



## Your guide to therapy with Lucentis<sup>®</sup> (ranibizumab)

**This booklet was created to help you better understand Lucentis® when used for the treatment of visual impairment due to macular edema secondary to retinal vein occlusion (branch RVO or central RVO)**

### WHAT IS LUCENTIS®?

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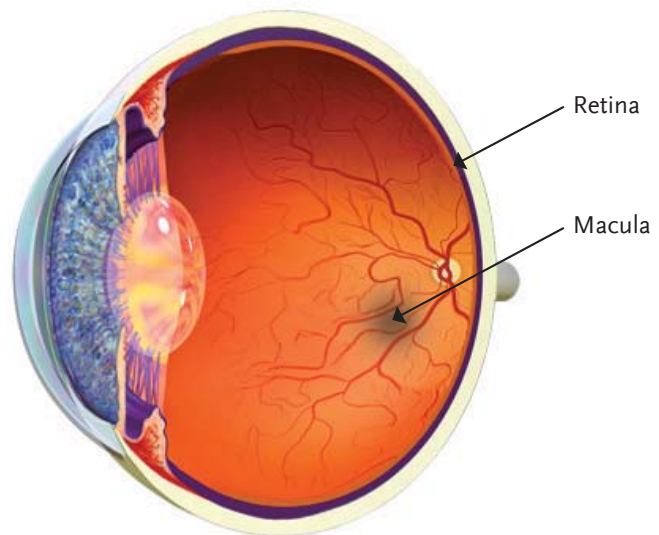
- In branch and central RVO, vision loss predominantly results from damage to the blood vessels of the eye causing them to leak fluid.<sup>1</sup> However, vision loss from the growth of new, abnormal blood vessels is also known in this condition<sup>1</sup>
- Lucentis® specifically recognizes and blocks the action of new blood vessel growth in the eye, and so in turn can help to stop leakage and vision loss<sup>2</sup>

1. Wong TY, Scott IU. *N Engl J Med.* 2010; 363(22): 2135-2144; 2. Ferrara N, *et al. Retina.* 2006; 26(8): 859-870.

## WHY HAVE I BEEN PRESCRIBED LUCENTIS®?

### RVO

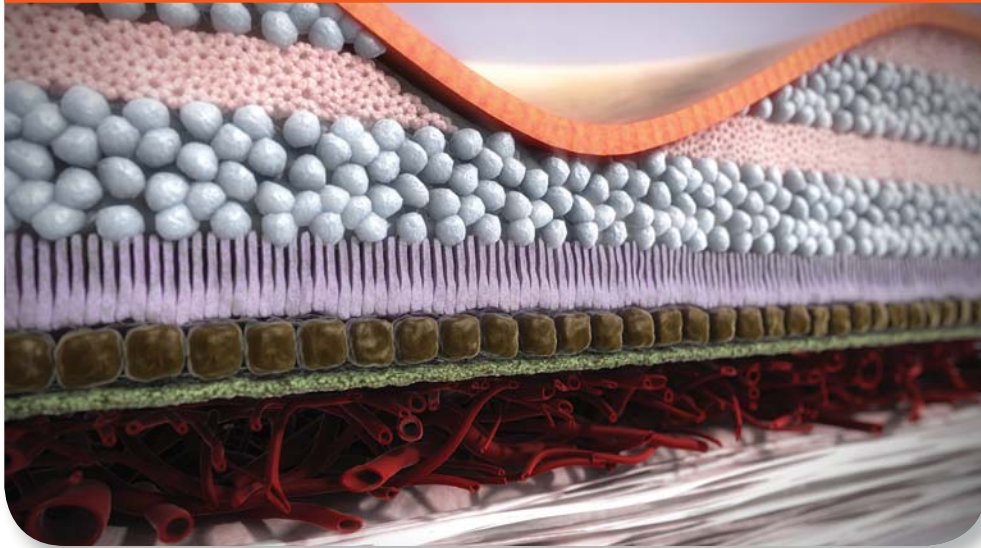
- RVO is a condition that affects the macula,<sup>1</sup> a part of the retina at the back of the eye<sup>2</sup>
- The macula is the area that lets you see sharply in the center of your vision<sup>2</sup>
- Blockage of a retinal vein can cause leakage of fluid into the retina and swelling of the macula. This may damage the retina and cause vision loss<sup>1,3</sup>
- There are two types of RVO, central and branch, which are defined by the type of blood vessel that is affected:<sup>3</sup>
  - > Branch RVO is more common than central RVO<sup>4</sup> and is caused by obstruction of a tributary of the retinal vein. Only the part of the retina that is drained by the blocked branch is affected<sup>3</sup>
  - > Central RVO is caused by obstruction of the central retinal vein. Because the main vein in the eye is blocked, the entire retina is affected<sup>3</sup>



1. Wong TY, Scott IU. *N Engl J Med.* 2010; 363(22): 2135-2144; 2. Jager RD, et al. *N Engl J Med.* 2008; 358(24): 2606-2617; 3. Channa R, et al. *Clin Ophthalmol.* 2011; 5: 705-713; 4. Rogers S, et al. *Ophthalmology.* 2010; 117(2): 313-319.

