Medical benefit drug policies are a source for BCBSM and BCN medical policy information only. These documents are not to be used to determine benefits or reimbursement. Please reference the appropriate certificate or contract for benefit information. This policy may be updated and therefore subject to change.

Effective Date: 05/09/2019

Luxturna™ (voretigene neparvovec-rzyl)

FDA approval: December 19, 2017
HCPCS:  C9032, J3398  
Benefit: Medical

Policy:

Requests must be supported by submission of chart notes and patient specific documentation.

A. Coverage of the requested drug is provided when all the following are met:
   a. Prescribed for an FDA approved indication
   b. Prescribed and administered by an ophthalmologist
   c. Patient is 12 months of age or older
   d. Documented biallelic RPE65 gene mutation
   e. Retinal thickness > 100 microns within the posterior pole
   f. Submission of baseline full field light sensitivity prior to approval. Submission of full field light sensitivity one year after administration as a follow-up to the prior approval request

B. Quantity Limitations, Authorization Period and Renewal Criteria
   a. Quantity Limit: Maximum of one injection per eye (lifetime)
   b. Initial Authorization Period: 1 month
   c. Renewal Criteria: None, one lifetime injection per eye

C. Luxturna is considered investigational when used for all other conditions, including but not limited to:
   a. Other types of Leber congenital amaurosis (i.e. Type 3, Type 15)
   b. Other inherited retinal disorders

***Note: Coverage may differ for Medicare Part B members based on any applicable criteria outlined in Local Coverage Determinations (LCD) or National Coverage Determinations (NCD) as determined by Center for Medicare and Medicaid Services (CMS). See the CMS website at http://www.cms.hhs.gov/. Determination of coverage of Part B drugs is based on medically accepted indications which have supported citations included or approved for inclusion determined by CMS approved compendia.
Therapeutic considerations:

A. FDA approved indication/Diagnosis
   a. For the treatment of patients with confirmed biallelic RPE65 mutation-associated retinal dystrophy. Patients must have viable retinal cells as determined by the treating physician(s).

   *Please refer to most recent prescribing information.

B. Background Information
   a. Luxturna, formerly known as SPK-RPE65, is a novel human gene therapy agent delivered by adeno-associated viral vector for genetic diseases, specifically inherited retinal diseases caused by a mutation in the RPE65 gene
   b. RPE65 is expressed in the retinal pigment epithelium layer of the retina, which nourishes the retina’s photoreceptor cells (rods and cones)
   c. The RPE65 gene is especially important for rods as it encodes a protein required in the visual cycle that converts the light entering the eye into electrical signals that are transmitted to the brain, enabling sight
   d. Mutations in RPE65 result in dysfunctional proteins, visual cycle disruption, and visual impairment that progress to blindness
   e. The biallelic mutation of RPE65 will be diagnosed with a genetic test
      i. Results of one pathogenic variant in the homozygous state (the same mutation on both alleles) confirm biallelic RPE65-mediated inherited retinal dystrophy
      ii. Results of two different pathogenic variants (compound heterozygous) in the trans configuration (each allele has one pathogenic variant) confirm biallelic RPE65-mediated inherited retinal dystrophy
      iii. However, results of two different pathogenic variants (compound heterozygous) in the cis configuration (one allele has both variants, the other allele has none) rules out RPE65-mediated inherited retinal dystrophy
      iv. If a compound heterozygous state is detected, documentation of a trans configuration will be needed to confirm diagnosis
   f. Patients with biallelic RPE65 mutations will experience progressive vision loss as they age
   g. While clinical trials restricted inclusion based on visual acuity and visual field testing it is not necessary in clinical practice to limit treatment to individuals that have based on a specific amount vision lost

C. Efficacy

   *Please refer to most recent prescribing information.

D. Medication Safety Considerations

   Black Box Warning: No

   *Please refer to most recent prescribing information.

E. Dosing and administration
   a. Dosing: $1.5 \times 10^{11}$ vector genomes/0.3 mL in each eye once

   *Please refer to most recent prescribing information.
F. How supplied
   a. 1.5 x 10^{11} vector genomes for reconstitution in a single-dose vial

References:

**Policy History**

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<th>Change Description</th>
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<tr>
<td>1.6</td>
<td>Effective Date: 05/09/2019</td>
<td>Annual Review of Medical Policy</td>
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<tr>
<td>1.5</td>
<td>Effective Date: 08/07/2018</td>
<td>PA added to BCNA and MAPPO</td>
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| 1.4 | Effective Date: 05/03/2018 | New drug review, updated background and indication, preliminary criteria updated by removing restrictions based on visual acuity/visual fields as well as adding necessity to submit full field light sensitivity at base line and after one year |
| 1.3 | Effective Date: 02/08/2018 | Update to Preliminary Criteria                                                      |
| 1.2 | Effective Date: 02/01/2018 | PA added to BCN and BCBS                                                            |

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| 1.1 | Effective Date: 12/07/2017 | Update to Preliminary Criteria                                                      |
| 1.0 | Effective Date: 02/09/2017 | Preliminary Criteria                                                               |

* The prescribing information for a drug is subject to change. To ensure you are reading the most current information it is advised that you reference the most updated prescribing information by visiting the drug or manufacturer website or [http://dailymed.nlm.nih.gov/dailymed/index.cfm](http://dailymed.nlm.nih.gov/dailymed/index.cfm).