

Purpose of study and authors

- A comparison of the clinical and patient reported outcomes of a new TECNIS Eyhance ICB00 monofocal IOL with enhanced features for intermediate vision to a standard TECNIS ZCB00 monofocal intraocular lens
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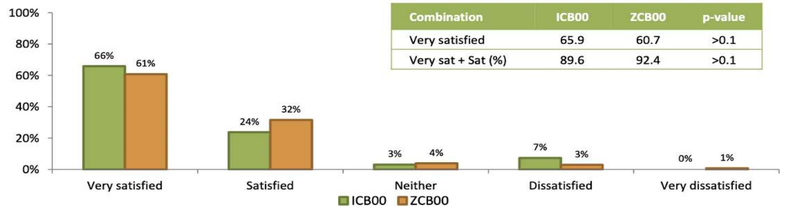
Inclusion criteria

- AMO Eyhance (ICB00) Monofocal IOL (target – best distance).
- Tecnis Monofocal 1-Piece (ZCB00) implants from 2020 used as comparison.
- Completed at least one clinical follow-up visit within 1 year of primary implant; outcomes represent the last available post-implant clinical visit.
- Myopia up to 11D or Hyperopia up to 6D; astigmatism up to 3D.
- Number of eyes / patients available for analysis: ICB00 = 1780 / 1013 ZCB00 = 1558 / 998

Eyhance and Tecnis patient demographics

- All Patients Combined Female % / Male %: 43%/53%
  - Eyhance Female % / Male %: 45%/55%
  - Tecnis Female % / Male %: 41%/59%
- All Patients Combined Mean / Median Follow-up Time: 3 months / 1 months
  - Eyhance Mean / Median Follow-up Time: 3 months / 2 months
  - Tecnis Mean / Median Follow-up Time: 3 months / 1 month
- All Patients Combined Number of Surgeons: 31
  - Eyhance Number of Surgeons: 26
  - Tecnis Number of Surgeons: 27

Postoperative patient recorded outcomes



Combination	ICB00	ZCB00	p-value
Very satisfied	65.9	60.7	>0.1
Very sat + Sat (%)	89.6	92.4	>0.1

Quality of Vision	ICB00	ZCB00	p-value
No Difficulty with Glare (%)	76.2	76.3	>0.1
No Difficulty with Halos (%)	81.1	80.3	>0.1
No Difficulty with Starbursts (%)	82.3	83.0	>0.1
No Difficulty with Ghosting (%)	100.0	100.0	--

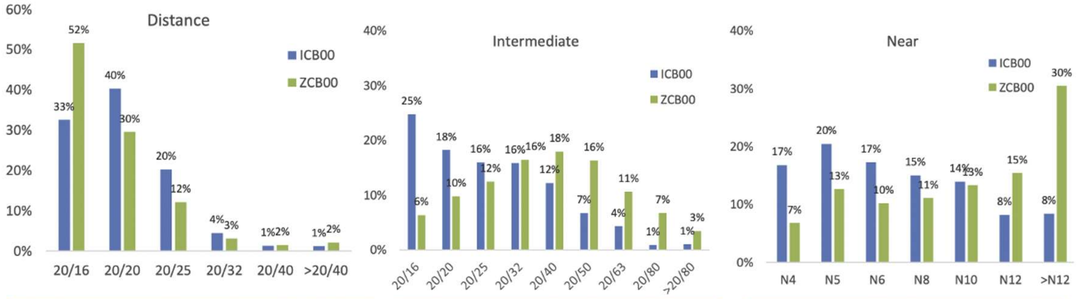
Conclusions

- The new TECNIS Eyhance ICB00 provides a safe and effective monofocal intraocular lens option.
- Performance is comparable to standard monofocal lens at distance with some improvement to UCIVA and UCNVA within the first year.
- Patient reported satisfaction is also high postoperatively for TECNIS Eyhance ICB00.
- A longer follow-up time period is warranted; >1 year.

References:

- *Michelle, D."Understanding positive dysphotopsia," EyeWorld [Preprint]. Available at: https://www.eyeworld.org/2014/understanding-positive-dysphotopsia/*
- *Garg, D. (no date) "Types of IOL Lenses," Eye Solutions. Available at: https://www.eyesolutions.in/blog/types-of-iol-lenses/.*
- *Huh, J. et al. (2021) "A comparison of clinical outcomes and optical performance between monofocal and new monofocal with enhanced intermediate function intraocular lenses: a case-control study," BMC Ophthalmology, 21(1). Available at: https://doi.org/10.1186/s12886-021-02124-w.*

Postoperative uncorrected visual acuity

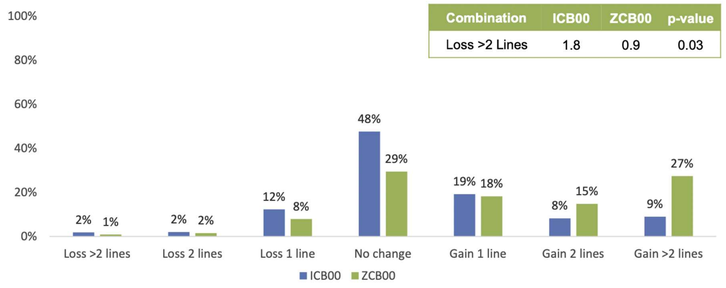


Distance Vision	ICB00	ZCB00	p-value
20/16 (6/5) or Better (%)	32.6	51.6	<0.01
20/20 (6/6) or Better (%)	72.9	81.2	<0.01
20/25 (6/7.5) or Better (%)	93.1	93.3	>0.1
20/40 (6/12) or Better (%)	98.8	97.9	>0.1

Intermediate Vision	ICB00	ZCB00	p-value
20/25 (6/7.5) or Better (%)	58.9	28.6	<0.1
20/40 (6/12) or Better (%)	87.0	62.9	<0.01
20/63 (6/19) or Better (%)	98.1	89.8	<0.01
20/80 (6/24) or Better (%)	86.8	69.9	<0.01

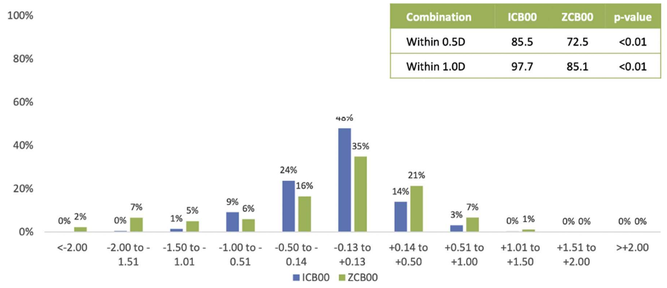
Near Vision	ICB00	ZCB00	p-value
N5 or Better (%)	37.2	19.4	<0.01
N6 or Better (%)	54.5	29.7	<0.01
N8 or Better (%)	69.5	40.8	<0.01
N12 or Better (%)	91.6	69.5	<0.01

Postoperative change in BCDVA



Combination	ICB00	ZCB00	p-value
Loss >2 Lines	1.8	0.9	0.03

Postoperative refractive predictability



Combination	ICB00	ZCB00	p-value
Within 0.5D	85.5	72.5	<0.01
Within 1.0D	97.7	85.1	<0.01