Pharmacy Management Drug Policy

SUBJECT: Kebilidi (eladocagene exuparvovec-tneq)
POLICY NUMBER: PHARMACY-128
EFFECTIVE DATE: 02/20/2025
LAST REVIEW DATE: 06/01/2026

If the member's subscriber contract excludes coverage for a specific service or prescription drug, it is not covered under that contract. In such cases, medical or drug policy criteria are not applied. This drug policy applies to the following line/s of business:

Policy Application

Category:	☒ Commercial Group (e.g., EPO, HMO, POS, PPO)	☒ Medicare Advantage
	☒ On Exchange Qualified Health Plans (QHP)	☐ Medicare Part D
	☒ Off Exchange Direct Pay	☒ Essential Plan (EP)
	☒ Medicaid & Health and Recovery Plans (MMC/HARP)	☒ Child Health Plus (CHP)
	☐ Federal Employee Program (FEP)	☐ Ancillary Services
	☒ Dual Eligible Special Needs Plan (D-SNP)	

DESCRIPTION:

Kebilidi (eladocagene exuparvovec-tneq) is a gene therapy product that uses a modified adeno-associated virus serotype 2 (AAV2) to deliver a functional version of the dopa decarboxylase (DDC) gene, which encodes the aromatic L-amino acid decarboxylase (AADC) enzyme, directly into the brain via intraputaminal infusion, resulting in AADC enzyme expression and subsequent production of dopamine in the putamen.

AADC deficiency is an ultra-rare, life-threatening genetic disorder that often presents symptoms in the first few months of life. It results in low energy, involuntary movements, poor sleep, weak or stiff muscles and failure to reach typical developmental milestones such as learning to sit up, talk and walk. Many patients have oculogyric crises, which are typified by uncontrollable eye, head and neck movements, intense irritability, muscle spasms, pain and seizures. Oculogyric crises are painful and tend to occur every few days and can last for several hours. AADC deficiency also causes dysfunction of the autonomic nervous system, leading many patients to experience low blood sugar, low blood pressure, or excessive sweating.

Kebilidi is administered as four 0.08 mL (0.45×10^{11} vg) intraputaminal infusions in a single stereotactic neurosurgical procedure. It is authorized as a one-time, single-dose treatment only.

Kebilidi was granted accelerated approval by the FDA based on safety and efficacy results from the Phase 2 PTC-AADC-GT-002 study (NCT04903288; referred to as Study 1 in the Kebilidi Prescribing Information), an ongoing, open-label, global study that enrolled 13 pediatric patients (ages 16 months to 10.8 years) with genetically confirmed, severe AADC deficiency who had achieved skull maturity assessed with neuroimaging. Patients were compared to an external untreated natural history cohort of 43 pediatric patients with severe AADC deficiency who had at least one motor milestone assessment after 2 years of age. Continued approval may be contingent upon verification and description of clinical benefit in a confirmatory trial.

The primary efficacy outcome, gross motor milestone achievement evaluated at Week 48, was assessed using the Peabody Developmental Motor Scale, Second Edition (PDMS-2).
Eight of the 12 evaluable patients (67%) achieved a new gross motor milestone at Week 48: three patients achieved full head control, two patients achieved sitting with or without assistance, two

patients achieved walking backward, and the patient with the "variant" severe phenotype was able to sit unassisted. The two patients who achieved walking backward at Week 48 were treated before 2 years of age. The four patients who were unable to achieve new gross motor milestones at Week 48 were treated between 2.8 and 10.8 years of age. In comparison, none of the 43 untreated control patients with the severe phenotype had documented motor milestone achievement at last assessment at a median age of 7.2 years (range: 2–19 years).

From a safety perspective, the median duration of follow-up was 72 weeks (range: 23–109 weeks). All reports of dyskinesia, the most common adverse reaction (AR), were reported within 3 months of Kebilidi administration, with two events requiring hospitalization. Though two reports of dyskinesia required hospitalization, most cases involved non-severe, involuntary movements of face, arm, leg, or entire body. Other common adverse reactions (≥15%) included pyrexia (38%), hypotension (31%), anemia (31%), salivary hypersecretion (23%), hypokalemia (23%), hypophosphatemia (23%), insomnia (23%), hypomagnesemia (15%), and procedural complications including respiratory and cardiac arrest (15%). Continuous cardiorespiratory monitoring during hospitalization is recommended.

