Neighborhood Health Plan OF RHODE ISLAND™
910 Douglas Pike, Smithfield, RI 02917 : 1-800-963-1001 : nhpri.org

Kebilidi™ (eladocagene exuparvovec-tneq) (Intraputaminal)

Effective Date: 05/01/2024
Review Date: 2/05/2025
Scope: Medicaid, Commercial, Medicare-Medicaid Plan (MMP)

I. Length of Authorization

Coverage will be provided for one dose and may not be renewed.

II. Dosing Limits

A. Max Units (per dose and over time) [HCPCS Unit]:

- $1.8x10^{11}$ vg (0.32 mL) one time only

III. Summary of Evidence

Kebilidi (eladocagene exuparvovec-tneq) is an adeno-associated virus (AAV) vector based gene therapy indicated for the treatment of adult and pediatric patients with aromatic L-amino acid decarboxylase (AADC) deficiency**.** Kebilidi is given as a one time dose of 1.8×10^{11} vector genomes (vg) as an intraputaminal infusion. The accelerated approval of Kebilidi was supported by efficacy and safety findings from a phase 2, open-label, global study (PTC-AADCGT-002) involving 13 pediatric patients with AADC deficiency. In the study, 13 pediatric patients with genetically confirmed, severe AADC deficiency who had achieved skull maturity assessed with neuroimaging were assessed at week 48 for gross motor milestone achievement. Twelve of the thirteen enrolled patients were evaluated for the primary endpoint, and 8 of the 12 patients achieved a new gross motor milestone at week 48. These results were compared to an external untreated natural history cohort of 43 pediatric patients with severe AADC deficiency. In the untreated controlled patients, no patient has a documented motor milestone achievement at the time of their last assessment. The most common adverse reactions of Kebilidi are dyskinesia, pyrexia, hypotension, anemia, salivary hypersecretion, hypokalemia, hypophosphatemia, insomnia, hypomagnesemia, and procedural complications.

IV. Initial Approval Criteria [1-15]

Submission of medical records (chart notes) related to the medical necessity criteria is REQUIRED on all requests for authorizations. Records will be reviewed at the time of submission. Please provide documentation related to diagnosis, step therapy, and clinical markers (i.e., genetic, and mutational testing) supporting initiation when applicable. Please provide documentation via direct upload through the PA web portal or by fax.

Coverage is provided in the following conditions:

MMP members who have previously received this medication within the past 365 days are not subject to Step Therapy Requirements

Aromatic L-amino acid decarboxylase (AADC) deficiency

- Kebilidi is prescribed by or in consultation with a pediatric neurologist or geneticist; **AND**
- Patient is at least 16 months of age through 10 years of age; **AND**
- Patient has a diagnosis of severe Aromatic L-amino acid decarboxylase (AADC) deficiency as established by the following:
  - Patient has a biallelic pathogenic variants in *DDC* gene identified by molecular genetic testing; **OR**
  - Patient cerebrospinal fluid (CSF) or plasma neurotransmitter profile is consistent with AADC deficiency; **AND**
    - Patient has significantly reduced AADC enzyme activity in plasma.; **AND**
- Patient is experiencing persistent neurological defects (e.g., autonomic dysfunction, hypotonia, dystonia and other movement disorders, etc.) secondary to AADC deficiency despite standard medical therapy (e.g., dopamine agonists, monoamine oxidase inhibitor, pyridoxine, or other forms of vitamin B6) Note: patients should be on stable dosages for at least 3 months prior to treatment with eladocagene; **AND**
- Patient is unable to ambulate independently; **AND**
- Patient has achieved skull maturity as assessed by neuroimaging; **AND**
- Patient does not have pyridoxine 5'-phosphate oxidase or tetrahydrobiopterin (BH4) deficiency; **AND**
- Patient has not received prior gene therapy; **AND**
- Patient must not have a baseline anti-AAV2 antibody titer above the established threshold for a positive result; **AND**
- Patient does not have any contraindications that would preclude the surgical intra-putaminal administration (e.g. significant brain structure abnormality)
- Patient will undergo treatment at a manufacturer approved Qualified Treatment Center (QTC);

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s); **Φ** Orphan Drug

V. Renewal Criteria [1]

Coverage cannot be renewed.

