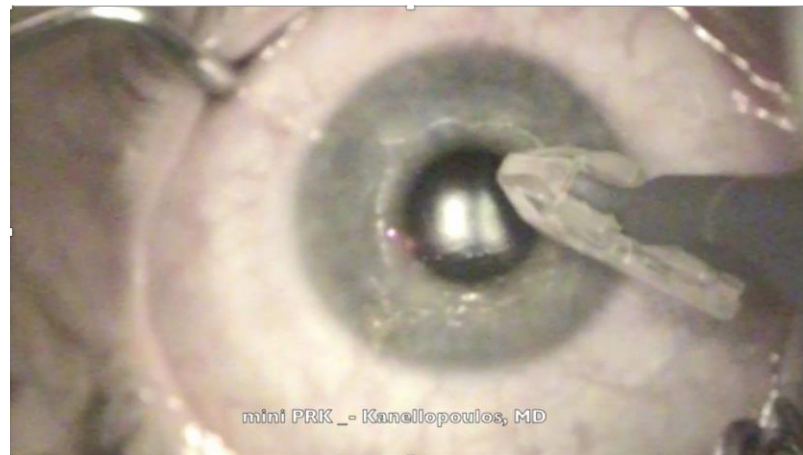
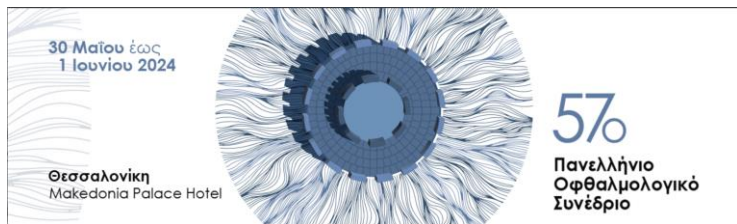


# 7mm frozen and dried-preserved 50um amnion disc (Ad) in wound healing following Minimal-Epithelial Removal Photorefractive Keratectomy (mini-PRK)- a Contralateral Eye Study



**Alexandros J Kanellopoulos MD<sup>1</sup>, Anastasios John Kanellopoulos, MD<sup>1,2</sup>,**

1: Laservision Ambulatory Eye Surgery Unit, Athens, Greece

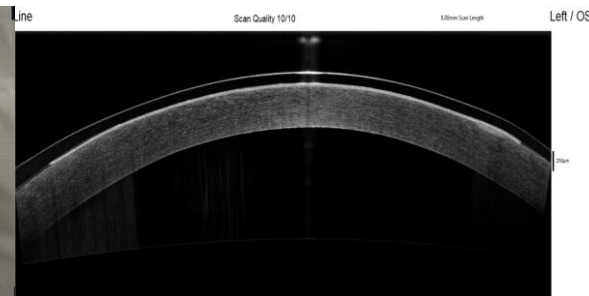
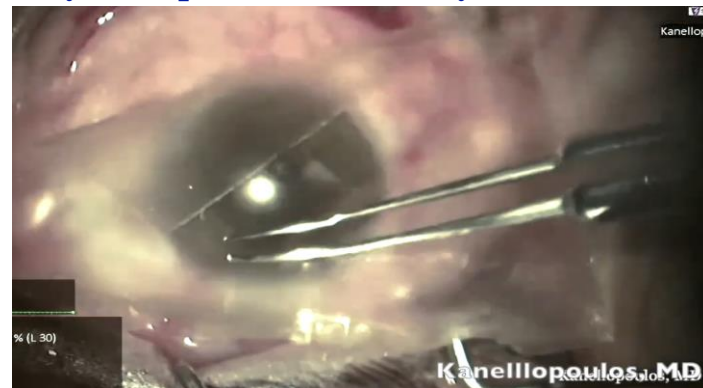
2: New York University Medical School, NY, NY

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**Purpose:** Compare the safety and efficacy of using a 7mm disc of 50um amnion in myopic mini-PRK

**Methods:** 30 patients that underwent myopic mini-PRK had one eye randomized to receive prior to the bandage contact lens placement an epithelial-side up 7mm in diameter 50um in thickness amnion disc that was applied dehydrated on the exposed stromal surface, attached by natural hydration. Both eyes were evaluated daily up to complete reepithelization, at month 1 and month 3 post-PRK by slit lamp biomicroscopy and fluorescein staining, refractive data as well as subjective first night discomfort experienced by each patient, in each eye on a scale 0-4 (0= no discomfort, 4= severe discomfort).



## Results:

Full re-epithelization: 15 eyes with adjunct Amnion disc, by day 3 vs. 9 contralateral eyes. All eyes re-epithelialized by day 4. There were no differences in UDVA, CDVA and residual refractive error between the 2 groups. There was statistical difference in epithelial mapping at 1 month only between the Amnion disc group and the non Amnion group, with the former demonstrating smoother epithelial remodeling. Ad first night pain score 0.5, non-Ad: 1.2= statistically significant.

## Conclusions:

Ultra-thin 50um amnion disc used as an adjunct biological bandage in PRK may accelerate re-epithelialization, improve first day pain profile and also improve epithelial remodeling within the first postoperative month.

Long term Amnion anti-inflammatory properties may reduce the risk for PRK-related haze.

