PRESBYOND Laser Blended Vision
Customized. All distances. Immediate.
The moment you bridge the gap to clear vision at all distances. This is the moment we work for.
PRESBYOND Laser Blended Vision
A clear choice for presbyopic patients

PRESBYOND® Laser Blended Vision from Carl Zeiss is an advanced method for treating patients with age-related loss of accommodation, also known as 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. As a surgical solution based on the naturally occurring spherical aberrations of the eye, PRESBYOND Laser Blended Vision extends the scope of customized ablation beyond the limits of conventional monovision laser methods in several ways.

Whether for its customized treatment profiles, its visual acuity at all distances, its indications range or its immediate impact, PRESBYOND Laser Blended Vision is a clear treatment choice for the fast growing demographic of presbyopic patients.

PRESBYOND Laser Blended Vision
Customized. All distances. Immediate.
Next-level vision correction
beyond conventional monovision

Although similar to conventional monovision laser treatments in terms of the workflow, PRESBYOND® Laser Blended Vision takes customized vision correction a step beyond, particularly with respect to the outcomes.
Individualized ablations
PRESBYOND Laser Blended Vision is a truly customized approach for treating presbyopic patients. It 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. In result, a personalized ablation profile is created 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.

Ideal for a growing demographic
As an optimized laser method for age-related loss of accommodation, PRESBYOND Laser Blended Vision is ideally suited for serving the needs of patients 40–60 years of age – a fast-growing demographic group interested in sophisticated options. It is also one of the least invasive methods for addressing presbyopia.

Familiar procedure
Following the same workflow as established LASIK procedures, PRESBYOND Laser Blended Vision combines the convenient binocular treatment planning of the CRS-Master® with the proven comfort and workflow of the MEL® 80 excimer laser from Carl Zeiss.

PRESBYOND Laser Blended Vision provides the most natural form of presbyopic correction, including 97% of all refractive errors with preservation of contrast sensitivity, night vision and stereoacuity; it is easily enhanced, adjusted and even reversed, if needed. It’s the Olympic Gold medalist in presbyopic surgery.

Prof. Dan Reinstein, London Vision Clinic, United Kingdom, August 2012
All distances

Strictly in terms of the visual outcomes, PRESBYOND® Laser Blended Vision transcends conventional monovision methods by offering clear sight at all distances: near, intermediate and far. Better yet, virtually all patients are freed from the need to wear reading glasses.1-4, 6

Outstanding visual acuity
By customizing each eye individually, PRESBYOND Laser Blended Vision provides excellent visual acuity for near and distance vision. Unlike conventional monovision methods, PRESBYOND Laser Blended Vision also offers good intermediate vision in the Blend Zone. According to clinical studies, there is virtually no loss of contrast sensitivity and stereoacuity is maintained. Also, side effects such as multiple images in one eye are almost eliminated.

An all-natural approach
PRESBYOND Laser Blended Vision is a physiological solution and a true binocular method for treating presbyopic patients.

Wide indication range
PRESBYOND Laser Blended Vision is a proven and effective method for treating indications ranging from -8.0 D to +2.0 D, including emmetropic and astigmatic presbyopic patients.

I have been impressed by the very high patient tolerance rate for PRESBYOND Laser Blended Vision which is much higher than what we see for conventional monovision methods.  

Christian de Courten, MD, MV Sante Vision, Switzerland, July 2012
Immediate

What also clearly sets PRESBYOND® Laser Blended Vision apart from other laser techniques is the immediate positive impact it offers patients and refractive surgeons alike – visually for the former, economically for the latter.1–4

Appropriate for most patients
A key advantage of PRESBYOND Laser Blended Vision 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. Even presbyopic patients with emmetropia and astigmatism can be treated. In fact, it has the potential to achieve a far greater success rate than any comparable treatment.1,5

A competitive edge
PRESBYOND Laser Blended Vision allows refractive practices already using a MEL® 80 excimer laser and CRS-Master® from Carl Zeiss to significantly expand their LASIK repertoire and increase the patient base. For most patients, a positive effect is that they can read without glasses the very same day. As such, PRESBYOND Laser Blended Vision offers a decisive competitive advantage over LASIK practices only specializing in monovision treatment methods.

> ZEISS Laser Blended Vision is the answer to the missing platform in LASIK refractive surgery for myopic, hyperopic and even emmetropic patients.  
Andrew Taylor, MD, F.R.C.S.C., LASIK Eye Surgery Niagara Falls, Canada, January 2012
A perfect combination: CRS-Master and MEL 80

CRS-Master

- Dimensions: Max. 1060 x 420 x 1510 mm
- Weight: Max. 110 kg
- Input voltage:
  - with table: 120, 230 V AC ± 10 %
  - without table: 100, 120, 230 V AC; adjustable, single phase
- Input current: Max. 6.3 A
- Rated frequency: 50/60 Hz
- Ambient conditions:
  - Temperature: +15 . . . +30 °C
  - Relative humidity: 30 . . . 75 %
  - Non condensing
  - Air pressure: 700 . . . 1060 hPa
- Data backup: CD/DVD
- Data transfer: USB flash memory drive (USB memory stick)
- Data printout: Via network connection with Ethernet cable and optional network isolator
- Approval: CE mark as per Medical Device Directive 93/42/EEC

References

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


MEL 80

Laser data
- Type: ArF excimer laser
- Wavelength: 193 nm
- Frequency: 250 Hz
- Aiming beam diode: 650 nm (laser class I according to IEC 60825-1)

Device data
- Weight of MEL 80: 290 kg incl. gas cylinder
- Weight of patient supporting system: 232 kg
- Dimensions (Laser, W x D x H): 800 x 1550 x 1490 mm
- Dimensions including patient supporting system (W x D x H): 1800 x 3140 x 1490 mm
- Power supply:
  - 100 V AC, 50/60 Hz; 17.5 A
  - 120 V AC, 50/60 Hz; 14.6 A
  - 208, 220, 240 V AC, 50/60 Hz; 7.9 A
- Approval: CE mark as per Medical Device Directive 93/42/EEC

Gas supply
- Integrated ArF-Premix cylinder 10 l

Equipment
- Surgical microscope: OPNAP price with integrated video camera
- Active eye tracker: Infrared, pupil and limbus tracking, 1050 frames per second (fps)
- CCA+ (plume removal system): Integrated in device

Spot scanning parameters
- Beam dimensions: 0.7 mm FWHM (Full-width at half maximum), Gaussian beam profile

Phototherapeutic keratectomy
- Area ablation: Programmed PKT shaping

PRESBYOND® Laser Blended Vision is an optional software upgrade for the CRS-Master® from Carl Zeiss. It forms a perfect fit with the MEL® 80 excimer laser, expanding the repertoire of the customized refractive laser corrections far beyond the limits of conventional monovision methods.

PRESBYOND and CRS-Master are not intended for sale in the United States.