ALCON WAVELIGHT
FS200 FEMTOSECOND LASER

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FS200 LASER

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ALCON WAVELIGHT FS 200

- Improved ergonomics
- Clever aplanation
- Faster flap creation
- Large(r) Flaps
- Larger (re)centered Flaps
- Customized Flaps
- Smooth interface
- Less OBL
- Less Sub conj Hemorrhage
- Better network integration

200 KhZ - 350 fs - 1microJ/p

ERGONOMICS

1st movable joystick:
- cone shifting /
docking

2nd Joystick:
- bed / head
positionning

FASTEST FEMTO- LASER

- WaveLight® FS200: “The fastest Femtosecond laser”
  - Shortest time (minimum duration = 6 seconds (~ 8 mm flap)

FLAT APLANATION /
RASTER PULSE PATTERN

PRECISION CONTROL

- DAILY SUCCION / ENERGY calibration

- Beam Control Check: each
cone is calibrated before use
SPOTS / LINE SEPARATION

≈1 Million spots for flap $\phi = 9$ mm

BCC = Beam Control Check

- Calibration: each procedure
- Compensation for local &“hardware” fluctuations

SUCCION CONE

ERGONOMICS

DOCKING system
Lunar & Command Module Docking

FS 200 laser: app. cone and cone docking

APOLLO 11: «Docking»

DOUBLE SUCCION

OBL (OPAQUE BUBBLE LAYER) PREVENTION

CREATION OF A CANAL
- BETTER EYE TRACKING
- BETTER INTERFACE HOMOGENEITY
- EASIER INTERFACE CREATION

Stroma (flap) 
CORNEAL TISSUE
Available FS treatments:
- Sub-Bowman Keratomileusis
- Full and partial thickness trephinations
- Intracorneal ring segments
- Pockets creation (KAMRA/ Acufocus – inlays)

VERSATILITY

TOTAL APLANATION WINDOW: 13 mm

ADJUSTABLE Centration WITHIN 11 mm ZONE

TRANSLATION : no cropping = no diameter reduction
**FLAP DIMENSIONS / CENTERING**

- Flap **dimension**: up to 10mm! (13 mm aplanation)
- Flap **hinge**: adjustable position (0° à 360°)
- Flap **perimeter**: elliptical

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**FLAP CUSTOMIZATION**

- Custom Flap

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**FLAP CUSTOMIZATION: HINGE LOCATION**
The fixation ring uses peripheral spacers to minimize sclera deformation:

- Less IOP rise (60/100 mmHg)
- Less sub conjonctival hemorrhage

**CUSTOM FLAPS: ELLIPTICAL / HINGE POSITION**
- Efficient Spots
- Optimisation of interface dimensions

**BETTER INTEGRATION OF THE ABLATION PROFILE**
CIRCULAR FLAP

CUSTOM ELLIPTICAL FLAP

9.5 x 8 mm
Hinge positioned along steep axis

CUSTOMIZING FLAPS

CUSTOM ELLIPTICAL FLAP 9.5 x 8.2 mm
A.T.R MYOPIC ASTIGMATISM: -3 (-1.50x80°) TEMPORAL HINGE

TEMPORAL

NASAL
CUSTOM ELLIPTICAL FLAP: 9.5 x 8.5 mm
Mixed / Hyperopic Astigmatism +0.75 (-1.75 x 140°) OBLIQUE HINGE

More reproducible and ergonomic aplanation
Faster flap creation
Large(r) Flaps
Custom flaps
Larger (re)centered Flaps
Less OBL
Smoother interface
Less sub conj. hemorrhage
Versatility
Network integration

THANK YOU!

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