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# THE RISK OF ALLOGRAFT IMMUNOLOGIC REJECTION AFTER ULTRATHIN DSAEK

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# Financial Disclosure

**Massimo Busin Has Received  
Travel Expenses and Royalties  
From Moria Antony, France  
(L,P)**

**Silvana Madi, Paolo Santorum  
and Cataldo Russo Have No  
Financial Interest to Disclose.**

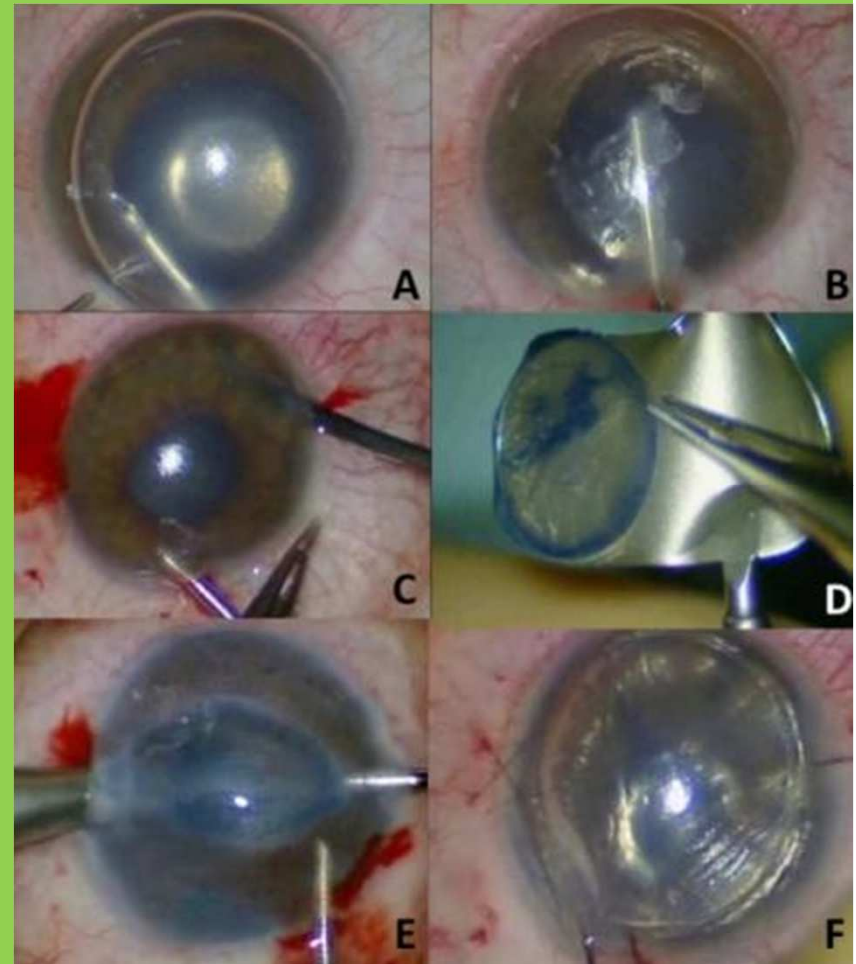
# SUBJECTS AND METHODS

- ✓ UT-DSAEK since 2009
- ✓ F/u  $\geq$  1 Year (Mean=15.7 Mos) = 162 Eyes
- ✓ Low-Risk Eyes                      n = 141
- ✓ **High-Risk Eyes**                      n = 21
  - Previous Graft                      n = 15
  - Corneal Vascularization      n = 6
- ✓ All Procedures Performed by the Same Surgeon (M.B)
- ✓ **Outcomes Measures:**
  - ✓ Rejection Rate
  - ✓ Rejection Probability

# SURGICAL TECHNIQUE

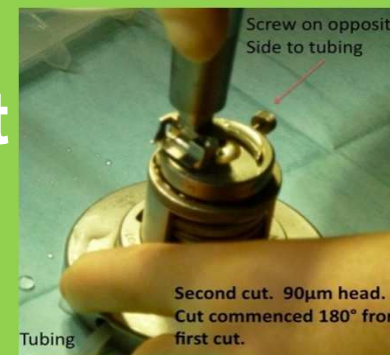
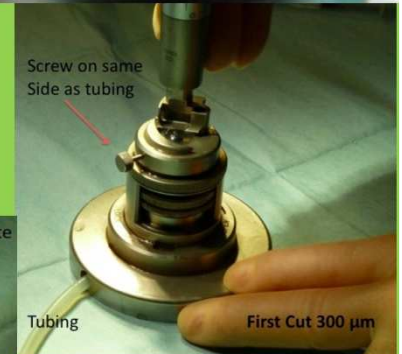
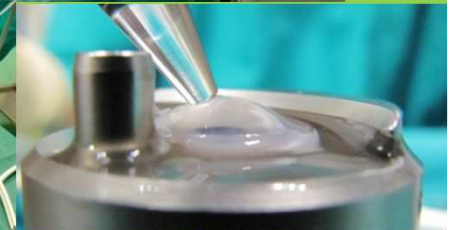
UT-DSAEK as per  
Standard DSAEK  
Except for:

