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Title:	LASIK for Myopia, Myopic Astigmatism, Hyperopia, and Hyperopic Astigmatism with the 213 nm Solid-State Laser
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Purpose:	To evaluate the clinical efficiency, predictability and safety of a new high-speed, 0.6 mm Gaussian shaped flying spot, 213nm solid state laser for the correction of myopia, myopic astigmatism, hyperopia and hyperopic astigmatism in laser in situ keratomileusis (LASIK).
Methods:	441 consecutive eyes with myopia and myopic astigmatism between -0.5 and -14.5 diopters (D) and up to -5.50 D astigmatism and 195 eyes with hyperopia and hyperopic astigmatism between +0.5 D and +6.00 D and up to -6.50 D astigmatism underwent LASIK treatment using the PULZAR Z1 laser. All cases were followed for 1 to 3 months. Parameters evaluated were residual refractive error, uncorrected visual acuity (UCVA), and best spectacle - corrected visual acuity (BSCVA).
Results:	Out of 441 myopic eyes 366 were within +/- 0.5 D (83%) and 423 eyes were within +/- 1 D (98%) of intended refractive correction. Uncorrected visual acuity \geq 6/6 was achieved in 326 eyes (74%), $>$ or = 6/7.5 was achieved in 388 eyes (88%). The Best Spectacle Corrected Visual Acuity (BSCVA) was improved by 1 line in 22 eyes. Out of 195 hyperopic eyes 168 eyes had 6/6 or better UCVA .No eye lost over one line.
Conclusion:	The data supports the safety, predictability and effectiveness of the solid state (213nm) laser for the correction of mild, moderate or severe myopia with or without astigmatism and hyperopia with or without astigmatism.