

“TIPS and TRICKS” nella preparazione di UT-DSA EK

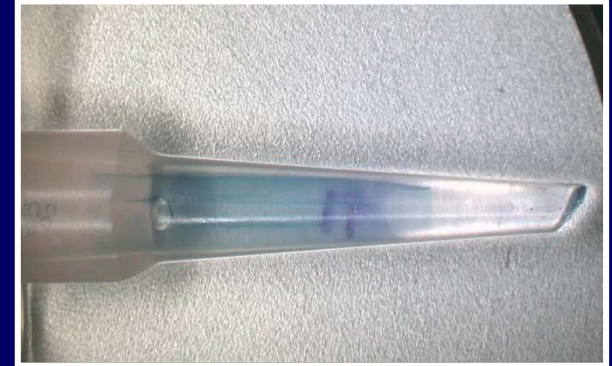
Alessandro Ruzza, Mattia Baruzzo, Elisa Favaro,
Andrea Grassetto, Antonella Franch

XXI Congresso SITRAC
16-18 Settembre 2017, Milano

TESSUTI DISTRIBUITI

■ DMEK

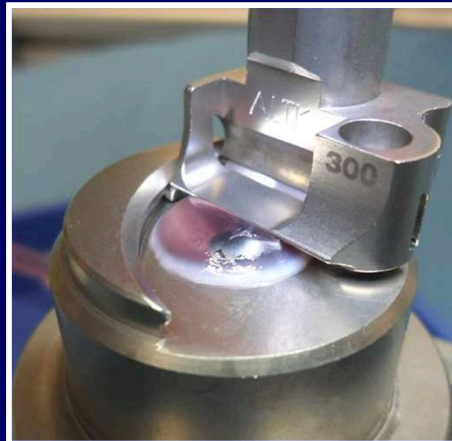
- 2014: 44
- 2015: 140
- 2016: 250



■ (UT) DSAEK

- 2014: 574
- 2015: 716
- 2016: 791

➤ 61 pre-loaded

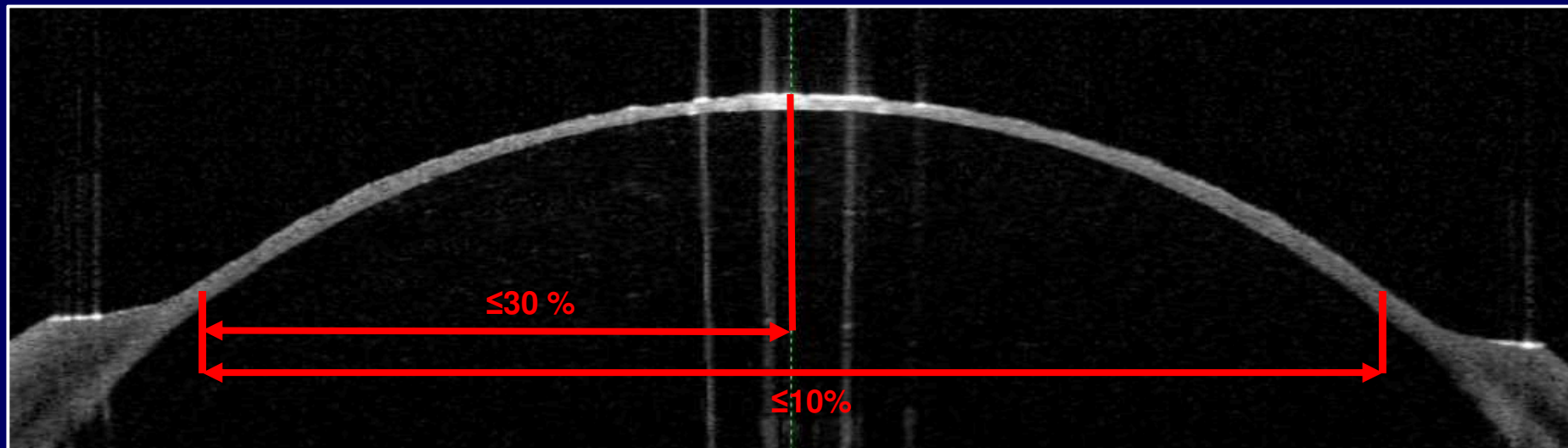


QUALITY PARAMITERS

- ECD and cells viability
- Diameter
- Thickness:
 - Central thickness
 - DSAEK < 200 μm
 - UT < 100 μm
 - **Regularity** (center vs periphery)

