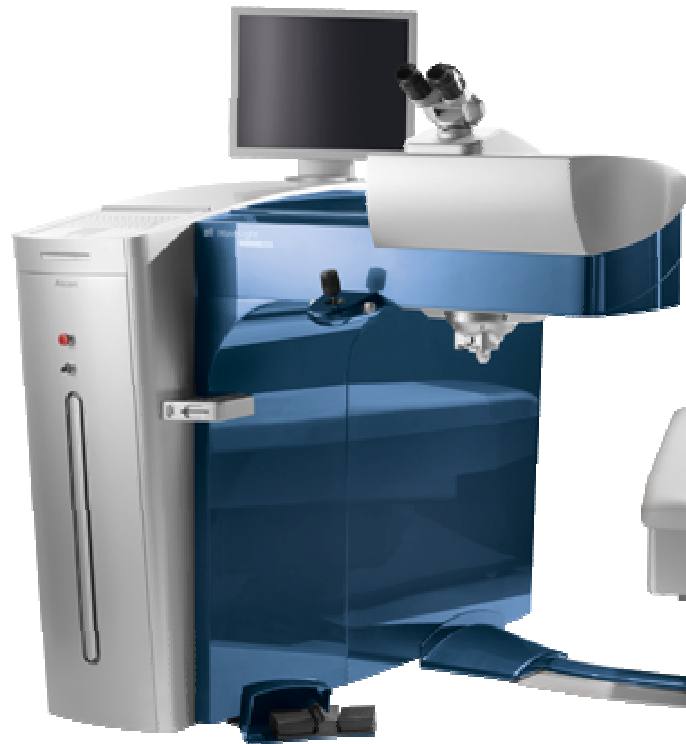


Initial clinical experience with the FS200 Femto and EX500 excimer lasers by Wavelight for LASIK

The Laservision.gr Institute
Athens, Greece





WaveLight® FS200
Femtosecond Laser



WaveLight® EX500
Excimer Laser

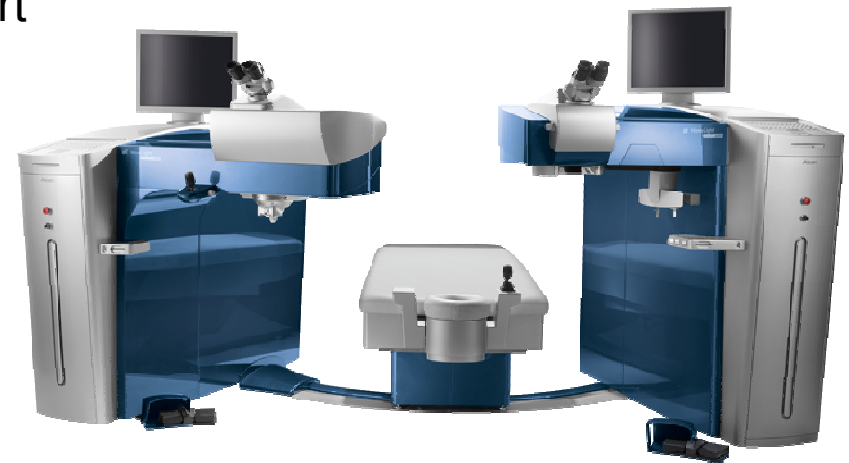


New York University
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A truly integrated system, the WaveLight® Refractive Suite features:

- Ultra fast platform, combining a 500 Hz excimer laser and a 200 kHz femtosecond laser
- Seamless data transfer within WaveNet™, an integrated network
- A small footprint for reduced space requirements
- A swivel bed for simplified patient positioning and enhanced patient comfort



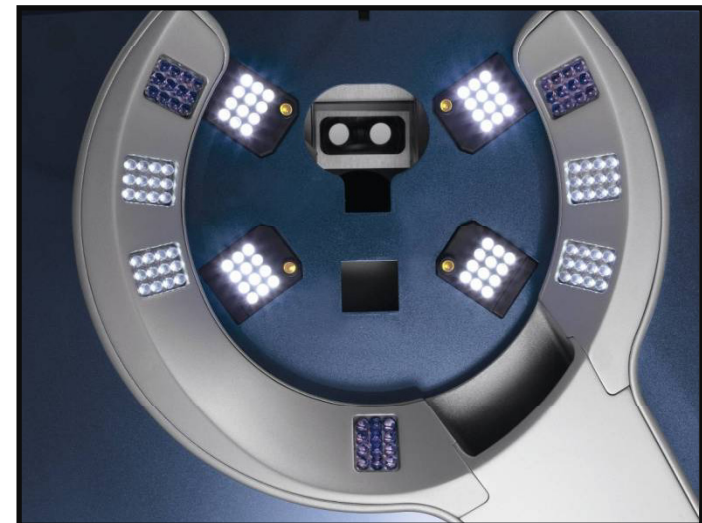
**New York University
School of Medicine**



