See the world as it was meant to be seen: See it clearly and trust your sight to the professionals.

About Us
Originally the “Excimer Laser Unit”, established 1993, at Sunderland Eye Infirmary, site for eyes is a private and fully dedicated refractive surgery facility, situated within the Infirmary. We provide sophisticated, state of the art facilities for patients seeking the most efficient and best service. Our unit benefits from an extensive ophthalmic research programme and has an established reputation as a high quality provider of comprehensive refractive surgery.

We offer advanced technology for small incision, no suture cataract surgery, corneal transplantation and refractive surgery.

Our unit has pioneered refractive surgery in the North East, and was the first centre to perform LASIK in the region. Similarly, site for eyes has introduced other technological innovations into the region. Amongst these, accommodating, toric and multi-focal implants for use with refractive lens exchange have helped to improve visual outcomes and near vision function, without glasses.

site for eyes was one of the first units nationally to introduce corneal Collagen Cross Linking for treatment of keratoconus and corneal ectasia; helping to pioneer its acceptance as a mainstream treatment for these conditions.

State of the Art Technology
We have continued to remain at the cutting edge of excimer laser technology and were the first centre in the region to introduce wavefront customised treatment, enabling laser treatment to be specifically customised for your refractive errors. This included the use of tissue saving and aspheric treatment profiles.

We offer both laser and surgical procedures. This allows us to treat a wide range of short sight, long sight and astigmatism.

site for eyes Limited welcomes you to the most advanced ophthalmic refractive surgery based out of Sunderland Eye Infirmary.

Whether it’s for a lifestyle change, for sporting reasons, your appearance or whether you’re ready for the freedom of not relying on glasses or contact lenses each day; your request for this brochure is the first step towards realising the freedom that refractive eye surgery brings to your life.

Your eyes are unique, priceless and irreplaceable. It is imperative to therefore entrust your eyes to the correct refractive surgery centre.

See it clearly and trust your sight to the professionals.

“We are dedicated to the improvement and maintenance of sight through the pursuit of surgical excellence and clinical research”

JP Danjoux MB BS, FRCOphth, CertLRS

WHY CHOOSE SITE FOR EYES
• highly qualified, fully accredited consultant corneal surgeons
• specialist ophthalmic staff
• full diagnostic & therapeutic unit
• full eye hospital backup
• 24 hour post-operative help line
• in-depth consultant assessment
• personal counselling with surgeon
• all post-operative care included
• comply with Royal College of Ophthalmologists guidelines
Our surgeons have completed Higher Surgical Training in Ophthalmology and are fully accredited by the Royal College of Ophthalmologists.

They have all been awarded the Certificate of Completion of Specialist Training (CCST) in Ophthalmology. They are Specialist Registered with the General Medical Council. All are NHS Consultants and have extensive experience in refractive and ophthalmic surgery.

Mr Jean-Pierre Danjoux MB BS, FRCOphth, CertLRS
Director, site for eyes

Mr Danjoux attended the University of Newcastle upon Tyne and qualified in Medicine in 1985. He completed training in Ophthalmology at:
• St James University Hospital, Leeds
• West Norwich Hospital
• Newcastle General Hospital and Royal Victoria Infirmary
• Sunderland Eye Infirmary.

In 1996, Mr Danjoux spent one year as Fellow in Corneal and Refractive Surgery at the Sydney Refractive Surgery Centre in Australia. Upon his return to the UK, he was appointed Consultant Ophthalmic Surgeon at Sunderland Eye Infirmary in July 1997.

He has contributed several papers on Corneal and Refractive Surgery to peer reviewed journals, together with textbook chapters on Excimer laser treatment.

A founder member of the ‘British Society for Refractive Surgery’, he is also a member of the ‘European Society of Cataract and Refractive Surgeons’ and the ‘United Kingdom and Ireland Society of Cataract and Refractive Surgeons’.

He has an active teaching role nationally on refractive surgery and is a member of the Royal College of Ophthalmologists Refractive Surgery Assessment Committee. He was part of the team that established the assessment in Refractive Laser Surgery for the College and is currently Senior Examiner for the Certificate in Refractive Surgery Assessment.

As a College appointed Specialist Advisor to NICE (National Institute for Clinical Excellence), Mr Danjoux has assisted in the publication of national guidance for both refractive and corneal surgical procedures.

Mr Saurabh Ghosh MB BS, Dip. Ophthal, MRCOphth, FRCOphth (Lond)

Mr Ghosh qualified in Medicine from University of Calcutta, India, after which he did specialist registrar training in Ophthalmology in India and achieved the Gold medal for topping the Diploma in Ophthalmology exit exam. He then joined the UK Specialist Registrar Ophthalmology programme and completed further training at:
• Royal Victoria Infirmary, Newcastle Upon Tyne
• Sunderland Eye Infirmary, Sunderland
• James Cook University Hospital, Middlesbrough

He undertook Advanced Subspecialty training in Cornea and Anterior segment at Sunderland Eye Infirmary, during which time he also did an honorary part time clinical fellowship at Moorfields Eye Hospital, London. After a further year’s Cornea Fellowship at Leicestershire Royal Infirmary he was appointed as a consultant at the Sunderland Eye Infirmary in 2014.

