

Patient information leaflet

Bevacizumab (Avastin) Intravitreal Injections for the treatment of wet macular degeneration

What is Bevacizumab (Avastin)

Avastin is a drug that is licensed for the treatment of certain types of colorectal cancer. It contains an antibody against blood vessel growth factor (anti-VEGF) called Bevacizumab. It can also be used to treat certain eye conditions by being injected into the eye. Although its use has only been approved for the treatment of cancer, doctors can use it for other purposes if they are well informed about it, look at reliable medical evidence & record its use & effects. When doctors use medications in this way, it is called 'off-label'.

Avastin is not licensed for use in the eye but it is very closely related to Ranibizumab or Lucentis, which is licensed for the treatment of wet age-related macular degeneration (AMD), retinal vein occlusions & diabetic macular edema.

International clinical trials, namely the CATT & IVAN studies, compared Avastin & Lucentis eye injections for wet macular degeneration. The trial results show comparable treatment effect & safety profiles for both sets of patients at the end of 2 years. Worldwide patients have been having Avastin eye injections since 2007.

More recently a newer drug called Aflibercept or Eyelea has also been licensed for AMD. Lucentis & Eyelea treatment are available in the NHS.

In wet age-related macular degeneration, small blood vessels grow under the retina at the macula (which is the part of the eye responsible for central vision i.e. reading & writing vision). These blood vessels bleed & damage the macula, leading to loss of central vision.

For more information, please refer to the following online resources:

RNIB

www.rnib.org.uk/eye-health/eye-conditions/age-related-macular-degeneration-amd#treatment

Macular Society

www.macularsociety.org/wet-amd

NHS

www.nhs.uk/conditions/age-related-macular-degeneration-amd/treatment

What are the benefits of Avastin injection?

Avastin injections can improve your vision or prevent further loss of vision in most cases. Avastin works by blocking the growth & leakage of the abnormal blood vessels which are causing loss of vision & preventing them from causing damage to the retina & macula. The effect of Avastin is short-lasting & you may need multiple injections to control your condition.

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Are there any alternative treatments?

There may be other suitable alternative treatments for your eye condition & you can discuss this with your Ophthalmologist.

What are the risks of not having this treatment?

If you choose not to have this treatment, you may encounter further loss of vision or blindness.

How are the injections performed?

There is nothing special you need to do to prepare for this procedure. The procedure lasts about 10 minutes & it is usually performed in a treatment room or in theatre. It is done as a day case so you would be able to go home the same day. This is what happens:

1. The Nurse will ask you questions & will put eye drops in your eye to dilate your pupils (this may blur your vision).
2. You will then be asked to wait for your turn to go into the treatment room.
3. In the treatment room you will either be asked to sit on a reclining chair or lie on a bed. Please let the doctor know if you are nervous & they will make sure you are comfortable before starting.
4. Anaesthetic & antiseptic eye drops will be put into your eyes.
5. Your eye & eyelid will be cleaned & your face covered by a light drape to keep the area very clean. The eyelids are held open with a gentle metal clip
6. The Avastin will then be injected into the back of your eye.

What will it feel like to have the injection?

Some patients feel nothing when having the injection, others may feel pressure on the eye or a quick sharp prick.

After the injection, you may see some black spots in front of the eye. This is common & will disappear after a few days. Your eye may also be slightly bloodshot/red where the injection was given. The redness should be painless & will resolve within one week.

You can go home as soon as you feel able & you will need someone to take you home as you should not drive for a few hours after the injection until you feel confident, & your vision is no longer blurred. Once you are at home, you can return to your normal activities but do not do any sport & avoid air travel for the first 48 hours. It is also advisable to avoid getting water into your eye or swim for the first few days.

Follow up

You will be given an appointment to come back to the hospital a few weeks after the injection. At this appointment, the doctor/nurse will examine your eye & perform optical coherence tomography (scan of your eyes). You will be told at this appointment if you need more injections & how many more you are likely to need. If you need more injections, they would be performed at varying intervals depending on the condition of the macular degeneration & the response to the drug.

Please report if you have any of the following symptoms

You should contact us immediately if you have worsening eye pain, redness, blurring of vision or discharge from the eye.

What are the potential complications of treatment?

The risks are small, but you need to be aware of these before you start treatment & before you sign the consent form. If you have any questions, you must ask the doctor before you sign the form. You must notify the doctor before the treatment, if your eye is red & sticky or you are on any antibiotics for an infection. Some patients may not respond well to the treatment which means that the drug may not restore vision or prevent further loss of vision in these patients.

You should not have these injections if you are pregnant or breastfeeding.

These side effects can occur commonly

- Moving spots or swirls in the vision
- Pain at the site of the injection or gritty sensation
- Increased production of tears
- Swelling of the eye lid
- Bleeding on the white of the eye (subconjunctival hemorrhage). This is more common if you take blood thinners
- General redness of the eye
- Damage to the front layer of the eye (corneal trauma, abrasion)
- Increase in eye pressure (raised intraocular pressure)

These uncommon side effects may affect up to 1 in 100 people

- Allergic reactions (hypersensitivity)
- Severe inflammation inside the eye (uveitis)
- Bleeding inside the eye (vitreous or retinal haemorrhage)
- Damage to the retina layers needing surgery (retinal tear, retinal detachment)
- Decreased sharpness of vision (retinal pigment epithelium tear or detachment)
- Clouding of the lens (cataract)
- Persistent irritation of the eye

Rare side effects which may affect up to 1 in 1,000 people

Severe eye infection or inflammation (endophthalmitis). This could lead to serious & permanent loss of vision. You will be given antiseptic & antibiotic eye drops or ointment to reduce the risk of developing an infection.

Heart attack or Stroke

Uncertain risk. When Avastin is given as cancer treatment the risks include stroke, heart attack, heart failure, high blood pressure, severe bleeding, a hole developing in the stomach or intestines, protein in the urine & wound healing problems. However, the dose of Avastin used to treat cancer is approximately 400 times higher than the dosage given to the eye. Avastin used to treat cancer is also given through a drip into a vein making it more likely to have an effect on the body. Patients on such a high dose of Avastin through a drip are likely to have already suffered from serious illness, so they are more susceptible to the risks above. For these reasons, it is unclear how likely patients receiving Avastin injections to the eye would develop these complications as a result of treatment.

What should I do if I am worried after treatment?

Please contact the following numbers for help & advice after intravitreal injection treatment:

0131 447 2340 (opening hours 0800-2000 Monday to Friday & reduced hours at weekends)

07885 448 248 Clinic emergency out of hours number

111 NHS 24

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