WaveLight® EX500 Excimer Laser

The 1050 Hz multi-dimensional eye tracker assists in offering exceptional precision and safety:

- Movement tracking with just 2 milliseconds of latency*
- Dynamic pupil tracking from 1.5 mm to 8.0 mm
- Active pupil centroid shift correction
- NeuroTrack to compensate for cyclotorsion



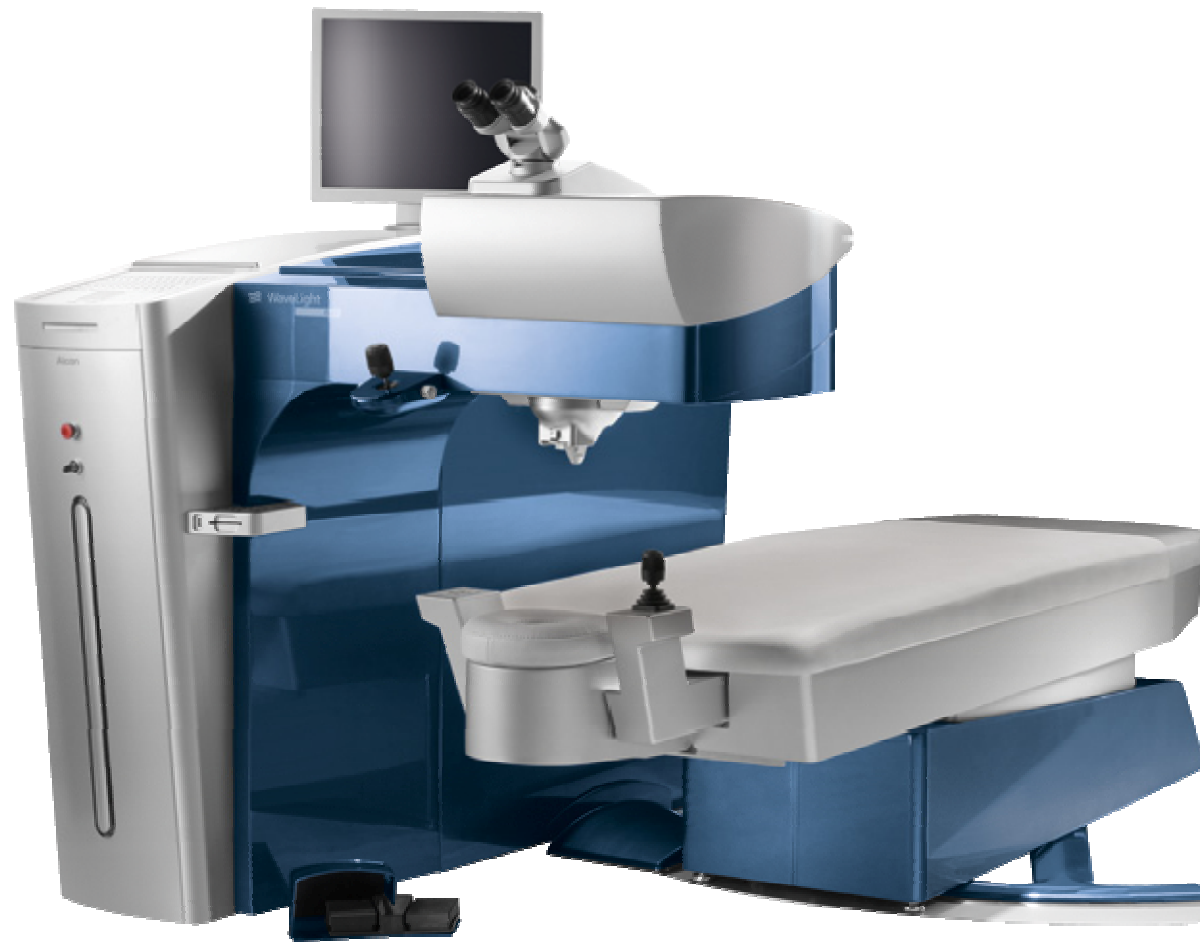
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*Latency time is approximate

