PHARMACY POLICY STATEMENT
TRICARE

DRUG NAME	Luxturna (voretigene neparvovec-rzyl)
BENEFIT TYPE	Medical
STATUS	Prior Authorization Required

Luxturna, approved by the FDA in 2017, is an adeno-associated virus vector-based gene therapy indicated for the treatment of patients with confirmed biallelic RPE65 mutation-associated retinal dystrophy. Patients must have viable retinal cells.
Mutations in the RPE65 gene lead to reduced or absent levels of RPE65 isomerohydrolase activity, blocking the visual cycle and resulting in impairment of vision. Luxturna is designed to deliver a normal copy of the gene encoding RPE65 to persons with reduced or absent levels of biologically active RPE65 so that functional RPE65 protein can be produced to help restore the visual cycle and potentially improve vision. With time, untreated patients lose the ability to detect any intensity of light.
In clinical trials, the efficacy of Luxturna was established based on multi-luminance mobility testing (MLMT) score change from Baseline to Year 1. The MLMT was designed to measure changes in functional vision, as assessed by the ability of a subject to navigate a course accurately and at a reasonable pace at different levels of environmental illumination. Response was rapid and sustained, with improvement noted by day 30, durable overall for at least 4 years. Some degree of numerical improvement in visual acuity was shown, but it was not statistically significant.

Luxturna (voretigene neparvovec-rzyl) will be considered for coverage when the following criteria are met:

Biallelic RPE65 Mutation-Associated Retinal Dystrophy

For **initial** authorization:
1. Member is 12 months of age or older; AND
2. Medication must be prescribed by an ophthalmologist or retinal surgeon; AND
3. Member has a documented diagnosis of biallelic RPE65 mutation-associated retinal dystrophy (e.g., Leber's congenital amaurosis [LCA], Retinitis pigmentosa [RP], Early Onset Severe Retinal Dystrophy [EOSRD]); AND
4. Biallelic mutations of the RPE65 gene are confirmed by genetic testing (results required); AND
5. Member has sufficient viable retinal cells as determined by optical coherence tomography (OCT) showing an area of the retina within the posterior pole of >100 µm thickness; AND
6. Member was NOT previously treated with RPE65 gene therapy.
7. **Dosage allowed/Quantity limit:** 1.5×10^{11} vector genomes (vg), administered by subretinal injection in a total volume of 0.3 mL for each eye. Administration of Luxturna to each eye must be performed on separate days within a close interval, but no fewer than 6 days apart.

If all the above requirements are met, the medication will be approved for 3 months.

For **reauthorization**:
1. Luxturna will not be re-authorized.

TRICARE Prime® Demo by CareSource Military & Veterans™ considers Luxturna (voretigene neparvovec-rzyl) not medically necessary for the treatment of conditions that are not listed in this document. For any other indication, please refer to the Off-Label policy.

DATE	ACTION/DESCRIPTION
08/27/2018	New policy for Luxturna created.
12/22/2021	Transferred to new template. Added references. Changed age limit from 3 years to 12 months and removed baseline MLMT test. Clarified the wording of some of the other criteria without changing the actual requirements.
05/14/2024	Updated references. Separated diagnosis and genetic testing into separate criteria (for readability) and added types of RD.
11/19/2024	Removed requirement for significant vision impairment (visual acuity, visual field).

References:

1. Luxturna [package insert]. Philadelphia, PA; Spark Therapeutics, Inc.: 2022.
2. Russell S, Bennett J, Wellman JA, at el. 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.
3. Maguire AM, Russell S, Chung DC, et al. Durability of Voretigene Neparvovec for Biallelic RPE65-Mediated Inherited Retinal Disease: Phase 3 Results at 3 and 4 Years. *Ophthalmology*. 2021;128(10):1460-1468. doi:10.1016/j.ophtha.2021.03.031
4. Ameri H. Prospect of retinal gene therapy following commercialization of voretigene neparvovec-rzyl for retinal dystrophy mediated by RPE65 mutation. J Curr Ophthalmol. 2018 Feb 16;30(1):1-2.
5. Aoun M, Passerini I, Chiurazzi P, et al. Inherited Retinal Diseases Due to *RPE65* Variants: From Genetic Diagnostic Management to Therapy. *Int J Mol Sci*. 2021;22(13):7207. Published 2021 Jul 5. doi:10.3390/ijms22137207
6. Sodi A, Banfi S, Testa F, et al. RPE65-associated inherited retinal diseases: consensus recommendations for eligibility to gene therapy. *Orphanet J Rare Dis*. 2021;16(1):257. Published 2021 Jun 4. doi:10.1186/s13023-021-01868-4
7. Han J, Joo K, Kim US, et al. Voretigene Neparvovec for the Treatment of RPE65-associated Retinal Dystrophy: Consensus and Recommendations from the Korea RPE65-IRD Consensus Paper Committee. *Korean J Ophthalmol*. 2023;37(2):166-186. doi:10.3341/kjo.2023.0008
8. Testa F, Bacci G, Falsini B, et al. Voretigene neparvovec for inherited retinal dystrophy due to RPE65 mutations: a scoping review of eligibility and treatment challenges from clinical trials to real practice. *Eye (Lond)*. Published online April 16, 2024. doi:10.1038/s41433-024-03065-6

Effective date: 01/01/2026
Revised date: 11/19/2024