

FINANCIAL DISCLOSURE

The authors have no financial interest in the subject matter of this presentation.

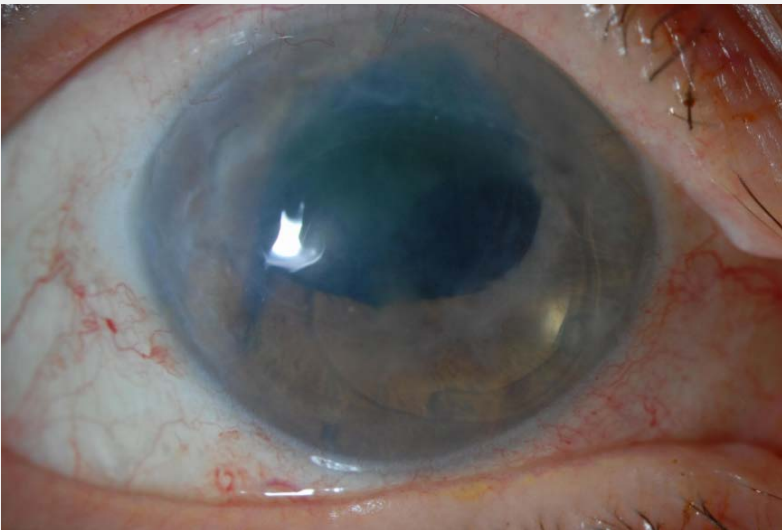
Outcomes of Intraocular Lens Exchange and Endothelial Keratoplasty – Comparing Staged Versus Combined Surgical Approach

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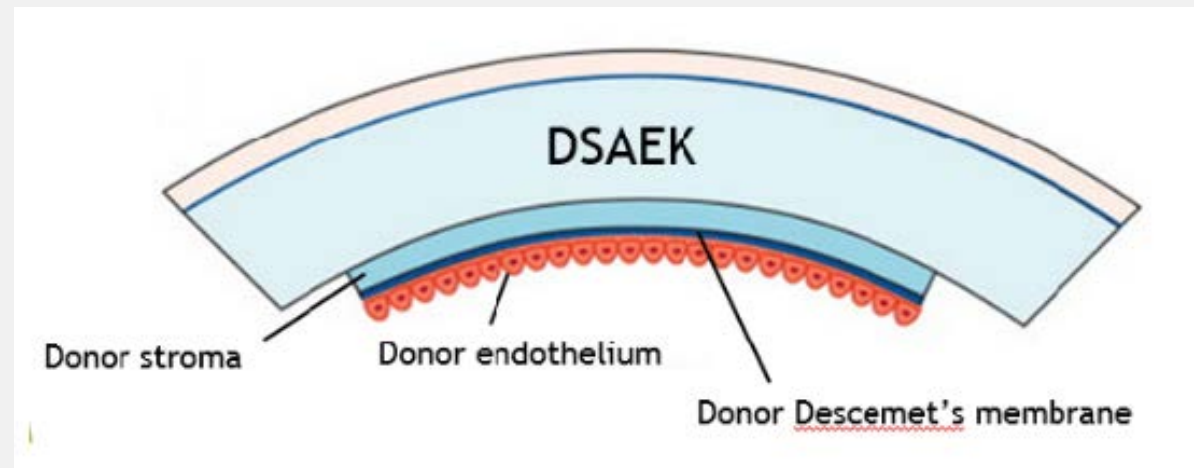
¹Bascom Palmer Eye Institute, Miami, FL

BACKGROUND/OBJECTIVE

- Extracapsular intraocular lens (IOL) implantation is necessary when capsular support is inadequate
- Management of corneal decompensation may require both **IOL exchange** and **endothelial keratoplasty (EK)**
- **Purpose**: To compare the outcomes of staged vs. combined surgical approaches of IOL exchange and EK



pseudophakic bullous keratopathy



METHODS AND MATERIALS

- Retrospective cohort study
- 75 eyes from patients who underwent IOL exchange and EK
- Bascom Palmer Eye Institute between 2014 and 2019

Variables collected:

