Introducing the EVO+ Visian ICL

- The current Visian ICL with central port has provided many benefits for patients, surgeons, and practices. The EVO+ is based on this successful platform.

- The EVO+ Visian ICL design introduces an increased optic with an expanded diameter range (5.0 mm – 6.1 mm) in spherical powers of -0.5 D to -14.0

- In CE markets, EVO+ will be introduced with the goal of increasing the appeal of the Visian ICL to Millennial patients.

Enlarged optical zone.
with an overall gain in optical surface
(5.0 mm – 6.1 mm optic diameter depending on power)
Value Proposition

- EVO+ Visian ICL with an expanded optic diameter is developed for patients with larger pupils including younger Millennial patients.

- A large surface of full correction with optimal quality may benefit young patients or those with larger pupils at night.¹

- Refractive corrections with larger optical zones are beneficial because they reduce the opportunity for light in the visual field to travel through a non-corrective treatment area or transition zone, resulting in lower visual quality or undesired effects such as glare, halos and higher order aberrations (HOA).
Expanded Optical Diameter Comparison

An expanded optical diameter in diopters < -14.5 while maintaining the same overall height.

EVO+ (-0.5 D to -14.0 D)

EVO (-14.5 D to -18.0 D)
JCRS Article on EVO+ Visian ICL

Optical quality comparison between 2 collagen copolymer posterior chamber phakic intraocular lens designs

Alberto Dominguez-Vicente, MSc, Teresa Fresno-Blasco, PhD, Carl Perales-Viruet, MSc, Jose J. Esteban-Taboada, PhD, Robert Memis-Mico, PhD

PURPOSE: To compare the optical quality in vitro of 2 designs of the Visian Implantable Collamer Lens phakic intraocular lens (pICL) for different powers and optical apertures.

SETTING: University of Valencia, Valencia, Spain.

DESIGN: Experimental study.

METHOD: The Iviso TR150K deflectometry device was used to measure the V4c pICL, which has a smaller optic diameter; and the V5 pICL, which has a larger optic diameter. The pICLs were measured for 3.08 diopters (D), 0.00 D, -0.50 D, and -10.00 D at different optical apertures from 3.00 to 6.00 mm, depending on the IOL power and model. The root mean square of higher-order aberrations (RMS-HOAs) was analyzed. The front, rear, and distortion functions (PSFs), and simulated images were calculated from wavefront aberrations.

RESULTS: There were no statistically significant differences in any Zernike RMS or RMS-HOAs between the 2 pICLs, models with the same power and optical aperture (P > 0.05). Both pICLs had negative spherical aberration that increased with the pICL power. Front and rear distortion values showed no statistically significant differences between the pICLs with the same power and pupil aperture. Minimal differences were seen in the PSFs and simulated images between the pICLs.

CONCLUSIONS: Both pICLs showed good and comparable in vitro optical quality similar to a perfect lens in that they should not affect visual performance after implantation. Patients with larger pupil diameters could benefit from the pICL, with the larger optic diameter because it showed better in vitro optical quality than the previous design with a smaller optic diameter.

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- JCRS Article compared the optical quality (in vitro) of EVO Visian ICL (V4c) and EVO+ Visian ICL (V5) at 4 different spherical powers and 3.0, 4.5 and 5.5 mm optical apertures. EVO+ lenses were also assessed at the largest optical aperture of 6.0 mm.

- RMS of HOAs up to the 7th order, trefoil, coma, tetrafoil, secondary astigmatism, and spherical aberration showed no statistical differences between models for any power and optical aperture.

- Patients with larger pupil diameters could benefit from the EVO+ Visian ICL (V5) because the EVO+ Visian ICL (V5) model showed “excellent” in vitro optical quality with a larger optical diameter than the EVO Visian ICL (V4c) model.
Patients Age Range 21 – 45 years have mean pupil diameter under night driving conditions of 5.4 mm and 5.2 mm, respectively. Between a mesopic pupil size and pIOL optic diameter a possible risk factor for night-vision disturbances exists such as halos.
# EVO and EVO+ Specifications

## Spherical Lenses

<table>
<thead>
<tr>
<th>Diopter</th>
<th>Current Optical Diameter</th>
<th>EVO+ Optical Diameter</th>
<th>Approximate Equivalent OZ at Corneal Plane&lt;sup&gt;4,5&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.5 to -9.0</td>
<td>5.8</td>
<td>6.1</td>
<td>7.6</td>
</tr>
<tr>
<td>-9.5 to -10.0</td>
<td>5.5</td>
<td>5.9 - 6.1</td>
<td>7.4 - 7.6</td>
</tr>
<tr>
<td>-10.5 to -12.5</td>
<td>5.3</td>
<td>5.3 - 5.8</td>
<td>6.6 - 7.3</td>
</tr>
<tr>
<td>-13.0 to -14.0</td>
<td>4.9</td>
<td>5.0 - 5.2</td>
<td>6.3 - 6.5</td>
</tr>
<tr>
<td>&gt;-14.0</td>
<td>4.9</td>
<td>N/A</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Lens Lengths: 12.1 mm / 12.6 mm / 13.2 mm / 13.7 mm

## Toric Lenses

<table>
<thead>
<tr>
<th>Diopter</th>
<th>Cylinder</th>
<th>Current Optical Diameter</th>
<th>EVO+ Optical Diameter</th>
<th>Approximate Equivalent OZ at Corneal Plane&lt;sup&gt;4,5&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.5 to -9.0</td>
<td>+0.5 to +6.0</td>
<td>5.8</td>
<td>6.1</td>
<td>7.6</td>
</tr>
<tr>
<td>-9.5 to -10.0</td>
<td>+0.5 to +6.0</td>
<td>5.5</td>
<td>5.9 - 6.1</td>
<td>7.4 - 7.6</td>
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<td>6.3 - 6.5</td>
</tr>
<tr>
<td>&gt;-14.0</td>
<td>+0.5 to +6.0</td>
<td>4.9</td>
<td>N/A</td>
<td>6.1</td>
</tr>
</tbody>
</table>

ATTENTION: Reference the Visian ICL Product Information for a complete listing of indications, warnings and precautions.
EVO+ Visian ICL Box

Model: VICM5
Model: VTICM5
Patient Membership Card

Evolution in Visual Freedom™
Patient
Name: ____________________
Doctor’s
email: ____________________
Doctor’s
website: ___________________

Patient Chart Label

Confidential. Internal Purposes Only. Do Not Distribute.
Conclusions

STAAR is increasing the appeal of the Visian ICL to Millennial patients with a new product and powerful new branding…EVO+ Visian ICL

Larger optic design may provide patients with the benefit of enhanced quality of vision due to increased optical zone, further increasing the value proposition of the Visian ICL

Optical diameter increase is provided in a wide range of powers

Further studies may prove the clinical benefit in terms of reduced night vision optical side effects. The larger optical zone will only enhance the current premium outcomes of the Visian ICL.
References


5. Lovisolo CF, Pesando PM. The Implantable Contact Lens (ICL) and Other Phakic IOLs. Canelli, Italy Fabione Editore s.r.l. 1999
Thanks.