

## Clinical Policy: Cerliponase alfa (Brineura)

Reference Number: PA.CP.PHAR.338

Effective Date: 01/2018

Last Review Date: 07/2023

[Revision Log](#)

### Description

Cerliponase alfa (Brineura<sup>®</sup>) is a hydrolytic lysosomal N-terminal tripeptidyl peptidase.

### FDA approved indication

Brineura is indicated to slow the loss of ambulation in symptomatic pediatric patients 3 years of age and older with late infantile neuronal ceroid lipofuscinosis type 2 (CLN2), also known as tripeptidyl peptidase 1 (TPP1) deficiency.

### Policy/Criteria

Provider must submit documentation (which may include office chart notes and lab results) supporting that member has met all approval criteria

It is the policy of PA Health and Wellness<sup>®</sup> that Brineura is **medically necessary** when the following criteria are met:

#### I. Initial Approval Criteria

##### A. Late Infantile Neuronal Ceroid Lipofuscinosis Type 2 (must meet all):

1. Diagnosis of late infantile neuronal CLN2;
2. Prescribed by or in consultation with a neurologist;
3. Age  $\geq$  3 years;
4. Confirmation of CLN2 with both of the following (a and b):
  - a. TPP1 enzyme activity test demonstrating deficient TPP1 enzyme activity in leukocytes;
  - b. Identification of 2 pathogenic mutations *in trans* in the TPP1/CLN2 gene;
5. At the time of request, member does not have acute intraventricular access device-related complications (e.g., leakage, device failure, or device-related infection) or ventriculoperitoneal shunts.
6. Dose does not exceed 300 mg administered once every other week as an intraventricular infusion;

**Approval duration: 6 months**

##### B. Other diagnoses/indications

1. Refer to PA.CP.PMN.53 if diagnosis is NOT specifically listed

#### II. Continued Therapy

##### A. Late Infantile Neuronal Ceroid Lipofuscinosis Type 2 (must meet all):

1. Currently receiving medication via of PA Health & Wellness benefit or member has previously met initial approval criteria or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;
2. Member is responding positively to therapy per the prescriber's clinical judgement (*see Appendix D*);

3. Member does not have acute intraventricular access device-related complications (e.g., leakage, device failure, or device-related infection) or ventriculoperitoneal shunts;
4. If request is for a dose increase, new dose does not exceed 300 mg administered once every other week as an intraventricular infusion.

**Approval duration: 6 months**

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

1. Currently receiving medication via of 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 PA.CP.PMN.53 if diagnosis is NOT specifically listed

**III. Appendices/General Information**

*Appendix A: Abbreviation/Acronym Key*

CLN2: ceroid lipofuscinosis type 2

FDA: Food and Drug Administration

TPP1: tripeptidyl peptidase 1

*Appendix B: Therapeutic Alternatives*

Not applicable

*Appendix C: Contraindications/Boxed Warnings*

- Contraindication(s):
  - Acute, unresolved localized infection on or around the device insertion site (e.g. cellulitis or abscess); or suspected or confirmed CNS infection (e.g. cloudy CSF or positive CSF gram stain, or meningitis)
  - Acute intraventricular access device-related complications (e.g., leakage, device failure, or device-related infection)
  - Patients with ventriculoperitoneal shunts
- Boxed warning(s): none reported

*Appendix D: Motor Domain of CLN2 Clinical Rating Scale*

- The motor domain of the CLN2 Clinical Rating Scale is scored as follow: walks normally = 3, intermittent falls, clumsiness, obvious instability = 2, no unaided walking or crawling only = 1, immobile, mostly bedridden = 0.
- Decline was defined as having an unreversed (sustained) 2 category decline or an unreversed score of 0 in the motor domain of the CLN2 Clinical Rating Scale.

**IV. Dosage and Administration**

Indication	Dosing Regimen	Maximum Dose
CLN2	300 mg administered once every other week as an intraventricular infusion followed by infusion of intraventricular electrolytes over approximately 4.5 hours	300 mg every other week

## V. Product Availability

Injection: Brineura 150 mg/5 mL (30 mg/mL) solution, two single-dose vials per carton co-packaged with Intraventricular Electrolytes Injection 5 mL in a single-dose vial

## VI. References

1. Brineura Prescribing Information. Novato, CA: BioMarin Pharmaceutical Inc.; March 2020. Available at: <https://www.brineura.com>. Accessed April 25, 2023.
2. Williams RE, Adama HR, Blohm M, et al. Management strategies for CLN2 disease. *Pediatric Neurology*. 2017 Apr;(69):102-112. <http://dx.doi.org/10.1016/j.pediatrneurol.2017.01.034>.
3. Fietz M, AlSayed M, Burke D, et al. Diagnosis of neuronal ceroid lipofuscinosis type 2 (CLN2 disease): Expert recommendations for early detection and laboratory diagnosis. *Molecular Genetics and Metabolism*. 2016 Jul;(119):160-167. doi: 10.1016/j.ymgme.2016.07.011. Epub 2016 Jul 25.
4. Kohlschütter A, Schulz A, Bartsch U, et al. Current and Emerging Treatment Strategies for Neuronal Ceroid Lipofuscinoses. *CNS Drugs* (2019) 33:315-325. <https://doi.org/10.1007/s40263-019-00620-8>.
5. Mole SE, Schulz A, Badoe E, et al. Guidelines on the diagnosis, clinical assessments, treatment, and management of CLN2 disease patients. *Orphanet Journal of Rare Diseases*. 2021 April 21; 16(1):185.

Reviews, Revisions, and Approvals	Date	Approval Date
2Q 2018 annual review: age added; modified continued therapy criteria to allow provider to determine presence of positive response instead of requiring no decline or decline or one category of CLN2 Clinical Rating Scale score and added requirement that member has at least a score of at least 1 to ensure continued ambulation; references reviewed and updated.	02/2018	
References reviewed and updated.	09/2018	
3Q 2019 annual review: No changes per Statewide PDL implementation 01-01-2020	07/2019	
3Q 2020 annual review: added new contraindications; references reviewed and updated	07/2020	
3Q 2021 annual review: no significant changes; references reviewed and updated.	07/2021	
3Q 2022 annual review: no significant changes; references reviewed and updated.	07/2022	
3Q 2023 annual review: revised and added to continuation of therapy to ensure member does not have acute intraventricular access device-related complications (e.g., leakage, device failure, or device-related infection) or ventriculoperitoneal shunts; references reviewed and updated.	07/2023	