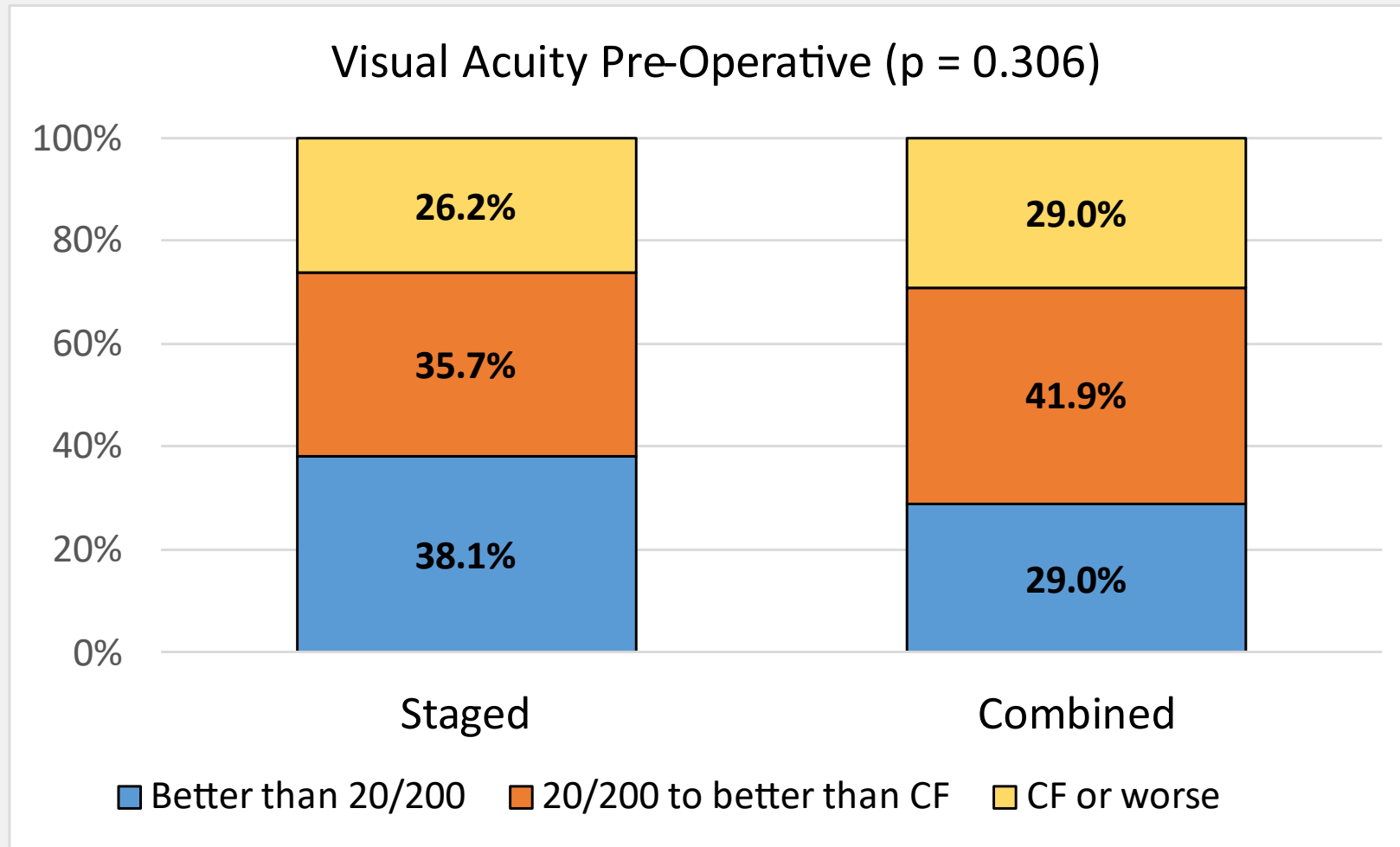
- ✓ Age
- ✓ Sex
- ✓ Method of surgical approach
- ✓ Primary graft failure
- ✓ Graft Detachment / Rebubbling
- ✓ Corrected distance visual acuity (CDVA)

Data Analysis:

- ✓ Mann-Whitney Wilcoxon 2-sample test
- ✓ Pearson's Chi-squared test
- ✓ Fisher's Exact test

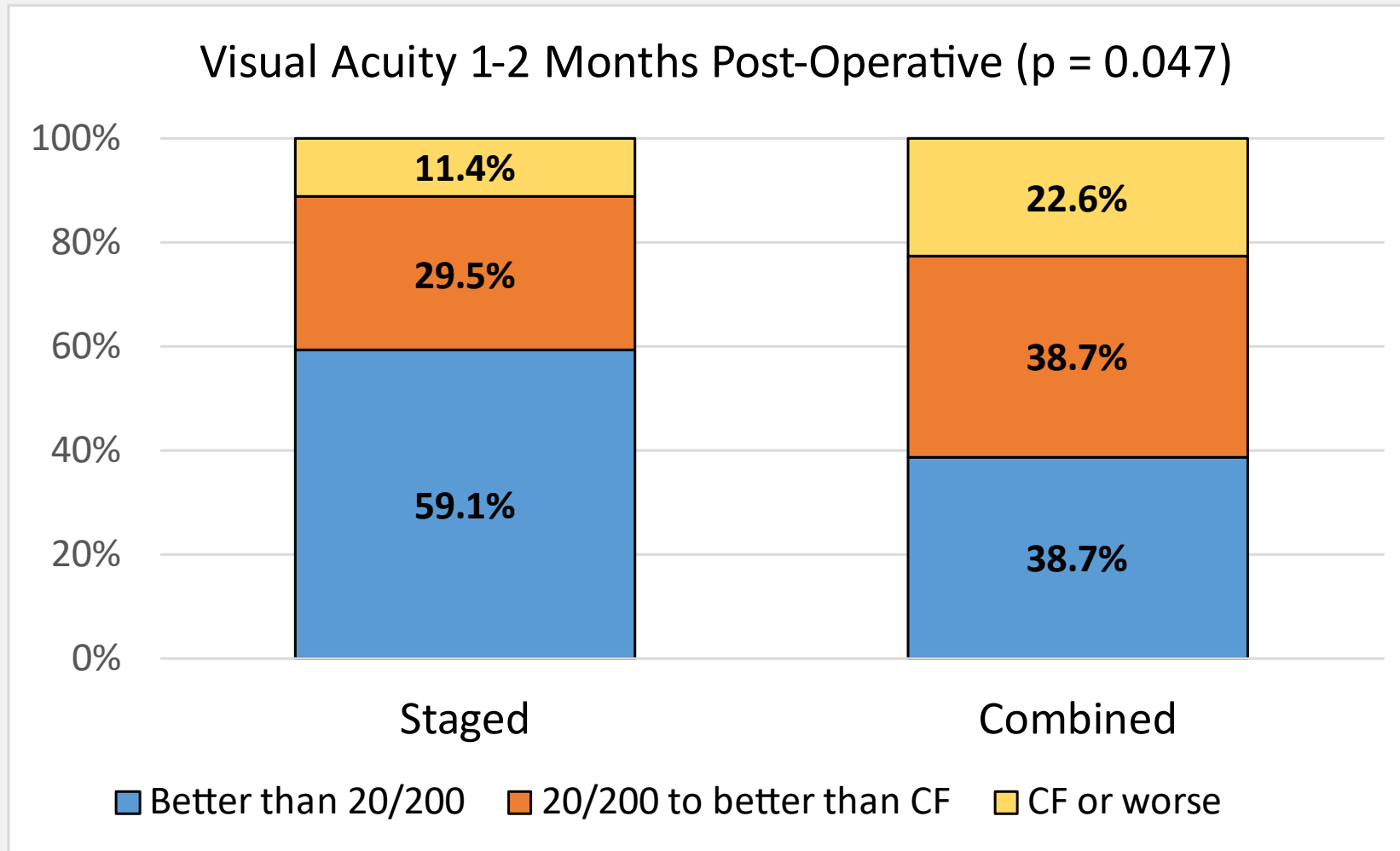
SUMMARY/RESULTS

- **Pre-operative Corrected Distance Visual Acuity (CDVA) –**
no significant difference between staged and combined ($p = 0.306$)



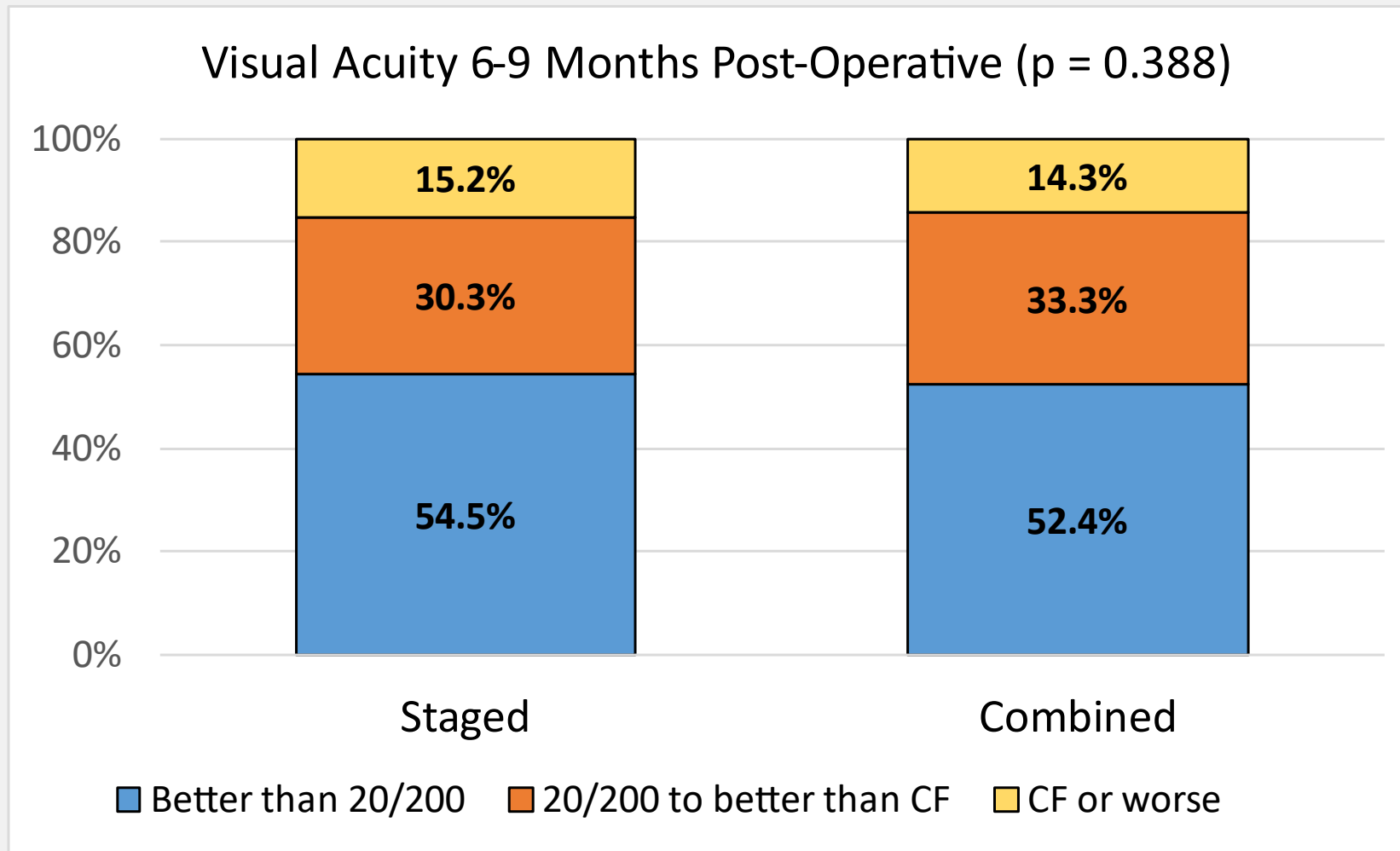
SUMMARY/RESULTS

- **Post-operative CDVA (1 to 2 Months Follow-up) –**
CDVA in the staged surgical approach was significantly better ($p = 0.047$)



SUMMARY/RESULTS

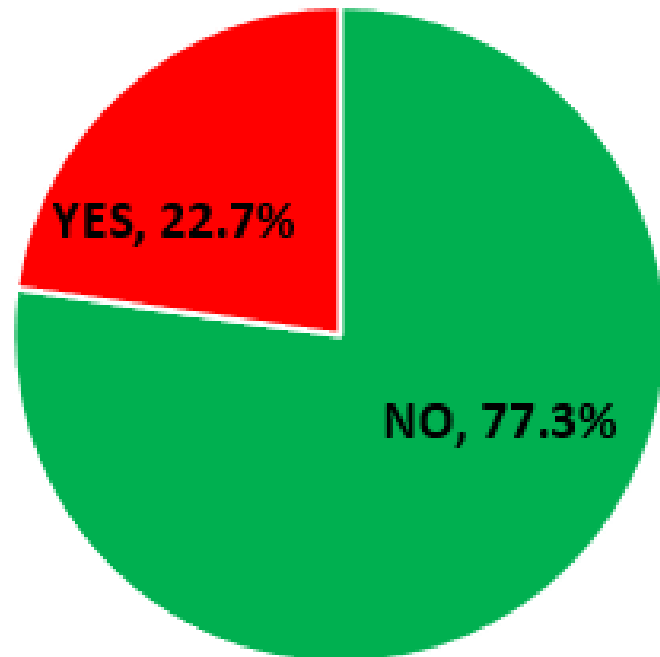
- **Post-operative CDVA (6 to 9 Months Follow-up) –**
no significant difference between staged and combined ($p = 0.388$)



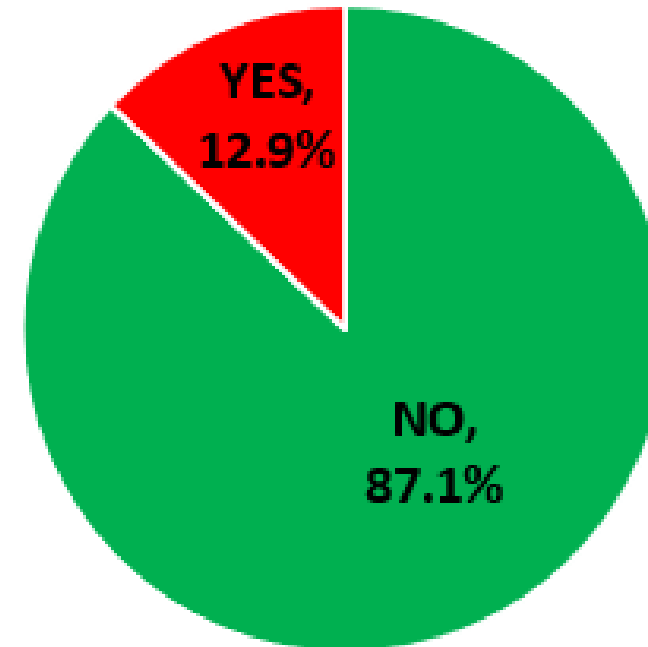
- **Graft Detachment / Rebubbling**

no significant difference between staged and combined ($p = 0.282$)