■ POSTERIOR THICKNESS

- 2011: $151 \pm 21 \mu\text{m}$
- 2016: $95,4 \pm 22 \mu\text{m}$



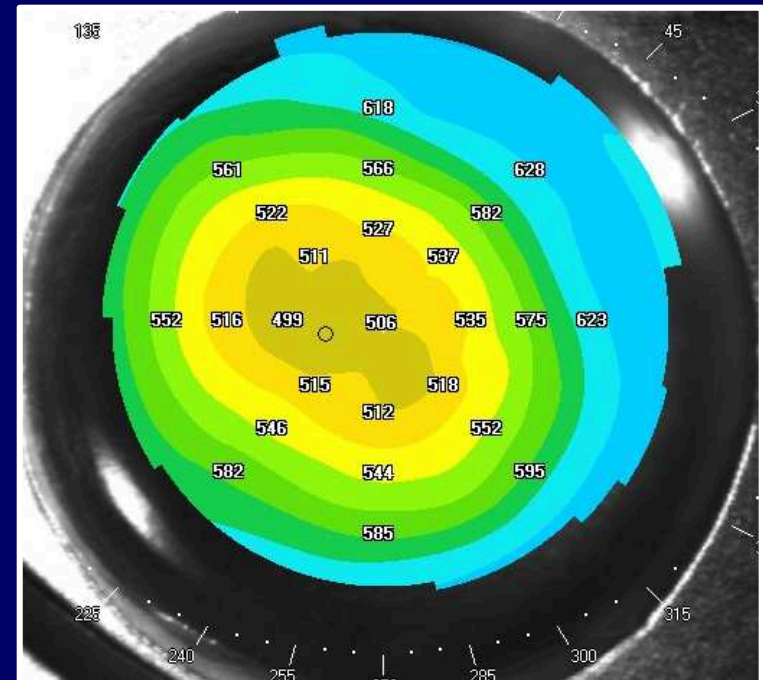
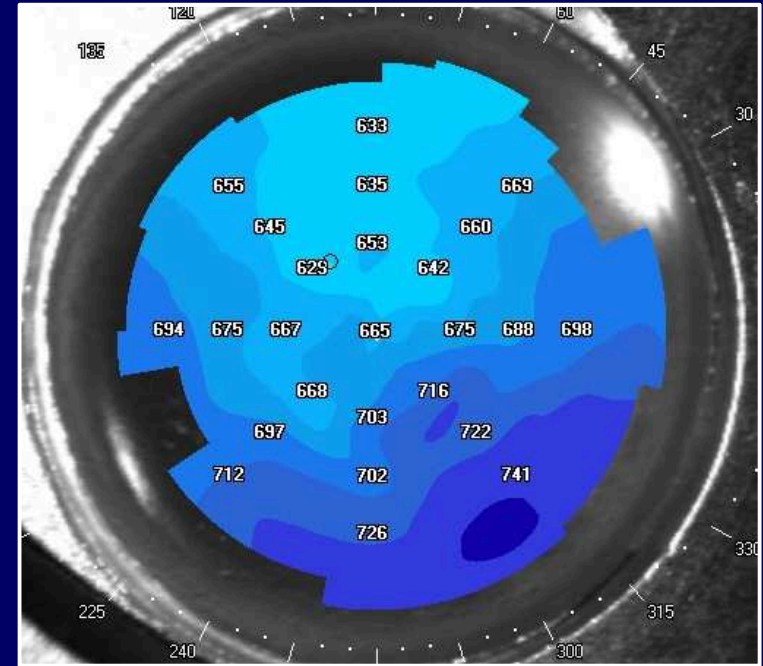
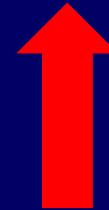
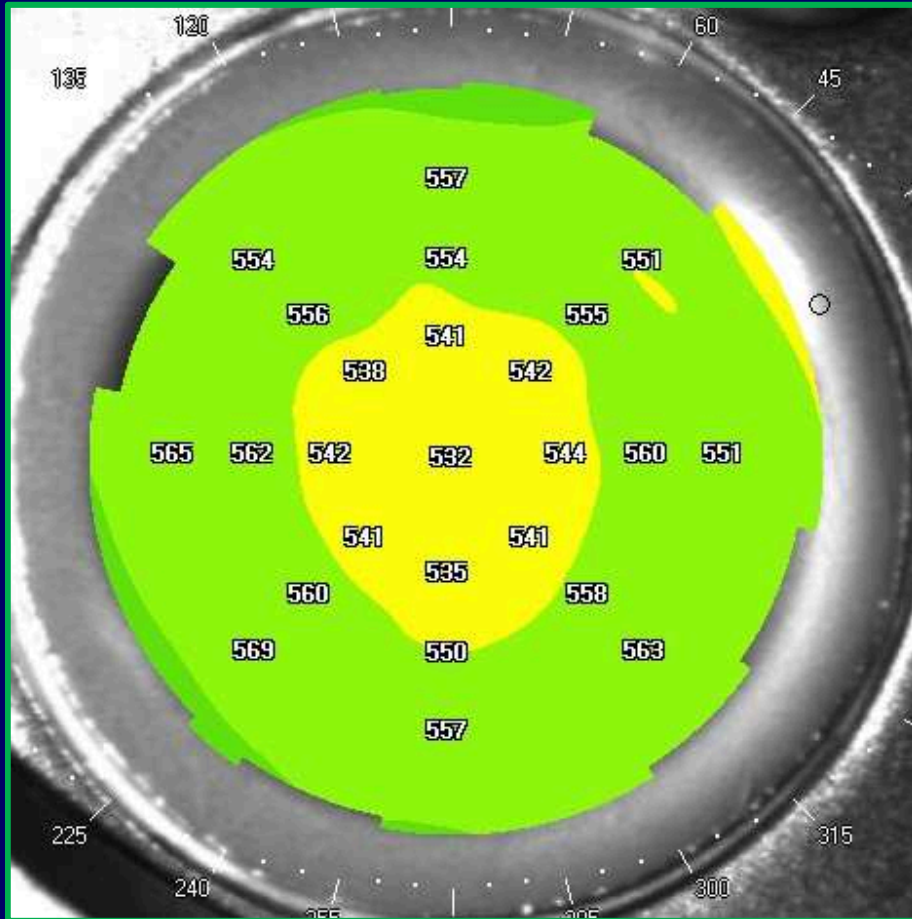
VARIABILITIES

- Microkeratome HEADS
- Intra-chamber pressure
- Cut speed
- **CORNEAL THICKNESS**
 - 48h in MEM+DEXTRAN

