DRUG DETERMINATION POLICY

Title: DDP-39 Luxturna Gene Therapy

Effective Date: 12/15/2020

Physicians Health Plan
PHP Insurance Company
PHP Service Company

Important Information - Please Read Before Using This Policy

The following policy applies to health benefit plans administered by PHP and may not be covered by all PHP plans. Please refer to the member's benefit document for specific coverage information. If there is a difference between this general information and the member's benefit document, the member's benefit document will be used to determine coverage. For example, a member's benefit document may contain a specific exclusion related to a topic addressed in a coverage policy.

Benefit determinations for individual requests require consideration of:

1. The terms of the applicable benefit document in effect on the date of service.
2. Any applicable laws and regulations.
3. Any relevant collateral source materials including coverage policies.
4. The specific facts of the particular situation.

Contact PHP Customer Service to discuss plan benefits more specifically.

1.0 Policy:

This policy describes the determination process for coverage of specific drugs.

This policy does not guarantee or approve benefits. Coverage depends on the specific benefit plan. Drug Determination Policies are not recommendations for treatment and should not be used as treatment guidelines.

2.0 Background or Purpose:

Luxturna is a specialty drug indicated for a very specific diagnosis and is associated with significant toxicity. These criteria were developed and implemented to ensure appropriate use for the intended diagnosis and mitigation of toxicity, if possible.

3.0 Clinical Determination Guidelines:

A. Luxturna subretinal injection (voretingene neparvovec) [must meet all listed below]:

   1. Age: at least four years (no study on patients less than four years of age).

   2. Prescriber: opthamologist or retinal surgeon.

   3. Diagnosis and severity [must meet all listed below]:

      a. Diagnosis: biallelic RPE65 mutation-associate retinal dystrophy [e.g. Leber's congenital amaurosis (LCA), retinitis pigmentosa (RP), early onset severe retinal dystrophy (ERSOD)].

      b. Genetic testing: documenting biallelic mutation of RPE65 gene.

      c. Sufficient viable retinal cell determined by optical coherence tomography (OCT) [must meet one listed below]:

         - Confirming an area of the retina within the posterior pole of greater than 100Um thickness.

- At least three disc areas of the retina without atrophy or pigmentary degeneration within the posterior pole.

- Remaining visual field within 30 degrees fixation as measured by III4e isopter or equivalent.

4. Other therapies: none at this time.

5. Dosage regimen: Luxturna subretinal injection (voretingene neparvovec) [must meet all listed below]:

   a. Dose: 1.5×10^{11} vector genomes (vg) subretinal injection in a total volume of 0.3 mL.

   b. Administration: each eye on separate days within a close interval, but no fewer that six days apart by opthamologist or retinal surgeon.

   c. Concomitant oral corticosteroid therapy: prednisone 1mg per kg per day (or equivalent) times seven days beginning three days before gene therapy, then tapering dose over the next ten days.

   d. Limited activities: no air travel and/or scuba diving post-treatment until all intraocular air bubbles have been absorbed.

6. Approval: one injection per eye per lifetime.

7. Exclusions:

   a. Introcular surgery: surgery within six months of the time of therapy.

   b. Ocular or systemic conditions that would interfer with therapy:

      - Malignancy treatment that effects the Central Nervous System (CNS): radiotherapy of the orbit, CNS leukemia with optic nerve involvement.

      - Diabetes or sickle cell disease with advance retinopathy: macular edema, proliferative changes.

      - Immunodeficiency suceptable to opportunistic infection: e.g. Cytomegalovirus retinitis.

   c. Pregnancy or breastfeeding.

4.0 Coding:

AFFECTED CODES				
Code	**Brand Name**	**Generic Name**	**Billing Units (1U)**	**Prior Approval**
J3398	Luxturna	voretingene neparvovec	1 billion vector genomes	Y
Medical Diagnosis Codes				
H35.50	Unspecified hereditary retinal dystropy			N
H35.53	Pigmentary retinal dystropy			N
H35.54	Dystrophies primarily involving the retinal epithelium			N

5.0 References, Citations & Resources:

1. Lexicomp Online®, Lexi-Drugs®, Hudson, Ohio: Lexi-Comp, Inc.; Luxturna accessed October 2020.
2. Efficacy and safety of voretingene neparvovec (AAV2-hRPE65v2) in patients wwith RPE65-mediated inherited retinal dystrophy: a randomized, controlled, open-label, phase 3 trial. Lancet 2017;390(10097):849-860.
3. Improvement and decline in vision with gene therapy om childhood blindness. N Eng J Med 2015;372:1920.

6.0 Appendices:

See page 4.

7.0 Revision History:

Original Effective Date: 12/11/2019

Next Review Date: 11/10/2021

Revision Date	Reason for Revision
11/19	New policy, split into two policies
10/20	Annual review; clarified critiera instructions, replaced abbreviations, formatting, approved by P&T Committee 12/9/20

Appendix I - Monitoring and patient safety

Drug	Adverse Reactions	Monitoring & Contraindications	REMS
Luxturna (voretingene neparvovec)	• Ophthalmic: conjunctival hyperemia (22%), cataract (20%), increased intraocular pressure (15%)	• Ophthalmic: increased intraocular pressure, retinal abnormalities, signs & symptoms of infection or inflammation, visual disturbances	• None needed