

Breaking News

Technolas Perfect Vision

ESCRS Lunchtime Symposium Journal

September 2010

Technolas Perfect Vision unveils two new pioneering laser procedure innovations

at the XXVIII Congress of the ESCRS, Paris



TECHNOLAS Laser Suite 737R

New femtosecond laser-assisted cataract surgery procedure and new excimer treatment for presbyopia.

During this year's ESCRS, TPV announced the development of two new groundbreaking laser procedures in the fields of cataract surgery and the treatment of presbyopia.

Cataract & Refractive procedures with the TECHNOLAS Femtosecond laser

TPV has now developed a new femtosecond laser procedure, known as CUSTOMLENS™, for performing the

key steps in the cataract surgery procedure. CUSTOMLENS will be the latest procedure module to become available on the TECHNOLAS Femtosecond Workstation, in addition to the presbyopia treatment, INTRACOR®, flap module CUSTOMFLAP®, and the therapeutic indications, CUSTOM-SHAPE®.

Dr Kristian Hohla, CEO of Technolas Perfect Vision, said "TPV is again leading the way in the field of laser surgery. In the two years since the formation of Technolas Perfect Vision, we have remained focused on bringing value to our customers.

With the addition of the CUSTOMLENS module to our femtosecond laser, surgeons will be able to perform

cataract, intrastromal, refractive and therapeutic procedures using the same femtosecond laser.

No other company can offer this level of versatility with *one* system." CUSTOMLENS has been developed to perform the key elements of the cataract procedure, capsulorhexis, lens fragmentation, limbal relaxing incisions and clear corneal incisions. CUSTOMLENS will be commercially available mid 2011 (see inside for more details on CUSTOMLENS).

True Solutions for Presbyopia

TPV has also developed an entirely new corneal approach to treating presbyopia with an excimer laser, known as SUPRACOR.

SUPRACOR is a new aberration-optimized presbyopic algorithm which is designed to be applied to Myopic, Hyperopic and Emmetropic eyes, as well as post-LASIK cases. SUPRACOR is performed using the TECHNOLAS Excimer Workstation 217P.

"No other company can offer this level of versatility with *one* system" Dr Hohla

The new SUPRACOR algorithm combines the best of both worlds, using the growing INTRACOR experience

and learnings from the corneal approach with excimer laser, to improve outcomes and patient satisfaction. While other presbyopic algorithms create undesired aberrations inside the pupil region, SUPRACOR provides the expected near addition without inducing undesired aberrations. Rupert Veith, Chief Commercial Officer of Technolas Perfect Vision, said "With the advent of SUPRACOR, we are truly positioning ourselves as the Presbyopia Company. The complementary offering of SUPRACOR and INTRACOR provides surgeons and patients with true solutions for presbyopia".

SUPRACOR is expected to receive the CE Mark in the first half of 2011.



TECHNOLAS Excimer Workstation 217P

The Key Points on SUPRACOR

Surgeon Q&A

Dr Jorge Castanera and Dr Dominique Pietrini, who are both clinical investigators in the SUPRACOR CE study provided their answers on some key SUPRACOR questions

1- Impressive Clinical Outcomes

After your experience performing SUPRACOR as investigator in the CE clinical study, are you happy with the clinical outcomes?

Dr Castanera:

I'm pleased with the results we are obtaining, and more important, patients are also very happy.

I think SUPRACOR has opened new possibilities in the treatment of presbyopia. Near vision is excellent immediately after surgery, and distance vision is also very good although it takes longer to stabilize. It is a very safe procedure with very a low complication rate. SUPRACOR is now my first choice for presbyopic patients with low hyperopia up to +2.50 diopters.

Dr Pietrini:

I have been surprised by the results obtained with SUPRACOR treatment. Using a corneal approach to treat presbyopia is very challenging because the treatment always realizes a compromise. The compromise obtained with SUPRACOR seems to be one of the best compared to other intraocular or corneal approaches.

