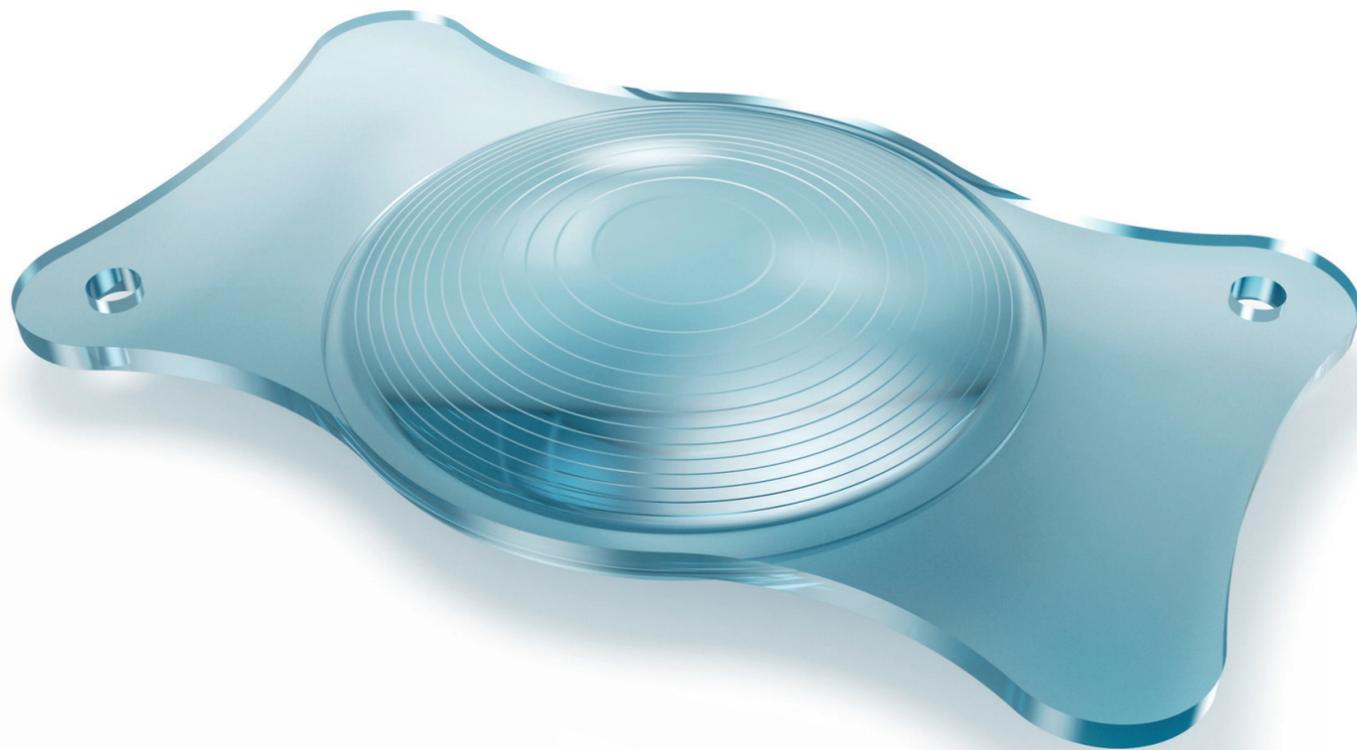


ZEISS AT LARA 829MP

The next-generation EDoF IOL with the widest range of focus



Florian Kretz, Chief Executive Officer and Lead Surgeon at Augenärzte Gerl, Kretz & Kollegen in Ahaus, Germany, says,

“AT LARA from ZEISS offers us an additional option for individualized patient care. It enhances the intermediate visual acuity and offers reduced optical phenomena with increased optical performance for distance and intermediate range.”

‘Premium’ patients expect premium outcomes. When it comes to multifocal IOLs, it’s the surgeon’s job to give their patients what they’ve paid for. Both surgeon and patient, therefore, require a premium IOL that can meet the demands (and the high expectations) that are inherent in premium cataract and refractive lens exchange procedures.

Multifocal IOLs – and in particular trifocal IOLs – provide patients with good visual acuity at all distances. But this has come at a cost: the optical compromises inherent in such lens designs can lead to visual side effects like halo and glare. If patients can’t tolerate them, the alternative is often placing a monofocal lens. These are safe in terms of visual side-effects, but come with a glaring drawback: patients need to wear spectacles for near and intermediate vision. Extended depth-of-focus (EDoF) IOLs provide an excellent compromise of the benefits of both monofocal and multifocal IOLs: more spectacle independence than monofocal IOLs, with fewer visual side effects than multifocal IOLs. If you have a patient who leads an active lifestyle, who wants to be largely spectacle-independent, who may be particularly sensitive to visual side effects, and who is happy to occasionally wear reading glasses, EDoF lenses could be a great choice. However, such lens designs still involve optical compromises and visual side effects – meaning there’s still room for improvement.

It has taken real innovation from ZEISS, including simulations with about 50,000 optical design candidates, to push forward the field of EDoF IOLs: the result is a lens that provides the widest range of focus of any lens of its type on the market today – and simultaneously minimizing visual side effects and contrast loss. That lens is the AT LARA 829MP, with each letter in ‘LARA’ representing an optical innovation by ZEISS:

L – “Light Bridge” optical design, providing the widest range of focus among EDoF IOLs.

A – Aspheric optics that are biometrically optimized and neutral. The aberration neutral aspheric design supports depth of focus and post-LASIK usage.

R – Reduced visual side effects, thanks to patented Smooth Micro Phase (SMP) technology and an EDoF design that results in fewer visual side effects than multifocal IOLs.

A – Advanced chromatic optics, with a color-optimized optical design for increased contrast sensitivity.

The Light Bridge optical design is based on a unique diffractive optic with two focus additions, creating a continuous focus extension that allows patients to see sharply without visual aid at distances relevant to most of their daily activities.

AT LARA 829MP’s aberration-neutral aspheric design and advanced chromatic correction allow for optimized contrast sensitivity. ZEISS’ SMP technology combines a diffractive optical design with a unique transition between optical powers. This design allows for an IOL surface profile that can be manufactured more precisely thus reducing light scatter inherent in other IOLs. As a consequence, a smaller fraction of the incident light is misdirected, and accordingly, minimizes visual side effects. Not only does the AT LARA 829MP represent an innovation in optics – it’s also an innovation in manufacturing.

With AT LARA 829MP, ophthalmic surgeons can decrease spectacle dependence for a broader group of patients and address the growing need for improved intermediate vision performance, which is important for activities such as working at a computer. ZEISS AT LARA EDoF IOL enhances the range of vision for patients by creating an elongated focus range. Now, doctors have a new option to provide superior visual outcomes for cataract patients for whom multifocal IOLs might not be the optimal choice because of sensitivity to visual side effects, such as halo and glare at night.

Balasubramaniam Ilango, Medical Director of OPTIMAX clinics, U.K.

“My patients are delighted and very happy with AT LARA 829MP. Their visual acuity is excellent over a wide range of distances and so far they do not report about any visual side effects.”