

**BAUSCH+LOMB** | **TECHNOLAS™**

# SUPRACOR

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# SUPRACOR

General information

- Correction of:

Far



Intermediate



Near



- Bilateral treatment possible
  - Enhanced depth of field and contrast

Comparison:

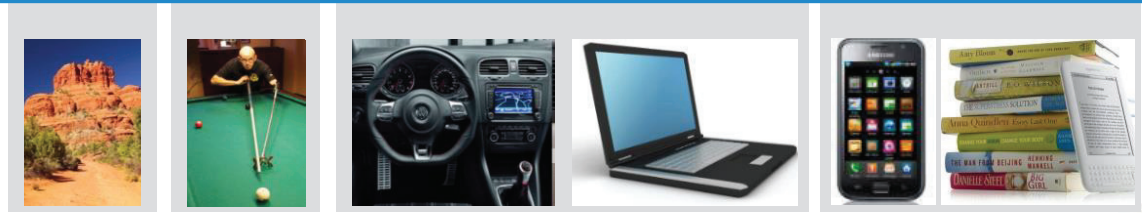
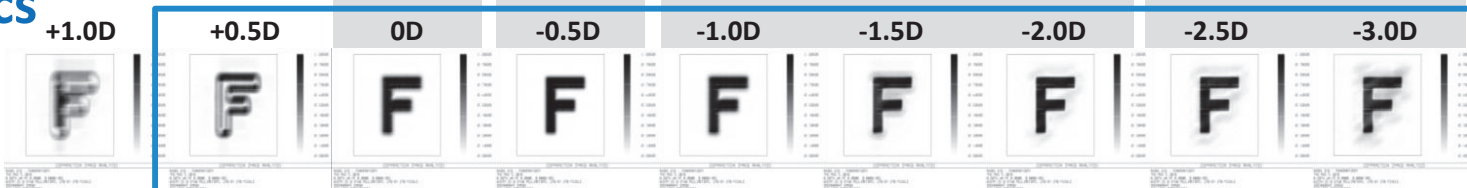
Normal Presbyopic Eye



