

Clinical Experience at Murcia With New Complementary IOLs With Advanced Diffractive Profiles

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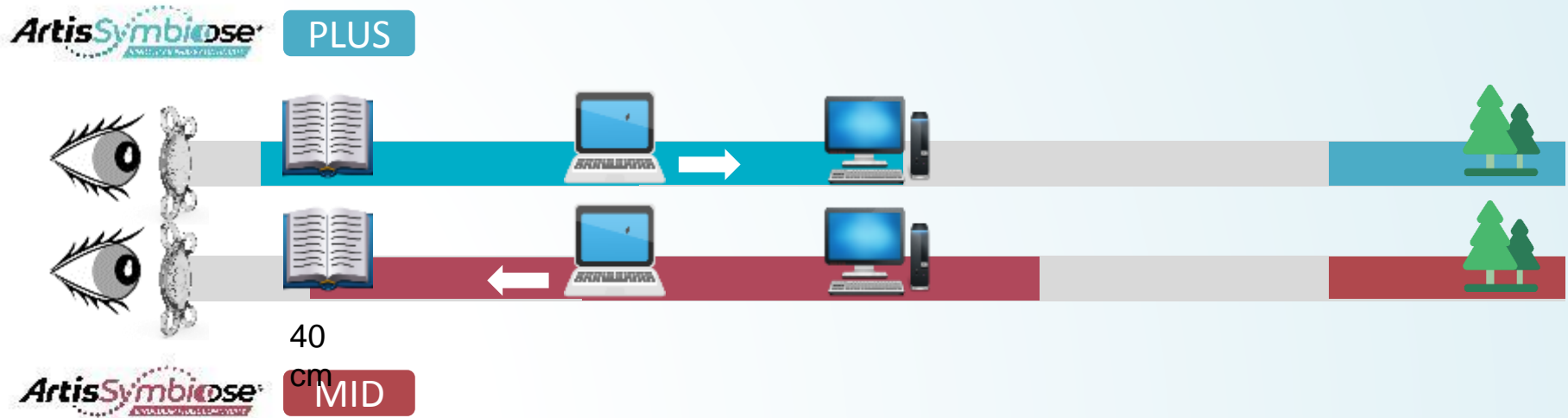
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Purpose: To evaluate the subjective visual outcomes of 2 new diffractive complementary lenses with advanced diffractive profiles.





Intraocular lenses: Cristalens Artis Symbiose MID & PLUS are a couple of complementary IOLs with a new advanced diffractive profile designed to provide a continuous range of clear vision from intermediate to near distances without compromising far distance visual acuity when implanted bilaterally.



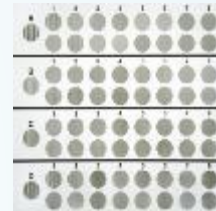
Methods:

- Inclusion criteria:
 - Age-related cataract.
 - No other ocular pathology that could compromise visual acuity.
 - Expected postoperative astigmatism < 0.75 D.
- Photopic pupil between 2 and 4 mm.
- No comorbidity including eye dryness (DEWS ≤ 2).
- No previous ocular surgery.
- Patients indicated to Multifocal IOL.

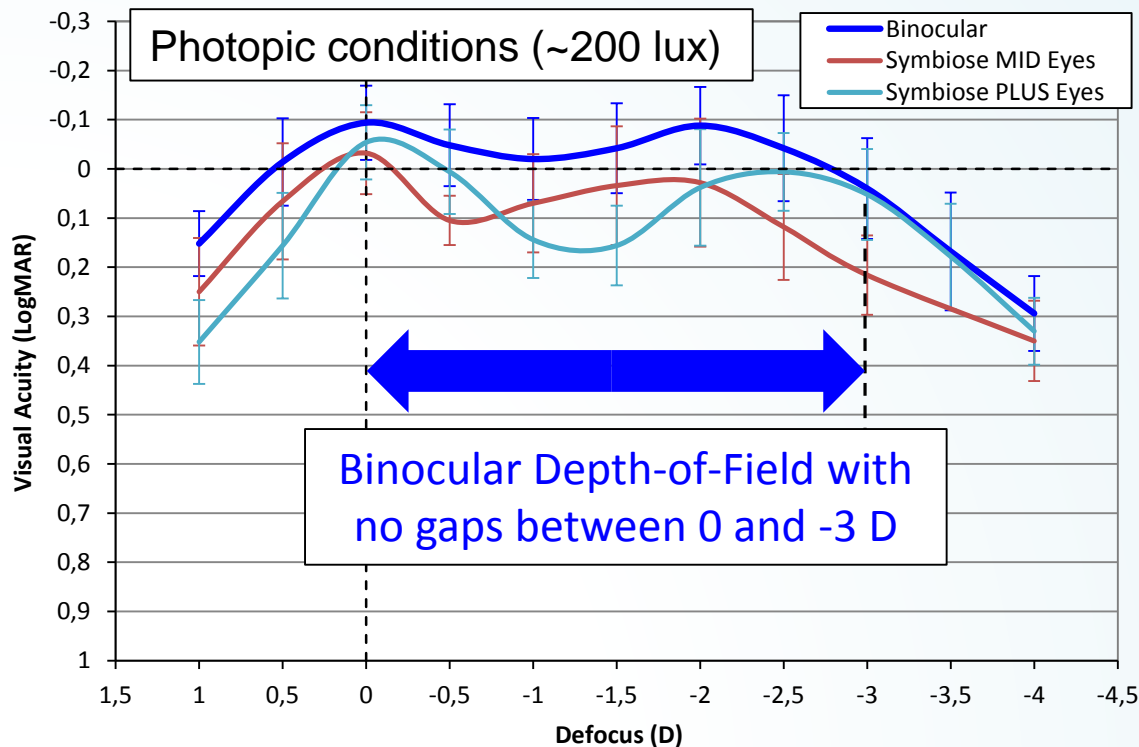
- Participants: **10 participants (20 eyes)**, age = 65 ± 10 years.
- Follow-ups: 1 week ; **1-2 months** ; 6 months.
- All tests were performed under **photopic conditions** (~ 200 lux).
- Tests:

