

Avastin Injections

Information and advice for patients

Ophthalmology

What is avastin?

Avastin is a drug that is licensed for the treatment of a certain type of colorectal cancer but 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 and record their use of it and its effects. When doctors use medications in this way it is called 'off-label'.

Which eye conditions can avastin injections be used for?

'Wet' age-related macular degeneration: This is where small blood vessels grow under the retina at the macula (the part of the eye responsible for central vision i.e. reading and writing vision). The blood vessels bleed and damage the macula, leading to loss of central vision. For more information see 'Age-related macular degeneration' leaflet.

Other conditions caused by abnormal growth of blood vessels: Other eye conditions such as short-sightedness (high myopia) and eye injury, can also cause loss of central vision due to the abnormal growth of blood vessels at the back of the eye. The retina is weak in these conditions so mimics wet age-related macular degeneration.

Macular oedema: This is where the layers of the retina around the macula are swollen due to leaking blood vessels, causing loss of central vision.

What are the benefits of avastin injections?

Avastin injections can improve your vision or prevent further loss of vision in the conditions mentioned on page 2.

Avastin works by blocking the growth and leakage of the abnormal blood vessels which are causing the loss of vision and preventing them from causing damage to the retina and macula.

The effect of Avastin is short lasting and you may need a few injections to control your condition.

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What are the risks of the treatment?

- Some patients may not respond well to the treatment so it may not restore vision or prevent further loss of vision in these patients.
- Eye infection occurs in 1 in 1000 patients following an injection to the eye. Serious complication as a result of this is rare but could lead to severe, permanent loss of vision.
- Glaucoma (high pressure in the eye), cataract formation and retinal detachment can sometimes occur after avastin injections, but this is usually only in patients who have repeated injections and can be effectively treated with eye drops or surgery.

When avastin is given as cancer treatment, the risks include:

- stroke
- heart attack or heart failure
- high blood pressure
- severe bleeding
- a hole developing in the stomach or intestines
- protein in the urine
- wound healing problems

However, the dosage of avastin used to treat cancer is 400 times higher than the dosage given to the eye. The avastin used to treat cancer is also given through a drip into a vein making it more likely to have an effect on other parts of the body. As well as this, patients who are having this high dose of avastin through a drip are very 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 having avastin injections to the eye are to develop these complications as a result of the treatment.

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Are there any alternative treatments?

There may be other suitable alternative treatments for your eye condition and you can discuss these with your ophthalmologist as the alternative will depend on which condition you have.

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.

Preparing for the injection

There is nothing special that you need to do to prepare for this procedure.

During the procedure

The procedure lasts about 10 minutes and is usually performed in the outpatient treatment room. It is done as a daycase so you will be able to go home the same day. This is what happens:

1. The nurse will ask you some questions and will put eye drops into your eye to dilate your pupil (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 be asked to sit on a reclining chair. Please let the doctor know if you are nervous. He/she will make sure you are comfortable before starting.
4. Anaesthetic eye drops will be put into your eye to numb it.
5. Your eye and eyelid will be cleaned.
6. The avastin will then be injected into the back of your eye.

What does it feel like?

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

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After the injection

You may see some black spots in front of the eye immediately after the injection. This is common, and will disappear after a few days. Your eye may also be slightly bloodshot/red where the injection was given. The redness should be painless and will resolve within 1 week.

You will be able to go home as soon as you feel able and will need someone to take you home as you should not drive for a few hours after the injection, until you feel confident you are able to and your vision is no longer blurred. Once you are home you can return to your normal activities, but do not do any sport for the next 48 hours.

You will be given artificial tear eye drops to use at home in the injected eye only, which you will need to use 4 times a day for 1 week.

Follow-up

You will be given an appointment to come back to the hospital 4-6 weeks after the injection. At this appointment the doctor/nurse will examine your eye and perform an optical coherence tomography (scan of your eyes). You will be told at this appointment (or within a few days) if you need to have more injections how many more you are likely to need. If you need more injections they will be done at intervals of 4-6 weeks.

Symptoms to report

If you have any of the following symptoms, you should contact us immediately:

- Severe eye pain
- Worsening redness in the eye
- Worsening blurring of vision
- Discharge from the eye

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Contact details

If you have any concerns following this treatment please contact us on one of the following numbers:

Birmingham & Midland Eye Centre

Day Surgery Unit (DSU)

0121 507 6868

Monday – Friday, 7.30am – 7pm

Eye Accident and Emergency

0121 507 6780

Monday – Sunday, 9am-7pm

Further information

Royal National Institute of Blind People (RNIB)

www.rnib.org.uk

0303 123 9999

The Macular Society

www.macularsociety.org

Helpline: 0300 3030 111

Focus Birmingham

www.focusbirmingham.org.uk

0121 478 5222

For more information about our hospitals and services:

Sandwell and West Birmingham Hospitals NHS Trust

www.swbh.nhs.uk

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Sources used for the information in this leaflet

- Royal college of Ophthalmologists, (2018) *Ophthalmic Service Guidance for Intravitreal injection therapy*. Available at: <https://www.rcophth.ac.uk/wp-content/uploads/2018/02/Intravitreal-Injection-Therapy-August-2018-2.pdf> (Accessed 22 October 2021).
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