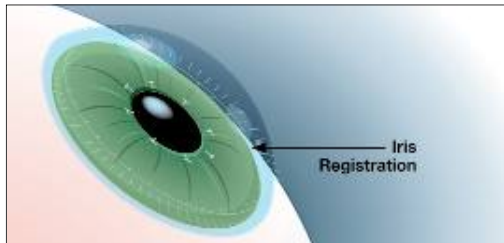


# THE 'I' MAKES YOU SAFER

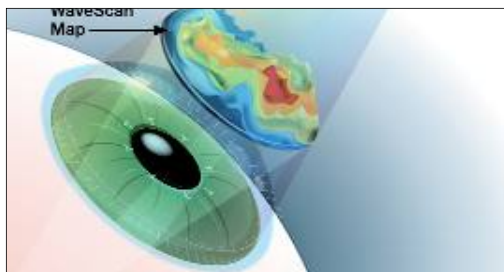
**LASIK** stands for laser-assisted in situ keratomileusis. In this procedure, a blade called a microkeratome is used to slice a flap in the top layer of the cornea before an excimer laser is used to vaporise tissue inside it.

**iLASIK** refers to a treatment which combines wavefront-guided LASIK with IntraLase, a femtosecond laser. A femtosecond is a quadrillionth of a second.

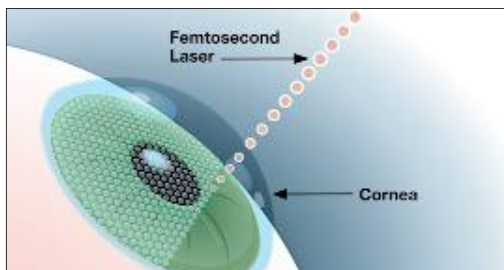
**It is the combination of femtosecond and wavefront guided lasers, Iris Registration and 3-D mapping of the eye that makes iLasik safer.**



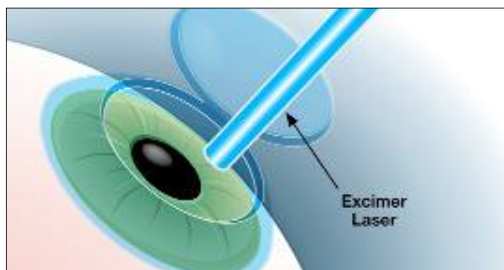
A very detailed image of the patient's eye, including the unique characteristics of the iris, is taken. The Iris Registration software tracks movements in the eye and relays them to the lasers.



As the patient gazes at a light in front of them, the WaveScan device sends light into the eye. The reflectant light is measured to determine its unique imperfections. Multiple images are taken to produce a 3-D map.



The femtosecond laser is directed in a pre-determined plan. Each rapid pulse of its light creates a tiny bubble below the corneal surface, where bonds are broken between molecules. A thin, loosened flap in the top layer of the cornea is then folded back.



An excimer laser (ultraviolet light) vaporises and removes tissue from the inner layer of the cornea to reshape it. The flap is then replaced.

*Laser vision correction gets owl-like in its precision, writes Helen Grange.*

**I** have been short-sighted most of my life, so a few years back I eagerly joined the run to an eye clinic.

But when, right at the end of the consultation, the surgeon said I'd probably need a "touch up" afterwards to achieve perfect vision – in other words, another procedure costing the same – I decided to stick with my contact lenses.

As you've no doubt heard or experienced, laser eye surgery is not cheap, and medical aids have deemed it "elective" surgery and will not cover it.

Yet people who have had it swear by it. It's been nothing short of a miracle for those who wore glasses or contact lenses for most of their lives for shortsightedness, farsightedness or astigmatism.

Now this amazing technology has been upped a notch, narrowing the margin of error to next to nothing.

The iLasik procedure has been in Johannesburg, at the Sandhurst Eye Clinic, since October 2008 and already 200 people have undergone it, none of them needing a "touch up" on their new 20-20 vision.

"It was the fact that this procedure has been accepted by NASA for use on its astronauts that swung me," says ophthalmologist Dr Mark Deist, who imported the specialised equipment to his clinic – and underwent training to use it – at a cost of R8 million.