**Image:** Blausen.com staff. "Blausen gallery 2014". *Wikiversity Journal of Medicine.* DOI:10.15347/wjm/2014.010. ISSN 20018762. (Own work) [CC-BY-3.0 (<http://creativecommons.org/licenses/by/3.0/>)], via Wikimedia Commons. Available: [http://commons.wikimedia.org/wiki/File:Blausen\\_0312\\_DiabeticRetinopathy.png](http://commons.wikimedia.org/wiki/File:Blausen_0312_DiabeticRetinopathy.png) [accessed October 2016].

Healthy retina



Retina affected by RVO



Blockage in a retinal vein increases blood vessel leakage, leading to accumulation of fluid

### HOW ARE RETINAL DISEASES DIAGNOSED?

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- There is a range of different techniques used to examine the eye. These can be divided into two broad categories depending on what they examine:<sup>1</sup>
  - > Eye function: these include techniques assessing vision, e.g. vision charts
  - > Eye structure: these techniques examine the tissues of the eye for damage or disease
- As well as the standard tests (vision charts, examination of the eye with a handheld device, etc.),<sup>1,2</sup> additional techniques are employed to examine eye blood vessels and tissues<sup>2</sup>
- **Fluorescein angiography** is a technique used to visualize the blood vessels at the back of the eye<sup>1,3</sup>
  - > First, the doctor will dilate your pupils with some eye drops
  - > Next, a yellow dye will be injected into your arm (this makes the blood vessels in your eyes glow brightly when a certain type of light is shone on them)
  - > A series of photographs is taken
- **Optical coherence tomography** is a commonly used technique that produces cross-sectional images of the back of the eye<sup>2-4</sup>
  - > This is a non-invasive technique<sup>4</sup> that just requires you to keep your head still and look into a machine while detailed images of your retina are taken without needing to touch your eye

1. Lueck CJ, et al. *J Neurol Neurosurg Psychiatry*. 2004; 75(Suppl 4): iv2-iv11; 2. American Academy of Ophthalmology. Available: [www.aao.org/Assets/dba38b76-3095-4360-8cb6-00adab3aad68/635919125497230000/diabetic-retinopathy-ppp-pdf](http://www.aao.org/Assets/dba38b76-3095-4360-8cb6-00adab3aad68/635919125497230000/diabetic-retinopathy-ppp-pdf) [accessed October 2016]; 3. Arias L, Mones J. AMD Book: Fluorescein angiography. Available: <http://www.amdbook.org/content/fluorescein-angiography-0> [accessed October 2016]; 4. Huang D, et al. *Science*. 1991; 254(5035): 1178-1181.



### HOW IS LUCENTIS® TREATMENT GIVEN?

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- Lucentis® is given by your ophthalmologist (eye doctor) as an injection into the eye
- It is normal to worry about such injections, but patients have reported that most often the injection is virtually painless and sounds worse than it is<sup>1</sup>
  - > The majority of patients reported that any apprehensions about injections dissipated after the first injection<sup>1</sup>

#### What will happen at my appointment?

- On the day of your treatment, care will be taken to make sure you are relaxed and comfortable
- Before receiving Lucentis®, you should inform your doctor if you have had a stroke or experienced transient signs of stroke (weakness or paralysis of limbs or face, difficulty speaking or understanding) so that it can be decided whether this is the most appropriate treatment for you
- Tell your doctor if you are taking or have recently taken any other medicines, including medicines obtained without prescription
- A doctor or nurse will:
  - > Cover your face and the area around the eye with a special drape
  - > Clean your eye and the skin around it
  - > Hold your eye open so you don't blink
  - > Numb your eye with an anesthetic to prevent pain
- The doctor will then give the injection into the white part of your eye. You may feel a little pressure with the injection
- It's important to tell your doctor if you:
  - > Have an eye infection
  - > Have any pain or redness in your eye
  - > Think you may be allergic to Lucentis® or to Betadine®† (iodine)

