

# Treatment for age-related macular degeneration

**In some cases, age-related macular degeneration can be treated. Treatment must be given as soon as possible to limit the impact and progress.**

**This leaflet is available on audio CD.**

**You don't have to face macular disease alone. For the best information and support call us on 0300 3030 111.**

### Introduction

Age-related macular degeneration (AMD) is the most common cause of sight loss in the UK.

There are around 650,000 people in the UK with AMD. The number is increasing as the population ages.

The macula is the most sensitive part of the retina. It gives us our central vision and the fine detail of what we see.

When the macula is damaged, people may not be able to drive and find it hard to

read, watch TV and recognise faces.

Dry AMD is a slow deterioration of the cells of the macula, often over many years. There is no medical treatment for dry AMD but research is going on around the world, including research funded by the Macular Society.

Wet AMD is another form of the condition. It is caused by tiny abnormal blood vessels growing into the retina which leak and cause scarring of the macula.

A person with wet AMD can lose much of their

central vision in a few weeks. There are now treatments for wet AMD which slow the progress of the condition in most people.

**Treatment has to be given quickly, before there is permanent scarring to the macula.**

## **Current treatments for wet AMD**

Several drugs are used to treat wet AMD. They are known as ‘anti-VEGF’ drugs.

VEGF is short for vascular endothelial growth factor. It is the substance in the body that is responsible for

the development of healthy blood vessels. In wet AMD, too much VEGF is produced in the eye, causing the growth of unwanted, unhealthy blood vessels.

Anti-VEGF drugs block the production of VEGF and stop the development of abnormal blood vessels. All the anti-VEGF drugs are given as an injection into the eye. Don't be alarmed – the injections are much less frightening than they sound. There are two licensed drugs available to treat wet AMD: Lucentis® and Eylea®.

Lucentis® (medical name ranibizumab) was the

first anti-VEGF to be licensed for wet AMD.

In accordance with NICE AMD guidelines, all patients receive a standard 'loading dosage' at the start of their treatment: normally three or more consecutive monthly injections.

In December 2020, NICE announced that Beovu® (brolucizumab) had been approved to treat wet AMD. This new anti-VEGF treatment is longer-acting than the current treatments, and needs to be injected only around every 12 weeks. Patients who react well to the drug

could have their injections spaced even further apart.

After this initial phase there are a number of treatment regimens that an ophthalmologist can choose. Each regimen has a subtle difference in the frequency of appointments. They also vary as to whether or not you have an injection at every appointment.

The ophthalmologist will tailor treatment to individual patients and how their disease is responding to treatment.

**Top tip** – We recommend that patients ask their eye doctor, after their

original loading dose, what treatment regimen they are on. From this, patients will be better able to understand the timescale between injections and feel confident that they are not being overlooked in the clinic appointment system or missing any treatment.

Eylea® (medical name aflibercept) can be given under different treatment regimens. Firstly the patient will be given three injections, a month apart in accordance with NICE AMD guidelines. This is known as a loading dose. Your hospital doctor will then decide how often treatment is

needed. Each regimen has a subtle difference in the frequency of appointments. They also vary as to whether or not you have an injection at every appointment.

Medical trials suggest that the effects of Eylea® last longer than those of Lucentis® and so people may need fewer injections over time.

A third drug, Avastin® (medical name bevacizumab) may be used in some circumstances. But Avastin® is an anti-VEGF drug used to treat cancer and is not yet licensed for use in the eye.

## **How is the injection given?**

The majority of patients are treated at a hospital in a designated injection room. The eye may be examined first to check that an injection is needed. If it is, the procedure may take place on the same day or the person may have to return. In most cases the injections are administered by trained and qualified ophthalmic nurses.

When the injection is given, the patient reclines on a couch. An antiseptic solution will be used to clean the surface of the eye. The eye will be held open with a device

called a speculum and anaesthetic drops are used to numb it. The patient looks to one side and the injection is given in the opposite corner of the eye. The patient does not see the needle and the injection only takes a few seconds. Following the injection the eye will be cleaned with a normal saline solution.

