Clinical Policy: Verteporfin (Visudyne)

Reference Number: ERX.SPA.205
Effective Date: 01.11.17
Last Review Date: 02.22
Line of Business: Commercial, Medicaid

Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
Verteporfin (Visudyne®) is a light activated drug used in photodynamic therapy.

FDA Approved Indication(s)
Visudyne is indicated for the treatment of patients with predominantly classic subfoveal choroidal neovascularization (CNV) due to:

- Age-related macular degeneration (AMD)
- Pathologic myopia
- Presumed ocular histoplasmosis

Limitation(s) of use: There is insufficient evidence to indicate Visudyne for the treatment of predominantly occult subfoveal CNV.

Policy/Criteria
Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

Health plan approved formularies should be reviewed for all coverage determinations. Requirements to use preferred alternative agents apply only when such requirements align with the health plan approved formulary.

It is the policy of health plans affiliated with Envolve Pharmacy Solutions™ that Visudyne is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Choroidal Neovascularization (must meet all)**:**

1. Diagnosis of subfoveal CNV due to one of the following (a, b, or c):
   a. AMD;
   b. Pathologic myopia;
   c. Presumed ocular histoplasmosis;
2. Prescribed by or in consultation with an ophthalmologist;
3. Age ≥ 18 years;
4. For AMD, member meets one of the following (a or b):
   a. Failure of bevacizumab intravitreal solution, unless contraindicated or clinically significant adverse effects are experienced;
      **Prior authorization may be required for bevacizumab*
   b. Disease has progressed after use of a vascular endothelial growth factor (VEGF) inhibitor as first-line treatment;
5. For CNV due to pathologic myopia, failure of bevacizumab intravitreal solution or Lucentis®, unless clinically significant adverse effects are experienced or both are contraindicated;
   **Prior authorization may be required for bevacizumab intravitreal solution and Lucentis. Requests for IV formulations of Avastin, Mvasi, and Zirabev will not be approved*
6. Dose does not exceed 6 mg/m^2 body surface area.

Approval duration: 3 months (1 dose)

B. Central Serous Chorioretinopathy (off-label) (must meet all)**:**

1. Diagnosis of central serous chorioretinopathy confirmed by retinal scan;
2. Prescribed by or in consultation with an ophthalmologist;

3. Disease is characterized as chronic or recurrent as evidenced by one of the following (a or b):
   a. Persistent subretinal fluid for ≥ 3 months;
   b. Persistent subretinal fluid for < 3 months and prescriber attestation that member is symptomatic (e.g., blurry central vision);
4. Member meets one of the following (a or b):
   a. Member is not taking medications from any of the following classes: corticosteroids, stimulants, decongestants, or erectile dysfunction medications;
   b. Documentation that prescriber has evaluated medications as risk factors if they are from any of the following classes: corticosteroids, stimulants, decongestants, or erectile dysfunction medications;
5. Dose does not exceed 6 mg/m^2 body surface area.

Approval duration: 3 months (1 dose)

B. Other diagnoses/indications
1. Refer to ERX.PA.01 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

II. Continued Therapy

A. Choroidal Neovascularization (must meet all)**:**
1. Currently receiving medication via a health plan affiliated with Envolve Pharmacy Solutions or member has previously met initial approval criteria;
2. Member is responding positively to therapy as evidenced by one of the following (a, b, c, or d):
   a. Detained neovascularization;
   b. Improvement in visual acuity;
   c. Maintenance of corrected visual acuity from prior treatment;
   d. Supportive findings from optical coherence tomography or fluorescein angiography;
3. Recent fluorescein angiography, conducted at least 3 months after the last treatment, shows recurrent or persistent choroidal neovascular leakage;
4. If request is for a dose increase, new dose does not exceed 6 mg/m^2 body surface area.

Approval duration: 3 months (1 dose)

B. Central Serous Chorioretinopathy (off-label):
1. Re-authorization is not permitted. Members must meet the initial approval criteria.

Approval duration: Not applicable

C. Other diagnoses/indications (must meet 1 or 2)**:**
1. Currently receiving medication via a health plan affiliated with Envolve Pharmacy Solutions and documentation supports positive response to therapy.
   Approval duration: Duration of request or 6 months (whichever is less); or
2. Refer to ERX.PA.01 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

III. Diagnoses/Indications for which coverage is NOT authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off-label use policy – ERX.PA.01 or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

AMD: age-related macular degeneration
CNV: choroidal neovascularization
mCNV: myopic choroidal neovascularization
FDA: Food and Drug Administration

Appendix B: Therapeutic Alternatives
This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
bevacizumab (Avastin®)	**Neovascular (wet) AMD:** 1.25 to 2.5 mg administered by intravitreal injection every 4 weeks	2.5 mg/month
	mCNV: 0.05 mL initial intravitreal injection, followed by monthly evaluation for additional injections as needed	0.5 mL/month
Beovu® (brolucizumab)	**Neovascular (wet) AMD:** 6 mg (1 via) administered by intravitreal injection every 4 weeks for the first 3 months, then every 8 or 12 weeks thereafter	6 mg (1 vial) every 2 months after loading period
Eylea® (aflibercept)	**Neovascular (wet) AMD:** 2 mg (0.05 mL) administered by intravitreal injection once a month for 3 months then 2mg every 2 months.	2 mg/month
Lucentis® (ranibizumab)	**Neovascular (wet) AMD:** 0.5 mg (0.05 mL) administered by intravitreal injection once a month. <u>Alternative dosing:</u> Once monthly injections for three months followed by 4-5 doses dispersed among the following 9 months Or Treatment may be reduced to one injection every 3 months after the first four injections if monthly injections are not feasible.	0.5 mg/month
	Myopic CNV: 0.5 mg (0.05 mL) administered by intravitreal injection once a month for up to 3 months. Patients may be retreated if needed.	0.5 mg/month
Macugen® (pegaptanib)	**Neovascular (wet) AMD:** 0.3 mg (0.09 mL) administered by intravitreal injection every 6 weeks	0.3 mg/6 weeks

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.

Appendix C: Contraindications/Boxed Warnings
- Contraindication(s):
  - Porphyria
  - Hypersensitivity
- Boxed warning(s): none reported

Appendix D: General Information
- In the ANti-VEGF Antibody for the Treatment of Predominantly Classic CHORoidal Neovascularisation in AMD (ANCHOR) trial, the number of patients that lost fewer than 15 letters at 12 months was achieved by 96.4% of patients treated with Lucentis 0.5 mg compared to 64.3% of patients treated with Visudyne ($p < 0.001$). Rate of intraocular inflammation was higher for patients treated with Lucentis 0.5 mg at 15% compared to Visudyne at 2.8%.
- In the RADIANCE, a Phase III, 12-month, multicenter, randomized, double-masked, active-controlled trial, Lucentis was compared to vPDT (Visudyne and photodynamic therapy) for the

treatment of mCNV. Lucentis treatment in groups I and II was superior to vPDT based on mean average BCVA change from baseline to month 1 through month 3 (group I: +10.5, group II: +10.6 vs. group III: +2.2 Early Treatment Diabetic Retinopathy Study [ETDRS] letters; both P<0.0001). Lucentis treatment guided by disease activity was noninferior to VA stabilization-guided retreatment based on mean average BCVA change from baseline to month 1 through month 6 (group II: +11.7 vs. group I: +11.9 ETDRS letters; P<0.00001). Mean BCVA change from baseline to month 12 was +13.8 (group I), +14.4 (group II), and +9.3 ETDRS letters (group III). At month 12, 63.8% to 65.7% of patients showed resolution of myopic CNV leakage. Patients received a median of 4.0 (group I) and 2.0 (groups II and III) ranibizumab injections over 12 months. No deaths or cases of endophthalmitis and myocardial infarction occurred.