2- Delivering Patient Satisfaction

And even more important, what is the level of patient satisfaction after undergoing SUPRACOR?

Dr Pietrini:

When treating presbyopia we must deliver what has been promised and even more. With good patient selection and managing patient expectations the level of satisfaction is high because the rehabilitation of far and near vision is very quick and allows a rapid return to usual activities. 90% of our patients live without glasses and all of them would recommend the procedure.

3- Quality of Life for your Patients

How is their **quality of life** after SUPRACOR?

Dr Castanera:

Patients are impressed with the quality in near vision, which was the main reason for surgery.

"SUPRACOR is now my first choice for presbyopic patients" Dr Castanera

Even the first postoperative day most of the patients could read normal print or use the cell phone without glasses. The majority of the patients achieved glasses independence both for distance and near, and so the satisfaction survey showed that all except one patient had their expectations completely fulfilled and they would do surgery again and would recommend it to a relative or a friend. But it is very important to establish good patient selection and to explain the procedure so that they have realistic expectations.

4- Key strengths

From your experience, which are the **main strengths** of SUPRACOR?

Dr Castanera:

Obviously the main strength of SUPRACOR is the efficacy in correcting presbyopia in hyperopic patients.

Another very important aspect is that it is not a monovision procedure. Patients have similar vision in both eyes for distance and near, so that binocular vision is not affected.

5- Ease of Use

Is SUPRACOR **easy to implement** in your surgery routine?

Dr Pietrini:

This corneal approach is easy to implement in our routine surgery. The treatment is planned like any other

treatment based on refraction data.

At this time the company has provided the software to correct hyperopia and hyperopic astigmatism associated with presbyopia. This treatment also includes the latest technology of the Technolas 217P excimer laser: active and rotational eye-tracker, iris recognition and "tissue saving" ablation for hyperopia.

"With good patient selection and managing patient expectations the level of satisfaction is high" Dr Pietrini

Dr Castanera:

It is basically a Lasik procedure with all the advantages of a well known and mastered surgical technique. There is

not a steep learning curve of a new procedure for the operating room team, and you can immediately include SUPRACOR patients in your regular Lasik sessions without delays.

Also, lifting the flap and performing an enhancement procedure is a very easy procedure if it is needed.

6- The most Innovative Algorithm

Why is SUPRACOR better than PresbyLASIK?

Dr Pietrini:

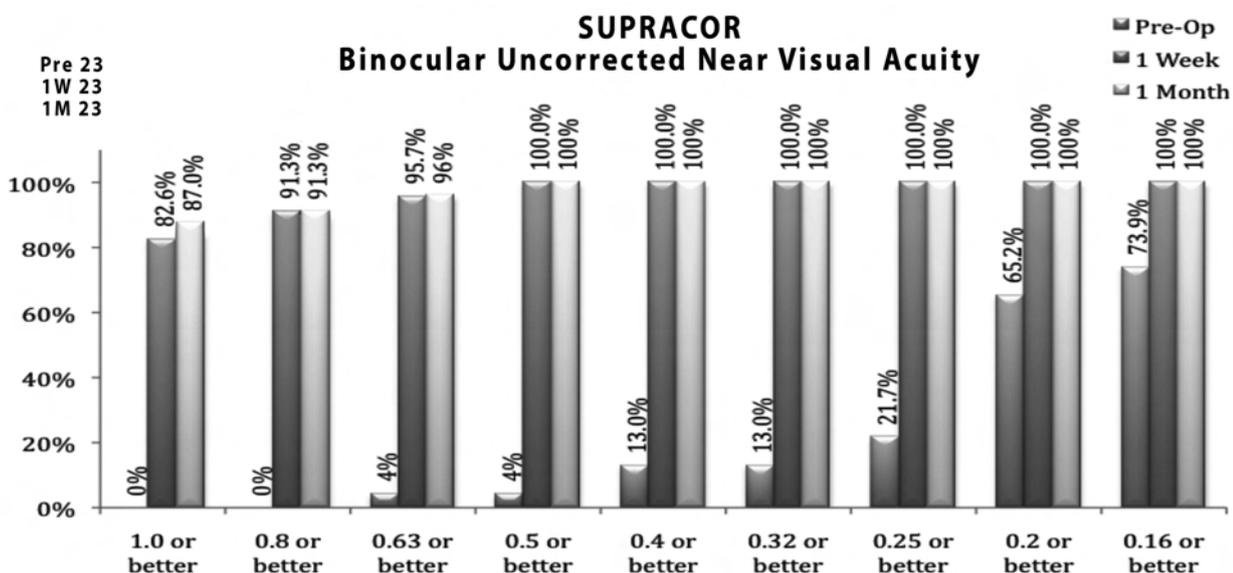
PresbyLASIK is a general term designating a lot of different techniques of multifocal corneal remodelling with a LASIK procedure. SUPRACOR's main difference is how it uniquely combines features for remodelling of the cornea for far, near and intermediate visual acuity.