Mr Ghosh has regularly contributed to peer review journals and has made multiple national presentations. He specialises in:
• Refractive surgery
• Cataract surgery
• Corneal grafts and corneal surgeries.

He has a keen interest in various corneal graft techniques and introduced and performed the first thin endothelial transplant - DMEK (Descemet Membrane Endothelial transplant) in the North-East.

He also regularly teaches various corneal procedures including corneal transplants and is a core member of the Advanced Subspeciality Training in Cornea in the North-East to train fellows.

Outside ophthalmology he has an interest in various culinary styles and enjoys cooking with his wife who is a General Practitioner in the North-East and his two boys. He is also a keen badminton player. When in India he also was involved in comparing a national television health quiz show.
The Schwind Sirus offers the perfect combined solution for refractive and therapeutic corneal surgery. The highly precise, multi-functional diagnostic device provides a quick, three-dimensional analysis of the entire cornea and anterior segment of the eye, in only one step and in less than one second. With a high resolution of one micrometre the diagnostic system detects the smallest of irregularities on the anterior corneal surface and therefore offers an extremely precise diagnosis of the aberrations. This non-contact measurement allows analysis of the total corneal wavefront and shape of the anterior and posterior corneal surface. The combined Schwind advanced and thorough diagnostic system uses the optical map and corneal map to generate a customised treatment plan for each eye and reduce more of the optical errors, thereby improving outcomes. This allows our surgeons to make a more informed decision about whether it is safe to treat and the type of treatment most suited to your eyes.

Eye Tracking System

The Schwind Amaris 750S incorporates a 6 dimension eye tracking system. The eye tracker camera monitors the position of the eye 1050 times per second with a latency time of 1.6 milliseconds. Altogether, the total reaction time of the laser system is only three milliseconds. As a result each laser pulse is placed in exactly the correct spot on the cornea during treatment. Any involuntary eye movements are therefore compensated for and if the eye moves too far out of position for safe treatment, the laser is automatically cut off. This ensures a high degree of safety and accuracy with every treatment.

Highest Level of Standards

All surgical procedures are carried out by a Consultant Ophthalmologist. Our surgeons are all fully accredited by the Royal College of Ophthalmologists having completed full higher surgical training and are on the Specialist Register of the General Medical Council as Ophthalmologists.

The aim of our facility is to provide the highest standard of refractive surgical treatment to suitable patients. The unit runs an extensive research programme into excimer laser treatment. Based on the research results numerous scientific presentations to national and international conferences have been given by members of staff since the unit’s inception. Patients attending the unit for treatment are already benefiting from some of these research developments.
The eye functions on much the same principle as a camera.

The iris, or coloured portion of the eye, acts as the shutter to regulate the amount of light admitted. The cornea (the clear window at the front of the eye), and the lens (located behind the pupil), serve to focus light rays, from the object being viewed, onto the retina at the back of the eye. The retina then transmits the "picture" of the object viewed to the brain where the object is "seen".

Refractive error
For the eye to present a clear image, the light rays entering need to come to focus on the retina. If rays of light do not focus on the retina, a blurred image is transmitted to the brain. This is correctable by glasses or contact lenses and is known as a refractive error.

The three categories of refractive errors are: myopia (short-sightedness), hypermetropia (long-sightedness) and astigmatism.

All of these may be corrected by refractive surgery.

What is my refractive error?
The format of prescriptions can vary, but the information is the same. The Distance line refers to the refractive error of your normal vision. The Near line refers to your Presbyopic error or reading correction.

### Refractive surgery

<table>
<thead>
<tr>
<th>Left</th>
<th>Sphere (Sph)</th>
<th>Cylinder (Cyl)</th>
<th>Axis</th>
<th>Distance</th>
<th>Near</th>
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<tbody>
<tr>
<td>RIGHT</td>
<td>Sph</td>
<td>Cyl</td>
<td>Axis</td>
<td>Sph</td>
<td>Cyl</td>
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Myopia (Short-sight)
Myopia is a very common defect affecting approximately one in five adults. It often commences in early teenage years and stabilises at around 20 years of age. Without their spectacles, short-sighted people are not able to see near objects clearly if held at the appropriate distance, but usually objects beyond arms length are "blurred" or "out of focus". Spectacles or contact lenses are used to correct myopia. People with moderate to high levels of myopia are unable to see anything clearly without their glasses.

If you wear myopic spectacles then by holding them a few inches away from a printed page you will note that they make everything seem smaller.

One or a combination of the following causes myopia:
- Steep cornea
- Long eyeball
- Powerful lens

Consequently light rays focus in front of, instead of directly on the retina. Excimer laser surgery corrects myopia by causing a degree of corneal flattening and decreasing the anterior corneal curvature. This reduces the focusing power of the cornea and allows light rays to be "refocussed" onto the retina. Intraocular implanted lenses either replace or augment the patient's own lens to achieve this 'refocussing'.

Hypermetropia (Long-sight)
One or a combination of the following causes hypermetropia:
1. Flat cornea
2. Short eyeball

Consequently light rays are focused behind instead of on the retina.

