

LASIK

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sehkraft	6
LASIK Safety	7
The Surgical Procedure	8
Customized LASIK	10
Refractive Lens Surgery	16
Bioptics	17
Diagnostic Technology	18
Treatment Technology	20
The sehkraft Team	24
Competence and Experience	26
Chances and Risks	28
Experiencing LASIK	30
Service	36
Address / Edition Notice	39



THE EXPERTS IN VISION

WE APPRECIATE THE TRUST THAT YOU HAVE PLACED IN US.

sehkraft

It is a fascinating challenge to help people achieve perfect vision and improve their quality-of-life through one simple procedure. This challenge is our motivation.

We appreciate the trust that you have placed in us, and feel that for this reason our duty is to provide you with excellent results and maximum safety.

To ensure successful outcomes, we have assembled a unique team of highly experienced and skilled professionals. We have also invested in the most modern technology available. As an international reference center for companies such as Alcon, WaveLight and Bausch+Lomb, we have a decisive competitive edge over other refractive centers.

We are the only center in Germany that uses the two fastest lasers in the world, the CONCERTO and the REFRACTIVE SUITE by WaveLight.

**THROUGH SAFETY AND
INNOVATIVE TECHNOLOGY WE
OFFER YOU THE HIGH-QUALITY
RESULTS YOU WOULD
EXPECT FOR YOUR EYES.**

Our quality controlled structures enable us to adapt every treatment to your individual needs and personal requirements, and thus to select the optimal solution for you from a broadly diversified treatment portfolio. There is only one other center worldwide which matches this cutting edge technology.



LASIK SAFETY

Over the last 20 years, Excimer lasers have been successfully used for laser vision correction.

To date, more than 30 million procedures have been performed worldwide, making it the most common surgical procedure in western civilization. We have been performing this procedure since 1995, carrying out more than 50,000 successful surgeries. We use only the most advanced technology to conduct customized LASIK treatments. Our technology enables us to treat prescriptions within these guidelines:

Near-sightedness (myopia) of up to -12 dioptres
Far-sightedness (hyperopia) of up to +6 dioptres
Astigmatism (corneal asymmetry) of up to 6 dioptres and in some cases, even higher prescriptions

Additionally, to correct very high refractive errors, our technology enables us to treat complex cases such as corneal scarring or other corneal irregularities.

**OVER 30 MILLION LASIK
SURGERIES PERFORMED
AROUND THE WORLD.**

The range of treatments that we offer only exists twice in the world.

LASIK is an extremely safe and reliable procedure.

During longterm studies for scientific validation conducted in 1993, comparative tests were carried out between LASIK and soft contact lenses. The study found that LASIK was at least as effective and safe as wearing soft contact lenses.

After the study's findings were published in 1998, the procedure's sustained and positive long-term effects have continued to be recognized.

We do not only have the benefit of 20 years of experience performing LASIK, but we also have even longer-term empirical results relating to the two individual components of the procedure.

The procedure of creating a thin corneal flap (to correct refractive errors in the cornea) is now 50 years old, having first been carried out in 1961. Since 1987 it has been scientifically proven that Excimer lasers can be used for precise vision correction.

After carrying out wind tunnel testing, the US Navy and NASA approved the use of LASIK for jet pilots and NASA astronauts. In the USA, newer studies have shown that the early performance of LASIK can prevent much of the damage that may result from decades of wearing soft contact lenses.

THE SURGICAL PROCEDURE

As a way of making the treatment more comfortable for the patient, LASIK is not performed directly on the surface of the cornea, but instead at a depth of approx. 0.1 mm.

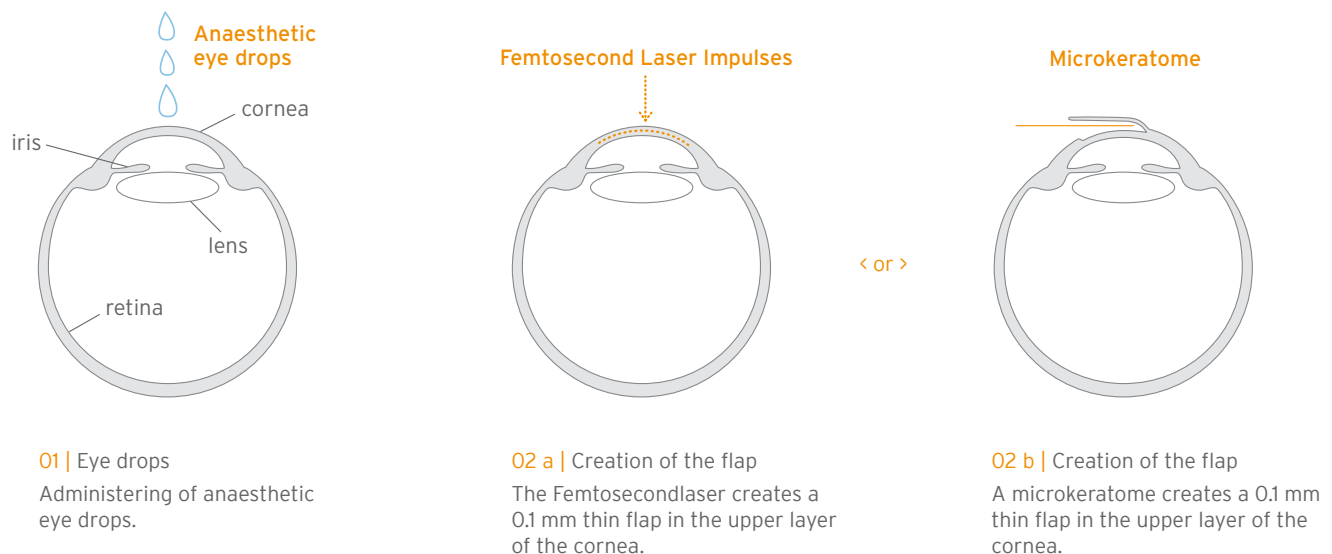
In order to accomplish this, the surgeon creates a flap before beginning the laser treatment, either by using a microkeratome or a Femtosecond laser. This flap is then carefully lifted.