Standard Bifocal



SUPRACOR  
Varifocal Optics

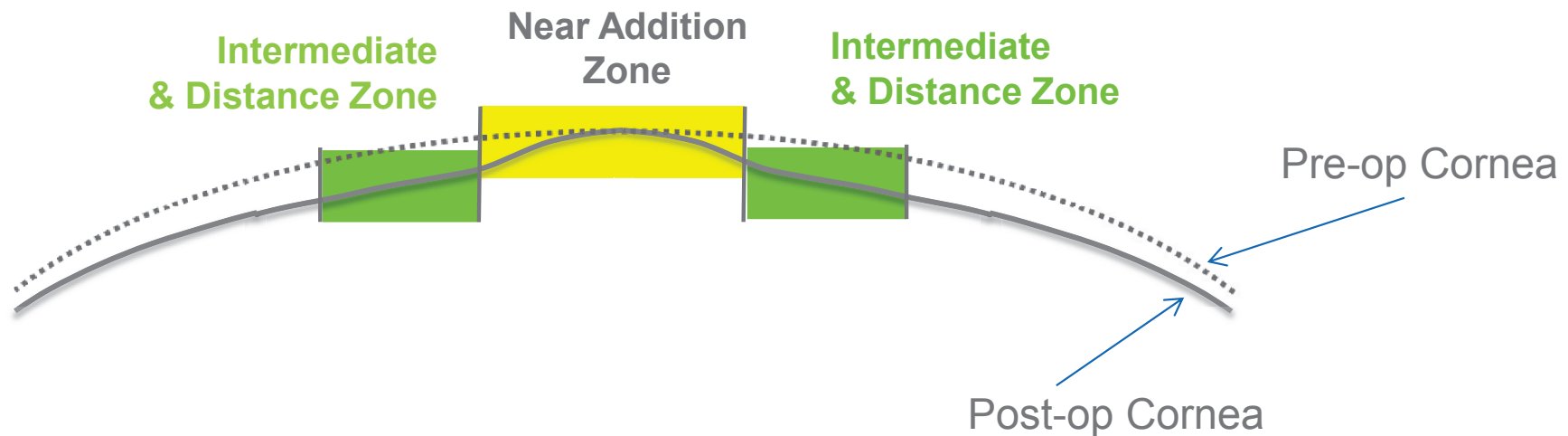


# SUPRACOR

Principle

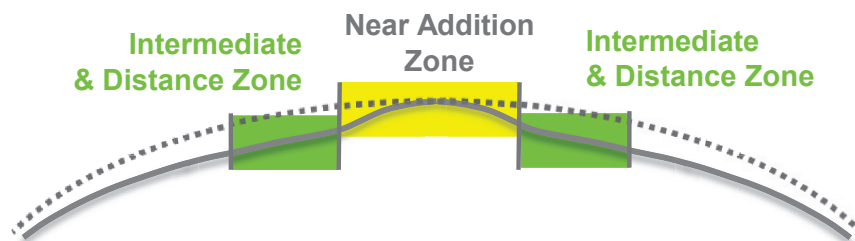
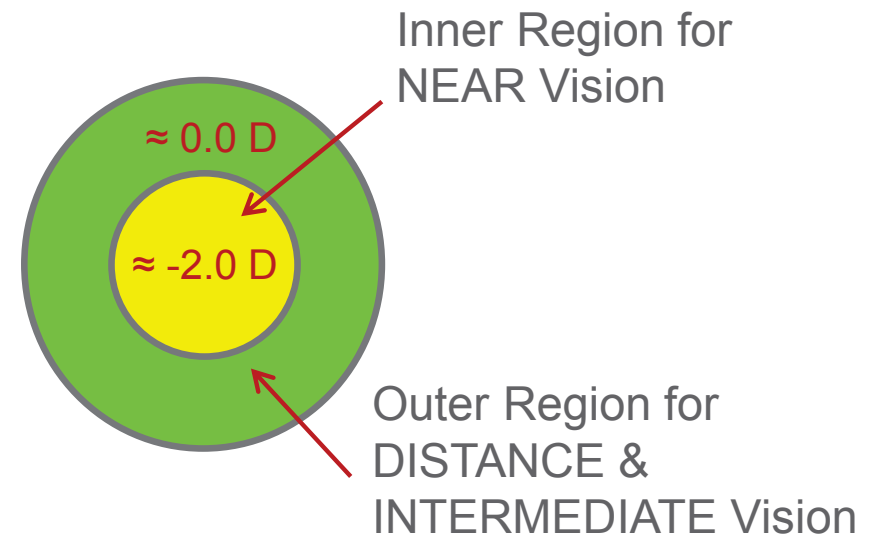
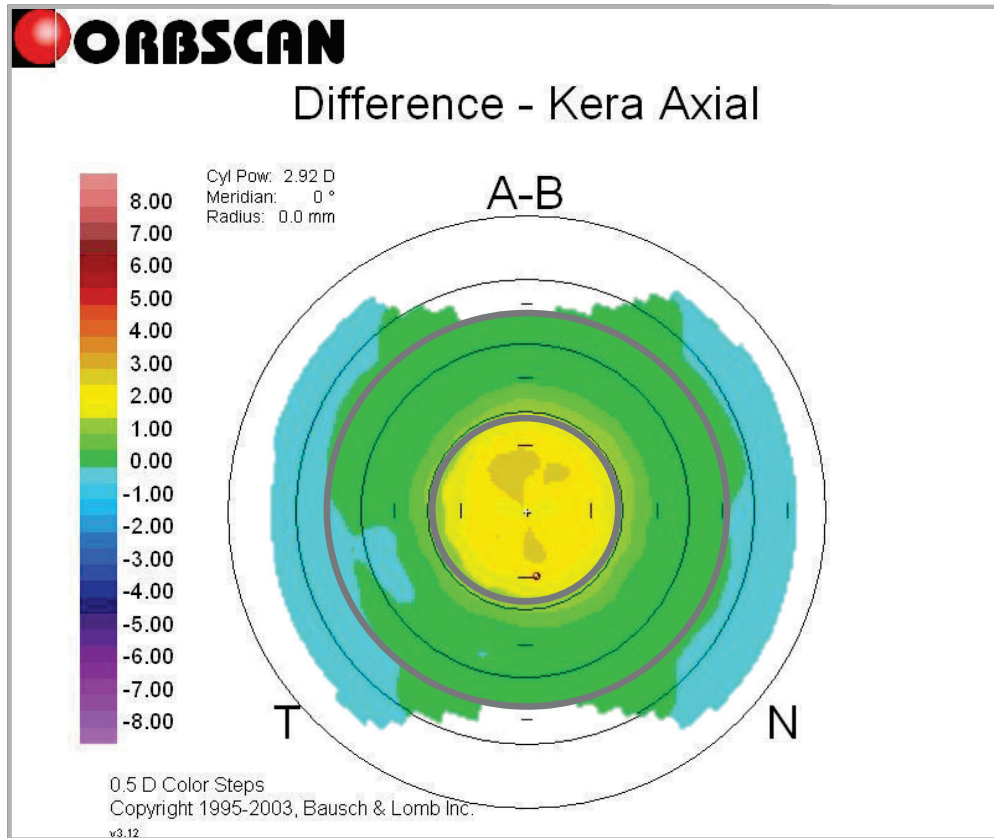
# SUPRACOR - Principle