Long-sighted people are able to see images in the distance more clearly than they can see images close up. Hypermetropic people may however, be unable to see at any distance clearly without their glasses. Laser surgery corrects hypermetropia by making the cornea steeper so the rays are 'refocused' on the back of the eye.

It is possible to correct up to +6.0 dioptres of long-sight (including astigmatism) with the excimer laser. If you are above the level of treatment it is still worthwhile coming for a consultation. Our surgeons may be able to give you less dependence on glasses and contact lenses, or offer other treatment options such as Refractive Lens Exchange.

Astigmatism
People with astigmatism have a cornea that instead of being shaped like a rugby ball shape (i.e. it is not equally curved in all places). This means that the rays of light are bent unequally, therefore giving a distorted or blurred image at all distances.

Astigmatism can be found either alone, or in conjunction with myopia or hypermetropia. Laser surgery can treat astigmatism especially in conjunction with myopia or hypermetropia. Occasionally, arcuate keratotomy (corneal incisions) may be used to treat astigmatism alone.

Presbyopia
Presbyopia is the term used to describe the need for reading glasses that usually occurs in middle age as a result of ageing changes within the eye's natural lens.

Most people require reading glasses when they reach their late forties, however short-sighted people often do not require glasses for reading when they reach this age.

People with normal vision when younger will need to wear reading glasses from about their late forties onwards. These people may still have good unaided distance vision. People who are mildly short-sighted will be unaffected by the symptoms of presbyopia in so much as they can read without glasses. People who have no prescription, are long-sighted or strongly short-sighted will suffer from the symptoms of presbyopia and need near vision glasses.

If a myopic patient is treated by excimer laser photokeratectomy, he or she will effectively become "normal-sighted" and whilst glasses may not be required for everyday tasks, once the treated person reaches 45-50, like most of the population, reading glasses will be required for near work.

Monovision
Monovision describes a form of treatment for presbyopia, where one eye is used for distance vision and the other is used for near vision.

People with no refractive error will have only one eye treated, which will be made mildly myopic (short-sighted). This eye will then be used for near or short distance vision.

People with myopia (short-sight) will have both eyes treated. One eye will be fully corrected and the other will be under corrected. This will leave one eye mildly myopic (short-sighted) for near vision.

People with hypermetropia (long-sight) will also have both eyes treated. One eye will be fully corrected and the other eye will be over corrected. This will leave the eye mildly myopic (short-sighted) for near vision.

Many people will accept this situation happily. It may take several weeks to fully adjust to the situation but most people will find it a useful alternative to being presbyopic and wearing reading glasses.

Some disadvantages to Monovision are:
- Decreased depth perception
- Reading very fine print may still be a problem
- Driving long distances especially at night may not be comfortable. This can be overcome by wearing glasses when required.

There are several laser and surgical options for the correction of short-sight, long-sight and astigmatism. No single vision correction procedure will be suitable for all eyes and a procedure that may be right for one individual may not be right for another.

Unlike some centres that may be able to offer you only excimer laser treatment or only non-laser surgical options, our ophthalmic surgeons can offer a wide range of both laser and surgical treatments. This means that we can consider treating all degrees of short- and long-sight with or without astigmatism.

Before deciding upon which may be the best treatment option for your eyes it is important for you to have a thorough eye examination. Our experienced ophthalmic surgeons can then discuss with you the procedures that may be suitable for the correction of your sight.
Excimer laser vision correction is an exciting development in Ophthalmology that has revolutionised the management of refractive errors.

It is an increasingly safe and accurate surgical method of correcting myopia (short sight), hypermetropia (long sight), and astigmatism, as well as a variety of corneal scarring disorders. Not all refractive errors prove suitable for laser surgery. In such cases, site for eyes is able to offer several equally effective micro-surgery solutions, such as Refractive Lens Exchange and Phakic Implants. All of these procedures allow the comprehensive refractive surgeon to offer treatment for a wide range of refractive errors. Site for eyes surgeons will ensure that you are offered the most appropriate treatment option to correct your spectacle prescription.

Benefits of refractive surgery
There are many benefits associated with refractive surgery. The benefit one receives depends mainly on the person and their visual requirements. Some of the potential benefits include:

- Enjoyment of sports e.g. swimming, football, tennis and skiing without the burden of glasses or contact lenses.
- Not having to worry about glasses or contact lenses being broken or lost.

Suitability for treatment
To be suitable for refractive surgery your prescription should be stable, i.e. it should not have changed significantly in the past two to three years. This generally means that patients are at least 21 years of age. Patients should have realistic expectations regarding expected outcomes. If you have a low or moderate degree of refractive error you should expect very good results. Those with higher degrees of refractive error may still need a reduced correction for some activities. Patients should have no significant eye disease.

You will need to undergo a consultation that will include a thorough eye examination. This involves an examination of the health of your eyes and an assessment of your suitability for surgery. You will be examined by the consultant who will perform your surgery and will have the opportunity to discuss any questions you may have.