Part of its big attraction is its ridiculously short recovery time. After resting your eyes a while, you're back in business – with crystal-clear sight – within three hours. "Down time" couldn't be more minimal.

In essence, iLasik is the world's most advanced vision correction technology, and is the result of a decade's worth of technical refinement.

"It is the only vision correction procedure to combine the IntraLase FS (femtosecond) laser, a 100% blade-free approach to slicing a corneal flap, and WaveScan, technology which captures the unique imperfections in your eye," explains Gerald Seftel from

GENOP Healthcare.

The WaveScan, used prior to the IntraLase, hones on the cornea (even if it moves), measuring and "mapping" it in 3D, creating a blueprint of the eye which affords unprecedented precision during the surgery itself.

The ultra fast IntraLase laser is used to slice a flap off the surface of the cornea – in effect, millions of tiny bubbles gently separate the corneal tissue – driven by the WaveScan "map". In the ordinary Lasik procedure (Laser-Assisted In Situ Keratomileusis), the cornea is cut with a microkeratome, a hand-held device with an oscillating razor blade.

Once the corneal flap is folded over, an Excimer laser is then used to correct your vision based on the "map" before the flap is folded back into place.

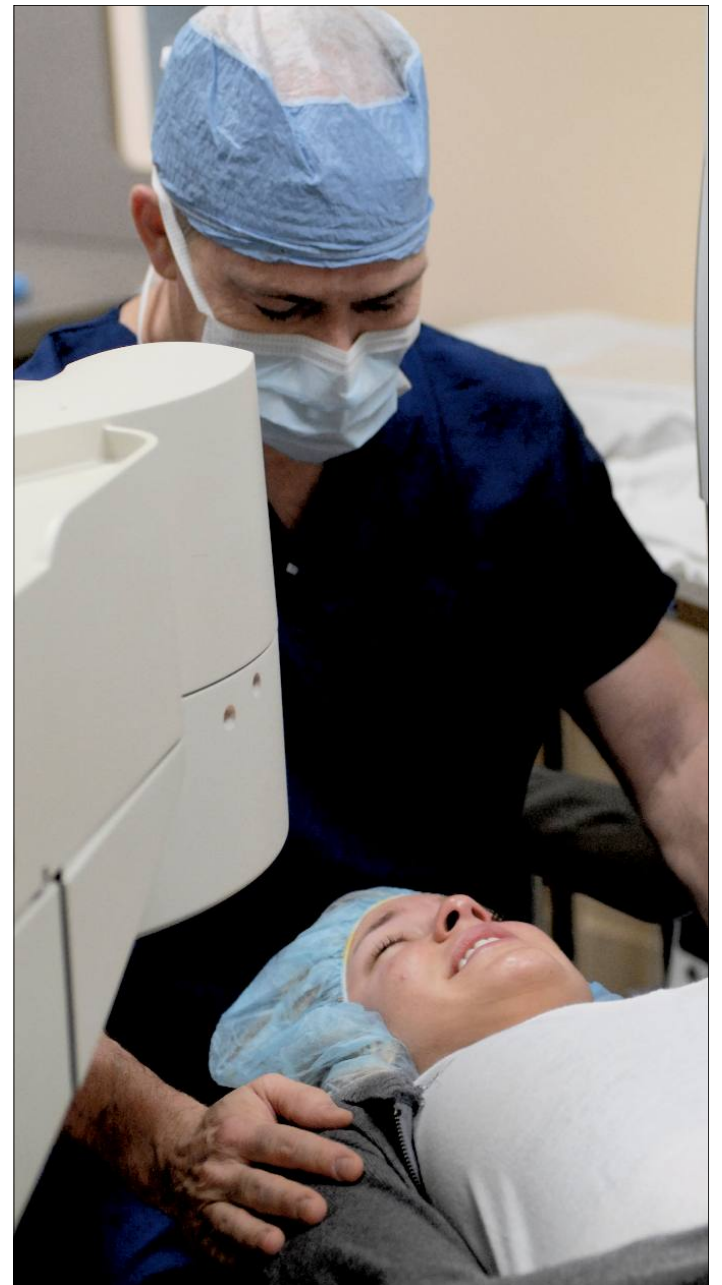
The rare complications associated with vision correction surgery – dry eye, blurriness and "ghosting" around objects at night (the halo phenomenon) – have been largely ironed out due to the iLasik technology's ability to "blueprint" the eye and customise the procedure to the exact specifications of the individual eye, as opposed to the assembly-line style Lasik procedure.