One Month Results on **CE SUPRACOR** study provide very promising outcomes

One month follow-up results on SUPRACOR find that 87% of patients achieve J1 binocular uncorrected near visual acuity and 91.3% achieve 0.8 decimal or better (J2). Distance vision also improved compared with preoperative measurements. The first results on the European multi-centre study on SUPRACOR, TPV's new corneal excimer solution for presbyopia, were presented by Dr Jorge Castanera, Spain,

during TPV's ESCRS lunchtime symposium. The study participants in this prospective, multicentre, bilateral study on 80-100 patients are Dr Jean-Jacques Chaubard, from Nice, Dr Jorge Castanera, from Barcelona, Dr Antoine Roure, from Nice and Dr Dominique Pietrini from Paris. In this ongoing SUPRACOR evaluation on hyperopic patients, measuring both objective data and including a patient questionnaire, 95.7% were

happy with the outcome. This is comparable with patient satisfaction following myopic LASIK surgery*. All of the SUPRACOR patients surveyed said they could read menus, short text message, newspapers, package inserts, mobile phone text messages and use the computer without glasses. Overall, all patients said they would recommend the surgery to a friend. *Solomon KD et al. LASIK world literature review: quality of life Ophthalmology 2009 Apr;116(4):691-701.



NEW BUSINESS OPPORTUNITIES

The aging baby boomer generation is resulting in an increase in the number of presbyopic patients. In 2007, an average of 37% of the population of the countries listed in Figure 1 was presbyopic, a number which is forecasted to grow in the future. Technolas Perfect Vision has the

perfect solution to meet this growing challenge by pioneering a revolutionary approach to treating presbyopia: the SUPRACOR treatment. SUPRACOR will be one of the most important contributors to the expansion of your refractive surgery business and will open the door to this

continuously growing presbyopia market. Together with INTRACOR, the only intrastromal presbyopic solution, TPV can offer the most complete range of solutions for this important group of patients who are looking for a better quality of life.

Country	2007			2020		
	Population	Presbyopes	Percent	Population	Presbyopes	Percent
United States	303.0	103.6	34,2%	340.4	119.4	35.1%
Japan	127.4	56.8	44,6%	123.4	58.7	47.5%
Germany	82.4	34.5	41,8%	36.8	16.4	44.6%
France	63.7	23.6	37,1%	70.2	27.4	39.1%
United Kingdom	60.8	22.4	36,8%	62.8	24.3	38.6%
Italy	58.1	23.9	41,2%	57.7	25.4	44.1%
Spain	40.4	15.1	37,3%	41.1	16.4	39.9%
Korea, South	49.0	15.5	31,5%	51.6	16.3	31.5%
Canada	33.4	12.2	36,4%	37.2	13.9	37.4%
Taiwan	22.9	7.2	31,6%	23.0	7.3	31.8%
Australia	20.4	7.1	34,7%	22.5	8.1	35.8%
Total	861.6	321.7	37.3%	867.3	333.6	38.5%

Fig 1- The Presbyopic Population (Source: Market Scope)



Prof Gerd Auffarth, University of Heidelberg, Germany

First **CUSTOMLENS™** cataract cases reported at the ESCRS

The first clinical cases showing anterior capsulotomies successfully performed with CUSTOMLENS on the TECHNOLAS femtosecond laser were presented by Prof Gerd Auffarth, University of Heidelberg, Germany, during the ESCRS. The Technolas femtosecond laser with CUSTOM-

LENS is the only laser which can perform cataract and refractive procedures.

Commenting on these cases, Prof Auffarth noted “Being able to perform femtosecond laser-assisted cataract surgery with the TECHNOLAS system is a remarkable step forward in femto-

second laser technology. I already perform the INTRACOR procedure with the system, as well as using it to create flaps and for perforating keratoplasty. So the option to also perform the cataract steps with CUSTOMLENS module is a very exciting development”.

Technolas Perfect Vision, Your Refractive Partner

Technolas Perfect Vision is the only company providing innovative laser solutions for presbyopia with SUPRACOR and INTRACOR. We're focused on continuous new developments to offer you the most advanced solutions and the best support to help drive your business.

TPV- The Presbyopia Company

Last July TPV invited 700 surgeons from Europe, Middle East and Africa to participate in a survey on presbyopia. The objective was to assess the community's view of the emerging presbyopia market opportunities. As shown in the Figure A below, 67% of the participants consider it is very important for their practice to be able to offer solutions for presbyopia.

How important do you believe presbyopia correction will be for your practice in the future?

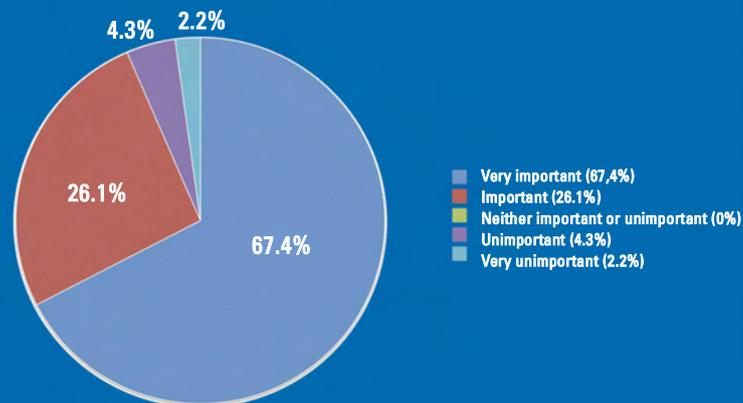


Figure A - Importance of presbyopia correction in the refractive practice

Technolas Perfect Vision is focused on presbyopia solutions and offers revolutionary approaches to treat presbyopia: SUPRACOR and INTRACOR. Approximately 90% of the survey participants considered TPV will play an important role in the area of presbyopia correction, as Figure B demonstrates.

How important a role do you believe Technolas Perfect Vision will play in the area of presbyopia correction?

