

**XXV CONGRESS OF THE ESCRS
STOCKHOLM
8-12 SEPTEMBER 2007**

8 September
SATURDAY

14:00-16:00

Refractive surgery with the CustomVis Pulzar Z1 solid state laser - 1 year post-op

PURPOSE: To evaluate the efficacy, safety and stability of PRK and LASIK in the correction of combined myopic astigmatism with the solid state laser system.

SETTING: Institute of Vision and Optics, Greece,

METHODS: A study was conducted on 115 eyes which underwent PRK and on 40 eyes of mean which underwent LASIK. The PRK group had a mean SEQ of $-4.43 \pm 1.81D$ (-1.50 to -11.0) and mean cylinder of $-0.443 \pm 0.68D$ (-0.25 to -4.00). The LASIK group had a mean SEQ of $-5.55 \pm 21.52D$ (-8.13 to -2.00) and a mean cylinder of $-0.64 \pm 0.72D$ (-2.5 to -0.00). The CustomVis quintupled Nd:YAG Solid State laser at 213 nm was used. **RESULTS:** After 12 months follow-up for the PRK mean RSEQ was $-0.11 \pm 0.52D$ and mean UCVA was 1.03 OR 20/19. 39% gained more than 1 line, 48% had no loss or gain of lines and 12% lost more than 1 line. For the LASIK group at 12 months the mean RSEQ was $+0.42 \pm 0.70D$ and the mean UCVA was 0.94 or 20/21; 61% of eyes gained more than 1 lines, 33.3% of eyes gained had no loss of lines and 5.6% of eyes lost more than 1 line. In terms of predictability 67% of eyes were in the ± 0.25 and 72% of eyes were in the ± 0.5 interval for the lasik patients. For the PRK patients 49% of eyes were in the ± 0.25 and 80% of eyes were in the ± 0.5 interval for the lasik patients. The PRK patients did not changed in terms of SEQ more than 0.03D in the last 9 months ($-0.11D$ mean value of SEQ at 12 months). The LASIK patients did not changed in terms of SEQ more than 0.01D in the last 9 months ($-0.41D$ mean value of SEQ at 12 months).

CONCLUSIONS: PRK and LASIK were both effective and safe in the correction of myopic astigmatism.

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