1. Thetford C, et al. *Br J Vis Impair.* 2013; 31(2): 89-101. †Betadine is a registered trademark of Mundipharma AG.

### WHAT WILL HAPPEN AFTER I RECEIVE MY LUCENTIS® INJECTION?

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- Your doctor will perform eye tests, such as measuring the pressure in your eye, to make sure the treatment went well
- The white area of the eye, where the injection is given, will likely be red
  - > This redness is normal and it will go away in a few days
  - > Contact your doctor if it does not go away or gets worse
- You may see a few spots or ‘floaters’ in your vision
  - > These spots are normal and should go away in a few days
  - > Contact your doctor if they do not go away or get worse
- Your pupils will be dilated for the injection, and this can make it difficult for you to see for a few hours after the treatment
  - > You should not drive until your vision has returned to normal
- It is important to monitor any changes in the condition of your eye and your overall wellbeing in the week following your injection
- Rarely, injections in the eye can cause infection
- Contact your doctor as soon as possible if you have any of the following signs and symptoms in your eye:
  - > Pain
  - > Light sensitivity/tearing
  - > Swollen lids or other swelling
  - > Increasing redness
  - > Blurred, distorted or sudden loss of vision
  - > Light flashes
  - > Seeing flies, black spots or colored halos
  - > Drying of the surface of your eye
- If you notice any side effects not listed in this leaflet, tell your doctor or pharmacist



### How long will I need to continue Lucentis® treatment?

- Every patient is different. It is likely that you will need additional Lucentis® injections, but this will depend on how you respond to treatment and how your vision changes
- Talk with your doctor about your results and your feelings about your treatment
- It is important to keep attending your eye doctor appointments
  - > The best way to protect your independent lifestyle and your vision is to visit your doctor on a regular basis
  - > Be sure to discuss your treatment options with your doctor
- If you are considering stopping treatment with Lucentis®, ask your doctor for advice first
- For any further questions on the use of this product, please ask your doctor
- Follow all your doctor's instructions carefully. They may differ from the general information in this leaflet

**Your doctor will decide how often they wish to see you to monitor your condition and determine if you need additional injections**

**Always go to every appointment that your doctor arranges for you**

**If you miss an appointment for Lucentis® treatment, contact your doctor as soon as possible**

### What can I do to help improve my visual impairment?

- **Monitor your own vision regularly**
  - > At home, take note of any changes in your vision
  - > Be proactive and tell your doctor or nurse if you notice any changes
- **Dealing with changes in your vision can be difficult – it's OK to ask for support**
  - > Talk with family and friends about your vision, and let them know if you are having trouble reading, getting around, taking medication or doing housework
  - > If you don't have family or friends who can help, ask at your doctor's office about support services
- **Adjust your lifestyle**
  - > You should eat a balanced diet because it is good for your body and overall health, which is, in turn, good for your eyes<sup>1,2</sup>
  - > Limiting fatty and high-cholesterol foods may help avoid plaque build-up that could narrow your blood vessels<sup>2</sup>
  - > If you smoke, try to quit – smoking can damage blood vessels and harm your eyes<sup>3</sup>
  - > Get regular exercise – sufficient physical activity may help you maintain an ideal weight and keep your vascular system (blood vessels) healthy<sup>2</sup>

1. Kadayifçilar S, et al. *Br J Ophthalmol*. 2001; 85(10): 1174-1178; 2. The Eye Disease Case-Control Study Group. *Arch Ophthalmol*. 1996; 114(5): 545-554; 3. Kolar P. *J Ophthalmol*. 2014; 2014: 724780.

**Keep this booklet;  
you may need to read it again**

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**If you have any further questions,  
ask your doctor or pharmacist**

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**If you experience any signs or symptoms  
that you consider to be associated with  
the use of Lucentis<sup>®</sup>, but are not listed in  
this booklet, please tell your doctor**

Suspected adverse reactions and medication errors associated with the use of Lucentis should be reported to:

Malta Medicines Authority,  
Sir Temi Zammit Buildings,  
Malta Life Sciences Park,  
San Gwann. SGN 3000.

Or at: [www.medicinesauthority.gov.mt/adrportal](http://www.medicinesauthority.gov.mt/adrportal).

Alternatively at: Novartis Pharma Services Inc., Representative Office, Malta by phone on 21222872.

Marketing Authorization Holder: Novartis Europharm Limited, Vista Building, Elm Park, Merrion Road, Dublin 4, Ireland.

Local Representative: Novartis Pharma Services Inc., Representative Office Malta.  
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