- ✓ Donor Tissue Preparation
- ✓ Graft Delivery with Modified Busin Glide



# DONOR TISSUE PREPARATION

- ✓ Bottle at 120 cm ( Pressure  $\pm 80$ -90 mm Hg)
- ✓ Clamp at 50 cm to Close System
- ✓ 3-Piece Artificial Anterior Chamber
- ✓ Intraoperative Pachymetry
- ✓ First Cut with 300  $\mu\text{m}$  Microkeratome Head
- ✓ Move Dove Tail 180°, Repeat Pachymetry and 2<sup>nd</sup> Cut from Opposite Direction



# POSTOPERATIVE TREATMENT

## Topical Dexamethasone 0.1%

- Tapered off over a 5-month Period  
(from 2-Hourly to qd)
- qd Lifelong  
(unless Contraindicated)

**For Eyes at High Risk 1.0-1.5 mg/Kg  
Prednisone p.o. Tapered off over a  
2-month Period**



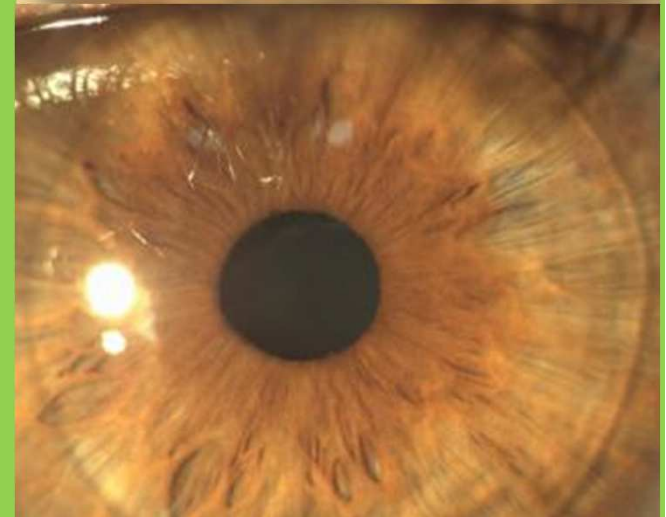
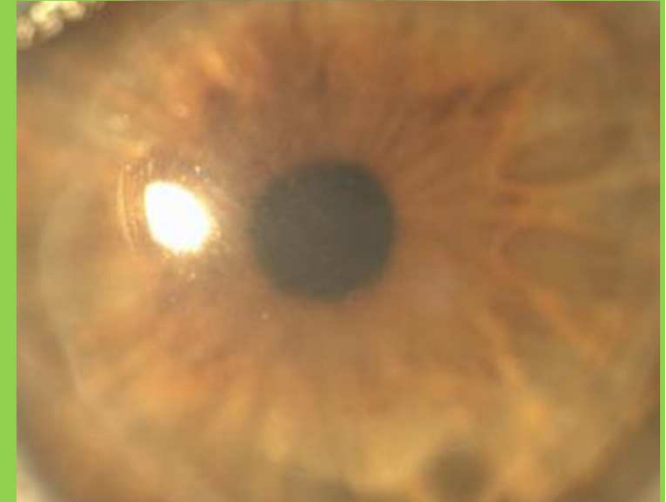
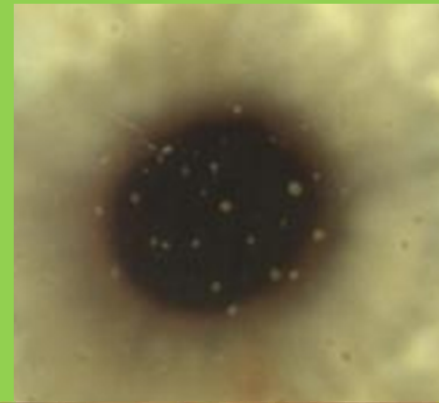
# RESULTS

✓ Endothelial Rejection in  
4/162 Eyes (2.47%)

**Low Risk n=3/142 (2.1%)**

**High Risk n=1/21 (4.8%)**

✓ All Cases Resolved  
with Steroidal  
Treatment !!!



# RESULTS

**Kaplan-Meier  
Probability of  
Rejection Episode  
1 year = 2.5%  
2 years = 2.5%**





# DSAEK/UT-DSAEK/DMEK

## Cumulative Probability (K-M)

	DSAEK*	UT	DMEK
1 Year	6%	2.5%	1%
2 Years	10%	2.5%	1%

\*Fuchs Indications Only

# CONCLUSION

Immunologic Rejection  
After UT-DSAEK Is

**Very Rare**

Even In Eyes At High Risk  
Because of Previous  
Keratoplasty and/or  
Corneal Neovascularization