

Clinical evaluation of a new monofocal intraocular lens with enhanced intermediate function in cataract patients

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OBJECTIVES

The **TECNIS Eyhance**[®] IOL (Model ICB00) was compared with a standard monofocal IOL (**TECNIS**[®] monofocal IOL, Model ZCB00) to evaluate the effectiveness and safety of the two monofocal intraocular lenses

DESIGN

European multicenter study.

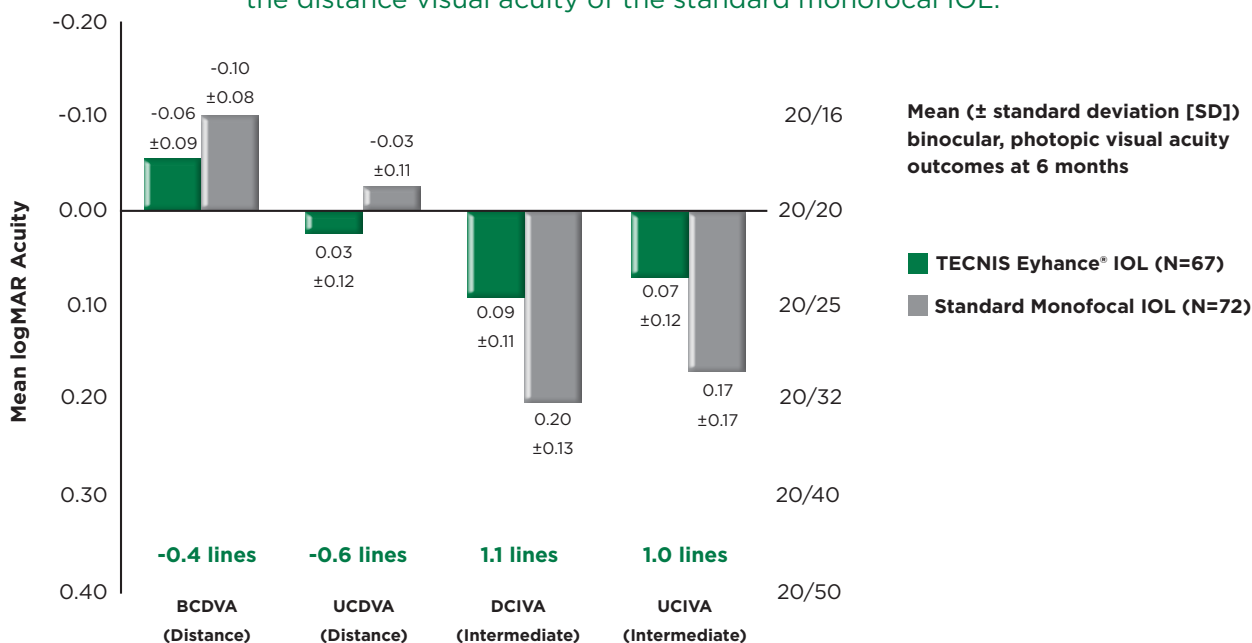
Prospective, bilateral, randomized, comparative/evaluator-masked, controlled study.

Monocular endpoints at 6 months:

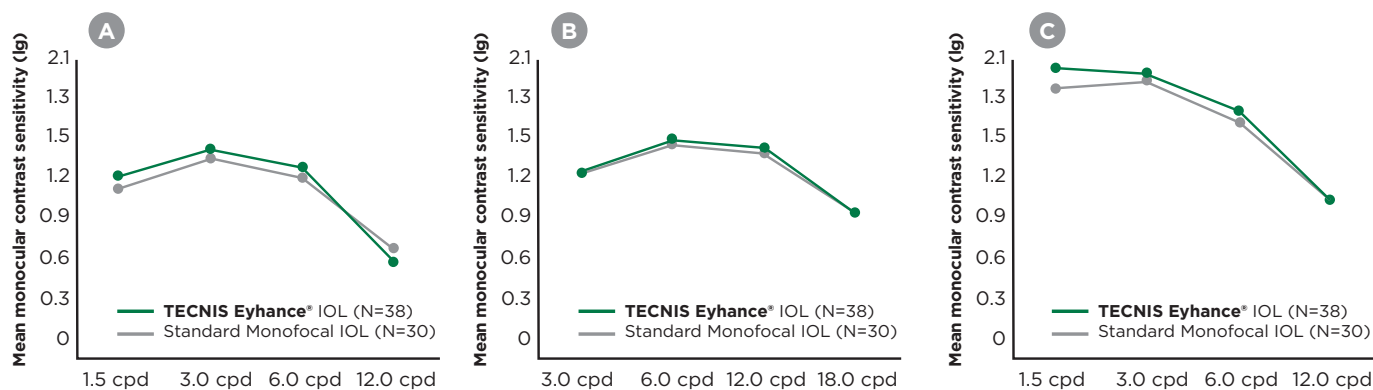
- distance corrected intermediate visual acuity (DCIVA),
- photopic corrected distance visual acuity (CDVA),
- uncorrected intermediate visual acuity (UCIVA).
- Binocular visual acuities, monocular corrected distance contrast sensitivity (first eyes), patient-reported outcomes, and safety were assessed at 6 months.

RESULTS

TECNIS Eyhance[®] IOL shows significant improvement in intermediate vision while keeping the distance visual acuity of the standard monofocal IOL.



MEAN VALUES FOR CONTRAST SENSITIVITY WERE SIMILAR FOR BOTH LENSES



Mean, best corrected distance contrast sensitivity under mesopic lighting conditions with glare (A), photopic lighting conditions with glare (B), and mesopic lighting conditions without glare (C) for first eyes only at 6 months

CONCLUSIONS

TECNIS Eyhance® IOL Model ICB00 provided compared with a standard monofocal IOL:

- enhanced intermediate vision
- similar distance performance
- similar photic phenomena profile
- similar values for contrast sensitivity
- improved functional performance in daily life

WHAT WAS KNOWN

The restoration of intermediate vision is an important outcome for many individuals who undergo cataract surgery, given that it is a requirement for common daily tasks, such as walking up and down stairs, and using computers or electronic devices.

Standard monofocal IOLs effectively restore distance vision, although do not provide functional vision at other distances.

WHAT THIS PAPER ADDS

The **TECNIS Eyhance®** IOL, Model ICB00, was a safe and effective alternative to standard monofocal IOLs in patients undergoing cataract surgery and is the first monofocal IOL to demonstrate an improvement in intermediate vision with comparable distance vision and photic phenomena as a standard monofocal IOL.

REFERENCE:

1. Auffarth GU, et al. Clinical evaluation of a new monofocal intraocular lens with enhanced intermediate function in cataract patients. *J Cataract Refract Surg* 2020;e-pub. REF2020CT4281.

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