

SCIENCE IN FOCUS

ESCRS 2026: Scientific Perspectives in Ophthalmic Surgery

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KEY TAKEAWAYS

- At ESCRS 2026, Bausch + Lomb presented approximately 50 scientific communications: 21 oral presentations, 26 posters and one enVista Aspire™ spotlight presentation.
- The Spotlight presentation reported results of a post-marketing study in which enVista Aspire™ showed excellent distance and intermediate visual acuity with 93% of patients reporting spectacle independence and 90% patient satisfaction.
- In the enVista Aspire™ mini-monovision analysis, 90.5% of intermediate-targeted eyes achieved uncorrected intermediate visual acuity of 20/32 or better, while the proportion of subjects reporting little or no difficulty with intermediate-to-near activities was 13 to 31 percentage points higher than with bilateral emmetropia.
- The enVista Envy™ subanalysis found that distance visual acuity remained strong across several residual refractive error scenarios, with 92.7% of eyes without residual cylinder and 96.7% of eyes with a residual manifest refraction spherical equivalent of 0 D achieving uncorrected distance visual acuity of 20/25 or better.
- The ELIOS™ pivotal effectiveness analysis met both co-primary endpoints at Month 12, with 84.2% of patients achieving at least a 20% reduction in unmedicated mean diurnal intraocular pressure and a mean reduction of 8.17 mmHg from baseline.

The Clinical Evidence Landscape at ESCRS 2026

The European Society of Cataract and Refractive Surgeons congress is one of the key annual meetings for the presentation and discussion of new evidence in cataract, refractive and glaucoma surgery and ocular surface care.

At ESCRS 2026, the Bausch + Lomb scientific program included approximately 50 communications across surgical and ocular surface care, of which 18 presented independently generated data. Surgical data covered six products and technologies: enVista Aspire™, enVista Envy™, LuxLife™, IC-8®

Aphera™, ELIOS™ and the TENEO™ Excimer Laser Platform. Four presentations reported data on the Artelac® dry eye range.

This Science in Focus article examines four of the presented studies in our surgical portfolio, selected for their particular relevance to clinical decision-making. The complete set of Bausch + Lomb congress materials, including additional surgical and ocular surface data, is available through the ESCRS 2026 section of the ECP Hub.

Selected Communications

Clinical Performance of Enhanced Monofocal Intraocular Lenses in a Real-World Multicenter Study¹

McCabe presented a prospective, multicenter, open-label, single-arm study evaluating enVista Aspire™ intraocular lenses across 57 US sites, with outcomes assessed 14 to 42 days after implantation of the second eye. The full analysis set included 338 subjects and 651 eyes.

Mean manifest refraction spherical equivalent was -0.18 ± 0.37 D, and 93.2% of eyes achieved monocular uncorrected distance visual acuity of 20/32 or better. Intermediate performance was also clinically relevant: 70.9% achieved binocular uncorrected intermediate visual acuity of 20/32 or better.

Patient-reported outcomes reinforced the clinical relevance of these acuity findings. Distance vision was rated good to excellent by 96.1% of subjects, and intermediate vision by 86.7%. In addition, 92.6% reported seeing well without glasses, and 89.6% were somewhat to completely satisfied. No serious adverse events were reported in this early postoperative cohort.

Taken together, these findings add to the evidence base for partial depth-of-field enhanced monofocal IOLs in cataract patients seeking strong distance vision with functional intermediate performance. The patient-reported satisfaction rates and spectacle-related findings are particularly relevant in routine clinical practice. This communication was selected for a spotlight presentation, reflecting the clinical relevance of the outcomes presented.

The ESCRS findings are complemented by recently published papers available on this platform: Donnenfeld et al² reported real-world clinical outcomes with enVista Aspire™ and enVista Aspire™ Toric, and Garzón et al³ provided an independent evaluation of visual performance with enVista Aspire™.

A Comparison Between Mini-Monovision and Bilateral Emmetropia: An Assessment of Clinical Outcomes with an Enhanced Monofocal Intraocular Lens⁴

Micheletti reported an exploratory post hoc analysis from a non-interventional, prospective, multicenter study comparing bilateral emmetropia with a mini-monovision approach. The bilateral emmetropia group included 49 patients, while the mini-monovision group included 21 patients, defined by a manifest refraction spherical equivalent within 0.50 D in one eye and more than 0.50 D of myopia in the fellow eye.

In the bilateral emmetropia group, mean manifest refraction spherical equivalent was -0.15 ± 0.26 D; 94.9% of eyes achieved uncorrected distance visual acuity of 20/32 or better, and 52.0% achieved uncorrected intermediate visual acuity of 20/32 or better. In the mini-monovision group, emmetropic eyes achieved mean uncorrected distance visual acuity of approximately 20/26, with 85.7% at 20/32 or better; intermediate-targeted eyes achieved mean uncorrected intermediate visual acuity of approximately 20/27, with 90.5% at 20/32 or better.