Summary

- 500 Hz laser head treats 1.0 diopter in 1.4 seconds
- 1050 Hz Eye Tracker has a latency of 2 milliseconds
- Patient-Specific applications:
 - Wavefront-Optimized, Wavefront-Guided, Topography-Guided, Custom Q, PTK
- Network connectivity allows seamless data transfer through the full WaveLight® Refractive System
- Advanced ergonomic design with enhanced feature set facilitates patient flow and physician experience





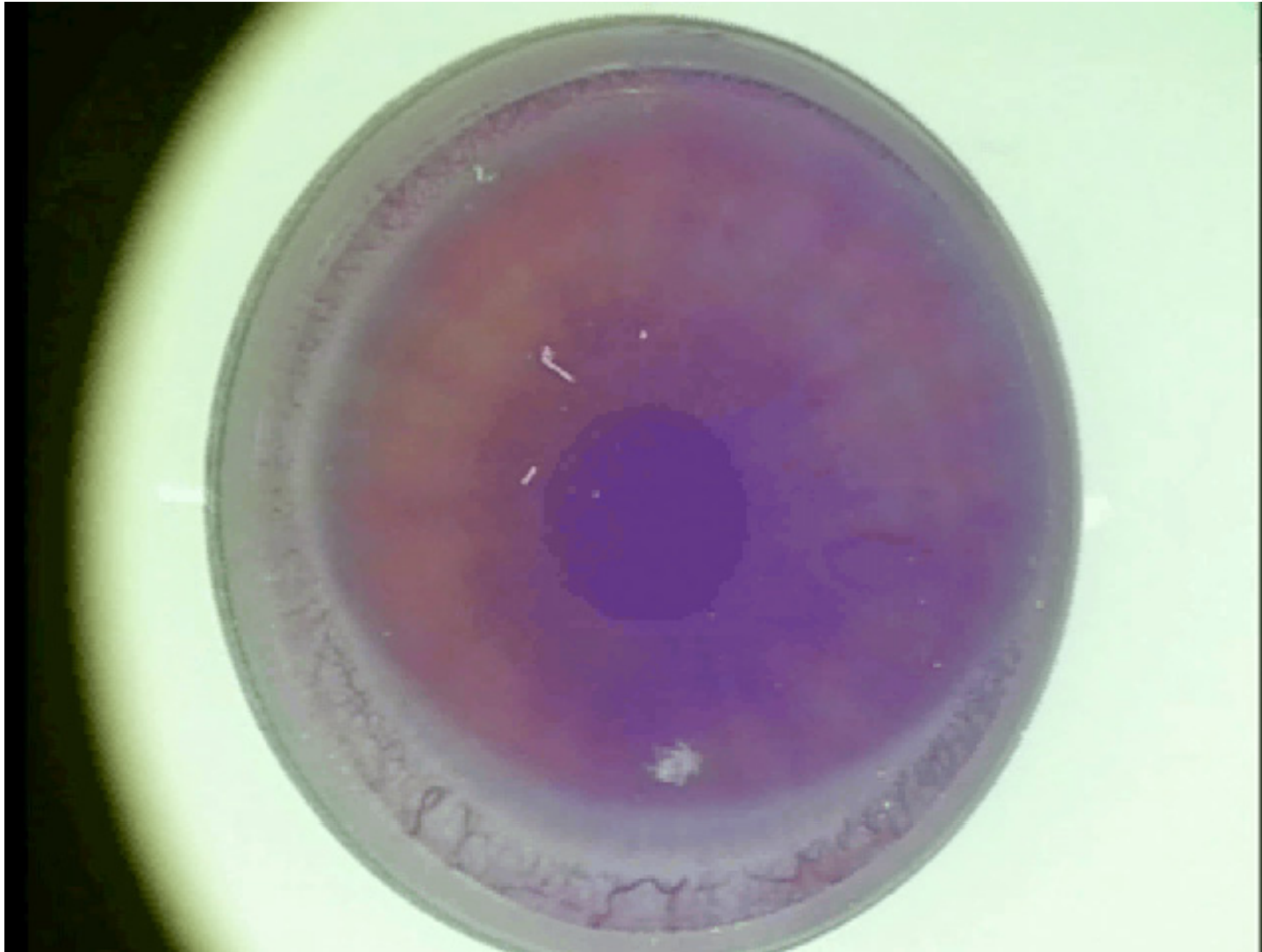
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Fast flap creation times Laser

- Standard flap creation in approximately 8.0 seconds*
- Automated vacuum control of the patient interface for consistent suction
- Minimized IOP and ocular distortion during suction
- Fast visual regeneration