As a guide, you should consider the procedure options

### Refractive Surgery Options

<table>
<thead>
<tr>
<th>Degree</th>
<th>Procedure Options</th>
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<tbody>
<tr>
<td>Low to moderate myopia (-1.0 to -4.5 dioptres)</td>
<td>Excimer laser (LASIK, Advanced Surface Ablation)</td>
</tr>
<tr>
<td>High myopia (-4.75 to -10.0 dioptres)</td>
<td>Excimer laser (LASIK, Advanced Surface Ablation) Occasionally Refractive Lens Exchange or Phakic Implants</td>
</tr>
<tr>
<td>Extreme myopia (over -10.0 dioptres)</td>
<td>Excimer laser (LASIK, Advanced Surface Ablation) up to -12 dioptres Refractive Lens Exchange or Phakic Implant</td>
</tr>
<tr>
<td>Low hypermetropia (+1.0 to +3.0 dioptres)</td>
<td>Excimer laser (LASIK, Advanced Surface Ablation) Possibly Refractive Lens Exchange</td>
</tr>
<tr>
<td>Moderate hypermetropia (+3.25 to +6.0 dioptres)</td>
<td>Excimer laser (LASIK) Refractive Lens Exchange</td>
</tr>
<tr>
<td>Extreme hypermetropia (over +6.25 dioptres)</td>
<td>Refractive Lens Exchange</td>
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If an individual has signs suggestive of early cataract development, then it may be more appropriate to perform a lens exchange and intraocular implant regardless of the refractive error. See Refractive Lens Exchange for details on this procedure.

Astigmatic Keratotomy (corneal incisions) may be used to treat Astigmatism.
The excimer laser is a precise device utilising a laser beam to contour the cornea (the clear portion of the eye in front of the pupil) with submicron precision and therefore a high degree of accuracy.

It can remove corneal tissue in a controlled manner not possible with conventional ocular microsurgery. By reshaping the cornea, the excimer laser can correct short-sight, long-sight and astigmatism. The reshaped corneal surface allows images to be focused on the retina. Technical progress with this technology, which has now been used for over 25 years, has been rapid, improving safety and outcomes. Excimer laser treatment can be carried out in two different ways.

1. Advanced Surface Treatments
   Laser Assisted Epithelial Keratomileusis (LASEK)
   LASEK is a variant of Photo Refractive Keratectomy (PRK). Instead of rubbing off the surface epithelial cells prior to lasering the corneal surface, the epithelial cells are lifted as an intact layer. After the laser treatment is complete, the epithelial cell layer is replaced and protected with a contact lens for up to five days. This usually helps to reduce postoperative discomfort and quicken visual recovery.

   The actual laser procedure is short, painless and only requires topical anaesthetic (eye drops). The patient’s refraction is programmed into the laser computer which calculates how much of the corneal surface to remove to correct the refractive error (this is usually less than 10-20% of the corneal thickness and the physical strength of the eye is essentially unchanged).

   TransPRK / SmartSurfACE
   With the SCHWIND AMARIS laser it is possible to carry out no-touch, all-laser surface ablations. TransPRK (Transepithelial Photorefractive Keratectomy) is an advanced version of surface treatments such as LASEK, Epi-LASIK and PRK. The epithelium, which is the regenerative surface of the eye, is ablated by the laser system. TransPRK is a transepithelial single-step treatment that avoids the eye coming into contact with any instrument. SmartSurfACE is an innovative eye laser surgery method that combines the benefits of touch-free TransPRK surface treatment with SmartPulse technology to give an impressively smooth corneal surface. Healing is typically 2 days faster than with earlier surface laser treatments such as LASEK.

2. Laser In-situ Keratomileusis (LASIK)
   Whilst surface ablation is highly accurate in correcting low refractive errors, the results can be less predictable with the higher degrees of refractive error. In these patients LASIK is the preferred procedure. LASIK also accurately corrects low refractive errors.

   The technique falls into two distinct steps, the creation of a corneal flap and the subsequent lasering of the corneal bed. Instead of lasering the surface layers, a superficial, thin, hinged flap of corneal tissue is made. This flap is then lifted and the laser is applied to the deeper corneal stromal bed before the flap is repositioned. The eye has a naturally occurring suction capacity, which holds the flap secure when the procedure is completed, therefore no sutures are necessary.

   As with surface treatments, this is a painless procedure.

   LASIK or Surface Ablation?
   The LASIK procedure can provide several advantages over surface treatments:
   - Less postoperative discomfort - as the corneal surface is only slightly disturbed it is rare for the LASIK patient to experience discomfort. Minimal irritation is expected initially for a few hours. With surface treatments it takes up to five days for the surface epithelial layer to regenerate and some discomfort and possible pain is likely in this time.
   - Faster visual recovery - as the epithelium is only minimally disturbed during LASIK the recovery is usually very fast with the majority of patients having a good level of unaided vision by the next day. Useful vision in surface treatment occurs only when the epithelium has regenerated and vision may take a little longer to become clear.
   - Lower incidence of corneal haze and scarring with LASIK - corneal haze is a potential side effect of surface treatment, particularly with higher refractive errors. Haze can cause or exacerbate symptoms such as glare and haloes, and contribute to myopic regression. LASIK allows surgeons to approach higher errors with greater confidence in relation to the end refractive result.
   - Faster stability - less fluctuation through the healing process (i.e. regression) and decreased corneal haze or scarring offers a faster and more stable correction with LASIK.

