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Title:	CustomVis Solid-State Laser LASIK Results in High Astigmatism
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Purpose:	To assess the predictability and efficacy of the CustomVis solid state laser in Laser in Situ Keratomileusis (LASIK) for high astigmatism
Methods:	50 eyes having astigmatism from -3.00 Diopter (D) to -6.50 D were treated with the CustomVis Pulzar Z1 solid state laser. Spheres ranged from +4.74 D to -7.00 D. Average post-operative follow up was 13 weeks. Moria CB and Hansatome Microkeratomes were used in all cases. Average pre-operative cylinder was -4.5 D. Pre-operative uncorrected visual acuity was from 20/60 to 20/400.
Results:	75% of cases had 20/25 or better Uncorrected Visual Acuity (UCVA) at an average follow up of 13 weeks and 94% had UCVA 20/40 or better. On vector analysis average percentage vector change was 93% suggesting little undercorrection. Error in vector angle was averaged 2 degrees. Post-operative patient satisfaction was high. As some of the follow-ups are as early as 2 weeks, the chance of improvement in results is high.
Conclusion:	Astigmatism corrections were predictable and effective with the Pulzar Z1 Solid State Laser. Nomogram adjustments will provide even better outcomes.