

Clinical evaluation of functional vision during implantation of an aspherical rotationally asymmetric EDoF intraocular lens with an addition of 1.50 dpt

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Financial Disclosure

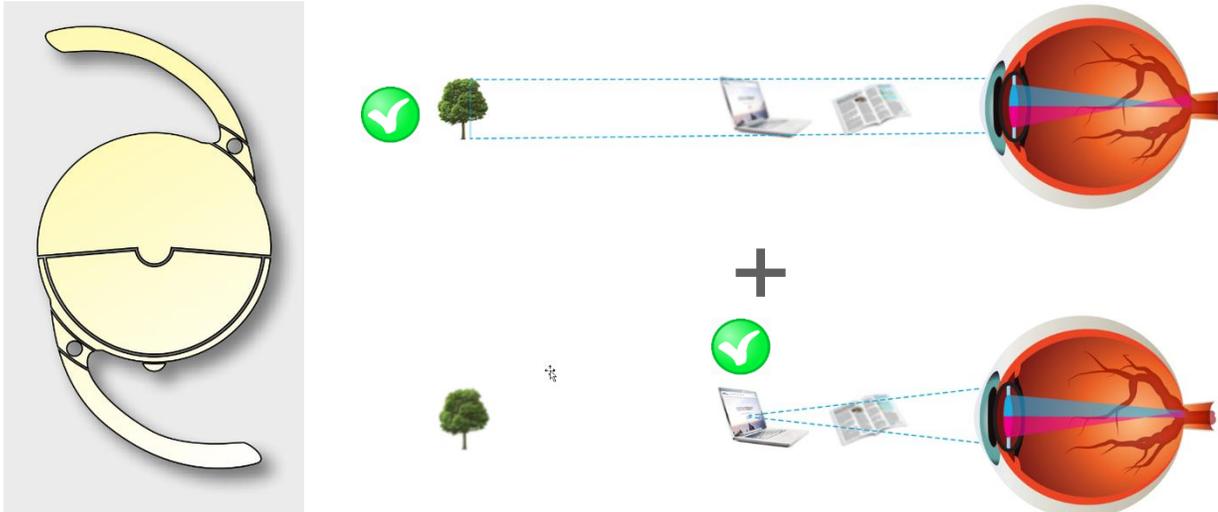
Acufocus ¹	LensAR ¹
AVS ^{1,3}	MST ⁴
Bausch & Lomb ^{2,3}	Mynosia ⁴
Carl Zeiss Meditec ^{1,2,3,4}	Oculentis ^{1,2,3,4}
Eyesight and Vision ¹	PhysIOL ^{1,2,3}
Fritz Ruck ¹	Polytech ^{1,2,3,4}
Glaukos ¹	Rayner ³
Hanita ¹	Santen ¹
Hoya ¹	Teleon ^{1,2,3,4}
Infinte Vision Optics ¹	Vision Ophthalmology Group ^{2,3,4}
iSTAR medical ¹	Vivior ¹
Johnson & Johnson	VSY ¹

1 = research; 2 = travel expenses; 3 = fee; 4 = consultation

Target & Methods

Target setting

Assessment of refractive and functional results up to 12 months after implantation of a rotationally asymmetric bifocal segment intraocular lens in 16 cataract patients



Methods

Post-operativ:

- refractiv results
- functional results (monocular & binocular):
 - UDVA & CDVA (4m)
 - UNVA & DCNVA (40cm)
 - UNIVA & DCIVA (80 cm)
 - Defocuscurve

IOL: product information

Product	ACUNEX® VARIO AN6V	aspheric
Type	Foldable one-piece EDOF-IOL for capsular bag fixation	EDOF
Optic Size	6.0 mm	blue light filter
Overall Length	12.5 mm	glistening-free
Haptic Angulation	0°	
Optic Design	Biconvex Sector-shaped nearvision segment - anterior: +1.5D Aspherical surface - posterior Spherical aberration neutral	
IOL Design	C-Loop haptic	
Material	Hydrophobic glistening-free acrylate UV absorbing and additional blue light filter	
Available Diopters	SE +10.00 to +30.00 (0.5D)	
Refractive Index	1.54 @ 35°	
A-Constant (nominal)	119.1	
Sterilisation	Gamma sterilisation	
Storage	Supplied in 0.9 % saline solution, storage at room temperature not > 43°C (110°F)	
Recommended Incision Size	≥ 2.0 mm	

