

EVIDENCE REVIEW · 04

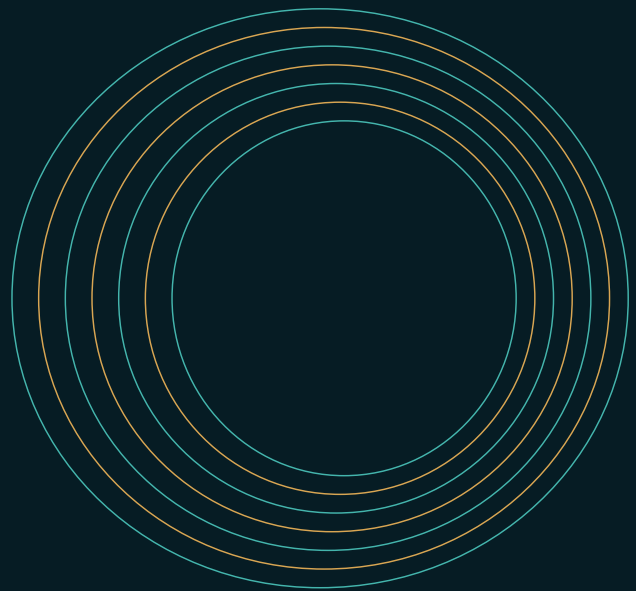
TECNIS ODYSSEY

HAS THE FULL-RANGE TRADE-OFF CHANGED?

Distance. Near. Refractive tolerance.
Quality of vision.

THE CENTRAL QUESTION

A better balance -
or a different balance?



Burak Mergen, MD, FEBO, FICO
Ophthalmic Surgeon

Evidence, interpreted.

Evidence cutoff: 20 September 2026

THE ISSUE IN ONE MINUTE

A changed balance. No established overall winner.

SUPPORTED

Broad functional vision

Strong distance; useful intermediate and near. [4-6]

EMERGING

A different balance

Tolerance and mesopic signals; closer-range costs. [2,3,10]

Synergy

Predecessor / evolution [3,12,13]

Clareon PanOptix

Established comparator [7]

Clareon PanOptix Pro

Current generation [8]

COMPARATOR GENERATION MATTERS

PanOptix evidence does not become Pro evidence.

CLAIM → MECHANISM → BENCH → CLINIC / PATIENT

What is designed to change?

01 MANUFACTURER CLAIM [1]

Refractive tolerance · dysphotopsia · contrast

02 MECHANISM / MANUFACTURER [1]

Freeform diffractive profile

03 EXTERNAL METROLOGY [2]

Odyssey: distance-dominant distribution
Synergy: more balanced intermediate / near

04 CLINIC / PATIENT [3,4,7,8]

Endpoint-specific findings
Frequency and bother measured separately

Mechanistic plausibility does not establish patient benefit.

EVIDENCE NOTES

Claims rely on manufacturer bench / data on file; some range claims use parent-lens evidence [1]. Reports 2024DOF4003/4005 not independently appraised. Metrology [2]: abstract only, +20 D, pupil-dependent simulation; funding/COI unverified.

ODYSSEY vs SYNERGY AND PANOPTIX [3]

A distance-weighted shift. Closer-range costs.

90 eyes / 90 patients · three months

RANGE	UNCORRECTED	DISTANCE-CORRECTED
Distance to 1 m	Odyssey signal	No significant difference
50 cm / 30 cm	Comparator signal	Comparator signal
70 cm	Not isolated here	Comparator signal

MESOPIC / GLARE-SIZE SIGNAL

Odyssey favoured at 10% mesopic contrast acuity and measured glare size. [3]

EVIDENCE NOTES

Abstract only: allocation and effect estimates unverified. Authors report no potential conflicts; funding unverified. PanOptix material unspecified; not Pro. Synergy literature [12,13] is context only. Uncorrected performance ≠ distance-corrected performance. Matrix directions report statistical findings; they do not establish effect magnitude or a clinically meaningful advantage.

ODYSSEY-SPECIFIC BILATERAL EVIDENCE [4]

Broad function. Individual variation.