   Both LASIK and surface treatments have associated risks and complications. See the ‘Risks and Complications’ section.
Cataract surgery is the most commonly performed ophthalmic surgical procedure worldwide.

Technological advances in equipment and techniques together with the development of foldable intraocular implants has resulted in the ability to perform small incision, sutureless cataract extraction and implant insertion, with a low incidence of complications. By calculating the appropriate power of the intraocular implant to be inserted it is possible to adjust the eye’s refractive power with a high degree of accuracy. This form of surgery has been taken one step further with Refractive Lens Exchange.

Essentially this is the same procedure as carried out with a cataract extraction (except that the removed lens has no cataract and is therefore clear) together with the insertion of an intraocular implant. The power of the implant to be inserted is calculated to give as close a final prescription to zero as possible, thereby correcting the underlying refractive error.

Surgery is performed as a day case under local anaesthetic. There is usually very little pain or discomfort following surgery. Refractive Lens Exchange is an alternative procedure for patients (usually over the age of 40) who may prove to be unsuitable for excimer laser surgery (especially individuals with high degrees of short sight or long sight that may be beyond the safe treatment limits with excimer laser). It may also be a more appropriate procedure for individuals who have early signs of cataract development.

Newer types of implants, such as accommodating or multi-focal lenses, can help give suitable patients not only good distance vision but also good near vision without the need for glasses. It is also possible to use toric implants to correct astigmatism.

Phakic implants
Phakic implants are similar to the implants inserted after cataract or refractive lens exchange. With phakic implants however, the patient’s own lens is not removed but augmented with the addition of a synthetic intraocular implant.

Whilst intra-ocular implants have been in use for many years after cataract surgery, phakic implants are a relatively new development in refractive surgery. They are used in patients unable to be treated with LASIK, especially individuals with very high degrees of short sight. Phakic implants are able to correct large refractive errors because the lens can be made to a high power, and does not rely on altering the corneal shape to produce its optical effect. Since the patient’s own lens is not removed, the ability to accommodate and focus on near objects is preserved. This is particularly beneficial to those younger individuals who have not yet developed presbyopia.

Phakic implants are inserted into the eye through a small incision, usually in the cornea. The implant is placed behind the iris through a dilated pupil and sits in front of the eye’s natural lens. Surgery is carried out under local anaesthesia as a day case procedure.

Astigmatic keratotomy
This procedure consists of making relaxing incisions into the mid- periphery of the cornea. In astigmatism the corneal shape is not symmetrical. It tends to be steeper in one direction (like a rugby ball). Relaxing incisions allow the steep axis to flatten and improve the overall corneal shape. For some individuals who have astigmatism without any other significant refractive error this procedure may be appropriate to improve their unaided vision. It may also be used as an adjunctive treatment to other forms of laser or surgical vision correction where there are high degrees of astigmatism.

Treatment is carried out with anaesthetic eye-drops as a day case procedure.

As with all surgical procedures, there are certain risks and complications involved, see the ‘Risks and Complications’ section.
Consultation

The assessment consultation takes place at Sunderland Eye Infirmary and will require approximately one to two hours.

During the consultation you will have a comprehensive ophthalmic examination. You will also be provided with an explanation of your treatment options, their benefits and possible consequences.

The examination includes a refraction to check your current spectacle prescription and vision, together with computerised corneal mapping and full ocular wavefront measurement to determine your ocular status and suitability for refractive surgery. As part of the examination you will receive dilating drops to allow the surgeon to fully examine the health of the eye. These drops will make you light sensitive and may make driving and close work difficult for an hour or two after the examination.

You will be able to ask the surgeon any questions you may have.

It is extremely important that contact lenses are left out of the eye for an appropriate length of time before both the consultation and surgery. This is because contact lenses sit on the cornea and may change the contour of the cornea, therefore affecting the accuracy of our measurements. Soft contact lenses must be left out for a minimum of 3 days before the consultation, hard or gas permeable lenses should be left out for a minimum of 3 weeks.

During the consultation you will be provided with an explanation of your treatment options, their benefits and possible consequences.

The day of surgery

If you are suitable and decide to go ahead with surgery, this will take place in our operating theatres at Sunderland Eye Infirmary.

You should refrain from wearing eye make-up for at least two days prior to surgery, to ensure that no trace remains.

Please do not wear perfume or after-shave on the day of surgery as this can affect the sensitivity of the excimer laser.

Although most of the surgical and laser procedures will take about 10-15 minutes per eye, you can expect to be at the hospital for around 2-3 hours.

Most procedures are performed with local anaesthetic eye drops. This means that you will experience little if any discomfort.

If you are having a LASIK procedure you will need to wait a further 30-40 minutes after surgery, so that the surgeon can be satisfied the flap is in a good position before you return home.

Following surgery

The surgeon has performed a final check of your eyes, a clear shield or pad may be placed over the operated eye. This will remain on until the next day. Further post-operative instructions are given.

After surgery you must not drive home yourself. If you are not accompanied by a friend or family member a taxi can be called.