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Flap thickness with the FS200 (303 eyes)

	pre-op flat K [D]	pre-op steep K [D]	Pre-op Pachymetry [μm]	Flap- thickness [μm]
Mean	42,5	43,8	557,5	122,4
Median	42,4	43,9	557,8	121,5
Min	38,6	41,2	518,5	100,0
Max	45,4	46,7	623,5	138,5
Sd	1,6	1,6	22,8	11,6

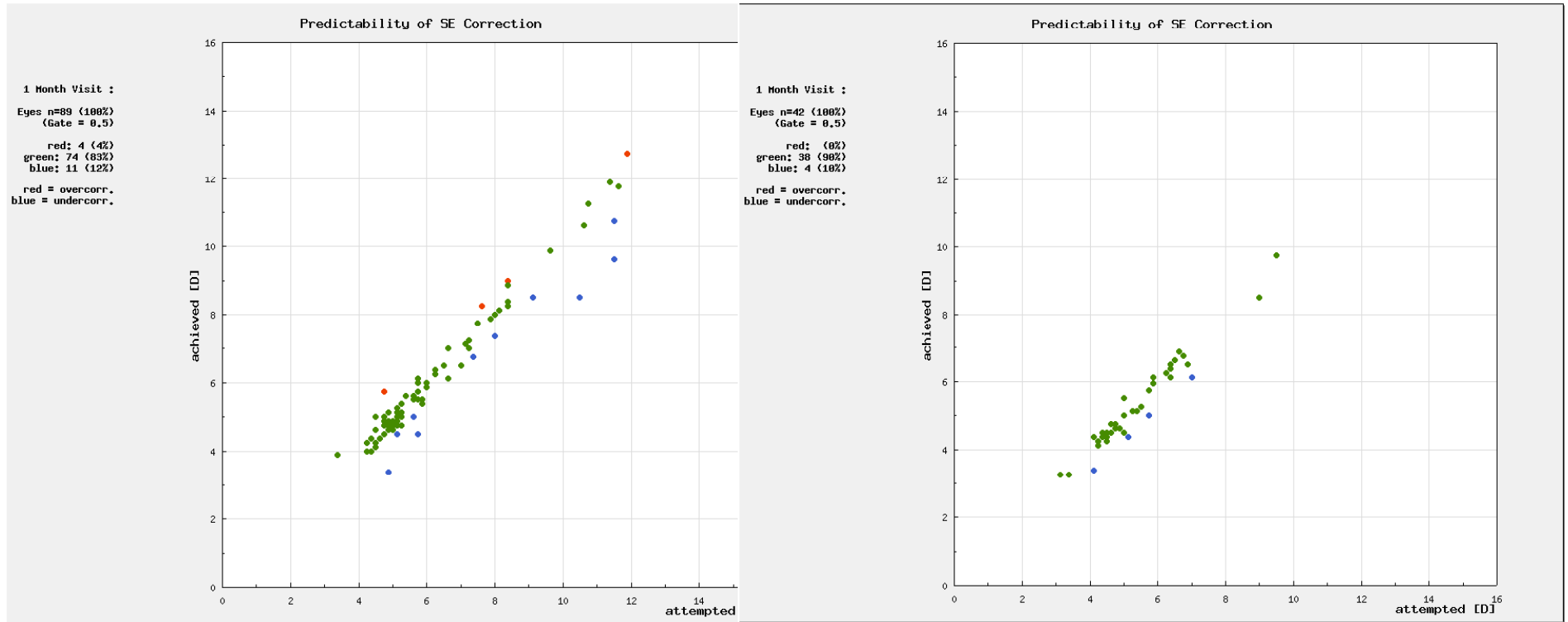


Flap size with the FS200 (135 eyes)

	6 [mm]	42 [mm]	64 [mm]	23 [mm]
Intended	8,5	9,0	9,5	10
Mean	8,5	9,0	9,5	10
Min	8,5	9,0	9,5	10
Max	8,5	9,0	9,5	10
Sd	0	0	0	0



Visual Outcomes



Conclusions

The “refractive suite” comprises of the

1-200 kHz femto laser

2-500 Hz excimer laser

Clinical results with LASIK show high level of reproducibility

Great safety record so far

Enhanced speed

Networking of diagnostics/both lasers!

-



Summary

- 200 kHz laser
 - Creates a 9.0 mm flap in 6 sec.
 - Total procedure time, “suction on” to “suction off” ~30 sec.
- Adjustable flap centration after suction is engaged
- Adjustable hinge placement and flap thickness
- Enhanced suction ring to maximize patient comfort and mitigate increases in IOP
- Network connectivity allows seamless data transfer through the full WaveLight® Refractive System
- Disposable Patient Interface