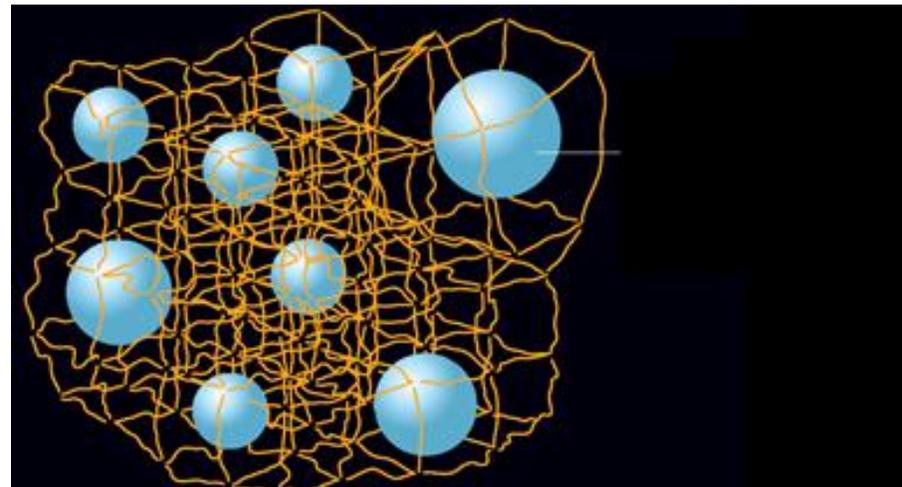
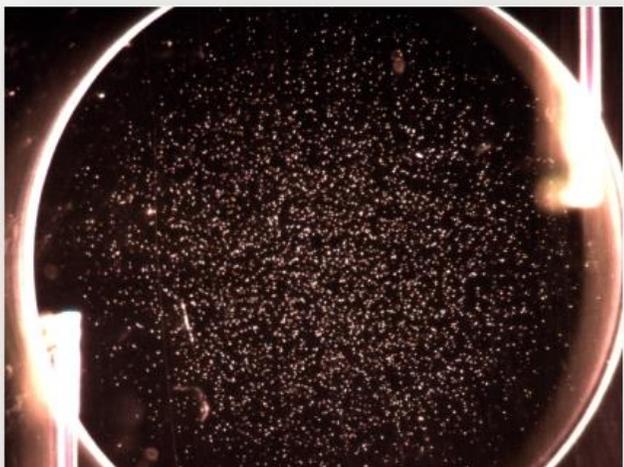
Revision: GF2005v3

Advantages over a monofocal lens:

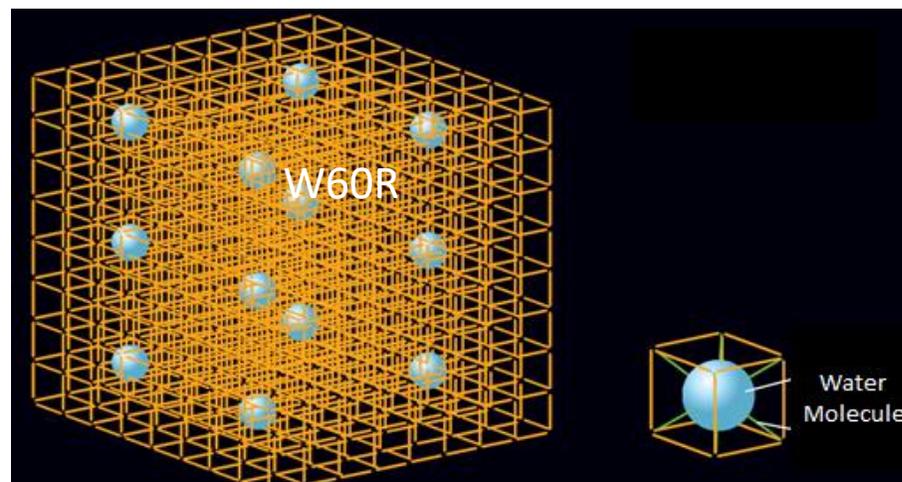
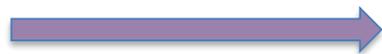
- **EDOF-IOL:** Extended depth of focus for an optimised vision
- Excellent visual acuity results for the intermediate and distance ranges due to 1.5D addition
- Computer or varifocal lenses mostly no longer necessary
- Improved contrast and depth of focus for optimal vision in low light conditions
- NoGlis technology to avoid disturbing stray light
- Blue light filter with natural image and colour perception

