



Medical Policy Manual

Approved Revision: Do Not Implement Until 6/2/21

Voretigene Neparvovec-rzyl (Luxturna®)

NDC CODE(S) 71394-0415-XX LUXTURNA Suspension (SPARK THERAPEUTICS)
71394-0065-XX LUXTURNA Suspension (SPARK THERAPEUTICS)

DESCRIPTION

Voretigene neparvovec-rzyl is a live, non-replicating adeno-associated virus serotype 2 which has been genetically modified to express the human RPE65 gene using recombinant DNA techniques. Prepared in a suspension, it is a vector-based gene therapy for subretinal injection containing 5×10^{12} vector genomes (vg) per mL.

This normal copy of the RPE65 gene encodes the human retinal pigment epithelial 65 kDa protein (RPE65) and delivers it directly to the cells of the retina in those individuals with mutations in the RPE65 gene. RPE65 protein is normally produced in the retinal pigment epithelial (RPE) cells and is necessary to the visual or retinoid cycle, which in turn is critical to phototransduction, the biological conversion of a photon of light into an electrical signal in the retina. Mutations in the RPE65 gene lead to reduced or absent levels of RPE65 which blocks the visual cycle resulting in visual impairment.

POLICY

- Voretigene neparvovec-rzyl for the treatment of biallelic *RPE65* mutation-associated retinal dystrophy is considered **medically necessary** if the medical appropriateness criteria are met. (See **Medical Appropriateness** below.)
- Voretigene neparvovec-rzyl for the treatment of other conditions/diseases is considered **investigational**.

MEDICAL APPROPRIATENESS

INITIAL APPROVAL CRITERIA

Submission of medical records 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 via direct upload through the PA web portal or by fax.

Universal Criteria

- Patient must be at least 4 years old; **AND**
- Patient must have an adequate washout period, defined as a minimum of 3 months, from retinoid therapies prior to receipt of voretigene; **AND**
- Patient has not had intraocular surgery within six months; **AND**

Retinal Dystrophy

- Patient has a definitive diagnosis confirming biallelic RPE65 mutation-associated retinal dystrophy; **AND**
- Patient must have viable retinal cells as determined by non-invasive means, such as optical coherence tomography (OCT) and/or ophthalmoscopy indicating one or more of the following:
 - An area of retina within the posterior pole of $>100 \mu\text{m}$ thickness shown on OCT
 - ≥ 3 -disc areas of retina without atrophy or pigmentary degeneration within the posterior pole
 - Remaining visual field within 30 degrees of fixation as measured by an III4e isopter or equivalent



RENEWAL CRITERIA

Coverage cannot be renewed.

DOSAGE/ADMINISTRATION

INDICATION	DOSE
Biallelic RPE65 Mutation-associated retinal dystrophy	<p>For subretinal injection only.</p> <p><u>Preparing for Administration:</u></p> <ul style="list-style-type: none"> • Luxturna should be administered in the surgical suite under controlled aseptic conditions by a surgeon experienced in performing intraocular surgery. • Dilate the eye, give adequate anesthesia to the patient, and administer a topical broad spectrum microbicide • Complete a vitrectomy • Do not administer Luxturna in the immediate vicinity of the fovea. <p><u>Luxturna Injection:</u></p> <ul style="list-style-type: none"> • Under direct visualization, administer Luxturna into the affected eye [1.5 x 10¹¹ vector genomes (vg) in a total volume of 0.3 mL] • Perform subretinal administration of Luxturna to each eye on separate days within a close interval, but no fewer than 6 days apart. • Recommend systemic oral corticosteroids equivalent to prednisone at 1 mg/kg/day (maximum of 40 mg/day) for a total of 7 days (starting 3 days before administration of Luxturna to the first eye) and followed by tapering the dose during the following 10 days. The same corticosteroid dosing regimen applies for the administration of Luxturna to the second eye. If the corticosteroid taper following Luxturna administration to the first eye is not complete three days prior to the planned Luxturna administration to the second eye, then the corticosteroid regimen for the second eye replaces the taper for the first eye.
<ul style="list-style-type: none"> • Store Luxturna and Diluent frozen at ≤ -65 °C. Thaw prior to infusion. • Luxturna is an adeno-associated virus vector-based gene therapy. Follow universal biohazard precautions for handling. 	

LENGTH OF AUTHORIZATION

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

DOSAGE LIMITS

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

- 150 billable units per eye

APPLICABLE TENNESSEE STATE MANDATE REQUIREMENTS

BlueCross BlueShield of Tennessee’s Medical Policy complies with Tennessee Code Annotated Section 56-7-2352 regarding coverage of off-label indications of Food and Drug Administration (FDA) approved drugs when the off-label use is recognized in one of the statutorily recognized standard reference compendia or in the published peer-reviewed medical literature.

IMPORTANT REMINDER



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We develop Medical Policies to provide guidance to Members and Providers. This Medical Policy relates only to the services or supplies described in it. The existence of a Medical Policy is not an authorization, certification, explanation of benefits or a contract for the service (or supply) that is referenced in the Medical Policy. For a determination of the benefits that a Member is entitled to receive under his or her health plan, the Member's health plan must be reviewed. If there is a conflict between the Medical Policy and a health plan, the express terms of the health plan will govern.

ADDITIONAL INFORMATION

For appropriate chemotherapy regimens, dosage information, contraindications, precautions, warnings, and monitoring information, please refer to one of the standard reference compendia (e.g., the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) published by the National Comprehensive Cancer Network®, Drugdex Evaluations of Micromedex Solutions at Truven Health, or The American Hospital Formulary Service Drug Information).

SOURCES

1. Luxturna [package insert]. Philadelphia, PA; Spark Therapeutics, Inc., December 2019. Accessed December 2020.
2. Russell S, Bennett J, Wellman JA, et al. Efficacy and safety of voretigene neparvovec (AAV2-hRPE65v2) in patients with RPE65-mediated inherited retinal dystrophy: a randomised, controlled, open-label, phase 3 trial. *Lancet*. 2017 Aug 26;390(10097):849-860. doi: 10.1016/S0140-6736(17)31868-8. Epub 2017 Jul 14. Erratum in: *Lancet*. 2017 Aug 26;390(10097):848.
3. MICROMEDEX Healthcare Series. Drugdex Evaluations. (2019 November). *Voretigene neparvovec-rzyl*. Retrieved January 16, 2020 from MICROMEDEX Healthcare Series.

EFFECTIVE DATE 6/2/2021

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