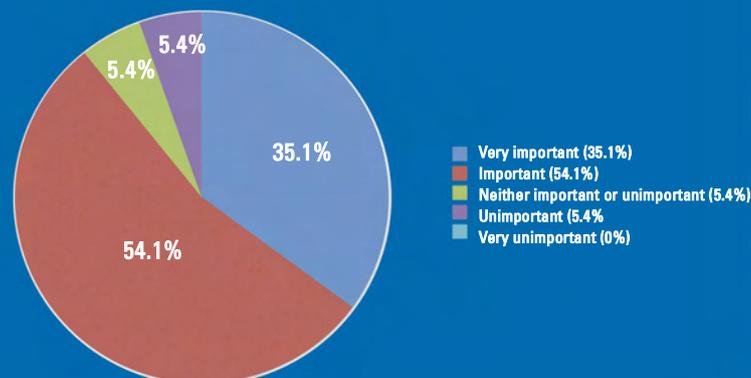
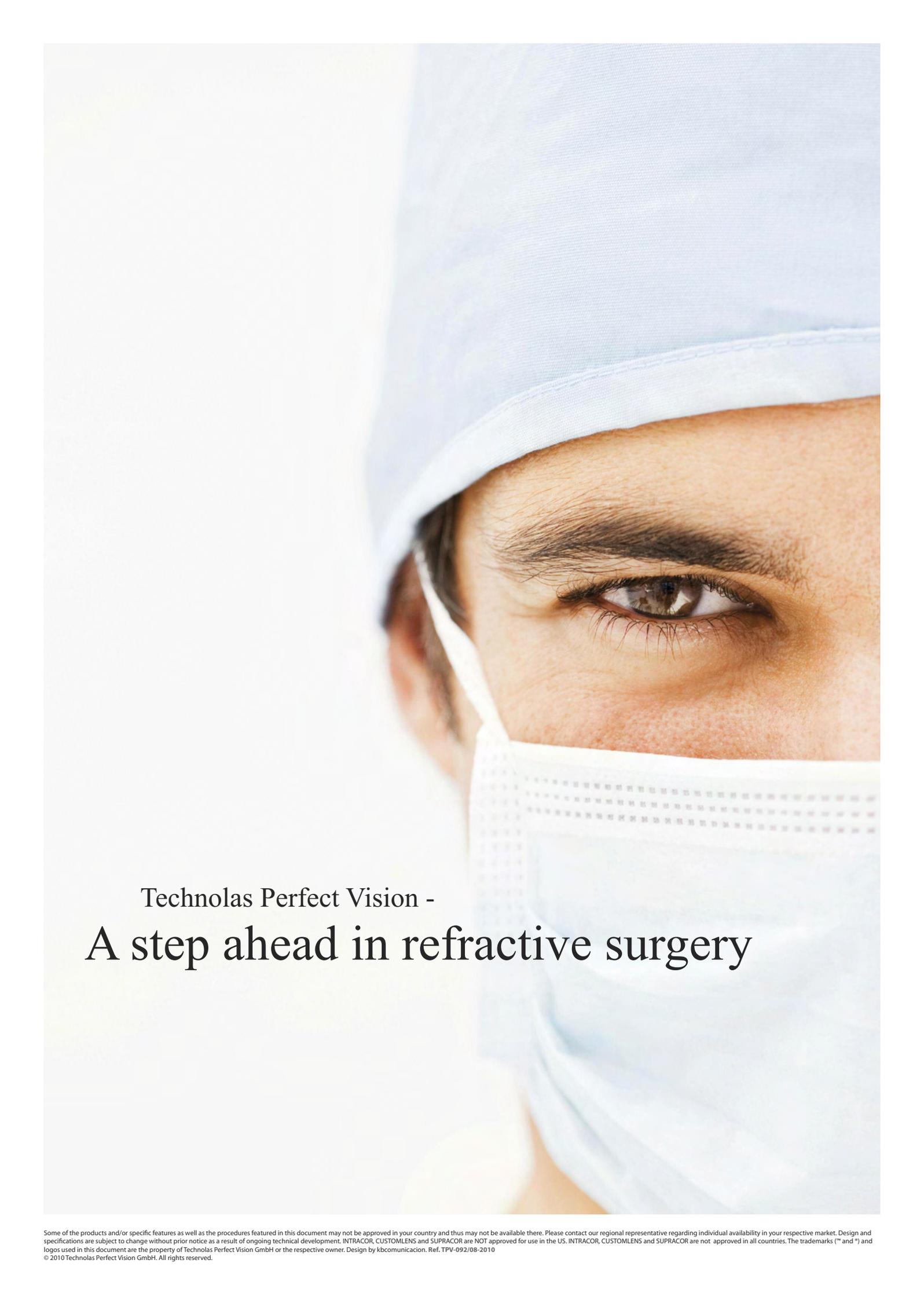


Figure B - TPV role in presbyopia correction



Technolas Perfect Vision -
A step ahead in refractive surgery