40 subjects / 80 eyes · ≥ 3 months · single arm

BINOCULAR UNCORRECTED VA / PHOTOPIC / MEAN $\pm$ SD, logMAR

6 m

66 cm

40 cm

33 cm

−0.07

0.03

0.03

−0.02

± 0.07

± 0.09

± 0.08

± 0.07

Full-text Table 1. Lower logMAR is better.

REFRACTIVE TOLERANCE / EMERGING [10]

Induced-cylinder study: 30 patients.
Tolerance depends on axis and amount.

Functional near: supported. Superior near versus competitors: not established.

EVIDENCE NOTES

Single-centre, selected bilateral cohort [4]; J&J grant. Abstract/Table 1 VA differ; registry [14] differs at 40 cm. Study [10]: full text appraised; no comparator, 1-3 months. Simulated tolerance does not justify accepting residual error.

AIOLIS / ODYSSEY-SPECIFIC [4]

Frequency $\neq$ burden

40 subjects · ≥ 3 months · published rounded percentages

SYMPTOM

"ALWAYS"

"EXTREMELY BOTHERED"

Halos

32% 13/40



0% 0/40

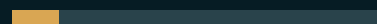


Night glare

30% 12/40

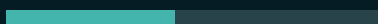


5% 2/40

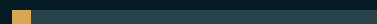


Rings / spiderwebs

18% 7/40



2% 1/40



**Frequent symptoms $\neq$ extreme bother.
Zero extreme bother $\neq$ no symptoms.**

85%: overall vision excellent / very good.
All reported at least some satisfaction. [4]

EVIDENCE NOTES

0-40% bar scale. Published rounding retained: 13/40=32.5%, 7/40=17.5%, 1/40=2.5%. J&J investigator-initiated grant; no comparator.

MEASUREMENT SHAPES THE ESTIMATE

The instrument changes the answer.

3%**Mild halo**

30 self-identified Japanese patients
Mean 44 days [5]

52%**Moderate / severe halos**

25 patients · one month [6]

NOT DIRECTLY COMPARABLE RATES

**Questionnaire + symptom definition
+ threshold + follow-up**

→ Changes the reported rate

**Do not rank lenses by symptom rates
collected in different ways.**

EVIDENCE NOTES

[5]: retrospective, single-site/arm; no validated questionnaire; J&J grant. Binocular $\geq 20/20$: UDVA/CDVA 100%, UNVA/DCNVA 93%; near glasses 3%. [6]: retrospective; spectacle independence 64%; no study funding, Alcon/J&J author ties. Frequency, severity and bother are different constructs.

ODYSSEY vs CLAREON PANOPTIX / NOT PRO [7]

No demonstrated overall superiority.

Prospective paired-eye pilot · 19 patients / 38 eyes · ≥ 1 month

ODYSSEY

Distance + contrast signal

CDVA 0.03 / UDVA 0.06 logMAR differences;
higher composite CSV-1000 contrast sensitivity.

CLAREON PANOPTIX

60-cm intermediate signal

Distance-corrected VA: 0.05 logMAR difference.

NO SIGNIFICANT DIFFERENCE DETECTED

Near · uncorrected intermediate · residual SE
Halo · glare · starburst

17/19 spectacle independent (89.5%)

Mixed-lens patients; not separate bilateral success rates.

EVIDENCE NOTES

Small exploratory pilot; no power calculation, multiple endpoints, early follow-up. Statistical differences $\neq$ clinical benefit thresholds. No work funding disclosed; Yoo: J&J/Alcon/Zeiss consultancy outside this work.

ODYSSEY vs CLAREON PANOPTIX PRO [8]

Statistically different.
Clinically superior?

≈0.04 logMAR
≈2 chart letters

CLINICAL RELEVANCE UNCERTAIN

MONOCULAR	ODYSSEY	PANOPTIX PRO	p
UDVA	0.10	0.13	0.29
CDVA	−0.001	0.039	0.034

Near, binocular VA, refraction and recorded photic symptoms:
no significant differences. Symptom incidence <15%.