Graft Detachment Rebubbling Staged



Graft Detachment Rebubbling Combined

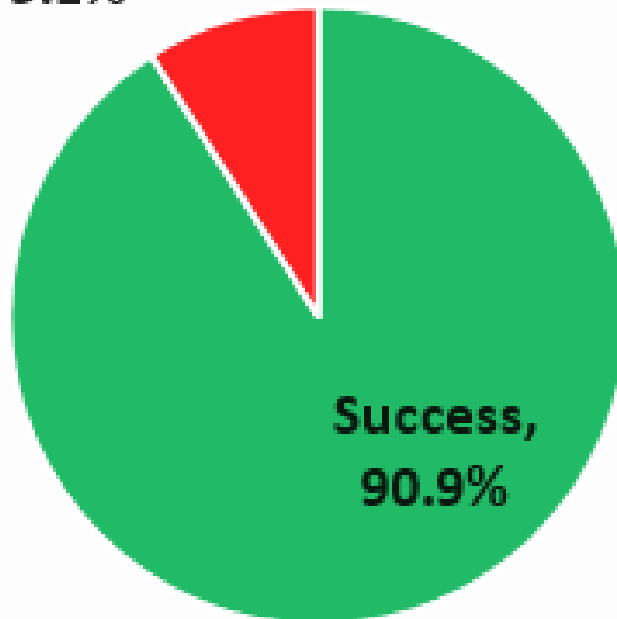


- **Primary Graft Failure**

no significant difference between staged and combined ($p = 1.00$)

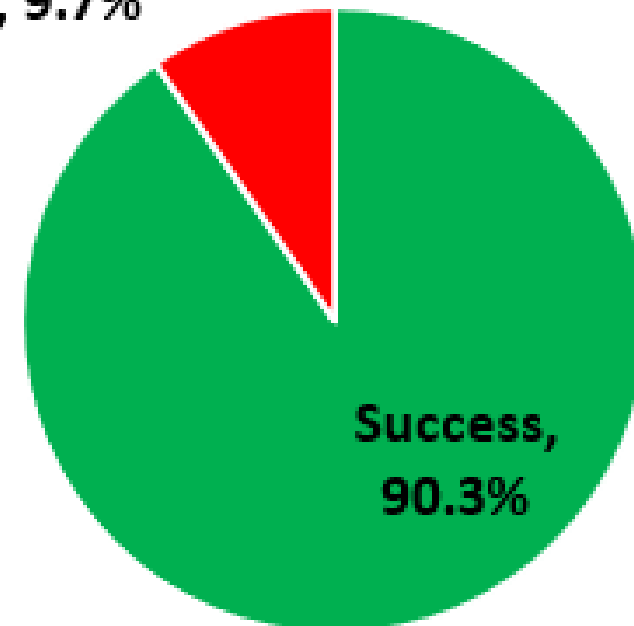
Primary Graft Failure Staged

Failure, 9.1%



Primary Graft Failure Combined

Failure, 9.7%



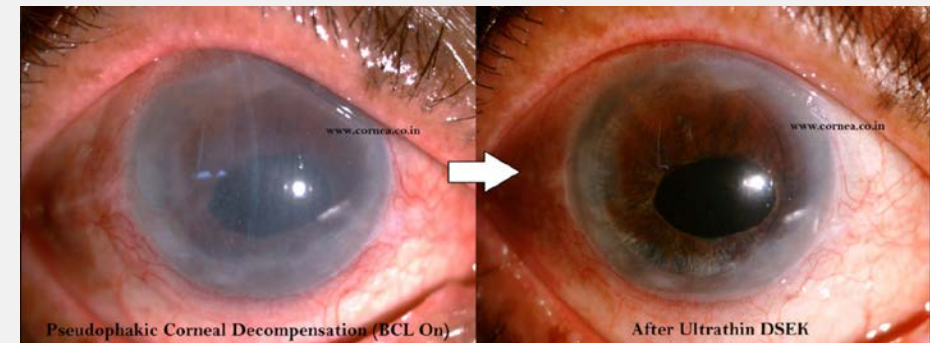
CONCLUSION/DISCUSSION

- Comparing staged vs. combined surgical approaches to IOL exchange and EK:
 - **Staged surgical approach had better CDVA outcomes 1 to 2 months postoperative****
 - No difference in long-term CDVA outcomes 6 to 9 months postoperative
 - No difference in primary graft failure or graft detachment

- **Limitations:** retrospective study, single institution

- **Strengths:** 75 eyes

- **Significance:** Staged surgical approach to IOL exchange and EK may lead to better *short-term visual outcomes* compared to combined surgical approach



** from the second surgery (if staged)

REFERENCES

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