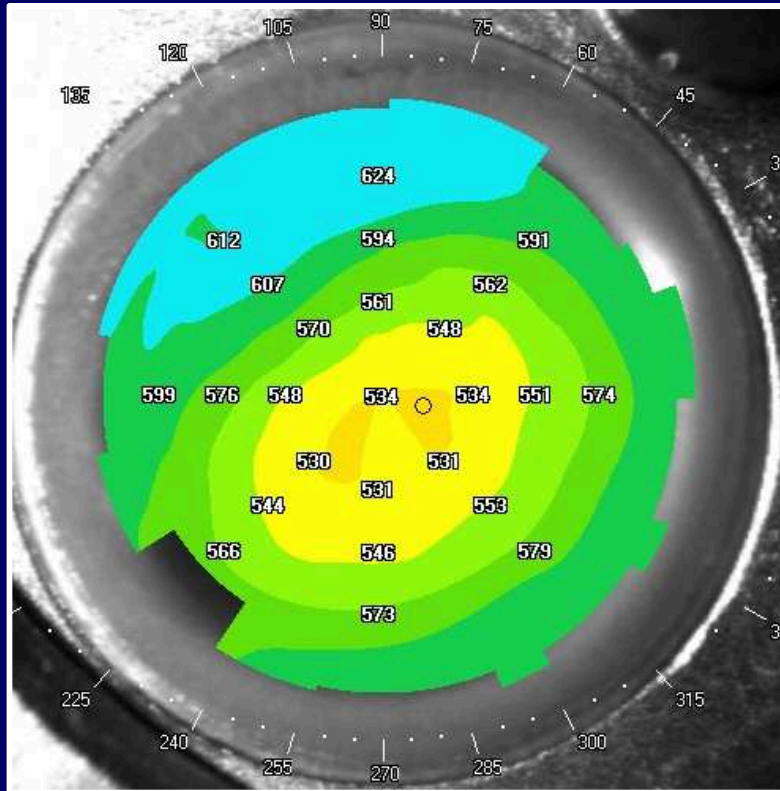


THICKNESS

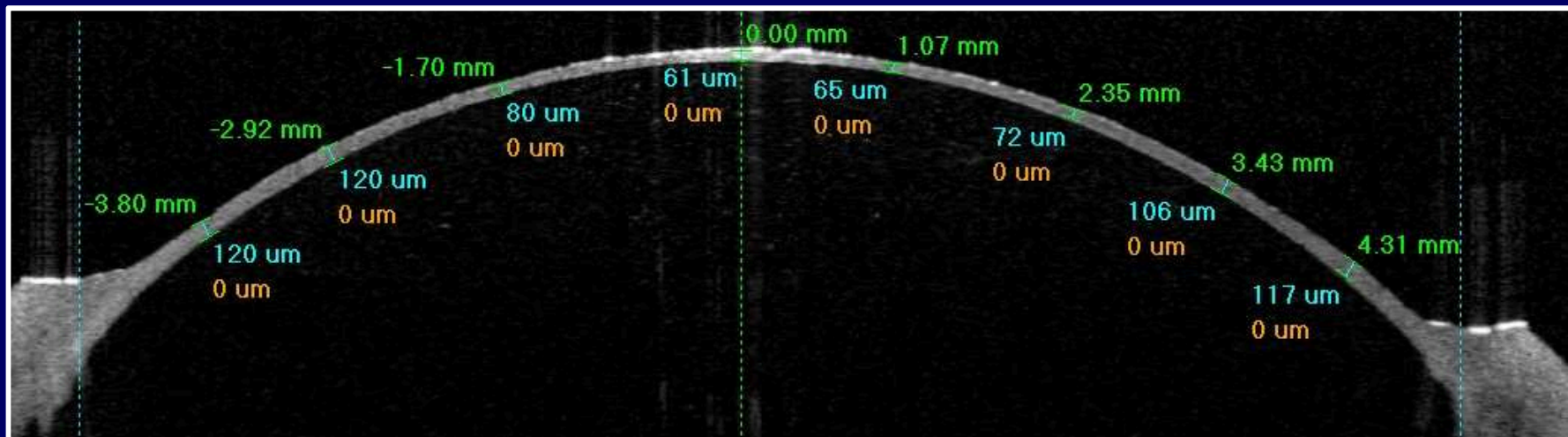
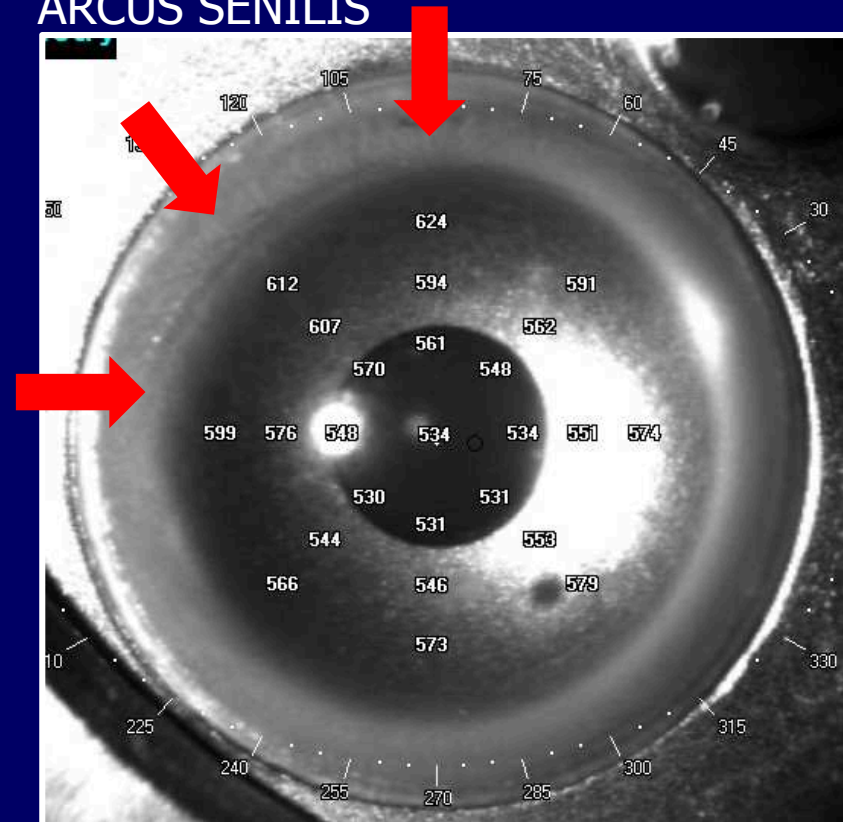
Pachymetry: INITIAL CORNEAL THICKNESS



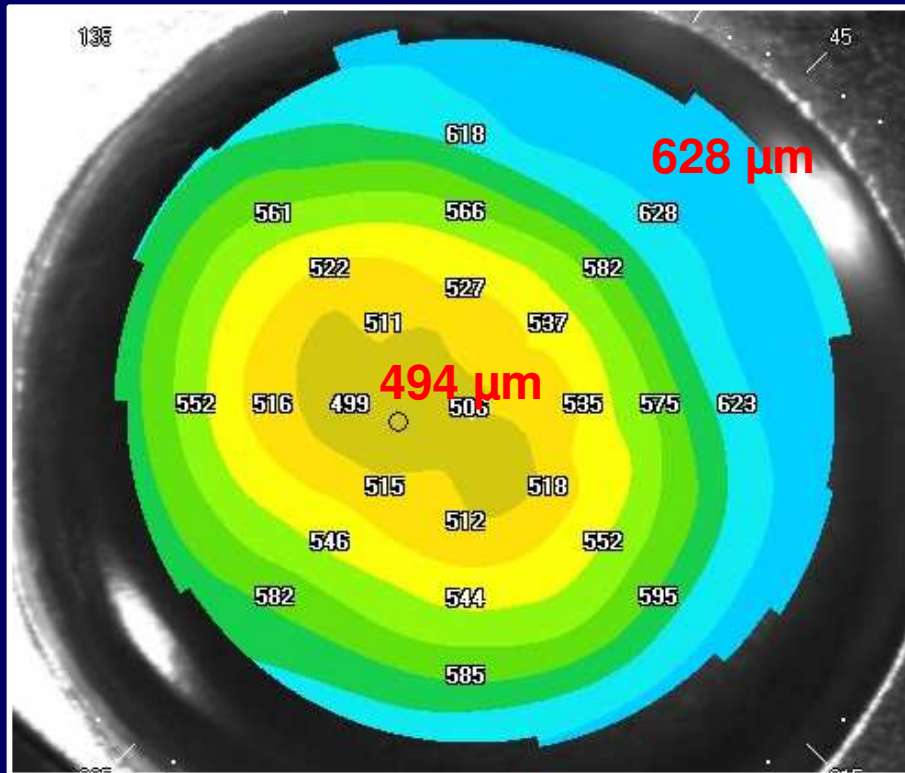
Pachymetry: INITIAL THICKNESS



ARCUS SENILIS



Pachymetry: INITIAL THICKNESS



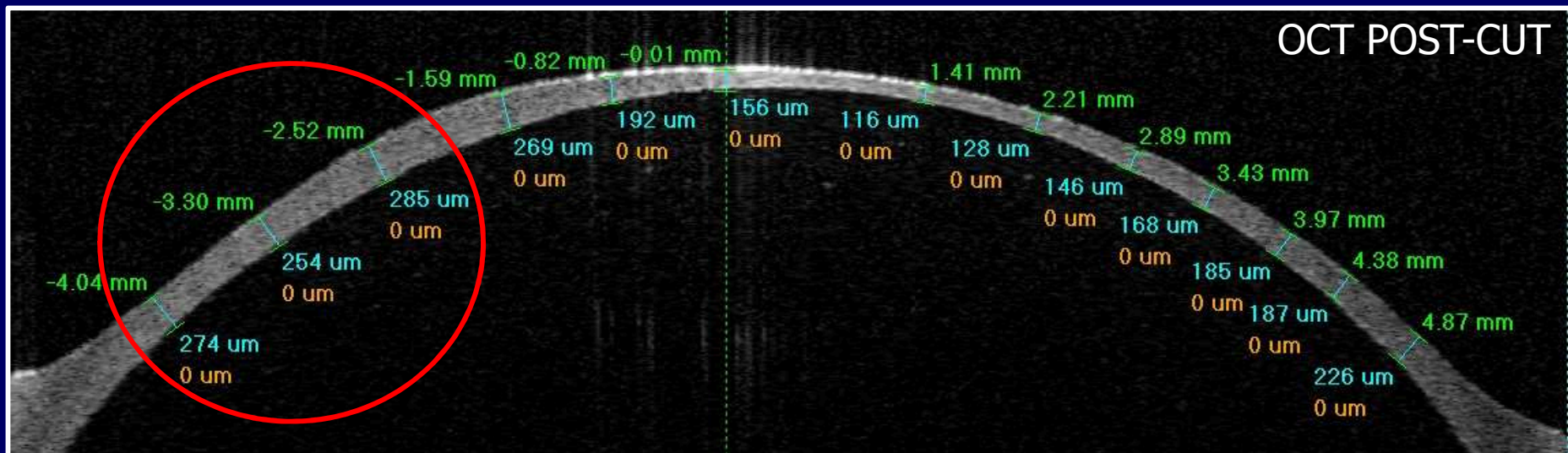
Difference (Δ): 134 μm

350 μm HEAD

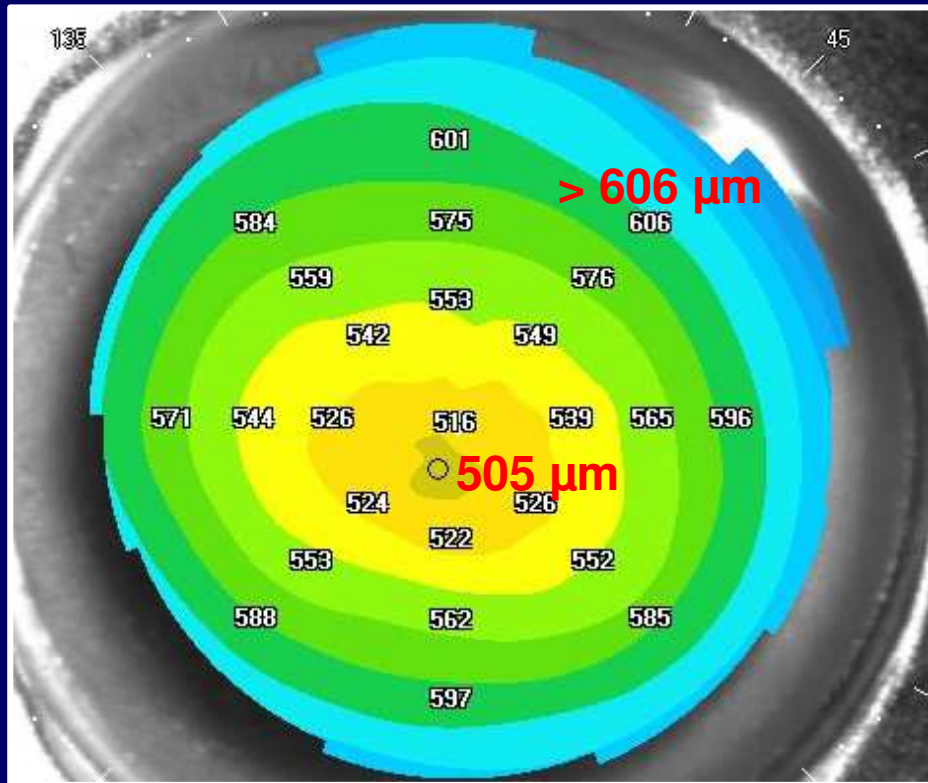
- Central: 14 μm
- Periphery: 148 μm

300 μm HEAD

- Central: 114 μm
- Periphery: 250 μm



Pachymetry: INITIAL THICKNESS



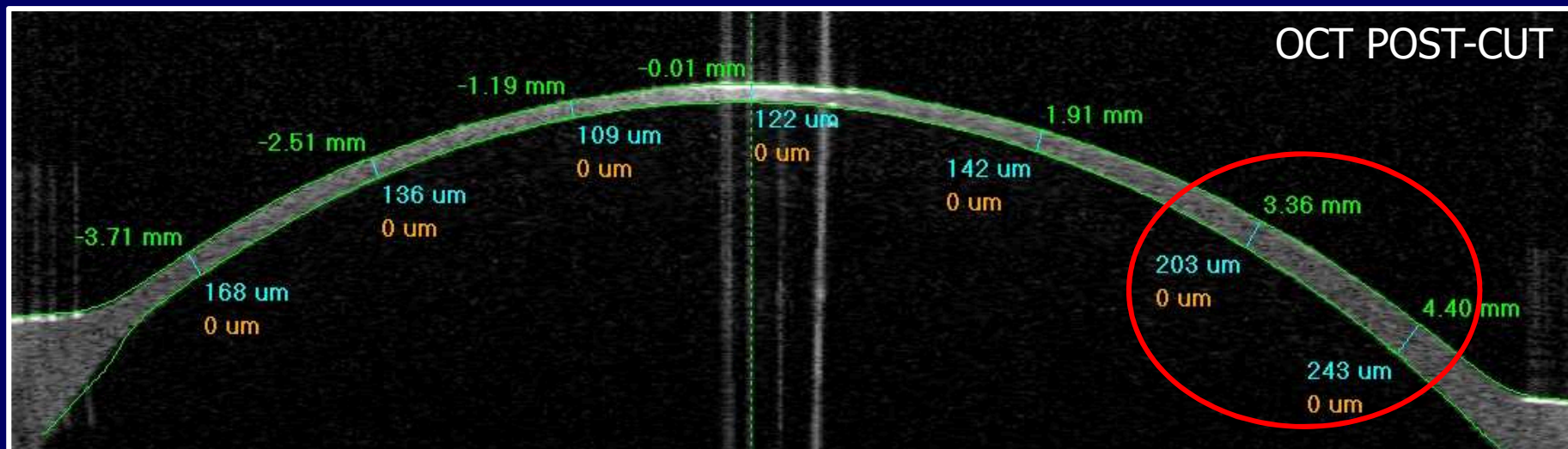
Difference (Δ): 100 μm

350 μm HEAD

- Central: 25 μm
- Periphery: 126 μm

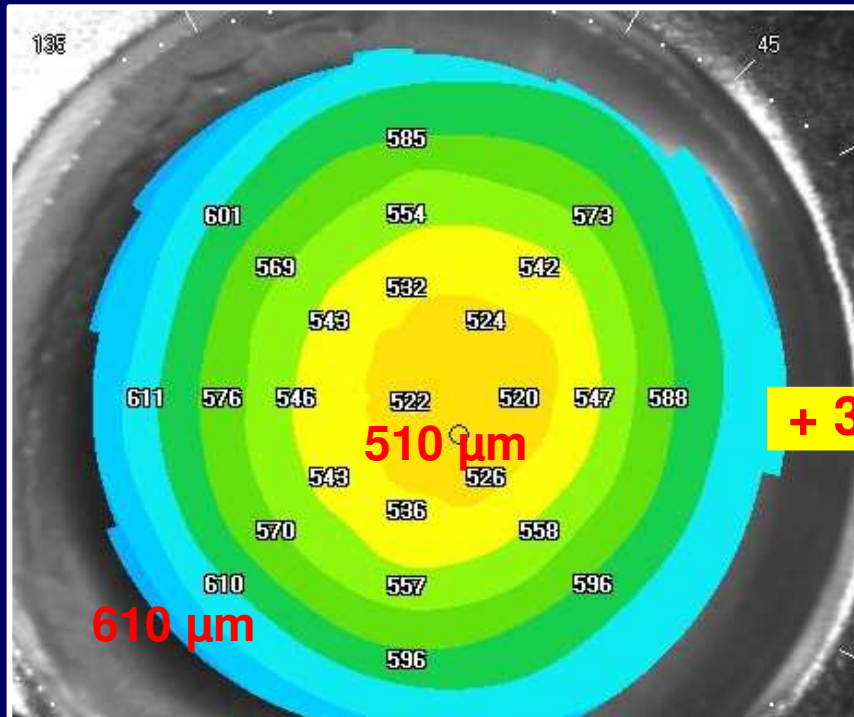
300 μm HEAD

- Central: 125 μm
- Periphery: 226 μm



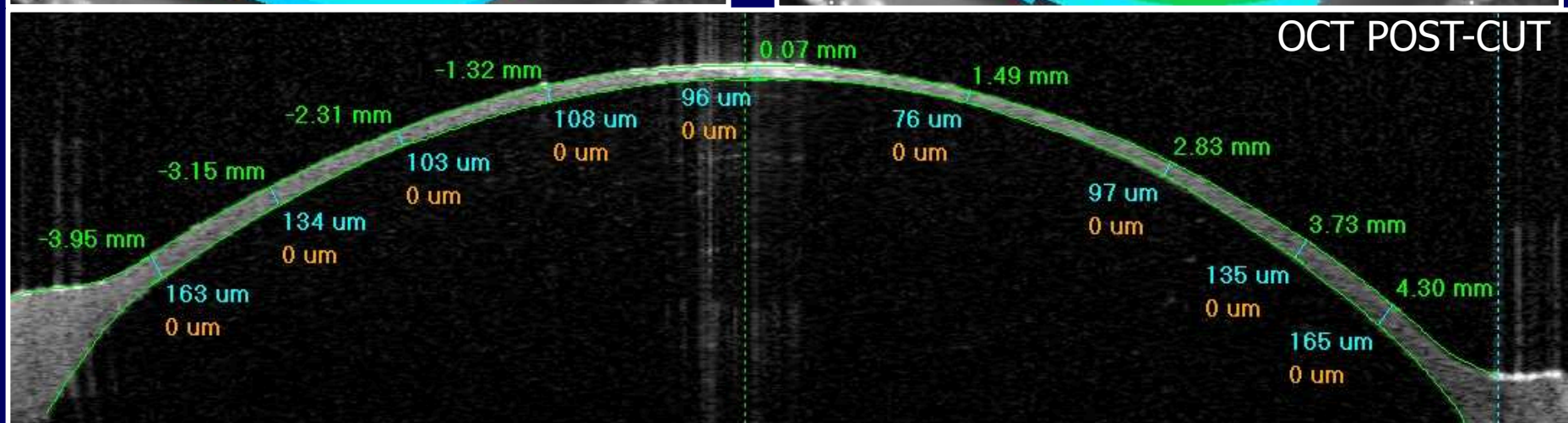
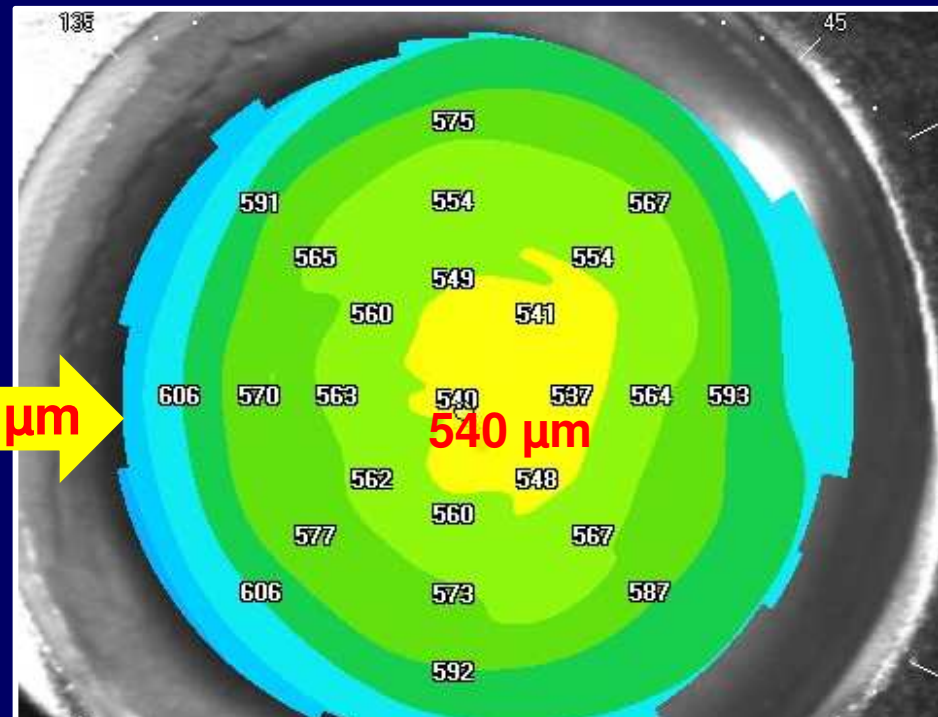
IDRATATION

Pachymetry: INITIAL THICKNESS

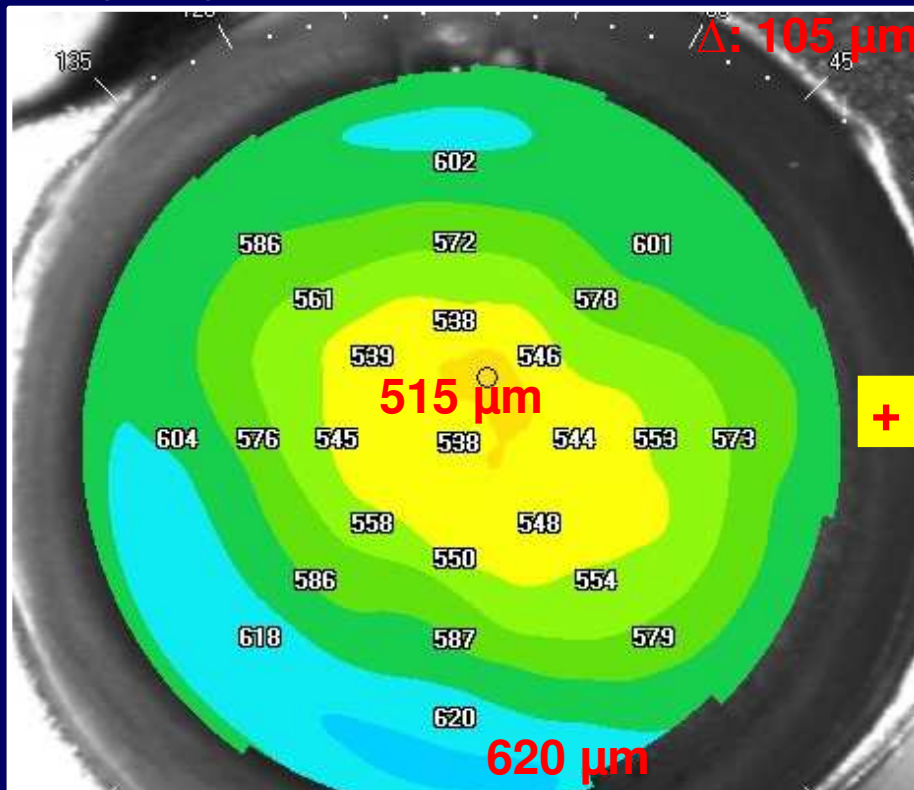


+ 30 μm

After IDRATATION

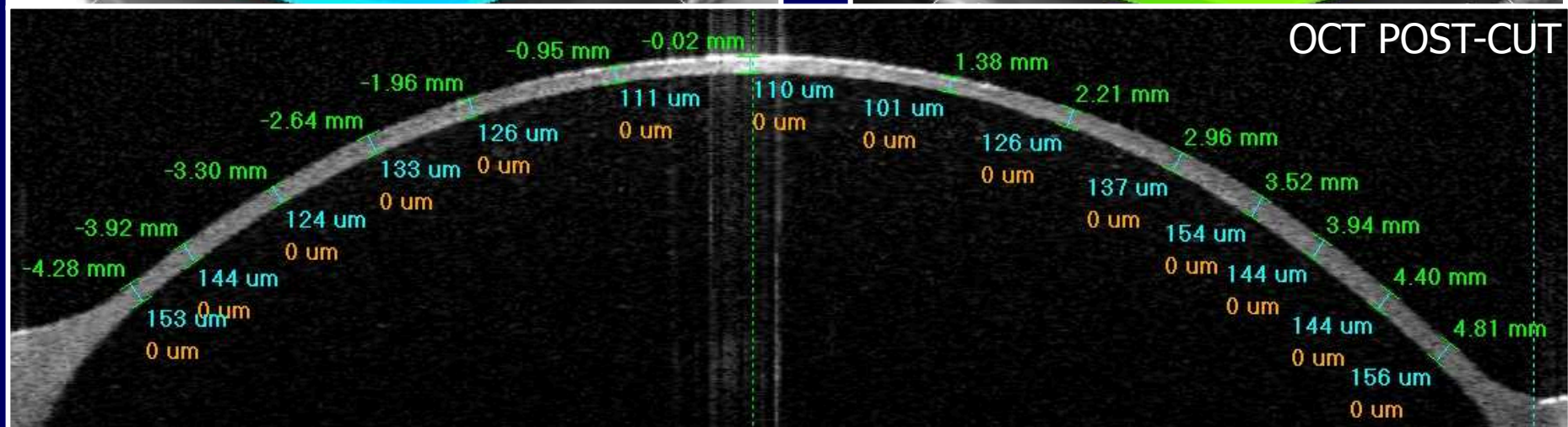
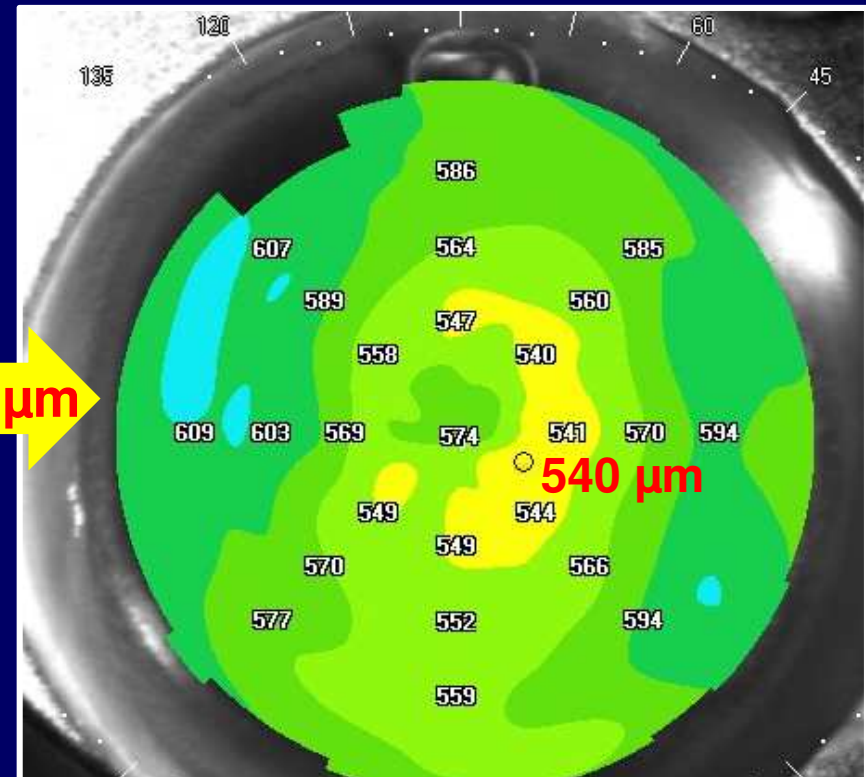


Pachymetry: INITIAL THICKNESS



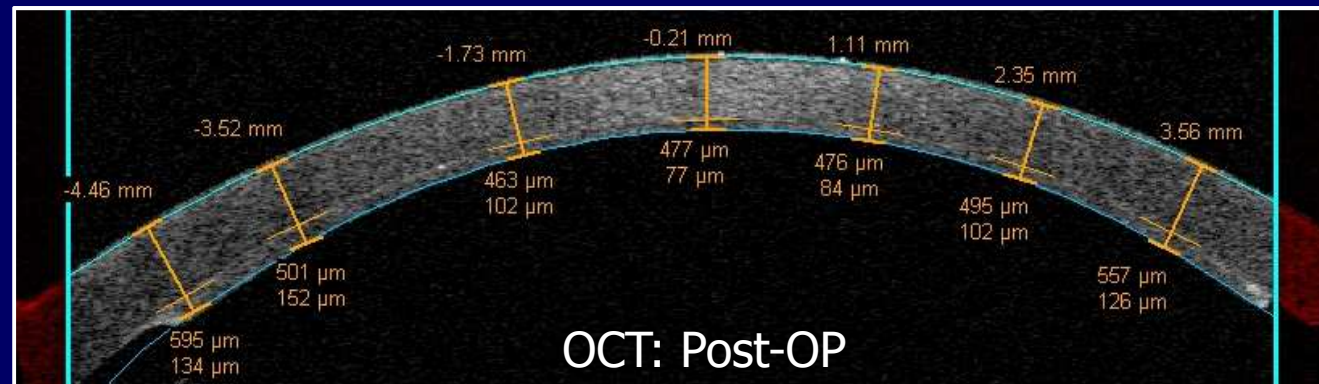
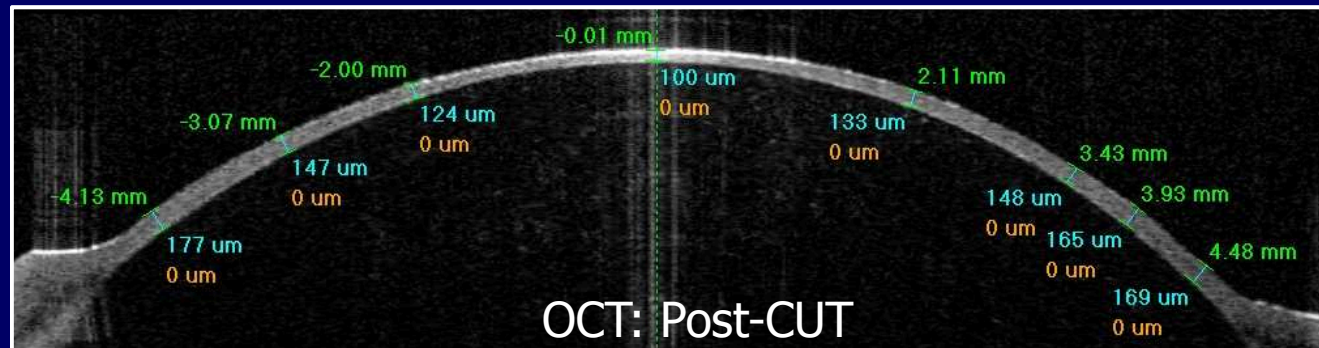
+ 25 μm