POLICY:

Kebilidi (eladocagene exuparvovec-tneq)

1. Kebilidi must be prescribed by or in consultation with a neurologist or metabolic specialist with expertise in aromatic L-amino acid decarboxylase (AADC) deficiency or neurotransmitter disorders **AND**
2. The procedure must be performed by a neurosurgeon trained in stereotactic neurosurgery
  a. The neurosurgeon performing the procedure must confirm, using neuroimaging (CT or MRI), that the patient has achieved skull maturity **AND**
3. Attestation that the administering facility has the following capabilities is required:
  a. Stereotactic neurosurgical capability (including MR-guided or frame-based systems)
  b. Pediatric neuroanesthesia support
  c. Inpatient neurology and neurosurgical postoperative care
4. The patient must be between 16 months and 10-years of age **AND**
5. The patient must have a diagnosis of aromatic L-amino acid decarboxylase (AADC) deficiency confirmed by ALL the following:
  a. Molecular genetic testing confirming biallelic pathogenic or likely pathogenic variants in the DDC gene
  b. Biochemical confirmation of disease that includes at least ONE of the following:
  i. Elevated plasma 3-O-methyldopa (3-OMD) **OR**
  ii. Reduced cerebrospinal fluid (CSF) homovanillic acid (HVA) OR 5-hydroxyindoleacetic acid (5-HIAA)
  c. Attestation from the treating specialist that the patient's clinical presentation is consistent with AADC deficiency (e.g., hypotonia, oculogyric crises, movement disorder, developmental delay with onset in infancy) **AND**
6. The patient must have a severe phenotype of AADC deficiency, defined as the inability to achieve **ANY** of the following motor milestones independently: sitting, standing, or walking (with or without assistive device). Documentation of a motor function assessment (e.g., PDMS-2, Bayley-III) within 6 months of the request must be submitted **AND**
7. The patient must not have:
  a. Significant brain structure abnormality on neuroimaging that would preclude safe stereotactic neurosurgery or compromise expected efficacy.
  b. Anti-AAV2 neutralizing antibody titer >1:1200 or ELISA OD >1

c. Confirmed diagnosis of pyridoxine 5'-phosphate oxidase (PNPO) deficiency or tetrahydrobiopterin (BH4) deficiency

8. Kebilidi is indicated for a one-time, single-dose intraputaminal use only and therefore will not be authorized for retreatment. Retreatment will be considered Experimental/Investigational when any FDA approved gene therapy, or any other gene therapy under investigation, has been previously administered
9. The recommended dose of Kebilidi is four 0.08 mL (0.45×10^{11} vg) intraputaminal infusions in a single stereotactic neurosurgical procedure. Please refer to Kebilidi FDA-approve prescribing information for complete dosage and administration instructions.
10. Kebilidi (eladocagene exuparvovec-tneq) is considered investigational when the above criteria are not met.
11. Kebilidi (eladocagene exuparvovec-tneq is considered investigational for all other indications.
12. Authorization will be granted for 6 months from the date of approval to allow sufficient time for pre-procedural workup, scheduling, and administration.
    a. If treatment is not administered within the 6-month authorization window, a new prior authorization request is required with updated clinical documentation, including repeat anti-AAV2 antibody testing.

POLICY GUIDELINES:

1. Unless otherwise indicated within drug specific criteria, the drugs listed in this policy are administered by a healthcare professional and therefore are covered under the medical benefit.
2. Utilization Management are contract dependent. Refer to specific contract/benefit language for exclusions.
    a. Coverage criteria may be dependent on the contract renewal date.
    b. Coverage of drugs listed in this policy are contract dependent.
    c. Not all contracts/benefits allow coverage of healthcare professional administered drugs as part of their pharmacy benefit
    d. Not all contracts/benefits cover all medical infusible drugs.
3. Clinical documentation must be submitted for each request (initial and recertification) unless otherwise specified (e.g., provider attestation required). Supporting documentation includes, but is not limited to, progress notes documenting previous treatments and treatment history, diagnostic testing, laboratory test results, genetic testing or biomarker results, imaging, and other objective or subjective measures of clinical benefit. For recertification, continued approval requires documentation demonstrating that the requested product is providing ongoing benefit to the patient, evidenced by improvement or stability in the disease state or condition, and that continued use remains medically necessary. Ongoing use of the requested product must continue to align with the current policy's preferred formulary. Recertification reviews may result in a requirement to trial more cost-effective treatment alternatives as they become available (e.g., generics, biosimilars, or other guideline-supported treatment options). Requested dosing must remain consistent with FDA-approved or off-label/guideline-supported dosing recommendations.
4. This policy does not apply to Medicare Part D and D-SNP pharmacy benefits. The drugs in this policy may apply to all other lines of business including Medicare Advantage.
5. For members with Medicare Advantage, medications with a National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) will be covered pursuant to the criteria outlined by the NCD and/or LCD. NCDs/LCDs for applicable medications can be found on the CMS website at https://www.cms.gov/medicare-coverage-database/search.aspx. Indications that have not been addressed by the applicable medication's LCD/NCD will be covered in accordance with criteria determined by the Health Plan (which may include review per the Health Plan's Off-

Label Use of FDA Approved Drugs policy). Step therapy requirements may be imposed in addition to LCD/NCD requirements.