- SUPRACOR enhances near vision by creating a 'bump' in the 3mm Near Addition Zone
- Distance Zone is left virtually untouched, with a smooth transition to create the Intermediate Zone.





# Corneal profile

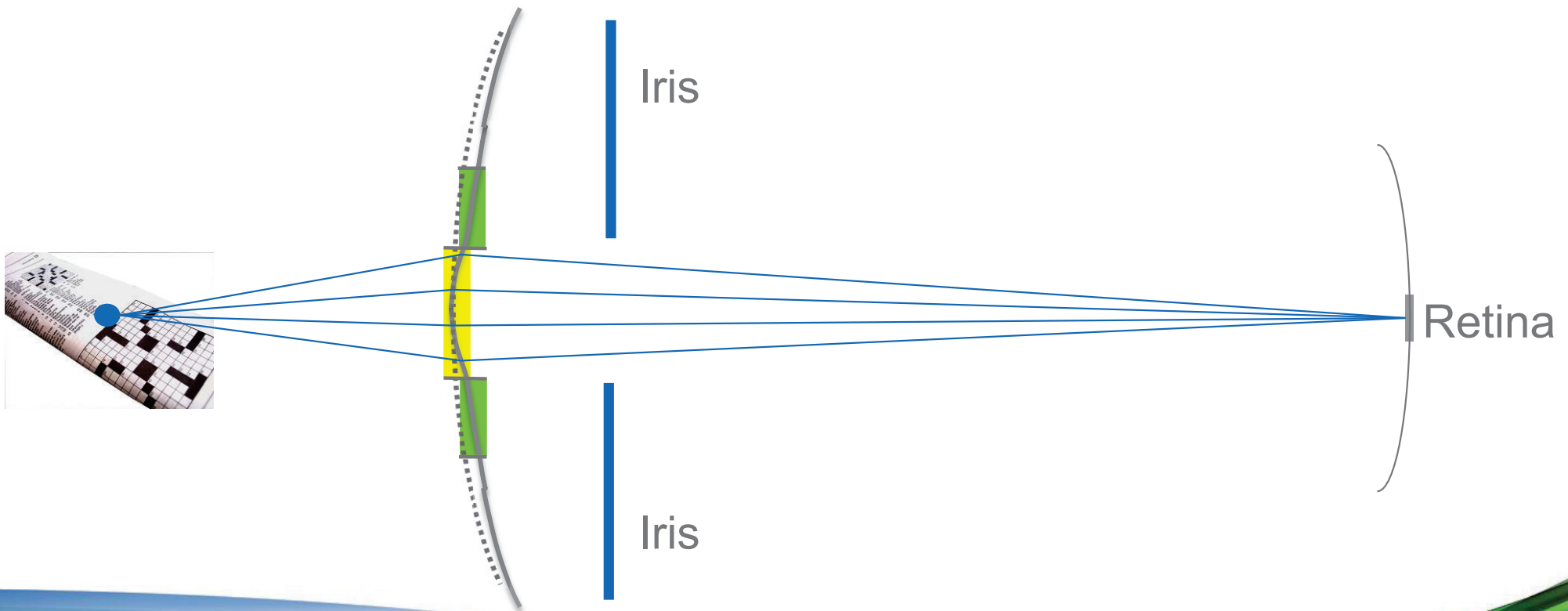




# Reading and near

Reading:

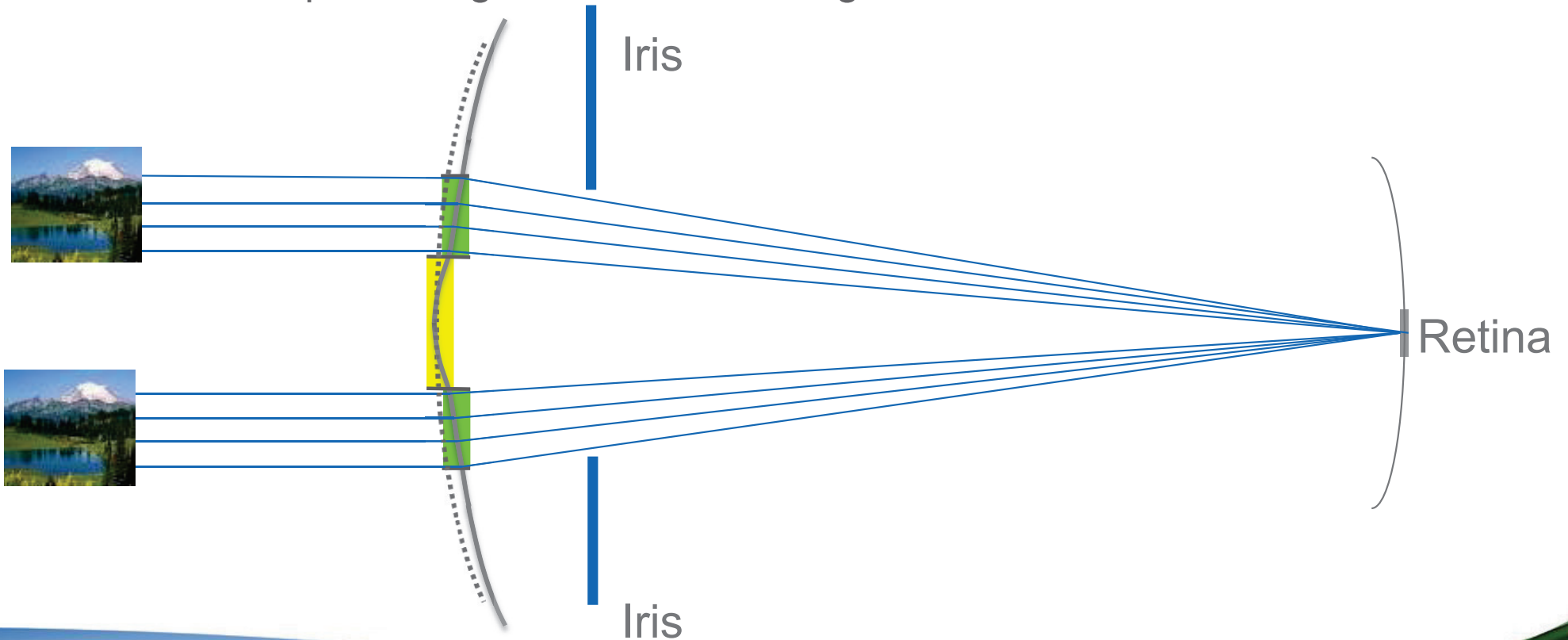
- The pupil contracts
- Light primarily passes central cornea (Near Addition Zone)
  - Focused on the retina.