Using an Excimer laser, the cornea is reshaped in order to achieve optimal vision. For correction of near-sightedness (myopia), the cornea is flattened, as the

eye is too long to be able to gather incoming light rays onto a focal point on the retina. In this process, it is primarily corneal tissue which is removed.

The treatment of far-sightedness (hyperopia) is just the opposite. The cornea is centrally steepened by removing tissue from the peripheral areas.

Astigmatism (corneal asymmetry) occurs when the cornea has a shape that is cylindrical rather than spherical. Most often, this form of visual impairment occurs in conjunction with near-sightedness or far-sightedness.



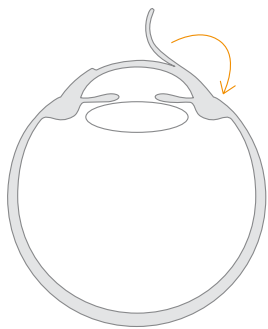
In this case, incoming light rays are gathered on a line rather than a point. The patient's vision is not just blurry, but also slightly distorted. The laser enables the precise correction of those areas of the cornea which are causing visual defects.

THE AVERAGE TREATMENT TAKES JUST 7 SECONDS.

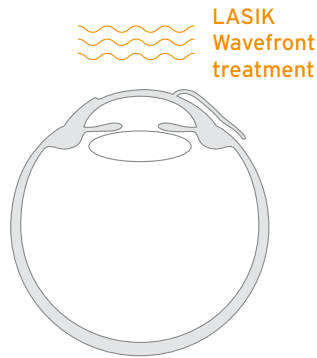
With our laser systems, treatment time is very short, on average just 7 seconds. Following the Excimer laser treatment, the corneal flap is repositioned, and

it quickly reattaches itself due to the eye's internal negative pressure, which creates a natural adhesive.

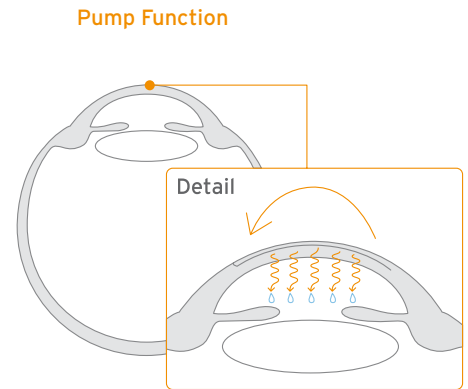
The procedure is always performed on an outpatient basis; it lasts only around 6 minutes, and is painless with the administration of anaesthetic eye drops. The tiny incision only takes about 4-6 hours to heal.



03 | Lifting of the flap
The flap is carefully folded over (like a book cover).



04 | LASIK
Using the Excimer laser, in only 1.4 seconds per dioptre, the refractive power of the cornea is changed in such a way that the refractive error is corrected.



05 | Completion
The flap is placed back onto the cornea. It attaches itself within minutes, due to the natural pump function of the cornea.

CUSTOMIZED LASIK

sehkraft uses only the most advanced methods of customized LASIK. Classic LASIK is an identical procedure that is still standard practice around the world, but it can only achieve refractive correction for prescription strength, and is therefore no longer in use by sehkraft.

Your eye is as unique as your fingerprint. Various refractive powers of the cornea and the lens, different curvatures at every point in the cornea, and a range of higher-order aberrations come together to make every eye unique.

YOUR EYE IS AS DISTINCTIVE AS YOUR FINGERPRINT.

Only by using the advanced technology of customized LASIK, can we take all of these factors into consideration in planning and determining your own specific treatment profile.

Our goal is to optimize your eye so that you do not only have sharper vision, but also the overall quality of vision is improved, including better contrast vision, night vision and 3-D vision. The many challenges of achieving this goal are met by our highly qualified and experienced staff and cutting-edge technology.

So it is only after we have carried out a thorough examination, analysed all the data and consulted with you in detail, that we select the procedure that is best for you.

Femto-LASIK

For certain specific corneal shapes, Femto-LASIK is our procedure of choice. Here, we do not create the flap using a microkeratome, but instead utilize a state-of-the-art Femtosecond laser. The ensuing correction of the cornea is always performed using the Excimer laser.

The REFRACTIVE SUITE by WaveLight has opened up a new dimension in Femto-LASIK. For the first time, WaveLight has succeeded in linking the Femtosecond laser to the Excimer laser. This means that the flap can be precisely adjusted to a tenth of a millimetre using integrated data exchange over the planned ablation zone by the Excimer laser. Subsequently all the information about the flap creation is automatically fed to the Excimer laser during the ensuing treatment.



The REFRACTIVE SUITE is another step in the customization of our LASIK treatment. Thanks to the wide selection of flap placement, we can reliably expand our treatment options, in particular to include farsighted patients, with complex corneal curvatures. At the same time, the Femto-LASIK treatment is significantly more pleasant for the patient.

USING CUSTOMISED LASIK IS THE ONLY WAY TO PRECISELY CORRECT ALL ERRORS IN THE EYE.

Wavefront-optimized LASIK

Wavefront-optimized LASIK is the foundation for all of our high-end individualized procedures. We perform all treatments using either the Wave-Light CONCERTO or the EX500, which are today's

fastest and safest lasers. Your unique Wavefront-optimized ablation profile simultaneously minimizes tissue removal while creating large optical zones that achieve the optimal curvature profile all the way out to the periphery of each eye. This is of great significance for night vision and your vision in dim light. It is also the first procedure, ever approved by the FDA, for the improvement of night vision and contrast vision.

A-CAT | Wave-front-guided LASIK

In addition to the refractive errors of near-sightedness, far-sightedness and astigmatism, we can also deal with an additional 24 higher-order errors such as aberrations or koma, which can affect the quality of the retinal image and thus maximum visual acuity. Using Wavefront technology, these defects can also be measured and corrected to a level of -6 dioptries. For the first time in



medical history, this technique makes it possible to actually improve the function of a human sensory organ.

Custom-Q | Q-LASIK

We are the first German center to introduce Q- LASIK technology. Q-value adjustment is a new tool that permits further individual adaptation of LASIK to each particular eye.

In many cases, reduced vision is caused by a less-than-perfect curvature pattern in the cornea. As a result, incoming light rays are not gathered into an optimal focal point, especially in dim light. Using Custom-Q treatment, we can target changes in the shape of your cornea and its curvature pattern or asphericity (defined by what is called the Q-factor) to a precision of 1/100 dioptre, and thus achieve an improved focal point.

T-CAT | Topography- or Pentacam-guided LASIK

Since 2001, we have had the technology available to implement Topography-guided LASIK. It has become our method of choice for patients with very severe astigmatism, for treating corneal scarring and in other situations such as surgically-induced corneal irregularities. Just as with all of our other procedures, Wavefront-optimized LASIK, with its many advantages, forms the basis of the treatment.

In addition, data for analysing corneal surface patterns from the Topolyzer or the Oculyzer are integrated. The ablation profile is calculated and generated by 22,000 measurement points.



WE ALSO OPTIMIZE YOUR
QUALITY OF VISION:
IMPROVED CONTRAST VISION
IMPROVED NIGHT VISION
IMPROVED 3-D VISION

Ray-Tracing | RT

RT is the most recent advance in customized LASIK technology. For the first time, it is possible to evaluate all of the measurement data relevant for the eyes' optics and use it to create the optimal individualized profile for your cornea. Aberrometry, Topography using Topolyzer and Pentacam, and biometrical measurement of the optical axes by the BioGraph all contribute to defining your individual data.

C-TEN | Advanced Surface Ablation

Occasionally, LASIK is not possible because of the thickness of the cornea or the condition of its surface. In these cases, we can perform a highly modern, completely contact-free correction directly on the surface. However, healing after this procedure takes 2-4 days, and the increase in visual acuity is slower.

Monovision

Monovision is a refractive surgery procedure to correct presbyopia, which is a term designating the loss of accommodation ability in the eye that generally begins after age of 40.

The goal of Monovision is to optimize the dominant eye for long-distance vision, and the non-dominant eye for near vision. In order to ensure that the non-dominant eye has decent near vision, it must be adjusted to a slight degree of near-sigh-

tedness of about -0.50 dioptres to -1.50 dioptres. A requirement for the success of this surgery is perfect coordination between the two eyes. In order to ensure a good outcome, we simulate the results of Monovision prior to the procedure using contact lenses.

**WITH INNOVATIVE TECHNOLOGY
AND OUR HIGHLY QUALIFIED
STAFF WE ARE ABLE TO OFFER
YOU THE PERFECT LASIK.**

We only carry out this procedure if the simulation is successful and limitations in three-dimensional vision are not found to be too much of a problem. Glasses may still be required for reading longer texts in small print as well as for driving in low-light conditions.

Carl Zeiss

A close-up, macro photograph of a lens element from a Carl Zeiss camera. The lens is dark, likely black or dark grey, and features a white scale with vertical tick marks. The brand name "Carl Zeiss" is printed in white, sans-serif font on the lens barrel. The background is a soft, out-of-focus light grey.

REFRACTIVE LENS SURGERY

Refractive lens surgery is an excellent option for people who are not suited for LASIK, due to high prescriptions or a specific contraindication but who nevertheless would like to give up their glasses or contact lenses.

In this procedure, an artificial lens that permanently corrects your refractive error is implanted directly into the eye, rather than onto the cornea. Innovations in lens implants have led to significant progress in both refractive lens surgery and the field of cataract surgery, with excellent results. We offer a total of more than 20 different types of new-generation lenses in precisely adapted strengths in order to completely meet your individual requirements.

We have two basic procedures, depending on the accommodation ability of the natural lens.

Phakic Lens Implantation

If natural accommodation is still functioning, and you do not yet need to wear reading glasses, an

artificial lens is implanted while retaining your natural lens.

Clear Lens Exchange

If you already wear reading glasses, we replace your natural lens with an artificial lens, thereby eliminating any potential need for cataract surgery in the future.

Further information on this is available in our brochure, "Refractive Lens Surgery."

**NO NEED FOR GLASSES
OR CONTACT LENSES -
DESPITE SEVERELY
DEFECTIVE VISION.**

BIOPTICS

With Bioptics, we combine the advantages of two procedures; lens implantation and LASIK.

We use the lenses to correct high refractive errors or to treat cataracts. A few weeks after the treat-

ment we can, if necessary, use the laser to perform fine corrections of any remaining visual defects, aberrations or astigmatism to the perfect level of precision.



DIAGNOSTIC TECHNOLOGY

Our technology in the field of diagnosis and treatment is unique in Germany, and worldwide there is only one other center that operates at such a high level. This means that we can provide you with an unparalleled incommensurable level of quality and safety.

Customized LASIK treatment was first made possible by the development and fine-tuning of modern diagnostic devices. Accurate and reliable diagnostic data, perfect coordination of the components of the laser system, and continuous dynamic quality assurance form the foundation of successful treatments. They are therefore precisely adapted to meet each patient's individual needs. We have our own diagnostic department, equipped with state-of-the-art equipment and headed up by a professional optical engineer and Master of vision Science and Business.

ALLEGRO TopolyzerTM | Corneal topography

Using our colour based video Topography system, we can determine the actual surface geometry of your cornea using 22,000 measurement points. The resulting image allows us to reliably diagnose specific corneal diseases that constitute a contra-indication for LASIK.

In addition, we can incorporate the individual curvature pattern of your cornea into the planning of your LASIK procedure.

ALLEGRO OculyzerTM II | Scheimpflug Camera

This innovative measurement system allows us to measure the actual thickness of your cornea in three dimensions. Instead of just a single point analysis, we are able to analyse your cornea at approximately 25,000 points on its anterior and posterior surfaces.

QUANTITY AND QUALITY OF THE DIAGNOSTIC DATA FORM THE FOUNDATION OF A SUCCESSFUL TREATMENT.

This is the only way to take measurements that guarantee precise results. It provides you with the assurance that your cornea will remain of sufficient thickness after your LASIK procedure. The Oculyzer additionally enables us to analyse potential corneal or lens opacities that may be present and is capable of providing a layered representation of the structures of the anterior portion of the eye.



ALLEGRO Analyzer™ | Aberrometer

The Aberrometer enables measurements of all optical aberrations in your eye (refractive errors, aberrations and other higher-order defects), which have an impact on the quality of the retinal image and thus on maximum visual acuity.

We use Tscherning-technology to carry out Wavefront measurements. This measures the incoming Wavefront by projecting a raster of light points into your eye and records its image on the retina using a high-sensitivity fundus camera. All discrepancies between this image and the original are mathematically analysed in order to determine the defects in the overall optical system and to calculate the corresponding optimal ablation profile.

ALLEGRO BioGraph™ | Biometer

As the first biometer of its kind, the BioGraph makes use of the unique EyeClick technology. This permits a precise and contact-free measurement of the length of your eye, along with other struc-

tural dimensions. The eye is an optical system comparable to a camera, with 2 lenses (the cornea and the lens) and one aperture (the pupil). The retina then corresponds to the film or the chip. The distance of each of the individual components significantly determines optical power. This new and patented process provides for the precise determination of these distances, using 16 scans per measurement, each one subdivided into an anterior and posterior surface. In this process, the central anterior curvature values are measured and the distribution of blood vessels in the conjunctiva is recorded.

This can be used to monitor and offset potential cyclic rotation (rotational movement of the eye) during the laser procedure.



TREATMENT TECHNOLOGY

We work with 3 different Excimer lasers and 2 Femtosecond lasers, which are all state of the art. We are the only center in Germany to use the fastest Excimer laser in the world, the CONCERTO, as well as the REFRACTIVE SUITE, the world's fastest integrative refractive platform.

The combination of 4 microkeratomes with refractive lens surgery methods means we can provide a range of treatments that is almost unparalleled in the rest of the world.

LASIK customization begins with the selection of the appropriate procedure, since the flap has to be of optimal size, shape and thickness. With the microkeratome and the Femtosecond laser, we have two basic methods at our disposal.

Microkeratome

The microkeratome is a microprocessor-guided precision blade, which is capable of creating a flap in the uppermost layer of the cornea with a thickness of just 0.08 - 0.13 mm (80 to 130 μ m). We have several different models in order to offer a high level of individual customization.

Femtosecond Laser

The Femtosecond laser is an infrared laser that is used as an alternative to the microkeratome for creating the corneal flap. It operates at a wavelength of 1,053 nm and emits a brief laser pulse-

with a very small spot size (1/100 mm). The energy of the laser beam, unlike that of the Excimer laser, is not directed to the surface of the cornea, but instead at a previously determined depth within the cornea, producing thousands of small bubbles which line up to create a complete incision on one plane. We work with two of the most advanced lasers of their kind.

FS200

We are the first center in Germany to have the FS200 by WaveLight, which at 200 kHz is the fastest Femtosecond laser available worldwide. It takes only 6 seconds to create a flap. Its extraordinary precision allows for size, length, shape and thickness of the flap to be reliably and exactly predicted. At the same time the treatment is much more pleasant for the patient, due to the small quantity of energy per pulse and its unique suction system. Together with the Excimer laser EX500, the FS200 makes up the REFRACTIVE SUITE.

Ziemer LDV

We additionally work with the current model of the LDV (Leonardo da Vinci) Femtosecond laser produced by the Swiss manufacturer Ziemer.

Excimer Laser Systems

The Excimer laser is a cold light laser with a wavelength of 193 nm. It only penetrates the cornea-

to a depth of one thousandth of a millimetre and thereby enables precise and gentle shaping without affecting the surrounding tissues.

**THE FASTEST LASER
TECHNOLOGY IN THE WORLD
GUARANTEES A PRECISE
AND GENTLE TREATMENT.**

Due to our close partnership with the Erlangen-based company WaveLight GmbH, global leaders in the area of refractive surgery technology, and our position as a global training and reference center, we are able to only utilize state-of-the-art technology.

We are the only center in Germany to use WaveLight's CONCERTO and the EX500, currently the fastest laser in the world.

We have been involved in the development and fine-tuning of these lasers from the very beginning, and they meet the highest requirements for speed, precision and safety. As a result, this type of laser was the first European laser to be certified as "safe and effective" by the American Food and Drug Administration (FDA) for the treatment of near-sightedness, far-sightedness and astigmatism. They specifically noted the precision of





the treatment results as well as the positive effects on night vision and contrast vision. In many cases, vision could also be improved to above average levels.

Thanks to the high speed of 500 pulses (hertz/Hz) per second, we can reduce treatment time to a minimum and ensure extreme consistency of ablation. A one-dioptre correction can be completed in only 1.4 seconds, which equals to an average treatment time of only a few seconds.

Another excellent feature of our lasers is the Wavefront optimized ablation profile. An important component of the Wavefront-guided treatment has been integrated into every one of our LASIK procedures.

The CONCERTO is the only laser which routinely measures and checks corneal ablation and remaining corneal thickness during the entire procedure in real time. It is also able to simultaneously calculate the level of moisture in the cornea during the treatment. Along with speed, precision is one of the most significant factors for a successful LASIK treatment. The CONCERTO uses a laser beam that only ablates 0.7 thousandth of a millimetre of tissue per pulse, thus enabling an extraordinarily high level of precision, and because of its specific ablation profile, it removes 40% less tissue than other lasers.

The WaveLight PerfectPulse technology is unique. The energy of every individual laser pulse is regulated during the treatment. The energy level is checked three times from the instant it is generated until it is delivered to the eye. Solely a consistent energy level can guarantee precise results and the highest level of safety.

UNIQUE 6-D EYE TRACKING TECHNOLOGY GUARANTEES THE HIGHEST POSSIBLE STANDARD OF SAFETY.

The unique intelligent 6-D eye tracking technology guarantees maximum safety. It monitors the position of your eye more than 1,000 times every second, tracing even the most rapid eye movements and adjusting the position of the laser beam depending on the current position of the eye. In only a thousandth of a second, the position of your eye is determined by a video camera, the positional data is transmitted to the laser, and the laser beam is readjusted.

Before a new laser impulse is sent to your eye, the eye tracker makes one final determination of your eye position. Should your eye move rapidly or beyond a predefined limit of tolerance, the laser automatically stops until your eye returns to

the target parameters, subsequently it automatically resumes the treatment.

WaveLight REFRACTIVE SUITE

We are the first center in Germany to have the REFRACTIVE SUITE, consisting of the FS200 and the EX500. For the first time, a Femtosecond laser and an Excimer laser are linked through an integrated data exchange system in such a way that information and data from each individual system can be exchanged and automatically utilized and integrated. Using WaveNet, this linkage permits perfect coordination of all pre-examination findings.

These unique features make LASIK even safer and more comfortable for you and provide even more precise results.

THE SEHKRAFT TEAM

In order to meet the high quality standards, we do not only use cutting-edge technology but also place great importance on our highly qualified, experienced staff.

Our expert team is made up of over 45 employees in an exceptional constellation; it includes ophthalmologists, optical engineers, Masters of Science in vision, professional optometrists, specialised medical assistants and quality assurance assistants.

Creative mastermind and medical director of this team is Matthias Maus, the founder of sehkraft. He has been an ophthalmologist since 1991. In 1992 he began to work in the area of photorefractive corneal surgery. He is a pioneer in the ongoing technological development of lasers and applications, and with over 50,000 LASIK operations under his belt; he is among the most experienced laser surgeons in the world. As an international LASIK trainer, he has already trained more than 400 surgeons from all around the world in customized LASIK and provides training related to new technologies for around 70 international ophthalmologists every year.

In all of our departments, our staffs specialize in their field. Our diagnostic technology department, for example, is responsible for all measurement procedures, data validation and carrying

out international research, and is headed up by an optical engineer and Master of Science in Vision and Business, supported by optical engineers and optometrists.

**IN ALL OF OUR DEPARTMENTS,
OUR STAFF IS SPECIALISED IN
THEIR FIELD.**

Our expert optical engineers and optometrists also support our detailed consultations on LASIK and intraocular lenses. All of our medical assistants are specially trained in their fields in order to guarantee our patients the highest quality of counselling and advice.

We run regular internal and external training programs, feedback meetings and systematic coaching sessions in order to maintain and continuously improve our high standards of quality and to increase our employees' motivation and development.



COMPETENCE AND EXPERIENCE

MORE THAN 50,000 PATIENTS
HAVE ALREADY PLACED THEIR
TRUST IN US.



Because of these skills, the sehkraft team has acted as an international reference center for WaveLight, Alcon, Bausch+Lomb and ifa systems; the technology and market leaders in the field of ophthalmology for many years. We maintain an active knowledge exchange with their development and marketing departments.

At the heart of these relationships stand active product development and international training programs for ophthalmologists. For instance, we made a major contribution to the WaveLight ALLEGRETTO Excimer laser being approved by the American Food and Drug Administration (FDA). The nomograms required for its approval were based upon our data. We also worked closely with the manufacturer on the development of the WaveLight CONCERTO and the REFRACTIVE SUITE. This function as a reference center guarantees that we have continuous access to the most advanced technology and a permanent innovative advantage over other refractive surgery centers.

Quality Standards

For many years we have been committed to the establishment and control of quality and safety standards in the area of refractive surgery, in order to provide patients with objective criteria for making their decisions. We are a founding member of "Leading Eye Clinics," an internatio-

nal association of top-level eye clinics, which has set itself the goal of establishing an international quality standard independent of universities and industry, and which is defined exclusively by quality of outcomes. In addition, we have been designated as a "Leading hospital of the World", been awarded the Visudoc seal of quality, and are QEP-certified.

OUR CONTINUOUS DEVELOPMENT GUARANTEES OUR INNOVATIVE EDGE.

Trust

To date, more than 50,000 patients have placed their trust in us. Because of the wide spectrum of services that we offer, we have achieved a special position amongst top athletes. An ever-increasing number of athletes have become aware of the impact that perfect vision can have upon their performance and have placed their trust in our expertise. They include Michael Greis, Tobias Angerer, Jochen Behle, John Kostecky, Jonas Reckermann, Katrin Holtwick and Ilka Semmler, to name just a few.

As official partners of the PGA of Germany, we have had the opportunity to provide laser treatment for many playing and teaching professional golfers.

CHANCES AND RISKS

After this description of the many opportunities and advantages of LASIK, we would now like to outline the potential risks and side effects of the procedure. We have deliberately included very rare side effects, so that you have all the facts at your fingertips when making your decision.

100 % OF PATIENTS COULD SEE AT LEAST AS WELL AS THEY COULD PREVIOUSLY, USING CORRECTIVE DEVICES.*

Risks can be reduced in advance by carefully selecting our patients and their individual treatment methods as well as by strictly adhering to international guidelines and quality standards.

LASIK is an extremely safe and gentle procedure, which has been scientifically validated since 1998. This means that the advantages and the disadvantages of the procedure are known to the greatest possible extent based upon scientific studies, the area of application can be clearly described, and there are long-term documented results that show the unlikelihood of late complications. Studies have shown that LASIK is actually safer than wearing soft contact lenses.

As a result of the procedure, the sensitivity of your cornea is initially reduced. This may result

in your eyes temporarily forming insufficient tear fluid to maintain sufficient moisture on the corneal surface, a condition known as dry eyes. It feels as though there are particles in your eye and it may cause blurred vision. This discomfort may last for a few weeks or months, but artificial tears can reduce this discomfort.

Both during the day and at night, some temporary glare sensitivity may occur and last for a few weeks. This can lead to halos around lights and reduced vision or glare in low light situations. These symptoms usually disappear of their own accord. These side effects are more common in patients suffering from near-sightedness of more than -5.00 dioptres and far-sightedness. We are able to substantially reduce this risk by treating larger optical zones and through using an aberrometer.

Use of the Femtosecond laser may result in transient light sensitivity (known as TLS), which usually goes away within a few weeks.

The use of cortisone-containing eye drops may briefly increase the pressure inside the eye. This is extremely rare, since such drops are not generally prescribed for longer than around 1 week.

In rare individual cases, inward growth of the upper lining of the cornea (epithelium) beneath the

corneal flap may occur. This complication is first recognizable after 4-6 weeks and occurs more commonly with out-dated laser systems with longer operative times, but may also occur after short surgeries. It is therefore essential to attend your post-operative examination appointment.

Rubbing the operated eye can lead to separation of the corneal flap or to the occurrence of wrinkles in the outer corneal layers. This can have a significant impact upon vision and may require brief revision surgery to smooth out the flap. It is therefore essential to avoid the rubbing of your eyes.

In rare cases, under-correction or over-correction may occur. These are most often the result of individual variations in the healing process or in tissue consistency, and can generally be resolved by a refinement procedure.

59 % ACHIEVED A VISUAL ACUITY OF 1.6, COMPARED TO A NORMAL LEVEL OF 1.0.*

After LASIK, there is at least a theoretical risk of post-operative infection (< 1:10.000), which may lead to scar formation. In order to prevent this, you will be given prophylactic ophthalmic antibiotic eye drops during and after the procedure.

You should use the drops exactly as prescribed and attend your post-operative appointment shortly after your LASIK.

THIS IS THE ONLY LASER ACCREDITED BY THE FDA, TO IMPROVE NIGHT VISION AND CONTRAST VISION.*

By performing LASIK surgery, we can correct your existing prescription. However, after the age of 40, you will still require reading glasses just like any other normal-sighted individual.

* Findings of the 2003 FDA approval study.

EXPERIENCING LASIK

Your Consultation Appointment

First of all, we perform a series of detailed preliminary examinations. These provide us with precise and exact measurements of the eye and are important to rule out certain illnesses that may represent contraindications for a LASIK treatment.

These tests include an evaluation of your depth perception and your colour and shape recognition, along with the determination of what you subjectively experience as optimum visual acuity. The diagnostic evaluation of your corneal surface using a colour-based video topography with 25,000 points can reveal specific optical defects. We assess the thickness of your cornea three-dimensionally with 22,000 points in order to guarantee its stability following the treatment.

Depending upon the dioptre value, the quality of the visual perception of your eye is measured using an aberrometer. This enables us to determine all optical defects in your eye and assess them individually. For this measurement, your pupils need to be dilated using eye drops, but they will return to their normal dilation a short time after the examination.

Finally, we discuss your personal expectations of the treatment in detail and select the ideal procedure for you based on all your test results.

Planning for your LASIK

After deciding upon a LASIK treatment, we will schedule an appointment for your procedure. Hard contact lenses may not be worn for six weeks before the procedure, and soft contact lenses need to be removed two weeks before surgery. For patients with hard contact lenses, we would be happy to supply soft contact lenses during the first 4 weeks of the transitional period.

Female patients should bear in mind, that they will not be able to wear eye makeup for the first week after the procedure. Any cosmetic appointments, such as eyelash tinting, should be planned accordingly.

Please also keep in mind that you may not drive for the first few hours after treatment and that the use of public transportation may be inconvenient for you. Many of our patients prefer to be picked up after the procedure.

One day after your LASIK treatment, we see our patients for a follow-up examination, generally our patients are able to drive themselves to this appointment.

You should set aside approximately 4-6 hours on the day of your LASIK surgery. We certainly try our hardest to make your stay as pleasant as possible. This includes a hotspot for internet users as well as beverages and small snacks.



Please refrain from using any make-up, perfume or after-shave lotion on the day of your surgery. You may eat and drink normally. Please bring non-prescription sunglasses with you, as your eyes will be relatively light sensitive for a few hours following the procedure.

Your LASIK Procedure

Before your actual surgery begins, we will perform another series of preliminary examinations. These are very important and serve as a base to precisely determine your medical test data and for quality control purposes.

Finally, we test, evaluate, select and validate your latest data. Only at this point do we make a final decision about what form of LASIK will be optimal

for you. Next, based upon this selection, we use specialized software to calculate a unique treatment procedure for each of your eyes and transfer this data into the computer guidance of the laser system.

Our surgical team will now accompany you to the surgery suite. You are welcomed to bring a companion, who is allowed to remain with you during the entire procedure. After you have made yourself comfortable on the treatment table, we disinfect the area around your eyes and apply anaesthetic eye drops. Then one eye will be covered. In order for you to be able to relax during the entire procedure, a small spring holds open your other eye. If you wish, we will explain every step of the procedure during the treatment so that you al-

**IF YOU WISH, WE WILL EXPLAIN
EVERY STEP OF THE PROCEDURE
DURING THE TREATMENT SO
YOU ALWAYS KNOW EXACTLY
WHAT TO EXPECT.**

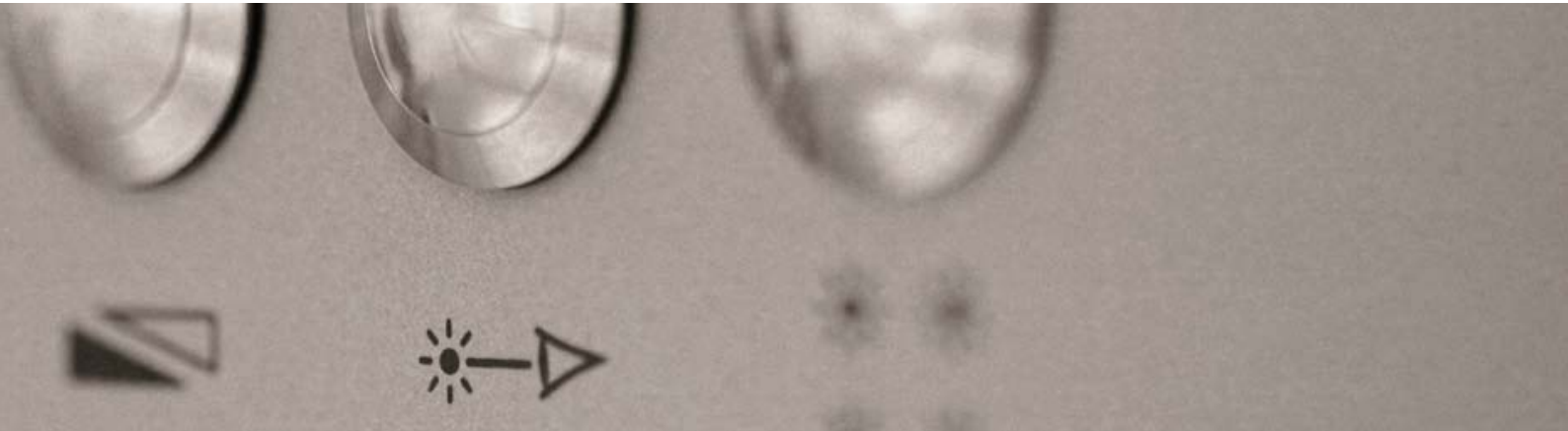


ways know exactly what to expect. You will be asked to look exactly into the blinking green light in front of you while the surgery is taking place. But don't worry, you cannot do anything wrong. Should you move your eye, the laser will move with it. We work with a unique fast-track technology that monitors the position of your eye 1,050 times every second, takes note of every positional change, and compensates for it so rapidly – specifically with a reaction time of 2 milliseconds – that the laser pulse will be directed precisely at the desired spot.

First, the surgeon makes a small mark with a pen; subsequently he attaches the guidance ring for the microkeratome or the Femtosecond laser. In only a few seconds, a thin flap measuring approxi-

mately 0.1 mm is created. During this period your vision will go dim or dark. You will feel slight pressure and hear the whirring of the device. A couple of seconds later, you will be able to see again, but the green light will appear slightly blurred. The corneal flap will be carefully lifted and your vision will now be less sharp. The laser is checked and programmed with your completely customized ablation profile.

Only at this point does the actual laser treatment begin, and because of the speed of our system, it only lasts an average of 7 seconds. You will feel nothing, but will hear a buzzing sound and may smell the tissue vapour in the air. You should simply concentrate on the green light above you.





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The surgeon monitors your eye during the entire procedure using a specialized operating microscope. Once the laser phase is completed, he will reposition the flap. The flap will adhere securely of its own accord, and after one minute it will already be blink-tight and will form a natural protective layer. In addition, we will put a protective contact lens on your eye, which will be removed the following morning. Your vision will still be a little blurred or milky, but you should already be able to perceive your surroundings more clearly than you could before correction.

YOU CAN GO OUT AGAIN THAT SAME EVENING.

After a half-hour rest interval we will examine you one more time. Along with 2 different eye drops, we will provide you with a set of eye protectors for the night, so that you do not inadvertently rub your eyes. In the next 4-6 hours, you will feel as if there is something in your eye, and your eyes may tear and burn a little. It will be most comfortable for you if you avoid visual stimuli during this period and simply rest or sleep.

After this you should be able to see the world around you with a new clarity and normally you should be able to go out again that same evening. The next morning, you will have a post-operative

examination and you will receive your personal eye drop schedule for the next few days.

After Your LASIK

Healing takes places extremely rapidly. By the next day you should be able to work, jog, walk, play tennis, golf and fly on an airplane. After 2-3 days, you can ride your bike, as long as you wear protective glasses. By the end of the week, you may go surfing, do some weightlifting or aerobics, go skiing, go tanning or go to the sauna. You should avoid swimming in a public pool for 2 weeks. You can resume diving after 4 weeks.

We would like to see you again to re-examine your eyes after about 3 months. Of course, you can choose to have your own local ophthalmologist take over your care at this point.



Information Events

We offer information evenings and our "LASIK Day" on a regular basis. At these events we present the full range of our customized LASIK services. You can find our current schedule at www.sehkraft.de or may call us for details.

One-to-One Counselling Centers

At our walk-in counselling centers in Köln (Cologne) and Krefeld, you can come by to find out more about LASIK and lens surgery from our specialized professional optical engineers and optometrists.

These quick appointments are free of charge and without obligation. After only a few examinations, we can let you know whether you are a good candidate for LASIK.

Köln (Cologne)

Wolfsstraße 2 - 4

Telephone: +49 (221) 860 16-88

Tuesday through Saturday 11:00 AM - 7:00 PM

Krefeld

Angerhausenstraße 2 /

at the corner of Königstraße

Telephone: +49 (2151) 568 01-16

Wednesday through Friday 11:00 AM - 6:00 PM

Saturday 11:00 AM - 4:00 PM

Weekend Appointments

You can have your laser treatment on a Friday, your follow-up appointment on Saturday and start the new week without glasses or contact lenses! Please select from the appointments available on our website www.sehkraft.de or get in touch with us by telephone.

The cost or investment

The current cost of LASIK treatment is approx. 2,600 Euro per eye.* This price applies to all laser refractive surgery operations, regardless of which type of LASIK we decide is best for you. Our goal is to achieve optimal treatment success for you, so we do not charge you for any additional costs.

You may pay the balance with your debit card, on the day of treatment. Unfortunately, government health insurance programs are not permitted to cover these costs. Private health insurance decides upon coverage on a case-by-case basis, but they generally cover at least a portion of the treatment. In principle, it is also possible to successfully declare the costs of treatment as an exceptional expense for the purposes of reducing taxes.

* The basis for this calculation is the standard fee schedule for physicians (GoÄ). All prices are approximate and may vary in individual cases.

Financing

Of course, you can also finance your LASIK treatment. Please contact us for further information.

Ability to Work

Since a LASIK treatment is not considered to be a treatment for an illness, it is not possible to justify or attest to any incapacity to work. As necessary, you may want to take the surgery day and possibly the next day as vacation days.

Location in Köln (Cologne)

sehkraft is conveniently located in the center of Cologne; only a few minutes to walk from the Cathedral and the main railway station. You can reach our center in only 15 minutes from the Köln Bonn Airport.

Location in Berlin

sehkraft is located in Berlin's downtown "Mitte" district, only a few minutes from the Gendarmenmarkt, the Reichstag and the Brandenburg Gate. From either Tegel or Schönefeld airports, you can reach us in only 20-30 minutes.

Hotels

Our patients receive discounted rates at several hotels in both cities. Please visit our website for more details.

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KÖLN

Eye Center

Wolfsstraße 16
50667 Köln

Fon +49 (221) 860 16-22

Fax +49 (221) 860 16-99

mail@sehkraft.de

BERLIN

Eye Center

Jägerstraße 32
10117 Berlin

Fon +49 (30) 862 04 66-66

Fax +49 (30) 862 04 66-60

berlin@sehkraft.de

PUBLISHER

sehkraft Augenzentrum Maus

Matthias Maus
Ophthalmologist

Wolfsstraße 16
50667 Köln

Fon +49 (221) 860 16-0

Fax +49 (221) 860 16-99

mail@sehkraft.de

sehkraft.de

KÖLN

Counselling Center

Wolfsstraße 2-4
50667 Köln

Fon +49 (221) 860 16-88

Fax +49 (221) 860 16-89

beratung@sehkraft.de

KREFELD

Counselling Center

Angerhausenstraße 2
47798 Krefeld

Fon +49 (2151) 568 01-16

Fax +49 (2151) 568 01-18

krefeld@sehkraft.de

Retrieved May 2011