While the majority of patients find this a painless procedure some people say the injections are uncomfortable and occasionally painful. Others experience discomfort for a while afterwards. Very occasionally there are

more severe reactions.

If you've been told you need injections and are worried, you can speak with people who've had injections for support and advice. Call our Advice and Information Service for more information.

Injections do not work if there is already long-standing damage to the macula. Around one in ten people with wet AMD do not respond to Lucentis® or Eylea®.

**The Royal College of Ophthalmologists recommends that people with suspected wet AMD should be**

**referred to a retinal specialist immediately and seen within two weeks. If treatment is needed it should be given within two weeks of the diagnosis.**

**Optometrists who suspect someone has wet AMD should refer the person directly to a retinal specialist.**

### **Laser treatments**

On rare occasions some people may be offered laser treatment. A light-sensitive drug is injected into the arm. The drug travels to the eye where it is activated by a laser beam, shutting down the abnormal blood vessels.

Most people need two to five treatments. The treatment is only suitable for people with particular patterns of damage to the retina. However as this treatment carries a greater level of risk to the patient it is not routinely offered.

## **New treatments**

Some new treatments for AMD are becoming available in the private sector.

Oraya therapy is a combination of Lucentis® injections plus a single, tiny dose of radiotherapy. Trials suggest that the

radiation may reduce the number of injections for some people. The STAR trial is a study looking into the effectiveness of Oraya and is still on-going. This is currently available as a private treatment.

## **Future treatments**

Researchers all over the world are working hard to find new and improved treatments for AMD. This includes researchers funded by the Macular Society.

Among the areas being explored are potential treatments to reduce the inflammation thought to lead to AMD, longer-acting anti-VEGF

drugs and eye drops to replace injections.

The London Project to Cure Blindness is a partnership between University College London and Moorfields Eye Hospital NHS Foundation Trust. Researchers are investigating whether a stem cell-based treatment can improve vision for people with sudden severe sight loss caused by wet age-related macular degeneration (AMD).

Although not currently available as a treatment the results are exciting, but it may take some years while further

research is conducted before it could be available as a treatment.

Longer-acting anti-VEGF drugs and novel methods to deliver drugs such as implants and eye drops to replace injections are also being researched.

To keep up-to-date with the latest news on treatments and research, visit **[macularsociety.org/news](http://macularsociety.org/news)** or become a member.

## Beating Macular Disease

Macular disease is the biggest cause of sight loss in the UK, with around 300 people diagnosed every day. The Macular Society is the only charity determined to beat the fear and isolation of macular disease with world class research, and the best advice and support.

Our research programme is focused on finding new treatments and a cure to Beat Macular Disease forever. To support people affected by macular disease now, the Macular

Society provides a range of support, information and services.

Macular Society treatment buddies offer telephone support to people who are anxious about their injections, and offer information and reassurance. If you would like to talk to an injection buddy about your treatment call our Advice and Information Service.

**The Advice and Information Service (0300 3030 111)** is available Monday to Friday, 9am to 5pm. Alternatively, you can email [help@macularsociety.org](mailto:help@macularsociety.org)

Our **website** provides a wide range of information and resources for people affected by macular disease. You can also find out more about the services we offer. Visit it at **macularsociety.org**

Our network of over **400 Macular Support Groups** stretches across the UK. Each one offers practical and emotional support for people with macular disease, from those living with it today.

We provide a confidential **Counselling Service** over the phone. Call the Advice and Information Service for more information.

Our **Telephone Befriending Service** pairs you up for regular telephone calls with another person with macular disease who knows what it is like to live with the condition. Calls can be about anything, and provide friendly support.

**Skills for Seeing** training can help you with techniques to make the most of your vision.

## Working with you to Beat Macular Disease:

- We provide the best advice and information on living with macular disease.
- Macular Society Support Groups can help you to beat the isolation of macular disease, by connecting you with other local people who know what you're going through – offering support and companionship.
- Our research programme is focused on finding new treatments and a cure to Beat Macular Disease forever.

# Macular Society

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