"Vision, both in the day and night, is much crisper because of the accuracy of this technology. And the possibility of human error is much reduced as it computer driven, which takes a lot of stress off the shoulders of the surgeon.

"Of the 200 people I've operated on so far, I haven't had to do any enhancements. The combination of the two lasers affords really excellent results," says Dr Deist.

As in any surgical procedure, there is risk of infection, but in the case of iLasik it is negligible. "One of the advantages of it is its excellent safety profile," says Dr Deist.

Now you know the scientific drill, but what are you in for once you're in the chair? Firstly, you'll get some anaesthetising drops in your eyes, and the most you'll feel is slight



**A patient about to undergo a Lasik procedure.**

PICTURE: PRNewsFoto/COUNCIL FOR REFRACTIVE SURGERY QUALITY ASSURANCE

pressure.

Although you're awake, the procedure to make the corneal flap is virtually painless, though a common complaint is discomfort in having your eyes clamped open.

But that takes as long as buttering a side of toast before the correcting laser does its thing.

People have described this part as "a lot of flashing and a burning smell", but within 15 minutes, one eye is done and it's time for the next one.

Half an hour later and you're ready to go home.

You may, of course, blink and open wide when you see the bill.

It costs R34 000 for iLasik at

Sandhurst Eye Clinic, to date the only clinic in Africa with this technology.

The common Lasik surgery is substantially cheaper; at the Cape Eye Hospital you'll pay R13 500 plus R572 for a consultation, while at Visiomed Laser Eye Centre in Johannesburg you'll pay R16 600 plus R900 for a consultation.

But think of it this way: the great thing about the modern era is you get to have a choice, including the choice to wait for competition to even out the playing fields.

The Sandhurst Eye Clinic can be reached at 011-783-7683. Please note that you have to be older than 21 to qualify for the procedure.



Medical Aid optical benefits are often insufficient to meet your own needs, never mind those of your family. Medical aid schemes might cover a pair of spectacles in a year, but if you're a contact lens wearer, your limit is likely to be exhausted before you've even reached June.

Laser eye surgery, unless it's a medical necessary (for instance, a cornea transplant, is beyond medical aid coverage altogether.

Brandon Sieff from Sieff Optometrists offers the following tips in managing your benefits,

Match your medical aid to your family's needs. Should several members of your family require glasses, examine your medical aid's optical benefits carefully and

## STRETCH YOUR OPTICAL BENEFITS

compare them to those of other medical aids. Ensure that you understand whether your optical fees are deducted from your Medical Savings Account (MSA) or whether they are an insured benefit.

Select an optometrist that charges medical aid rates. Not all opticians charge consultation fees guided by medical aid rates. Ask about this when you book your appointment. Should you visit one that doesn't, you will either be left with a payment shortfall, or the difference will quickly erode your MSA.

Choose local brands when selecting frames. The most

important part of your glasses are the lenses, not the frames. So, select less expensive, local brands that will not erode your optical benefit.

Regular check-ups save money in the long run. Ocular conditions diagnosed early often result in treatment that is shorter in duration and more effective. This means that you will end up paying less. Ensure that each member of your family has an annual visual screening whether you wear glasses or not – opticians do not only check your vision, they also check the health of the eye. This is particularly important if you are

over 40 years, if you drive any type of vehicle or if you work on a computer.

If your medical aid specifies a partner network, be sure to use them. Using an optician outside of your medical aid's specified partner network could mean that your claim is only partly reimbursed, or rejected altogether.

Look after your glasses and contact lenses. Damaged and stolen glasses and contact lenses means they will have to be replaced earlier than necessary, at the cost of your MSA or optical benefits. Always place glasses in their protective case, store contact lenses correctly and consider insuring your glasses against theft.