

# All about Anti-VEGF treatment

Your ophthalmologist has recommended anti-VEGF treatment for you. This leaflet explains what it is and how it can help you.

Medical Specialist Group

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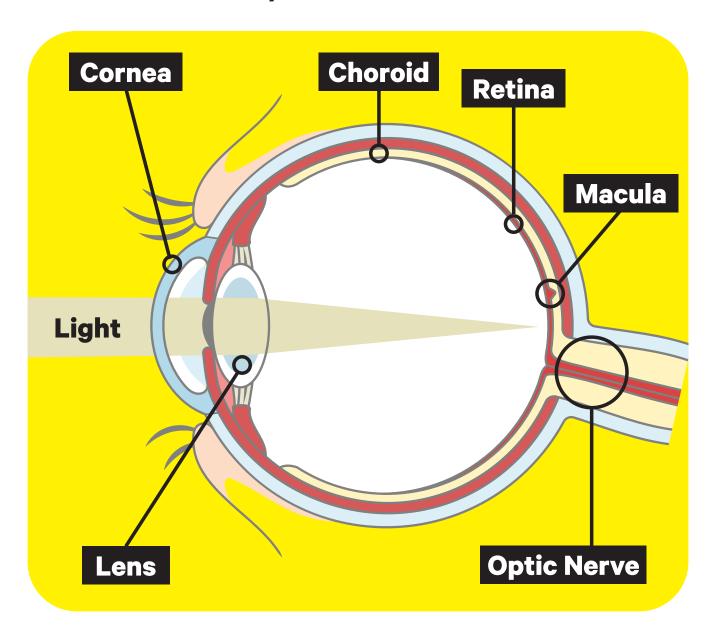


#### What is anti-VEGF treatment?

Anti-VEGF refers to a group of medicines which are used to treat eye conditions that cause new blood vessel growth or swelling under the macula area of your retina.

It is given by an injection into the eye and works by reducing the growth of new blood vessels and the oedema (swelling) they may cause. It can reduce the risk of scarring and damage to the retina caused by the bleeding of these new vessels, and so help to avoid further sight loss. Some people will find that it improves their vision.

# **Cross-section of the eye**



#### Who benefits from anti-VEGF treatment?

People who have:

- Wet age-related macular degeneration (AMD)
- Macular oedema caused by retinal vein occlusion (blocking or closing)
- Diabetic maculopathy (a disorder of the macula)

New blood vessel growth and macular oedema can also occur in other retinal conditions so in the future anti-VEGF treatment may be used more widely.

#### How does anti-VEGF treatment work?

Anti-VEGF is a treatment that stops a protein called vascular endothelial growth factor (VEGF) produced by cells in the retina from working.

Anti-VEGF stands for 'anti vascular endothelial growth factor'. The term "anti" means against and "vascular" refers to blood vessels.

New (weak-walled) blood vessel growth is a major problem in a number of eye conditions. VEGF promotes blood vessel growth in the body. Anti-VEGF treatment can interfere with this process, reducing new blood vessel growth and slowing down any leakage or swelling these new blood vessels may cause. This in turn can help to slow down or hold back sight loss.

Your ophthalmologist will perform tests to decide whether or not anti-VEGF treatment is right for you.

# How and when is anti-VEGF given?

The drug is injected into the white part of your eye with a fine needle. Your eye will be numb and you will not normally feel any pain. The injections take less than 30 seconds and you will need to have them regularly to keep the benefit.

A fully-trained member of the MSG ophthalmic team, either an experienced nurse, optometrist or ophthalmologist, will give the injections.

Your vision may be temporarily impaired following injection, so you should not drive or operate machinery until your vision has returned to normal.

If you choose treatment, the injections will start as soon as possible. The sooner you start, the better the results.

You will have one injection in each eye that needs treatment at each clinic visit.

At first you will have three injections - one injection every four weeks. This is known as the loading dose.

A month after the third injection we will carry out tests to decide when you need more injections.

Some people need to have an injection every four weeks. Once the situation has stabilised and the bleeding and swelling are under control we will lengthen the period between injections. For others there may be months when they don't need any treatment, we will just observe.

Once your vision has stabilised, we will share the ongoing monitoring with your optometrist.

#### After treatment

Please call us if you notice any of the following changes in your vision:

- A blurred or grey patch
- Straight lines appearing distorted
- Objects appearing smaller than normal

#### How effective is anti-VEGF treatment for wet-AMD?

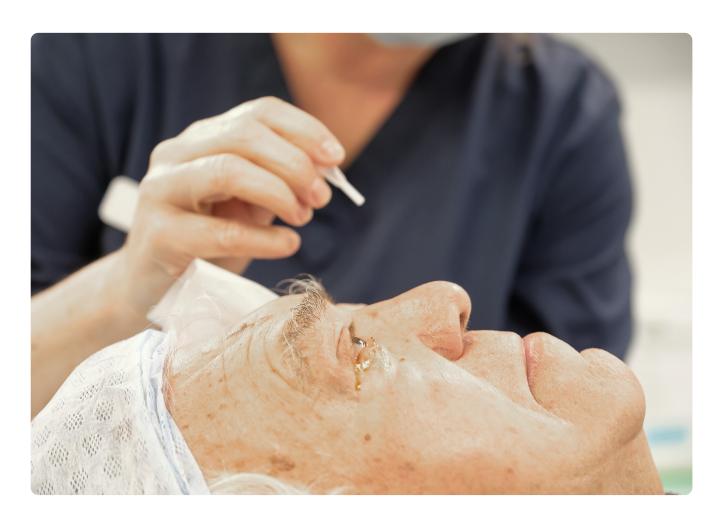
Research shows that with anti-VEGF treatment, your sight is more likely to improve.

