Clinical Results With a New Multifocal IOL

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Financial Disclosure

- Dr Piovella has the following Financial Interests or Relationships to disclose as consultant:
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Clinical results with a new Multifocal IOLs

Precis
To evaluate a new multifocal IOL for cataract surgery. This multifocal refractive IOLs (mod.FIL 611, Soleko,Italy), aims to minimize postoperative visual problems encountered with traditional multifocal IOLs under all light conditions. For this purpose, the additional power is concentrated in the center of the optical zone and it is linked to the peripheral portion of the optic with an aspherically curved zone dedicated to mid-distance vision. Patient satisfaction surveys were administered to assess functional visual performance.

Abstract
Purpose: To evaluate a new multifocal IOL for cataract surgery that minimizes postoperative visual problems under all light conditions
Methods: 29 cataract surgery eyes of 15 patients received a multifocal IOL (FIL 611 PV Soleko, Italy). In this lens the total area dedicated to mid and near vision is of 2.00 mm; with 3 progressive additional power steps. Follow-up examinations included UCVA and BCVA for distance, near and intermediate visual acuity
Results: Mean preoperative BCVA was 0.23 ± 0.12 with -0.53 ± 1.71 D SE. Three months postoperatively, mean monocular BCVA was 0.92 ± 0.08. Mean UCVA for near was J 2.17. Mean corrected monocular near vision was J 1.17 with 1.50 ± 1.22.
Conclusion: Best results with Soleko FIL 611 PV are obtained when implanted bilaterally. It is a promising multifocal IOL, providing good distance and near vision.
Technical Data

- Optical diameter: 6.0
- Total diameter: 11.0
- Haptic angle: 5°
- Shape: square edge on rear of haptic and optical zone
- Incision diameter: 2.0 mm
- Material: foldable acrylate with 25% H₂O and UV filter
- Power range: +9.0 to +26.0 (0.5 step)
  Add. +3.75
- Recommended A constant: 118.3
**Review™ Multifocal IOLs (Soleko FIL 611)**

**Technical Features**

- **Power Gradient 6.00 mm**
- **Note:**
  - The cylinder axis is set during production and is shown in the technical drawing that comes in the package. The lens must always be implanted at 180° and facing in the right direction.

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**Zone** | **Additional Power** | **mm** | **Description**
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A | 0 | 6.00 | Distance
B | 0.9 | 2.48 | Joint zone
C | 2.1 | 1.98 | Media distance
D | 3.75 | 1.48 | Accommodation zone

With positive aspherical curves
Standard 1.2 mm distance between the MIOL and the iris increases the amount of light reaching on the anterior MIOL surface, and keeps the percentage of MIOL optical area dedicated to near vision under 25% for most of iris diameters. Small pupils size (below 1 mm) might decrease Review™ vision quality.
Review™ Multifocal IOLs (Soleko FIL 611)
How it works

Distance Vision:
the peripheral zone of the MIOL focuses the image on the retina, while the central zone does not.

Near Vision:
the central zones of the MIOL focuses the image on the retina, while the peripheral zones does not.
Review™ MIOL implanted in 29 eyes of 15 patients

Mean age: 76.14 ± 9.15 years.
Preoperative BCVA 0.23 ± 0.12
Follow-up: 6 months (29 eyes)
All patients were evaluated at one, three, and six months.

• Best Corrected Distance Visual Acuity (BCDVA)
• Refractive Outcomes: Spherical Equivalent
• Uncorrected Near Visual Acuity (UNVA)
Review™ Multifocal IOLs (Soleko FIL 611)
Six Months Results: 29 Eyes

Best Corrected Distance VA (BCDVA)

Refractive Outcome: Spherical Equivalent

Uncorrected Near VA (UNVA): 23.00 (EDTRS 6 months p.o.)
The cylinder axis is set during the Review™ MIOL manufacturing
The lens must always be implanted at 0/180° axis
Personalized toric correction, with DAC oscillating tool system on the posterior surface of the lens.
The surgeon has to implant the lens horizontally (0/180°), with few adjustments:
cylinder axis is set during manufacturing
All personalized informations are shown in the package technical drawing
Thank you for your attention!