NOT ESTABLISHED BY THIS STUDY

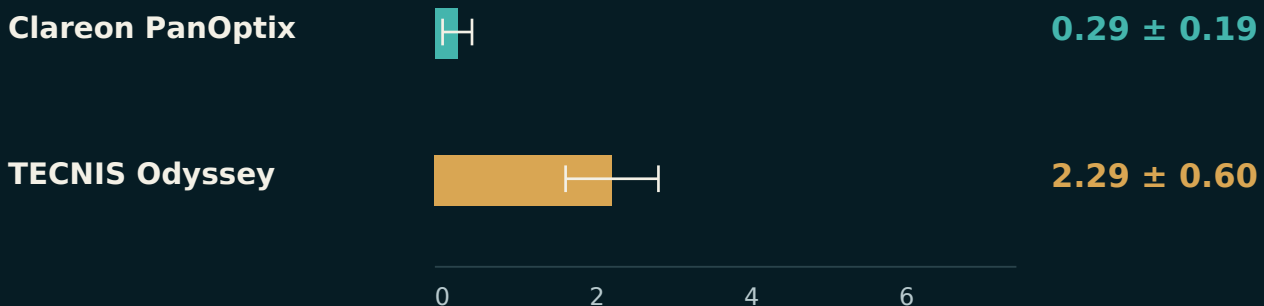
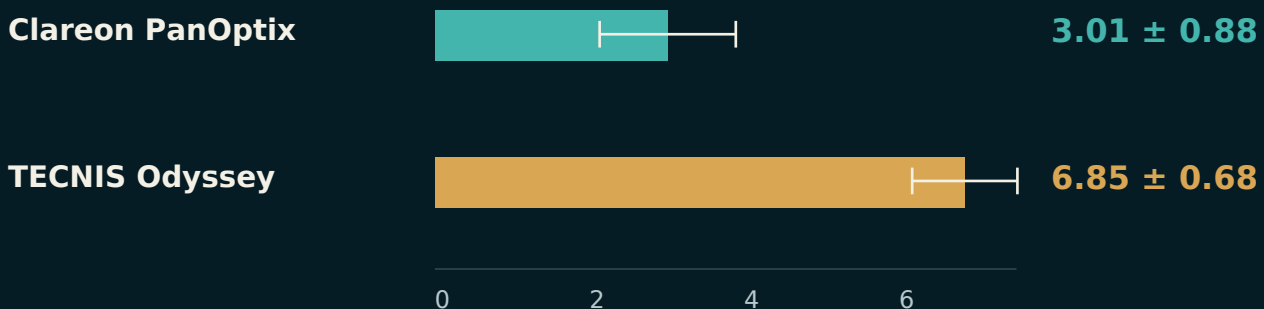
Equivalence · intermediate performance
Overall quality-of-vision superiority

EVIDENCE NOTES

VA: logMAR; lower is better. Retrospective; one month. Initial 168 patients/246 eyes → 65+65 matched eyes. Missing data, multiple testing, chart-recorded symptoms; no validated PRO/contrast testing. Authors report no external support or relevant relationships.

EXTERNAL LABORATORY / ABSTRACT APPRAISAL [9]

More measured straylight.

IN-VITRO STRAYLIGHT $\neq$ PATIENT-REPORTED GLAREMODIFIED C-QUANT / deg^2/sr / MEAN $\pm$ REPORTED DISPERSION**7°****3.5°**

**Real within the laboratory model.
Patient-perceived magnitude:
unestablished.**

EVIDENCE NOTES

PanOptix, not Pro. Also tested 2.5° (not plotted). Full protocol, sample count, dispersion definition and funding/COI unverified. Whiskers reproduce reported $\pm$ values.

THE TRANSLATION GAP

BENCH $\neq$ CLINICAL

BENCH SIGNAL [9]

Higher measured straylight



CLINICAL MEASUREMENT [7,8]

No significant photic difference detected



PATIENT EXPERIENCE

Greater perceived glare not established

**Higher measured straylight
 $\neq$ demonstrated greater
patient-perceived glare.**

EVIDENCE NOTES

PanOptix paired-eye [7] and Pro chart-based [8] evidence remain separate. Small, short-term studies; no patient-level straylight/symptom correlation. No significant difference does not prove absence of an effect.

