

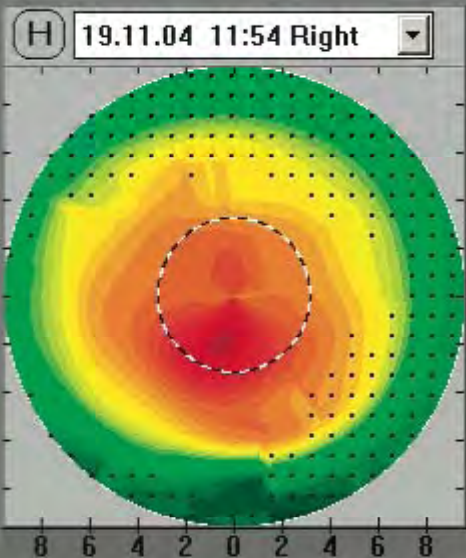
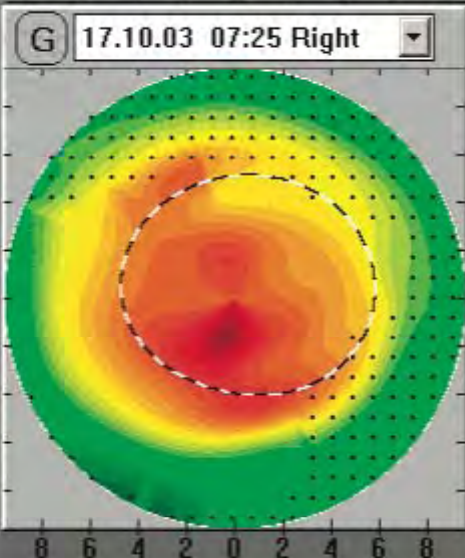
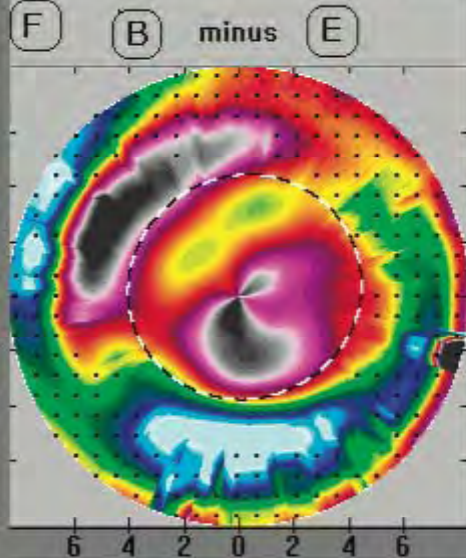
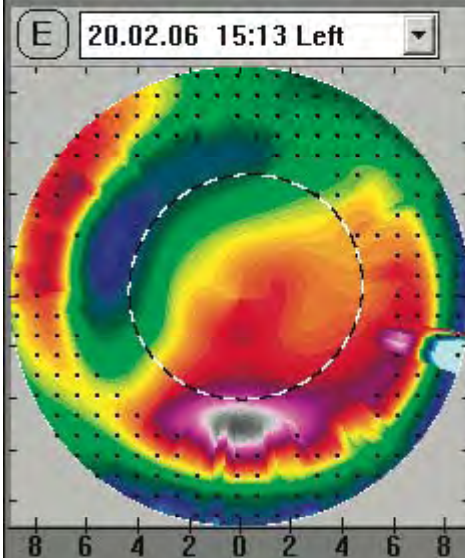
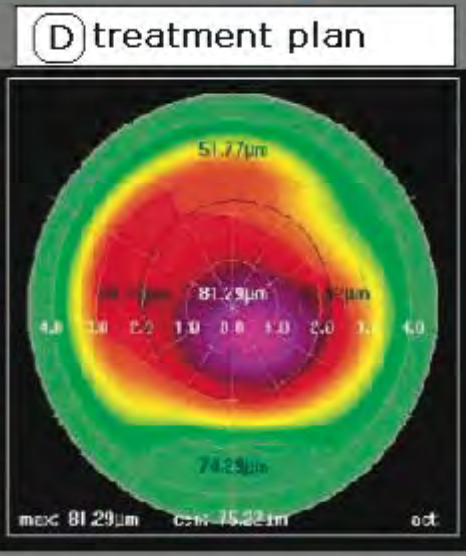
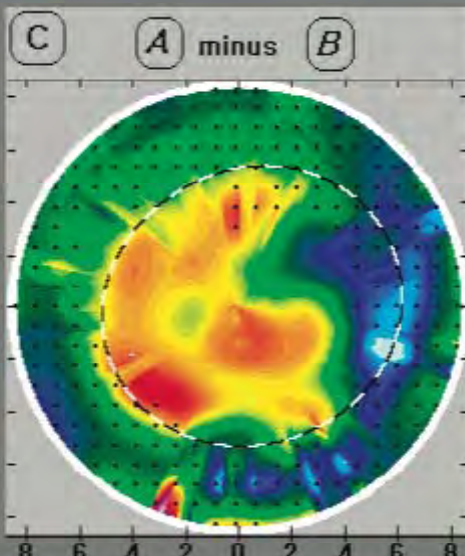
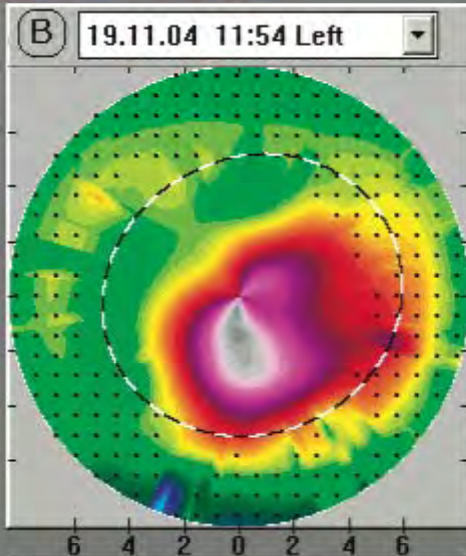
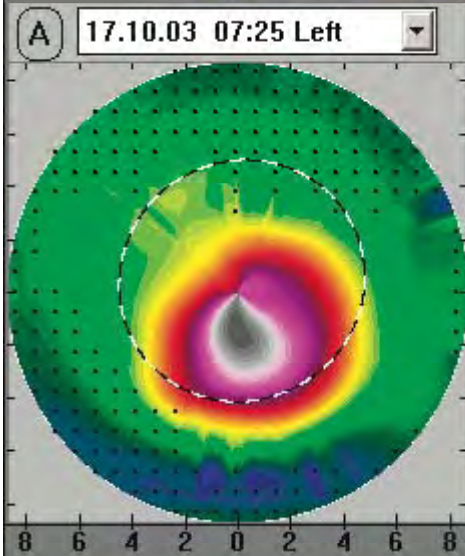
Long term comparison of sequential to combined collagen cross-linking (CCL) and limited topography-guided PRK (tPRK) for keratoconus (KCN)

Winter ESCRS 09

ROME



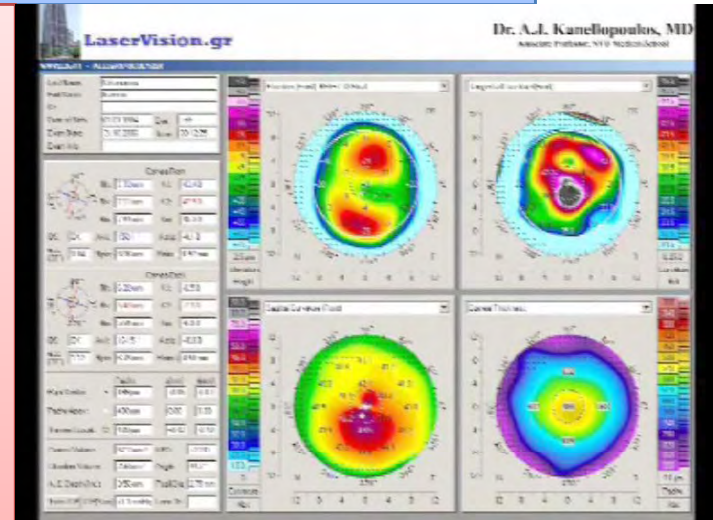
A. John Kanellopoulos, MD
Clinical Associate Professor NYU Medical School, NY
Director, Laservision.gr Institute, Athens, Greece



