Brineura® (cerliponase alfa)

(Intraventricular Injection)

Date of Origin: 5/30/2017 **Last Review Date: 12/2018** **Effective Date: 01/01/2019**

Dates Reviewed: 5/2017, 4/2018, 12/2018

Developed By: Medical Criteria Committee

I. Length of Authorization

Coverage is provided for 6 months and may be renewed.

II. Dosing Limits

A. Quantity Limit (max daily dose) [Pharmacy Benefit]:

- Brineura 150 mg/5 mL single dose vial : 2 vials every 14 days

B. Max Units (per dose and over time) [Medical Benefit]:

- 300 billable units (two kits) every 14 days

III. Initial Approval Criteria

Coverage is provided in the following conditions:

Late infantile neuronal ceroid lipofuscinosis type 2 (CLN2); tripeptidyl peptidase 1 (TPP1) deficiency † when **ALL** of the following criteria are met:

- Patient is 3 years of age or older; **AND**
- Patient must have a definitive diagnosis of late infantile CLN2 confirmed by deficiency of the lysosomal enzyme tripeptidyl peptidase-1 (TPP1) and/or molecular analysis indicating dysfunctional mutation of the TPP1 gene on chromosome 11p15; **AND**
- Patient has mild to moderate disease documented by a two-domain score of 3- 6 on motor and language domains of the Hamburg CLN2 Clinical Rating Scale, with a score of at least 1 in each of these two domains; **AND**
- Patient is ambulatory; **AND**
- Patient must not have ventriculoperitoneal shunts; **AND**
- Patient must not have acute intraventricular access device-related complications (e.g., leakage, device failure, or device-related infection); **AND**
- Patients with a history of bradycardia, conduction disorder, or with structural heart disease must have electrocardiogram (ECG) monitoring performed during the infusion

† FDA-labeled indication(s)

IV. Renewal Criteria

Coverage can be renewed based upon **ALL** of the following criteria:

- Patient continues to meet the criteria in section III; **AND**
- Absence of unacceptable toxicity from the drug or complications from the device. Examples include the following: intraventricular access device leakage or infection, severe hypersensitivity reaction, severe hypotension; etc.; **AND**
- Patient had a 12-lead ECG evaluation performed within the last 6 months (those with cardiac abnormalities require ECG during each infusion); **AND**
- Patient has responded to therapy compared to pretreatment baseline with stability/lack of decline in motor function/milestones on the Motor domain of the Hamburg CLN2 Clinical Rating *Scale (decline is defined as having an unreversed (sustained) 2-category decline or an unreversed score of 0)*

V. Dosage/Administration

Indication	Dose
CLN2	300 mg administered once every other week by intraventricular infusion. Administer Brineura first followed by infusion of the Intraventricular Electrolytes each at an infusion rate of 2.5 mL/hr. The complete Brineura infusion, including the required infusion of Intraventricular Electrolytes, is approximately 4.5 hours. • Aseptic technique must be strictly observed during preparation and administration • Brineura should be administered by, or under the direction of a physician knowledgeable in intraventricular administration • Brineura is administered into the cerebrospinal fluid (CSF) by infusion via a surgically implanted reservoir and catheter (intraventricular access device). Brineura is intended to be administered via the Codman® HOLTER RICKHAM Reservoirs with the Codman® Ventricular Catheter. The intraventricular access device must be implanted prior to the first infusion. It is recommended that the first dose be administered at least 5 to 7 days after device implantation • Brineura is intended to be administered with the B Braun Perfusor® Space Infusion Pump System • Pre-treatment of patients with antihistamines with or without antipyretics or corticosteroids is recommended 30 to 60 minutes prior to the start of infusion.

Store upright in freezer (-25°C to -15°C); thaw at room temperature for ~60 minutes prior to administration

VI. Billing Code/Availability Information

Jcode:

- J0567 - Injection, cerliponase alfa, 1 mg: 1 billable unit = 1 mg **(effective 1/1/19)**
- J3590 – Unclassified biologics
- C9014 – Injection, cerliponase alfa, 1 mg: 1 billable unit = 1 mg (inactive 1/1/19)

NDC:

- 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: 68135-0811-xx

VII. References

1. Brineura [package insert]. Novato, CA; BioMarin Pharmaceutical Inc.; April 2017. Accessed March 2018.
2. Schulz A, Specchio N, Gissen P. Intracerebroventricular cerliponase alfa (BMN 190) in children with CLN2 disease: Results from a Phase 1/2, open-label, dose-escalation study. J Inherit Metab Dis. 2016;39(Suppl. 1):S51.
3. Cherukuri A, Cahan H, Van Tuyl A, et al. Immunogenicity to cerliponase alfa, an enzyme replacement therapy for patients with CLN2 disease: results from a phase 1/2 study. Molecular Genetics and Metabolism. 2017 Jan 1;120(1):S35
4. Schulz A, Specchio N, Gissen P, et al. Long-term safety and efficacy of intracerebroventricular enzyme replacement therapy with cerliponase alfa in children with CLN2 disease: interim results from an ongoing multicenter, multinational extension study. Molecular Genetics and Metabolism. 2017 Jan 1;120(1):S120.
5. Mole SE, Williams RE. Neuronal Ceroid-Lipofuscinoses. GeneReviews. www.ncbi.nlm.nih.gov/books/NBK1428/ (Accessed on May 01, 2017).
6. Online Mendelian Inheritance in Man, OMIM®. Johns Hopkins University, Baltimore, MD. MIM Number: 204500: 9/18/2016. World Wide Web URL: https://omim.org/

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
E75.4	Neuronal ceroid lipofuscinosis

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD):

- N/A

Jurisdiction(s): 5, 8	NCD/LCD Document (s): L35053
https://www.cms.gov/medicare-coverage-database/search/lcd-date-search.aspx?DocID=L35053&bc=gAAAAAAAAAAAAA==	

NCD/LCD Document (s): A52701
https://www.cms.gov/medicare-coverage-database/search/article-date-search.aspx?DocID=A52701&bc=gAAAAAAAAAAAAA==

Jurisdiction(s): 6,K	NCD/LCD Document (s): A52450
https://www.cms.gov/medicare-coverage-database/search/article-date-search.aspx?DocID=A52450&bc=gAAAAAAAAAAAAA==	

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
E (1)	CA,HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corporation (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corporation (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Cahaba Government Benefit Administrators, LLC
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC