

Ophthalmology department

# iStent – treatment for glaucoma

## Information for patients, relatives and carers

### Introduction

This leaflet has been designed to give you information about a surgical device, the iStent, to help treat your glaucoma. We hope to answer some of the questions you might have although it is not meant to replace the discussion between you and your medical team. The aim is to help you understand more about what is discussed and if you have any questions about the information, please contact us.

### What is an iStent?

High eye pressure – or intraocular pressure (IOP) – is often the cause of glaucoma. Glaucoma is an eye condition that gets worse over time. It can damage the optic nerve and lead to vision loss that cannot be recovered.

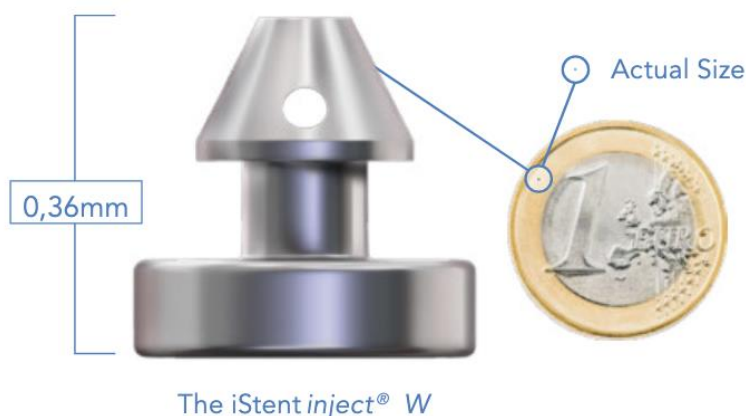
An iStent is a very small medical device that aims to help lower your IOP. It is implanted into the natural drainage channel of the eye and helps take fluid away from your eye.

The iStents are tiny titanium tubes that are implanted using minimally invasive glaucoma surgery (MIGS).

We usually implant 2 stents. You will not be able to feel or see the iStent device.

### About the iStent

- measures 0.2mm x 0.36mm
- one of the smallest surgical devices used anywhere in the human body
- designed to last a lifetime
- can be used alongside cataract surgery, or as a stand alone device
- will not set off airport scanners.
- is 'MRI scan conditional', which means it is safe for most MRI scans



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## Why would I have the iStent?

The iStent may be recommended by your eye doctor (ophthalmologist) to manage your glaucoma and IOP further. It may reduce the need for glaucoma eye drops.

The iStent will not cure your glaucoma or reverse any damage to your vision that has already been done. But it might help stop your glaucoma getting worse.

Studies have shown that the iStent device offers:

- maintained reductions in IOP
- reduction in the number of glaucoma drops used for more than five years
- a very low rate of complications

## What are the risks of having the surgery?

Like all forms of treatment, the iStent procedure can have risks and complications. Cataract surgery on its own has some risks. As well as these, iStent implantation may also result in:

- **bleeding:** immediately afterwards, your eye may look bloodshot. This is due to the local anaesthetic. There may also be a small amount of blood in the front of the eye. This is expected and clears up by itself
- **damage to other parts of the eye:** the intraocular lens, cornea or coloured part of the eye (iris) may be damaged
- **movement of the iStent:** the stent may become dislodged or move out of its position. This may need a second procedure
- **need for further treatments:** the IOP may remain raised. Further eye drops or procedures may be needed to bring the pressure down

## What are the risks of not having treatment?

There may be further damage to the eye's optic nerve if the eye pressure is not controlled. This, in turn, leads to irreversible sight loss.

## Are there any alternatives to this procedure?

There are many ways to treat glaucoma. These include eye drops, laser and other surgical procedures.

Your surgeon will recommend a treatment after they have looked at factors like:

- your eye pressure

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- the stage and type of glaucoma you have
  - your previous treatment
  - other eye conditions you have
  - your general health
  - how easy it is for you to attend follow-up appointments.

Your doctor can talk to you about possible alternatives in more detail.

## What happens before the surgery?

You will be told which eye drops or oral tablets, or both, you should take as part of your treatment plan until the day of your surgery.

Please talk to your eye doctor if you take any blood-thinning medicines. You may need to stop taking these a few days before surgery.

## What happens on the day of my procedure?

You will get all the details on your appointment letter

The team will meet you before the procedure. They will conduct a few checks before the procedure and answer any queries you might have. They ensure everything is ready for your surgery.

The procedure is generally carried out as a day case procedure and you are not expected to stay in hospital overnight. You may expect to be in hospital for about half a day.

## What happens during the procedure?

1. You will be given eye drops and a local anaesthetic injection around the eye. This will numb your eye so that you do not feel pain during the procedure.
2. Your surgeon will perform the procedure using a microscope which shows a magnified view of your eye.
3. You will be asked to lie relatively flat. Your eye will be held open with a small clip.
4. A small cut (incision) will be made in the outer surface of the eye.
5. If you are having cataract surgery, this will be performed first. The surgeon will use the same incision to enter the eye with the iStent injector to implant the 2 stents.

The iStent implantation only takes 5 to 10 minutes.

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## What happens after the procedure?

1. Your surgeon will usually place a shield over your eye to protect it. Leave this on until the morning after surgery.
2. You will spend a short time in the recovery area.
3. You will not be allowed to drive home. So, you will need to plan an alternative. Someone else could drive you, for example.
4. Your vision will return as the anaesthesia wears off, but your eye may feel sore. If you are experiencing discomfort, you can take some regular pain relief that suits you.
5. Your glaucoma team will review you 2 weeks after the procedure. They will assess your response to the iStent.

## Do I have to use eye drops after surgery?

Do not worry about using eye drops in the operated eye until you have removed the eye shield the next morning.

These eye drops are given to help your eye heal and prevent infection.

Your surgeon will talk to you about if you need to make any changes to your normal glaucoma drops in the operated eye.

## After surgery, what can I do and what should I avoid?

After MIGS with the iStent, please avoid rubbing or pressing on your eye.

You should not go to the gym for 2 to 3 weeks and not go swimming for 4 weeks.

## Who can I contact for more information?

- Emergency Department at Western Eye Hospital – 020 3312 3247
- Outpatients at Western Eye Hospital – 020 3312 3236
- Alex Cross Ward. Day care unit – 020 3312 3218/ 9614
- Outpatients at Charing Cross Hospital – 020 3311 1109/ 1233/ 0137

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## How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at [imperial.pals@nhs.net](mailto:imperial.pals@nhs.net) The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street  
London W2 1NY

Email: [ICHC-tr.Complaints@nhs.net](mailto:ICHC-tr.Complaints@nhs.net)

Telephone: **020 3312 1337 / 1349**

## Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:  
[imperial.communications@nhs.net](mailto:imperial.communications@nhs.net)

## Wi-fi

Wi-fi is available at our Trust. For more information visit our website: [www.imperial.nhs.uk](http://www.imperial.nhs.uk)

Ophthalmology Department  
Published: September 2024  
Review date: September 2027  
Reference no: 1003  
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