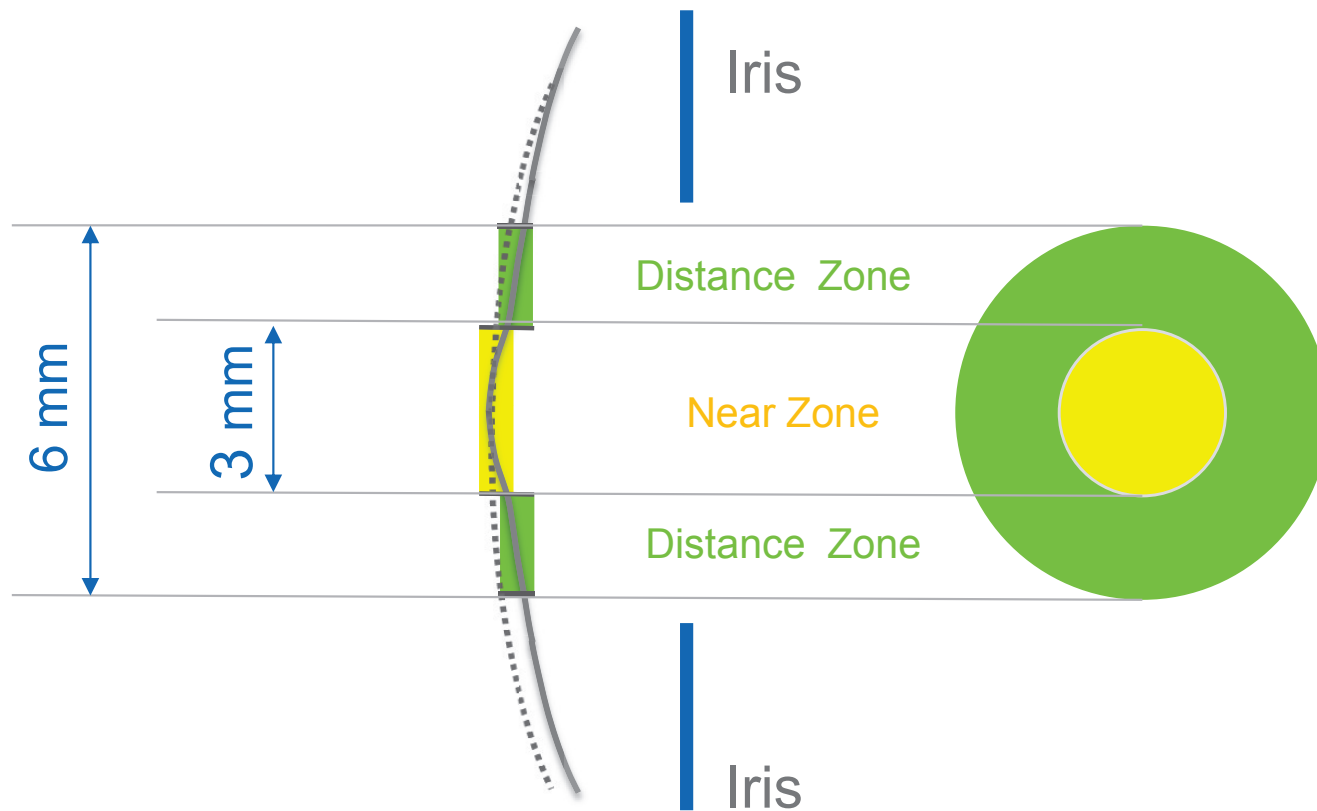


# Distance and intermediate

Distance:

- Iris opens
- Light passes through the outer part of the cornea
  - Focus parallel light on the retina → good distance vision.





300% more light passes through the distance zone than through the near zone when the iris is wide open for distance vision

- Slight impact on distance vision with SUPRACOR, since light passing through the near zone will not focus perfectly
- If iris is small, there will be more impact on distance vision
  - Improve distance vision in bright light by wearing sunglasses



- **Presbyopia cannot be cured**
  - Patients should not expect to see like a 20 year old again
  - Cannot get both: near AND distance uncorrected as good as best corrected

└───────────▶ COMPROMISE



# SUPRACOR

How to start with SUPRACOR?

- A detailed Anamnesis of patient is required:
  - Lifestyle
  - Refraction & Visual acuity for near and far
  - Eye health history
  - Inspection of the eye
    - Diseases
    - Cataract?!
  - The most important point are the **expectations of the patient** → detailed patient information about the possibilities of vision after Supracor treatment
  - **Start with easy hyperopic cases for the first time!**

- Starting Phase – **Bilateral Treatment Approach**
  - Be careful with treating Supracor on the dominant eye!
- Dominant eye:
  - SUPRACOR Mild (= „soft“ (~ 1.5 D) near addition)
  - **Target sphere:**  $\pm 0.00$  D / +0.25 D
- Non-Dominant eye:
  - SUPRACOR Regular (= „standard“ (~ 2 D) near addition)
  - **Target sphere:** -0.50 D / -0.75 D
- Optical Zone: 6.0 mm
- Minimum pupil size:
  - Measured with ORBSCAN2 > 2,9mm
  - Measured with ORBSCAN3 > 2,1mm



