

## DR.016.A ELEVIDYS® (Delandistrogene moxeparvovec-rokl)

**Original Implementation Date:** 7/1/2024

**Version [A] Date:** 7/1/2024

**Last Reviewed Date:** 7/1/2024

### PRODUCT VARIATIONS

This policy applies to Jefferson Health Plans Medicaid, CHIP and Medicare product lines.

Gene therapy is a benefit exclusion for Individual and Family (ACA) product lines and therefore, non-covered.

### POLICY STATEMENT

Jefferson Health Plans considers Delandistrogene moxeparvovec-rokl (Elevidys®) medically necessary for its FDA approved indications when the prior authorization listed in this policy are met.

### FDA INDICATIONS

Gene Therapy is the introduction, removal, or change in the content of a person's genetic code with the goal of treating or curing a disease. It includes therapies such as gene transfer, gene modified cell therapy, and gene editing.

Elvedidys® is an adeno-associated virus vector-based gene therapy indicated for the treatment of ambulatory pediatric patients aged 4 through 5 years with Duchenne muscular dystrophy (DMD) with a confirmed mutation in the DMD gene. This indication is approved under accelerated approval based on expression of ELEVIDYS microdystrophin in skeletal muscle observed in patients treated with ELEVIDYS. Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial(s).

### OFF-LABEL USE

N/A

## PRIOR AUTHORIZATION CRITERIA

Prior authorization required for Elevidys® (Delandistrogene moxeparvovec-rokl)

Elevidys® (Delandistrogene moxeparvovec-rokl) may be considered medically necessary when **all** of the following apply.

1. Individuals aged 4 through 5 years with a diagnosis of Duchenne Muscular Dystrophy (DMD) and confirmed mutation within the DMD gene.
  - a. Must have proper documentation of DMD.
  - b. Medication is being prescribed by, or in consultation with, a Neurologist, Neuromuscular specialist, or by a Muscular Dystrophy Association (MDA) clinic.
  - c. FDA approved dosing.
  - d. Single-dose intravenous use only.
  - e.  $1.33 \times 10^{14}$  vector genomes (vg) per kg.
2. Eligible to receive premedication with corticosteroids 1 day prior to infusion and minimum of 60 days after (unless tapering is clinically indicated).
3. Does not have any deletion in exon 8 and/or exon 9 in the DMD gene.
4. Does not have any clinical signs or symptoms of active infection at the time of administration.
5. Individual is compliant with necessary monitoring parameters.
6. Individual has an anti-AAVrh74 total binding antibody titer <1:400.
7. Individual is not taking any other RNA antisense agent or any other gene therapy. E.g., exon skipping therapies (Amondys 45™, Exondys 51®, Vyondys 53™).

## SAFETY AND MONITORING

Elevidys® (Delandistrogene moxeparvovec-rokl).

### Risk Factors:

1. **Acute Serious Liver Injury:** Acute serious liver injury has been observed. If acute serious liver injury is suspected, a consultation with a specialist is recommended. Patients with preexisting liver impairment, chronic hepatic condition or acute liver disease may be at higher risk of acute serious liver injury.
2. **Immune-mediated Myositis:** Patients with deletions in the DMD gene in exons 1 to 17 and /Or exons 59 to 71 may be at risk for severe immune-mediated myositis reaction. Consider additional immunomodulatory treatment if symptoms of myositis occur.
3. **Myocarditis:** Myocarditis and troponin-I elevations have been observed.
4. **Pre-existing Immunity against AAVrh74:** Perform baseline testing for presence of anti- AAVrh74 total binding antibodies prior to administration.

### Monitoring:

- The most common adverse reactions (incidence  $\geq$  5%) reported in clinical studies were vomiting, nausea, liver function test increased, pyrexia, and thrombocytopenia.
- Liver function before infusion, and weekly for the first 3 months after infusion. Continue monitoring until results are unremarkable.
- Troponin-I before infusion, and weekly for the first month after infusion.
- Obtain platelet counts weekly for the first two weeks.

## RENEWAL CRITERIA

Elevidys® (Delandistrogene moxeparvovec-rokl) may be considered medically necessary when initial criteria for use are met and the member shows no signs of intolerance/ adverse effects and remains disease free during the treatment with this drug.

## DOSAGE AND ADMINISTRATION

Elevidys® is a suspension for intravenous infusion with a nominal concentration of  $1.33 \times 10^{13}$  vg/mL, provided in a customized kit containing ten to seventy 10 mL single-dose vials, with each kit constituting a dosage unit based on the patient's body weight.

- **Administration:** One day prior to infusion, initiate a corticosteroid regimen for a minimum of 60 days. Recommend modifying corticosteroid dose for patients with liver function abnormalities. Administer as an intravenous infusion over 1-2 hours. Infuse at a rate of less than 10 mL/kg/hour.
- **Dose:**  $1.33 \times 10^{14}$  vector genomes (vg) per kg of body weight.

## BENEFIT APPLICATION

Medical policies do not constitute a description of benefits. This medical necessity policy assists in the administration of the member's benefits which may vary by line of business. Applicable benefit documents govern which services/items are eligible for coverage, subject to benefit limits, or excluded completely from coverage.

This policy is invoked only when the requested service is an eligible benefit as defined in the Member's applicable benefit contract on the date the service was rendered. Services determined by the Plan to be investigational or experimental are excluded from coverage for all lines of business. For Medicaid members under 21 years old, benefits and coverage are always based on medical necessity review.