#### With anti-VEGF treatment

In a survey of 100 people, in the first year 40 people found their sight improved, and five people found it got worse. In the second year, 33 people found their sight improved, and for eight people it got worse.

#### Without anti-VEGF treatment

In a survey of 100 people, in the first year five people found their sight improved but for 28 people it got worse. In the second year, four people found their sight improved but for 48 people it got worse.



'Improve' and 'get worse' is judged by whether you can see 15 more or fewer letters (a significant change) on the chart than when you were first diagnosed.

# What are the potential complications of treatment?

There is a small risk of complications from anti-VEFG injections.

#### For every 100 injections we'd expect:

- Thirty people to experience temporary symptons (first 48 hours) such as small specs in the vision or a red or sore eye, or high pressure inside their eye requiring treatment
- One person to experience inflammation inside the eye treated with drops and usually better within one month

#### For every 1000 injections we'd expect:

■ Four people to experience serious infection in their eye (endopthalmitis) that can cause loss of vision or other complications permanently, or bleeding inside their eye or glaucoma (high pressure needing treatment or affecting sight)

#### For every 10,000 injections we'd expect:

 One person to experience retina damage such as retinal detachment, or cataract, and need a further operation or procedure, or permanent serious loss of vision

# Which anti-VEGF medications are used in Guernsey?

The States of Guernsey has commissioned Bevacimuzab or AVASTIN® injections for patients who are seen under the secondary healthcare (States) contract.

Bevacimuzab or AVASTIN® contains an antibody against blood vessel growth factor (anti-VEGF).

Although AVASTIN® is not licensed for use in the eye it is very closely related to Ranibizumab 'LUCENTIS®' which is licensed for the treatment of AMD and retinal vein occlusions and diabetic macular oedema. Ranibizumab 'LUCENTIS®' is not funded under the States contract.

There are large scale trials which have compared AVASTIN® and LUCENTIS® for AMD. The trial results show comparable treatment effect and safety profiles for patients at two years after treatment.

AVASTIN® is much less expensive than LUCENTIS® and is shown to be very cost effective. Patients worldwide have been having AVASTIN® injections since 2007.

Newer drugs Aflibercept 'EYLEA®' and Faricimab have also been licensed for AMD. These are only funded by the States in specific cases when AVASTIN® has not worked.

If you would prefer to have LUCENTIS® or 'EYLEA®', this is available to private patients.

# Are there any contraindications to treatment?

#### **Pregnancy and breast-feeding**

Anti-VEGF medicines should not be used during pregnancy. If you are pregnant or planning to be, please discuss this with your ophthalmologist before your treatment. If you are of child-bearing age you should use effective contraception during your treatment and for at least three months after the last injection. If you do become pregnant while having treatment please inform your doctor immediately.

Anti-VEGF treatment is not recommended during breast-feeding because it is not known whether the medicine passes into human milk. Ask your doctor for advice before treatment.

# You should not be given anti-VEGF if you have any of the following conditions:

- Allergy to anti-VEGF or any of its ingredients
- An infection in or around either eye or severe infection anywhere in your body

#### **Anti-VEGF should be used with caution if:**

- You have had a heart attack or stroke in the last three months
- You have uncontrolled angina or uncontrolled high blood pressure

At each clinic visit you must inform the person dealing with you of any changes in your medical condition.

# What can I do to help myself?



# Eat lots of fruit and vegetables every day, and eat fish at least twice a week

According to the Royal College of Ophthalmology:

"A diet low in omega-3 and -6 fatty acids, antioxidant vitamins, carotenoids and minerals are risk factors for AMD. Adherence to a Mediterranean diet is associated with a 41% reduced risk of incident late AMD. The effect is due to the increased consumption of fruits and diet rich in antioxidants that aid in prevention of AMD. A diet of 200 grams per day of vegetables (particularly green vegetables), fruit two times per day, and fish two times per week is associated with a significantly reduced risk of AMD." Ask your doctor for advice before treatment.



#### **Stop smoking**

Smoking is a significant risk if you have AMD so if you do smoke, please STOP – for help, call Quitline Guernsey Stop Smoking Service on 01481 220021.



#### Vitamin supplements

You may wish to consider taking vitamin supplements, which you can get over the counter from your pharmacy.

# Is there anyone else I can talk to?

#### **Guernsey Macular Support Group**

A patient focused and patient run group aimed at helping people with poor vision find ways to smile again.

Our meetings are on the second Wednesday of every month from 13.30 at St Martin's Community Centre, GY4 6LL and are open to anyone affected by vision loss, including family, friends and carers.

For further information contact **Bill on 07781 130772** or **Ray on 07781 136772** 

www.macularsociety.org

#### **Guernsey Vision Support Centre**

We are here to support anyone affected with sight loss emotionally, practically and financially with advice tailored to your personal circumstances.

We provide a listening platform to discuss your individual requirements, concerns and circumstances surrounding your visual loss.

We have a wide range of specialist equipment in our specialised resource showroom which is open 08.00 to 11.00 Monday to Friday. We can provide long cane training with mobility and navigation assistance at home and out and about.

There are no barriers to accessing our support. Simply drop in, call or email and we are here to help you.

For further information contact **Debbie Clarke Vision Support Advisor** on 01481 236933 or **Debbie@gba.org.gg** 

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