

# Introducing the Bi Expert GP Bifocal Design – A patient evaluation

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## Background

Presbyopia remains a challenge for all contact lens practitioners. This group poses some challenges, of course – drier eyes, sagging and looser lids, more medication use, etc. – but often have an interest in beginning or continuing contact lens wear. While there are many options available to manage these patients in soft, hybrid and GP materials new designs continue to be brought to the market.

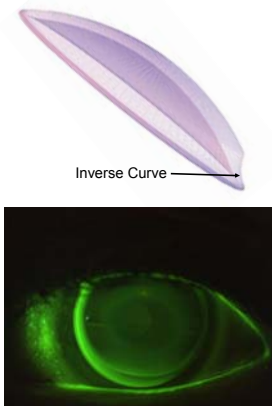
A new non-rotational GP lens has recently been developed – the Bi Expert Bifocal. This lens, which originates from the French contact lens company Precilens, is unique in this category in that it utilizes a patented slab-off technology that results in a 360° uniform edge profile. It is non-truncated and can be fabricated thinner than other lenses in this category.

A study was performed to evaluate the performance of this new GP lens for presbyopia.

## The Lens Design

Bi Expert is a non-truncated, alternating vision bifocal lens in which the base of the prism is designed as an inverse curve. This unique curve fits the lower eyelid providing a natural lens translation to near vision.

The patented slab-off technology also features a thinner, uniform edge profile 360 degrees around the circumference of the lens, resulting in less patient lid awareness.



## The Evaluation

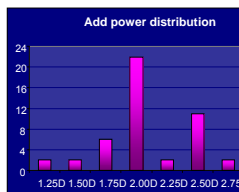
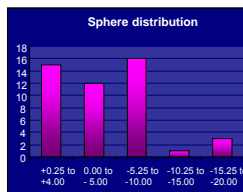
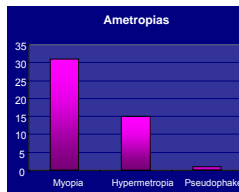
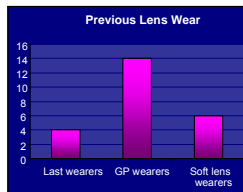
Doctor C.PEYRE evaluated the Bi expert on 24 patients (48 eyes). Gender breakdown was skewed towards females as of this group only one was male. All eyes were normal and free of any ocular pathology.

There was large variance in age between 35 and 63 years. The 35 year old was a unilateral pseudophake.

Most subjects were previous lens wearers – GP, soft and piggyback. The GP wearers were refitted because of excessive lens awareness and discomfort.

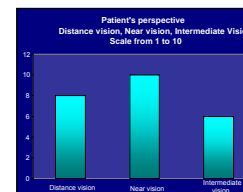
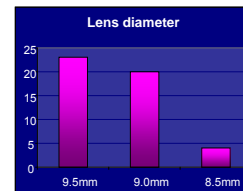
Those who were either non-wearers or previous SCL wearers were chosen for this evaluation based on the indication of improved vision for driving, especially at night.

The majority of patients were myopic, although there either soft lenses and first time wearers the choice of this equipment was made based on specific visual needs, mainly for night driving.



## Fitting Process

Lens fitting was based on the manufacturer's suggested fitting guide for base curve, distance and near power, segment height and overall diameter. The diameter of the lenses used were divided in half between the average diameter (9.5mm) and small diameters (9.0-8.5mm).



## Discussion

In the post fit survey 84% of the evaluation subjects were satisfied with the lens fit.

62% of the patients (the majority of whom previously wore rigid lenses) expressed satisfaction with their vision and comfort.

Of the 22% of the patients who were moderately satisfied, they described their dissatisfaction related to the translation (not quick enough) 12% and related to comfort 10%.

The discontinuations were explained by overall poor vision (2%) and insufficient comfort for those who essentially wore soft lenses (14%).

In another evaluation, Norman evaluated 13 patients who were a mix of previous single vision GP and soft contact lens wearers as well as patients who were presently wearing GP multifocals and bifocals. As of this writing, 10 of the 13 are successfully wearing the design with good vision, comfort and overall wearability.

These results demonstrate that the Bi Expert non-rotational bifocal GP design offers another option for management of presbyopia.

Its thinner design, combined with the unique slab-off inverse geometry allowed for easy translation, interaction with the lower lid during near gaze and good overall patient comfort.

## Resources

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