





Laser Comparison Table

				
Feature	Nidek: EC5000 CXIII	Nidek: Quest	Visx Star S4 IR	Bausch and Lomb Technolas 217z Zyoptix
Diagnostic Aberrometer (machine used to calculate Wavefront treatment plan)	Optical Path Difference (OPD)	Optical Path Difference (OPD)	Wavescan	Orbscan
Laser Application	Slit Scanning and Rotation with additional 1.0mm spot beam facility and Multipoint ablation	Slit Scanning and Rotation with additional 1.0mm spot beam facility and Multipoint ablation	Spot Scanning with flat-top beam up to 6.5 mm diameter.	Flying Spot technology using combined 1mm and 2mm beam diameter.
Iris Identification Technology	Torsion Error Detection (Pre-treatment adjustments based on involuntary eye movements)	Torsion Error Correction (In-treatment adjustments based on involuntary eye movements)	Iris Registration	Advanced Control Eye tracking (with advanced rotational tracking)
In-treatment Pupil Tracker	Yes (200 Hz)	Yes (1000 Hz)	Yes (60 Hz)	Yes (Video based 120 Hz)

A Retrospective Comparison of LASIK Outcomes for Myopia and Myopic Astigmatism with Conventional NIDEK Versus Wavefront-guided VISX.

Study Conducted in November 2008 by Dougherty PJ, Bains HS.

- 290 eyes treated
- Prescription and Age of subjects matched
- 3 month follow-up data recorded

Technology	Nidek EC 5000: Standard Treatment	Visx Star S4: Custom Vue (Wavefront)
Within +/- 0.50 of intended correction	89%	88%
Lost 2 or more lines of BCVA*	0%	0%
Conclusion	There is no statistical difference in results obtained between NIDEK Standard correction and VISX wavefront correction	

* BCVA = Best Corrected Visual Acuity

<http://www.ncbi.nlm.nih.gov/pubmed/19044229>

Variables affecting refractive outcome following LASIK for Myopia

Study Conducted in September 2008 by M H Feltham, R Wong, R Wolfe & F Stapleton

- 674 eyes treated
- Prescription, Gender and Age of subjects matched

Technology	Nidek EC 5000	Bausch & Lomb Technolas 217
% of Patients achieving successful results	88%	78%
Conclusion	Both the Technolas and the Nidek EC 5000 excimer lasers achieve a successful refractive outcome in the majority of cases	

<http://www.nature.com/eye/journal/v22/n9/abs/6702856a.html>

Optimax Laser Facts

1. Optimax Lasers are serviced every 6 weeks (manufacturer's recommendation is to service the lasers every 3 months)
2. Optimax employ a team of dedicated and specially trained Laser Engineers.
3. Optimax Nidek Lasers are upgraded regularly to ensure the most current software and technology.