Medical Policy:
Luxturna™ (voretigene neparvovec)

POLICY NUMBER	LAST REVIEW	ORIGIN DATE
MG.MM.PH.43	February 2, 2024	

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The treating physician or primary care provider must submit to EmblemHealth, or ConnectiCare, as applicable (hereinafter jointly referred to as "EmblemHealth"), the clinical evidence that the member meets the criteria for the treatment or surgical procedure. Without this documentation and information, EmblemHealth will not be able to properly review the request preauthorization or post-payment review. The clinical review criteria expressed below reflects how EmblemHealth determines whether certain services or supplies are medically necessary. This clinical policy is not intended to pre-empt the judgment of the reviewing medical director or dictate to health care providers how to practice medicine. Health care providers are expected to exercise their medical judgment in rendering appropriate care. Health care providers are expected to exercise their medical judgment in rendering appropriate care.

EmblemHealth established the clinical review criteria based upon a review of currently available clinical information (including clinical outcome studies in the peer reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). EmblemHealth expressly reserves the right to revise these conclusions as clinical information changes and welcomes further relevant information. Each benefit program defines which services are covered. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered and/or paid for by EmblemHealth, as some programs exclude coverage for services or supplies that EmblemHealth considers medically necessary.

If there is a discrepancy between this guideline and a member's benefits program, the benefits program will govern. Identification of selected brand names of devices, tests and procedures in a medical coverage policy is for reference only and is not an endorsement of any one device, test or procedure over another. In addition, coverage may be mandated by applicable legal requirements of a state, the Federal Government or the Centers for Medicare & Medicaid Services (CMS) for Medicare and Medicaid members. All coding and web site links are accurate at time of publication.

EmblemHealth may also use tools developed by third parties, such as the MCG™ Care Guidelines, to assist us in administering health benefits. The MCG™ Care Guidelines are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice. EmblemHealth Services Company, LLC, has adopted this policy in providing management, administrative and other services to EmblemHealth Plan, Inc., EmblemHealth Insurance Company, EmblemHealth Services Company, LLC, and Health Insurance Plan of Greater New York (HIP) related to health benefit plans offered by these entities. ConnectiCare, an EmblemHealth company, has also adopted this policy. All of the aforementioned entities are affiliated companies under common control of EmblemHealth Inc.

Definitions

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 (voretigene neparvovec) 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 (voretigene neparvovec) is intended to negate the effects of mutations in the RPE65 gene.

Length of Authorization

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

Dosing Limits

Max Units (per dose and over time) [HCPCS Unit]:
150 billable units per eye

Guideline

Provider must submit documentation (which may include office notes and lab results) supporting that the patient has met all approval criteria.

Luxturna may be considered medically necessary when all the below criteria are met:

1. **Retinal Dystrophy**
   A. The patient is between 12 months and 65 years of age; **AND**
   B. The patient has a confirmed diagnosis of a biallelic RPE65 mutation-associated retinal dystrophy; **AND**
   C. The patient must have documented genetic testing to confirm mutation in both copies of the RPE65 gene; **AND**
   D. The member must have sufficient viable retinal cells as determined by treating physician through optical coherence tomography (OCT) imaging and/or ophthalmoscopy indicating:
      i. An area of retinal thickness >100 microns within the posterior pole; **OR**
      ii. ≥ 3-disc areas of the retina without atrophy or pigmentary degeneration within the posterior pole; **OR**
      iii. Any remaining visual field within 30° of fixation as measured by III4e isopter or equivalent; **AND**
   E. The patient has not had intraocular surgery within the past six months; **AND**
   F. The patient has not used prescription retinoid compounds or precursors within the past 3 months; **AND**
   G. Luxturna (voretigene neparvovec) therapy must be prescribed and administered by an ophthalmologist or retinal surgeon at an Ocular Gene Therapy Treatment Center authorized by Spark Therapeutics; **AND**
   H. Patient has not previously received subretinal administration of a gene therapy vector, or Luxturna into the intended eye; **AND**
   I. The 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 (voretigene neparvovec) has been verified through ophthalmic examination; **AND**
   J. 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 (voretigene neparvovec) for each eye is 1.5×10^{11} vector genomes administered by sub-retinal injection in a total volume of 0.3ml
6. If both eyes are to be treated, Luxturna (voretigene neparvovec) must be administered to each eye on separate days at least 6 days apart

Applicable Procedure Codes

Code	Description
J3398	Injection, voretigene neparvovec-rzyl, 1 billion vector genomes

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Applicable NDCs

Code	Description
71394-0415-01	Luxturna Suspension

ICD-10 Diagnoses

Code	Description
H35.50	Unspecified hereditary retinal dystrophy

Revision History

Company(ies)	DATE	REVISION
EmblemHealth & ConnectiCare	2/2/2024	Annual Review: No criteria changes, updated formatting, added dosing limits
EmblemHealth & ConnectiCare	6/6/2023	Annual review: No criteria changes. Removed NDC: 71394-0065-01, Removed ICD-10 codes H35.52 and H35.54
EmblemHealth & ConnectiCare	09/07/2022	Transferred policy to new template
EmblemHealth & ConnectiCare	12/30/2020	Annual review: no policy changes
EmblemHealth & ConnectiCare	10/31/2019	Added criteria surrounding preexisting eye conditions or complicating systemic diseases. Added limitation: The individual is not pregnant or breastfeeding.
EmblemHealth & ConnectiCare	7/26/2018	Added coverage to all lines of business
EmblemHealth & ConnectiCare	12/3/2018	Added J3398 and removed J3490, J3590, C9399 from Applicable Procedure Codes.

References

1. Luxturna [package insert]. Philadelphia, PA; Spark Therapeutics, Inc. December 2019.
2. FDA Advisory Committee Briefing Document: Spark Therapeutics, INC, Luxturna (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.

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