

Evidence Based Guideline

Treatment for Age Related Macular Degeneration

File Name: treatment_for_age_related_macular_degeneration
Origination: 11/2006
Last CAP Review: 1/2007
Next CAP Review: n/a
Last Review: 3/2012

Active guideline, no longer scheduled for routine literature review

Description of Procedure or Service

Age-related macular degeneration (AMD) is a disease that affects the central vision. It is a common cause of vision loss among people over age of 55. The disease affects the macula, which is located at the center of the retina (the light-sensitive tissue which lines the back of the eye). The macula provides us with central vision and is responsible for the sharp, direct vision needed to read, drive or watch television. The fovea is a small depression in the center of the macula that provides the sharpest vision. When the macula is damaged, significant vision loss can occur.

There are two types of AMD: non-neovascular or "dry" and the more severe neovascular or "wet" form. The non-neovascular (dry) form of AMD is more common and leads to a slow deterioration of the macula with a gradual loss of vision over a period of years.

Although wet AMD accounts for only 10% of patients with AMD, 90% of AMD patients with significant vision loss have this form of the disease. Wet AMD is caused by the growth of abnormal new blood vessels under the central part of the retina, the macula (choroidal neovascularization). Because these new blood vessels tend to be very fragile, they will often leak fluid and blood underneath the macula. This leakage causes a blister to form in the retina, which lifts the macula from its normal place causing distorted vision. The development of the abnormal blood vessels is due in part to the activity of vascular endothelial growth factor (VEGF), which induces angiogenesis and increases vascular permeability and inflammation. All of this is thought to contribute to the progression of the neovascular (wet) form of the disease.

VEGF is a crucial positive regulator of angiogenesis and evidence for its role in the pathological ocular neovascularization in disorders such as neovascular AMD provided the rationale for the assessment of anti-VEGF agents such as pegaptanib and ranibizumab as potential therapies. Pegaptanib sodium injection (Macugen) was approved by the U. S. Food and Drug Administration (FDA) on December 17, 2004 for the treatment of patients with neovascular (wet) age-related macular degeneration. Macugen is recommended to be administered once every six weeks by intravitreal injection into the eye to be treated. Ranibizumab injection (Lucentis) was approved by the U.S. Food and Drug Administration (FDA) on June 30, 2006 for the treatment of patients with neovascular (wet) age-related macular degeneration. Lucentis is recommended to be administered by intravitreal injection once a month. Although less effective, treatment may be reduced to one injection every three months after the first four injections if monthly injections are not feasible. Compared to continued monthly dosing, dosing every 3 months will lead to an approximate 5-letter (1-line) loss of visual acuity benefit, on average, over the

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following 9 months. Patients should be evaluated regularly.

Note: Please also refer to Evidence Based Guideline, Photodynamic Therapy, Ocular for the treatment of patients with neovascular (wet) age-related macular degeneration with photodynamic therapy.

*****Note: This Evidence Based Guideline is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.**

Evidence Based Guideline for Treatment for Age Related Macular Degeneration

Ranibizumab injection (Lucentis) may be appropriate for the treatment of individuals with neovascular (wet) age-related macular degeneration (AMD). Pegaptanib sodium injection (Macugen) may be appropriate for the treatment of individuals with neovascular (wet) age related macular degeneration.

Medical Evidence regarding Treatment for Age Related Macular Degeneration indicates it is not recommended in the following situations

Ranibizumab injection and pegaptanib sodium injection are not appropriate for treatment of non-neovascular or "dry" age-related macular degeneration.

Benefits Application

This evidence based guideline relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this guideline.

Billing/Coding/Physician Documentation Information

This guideline may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: 67028, C1840, C9291, J2503, J2778

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Scientific Background and Reference Sources

BlueCross BlueShield Association (BCBSA), Technology Evaluation Center (TEC). Special report: Current and evolving strategies in the treatment of age-related macular degeneration. TEC Assessment Program, Vol. 20, No. 11. December 2005. Retrieved on 8/1/06 from http://bluweb.bcbs.com/global_assets/special_content/tec_assessments/vol20/20_11.pdf

U.S. Food and Drug Administration (FDA). FDA Approves New Biologic Treatment for Wet Age-Related Macular Degeneration. FDA News. P04-110. December 20, 2004. Retrieved on 11/7/06 from <http://www.fda.gov/bbs/topics/news/2004/new01143.html>

U.S. Food and Drug Administration (FDA). FDA Approves New Biologic Treatment for Wet Age-Related Macular Degeneration. FDA News. P06-94. June 30, 2006. Retrieved on 8/1/06 from <http://www.fda.gov/bbs/topics/NEWS/2006/NEW01405.html>

U.S. Food and Drug Administration (FDA). Label and Approval History. Drug name: Macugen (Brand Name Drug). Retrieved on 9/11/06 from http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm?fuseaction=Search.Label_ApprovalHistory#applist

U.S. Food and Drug Administration (FDA). Label and Approval History. Drug name: Lucentis (Brand Name Drug) Retrieved on 9/8/06 from <http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm?fuseaction=Search.DrugDetails>

ECRI. Health Technology Assessment Information Service (HTAIS). Vascular Endothelial Growth Factor (VEGF) Inhibitors for the Treatment of Neovascular Age-related Macular Degeneration. Hotline Response Updated 9/21/06. Retrieved on 11/10/06 from http://www.ta.ecri.org/Hotline/Prod/summary/detail.aspx?e=6&doc_id=8534&q=VEGF&anm

Specialty Matched Consultant Advisory Panel - 1/25/07

Policy Implementation/Update Information

12/11/06 New Evidence Based Guideline issued. (pmo)

2/26/07 Specialty Matched Consultant Advisory Panel review. No changes to guidelines. Reference source added. (pmo)

6/22/10 Policy Guideline Number(s) removed (amw)

3/29/11 Removed the following sentence from the "Billing/Coding" section: "There is no specific code for Ranibizumab injection (Luncentis)". Added code J2778 to "Billing/Coding" section. (mco)

1/1/2012 Added HCPCS code C1840 to Billing/Coding section for 2012 code update. (lpr)

3/30/12 Added HCPCS code C9291 to Billing/Coding section for 2012 code update. (lpr)

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.