Medical Coverage Policy

Wet-Age Macular Degeneration Treatment

☐ Device/Equipment ☒ Drug ☐ Medical ☐ Surgery ☐ Test ☐ Other

Effective Date:	01/01/2003	Policy Last Updated:	12/4/2012

☐ **Prospective review is recommended/required. Please check the member agreement for preauthorization guidelines.**

☒ **Prospective review is not required.**

Description:
Age-related macular degeneration (AMD) is a retinal disease causing severe and irreversible vision loss. AMD effects the macula, the area of the eye responsible for central vision, is essential for most visual activities such as reading, driving, and facial recognition. It is the major cause of blindness in individuals 60 years of age or older. There are two type of age-related macular degeneration: wet and dry.

Dry AMD is the more common type and is associated with drusen (small, yellow deposits) in the macula. This causes the macula to lose its function and results in blurred central vision that slowly worsens.

Wet AMD accounts for approximately 15% of cases and is caused by the development of abnormal leaky blood vessels that eventually damage the macula. These abnormal vessels leak fluid and blood into the tissue at the back of the eye, causing a blister to form in the retina. This leads to scarring and the permanent impairment of central vision.

Currently there is no preventive treatment for wet AMD. However, there are several therapeutic treatments that slow the progression.

1. Ocular photodynamic therapy (OPT) with verteporfin
Photodynamic therapy using verteporfin (Visudyne) allows destruction of the subfoveal choroidal neovascularization of the eye in "wet" (leaking and destructive neovascularization) AMD. A course of verteporfin therapy is a two-step process requiring administration of both drug and light. The first step is the intravenous infusion of verteporfin. The second step is the activation of verteporfin with light from a non-thermal diode laser.

The physician should re-evaluate the patient every three months and, if choroidal neovascular leakage is detected on fluorescein angiography, verteporfin therapy should be repeated again. While bilateral treatments may be performed, it is advisable that a patient having this therapy

for the first time be treated for one eye only. If the patient reacts favorably to the verteporfin therapy, the subsequent treatments may be performed bilaterally.

2. Pegaptanib Sodium
Pegaptanib sodium injection (Macugen®) is a sterile, aqueous solution for intravitreous injection. It is supplied in a single-dose, pre-filled syringe. Pegaptanib sodium is indicated for the treatment of neovascular (wet) age-related macular degeneration.

Pegaptanib sodium is administered every six weeks by intravitreous injection into the eye to be treated, with follow-up every three months, with additional treatment if neovascularization recurs. Pegaptanib sodium is typically administered in one eye per visit, the safety and efficacy of pegaptanib sodium therapy administered to both eyes concurrently has not been studied. The safety or efficacy of pegaptanib sodium beyond two years has not been demonstrated.

3. Ranibizumab
Ranibizumab (Lucentis®) is a recombinant humanized monoclonal antibody fragment designed for intraocular use. Ranibizumab binds to and inhibits the biologic activity of human vascular endothelial growth factor.

Ranibizumab is administered once a month by intravitreal injection. Although less effective, treatment may be reduced to one injection every three months after the first four injections if monthly injections are not feasible. It is supplied in a single-dose vial.

4. Bevacizumab
Bevacizumab (Avastin®) may be used off-label for AMD.

5. Aflibercept
Aflibercept (Eylea) is a vascular endothelial growth factor fusion (VEGF-Trap) protein. This prevents VEGF binding with its intended receptor targets, and prevents the growth of new blood vessels. In the eye this can prevent neovascular changes which occur as part of the age-related macular degeneration process

Medical Criteria:
None

Policy:
Ocular photodynamic therapy (OPT) with verteporfin, pegaptanib sodium, ranibizumab, bevacizumab, and aflibercept are covered for the treatment of neovascular (wet) age-related degeneration.

Pegaptanib sodium, ranibizumab, bevacizumab, and aflibercept are not available for member purchase at local pharmacies; physicians may order through the network specialty pharmacy.

Coverage:
Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement, or Benefit Booklet for the applicable surgical and injectable drug benefits/coverage.

Specialty Pharmacy: For contracts with specialty drug coverage, please refer to the member agreement for benefits and **preauthorizations** guidelines.

Coding:
67028
67221
J2503 Injection pegaptanib sodium, 0.3 mg (Mucagen)
J2778 Injection, ranibizumab, 0.1 mg (Lucentis)
J3396 Injection verteporfin, 0.1 mg (Visudyne)
J9035 Injection, bevacizumab, 10 mg (Avastin)
J0178 Injection, aflibercept, 1 mg (Eylea)

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References:
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Hampton T; Scientists Take Aim at Angiogenesis to Treat Degenerative Eye Diseases; JAMA 2004 291: 1309-1310.

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services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice.