

INFORMATION FOR PATIENTS

Here is a list of common questions relating to the *iLASIK* procedure.

For more information regarding safety and effectiveness, please refer to the patient information brochure at <http://www.backinfocus.com/lasik-for-astigmatism-information>

A. Top-Level Topics

1. What is the *iLASIK* procedure?

It is an all-laser vision correction procedure that uses proprietary technology to measure the unique characteristics of your eye and provide a completely customized correction for exceptional visual clarity.

LASIK with *iLASIK* technologies have been used in over 15 million procedures worldwide.

2. How does the *iLASIK* procedure work?

There are three steps to the *iLASIK* procedure:

Step 1: Creating Your Eye Map

A detailed 3-D map of the unique visual imperfections of your eye is created using wavefront eye-mapping technology that is 25x more precise than the measurements used to write a standard prescription for eyeglasses or contact lenses.

Step 2: Preparing Your Eye

An ultra-fast laser creates a thin flap to prepare your cornea for your personalized wavefront vision correction.

Step 3: Delivering Your Personalized Treatment

In this final step, an ultra-precise laser gently reshapes your cornea to the desired curvature, based on the digital information from your personalized eye map measurements.

3. How do I know if the *iLASIK* procedure is right for me?

The *iLASIK* procedure helps people do the things they love to do without the hassle of contacts or glasses.

It is FDA approved to correct mild to severe nearsightedness, farsightedness, and all types of astigmatism. If you meet the following conditions, it's likely you are an excellent candidate for the *iLASIK* procedure:

- Be at least 21 years of age and have refractive error.
- Have healthy eyes that are free from eye disease or corneal abnormality (e.g., scar, infection, etc.).
- Have documented evidence that your refraction did not change by more than 0.50 to 1 diopters during the year before your pre-operative examination.
- Be informed of LASIK risks and benefits as compared to other available treatments for your refractive error.
- Be able to lie flat without difficulty.
- Be able to tolerate local or topical anesthesia.
- Be willing to sign an informed consent form as provided by your eye care professional.
- Be able to keep your eye accurately on the fixation light for the entire laser surgical procedure.

A certified *iLASIK* doctor can tell you with greater certainty whether the *iLASIK* procedure is right for you.

4. Is the *iLASIK* procedure safe?

iLASIK technologies have been used in more than 15 million vision correction procedures worldwide. In fact, NASA astronauts and US aviators are able to have laser vision correction surgery today because of studies validating the safety and effectiveness of the technologies.

Talk to your doctor about the risks of this procedure. Side effects may include but are not limited to:

- Eye dryness
- Reduction of vision or the possible need for glasses or contact lenses after surgery
- Visual disturbances such as halos, glare, starbursts, ghost images and other visual symptoms

Complications from the **iLASIK** procedure usually can be successfully managed medically or with follow-up care. The frequency and severity of complications vary, depending on how much nearsightedness, farsightedness and/or astigmatism you have prior to the procedure and other factors.

5. How much does the *iLASIK* procedure cost?

By choosing the **iLASIK** procedure, you are making a solid investment that pays dividends in glasses-free vision for years to come and offers significant long-term savings compared to contact lens wear.

For example, the average 25-year-old will spend roughly \$30,000 on contacts and contact lens care (including contact lens exam, lenses and supplies) by age 50, compared with an **iLASIK** procedure fee range of \$4,200-\$5,000 (\$2,100-\$2,500 per eye). This calculation excludes the routine eye exam required after LASIK.

Most certified **iLASIK** doctors offer attractive financing options to make the **iLASIK** procedure easy on your pocketbook/wallet, and there are financing options available outside the doctor's practice as well.

You also might be eligible to pay a portion of the cost or the entire procedure fee using a Flexible Spending Account (FSA) or vision insurance..

6. Where can I find an *iLASIK* doctor?

There are many **iLASIK** centers throughout the United States, and chances are there may be a number of doctors near you. Use our **iLASIK** Doctor Locator to find **iLASIK** doctors in your area, request a consultation, and choose a doctor who is right for you.

B. "Drill-Down" Topics

1. What part of the eye is the treatment performed on?

The *iLASIK* procedure is performed on the cornea — the clear front surface of the eye located in front of the pupil and the colored iris.

The cornea provides about 65 to 75 percent of the focusing power of the eye. The rest is provided by the eye's lens, which is located behind the pupil¹.

The cornea is clear because it is a highly organized network of collagen (a connective tissue protein) and it contains no blood vessels.

The central region of the cornea — the portion affected by the *iLASIK* procedure — is typically 500 to 600 microns (about a half of a millimeter) thick.

2. What is "wavefront technology"?

Wavefront technology is an advanced, digital optical imaging technique used to detect, analyze and correct complex optical imperfections called *higher-order aberrations* that cannot be corrected with regular eyeglass lenses.

Eyeglass lenses correct only simple refractive errors — nearsightedness, farsightedness and/or astigmatism. But most people also have higher-order aberrations (HOAs) that affect the quality of their vision.

By correcting HOAs as well as common refractive errors with wavefront technology, LASIK using *iLASIK* technologies often produces noticeably sharper vision than that possible with eyeglasses and contact lenses.

¹ Facts About the Cornea and Corneal Disease. National Eye Institute.
<https://nei.nih.gov/health/cornealdisease>. Last reviewed May 2013. Accessed June 14, 2015.

3. What is wavefront-guided LASIK?

Wavefront-guided LASIK creates a personalized 3-D map of the patient's visual pathway (from the front of the cornea to the back of the retina). These measurements are obtained with an instrument called a wavefront aberrometer during your **iLASIK** pre-op exam and consultation.

Wavefront-guided LASIK measures and treats lower-order aberrations (LOA) such as nearsightedness, farsightedness and astigmatism as well as higher-order aberrations (HOAs), with the goal of providing better vision than that possible with eyeglasses, contact lenses or conventional LASIK.

Wavefront-guided LASIK produces a higher level of personalization compared with wavefront-optimized LASIK (see the next question below), which is based only on the eye's refractive error and corneal curvature.

4. What is wavefront-optimized LASIK?

Wavefront-optimized LASIK produces computerized laser treatment plans based on typical lower-order aberrations associated with specific refractive errors. In particular, wavefront-optimized LASIK attempts to minimize the effect of spherical aberration.

The goal of wavefront-optimized LASIK is to provide better visual outcomes than conventional LASIK — primarily by reducing the amount of spherical aberration caused by the laser reshaping process during LASIK.

5. What is the *WaveScan WaveFront* System?

The **WaveScan** system, a key part of the **iLASIK** technology platform, detects and measures visual imperfections in the eye 25 times more precisely than standard methods used for eyeglass prescriptions. It uses wavefront measurements to create a 3-D map of your eye that tells the laser how to create the optimal corneal shape for your personal best vision.

6. What type of laser is used for *iLASIK* surgery?

The **iLASIK** procedure uses two sophisticated state-of-the-art medical lasers: an ultra-fast laser (femtosecond laser) that creates a thin flap to prepare the cornea for treatment, and an ultra-precise laser (excimer laser) that gently reshapes the cornea based on the digital information from a 100% personalized eye map.

7. What is an excimer laser?

An excimer laser is an ultra-precise medical laser that creates a highly focused beam of cool ultraviolet (UV) light to gently reshape the cornea. The excimer laser reshaping process is called photoablation and it takes about 30 to 90 seconds.

8. What is a femtosecond laser?

A femtosecond laser is an ultra-fast medical laser that creates the thin flap to prepare the cornea for treatment. The femtosecond laser creates a pattern of pulses of laser energy at a specific depth within the cornea. At this point, corneal tissue is separated by a process called photodisruption. The creation of the *iLASIK* flap with a femtosecond laser takes less than 20 seconds.

10. How much nearsightedness can the *iLASIK* procedure correct?

The *iLASIK* wavefront-guided laser is FDA-approved for the correction of up to -11.00 diopters (D) of nearsightedness (myopia) with and without astigmatism. The actual amount of myopia that can be corrected depends on factors including the thickness and shape of your corneas and how much astigmatism you have. Your eye doctor will discuss these factors with you at your pre-operative exam and consultation.

11. How much farsightedness can the *iLASIK* procedure correct?

The *iLASIK* excimer laser is FDA-approved for the correction of up to +3.00 diopters (D) of farsightedness (hyperopia) with and without astigmatism. But factors such as the shape of your cornea and how much astigmatism you have may influence the amount of hyperopia that can be corrected in your eyes. Your eye doctor can advise you of your specific needs at your *iLASIK* pre-operative exam and consultation.

12. How much astigmatism can the *iLASIK* procedure correct?

- For nearsightedness, the *iLASIK* excimer laser can correct up to -3.00 diopters of astigmatism
- For farsightedness, the *iLASIK* excimer laser can correct up to +2.00 diopters of astigmatism
- For mixed astigmatism, 1.00 to 5.00 diopters

13. How old must a person be to have a LASIK procedure with the *iLASIK* technologies?

You must be at least 21 years of age.

Bring records of your previous eye exams with you to your *iLASIK* consultation. Your surgeon will want to see that your eyeglass prescription has not changed more than 0.50 to 1 diopter (D) over the previous 12 months before you have the *iLASIK* procedure, regardless of your age.

14. What conditions might disqualify me from having the *iLASIK* procedure?

Most people with healthy eyes and mild to moderate refractive errors are excellent candidates for the *iLASIK* procedure. You may not qualify for the *iLASIK* procedure for a few reasons including – but not limited to:

- Autoimmune diseases (e.g., rheumatoid arthritis; lupus; multiple sclerosis)
- Diabetes
- If you are taking Accutane® (a prescription medication for acne)
- If you are taking Cordarone® (a prescription medication for irregular heartbeat)
- A history of Herpes simplex or Herpes zoster eye infections
- Signs of keratoconus or abnormal corneal topography
- Significant dry eye that is unresponsive to treatment
- Severe allergies
- If you are pregnant or nursing
- If you have thin corneas

Your eye doctor will discuss these and other possible contraindications at your pre-operative exam and consultation.

15. Can I have LASIK with the *iLASIK* technologies if I'm pregnant?

You should not have the *iLASIK* procedure if you are pregnant or nursing because these conditions may cause temporary and unpredictable changes in your cornea.

16. Can I have the *iLASIK* procedure if I have cataracts?

A cataract is a clouding of the lens inside the eye, which is located behind the pupil.

The *iLASIK* procedure should not be performed in patients with cataracts.

When it's time for cataract surgery, your surgeon can help restore the vision you've lost due to cataract formation; and he or she can select an intraocular lens (IOL) that corrects your specific amount of nearsightedness, farsightedness and astigmatism, reducing your need for glasses after cataract surgery.

17. Can I have the *iLASIK* procedure if I have dry eyes?

Dry eyes can affect the accuracy of pre-operative measurements that are crucial to achieving good vision after the *iLASIK* procedure. Also, dry eyes can affect how well and how quickly your eyes heal.

For these reasons, if you have dry eyes you need to have the condition successfully treated before proceeding with the *iLASIK* procedure.

18. I have thin corneas. Can I still have the *iLASIK* procedure?

It depends on how thin your corneas are, how much refractive error you have, and other factors.

iLASIK, like all types of LASIK surgery, corrects vision by reshaping the cornea. In this process, a very small amount of tissue is removed from the central cornea.

During your *iLASIK* pre-operative exam and consultation, your eye doctor will take detailed measurements of the thickness and shape of your cornea and calculate how much laser treatment is required to fully and safely correct your vision.

If your corneas are too thin, you still might be a candidate for other types of vision correction surgery.

19. Is the vision correction from the *iLASIK* procedure permanent?

Generally, it takes 3 to 6 months for vision to stabilize after the procedure. However, our bodies continue to change as part of the normal ageing process. Your eyes, like the rest of your body, may age over time and changes in vision may occur.

Each patient is different so the amount of change varies for each patient.

20. Will I still need glasses after the *iLASIK* procedure?

Most people are glasses-free after the *iLASIK* procedure. Still, some people who have minor refractive errors remaining after find that wearing eyeglasses part-time for tasks such as driving at night provides added clarity and comfort.

For glasses needed for near vision, please see the question about reading glasses.

21. Will the *iLASIK* procedure eliminate my need for reading glasses?

No, *iLASIK* may not eliminate the need for reading glasses even if you have never worn them before. LASIK surgery will not prevent the normal aging change in the lens of the eye that causes blurry reading vision sometime after age 40 (presbyopia).

When most people start experiencing presbyopia, they simply purchase reading glasses and use them when needed to see small print. But there are options available if you have presbyopia and want to reduce or eliminate your need for reading glasses after the *iLASIK* procedure.

Ask your eye doctor about options for reducing your need for reading glasses during your *iLASIK* pre-operative exam and consultation.

22. What are the complications associated with *iLASIK* surgery?

Complications from the *iLASIK* procedure usually can be successfully managed medically or with follow-up care. The expected frequency and severity of complications vary, depending on how much nearsightedness, farsightedness and/or astigmatism you have prior to the procedure and other factors.

23. Is the *iLASIK* procedure safe or effective ?

LASIK has been proven safe and effective. The *iLASIK* procedure has the added advantages of being a blade-free, "100 percent laser" procedure that includes the latest wavefront-guided technology to help you achieve your personal best vision. However, there are risks and complications. For more information, please refer to the patient information brochure at <http://www.backinfoocus.com/lasik-for-astigmatism-information>.

24. What happens if I don't see well after the *iLASIK* procedure?

If patients are dissatisfied with their vision after the procedure, follow-up care may improve visual acuity and patient satisfaction.

C. Information for *iLASIK* Patients

Days Prior to Surgery

1. When do I have to stop wearing contact lenses prior to the *iLASIK* procedure?

If you wear contact lenses, it is very important to stop wearing them 2 – 4 weeks before examination and treatment for the doctor to obtain a stable eye measurement. Failure to do this might produce suboptimal surgical results.

Your eye doctor or *iLASIK* surgeon will give you specific advice about when to stop wearing your contact lenses at your *iLASIK* pre-operative eye exam and consultation.

2. Do I have to discontinue any medications I take prior to the *iLASIK* procedure?

Bring a list of all medications you take (including supplements and other non-prescription, "over-the-counter" products) to your *iLASIK* pre-op exam and discuss all allergies. Your eye doctor will advise you if you should discontinue any of these products prior to the *iLASIK* procedure.

3. What takes place during my *iLASIK* pre-op exam?

During your *iLASIK* pre-operative ("pre-op") exam, your doctor will perform a comprehensive eye exam to evaluate whether you are a good candidate for the *iLASIK* procedure.

An important component of this exam is a thorough review of your medical history. Bring a list of all medications (including supplements and over-the-counter products) to your exam so your eye doctor can advise you whether any of these products could pose a problem.

Additional testing called a wavefront eye map is performed during an *iLASIK* pre-op exam. This is a sophisticated evaluation of the optics of your eye that determines the type and amount of lower-and-higher-order aberrations (HOAs) present. HOAs are subtle, irregular optical imperfections that can affect the quality of your vision and cannot be corrected with eyeglasses but can be minimized with the *iLASIK* procedure to give you sharper vision.

Your cornea (the clear front surface of your eye) will be thoroughly examined to ensure it is healthy, has a normal shape and is thick enough for the **iLASIK** procedure.

Additional testing will be done to make sure you have a healthy tear layer on the surface of your eyes and that there are no signs of a dry eye condition that could affect your visual outcome and the healing of your eyes after the procedure.

The comprehensive eye exam includes dilation of your pupil to thoroughly evaluate the health of your eyes. Also, care will be taken to determine the exact amount of nearsightedness, farsightedness and astigmatism you have and to make sure your eyeglass prescription has not changed significantly within the previous year.

4. What is the most important question I should ask during my *iLASIK* pre-op exam?

Perhaps the most important discussion to have with your eye doctor or LASIK surgeon during your pre-op exam and consultation concerns your expectations for your vision after the **iLASIK** procedure.

A recent review of LASIK satisfaction worldwide found more than 95 percent of LASIK patients are satisfied with the results of their procedure. But it's important to have realistic expectations².

For example, *iLASIK* may not eliminate the need for reading glasses even if you have never worn them before. LASIK cannot stop your eyes from aging or eliminate your need for reading glasses if you are already over age 40 and are experiencing the normal age-related loss of near vision called presbyopia. Also, it's possible you might experience problems such as dry eyes or glare after any type of corneal refractive surgery, including the **iLASIK** procedure.

² Solomon KD, Fernández de Castro LE, Sandoval HP, et al. LASIK world literature review: quality of life and patient satisfaction. *Ophthalmology*. 2009;116(4):691-701

5. Can I drive myself home after my pre-op exam?

Your pupils will be dilated during your pre-operative exam. As a result, your vision will be blurry and you will be sensitive to light. It is important you bring a pair of sunglasses to this exam. You may also want to bring someone along to drive you home. Discuss this with your doctor.

Day of Surgery

1. Do I have to discontinue taking any medications on surgery day?

Bring a list of your medications with you to your pre-op exam, and your eye doctor can advise you about this at that time. If you have any concerns about this between your pre-op exam and the day of your procedure, call your ***iLASIK*** surgeon for advice.

2. Does the *iLASIK* procedure hurt?

Numbing eye drops will be applied to your eyes to keep them comfortable throughout the ***iLASIK*** procedure.

You will feel some pressure on your eye when the flap is created to prepare your cornea for treatment; but this is not painful and the sensation usually lasts less than a minute.

When you return home, you may experience moderate pain and discomfort that could last up to 3 days. Your ***iLASIK*** surgeon will advise you which medications to use if you are uncomfortable. .

If you experience significant discomfort after your ***iLASIK*** procedure, call your ***iLASIK*** surgeon for further instructions.

3. Will I be given something to calm my nerves on surgery day?

Please discuss this with your surgeon during the pre-op visit. If you feel nervous when you arrive for your ***iLASIK*** procedure, your surgeon may provide some medication to help you relax.

4. Am I awake during the *iLASIK* procedure?

Yes, you will be awake during the ***iLASIK*** procedure..

5. What happens if I blink or move during the *iLASIK* procedure?

Your eyelids will be gently held open with a small device (lid holder) during the procedure, and eye drops used during the procedure will reduce any urge you might have to blink.

You will be lying on a comfortable chair during the brief **iLASIK** procedure, and your head will rest on a contoured cushion. Your surgeon will be close by and may gently hold your head to help you stay perfectly steady when the laser is active, which lasts less than a minute.

The **iLASIK** procedure also includes an automated "eye tracker" feature that monitors the position of your eye and compensates for any small involuntary eye movements during the laser treatment delivering the treatment right where it is intended.

6. How long does the *iLASIK* procedure take?

The entire **iLASIK** procedure (both eyes) usually takes about 20 minutes.

7. Can I drive home after the *iLASIK* procedure?

You must have someone drive you home after your **iLASIK** procedure because your vision will be blurry. Also, if you were given a mild sedative to help you relax, it's likely you will be a little drowsy.

You may resume driving only after receiving permission from your doctor.

8. Can I read and watch TV when I get home from my *iLASIK* procedure?

The best thing to do when you return home from your **iLASIK** procedure is to take a nap or simply relax and let your eyes rest a while. Be sure to use eye drops as recommended by your doctor to keep your eyes moist, healthy and comfortable.

Be sure to check with your surgeon and follow your surgeon's directions.

Days/Weeks After Surgery

1. Will my eyes hurt after the *iLASIK* procedure?

It's normal for you to feel some moderate pain and discomfort for up to 3 days after your *iLASIK* procedure. In particular, some people report their eyes feel like an eyelash or something is "in" the eye.

As the cornea heals, you may experience some blurriness, tears may form and you will be sensitive to bright lights.

If you experience significant discomfort after your *iLASIK* procedure — particularly if it worsens over time — call your eye doctor for further instructions.

2. Are there special precautions I need to take the first few days after the *iLASIK* procedure?

Do not rub or bump your eyes. Wear sunglasses to shield your eyes from the sun's UV rays, reduce glare, and protect your eyes from trauma or drying out. Protective shields will be placed over your eyes to help you avoid rubbing, touching or bumping your eyes in the hours following your procedure.

Ask your LASIK surgeon about precautions.

3. How long do I have to wear an eye shield during sleep after the *iLASIK* procedure?

You will be given clear plastic shields to tape to your brow and cheek to protect your eyes during sleep after the *iLASIK* procedure. You can see through these shields and they have ventilation holes, so they are not hot or uncomfortable.

Your doctor will advise you how long you should wear the shields before you leave the laser center on the day of your procedure and/or during your follow-up visits.

4. When will my vision stabilize after the *iLASIK* procedure?

Some blurriness and fluctuation of vision is common during recovery. This should continue to diminish with time. It's not unusual for vision to take 2 months or longer to continue to improve and become more stable after the *iLASIK* procedure.

5. How long does it take for my eyes to fully recover from the *iLASIK* procedure?

It's common for full healing to take three months or longer.

Ask your LASIK surgeon about recovery time.

6. How soon can I drive after the *iLASIK* procedure?

Generally, your first follow-up visit will be approximately 24 hours after your *iLASIK* procedure. Even if your vision seems clear, have someone drive you to this visit.

Your eye doctor or LASIK surgeon will examine your eyes and make sure they are healing properly. Your surgeon will let you know when it is safe for you to drive at your first follow up visit.

7. When can I resume wearing makeup after the *iLASIK* procedure?

Ask your LASIK surgeon about use of makeup.

8. How soon can I swim after *iLASIK* surgery?

Ask your LASIK surgeon when it is safe for you to resume swimming.

9. How soon can I exercise after the *iLASIK* procedure?

Ask your LASIK surgeon when it is safe for you to exercise.

10. Do I still need routine eye exams after *iLASIK* surgery?

Absolutely. Routine comprehensive eye exams are still needed after your *iLASIK* procedure to safeguard the health of your eyes.

For more information regarding safety and effectiveness, please refer to the patient information brochure at <http://www.backinfocus.com/lasik-for-astigmatism-information>

Important Patient Safety Information

LASIK (laser-assisted *in situ* keratomileusis) is a laser surgery procedure that permanently changes the shape of the cornea to reduce or eliminate nearsightedness, farsightedness, or mixed visual irregularities due to an abnormal curve in the cornea. Only an eye care professional trained in laser vision correction can determine if you are a candidate for this procedure.

Contraindications: You should not have LASIK if you have collagen vascular (such as rheumatoid arthritis), autoimmune, or an immunodeficiency disease because they affect the body's ability to heal. You should not have this procedure if you are pregnant or nursing, show signs of corneal thinning, or take medications with eye-related side effects, such as Isotretinoin (Accutane®) for acne treatment or Amiodarone hydrochloride (Cordarone®) for normalizing heart rhythm.

Warnings: LASIK is not recommended if you have diabetes, a history of herpes simplex or herpes zoster keratitis, significant dry eye, or severe allergies.

Precautions: Your doctor will examine your eyes to determine if you are a candidate for this procedure. Talk to your doctor about any eye-related conditions, injuries, or surgeries you have had, as well as any changes to your vision in the past year. These may result in poor vision after LASIK. Tell your doctor about any medications you are taking. After surgery, you may find it more difficult to see in conditions such as dim light, rain, snow, fog, or glare from bright lights at night. LASIK is for patients 21 and over.

Side effects: Possible side effects include dryness, which may be severe; loss of vision or the possible need for glasses or contact lenses after surgery; and visual disturbances such as halos (hazy rings around lights), glare, starbursts, double images, and other visual irregularities that may be debilitating. LASIK requires the use of an instrument (keratome) that cuts a flap on the surface of the cornea, and this may potentially cause swelling, corneal scratch, and other flap-related complications.

Please consult with your eye care professional and carefully review the [Patient Information Booklet](#) regarding the potential risks and benefits of this procedure. Results may vary for each individual patient.

[Please see additional Important Patient Information.](#)

The *iLASIK* platform utilizes *Advanced CustomVue* technology with the *STAR S4 IR* excimer laser system and *WaveScan WaveFront* system, as well as the *IntraLase FS* femtosecond laser or *iFS* advanced femtosecond laser.

Caution: U.S. Federal Law restricts these devices to use by practitioners who have been trained in their calibration and operation and who have experience in the surgical treatment and management of refractive errors.

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