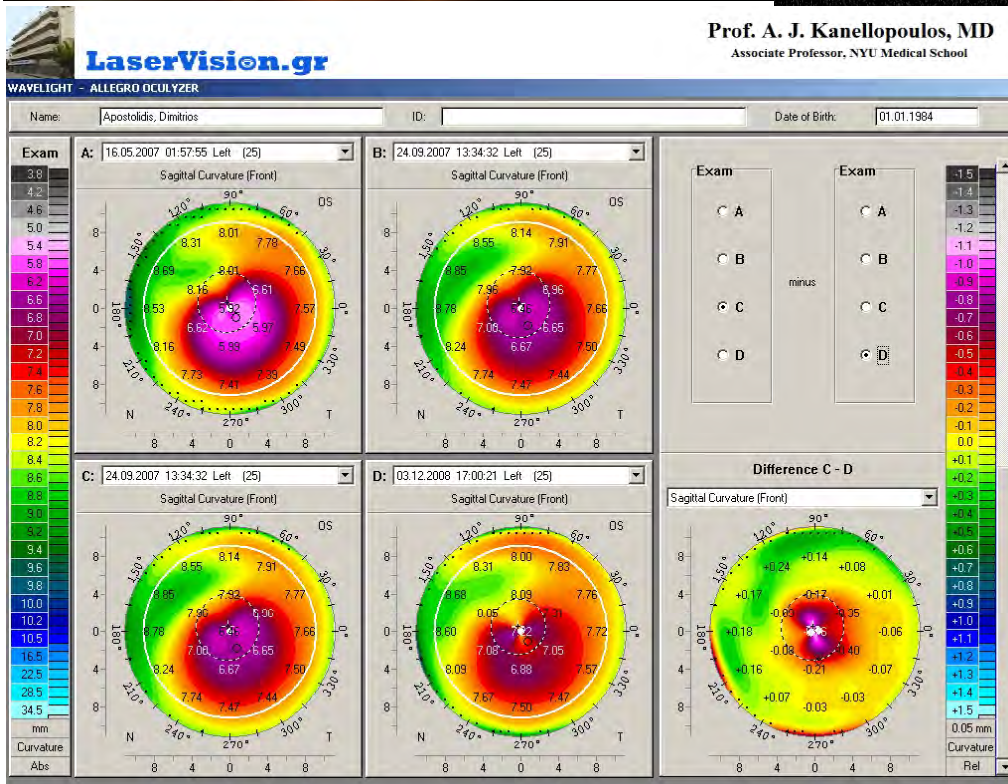
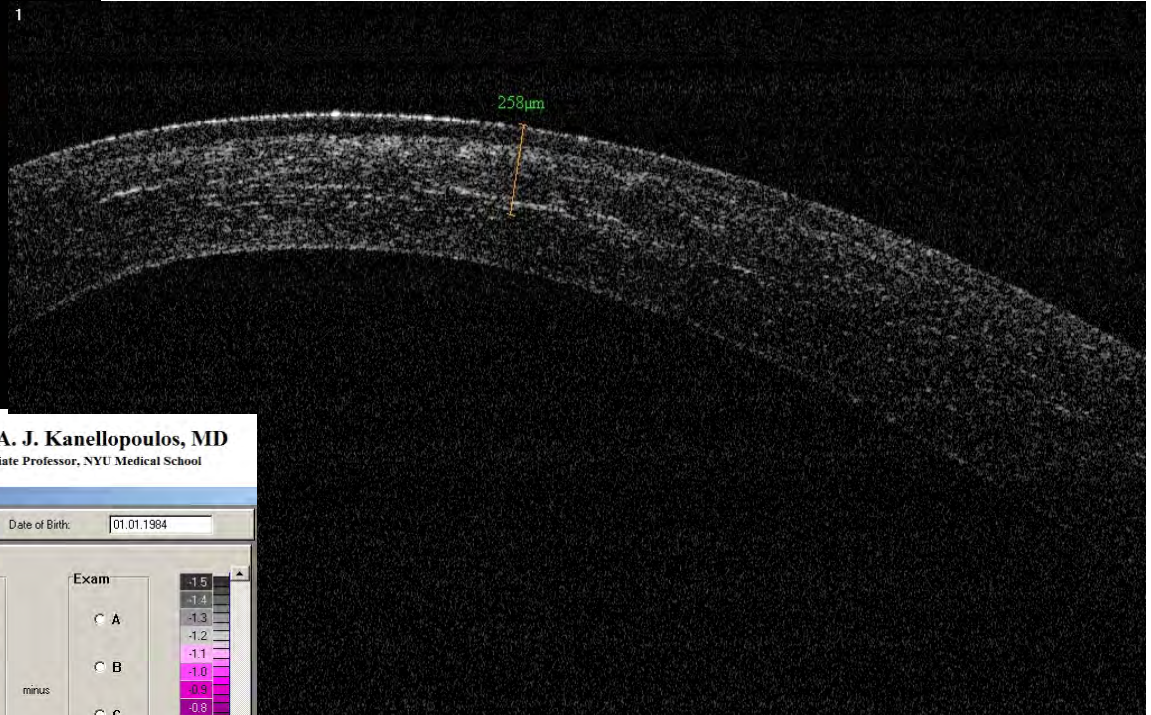
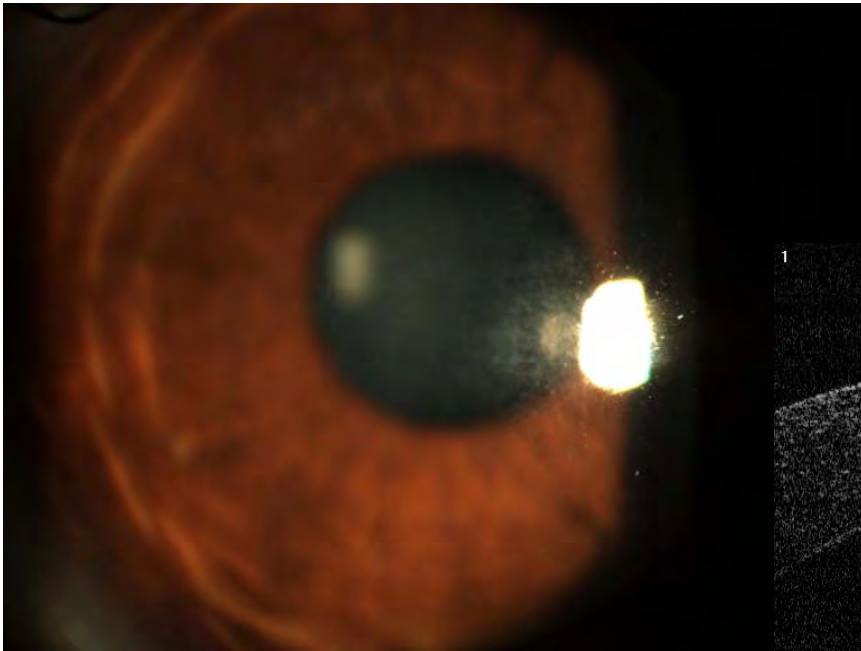
Methods new technique:

- 1-Topo-customised PARTIAL surface ablation
- Epithelial removal: 6.5mm 50nm PTK
- Custom topography-guided treatment utilizing Wavelight topo-guided software (topo or oculink)
- (75% cylinder, some or all sphere limited by cornea thickness up to 50 microns, OZ at least 5mm)
- MMC 0.02% for 20 sec

- 2-Then UVA CCL 3mW/cm² for 30 minutes with riboflavin 0.1% drops
- Follow-up 18-36 months



26 months



Results-Conclusions

- Group A (had tPRK at least 6 months following CCL): The mean improvement of UCVA was 0.12 to 0.41, BSCVA 0.42 to 0.68.
- Group B (had first tPRK combined with CCL): UCVA 0.11 to 0.5, BSCVA: 0.41 to 0.78.
- Statistically group B did better in all fields evaluated.

Sequential tPRK and CCL appear to be superior to the rehabilitation of KCN.

The advantages in pre-treating with the topo-guided PRK are:

- 1-one procedure
 - 2-less PRK associated scarring
 - 3-redistribution of K strain
 - 4-No need to remove cross-linked cornea
-
- This technique may prevent PK as a necessary option and may have wide application
 - Longer follow-up and further studies are necessary