

# OUR SPECIALISTS

SNEC Laser Vision Centre is led by a team of experienced refractive surgeons who are certified and accredited to perform refractive laser vision correction. They undergo annual re-accreditation to maintain international standards and keep at the forefront in this field of refractive surgery.

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Professor Donald Tan



Dr Ti Seng Ei



Dr Peter Tseng



Dr Wang Jenn Chyuan

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Dr Jean Chai



Dr Allan Fong



Dr Daphne Han



Dr Khor Wei Boon



## Our Range of Refractive Surgery Services

- LASIK
- LASIK Xtra
- Advanced Surface Ablation (ASA) - LASEK
- Implantable Collamer Lens (ICL)
- ReLEx® smile

# InTouch

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# InTouch

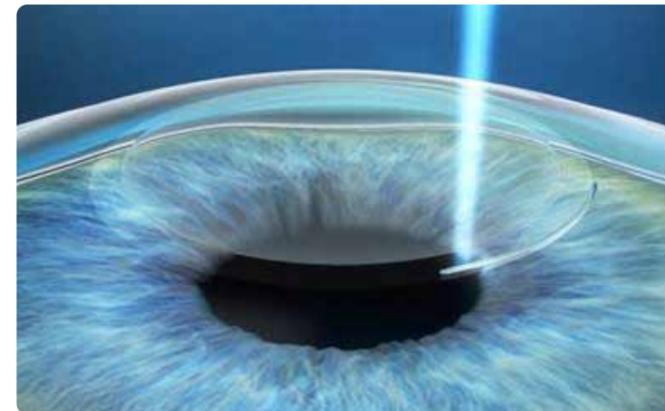
with SNEC Laser Vision Centre



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# ReLEx® smile

ReLEx® smile is an alternative technique of laser vision correction. Unlike LASIK, it does not require the creation of a corneal flap. This day surgery procedure is a one-step, 20-minute all-in-one laser operation that can correct short-sightedness from 100 to 1,000 degrees, as well as astigmatism of up to 500 degrees. Instead of vaporising cornea tissue to correct the underlying short-sightedness and astigmatism, ReLEx® smile removes a small amount of corneal tissue through a tiny incision (about 2.5 to 4mm only).



## WHAT'S INSIDE?

- Our Laser Technology
- LASEK
- LASIK Accreditation Course

Due to the smaller wound by minimally invasive surgery, ReLEx® smile results in a possibly stronger eye and less immediate postoperative discomfort and tearing. The use of a small incision also means that fewer corneal nerves are severed during the procedure, which also means lower risk of dry eye. With no flap created, there is no issue of flap displacement and no risk of flap dislodgement in the event of a trauma. Thus, ReLEx® smile is a good option for those who are involved in contact sports.

Most patients will experience an improvement in their vision a day after the surgery, but attaining full visual potential may take some time. ReLEx® smile patients will notice their vision improving over time, with full restoration of their eyesight three to six months after the surgery.



SNEC Laser Vision Centre has launched its official Facebook page, a platform where you can search for information on the latest news updates, upcoming events as well as doctors' listing. Designed with our patients in mind, this new Facebook page offers easy navigation and facilitates quick interaction at your fingertips, be it using your smartphone, tablet or home computer. Check it out today at <https://www.facebook.com/SNECLaserVisionCentre>



# Our Laser Technology

At the SNEC Laser Vision Centre, there is a constant quest to expand the range of refractive errors that can be treated, to improve the predictability and accuracy of the outcomes and to enhance the safety of the surgery. Our specialist team is always at the forefront of innovation, leveraging emerging laser technology to offer customised treatment for patients.

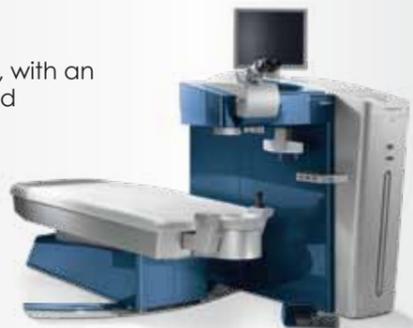
## Excimer Laser

### Wavelight EX500 Excimer Laser

This excimer laser by Alcon is a flying spot laser that delivers treatment at 500Hz, with an average treatment time of approximately 1.4 seconds per diopter. It sculpts and treats refractive errors following flap creation by the femtosecond laser.