After IDRATATION



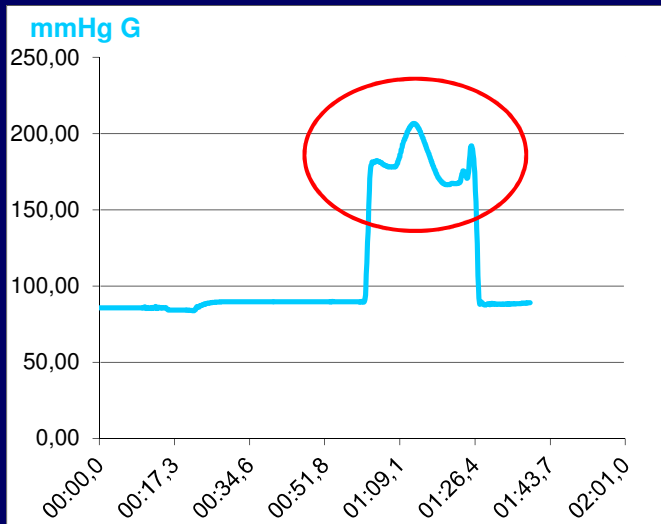
POST SURGERY CONTROLES

n=13	POST-CUT (μm)
Average $\pm$ ST dev.	140 ± 26

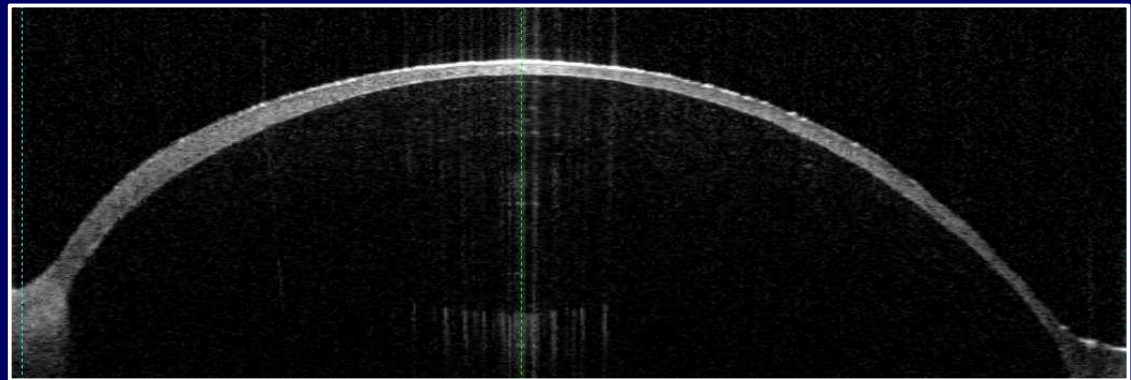


INTRA-CHAMBER PRESSURE

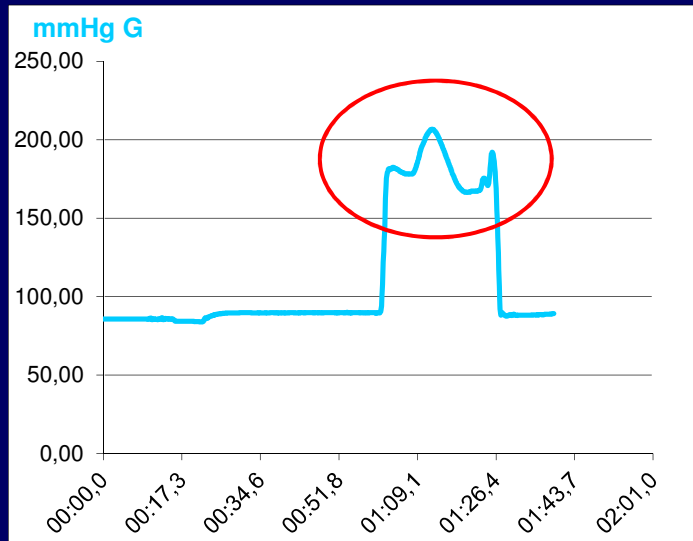
- Chiusura del deflussore = aumento di pressione
 - Maggiore quantità di stroma asportato
 - Ampio diametro
 - Taglio regolare
 - Variabilità della pressione



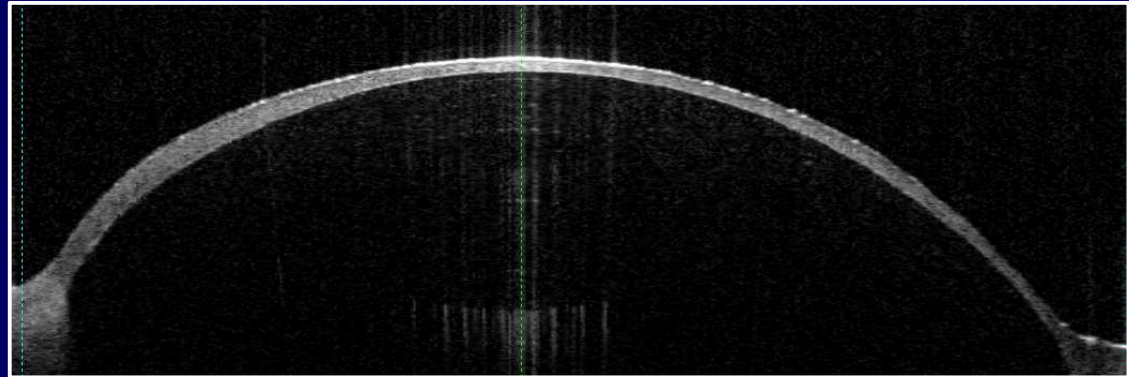
CLOSE SYSTEM
Intra-chamber pressure variation