6. All utilization management requirements outlined in this policy are compliant with applicable New York State insurance laws and regulations. Policies will be reviewed and updated as necessary to ensure ongoing compliance with all state and federally mandated coverage requirements.
7. Manufacturers may either discontinue participation in, or may not participate in, the Medicaid Drug Rebate Program (MDRP). Under New York State Medicaid requirements, physician-administered drugs must be produced by manufacturers that participate in the MDRP. Products made by manufacturers that do not participate in the MDRP will not be covered under Medicaid Managed Care/HARP lines of business. Drug coverage will not be available for any product from a non-participating manufacturer. For a complete list of New/Reinstated & Terminated Labelers please visit: https://www.medicaid.gov/medicaid/prescriptiondrugs/medicaid-drug-rebate-program/newreinstated-terminated-labeler-information/index.html
8. This policy is based on available evidence as of the last review date. Coverage determinations are subject to applicable plan documents, state and federal regulations, and individual patient circumstances. This policy does not constitute medical advice.
9. For commercial contracts, medical necessity determinations align with the Certificate of Coverage issued by the Health Plan, which states that covered services must be clinically appropriate and not primarily for the convenience of the member, the member's family, or the provider.
10. This policy is subject to ongoing revision. Newly marketed drugs and existing drugs with new indications may require prior authorization until formal coverage criteria are established. Inclusion of a drug in this policy does not guarantee its current availability on the market, as some agents may be discontinued, withdrawn, or otherwise unavailable. As product status changes, drugs may be removed from the policy.
11. The following applies to all gene and cellular therapies unless otherwise specified within the drug-specific coverage criteria:
    a. Administration, Retreatment, and Treatment with Additional or Other Gene/Cellular Therapies
        i. One-Time Administration
            1. Most gene and cellular therapies, whether autologous, allogeneic ("off-the-shelf"), or in vivo gene-transfer therapies, are designed and studied as one-time treatments.
            2. Repeat dosing, reinfusion, or sequential therapy with other gene or cellular products has not been established as safe, effective, or clinically appropriate.
        ii. Retreatment/Repeat Administration
            1. Retreatment with the same gene or cellular therapy product is considered experimental and investigational because:
                a. Clinical trials evaluated these therapies as single-administration interventions
                b. Safety, efficacy, and durability of a second administration have not been established
                c. Risks of immune activation, insertional mutagenesis, or vector immunity may be increased with repeat dosing
        iii. Treatment with an Additional or Other Gene/Cellular Therapy
            1. Treatment with an additional or different gene or cellular therapy after prior exposure to any gene or cellular therapy is currently considered experimental and investigational as there is lack of evidence demonstrating the following (a-c):
                a. Anticipated clinical benefit beyond available standard therapies
                b. Safety of sequential administration
                c. Justification for selecting a second gene/cellular intervention after a prior one
            2. This includes, but is not limited to:
                a. Switching between CAR-T products (e.g., CD19 → CD19 or CD19 → BCMA)

b. Switching between autologous and allogeneic cellular therapies
c. Sequential use of CAR-T, TCR-T, NK-cell therapies, or other genetically engineered cell therapies
d. Receiving a gene therapy after previous gene or cellular therapy exposure
e. Receiving an in vivo gene therapy following any prior vector-based therapy

iv. Prior Gene/Cell Therapy Exposure
1. An individual is generally not eligible for additional gene or cellular therapy if they have previously received:
a. Any autologous cellular therapy (e.g., CAR-T, TCR-T, TIL),
b. Any allogeneic genetically modified cellular therapy,
c. Any in vivo gene therapy (e.g., AAV, lentiviral vector)
d. Any ex vivo gene-modified cell product
e. Are being considered for any other gene or cellular therapy without documented evidence supporting safety and anticipated benefit.

v. Coverage Determination
1. Absent peer-reviewed evidence demonstrating safety and benefit, retreatment or sequential therapy is considered investigational and will not be covered.

CODES:

Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.
CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.
Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

Code Key:
Experimental/Investigational = (E/I),
Not medically necessary/ appropriate = (NMN).

HCPCS:

J3590 **Kebilidi (eladocagene exuparvovec-tneq)**

UPDATES:

Date	Revision
06/01/2026	Revised
11/19/2025	Revised
10/01/2025	Revised
05/08/2025	Reviewed / P&T Committee Approval
04/14/2025	Revised & Implemented

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