Medical Policy

Luxturna® (voretigene neparvovec)	
MEDICAL POLICY NUMBER	MED_Clin_Ops_028
CURRENT VERSION EFFECTIVE DATE	January 1, 2024
APPLICABLE PRODUCT AND MARKET	*Individual Family Plan:* All Plans *Small Group*: All Plans *Medicare Advantage:* All Plans

Brand New Day/Central Health Medicare Plan develops policies and makes coverage determinations using credible scientific evidence including but not limited to MCG™ Health Guidelines, the ASAM Criteria™, and other third party sources, such as peer-reviewed medical literature generally recognized by the relevant medical community, physician specialty society recommendations, and expert opinion as relevant to supplement those sources. Brand New Day/Central Health Medicare Plan Medical Policies, MCG™ Guidelines, and the ASAM Criteria™ are not intended to be used without the independent clinical judgment of a qualified health care provider considering the individual circumstances of each member's case. The treating health care providers are solely responsible for diagnosis, treatment, and medical advice. Members may contact Brand New Day/Central Health Medicare Plan Customer Service at the phone number listed on their member identification card to discuss their benefits more specifically. Providers with questions about this Brand New Day/ Central Health Medicare Plan policy may contact the Health Plan. Brand New Day/ Central Health Medicare Plan policies and practices are compliant with federal and state requirements, including mental health parity laws.

If there is a difference between this policy and the member specific plan document, the member benefit plan document will govern. For Medicare Advantage members, Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), govern. Refer to the CMS website at http://www.cms.gov for additional information.

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PURPOSE

To promote consistency between reviewers in clinical coverage decision-making by providing the criteria that generally determine the medical necessity of Luxturna® (voretigene neparvovec) therapy.

POLICY/CRITERA

Prior Authorization and Medical Review is required.

Luxturna® (voretigene neparvovec) may be considered medically necessary when all the below criteria are met:

1. Patient is between 12 months and 65 years of age **AND**
2. Patient has a confirmed diagnosis of a biallelic RPE65 mutation-associated retinal

Luxturna

dystrophy **AND**

3. Patient must have documented genetic testing to confirm mutation in both copies of the RPE65 gene **AND**
4. Patient must have sufficient viable retinal cells as determined by treating physician through optical coherence tomography (OCT) imaging and/or ophthalmoscopy indicating:
    a. An area of retinal thickness >100 microns within the posterior pole OR
    b. ≥ 3-disc areas of the retina without atrophy or pigmentary degeneration within the posterior pole **OR**
    c. Any remaining visual field within 30° of fixation as measured by III4e isopter or equivalent **AND**
5. Patient has not had intraocular surgery within the past six months **AND**
6. Patient has not used prescription retinoid compounds or precursors within the past 3 months **AND**
7. Patients less than 65 years of age will utilize concomitant systemic oral corticosteroids for a total of 7 days starting 3 days before administration of Luxturna and followed by tapering the dose during the following 10 days.
8. Luxturna therapy must be prescribed and administered by an ophthalmologist or retinal surgeon at an Ocular Gene Therapy Treatment Center authorized by Spark Therapeutics **AND**
9. Patient has not previously received subretinal administration of a gene therapy vector, or Luxturna into the intended eye **AND**
10. Patient will avoid air travel, scuba diving, and/or travel to high elevations until the dissipation of the air bubble formed following administration of Luxturna has been verified through ophthalmic examination **AND**
11. There are no preexisting eye conditions or complicating systemic diseases (e.g. radiotherapy of the orbit, leukemia with CNS/optic nerve involvement, advanced retinopathy patients particularly those with diabetes or sickle cell disease, and immunodeficient patients)

LIMITATIONS/EXCLUSIONS

1. Approval will be granted for 3 months or as determined through review
2. Coverage cannot be renewed; a maximum of 1 injection per eye per lifetime will apply
3. Use in infants under 12 months of age
4. The individual is not pregnant or breastfeeding
5. The recommended dose of Luxturna for each eye is 1.5 X 10^{11} vector genomes administered by sub-retinal injection in a total volume of 0.3ml
6. If both eyes are to be treated, Luxturna must be administered to each eye on separate days at least 6 days apart

BACKGROUND

Luxturna® (voretigene neparvovec) is an adeno-associated virus vector-based gene therapy indicated for the treatment of patients with confirmed biallelic RPE65 mutation-associated retinal dystrophy.
Luxturna is designed to deliver a normal copy of the gene encoding the human retinal pigment epithelial 65 kDa protein (RPE65) to cells of the retina in persons with reduced or absent levels

of biologically active RPE65. RPE65 is produced in the retinal pigment epithelial (RPE) cells and converts all- trans-retinol to 11-cis-retinal, which subsequently forms chomophore, 11-cis-retinal, during the visual (retinoid) cycle. The visual cycle is critical in phototransduction, which refers to 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 isomerohydrolase activity, blocking the visual cycle and resulting in impairment of vision. Luxturna is intended to negate the effects of mutations in the RPE65 gene.

DEFINITIONS

1. Luxturna® (voretigene neparvovec) is a suspension for subretinal injection. Initial US Approval: 2017
    a. Luxturna® (voretigene neparvovec) is supplied in a 0.5mL extractable volume in a single-dose 2mL vial for a single administration in one eye.
    b. Luxturna® (voretigene neparvovec) is supplied at a concentration of $5x10^{12}$ vg/mL and requires a 1:10 dilution prior to administration
        i. Diluent is supplied in two single use 2mL vials

CODING

Applicable Procedure Codes	
J3398	Injection, voretigene neparvovec-rzyl, 1 billion vector genomes

Applicable NDCS	
71394-0065-01	0.5mL Luxturna® (voretigene neparvovec)
71394-0716-01	2 vials of 1.7mL diluent

Applicable Diagnosis Codes	
H35.50	Unspecified hereditary retinal dystrophy
H35.52	Pigmentary retinal dystrophy
H35.54	Dystrophies primarily involving the retinal pigment epithelium

EVIDENCE BASED REFERENCES

1. Luxturna® (voretigene neparvovec) [package insert]. Philadelphia, PA; Spark Therapeutics, Inc. December 2017.
2. FDA Advisory Committee Briefing Document: Spark Therapeutics, INC, Luxturna® (voretigene neparvovec) (voretigene neparvovec).2017; https://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/BloodVaccinesandOtherBiologics/CellularTissueandGeneTherapiesAdvisoryCommittee/UCM579300.pdf Accessed April 10, 2018.

3. 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 randomized, controlled, open-label, phase 3 trial. Lancet. 2017 Aug 26;390(10097):849-860.

POLICY HISTORY

Original Effective Date	December 7, 2020
Revised Date	November 1, 2021 – Annual Review and approval (no policy revisions made) February 2, 2022 – Annual Review and approval (no policy revisions made) February 28, 2023 – Annual Review and approval (no policy revisions made) March 1, 2023 – Adopted by MA UM Committee (no policy revisions made) January 1, 2024 - Updated to Brand New Day/Central Health Medicare Plan (no policy revisions made)

Approved by Pharmacy and Therapeutics Committee on 2/28/2023