## BACKGROUND

Delandistrogene moxeparvovec-rokl (Elevidys®) is a recombinant gene therapy product that is comprised of a non-replicating, recombinant, adeno-associated virus (AAV) serotype rh74 (AAVrh74) capsid and a ssDNA expression cassette flanked by inverted terminal repeats (ITRs) derived from AAV2. The cassette contains: 1) an MHCK7 gene regulatory component comprising a creatine kinase 7 promoter and an  $\alpha$ -myosin heavy chain enhancer, and 2) the DNA transgene encoding the engineered ELEVIDYS micro-dystrophin protein. Elevidys® is designed to carry a transgene encoding a micro-dystrophin protein consisting of selected domains of dystrophin expressed in normal muscle cells. Micro-dystrophin has been demonstrated to localize to the sarcolemma. Following IV administration, the drug's vector genome undergoes distribution via systemic circulation and distributes into target muscle tissues followed by elimination in the urine and feces.

Its biodistribution and tissue transduction are detected in the target muscle tissue groups and quantified in the gastrocnemius or biceps femoris biopsies obtained from patients with mutations in the DMD gene. Evaluation of the drug's vector genome exposure in clinical muscle biopsies at Week 12 post-dose expressed as copies per nucleus revealed ELEVIDYS drug distribution and transduction with a mean change from baseline of 2.91 and 3.44 copies per nucleus at the recommended dose of  $1.33 \times 10^{14}$  vg/kg. Elevidys® is the first adeno-associated virus vector-based gene therapy indicated for the treatment of ambulatory pediatric patients aged 4 through 5 years with Duchenne muscular dystrophy (DMD) with a confirmed mutation in the DMD gene. It is not curative and can be administered in an outpatient setting.

## CLINICAL EVIDENCE

Delandistrogene moxeparvovec-rokl (Elevidys®).

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in clinical practice.

The expression of Elevidys micro-dystrophin in skeletal muscle and the effect on the North Start Ambulatory Assessment (NSAA) total score was evaluated in a two-part ongoing 1:1 randomized, double-blind, placebo-controlled study including 41 male DMD patients aged 4 through 7 with confirmed frameshift mutation, or a premature stop codon mutation between exons 18 to 58 in

the DMD gene. Eight patients in the treatment group received  $1.33 \times 10^{14}$  vg/kg of ELEVIDYS, and 12 patients received lower doses. All subjects were on at least 12 weeks of corticosteroids prior to infusions, increased at least 1 mg/kg prior to infusion, and baseline anti-AAVrh74 titers <1:400. The difference between the ELEVIDYS and placebo groups was not statistically significant ( $p=0.37$ ). The least squares (LS) mean changes in NSAA total score from baseline to Week 48 was 1.7 (standard error [SE]: 0.6) points for the ELEVIDYS group and 0.9 (SE: 0.6) points for the placebo group.

## CODING

The effect of Elevidys micro-dystrophin expression was also evaluated in Study 2, an ongoing, open-label, multi-center study cohort consisting of 20 males DMD patients aged 4 through 7 years. All subjects received a single intravenous infusion of  $1.33 \times 10^{14}$  vg/kg. For subjects aged 4 through 5 years who received  $1.33 \times 10^{14}$  vg/kg, the mean (SD) micro-dystrophin expression levels at Week 12 following infusion were 95.7% (N=3, SD: 17.9%) in Study 1 Parts 1 and 2 and 51.7% (N=11, SD: 41.0%) in Study 2 Cohort 1. Evaluation of ELEVIDYS vector genome exposure in clinical muscle biopsies at Week 12 post-dose expressed as copies per nucleus revealed drug distribution and transduction with a mean change from baseline of 2.91 and 3.44 copies per nucleus at the recommended dose of  $1.33 \times 10^{14}$  vg/kg for Study 1 and Study 2 Cohort 1, respectively.

**Note:** The Current Procedural Terminology (CPT®), Healthcare Common Procedure Coding System (HCPCS), and the 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) codes that *may* be listed in this policy are for reference purposes only.

Listing of a code in this policy does not imply that the service is covered and is not a guarantee of payment. Other policies and coverage guidelines may apply. When reporting services, providers/facilities should code to the highest level of specificity using the code that was in effect on the date the service was rendered. This list may not be all inclusive.

*CPT® is a registered trademark of the American Medical Association*

HCPCS Code	Description
J1413	Injection, delandistrogene moxeparvovec-rokl, per therapeutic dose

## DISCLAIMER

Approval or denial of payment does not constitute medical advice and is neither intended to guide nor influence medical decision making.

Policy Bulletins are developed by Jefferson Health Plans to assist in administering plan benefits and constitute neither offers of coverage nor medical advice. This Policy Bulletin may be updated and therefore is subject to change.

For Health Choices (Medicaid) and Children’s Health Insurance Program (CHIP) products: Any requests for services that do not meet criteria set in PARP will be evaluated on a case-by-case basis.

## POLICY HISTORY

This section provides a high-level summary of changes to the policy since the previous version.

Summary	Version	Version Date
New policy.	A	7/1/2024

## REFERENCES

1. Elevidys (delandistrogene moxeparvovec) [prescribing information]. Cambridge, MA: Sarepta Therapeutics Inc; June 2023. Accessed June 28, 2023. Available at <https://www.fda.gov/media/169679/download>
2. <https://classic.clinicaltrials.gov/ct2/show/NCT05096221>
3. <https://classic.clinicaltrials.gov/ct2/show/NCT03375164?term=Delandistrogene+moxeparvovec&draw=2&rank=4>