

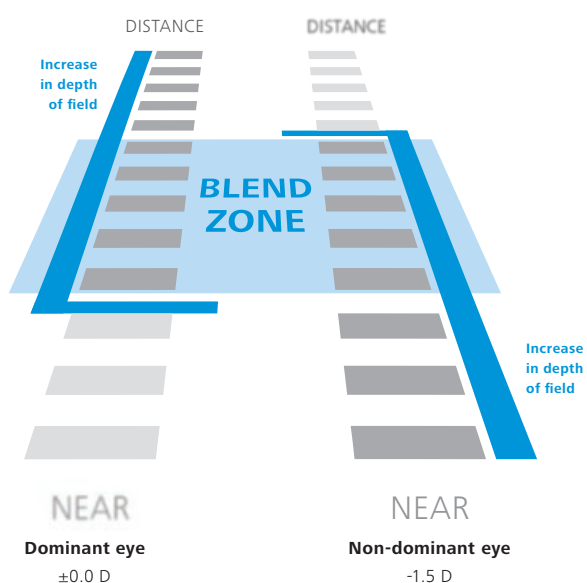


Seeing beyond

## ZEISS PRESBYOND

Blending vision into better outcomes.\*

PRESBYOND® Laser Blended Vision from ZEISS is a software for treating patients with presbyopia. It offers the opportunity to achieve freedom from glasses by combining the simplicity and accuracy of corneal refractive surgery with the benefits of increased depth of field in retaining visual quality.



*Essentially, the Blend Zone makes it easier for the brain to merge the images of both eyes, thereby achieving true binocular vision. In addition to excellent near and far vision, ZEISS PRESBYOND Laser Blended Vision patients also experience very good visual acuity and contrast sensitivity in the intermediate range.*

### Conventional monovision

With micro-anisometropia treatment methods, the dominant eye is corrected for distance vision to almost plano while the non-dominant eye is corrected for near vision, usually up to  $-3.0$  D.

Optimal vision is achieved at distance and near range, requiring the brain to contend with two separate images at different levels of correction which not all patients can tolerate. Patients that do tolerate the method are left with an uncorrected gap in the intermediate range, the so-called "Blur Zone."



### ZEISS PRESBYOND Laser Blended Vision

As a surgical solution based on the naturally occurring spherical aberrations of the eye, this ZEISS software extends the scope of customized ablation beyond the limits of conventional monovision laser methods.

Similar to conventional monovision, the dominant eye is corrected for distance vision to almost plano, whereas the non-dominant eye is corrected to be slightly myopic for near vision to  $-1.5$  D. This micro-anisometropia strategy is further enhanced by a decisive difference: an increase in the depth of field of each eye using a wavefront-optimized ablation profile to create a continuous refractive power gradient for the whole optical zone of the cornea.

This ZEISS software enables an individual treatment designed to consider the preoperative spherical aberrations and the functional age of the eye. As a result, a customized fusion of the two images for near and distance vision is created for each patient – the so-called "Blend Zone."

\* In reference to clinical outcomes as compared to monovision. Data on file.



## CUSTOMIZED

### Individualized ablations

As an optimized laser method to compensate age-related accommodation loss, PRESBYOND LASIK is ideally suited for serving the needs of patients 40–60 years of age – a fast-growing demographic group interested in sophisticated options. ZEISS PRESBYOND Laser Blended Vision incorporates preoperative wavefront data to fine-tune the depth of field for each eye individually. The functional age of the eye is also factored in. As a result, a personalized ablation profile is created per eye for optimized target refraction. The monovision component can be pre-adjusted for the patient's tolerance level. Also, different optical zone sizes can be selected to account for the patient's pupil size.

## ALL DISTANCES

### Excellent visual acuity

LASIK with PRESBYOND is a method for treating indications ranging from  $-8.0$  D to  $+2.0$  D, including emmetropic and astigmatic patients (up to  $+2.0$  cyl). By customizing each eye individually, ZEISS PRESBYOND Laser Blended Vision provides excellent visual acuity for near and distance vision. Unlike conventional monovision methods, LASIK with PRESBYOND also offers good intermediate vision in the Blend Zone. According to clinical studies, there is virtually no loss of contrast sensitivity while stereoacuity is maintained. Also, side effects such as multiple images in one eye are almost eliminated. PRESBYOND offers a physiologically optimized solution and a true natural binocular method for treating patients with presbyopia.

## IMMEDIATE

### Appropriate for most patients

A key advantage of ZEISS PRESBYOND is that it is proven to be tolerated by more patients than conventional monovision. It is effective for treating up to 97% of all presbyopia-related forms of impairment as compared to only 59–67% for conventional monovision. In fact, it has the potential to achieve a far greater success rate than any comparable treatment along with giving patients the wow effect of being able to read without glasses the very same day. Thus, it positively impacts patients and refractive surgeons alike – visually for the former, economically for the latter<sup>1–5</sup>



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### References

Claims made in this document are supported by information provided in the following publications:

1. Reinstein DZ, Couch DG, Archer TJ. LASIK for Hyperopic Astigmatism and Presbyopia Using Micro-monovision With the Carl Zeiss Meditec MEL 80. *J Refract Surg.* 2009;25(1):37–58.
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3. Reinstein DZ, Carp GI, Archer TJ, Gobbe M. LASIK for the correction of presbyopia in emmetropic patients using aspheric ablation profiles and a micro-monovision protocol with the Carl Zeiss Meditec MEL 80 and VisuMax. *J Refract Surg.* 2012 [In Press].
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5. Evans BJ. Monovision: a review. *Ophthalmic Physiol Opt.* 2007;27(5):417–439.