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Predominantly classic subfoveal CNV due to AMD, pathologic myopia or presumed ocular histoplasmosis	6 mg/m^2 IV diluted with 5% dextrose to a final volume of 30 mL infused over 10 minutes	6 mg/m^2 IV

VI. Product Availability

Vial for reconstitution: 15 mg (2 mg/mL after reconstitution)

VII. References

1. Visudyne Prescribing Information. Bridgewater, NJ: Valeant Ophthalmics; February 2017. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2021/021119s029lbl.pdf. Accessed September 17, 2020.
2. American Academy of Ophthalmology Retina/Vitreous Panel. Preferred Practice Pattern® Guidelines. Age-Related Macular Degeneration. San Francisco, CA: American Academy of Ophthalmology; October 2019. Available at: www.aao.org/ppp. Accessed November 9, 2021.
3. Diaz RI, Sigler EJ, Rafieetary MR, Calzada JI. Ocular histoplasmosis syndrome. *Surv Ophthalm*. 2015; 60(4): 279-295.
4. Wolf S, Valciuniene VJ, Laganovska G, et al. RADIANCE: a randomized controlled study of ranibizumab in patients with choroidal neovascularization secondary to pathologic myopia. *Ophthalmology*. 2014; 121(3):682-92.e2. doi: 10.1016/j.ophtha.2013.10.023. Epub 2013 Dec 8.
5. Hanumunthadu D, Tan ACS, Singh SR, et al. Management of chronic central serous chorioretinopathy. *Indian J Ophthalmol.* 2018; 66(12): 1704-1714.
6. Salehi M, Wenick S, Law HA, Evans JR, Gehlbach P. Interventions for central serous chorioretinopathy: a network meta-analysis. *Cochrane Database Syst Rev.* 2016; 12. doi: 10.1002/14651858.CD011841.pub2.
7. Van Rijssen TJ, van Dijk EHC, Yzer S, et al. Central serous chorioretinopathy: towards an evidence-based treatment guideline. *Progress in Retinal and Eye Research.* 2019; 73. doi: 10.1016/j.preteyeres.2019.07.003.

Reviews, Revisions, and Approvals	Date	P&T Approval Date
1Q18 annual review: Converted to new template Added specialist requirement Removed fluorescein angiography for diagnosis due to addition of specialist Added requirement of documentation of recurrent or persistent CNV leakage in addition to positive response to last treatment Added age limit Expanded VEGF requirement for AMD and pathologic myopia specifically to bevacizumab or other VEGF inhibitors Added redirection to Lucentis for mCNV due to clinical superiority Removed allowed indication for occult CNV	11.23.17	02.18

Reviews, Revisions, and Approvals	Date	P&T Approval Date
1Q 2019 annual review: added bevacizumab as an option for CNV due to myopia; references reviewed and updated.	11.20.18	02.19
1Q 2020 annual review: no significant changes; added Avastin biosimilar to therapeutic alternatives; references reviewed and updated.	10.23.19	02.20
Ad Hoc update: clarified redirection from bevacizumab to Avastin as compounding pharmacies often break standard Avastin vials into smaller dosages specifically for ophthalmic use and there is a temporary CPT code not currently available to biosimilars.	10.01.20	
1Q 2021 annual review: no significant changes; added Beovu to therapeutic alternatives; references reviewed and updated.	12.01.20	02.21
Ad Hoc update: updated redirection to "bevacizumab intravitreal solution" given availability of generic bevacizumab intravitreal solution and considering goal was to minimize use of IV bevacizumab products, most notably biosimilars; converted redirection language to "must use"	03.04.21	
Ad Hoc update: added off-label criteria for central serous chorioretinopathy per health plan request.	03.23.21	05.21
Ad Hoc update: converted redirection language from "must use" to: "Failure of" bevacizumab intravitreal solution.	08.03.21	
1Q 2022 annual review: no significant changes; added Illinois Medicaid line of business (IL.ERX.SPA.205 to retire); references reviewed and updated.	11.09.21	02.22

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information.

This Clinical Policy is not intended to dictate to providers how to practice medicine, nor does it constitute a contract or guarantee regarding payment or results. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members.