# SUPRACOR - Myopia

- Starting Phase – **Monolateral Treatment Approach**
- Dominant eye: **plano**

TECHNOLAS 217P	HSSM ZTC 2.1.0.3	TECHNOLAS TENO 317
TISSUE SAVING / ASPHERIC	ASPHERIC	PROSCAN
PERSONALIZED ADVANCED	PERSONALIZED	ZYPOTIX HD

- Non-Dominant eye:
  - SUPRACOR Regular (= „standard“ (~ 2 D) near addition)
  - **Target sphere:** -0.50D / -0.75D
- Optical Zone: 6.0mm
- Minimum pupil size:
  - Measured with ORBSCAN2 > 2,9mm
  - Measured with ORBSCAN3 > 2,1mm

# SUPRACOR

Clinical recommendations

- **Simulation test of decreased distance vision**
  - Give patient trial frame with best distance correction, and afterwards +0.50 D sphere bilateral to simulate potential blur (multifocality) - or only on non dominant eye if monolateral treatment
  - „This might be the distance vision after surgery“
  - If patient does not like distance vision => SUPRACOR might not be the right treatment solution for the patient!
  - Assess the near vision with +1.25 D bilateral addition on top of best distance correction (or +1.5 D only on non dominant eye if monolateral treatment planned) to identify the patient's expectations regarding near vision
  - If patient requests higher addition it means that the patient's expectations are too high and that SUPRACOR is probably not able to deliver 100% satisfaction to the patient

- **Alignment under laser**
  - Pupil Center or In-between Apex & Pupil Center (Like std. Hyperopic Lasik)
  - Always use 6.0mm Optical Zone (Standardization)
  - ACE eye tracker system using iris data from ZYWAVE
- **Postoperative care**
  - Like standard LASIK
  - SUPRACOR is usually performed in an elderly patient group therefore more artificial tears or punctual plugs could be required

# Clinical recommendations- Hyperopia

Start-Up inclusion criteria for hyperopic presbyopic patients

- Start with +1.0 D to +3.0 D MRSE
- Start with astigmatism < 2.0 D
- Start with mean K-readings at 41.0 D to 45.0 D
- Start with Flaps of 110  $\mu\text{m}$  to 120  $\mu\text{m}$ , diameter  $\geq$  9 mm
- Start with Angle Kappa < 10°
- Start with patients  $\geq$  47 years
- Near addition of +1.75 D minimum
- Maximal 0.75 D difference between cycloplegic and manifest refraction SE
- Both eyes with BCDVA  $\geq$  0.8
- Both eyes to be **treated with LASIK**, no previous surgery, clear medias
- General LASIK restrictions (pachymetry, keratoconus suspects, ...)
- Photopic pupil size measured with the ORBSCAN2 must be > 2.9 mm, measured with ORBSCAN3 > 2.1mm
- Treatment Planning: Always Use 6mm Optical Zone

# Clinical recommendations - Myopia

## Start-Up inclusion criteria for myopic presbyopic patients

- Start with -2.0 D to -5.0 D MRSE (Sphere from -2.0 D up to -5.0 D)
- Start with astigmatism < 2.0 D
- Start with mean K-readings at 41.0 D to 45.0 D
- Start with Flaps of 110 µm to 120 µm, diameter ≥ 9 mm
- Start with Angle Kappa < 10°
- Start with patients ≥ 45 years
- Near addition of +1.50 D minimum
- Both eyes with BCDVA: 1.0 (Snellen 20/20) or better
- Both eyes to be **treated with LASIK**, no previous surgery, clear medias
- General LASIK restrictions (pachymetry, keratoconus suspects, ...)
- Photopic pupil size measured with the ORBSCAN must be > 2.9 mm, measured with ORBSCAN3 > 2.1mm
- Treatment Planning: Always Use 6mm Optical Zone
- (Mesopic pupil size measured with the ZYWAVE < 6.5 mm)