Once you are at home we recommend that you rest in bed or in a comfortable chair to allow yourself time to recover from the surgery.

You may experience some gritty discomfort in the operated eye soon after surgery and it may water in response to this. This is a normal response and these symptoms can be relieved by gently closing your eyes. Do not squeeze or rub your eyes.

You may experience a mild headache postoperatively and can take analgesics if required.

Be careful to protect your eyes from soap, shampoo and the flow of water if you are showering or washing.

Your vision may be blurred and the eye may be a little red and light sensitive. Again, this is normal and is nothing to be concerned about.

Each patient is required to see the surgeon the following day after LASIK. After Surface Laser Treatment you are usually seen on the second and fifth post operative day. For Refractive Lens Exchange, you will be seen the following week after surgery. Anti-inflammatory and antibiotic drops will be given to take home and used as instructed.

Your eyes may remain sensitive to light for a few days following surgery. Similarly a gritty irritated feeling may also persist, possibly continuing in one eye longer than the other. As the eye heals, your vision may fluctuate. This can occur over the first 3-4 weeks. You should however always maintain a reasonable level of vision.

Follow up visits take place at ONE WEEK, ONE MONTH, THREE MONTHS, SIX MONTHS AND TWELVE MONTHS. These visits are included in the surgical fee.

Cost of Treatment

A separate ‘cost of treatment’ sheet is included in your information pack. The fee includes all necessary post-operative visits.

Laser re-treatment within the first two years is carried out free of charge, on a like for like basis, thereafter a small facility fee may be charged.

There may be a small facility fee payable for any other surgical procedures performed.

To ensure the safety of both yourself and your eyes post-operatively we ask that you follow these simple guidelines:

- No swimming for two weeks.
- No eye makeup for two weeks.
- Take extra care to avoid getting soap or shampoo in your eye for one week.
- Do not drive until your vision is adequate both day and night. (This usually takes about two days for LASIK but longer for surface treatments).
- Do not use any eye drops other than those prescribed by the surgeon.
- No body contact sport for 4 weeks following surgery.
- You must not rub the eye vigorously for one month following the procedure.
Prior to treatment;

Are there limits as to how much refractive error can be treated with excimer laser?

Yes. Myopia can be treated to approximately -12, whilst hypermetropia can be treated to +6. Up to 6 dioptres of astigmatism can be treated by LASIK. Patients unsuitable for excimer laser treatment may be offered an alternative treatment option to correct their vision.

How do I know if I am suitable for refractive surgery?

To determine your suitability for laser surgery you need an assessment consultation at site for eyes. At this consultation we will look at the general health of your eye, discuss the treatment options, possible complications and results you can expect after surgery.

If I need further surgery do I have to pay?

Laser retreatments within the first two years are carried out free of charge, on a like for like basis. Thereafter a small facility fee will be charged. There may be a small facility fee payable for any other surgical procedures preformed.

Is surgery painful?

The majority of refractive surgical procedures are carried out under a local anaesthetic and pain or discomfort at the time of surgery is uncommon. It is very unusual for there to be pain following LASIK or intraocular lens procedures. Occasionally a patient will complain of gritty, uncomfortable eyes after LASIK. Discomfort is more common after surface laser ablation for two to three days as the surface of the eye heals.

How long does surgery take?

This will depend upon the procedure being preformed. In most cases the actual surgery only takes 10-20 minutes, but you will be with us for approximately 2-3 hours.

What is the success rate with refractive surgery?

The success rate depends upon your ocular health and refractive error. This is better discussed at the initial consultation with the surgeon.

How long until the flap is settled after LASIK?

The flap is settled immediately after surgery. It is possible for it to move on the first night after surgery. The surgeon can lift the flap if necessary for retreatments, but you are very unlikely to move it after the first week unless you rub it vigorously.

Does surgery cause Presbyopia?

Laser surgery does not cause presbyopia. If you have refractive lens exchange and an intraocular implant this will result in a loss of ability to focus (unless an accommodating or multifocal implant can be used) and reading glasses may be required.

How long do my contact lenses need to be left out prior to the consultation?

Soft contact lenses need to be left out for at least three days prior to the consultation. Hard or gas permeable contact lenses need to be left out for at least three weeks.

Why do contact lenses have to be left out prior to the consultation?

Contact lenses need to be left out prior to the consultation and any subsequent assessment, as they may affect the natural curvature of the cornea. For the accuracy of results we need to know the curvature of the cornea before surgery, therefore it is essential that you leave them out for the recommended period.

If I need to will I be able to wear contact lenses after the surgery?

If you do need to wear contact lenses then they can be fitted three months after surgery.

Is surgery permanent?

Excimer laser surgery does permanently alter the shape of your cornea. This does not mean that your refractive error will not change. If you are going to naturally become more short or long sighted then this will still occur. With lens replacement surgery once your own lens has been removed the effect of this is permanent.

Will I ever wear glasses again?

Presbyopia is a natural aging condition which affects most people in their mid forties to fifties. It is due to the lens in the eye becoming less elastic with age, and therefore not working as effectively for close work. This means that most people in this age group start to need reading glasses, or bifocals. With or without refractive surgery you are likely to need reading glasses at some stage. It is also possible that people may need to wear a small prescription for certain other activities after surgery.

