

# Lucentis™ (Ranibizumab) Injections: Risk Management Recommendations

Anne M. Menke, R.N., Ph.D.  
OMIC Risk Manager

## PURPOSE OF RISK MANAGEMENT RECOMMENDATIONS

OMIC regularly analyzes its claims experience to determine loss prevention measures that our insured ophthalmologists can take to reduce the likelihood of professional liability lawsuits. OMIC policyholders are not required to implement these risk management recommendations. Rather, physicians should use their professional judgment in determining the applicability of a given recommendation to their particular patients and practice situation. These loss prevention documents may refer to clinical care guidelines such as the American Academy of Ophthalmology's Preferred Practice Patterns, peer-reviewed articles, or to federal or state laws and regulations. However, our risk management recommendations do not constitute the standard of care nor do they provide legal advice. If legal advice is desired or needed, an attorney should be consulted. Information contained here is not intended to be a modification of the terms and conditions of the OMIC professional and limited office premises liability insurance policy. Please refer to the OMIC policy for these terms and conditions.

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Lucentis™ (ranibizumab) is administered on-label for the treatment of age-related macular degeneration (AMD) and off-label for the treatment of a number of ophthalmic conditions. This document answers many questions ophthalmologists have about the patient safety and professional liability risks of this medication.

- Patient selection:
  - To determine if patients would benefit from Lucentis™, conduct at least an initial fluorescein angiogram and OCT, and evaluate lesion type, location, size, and presence of subretinal fluid.
  - Lucentis™ (ranibizumab) is contraindicated in patients with ocular or periocular infections. It has not been studied in pediatric patients, and should be given to a pregnant or nursing woman only if clearly needed.
- Stroke Risk
  - The prescribing information for intravitreal Lucentis™ contains a **warning** about arterial thromboembolic events: "Although there was a low rate (<4%) of arterial thromboembolic events observed in the LUCENTIS clinical trials, there is a theoretical risk of arterial thromboembolic events following intravitreal use of inhibitors of VEGF."<sup>1</sup>

<sup>1</sup> See the full prescribing information at <http://www.gene.com/gene/products/information/pdf/lucentis->

- A “Dear Healthcare Provider” letter of 24 January 2007 from Genentech advised ophthalmologists “of a higher incidence in one study of strokes in the 0.5-mg dose group compared with the 0.3-mg dose group (1.2% versus 0.3%, respectively;  $P=0.02$ ).”<sup>2</sup>
- Consider medical conditions that increase their risk for thromboembolic events. Ask patients specifically if they have had a prior stroke.
- Consider providing or obtaining medical clearance for patients with pertinent medical comorbidities, such as a history of stroke.
- Consider whether a change in dosage is warranted in the setting of prior stroke history.
- Consider providing patients with a history of stroke the information on stroke symptoms and response from the American Heart Association.<sup>3</sup> The AHA’s symptoms of stroke include sudden changes in vision; since such visual changes may not be reliable indicators of stroke in patients on Lucentis, these are not included here:
  - Call 911 or go the emergency room if you experience any of the following signs of a stroke:
    - sudden numbness or weakness of the face, arm, or leg, especially on one side of the body;
    - sudden confusion, trouble speaking or understanding;
    - sudden trouble walking, dizziness, loss of balance or coordination;
    - sudden, severe headache with no known cause.
- Preparation of the medication
  - Proper aseptic technique should be utilized during the preparation and administration of the injection.
  - The medication comes in preservative-free 10mg/mL single-use vials. Genentech has prepared a dosing and injection preparation guide, which can be accessed at [http://www.lucintis.com/lucintis/hcp/pdf/LUCEGF-27026\\_M02\\_D&A\\_SS\\_WEB.pdf](http://www.lucintis.com/lucintis/hcp/pdf/LUCEGF-27026_M02_D&A_SS_WEB.pdf).
- Preventing and managing complications from intravitreal injection
  - Intravitreal injections have caused endophthalmitis, retinal detachment, and increased intraocular pressure (IOP). Be familiar with the latest guidelines on care before, during, and after intravitreal injections. One such source is the article by Flynn, Harry W. and Scott, Ingrid U., Evolving Guidelines For Intravitreal Injections. *Retina* 24: S3-S19, 2004.
  - Educate the patient about the warning signs of complications and how to contact you. Consider giving these instructions in writing.
  - Lucentis<sup>TM</sup> has been noted to increase IOP within 60 minutes of intravitreal administration. The product label notes that IOP and perfusion of the optic

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[prescribing.pdf](#).

<sup>2</sup> “Dear Healthcare Provider,” Barron, Hal MD, Senior Vice President, Development, Chief Medical Officer, Genentech, Inc., 27 January 2007.

<sup>3</sup> Stroke Warning Signs. American Heart Association. Patients are encouraged to note the time of the onset of symptoms and to seek care as soon as possible, as the most common type of stroke can be treated with a clot-dissolving medication. <http://www.americanheart.org/presenter.jhtml?identifier=3053#Stroke>

head should be monitored and managed appropriately. This assessment should be documented in the medical record.

- The product label states that “the patient should be monitored during the week following the injection to permit early treatment, should an infection occur.”
- Informed consent discussion and documentation
  - Warnings associated with intravitreal Lucentis™ include arterial thromboembolic events.
    - Patients should be warned of this potential complication, and that one study showed that patients who have had a stroke are at greater risk of having one again.
    - The causal relationship between Lucentis and strokes is unclear, and patients with AMD are already at risk for stroke. For this reason, patients should also be told that whenever a medication is used in a large number of patients, a small number of coincidental life-threatening problems may occur that have no relationship to the treatment.
  - Consent for ongoing treatment
    - Lucentis™ is usually initially administered once a month; the ophthalmologist will determine the interval based upon the clinical situation.
    - In general, informed consent may be considered to have ongoing force and effect until 1) the patient revokes the consent or 2) circumstances (i.e., the patient’s medical or ocular condition) change so as to materially affect the nature of the procedure or the risk/benefit ratio.
    - Prior to subsequent injections, the continued need, effectiveness, and safety of the medication should be evaluated and documented.
    - If the patient’s medical or ocular condition changes to the point that the risk/benefit ratio is affected, it would be prudent to either discontinue treatment or obtain and document informed consent again.
  - Documentation
    - Document the decision-making process that led to choosing Lucentis™ as the treatment for the patient. Note results of earlier attempts at treatment (if applicable) and the results of diagnostic tests.
    - Note the dose, lot number of the vial, any reactions to the injection and how they were handled, and the discharge and follow-up instructions.

**OMIC policyholders who have additional questions about this topic are encouraged to utilize our confidential Risk Management Hotline by calling 1.800.562-6642, extension 651 or 662.**