# Medical Policy

BlueCross BlueShield Kansas
An Independent licensee of the Blue Cross Blue Shield Association

## Title: Elevidys® (delandistrogene moxeparvovec-rokl) (Intravenous)

| **Professional / Institutional** |
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| Original Effective Date: November 13, 2023 |
| Latest Review Date: |
| Current Effective Date: November 13, 2023 |

**State and Federal mandates and health plan member contract language, including specific provisions/exclusions, take precedence over Medical Policy and must be considered first in determining eligibility for coverage. To verify a member's benefits, contact Blue Cross and Blue Shield of Kansas Customer Service.**

**The BCBSKS Medical Policies contained herein are for informational purposes and apply only to members who have health insurance through BCBSKS or who are covered by a self-insured group plan administered by BCBSKS. Medical Policy for FEP members is subject to FEP medical policy which may differ from BCBSKS Medical Policy.**

**The medical policies do not constitute medical advice or medical care. Treating health care providers are independent contractors and are neither employees nor agents of Blue Cross and Blue Shield of Kansas and are solely responsible for diagnosis, treatment and medical advice.**

**If your patient is covered under a different Blue Cross and Blue Shield plan, please refer to the Medical Policies of that plan.**

### I. Description of Procedure or Service [1]

Elevidys is the 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. DMD is caused by a mutation in the *DMD* gene resulting in lack of functional dystrophin protein.

Elevidys carries a transgene encoding a micro-dystrophin protein consisting of selected domains of dystrophin expressed in normal muscle cells. Dystrophin is the protein that is absent in patients with Duchenne Muscular Dystrophy (DMD) which results in muscle damage and progressive dysfunction. Elevidys micro-dystrophin has been demonstrated to localize to the sarcolemma.

## II. Policy

Elevidys® (delandistrogene moxeparvovec-rokl) suspension is considered **experimental/ investigational** for all indications including treatment of Duchenne's muscular dystrophy.

Note: There is insufficient clinical evidence for demonstrated efficacy.

**Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.**

## III. Key Points

Current treatment options for DMD focus on symptomatic management and prevention of complications. The mainstay of treatment is to offer patients glucocorticoids which have been confirmed to improve motor strength and function, pulmonary function, reduce the risk of scoliosis, and may delay the onset of cardiomyopathy. Current guidelines recommend initiation of glucocorticoids (such as prednisone) once patients reach a plateau of motor skill development, generally at age 4-6 years, but prior to onset of motor decline. Other therapies include ACE- inhibitors or Beta-blockers for cardiac disease, immunizations, pain management, respiratory support, and comorbidity surveillance. Eteplirsen was approved September of 2016 for the treatment of DMD in patients with a confirmed mutation of the DMD gene that is amenable to exon 51 skipping. Golodirsen and viltolarsen were approved (December 2019 and August 2020 respectively) for the treatment of DMD in patients with a confirmed mutation of the DMD gene that is amenable to exon 53 skipping. Casimersen was approved February 2021 for the treatment of Duchenne muscular dystrophy (DMD) in patients with a confirmed mutation of the DMD gene that is amenable to exon 45 skipping.

In much the same way as the exon-skipping therapies, delandistrogene moxeparvovec, the first gene therapy approval, occurred following priority review as an accelerated approval allowing for use of a surrogate endpoint (contingent upon verification of a clinical benefit in ongoing confirmatory clinical trials). Approval for the DMD indication was based on expression of micro- dystrophin observed in patients treated with Elevidys. Whether this expression of micro- dystrophin seen in the trials is reasonably likely to confer a clinical benefit remains to be elucidated. The below excerpts from the clinical studies elaborate upon the question of clinical benefit posited with delandistrogene treatment.

## IV. Clinical Trials and FDA Review [11,12]

Elevidys' safety and efficacy was evaluated in three on-going clinical studies, the SRP-9001 101, 102 and 103 trials. The accelerated approval was primarily based on data from the 102 and 103 studies (ClinicalTrials.gov Identifier: NCT03769116, NCT04626674, respectively). Elevidys is also being studied in the pivotal study SRP-9001-301 or EMBARK, (ClinicalTrials.gov Identifier: NCT05096221) a randomized, double-blind, placebo-controlled phase 3 clinical trial in 126 participants with DMD between the ages of 4 to 7 years. The EMBARK study is expected to serve as the post-marketing confirmatory trial.

SRP-9001-102 included 41 male ambulatory DMD patients aged 4 to 7 years with either a confirmed frameshift mutation, or a premature stop codon mutation between exons 18 to 58 in the *DMD* gene. In part 1 of the study, patients were randomly assigned to receive Elevidys or placebo and were followed for 48 weeks. In part 2, patients who received placebo during part 1 were treated with Elevidys and those treated with Elevidys during part 1 received placebo; all patients were followed for an additional 48 weeks.

SRP-9001-103 included a cohort of 20 ambulatory male DMD patients aged 4 to 7 years with a confirmed frameshift mutation, canonical splice site mutation, or premature stop codon mutation in the *DMD* gene.

To support the application for the accelerated approval, Sarepta used the surrogate endpoint of expression of Elevidys micro-dystrophin protein in muscle biopsy tissue samples at Week 12. Correlation analysis was used to assess whether it is "reasonably likely to predict clinical benefit" by correlating it with the change in the North Star Ambulatory Assessment (NSAA) Total Score at Year 1.

Based on the results which were adjusted for baseline age and NSAA Total Score), the Study 102 Part 1 data showed no clear association between expression of Elevidys micro-dystrophin and change in NSAA Total Score. "Correlation analysis at the age group level also did not suggest clear association between Elevidys micro-dystrophin expression and change in NSAA Total Score, based on limited data. However, improved NSAA Total Score with increased Elevidys micro-dystrophin expression was observed in younger subjects (aged 4-5 years), but not in those aged 6 years and older. Because of the very limited data and exploratory nature of the NSAA assessment, these results in subjects aged 4 to 5 years must be interpreted with caution." 11

The FDA Cellular, Tissue, and Gene Therapies Advisory Committee (CTGTAC) met on May 12, 2023 and were asked to discuss, then vote regarding the following: Do the overall considerations of benefit and risk, taking into account the existing uncertainties, support Accelerated Approval of SRP-9001—using as a surrogate endpoint, expression of Elevidys microdystrophin at Week 12 after administration of Elevidys—for the treatment of ambulatory patients with DMD with a confirmed mutation in the DMD gene. The committee voted 8 to 6 in favor of Accelerated Approval of Elevidys. Several committee members who voted in favor of Accelerated Approval did so despite reservations about the clinical study results and use of Elevidys microdystrophin as a surrogate endpoint "reasonably likely to predict clinical benefit." 11

## V. Billing Code/Availability Information

**The following codes for treatment and procedures applicable to this policy are included below for informational purposes. This may not be a comprehensive list of procedure codes applicable to this policy.**

**Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.**

**The code(s) listed below are medically necessary ONLY if the procedure is performed according to the "Policy" section of this document.**

HCPCS Code:

- J3590

NDC:

**Elevidys kit sizes:**

| Patient Weight (kg) | Total Vials (and mL) per Kit | NDC | Patient Weight (kg) | Total Vials (and mL) per Kit | NDC |
|---|---|---|---|---|---|
| 10.0 – 10.4 | 10 (100) | 60923-0501-10 | 39.5 – 40.4 | 40 (400) | 60923-0531-40 |
| 10.5 – 11.4 | 11 (110) | 60923-0502-11 | 40.5 – 41.4 | 41 (410) | 60923-0532-41 |
| 11.5 – 12.4 | 12 (120) | 60923-0503-12 | 41.5 – 42.4 | 42 (420) | 60923-0533-42 |
| 12.5 – 13.4 | 13 (130) | 60923-0504-13 | 42.5 – 43.4 | 43 (430) | 60923-0534-43 |
| 13.5 – 14.4 | 14 (140) | 60923-0505-14 | 43.5 – 44.4 | 44 (440) | 60923-0535-44 |
| 14.5 – 15.4 | 15 (150) | 60923-0506-15 | 44.5 – 45.4 | 45 (450) | 60923-0536-45 |
| 15.5 – 16.4 | 16 (160) | 60923-0507-16 | 45.5 – 46.4 | 46 (460) | 60923-0537-46 |
| 16.5 – 17.4 | 17 (170) | 60923-0508-17 | 46.5 – 47.4 | 47 (470) | 60923-0538-47 |
| 17.5 – 18.4 | 18 (180) | 60923-0509-18 | 47.5 – 48.4 | 48 (480) | 60923-0539-48 |
| 18.5 – 19.4 | 19 (190) | 60923-0510-19 | 48.5 – 49.4 | 49 (490) | 60923-0540-49 |
| 19.5 – 20.4 | 20 (200) | 60923-0511-20 | 49.5 – 50.4 | 50 (500) | 60923-0541-50 |
| 20.5 – 21.4 | 21 (210) | 60923-0512-21 | 50.5 – 51.4 | 51 (510) | 60923-0542-51 |
| 21.5 – 22.4 | 22 (220) | 60923-0513-22 | 51.5 – 52.4 | 52 (520) | 60923-0543-52 |
| 22.5 – 23.4 | 23 (230) | 60923-0514-23 | 52.5 – 53.4 | 53 (530) | 60923-0544-53 |
| 23.5 – 24.4 | 24 (240) | 60923-0515-24 | 53.5 – 54.4 | 54 (540) | 60923-0545-54 |
| 24.5 – 25.4 | 25 (250) | 60923-0516-25 | 54.5 – 55.4 | 55 (550) | 60923-0546-55 |
| 25.5 – 26.4 | 26 (260) | 60923-0517-26 | 55.5 – 56.4 | 56 (560) | 60923-0547-56 |
| 26.5 – 27.4 | 27 (270) | 60923-0518-27 | 56.5 – 57.4 | 57 (570) | 60923-0548-57 |
| 27.5 – 28.4 | 28 (280) | 60923-0519-28 | 57.5 – 58.4 | 58 (580) | 60923-0549-58 |
| 28.5 – 29.4 | 29 (290) | 60923-0520-29 | 58.5 – 59.4 | 59 (590) | 60923-0550-59 |
| 29.5 – 30.4 | 30 (300) | 60923-0521-30 | 59.5 – 60.4 | 60 (600) | 60923-0551-60 |
| 30.5 – 31.4 | 31 (310) | 60923-0522-31 | 60.5 – 61.4 | 61 (610) | 60923-0552-61 |
| 31.5 – 32.4 | 32 (320) | 60923-0523-32 | 61.5 – 62.4 | 62 (620) | 60923-0553-62 |
| 32.5 – 33.4 | 33 (330) | 60923-0524-33 | 62.5 – 63.4 | 63 (630) | 60923-0554-63 |

