

Perfect LASIK Flaps with Different Femtosecond Platforms: A Video Symposium on Techniques in Femtosecond Flap creation and Management of Unexpected Scenarios in LASIK

20 April 2015
1.30 pm to 3.00 pm

- Dr Cordelia Chan MBBS, MMed, FRCSEd
 - Medical Director, International Specialist Eye Centre
 - Senior Consultant Ophthalmologist, Cornea Service and Refractive Surgery Service, SNEC
- Dr Damien Gatinel
 - Chef de Service
 - Fondation Rothschild, Paris, France
- Dr Lim Li MBBS, MMed, FRCSEd, FAMS
 - Senior Consultant Ophthalmologist and Head, Cornea Service, SNEC
 - Deputy Director, Singapore Eye Bank
- Dr Mohamad Rosman MBBS, MMed, FRCSEd, FAMS
 - Senior Consultant Ophthalmologist and Head, Refractive Service, SNEC

Course Faculty

Topic	Time	Speaker
1. Intro and overview of FS platforms	5min	Dr Rosman
2. Visumax (Zeiss Meditec) Flap Creation Made Easy	8min	Dr Rosman
3. How to Create the perfect Intralase iFS (AMO) flap	8min	Dr Lim Li
4. My Experience with the Wavelight FS 200	8min	Dr Damien Gatinel
5. LASIK with the Ziemer Z6 and how it compares with other FS lasers	8min	Dr Cordelia Chan
6. Videos on Managing unexpected or difficult scenarios	60min	All

Contents of Instructional Course

- **IntraLase** (AMO, USA)
 - 1st commercial system available in 2001
- **FEMTEC** (20/10 Perfect Vision, Germany)
- **FEMTO LDV** (Ziemer Ophthalmic Systems AG, Switzerland)
 - Late 2005
- **VisuMax** (Carl Zeiss Meditec, Germany)
 - Late 2006
- **Wavelight FS200** (Alcon, USA)
 - 2010

FEMTOSECOND LASERS IN REFRACTIVE SURGERY



- Longest history
- Good efficacy and safety record
- Some disadvantages
 - Decentered flaps
 - Subconjunctival haemorrhage
 - Difficult for patients with small palpebral apertures

Intralase femtosecond (AMO, USA)



Comparison of FS platforms

Platform	Intralase	Visumax	FemtoLDV	520F	FS200
Company	Abbott Medical Optics	Carl-Zeiss Meditec	Ziemer	Technolas	Wavelight AG/Alcon
Suction	Scleral	Corneal	Scleral	Scleral	Corneal
Docking surface	Flat Applanating	Non-applanating curved patient interface	Flat Applanating	Non-applanating curved patient interface	Flat Applanating
FS pattern	Raster	Spiral	Meander	Spiral	Raster
Spot size	<3µm	3µm ¹	2µm	2-7µm ²	5.0 +/-0.5 µm
Pulse Duration	600-800fs	220-580fs	200-350fs	400-800fs	350+/-50fs
Repetition Rate	150kHz	500kHz	>20MHz	40/80kHz	200kHz
Laser Pulse	120 nJ	300nJ	10-20nJ	2300nJ	<3000nuJ
Energy (max)					