-206. PMID: 30766957.

Development of utilization management criteria may also involve research into other state Medicaid programs, other payer policies, consultation with experts and review by the Medicaid Clinical Advisory Committee (CAC). These sources may not be referenced individually unless they are specifically published and are otherwise applicable to the criteria at issue.

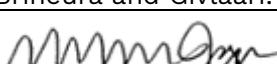
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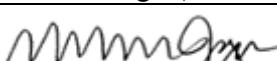
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| Change Date | Changed By | Description of Change | Version |
|------------------|------------|---|---------|
| 01/16/2026 | CAC | Annual review. Updated references. | 6 |
| Signature | |  | |

| Change Date | Changed By | Description of Change | Version |
|------------------|------------|---|---------|
| 01/17/2025 | CAC | Annual review. Added description of FDA Office of Products Development (OOPD) to the Descriptive Narrative. Brineura: Added new boxed warning regarding hypersensitivity reactions. Updated criteria and Appendix A information, aligning with expanded FDA-approved indication to slow loss of ambulation of pediatric patients (removes minimum age of 3 years; removes "symptomatic" designation; removes "late infantile" subtype specification of CLN2). Updated dosing and administration in Overview table. Added clinical information on disease progression and gold standard for diagnosis. No changes for Cablivi or Givlaari. Both have updated prescribing information from manufacturer, but changes do not include any change in indication or dosing. | 5 |
| Signature | |  | |

| Change Date | Changed By | Description of Change | Version |
|------------------|------------|---|---------|
| 01/19/2024 | CAC | Annual review. Added dosing information into criteria for Brineura and Givlaari. | 4 |
| Signature | |  | |

| Change Date | Changed By | Description of Change | Version |
|------------------|------------|--|---------|
| 01/20/2023 | CAC | Brineura: Diagnosis criteria 1, changed to "AND/OR" to allow either a or b, instead of requiring both. Cablivi: added CPT 85397 to Coding and Product Information. Givlaari: added gastroenterologist, hepatologist, or neurologist to specialty types (in addition to existing specialist: hematologist). | 3 |
| Signature | |  | |

Criteria Change History (continued)

| Change Date | Changed By | Description of Change | Version |
|-------------|------------|---------------------------|---------|
| 01/21/2022 | CAC | Brineura added to policy. | 2 |

Signature

William (Bill) Jagiello, DO



| Change Date | Changed By | Description of Change | Version |
|-------------|------------|--------------------------|---------|
| 07/16/2021 | CAC | Criteria implementation. | 1 |

Signature

William (Bill) Jagiello, DO



CAC = Medicaid Clinical Advisory Committee