SUPPORTED / EMERGING / NOT YET ESTABLISHED

Improve - or redistribute?

SUPPORTED

Broad functional range · strong distance
High spectacle independence in selected cohorts [4-7,10]

EMERGING

Axis-dependent refractive tolerance
Endpoint-specific Synergy evolution
Selected mesopic / glare-size signals [2,3,10]

NOT YET ESTABLISHED

Superior near · broadly reduced dysphotopsia vs Synergy
Overall quality-of-vision superiority vs PanOptix or Pro
Bench straylight → greater clinical glare [3,7-9]

THE OIE INTERPRETATION

**Odyssey appears to redistribute
the full-range trade-off,
with promising gains in selected domains.**

EVIDENCE LEVELS ≠ INTERCHANGEABLE PROOF

Keep each source in its lane.

Evidence cutoff: 20 September 2026

Odyssey-specific clinical	Range / patient reports [4-6,10]
Direct comparative	Paired-eye / three-lens study [3,7]
Current generation	PanOptix Pro matched cohort [8]
Predecessor context	Synergy only [12,13]
External bench	Metrology / straylight [2,9]
Manufacturer / mechanism	Claims / data on file [1]
Ongoing / emerging	Protocols, not results [15,16]

WHAT WOULD CHANGE CONFIDENCE?

NCT07768475: 266 enrolled; randomized, unmasked Odyssey vs PanOptix; active/not recruiting.
NCT07213167: low-contrast / halometry; target 120; recruiting. Neither has posted results. [15,16]

POAG: 26 selected patients; supportive only. Mild/moderate controlled disease; no general-population or long-term safety inference. J&J grant. [11]

EVIDENCE NOTES

Narrative appraisal, not systematic review/GRADE. Full text: [4-8,10-13]; abstract-level appraisal: [2,3,9]. [12]: Alcon investigator-initiated grant; author financial ties. Proprietary reports unavailable. Registry [14] = cohort [4], not replication. Status may lag.

CURATED SOURCES / 1-6

References

Source labels describe evidence type and access, not quality grades.

01 MANUFACTURER / DATA ON FILE

Johnson & Johnson Vision. TECNIS Odyssey IOL. US professional product page. Accessed 20 September 2026. Bench qualifiers and parent-lens footnotes reviewed.

[Source / registry link](#)

02 ODYSSEY / EXTERNAL METROLOGY / ABSTRACT

Bang SP, Lim GH, Pantanelli S. Interferometric analysis of diffractive multifocal intraocular lenses. J Cataract Refract Surg. 2026;52(9):912-918.

doi: [10.1097/j.jcrs.0000000000001934](https://doi.org/10.1097/j.jcrs.0000000000001934)

03 ODYSSEY / SYNERGY / PANOPTIX / ABSTRACT

Hayashi K, Uno K, Hayashi S, Yoshida M. Comparison of Visual Performance Among Two Multifocal-Extended Depth-of-Focus Intraocular Lens Types and a Trifocal Intraocular Lens. J Refract Surg. 2026;42(4):e327-e334.

doi: [10.3928/1081597X-20260212-01](https://doi.org/10.3928/1081597X-20260212-01)

04 ODYSSEY / PATIENT-REPORTED / FULL TEXT

Hacopian AG, Brunson PB, Hall B. Patient Reported Outcomes and Visual Acuity After Bilateral Implantation of a Next Generation Presbyopia Correcting Intraocular Lens. Clin Ophthalmol. 2026;20:572703.

doi: [10.2147/OPHTH.S572703](https://doi.org/10.2147/OPHTH.S572703)

05 ODYSSEY / SUPPORTIVE COHORT / FULL TEXT

Yuen C, Keahi CL, Dutton S, et al. Clinical Outcomes Following Bilateral Implantation of TECNIS Odyssey Intraocular Lenses in Japanese Eyes. Clin Ophthalmol. 2026;20:610351.

doi: [10.2147/OPHTH.S610351](https://doi.org/10.2147/OPHTH.S610351)

06 ODYSSEY / EARLY COHORT / FULL TEXT

Bissen-Miyajima H, Midorikawa M, Fujisaki R, et al. Early Clinical Results of a Newly Developed Continuous Range of Vision Intraocular Lens. Ophthalmol Ther. 2025;14(11):2937-2945.

doi: [10.1007/s40123-025-01235-7](https://doi.org/10.1007/s40123-025-01235-7)

CURATED SOURCES / 7-12

References

Source labels describe evidence type and access, not quality grades.

