Information for Patients

Treatment of Myopic Choroidal Neovascularisation (CNV) with Ranibizumab (Lucentis)

What is Myopic CNV?

The retina is the light sensitive layer at the back of the eye. It acts like a film that captures light and is therefore responsible for what we see. The central part of the retina is called the macula and is responsible for your sharp vision, such as seeing people’s faces or watching television.

Myopia is an optical condition caused by having a longer eyeball than average. As a result of this the retina can become thin and prone to certain problems. In a small proportion of patients abnormal blood vessels grow under the macula and affect the centre of the vision. This is called Myopic Choroidal Neovascularisation (CNV). Often such vessels leak blood or fluid and cause blurred or distorted vision. Without treatment, central vision could rapidly get worse.
How is the diagnosis of Myopic CNV confirmed?

Diagnosis of Myopic CNV is confirmed by:

• **Optical Coherence Tomography (OCT)**
  This is a non-invasive test that uses light and light waves to make a map of the retina at the back of your eye to show up any damaged areas. It is undertaken at every visit.

• **Fluorescein Angiography (FFA)**
  This is a diagnostic, photographic test that uses a special dye called fluorescein which will be injected into a vein in your arm or hand. This gives a detailed view of the back of your eye and is usually only done once to confirm the diagnosis before starting treatment and is only repeated later if required.

What is Ranibizumab (Lucentis)?

Lucentis is a drug that is used to block the action of a chemical called vascular endothelial growth factor (VEGF). This is produced in excess in eyes suffering from Myopic CNV and plays a role in the development of central swelling of the tissue at the back of the eye, Cystoid Macular Oedema (CMO).

Why is Lucentis being recommended for my eye condition?
Treatment might be recommended to you to improve your vision, or prevent any further visual loss. The final decision to treat is usually made at the time of your appointment in clinic on the basis of various tests performed on the day.

Lucentis has been shown in studies to successfully maintain and/or improve vision in patients with Myopic CNV. Lucentis will not always restore vision that has already been lost and will not always prevent further loss of vision by the disease.

You do not have to receive treatment for your condition. However, without treatment, your central vision could start, or continue to get worse over a fairly short period of time and reach the point where treatment may no longer help.

**How is the treatment given?**

Lucentis is given by injection into the eye. The injection procedure will be carried out by a qualified doctor or nurse. You will be awake for the procedure. The pupil (black part of your eye) is dilated and anaesthetic drops will be put in to numb the surface of your eye. The surface and the skin around your eye are washed with an antibacterial solution to reduce the risk of infection. Your face is then covered with a sterile drape.

The drug is injected into the vitreous humour (the jelly like substance inside the back of your eye). You could feel slight pressure on the eye when this is done, but you should not experience pain. After the injection you might experience a gritty feeling in your eye, and there could be bleeding over the white of your eye. You should not worry about this, the gritty sensation will resolve within a few days and the bleeding over the white of your eye normally within 7-10 days. You might also see floaters (black spots); these will also become smaller and disappear over a couple of weeks.

Lucentis injections are given at repeated intervals based on what is necessary for your eye. The precise number of injections that might be necessary can vary considerably between patients. On each monthly visit the decision to give you another injection or not will be made on the day of your appointment based on your vision, the appearance of the back of your eye and the findings on the OCT scan.

It is often necessary to attend for eye examinations and/or injections on a regular basis and perhaps for several months. It is very likely that you will need to attend for a follow-up appointment every month for the first year of
treatment. At Manchester Royal Eye Hospital, you might also be offered new treatments as part of a clinical trial.

**What are the risks of treatment?**

The potential risks are outlined below and will be discussed with you by your ophthalmologist. Not everyone who takes the drug will experience side effects, however, as with any medicine; side effects are possible with these drugs.

**Risks of the eye injection procedure**

Regardless of the drug used, the main potential risks are those related to the injection procedure and not the drug itself. Serious complications of the intravitreal injection procedure include bleeding, infection (endophthalmitis), cataract formation and retinal detachment. Any of these serious complications can lead to severe, permanent loss of vision.