| Patient Weight (kg) | Total Vials (and mL) per Kit | NDC | Patient Weight (kg) | Total Vials (and mL) per Kit | NDC |
|---|---|---|---|---|---|
| 33.5 – 34.4 | 34 (340) | 60923-0525-34 | 63.5 – 64.4 | 64 (640) | 60923-0555-64 |
| 34.5 – 35.4 | 35 (350) | 60923-0526-35 | 64.5 – 65.4 | 65 (650) | 60923-0556-65 |
| 35.5 – 36.4 | 36 (360) | 60923-0527-36 | 65.5 – 66.4 | 66 (660) | 60923-0557-66 |
| 36.5 – 37.4 | 37 (370) | 60923-0528-37 | 66.5 – 67.4 | 67 (670) | 60923-0558-67 |
| 37.5 – 38.4 | 38 (380) | 60923-0529-38 | 67.5 – 68.4 | 68 (680) | 60923-0559-68 |
| 38.5 – 39.4 | 39 (390) | 60923-0530-39 | 68.5 – 69.4 | 69 (690) | 60923-0560-69 |
| The total number of vials in each kit corresponds to the dosing requirement for the individual patient, based on the patient's body weight. Each kit includes a specified number of Elevidys vials (with a minimum of 10 vials for a patient with 10.0 – 10.4 kg body weight range, and a maximum of 70 vials for a patient with body weight of 69.5 kg and above). | | | | | |

| REVISIONS | |
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| 11-13-2023 | Policy added to the bcbsks.com web site. |

## VI. References


1. Elevidys [package insert]. Cambridge, MA; Sarepta Therapeutics, Inc.; June 2023. Accessed June 2023.
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7. Moxley RT 3rd, Ashwal S, Pandya S, et al. Practice parameter: corticosteroid treatment of Duchenne dystrophy: report of the Quality Standards Subcommittee of the American Academy of Neurology and the Practice Committee of the Child Neurology Society. Neurology. 2005;64:13–20.
8. Gordon LB, Brown WT, Collins FS. Hutchinson-Gilford Progeria Syndrome. GeneReviews. https://www.ncbi.nlm.nih.gov/books/NBK1121/ (Accessed on November 25, 2020).
9. Scott E, Eagle M, Mayhew A, et al. Development of a Functional Assessment Scale for Ambulatory Boys with Duchenne Muscular Dystrophy. Physiother. Res. Int. 17 (2012) 101–109.
10. Mercuri E, Coratti G, Messina S. et al. Revised North Star Ambulatory Assessment for Young Boys with Duchenne Muscular Dystrophy. PLoS ONE, 11(8), e0160195.
11. FDA Summary Basis for Regulatory Action. June 21, 2023. Available at: June 21, 2023 Summary Basis for Regulatory Action - ELEVIDYS (fda.gov).
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