Faster laser treatment improves the predictability and results of LASIK by reducing the problems of dehydration of the cornea during treatment, flap shrinkage, treatment sensitivity to patient's eye movement and fixation fatigue.

For safety and precision, the laser is coupled with a faster, 1050Hz multi-dimensional eye tracker that tracks horizontal, vertical, rotational and torsional movements of the eye. This excimer laser can also be linked to corneal mapping instruments like the topolyzer and oculyzer, enabling customised mapping of the corneal surface or the global mapping of the eye.



## Femtosecond Lasers



**VISUMAX®** The Visumax® femtosecond laser from Carl Zeiss Meditec is a new generation femtosecond laser platform designed for the creation of corneal flaps during LASIK. Its repetition rate of 500kHz enables faster flap creation and uses lower energy levels, thereby reducing the amount of thermal energy delivered to the cornea. A specially designed spherically curved contact glass used during the procedure prevents unnecessarily high rise in intraocular pressure and temporary vision loss during the procedure. The net result is a fast, safe and comfortable LASIK procedure.

### IntraLase™ iFS Laser System

This iFS laser system by AMO has a repetition rate of 150kHz, enabling corneal flaps to be created in just 12 to 16 seconds during LASIK. The lower energy levels used with this laser also reduces risk of tissue burns and injury. With iFS, the flap dimensions are customisable based on patient factors, such as corneal thickness, diameter and pupil position.



### LDV Femtosecond Laser System

This system by Ziemer is another femtosecond laser for making LASIK flaps. It operates at low pulse energy (nJ) and short pulse width, but at high pulse frequencies (MHz). As a result, fewer gas bubbles are formed during flap creation and more tissue is preserved. The effect is quiet eyes which are free from edema post-surgery.

This high-speed system also allows generation of tightly focused low-energy laser pulses in an overlapped pulse raster, resulting in a complete and smooth resection for easy flap lift, and faster visual recovery.



# LASEK – A Flapless Laser Correction Procedure

**Laser assisted sub-epithelial keratectomy (LASEK)** is a laser surgical procedure for the correction of refractive error i.e. astigmatism, hyperopia (long-sightedness), and myopia (short-sightedness). Similar to PRK and epi-LASIK, this is a flapless laser procedure which may be more appropriate in certain individuals such as those with inadequate corneal thickness, abnormal corneas or those with existing corneal diseases such as recurrent erosion syndrome, dry eye syndrome or corneal scars. Individuals whose job or lifestyle has a higher risk of eye trauma are suitable as well.

At SNEC, we perform LASEK, which is a type of Advanced Surface Ablation (ASA) procedure. The LASEK procedure, unlike LASIK, does not require a flap. It involves softening or loosening the outer surface layer of the cornea (epithelium) with diluted alcohol, thereby removing the corneal epithelium easily. The excimer laser is then used to treat the surface of the cornea directly and the amount of treatment is dependent on the individual's refractive error. At the end of the procedure, a soft bandage contact lens is applied to aid healing and improve comfort. The bandage lens is removed once epithelial healing is completed five days to a week later.



## PRICE

| Description                  | Price with 7% GST (per eye)   |
|------------------------------|---|
| Consultation and Examination | \$97 (Consultant)<br>\$110 (Senior Consultant)  |
| LASEK Suitability Assessment | \$150   |
| LASEK Surgery                | \$1,926 (SNEC Assigned Doctor)<br>\$2,033 (Consultant)<br>\$2,140 (Senior Consultant) |

# International Participation for LASIK Accreditation Course

Senior LASIK surgeons from SNEC conducted the LASIK Accreditation Course for ophthalmologists who are interested in performing LASIK. The course which took place from 26 to 28 September 2014, was fully subscribed with participants from the United Kingdom, Australia, India, Sri Lanka, Indonesia, Vietnam, Malaysia and Singapore. It comprised three modules of didactic teaching which encompassed interactive lectures on LASIK essentials, management of complicated and challenging cases as well as the latest updates and advances in LASIK Technology and Refractive Surgery. As part of the course module, the participants had the opportunity to try out the various laser platforms and exchange practical pointers with our Refractive Surgery Trainers on the usage of the equipment.