The difference was most apparent in daily intermediate-to-near activities. On the Near Activity Visual Questionnaire, the proportion of subjects reporting no or only a little difficulty was 13 to 31 percentage points higher with mini-monovision. Satisfaction with intermediate and near vision was also higher with mini-monovision than bilateral emmetropia, at 76.2% versus 59.2%.

This communication was highlighted because it provides practical evidence on how a mini-monovision strategy may extend functional intermediate-to-near performance with an enhanced monofocal IOL without using a diffractive lens design. The full analysis by Parekh et al⁵ has also been published in *Clinical Ophthalmology*, providing further detail on the visual, refractive and patient-reported outcomes presented at ESCRS 2026. Readers can access the full paper [here](#).

Impact of Residual Refractive Error on Visual Acuity in Eyes Implanted with a Full Visual Range Intraocular Lens⁶

Muzychuk presented a subanalysis of a multicenter, cross-sectional, retrospective case series including 119 patients and 166 eyes implanted with a non-toric full visual range intraocular lens. Data were collected by 14 healthcare professionals in the US and Canada, with follow-up of up to six months. Outcomes were stratified by residual cylinder and manifest refraction spherical equivalent in 0.25 D increments, providing a practical view of how postoperative refractive precision relates to visual performance.

Distance acuity remained strong across several refractive scenarios. Uncorrected distance visual acuity of 20/25 or better was achieved by 92.7% of eyes without residual cylinder and by 96.7% of eyes with a residual manifest refraction spherical equivalent of 0 D. Importantly, 71.4% of eyes with 1.00 D of residual cylinder still achieved 20/25 or better, suggesting that some residual cylinder may be clinically tolerated. Performance appeared optimal when residual manifest refraction spherical equivalent was between 0 and +0.25 D, while +0.50 D was associated with inferior distance, intermediate and near outcomes compared with other groups.

Cylinder findings were directionally consistent with better acuity in eyes without residual cylinder, although the only statistically significant pairwise difference was for uncorrected distance visual acuity between 0 and 0.25 D of cylinder. For clinical practice, this paper is particularly relevant because it moves beyond average outcomes and helps define a refractive tolerance window for full visual range IOL implantation.

This communication was selected because it provides clinically relevant evidence on the relationship between residual refractive error and visual performance with enVista Envy™, helping to inform postoperative refractive assessment and expectations.

Effectiveness of the Excimer Laser Trabeculostomy Procedure in Patients with Primary Open-Angle Glaucoma Undergoing Cataract Surgery⁷

McCabe presented the effectiveness analysis from a prospective, non-randomized pivotal clinical trial evaluating excimer laser trabeculostomy performed in conjunction with cataract surgery in patients with primary open-angle glaucoma. The study enrolled 318 patients across 20 US sites following uncomplicated phacoemulsification.

Both co-primary endpoints were met at Month 12. A 20% or greater reduction in unmedicated mean diurnal intraocular pressure was achieved by 84.2% of patients and mean unmedicated diurnal intraocular pressure decreased by 8.17 mmHg from baseline. Medication burden decreased from a mean of 1.5 ± 0.7 medications at screening to 0.2 ± 0.7 at Month 11, with 85.6% of patients medication-free at that visit. Mean intraocular pressure and medication burden remained stable through Month 24, extending the follow-up context for this combined cataract and glaucoma procedure.

This communication was highlighted because it adds a high-value pivotal trial perspective to the ESCRS 2026 glaucoma evidence. Beyond the headline efficacy results, the prospective multicenter design, predefined endpoints and longer-term follow-up make the dataset particularly informative for clinicians evaluating implant-free approaches to intraocular pressure reduction during cataract surgery. The ESCRS findings are further supported by two recent manuscripts, which can be accessed on this platform: the 24-month report from the ELIOS™ pivotal trial by Gallardo et al⁸, published online ahead of

print in *Ophthalmology Glaucoma*, and a published comparative study by Jacobs et al⁹ evaluating ELIOS™ versus iStent inject when performed with phacoemulsification.

Conclusions

Taken together, the selected ESCRS 2026 communications provide clinically relevant evidence across cataract and glaucoma surgery. These findings illustrate how visual, refractive and treatment-burden outcomes can inform clinical decision-making across different stages of the surgical pathway. Readers can access the complete congress materials and related full manuscripts through the links provided in this article and the ESCRS 2026 section of the ECP Hub.

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Author disclosures

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