In the clinical trials these complications occurred at a rate of less than 0.1% (1 in 1,000) of injections. The overall risk over a long term course of treatment is estimated at about 1% (1 in 100) or less. The risks will be explained and discussed with you before you agree to treatment.

More common side effects include:

- Eye pain.
- Conjunctival haemorrhage (bloodshot eye).
- Vitreous floaters.
- Irregularity or swelling of the cornea.
- Inflammation of the eye.
- Visual disturbances such as small specks in the vision.

**Complications of Lucentis in other body parts**

Very small quantities of these drugs are injected into the eye, so the amount which can get into the bloodstream and potentially cause side effects elsewhere in the body are minimal. If sufficient levels of these chemicals get into the bloodstream there can be an increased risk of experiencing blood clots (which could cause heart attack or stroke). Patients with a history of a stroke might be at greater risk of another stroke. If you have had a stroke, please discuss this with your ophthalmologist or nurse. In practice despite millions of injection treatments having been done worldwide the risk outside the eye has not been conclusively proven but has to be mentioned as a potential risk.
Coincidental risks

Whenever a medication is used in a large number of patients coincidental problems can occur that could have no relationship to the treatment. For example, patients with high blood pressure or smokers are already at increased risk of heart attacks and strokes. If one of these patients being treated with Lucentis suffers a heart attack or stroke, it might be caused by the high blood pressure and/or smoking and not necessarily due to this treatment.

The treatment might not be effective for you

Your condition might not get better or could become worse despite these injections. Any, or all of the complications described above could cause decreased vision and/or have a possibility of causing blindness. Additional procedures might be needed to treat these complications. During follow up visits or phone calls, you will be checked for possible side effects and the results will be discussed with you.

Reducing the risk of infection

Please use any eye drops prescribed for you after the injection. If you have an eye infection on the day of your planned treatment, the injection might have to be delayed until the infection has resolved. Please inform your doctor or nurse if you have a red or sticky eye. Your injection might also not be possible if you have an infection in any other part of the body currently requiring treatment. The doctor who assesses you will advise if this is the case. If you have an infection but are still well enough to attend for your appointment it is better to keep the appointment.

There have been rare reports of infection related to the injection procedure arising from bacteria which are normally present in the mouth. This is the reason staff in the injection room wear face masks during your procedure. It is also recommended that conversation is kept to a minimum in the injection room. It is therefore important that during your injection, you keep quiet except when necessary.

Patient responsibilities

If you experience any of the following please contact the hospital:

- Pain.
- Blurred or reduced vision.
• Sensitivity to light.
• Redness of your eye (increasing compared to immediately after your injection).
• Sticky discharge from your eye.

You should avoid rubbing your eyes or swimming for 3 days following each injection, to reduce the risk of infection.

Please keep all post injection appointments or scheduled telephone calls so that potential complications can be checked for.

Although the likelihood of serious complications affecting other organs of your body is low, you should immediately contact your GP or attend your local Accident and Emergency Department if you experience:
• Abdominal pain.
• Abnormal bleeding.
• Chest pain.
• Severe headache.
• Slurred speech.
• Sudden limb numbness or weakness.

What if I change my mind?

If you have any concerns, please discuss these with the doctor. You can change your mind about your treatment at any time.

If you require further advice, do not understand anything contained in this leaflet, or are having problems following your injection please contact the Macular Treatment Centre on (0161) 276 3341/5572 Monday-Thursday 9.00 am-5.00 pm, Friday 9.00 am-4.00 pm.

You may also contact the Emergency Eye Centre on (0161) 276 5597 available 8.00 am-9.00 pm everyday including public holidays.

If your problem is urgent and the departments above are closed or you are unable to get an answer, please ring Ward 55 on (0161) 276 5512 available 24 hours every day.