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**Custom Ablation of Myopic Cases with a Solid State Refractive Laser**

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**Purpose:** To investigate the efficacy of the CustomVis™ Pulzar™ Z1 213nm Solid State Laser to treat patients with standard refractive disorders.

**Method:** Seven eyes of 5 patients underwent custom surgery using LASEK. The treatments ranged from 0 to -4.0 D of myopia and up to +3.25 of astigmatism. Three cases had previous surgeries including limbal relaxing incisions (LRI's), astigmatic keratectomies (AK) and ICL's. Another case had a previous PRK. The ablation design program (ZCAD™) used topographical maps to customize the surgeries. The treatments were performed using the Pulzar™ Z1 laser with a 0.6mm scanning spot size and 213nm laser beam.

**Results:** At 1 month or less follow-up, 4 of the 7 eyes obtained unaided vision that equaled their pre-op BSCVA. At the latest post-operative date, 5 cases achieved UCVA of 6/6 or better and 5 cases also demonstrated UCVA that equaled their pre-op BSCVA. There were no losses in BSCVA.

**Conclusion:** Treatment of a small cohort of patients with the Pulzar™ Z1 solid state laser produced excellent visual outcomes and rapid visual recovery. Further cases are planned to demonstrate safety and efficacy with this device for an expanded range of indications.