VI. Dosage/Administration [1]

Indication	Dose
AADC deficiency	– Total Recommended Dose: 1.8x10^{11} vg (0.32 mL) – Total number of infusions: 4 – Volume (dose) per infusion: 0.08 mL (0.45x10^{11} vg) – Location of infusions: 2 in anterior putamen, 2 in posterior putamen – Infusion rate at each target point: 0.003 mL/min – Dose duration for infusion at each target point: 27 minutes
• Kebilidi is administered using an infusion pump at a rate of 0.003 mL/min, infusion pump must be capable of infusing at this rate. • Kebilidi is administered as four intraputaminal infusions in a single stereotactic neurosurgical procedure. • **Do not** refreeze thawed product. • Kebilidi should be administered in a medical center which specializes in stereotactic neurosurgery. • Administer Kebilidi only using an FDA-authorized cannula for intraparenchymal infusion (i.e., ClearPoint SmartFlow Neuro Cannula).	

VII. Billing Code/Availability Information

HCPCS code:

- J3590 – Unclassified biologics

NDC:

- Kebilidi 5.6 × 10^{11} vector genomes (vg) per mL – 2 mL single dose vial: 52856-0601-xx

VIII. References

1. Kebilidi [package insert]. Warren, NJ; PTC Therap., Inc., November 2024. Accessed November 2024.
2. ClinicalTrials.gov. NCT01395641. A Phase I/II Clinical Trial for Treatment of Aromatic L-amino Acid Decarboxylase (AADC) Deficiency Using AAV2-hAADC. https://clinicaltrials.gov/study/NCT01395641 .
3. ClinicalTrials.gov. NCT02926066. A Clinical Trial for Treatment of Aromatic L-amino Acid Decarboxylase (AADC) Deficiency Using AAV2-hAADC - An Expansion (NTUH-AADC-011). https://clinicaltrials.gov/study/NCT02926066 .
4. Blau N, Pearson TS, Kurian MA, et al. Aromatic L-Amino Acid Decarboxylase Deficiency. GeneReviews. https://www.ncbi.nlm.nih.gov/books/NBK595821/ (Accessed on August 5, 2024).
5. Wassenberg T, Molero-Luis M, Jeltsch K, et al. Consensus guideline for the diagnosis and treatment of aromatic L-amino acid decarboxylase (AADC) deficiency. Orphanet J Rare Dis. 2017. https://doi.org/10.1186/s13023-016-0522-z.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
E70.81	Aromatic L-amino acid decarboxylase deficiency

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

The preceding information is intended for non-Medicare coverage determinations. 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 Determinations (NCDs) and/or Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. Local Coverage Articles (LCAs) may also exist for claims payment purposes or to clarify benefit eligibility under Part B for drugs which may be self-administered. The following link may be used to search for NCD, LCD, or LCA documents: https://www.cms.gov/medicare-coverage-database/search.aspx. Additional indications, including any preceding information, may be applied at the discretion of the health plan.

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

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 Corp (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 Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	**Applicable State/US Territory**	**Contractor**
J (10)	TN, GA, AL	Palmetto GBA
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC

Policy Rationale: Kebilidi was reviewed by the Neighborhood Health Plan of Rhode Island Pharmacy & Therapeutics (P&T) Committee. Neighborhood adopted the following clinical coverage criteria to ensure that its members use Kebilidi (to Food and Drug Administration (FDA) approved labeling and/or relevant clinical literature. Neighborhood worked with network prescribers and pharmacists to draft these criteria. These criteria will help ensure its members are using this drug for a medically accepted indication, while minimizing the risk for adverse effects and ensuring more cost-effective options are used first, if applicable and appropriate. For INTEGRITY (Medicare-Medicaid Plan) members, these coverage criteria will only apply in the absence of National Coverage Determination (NCD) or Local Coverage Determination (LCD) criteria. Neighborhood will give individual consideration to each request it reviews based on the information submitted by the prescriber and other information available to the plan