HYDROPHOBIC ACRYLAT

MA60 AC (ALCON) vs W60R (ACUNEX)



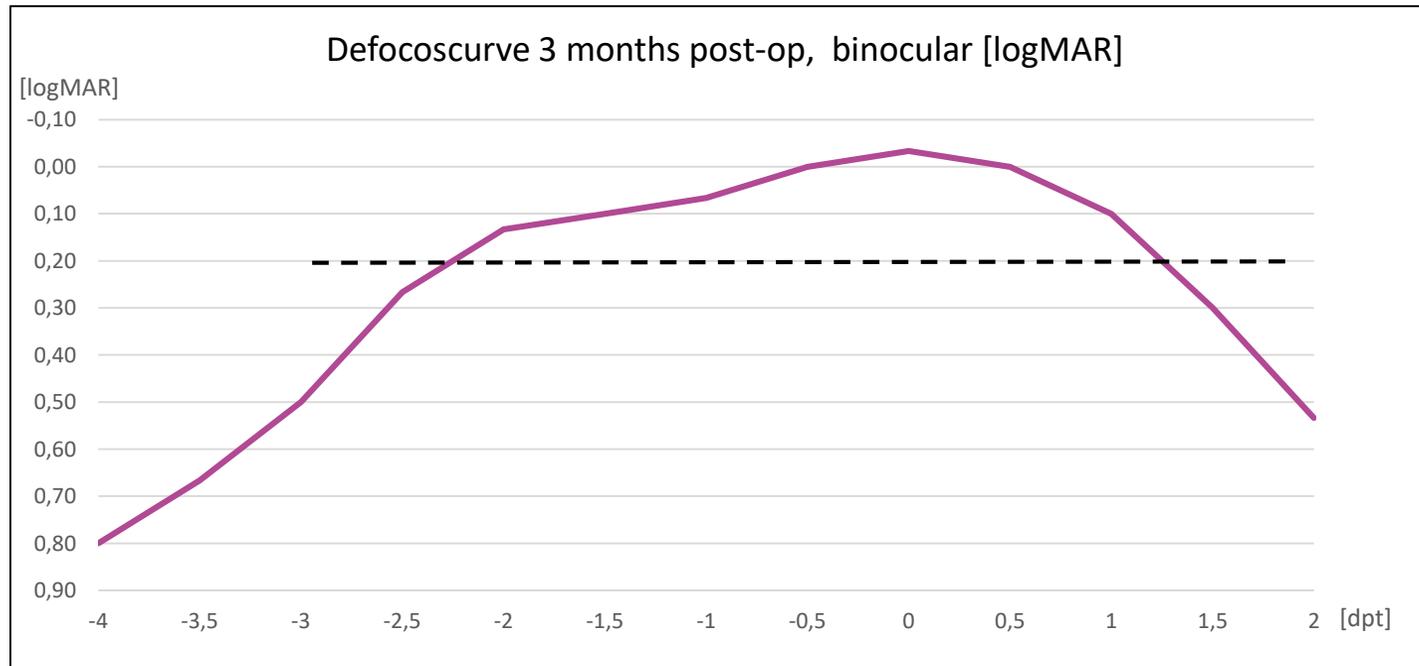
MA60 AC



W60R

Refractiv results

Refractive results [logMAR]								
n=16	SE [dpt]	UDVA	DCVA	DCVA bino	UIVA (80cm)	DCIVA (80cm)	UNVA (40cm)	DCNVA (40cm)
1-7 Tage		0,14			0,33		0,55	
1 Monat	-0,07	0,17	0,04	0,08	0,22	0,22	0,55	0,55
3 Monate (n=?)	0,03	0,07	-0,03	0,00	0,12	0,13	0,37	0,43



➤ from -2,5 dpt to 1,0 dpt > 0,2 logMAR

Summary

- results are similar to the Oculentis Comfort MF15 model
- no complaints about dysphotopsia
- high patient satisfaction
- more results necessary for significant statements
- very good alternative to Oculentis Comfort made of hydrophobic material