If I wear glasses for reading only, will this surgery help me?

It is possible that laser surgery may be able to help you. Monovision is a possible alternative to reading glasses. Refractive lens surgery with multifocal implants may help.

Do I have to get both eyes done on the same day?

This will depend upon the procedure being carried out. It is possible to perform surgery on both eyes on the same day if you are having laser surgery. You would need to discuss the risks with your surgeon. However the final decision is yours.

Do I need to remove my nail varnish prior to refractive lens surgery?

Yes, we recommend you remove all nail varnish prior to refractive lens surgery.

Can I wear eye makeup prior to surgery?

We ask that you do not wear any eye makeup for a minimum of 3 days prior to and on the day of surgery.

In most cases the actual surgery only takes 10-20 minutes, but you will be with us for approximately 2-3 hours.

After treatment;

How long until I can fly?

We recommend at least one week as long as you have had your first follow up appointment.

How long until I can wear makeup?

We advise that you do not wear makeup for a minimum of two weeks post surgery.

How long until I can play sports?

One month for contact sport e.g. football, rugby, boxing and martial arts.

How long until I can have my eye lashes tinted?

We advise that you do not get your eye lashes tinted for at least one month post surgery.

How long until I can swim, use the sauna or the steam room?

We advise that you don’t do any of the above for a minimum of two weeks after surgery.

How long is it until my eye heals?

The eye is healed structurally at approximately one month, and optically at approximately three months after surgery.

How long before I can go back to work?

You will need to see the surgeon on the day after LASIK surgery and the second and fifth day after surface laser. For most procedures it is recommended that you take approximately 1-2 days off work. With surface laser 5 days is recommended and following refractive lens surgery 2-3 days is recommended. Certain manual workers may require a little longer in all cases.

When will my vision be adequate to perform my normal activities?

Most patients will have adequate vision to resume normal activities the day after the procedure except in the case of surface laser where this may take up to one week.

When will I be able to drive?

Usually you are able to drive within a few days of surgery as long as you meet legal driving standards. We suggest that you wait until you are used to both your night and day vision.
Myopia
Following treatment for mild to moderate myopia (up to -5.0 dioptres) over 99% of patients will not require spectacles or lenses for most everyday activities, the remaining 1% may require them for visually demanding tasks such as driving.
For higher levels of myopia (greater than -5.0) it is less likely that patients will be able to see perfectly unaided. Unaided vision will however, be greatly improved and spectacles considerably thinner. Above -5.0 dioptres, 90% can expect 6/12 or better unaided vision.
It should be explained that 6/12 is approximately the visual acuity required to drive a car, play most sports and perform many day to day tasks. 6/6 vision is “perfect” or “normal” vision (which is probably the vision that you presently obtain with spectacles).
The degree of myopia can fluctuate a little for up to six months after laser treatment but thereafter the effects are usually stable. Although it is established that the various treatment options can reduce the degree of short sight, the exact amount in each case cannot be guaranteed.
The results of excimer laser treatments performed at Sunderland Eye Infirmary are continuously audited.
The response of astigmatism to excimer laser is more variable than myopia alone and if you simply have myopia your outcome may be slightly more favourable than the results above.

<table>
<thead>
<tr>
<th>Degree of Myopia (Dioptres)</th>
<th>6 / 6 or better (unaided)</th>
<th>6 / 12 or better (unaided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to -5.00</td>
<td>85%*</td>
<td>98%*</td>
</tr>
<tr>
<td>-5.00 to -10.00</td>
<td>68%*</td>
<td>92%*</td>
</tr>
</tbody>
</table>

*These are the results for individual eyes. Binocular vision using both eyes is often better.

Higher degrees of hypermetropia (over +3.0 to +6.0 dioptres) are more difficult to correct but patients can expect an 85% chance of 6/12 or better unaided vision with treatment.
For those with extreme long sight of over +6.0 dioptres, results are much less predictable and outcomes would need to be discussed at the assessment consultation.

Astigmatism
The visual outcome following treatment for astigmatism will depend partly on the degree of astigmatism and the underlying amount of short or long sight, together with the type of treatment performed.
On average, patients can expect to have a reduction of 66-75% in the amount of astigmatism with treatment. Some may however, do better or worse.
If the residual astigmatism after treatment is less than 1.0 dioptre and there is no significant short or long sight then the unaided vision should be good.
Higher degrees of residual astigmatism may mean that glasses or contact lenses are required to achieve the best vision.

The results of excimer laser treatments performed at Sunderland Eye Infirmary are continuously audited.
WHAT OUR PATIENTS SAY

Georgina, Northumberland
“A really big thank you Mr Danjoux and all your team for doing such a brilliant job on my eyes. Going from a +14 to 20/20 vision has been nothing short of a miracle. Just wish I could have had it done years ago. Many thanks for all the excellent care. I will certainly be recommending site for eyes.”

MoiRo, Whitley Bay
“I had refractive surgery in May and June 2016. My operation went extremely well on both eyes and was completely painless. Mr Danjoux did an excellent job and I now have 20/20 vision. Many thanks to Mr Danjoux and his friendly and professional team on their excellent work.”