- UDVA (400 cm), UIVA (70 cm), UNVA (40 cm) 
- Monocular and binocular distance corrected defocus curves 
- Contrast Sensitivity  CSV1000 (VectorVision)
- Questionnaire  VF-14

ETDRS Charts



Monocular and Binocular Distance Corrected Defocus Curves and Uncorrected VA

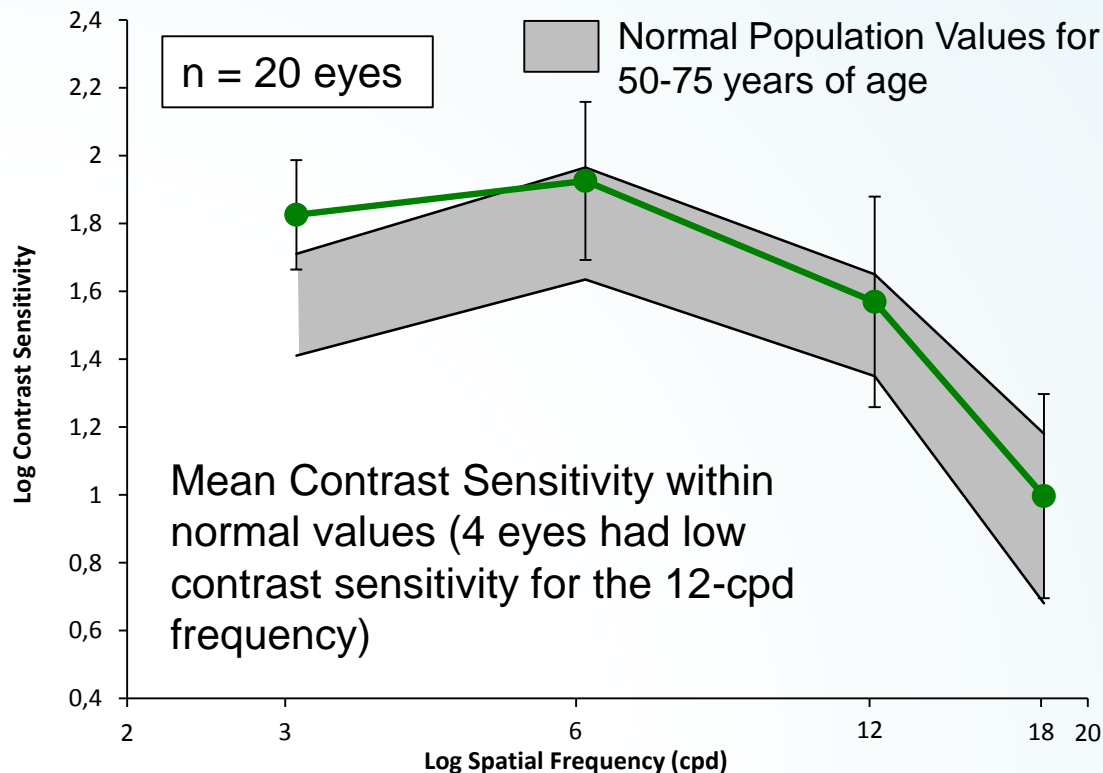


n = 20 eyes,
All results at 1-2 months follow-up

*	UDVA	UIVA 70 cm	UNVA 40 cm
MID Eyes	0.06 ± 0.15	0.08 ± 0.18	0.15 ± 0.15
PLUS Eyes	0.03 ± 0.15	0.06 ± 0.13	0.08 ± 0.08
Bino	-0.03 ± 0.11	-0.03 ± 0.17	0.04 ± 0.10

*Mean ± SD (LogMAR)

Contrast Sensitivity and Patient Satisfaction



**VF-14 Score
(Mean \pm SD)**

88.19 \pm 10.55

Overall high patient satisfaction (88.19 out of 100).
Some patients (5 out of 10) referred halos (at 1-2 months follow-up).
100 % of patients do not wear glasses (at 1-2 months follow-up).

Conclusions

- The combination of the Artis Symbiose PLUS and MID IOLs provided patients with a continuous binocular range of clear vision between 0 and -3 D with no gaps.
- The monocular defocus curves showed that the set of Artis Symbiose IOLs are complementary.
- Uncorrected visual acuity at far, intermediate (70 cm), and near (40 cm) distances were good, but were affected by some refractive surprises.
- Mean contrast sensitivity was within the normal values for these ages. Some patients (4 eyes out of 20) had low contrast sensitivity at 12-cpd frequency.
- Patient satisfaction was high, only affected by refractive surprises and some references of halos (at 1-2 months, and waiting for 6-months adaptation).
- 100 % of patients are not wearing glasses at 1-2 months.

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