07 ODYSSEY vs PANOPTIX / FULL TEXT

Kang S, Arsenault SM, O'Brien RC, et al. Comparison of Visual Performance and Patient Satisfaction Between Two Trifocal Intraocular Lenses: A Prospective, Paired-Eye Comparative Study. Clin Ophthalmol. 2026;20:572237.

doi: 10.2147/OPTH.S572237

08 ODYSSEY vs PANOPTIX PRO / FULL TEXT

Alomar ZO, Pawlowski H, Molleti S, et al. A Comparative Study of the Visual Outcomes of Two Common Diffractive Trifocal Intraocular Lenses in a Matched Cohort. Cureus. 2026;18(8):e114447.

doi: 10.7759/cureus.114447

09 ODYSSEY vs PANOPTIX / BENCH / ABSTRACT

Kremser F, Łabuz G, Zielińska A, Khoramnia R, Auffarth GU. Straylight-Based Evaluation of Glare in Two Presbyopia-Correcting Intraocular Lenses. Klin Monbl Augenheilkd. 2026. Online 14 August.

doi: 10.1055/a-2913-2611

10 ODYSSEY / SIMULATED ASTIGMATISM / FULL TEXT

Borges HTF, Trivedi RH, Pandya M, et al. Tolerance to Simulated Astigmatism and Patient-Reported Outcomes of a Violet Light-Filtering Diffractive Full Visual Range Intraocular Lens. J Refract Surg. 2026;42(1):e4-e11.

doi: 10.3928/1081597X-20251113-01

11 ODYSSEY / POAG / FULL TEXT

Keahi CL, Yuen C, Yuen CK, et al. Clinical Outcomes Following Bilateral Implantation of a Next-Generation Intraocular Lens in Patients with Primary Open Angle Glaucoma. Clin Ophthalmol. 2026;20:616773.

doi: 10.2147/OPTH.S616773

12 SYNERGY CONTEXT ONLY / RANDOMIZED / FULL TEXT

Modi SS, Lehmann RP, Fisher BL, et al. Comparison of visual function and patient-reported outcomes between two full range of field intraocular lenses: a randomized controlled study. J Cataract Refract Surg. 2025;51(8):695-702.

doi: 10.1097/j.jcrs.0000000000001678

CURATED SOURCES / 13-16

References & disclosures

13 SYNERGY CONTEXT ONLY / FULL TEXT

Micheletti JM, Hall B, Smiley HG, Langston WJ. Visual Outcomes and Patient Satisfaction of Two Continuous Range of Vision Intraocular Lenses. Clin Ophthalmol. 2025;19:309-316.

doi: 10.2147/OPTH.S504090

14 ODYSSEY / SAME COHORT AS [4] / POSTED RESULTS

ClinicalTrials.gov. NCT06550375. Clinical Outcomes With Bilateral Implantation of Odyssey IOLs. Completed; results posted. Accessed 20 September 2026. Not an additional independent cohort.

[Source / registry link](#)

15 ODYSSEY vs PANOPTIX / ONGOING

NCT07768475. A Prospective Study Comparing Visual Outcomes and Patient Satisfaction Following Implantation of the Clareon PanOptix Versus Tecnis Odyssey IOL in Patients Undergoing Cataract Surgery. Active, not recruiting. Accessed 20 September 2026.

[Source / registry link](#)

16 ODYSSEY / LOW-CONTRAST AND PHOTIC ASSESSMENT

ClinicalTrials.gov. NCT07213167. Clinical Evaluation of Low Contrast Visual Performance and Low Light Phenomena in Patients With Various Intraocular Lens Implants. Recruiting; J&J collaborator. Accessed 20 September 2026.

[Source / registry link](#)

THIS OIE EVIDENCE REVIEW**CONFLICT OF INTEREST**

The author declares no conflicts of interest relevant to this publication.

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