Anne, Co. Durham
“I can see clearly for the first time in 60 years. Absolutely fantastic. Thanks to all the staff!”

Lucy, Newcastle
“It’s been 9 months since my laser surgery on both eyes and I couldn’t be happier with the results! The team have been very supportive, giving honest, comprehensive advice throughout the process – which I can’t say for other places I consulted about laser surgery. It sounds cliché but the results are truly life changing! Thank you to the team at site for eyes.”

Bernard, Hartlepool
“Mr Danjoux, Anita and all the team have been absolutely superb. Unbelievable! Thank you so very much.”

Jane, Co. Durham
“I decided to have my eyes done because I didn’t want to have glasses on all day on my wedding day. It was fantastic, not having to take my glasses ‘on’ and ‘off’ for the photographs. The overall benefits have meant so much more to me than that. It’s incredible being able to thread a needle without glasses, read the newspaper, snorkel etc. The procedure has totally changed my life and was worth every penny. Also the team at site for eyes are so nice – thank you so much Mr Danjoux, Anita and Alex for a pain free procedure and looking after me so well at every visit – cannot recommend you highly enough.”

Joe, Newcastle
“I had LASIK performed on both eyes. The results have been incredible. It took my eyes quite a while to adjust (I had worn glasses for around 15 years) but now my vision is fantastic. I could never imagine going about my everyday life without glasses. For months after the surgery I went to pick my non-existent glasses up from my bedside table!”

Mr Danjoux explained every step right from the initial consultation, and all the risks were fully explained. The surgery was pain free and Mr Danjoux talked me through it – just like the dentist would!”

This has improved my life on a daily basis and I would like to say a huge thanks to Mr Danjoux and all of the staff here. Thanks.”

Lesley, Washington
“Just want to say a huge thank you to Mr Danjoux and all of your team. I am thrilled with my results, for the first time in 50 years I can see when I wake up. Absolutely no pain – just gain.”

Rebecca, Newcastle
“I had my eyes done last October and it’s truly the best thing ever to happen to me. When I woke up the next day, I actually cried because I could see! Really recommend it as it’s changed my life.”

Liam, Durham
“In all my 21 years of being on this earth this is, without a doubt the most surreal, wonderful and life altering experience of my life so far. Everybody at site for eyes has been wonder fully helpful, kind and reassuring. The corrective surgery was quick, painless and Mr Danjoux was kind enough to walk me through every step of the way. Fantastic experience.”

Paul, Durham
“I can highly recommend Mr Danjoux and his team that put me at ease from the start. I have had no pain at all and the results are amazing.”

Chris, Co. Durham
“Waited a year before getting my eyes lasered as I was very nervous, best decision I have ever made. Perfect vision now and my golf has improved. Happy days.”

Anonymous
“I had LASIK to the left eye. I now have monovision. Had no problems whatsoever. No pain afterwards and I now have perfect sight. I wish I had done this years ago. Mr Danjoux gave perfect advice and is an excellent surgeon, I would definitely recommend site for eyes to my friends and family.”

Anonymous, London
“After discovering I had cataracts at the age of 35 (despite never having any visual problems before) I was referred by my own GP to an eye specialist who informed me that I was eligible for an operation to remove the cataract but would in all likelihood be left short-sighted. An optician based in London recommended Mr Danjoux specifically, and I decided to seek private treatment at site for eyes. I can wholeheartedly state that it was money well spent and my vision is fully restored. Thank you!”

Richard, Sunderland
“It’s been 1 year since my eye surgery. My vision was dreadful 15/25 right 7/1 left. I have now been discharged with 20/20 vision. Remarkable - still can’t believe what my eyes are like now compared to before. This was the best thing I have ever done and it has given me a new life. The staff are fantastic as I have been brilliant from the start to finish. Thank you so much for your help, support and amazing skills and technology.”

Have you carefully read our information on refractive surgery?

Are you fully aware that the results from treatment are not 100% predictable and that although your unaided vision can be improved you may still need to wear glasses to obtain the best result?

If you only wear contact lenses as an alternative way of correcting your refractive error?

Are you aware that the treatment will require a total of 6-8 visits to the Sunderland Eye Infirmary during the recommended follow-up period after treatment?

To make an appointment contact:

site for eyes
0800 085 77 55
0191 569 9165 or
enquiries@site-for-eyes.co.uk

THE DECISION
One year visual outcomes with a rotationally asymmetric multifocal intra-ocular implant: the Lenstec SBL-3

Forty patients (80 eyes) undergoing refractive lens exchange surgery by a single surgeon with bilateral SBL-3 implantation and were recalled for review 1 year following surgery. Thirty three patients (82.5%) attended for review. Binocular UDVA was 20/40 or better in 100% of patients and 20/20 or better in 88%. Binocular UNVA was N5 or better in 82% of patients. 92% of patients were satisfied with their unaided visual outcome for distance and near vision.

The one year visual outcomes results are encouraging and the Lenstec SBL-3® is an effective way to improve both unaided distance and near vision in patients undergoing refractive lens exchange surgery.