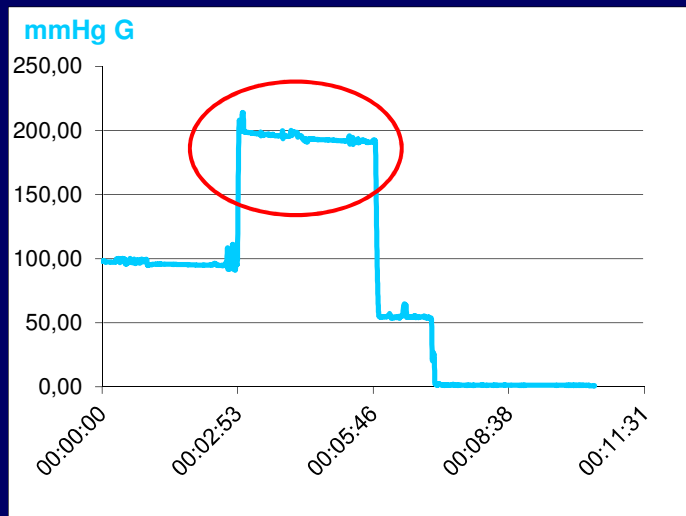
INTRA-CHAMBER PRESSURE



CLOSE SYSTEM
Intra-chamber pressure variation

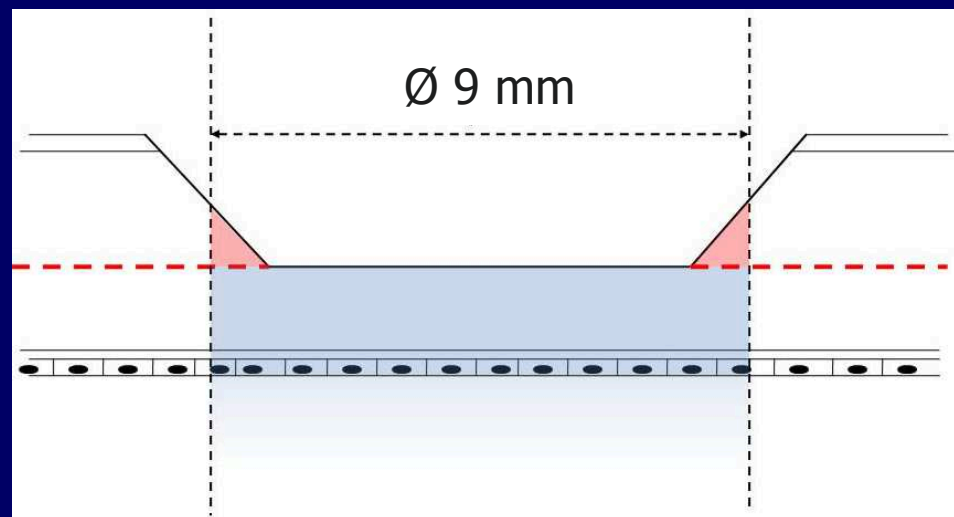
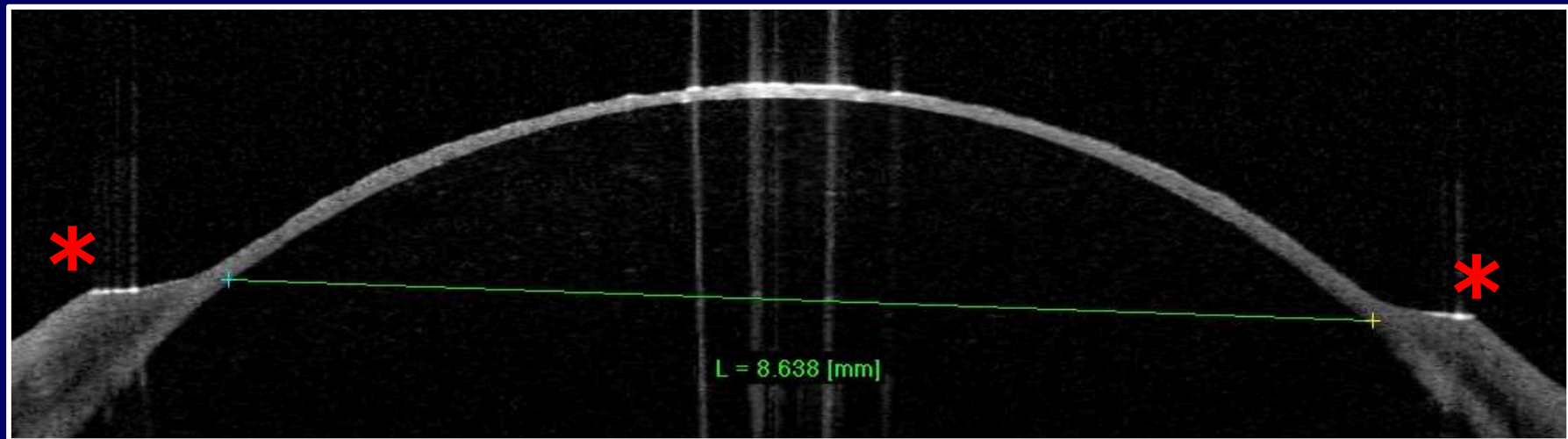


■ Automated ACP (Artificial Chamber Pressure) system



DIAMETER

- Diametro del lenticolo POSTERIORE
 - Sottominare se < 9 mm

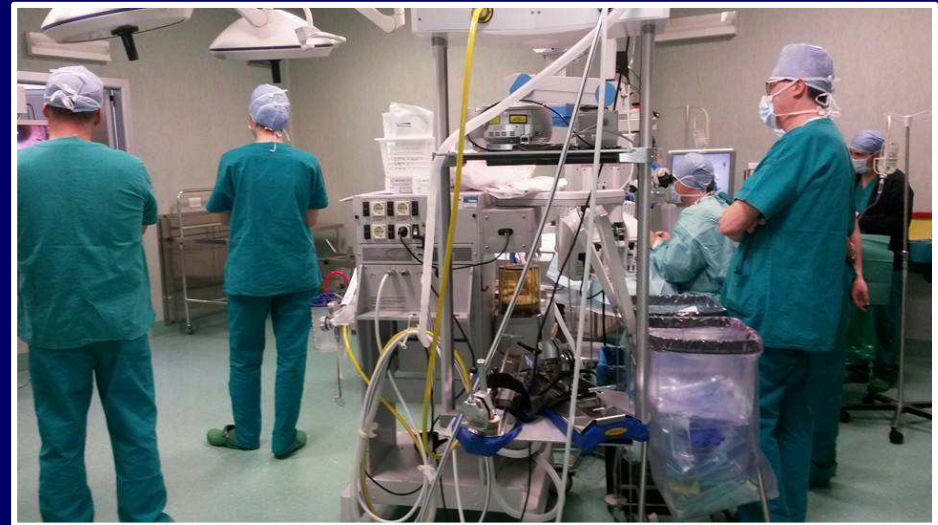
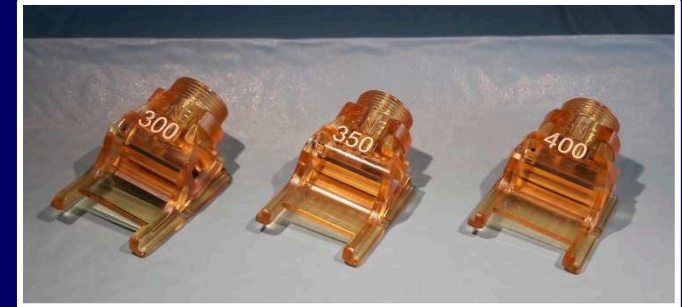


DIAMETER



CONCLUSIONI

- Migliorare la qualità dei lenticoli per (UT) DSAEK
- Nuovi dispositivi dedicati
- Esperienza del chirurgo
- Procedura
STANDARDIZZATA e
VALIDATA



THANK YOU FOR YOUR ATTENTION



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