

# Information for patients and carers

## iStent Glaucoma Treatment



Glaucoma is commonly associated with raised pressure in the eyes (intraocular pressure). This is a result of inadequate fluid drainage out of the eye leading to a pressure build up.

The iStent inject® is designed to reduce intraocular pressure by improving fluid outflow through the trabecular meshwork, which is the natural drainage channel in the eye. The iStent inject® creates an opening in the trabecular meshwork, it bypasses the blockage and helps to drain fluid which helps to reduce the eye pressure. The iStent inject® has been in use since 2012 and has proved to have an excellent safety record.

## Why has the iStent been suggested?

iStent inject® insertion is faster, more straightforward, and less invasive than traditional operations for glaucoma. The iStent inject® is suitable for patients with mild-to-moderate open-angle glaucoma who are going to have cataract surgery, and it potentially can reduce the need for glaucoma eye drops.

The iStent inject® will not cure your glaucoma, reverse any damage already caused by glaucoma, or bring back any lost vision.

## Risks of surgery

Infection, reduction in vision, bleeding mainly at the front of the eye, inflammation in the eye which may be severe and may last for a long time, raised eye pressure which is often temporary and most often settles once the steroid drops have been stopped,

The stent placement is done with a huge amount of precision or else it does not work. However, it is one of the safest devices currently available. If the glaucoma is too brittle, iStent may not be effective and further glaucoma incisional surgery or surgery for glaucoma may be needed.

## When is iStent inject not useful?

The iStent inject® is not suitable for people who have advanced glaucoma, uncontrolled eye pressure on medication or where the trabecular meshwork is not visible.

## What does the procedure involve?

The iStent inject® consists of 2 microscopic stents within one injector device. The injector enters the eye through a small cut made on the edge of the cornea and is injected into 2 separate areas of the trabecular meshwork.

It is made of surgical-grade titanium, so it won't be rejected by the body. Each iStent inject stent® is approximately 0.23 mm x 0.36 mm; they are so small that you will not see or feel them when they are in place in the eye.

The procedure is carried out in theatre usually under a local anaesthetic; it can be performed on its own or as part of cataract surgery. If it is carried out at the end of cataract surgery, it takes an extra 15 minutes, with the same wound used as for cataract surgery. During the iStent inject® surgery you will be asked to tilt your head about 35 degrees away from the surgeon, the microscope will then be adjusted giving the best view of the eye's drainage channel for the surgery.

## What to expect after the procedure

At the end of the procedure your operated eye will have a pad placed over it and this will be covered with an eye shield. However, if your unoperated eye does not see well, your operated eye may not be padded and instead covered with a clear plastic shield for protection. You will usually be able to go home the same day as your operation.

Recovery is usually quick after the surgery, which allows you to return to normal activities soon. You will get an appointment 1 – 2 weeks after

the procedure and then in 6 – 8 weeks. You will be started on eye drops after the procedure for 6 weeks. Your doctor will tell you whether you should continue with the anti-glaucoma drops for the operated eye depending upon the response of the eye to the iStent. You will continue to have regular checks for your glaucoma.

## Additional information

The iStent inject® will not set off airport scanners. It is MRI scan conditional, which means it is safe in most instances. The specific conditions under which an MRI scan is allowed are listed below.

The stent is coated with heparin which is from a porcine (pig) source.

Parameters for safe MRI scans:

MRI conditional: · Static magnetic field of 3 Tesla or less. · Maximum spatial gradient magnetic field of 4,000 gauss/cm (40 T/m). · Maximum MR system reported, whole body averaged specific absorption rate (SAR) of 4 W/kg. Within these parameters, a clinically significant temperature rise after 15 minutes of continuous scanning is not expected in the iStent inject®.

## Contact details

If you experience any problems, such as sudden loss of vision or pain, contact the number below:

Ophthalmology telephone triage service:

**01257 245346** (Monday to Friday 9.00am to 4.30pm).

If you feel that your eye condition needs an urgent assessment outside of these hours, please attend the nearest Emergency Department.

## Sources of further information

[www.lancsteachinghospitals.nhs.uk](http://www.lancsteachinghospitals.nhs.uk)

[www.nhs.uk](http://www.nhs.uk)

[www.accessable.co.uk](http://www.accessable.co.uk)

[www.patient.co.uk](http://www.patient.co.uk)

[www.glaucoma-association.com](http://www.glaucoma-association.com)

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[www.lancsteachinghospitals.nhs.uk/patient-information-leaflets](http://www.lancsteachinghospitals.nhs.uk/patient-information-leaflets)

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If you want to stop smoking, you can also contact Smokefree Lancashire on Freephone **08081962638**

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Our patient information group review our leaflets regularly, if you feel you would like to feedback on this information or join our reading group please contact on email address:

[patientexperienceandinvolve@LTHTR.nhs.uk](mailto:patientexperienceandinvolve@LTHTR.nhs.uk)

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