

Amico Yasna Pars

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“The beautiful spring came, and when nature resumes her loveliness, the human soul is apt to revive also”

-Harriet Ann Jacobs



Dear Valued partners

As Harriet Ann Jacobs quoted, the spring is a chance to revive human soul, it's a chance to stop for a moment in the fast moving lives of today and think about the path that we paved. It's a chance to value the important and loved ones, it's a chance to renew. **AMICO YASNA PARS** is honored to be your partner by providing the most trusted products and latest technologies in the field of ophthalmology for one more year, there is no doubt that with your warm support we will continue this path as an obligation. Let's cherish this opportunity to wish you a happy and prosper year ahead.

elita

Femtosecond Laser



Introducing ELITA™,
next-generation
corneal refractive
technology

Johnson & Johnson

Evaluation of Visual Outcomes After Smooth Incision Lenticule Keratomileusis (SILK)

ROHIT SHETTY, DNB, FRCS, PHD

Smooth incision lenticule keratomileusis (SILK) uses the next-generation ELITA femtosecond laser (Johnson & Johnson Vision) and is designed for tissue-bridge-free incision.

It is currently being evaluated for the treatment of myopia and myopic astigmatism, and is still an investigational device as of February 2023. The greatest differentiator between SILK and other LE procedures is the novel ablation profile, i.e., a biconvex shape.

INTRODUCING **SILK** (SMOOTH INCISION LENTICULAR KERATOMILEUSIS)

THE NEXT GENERATION LENTICULAR PROCEDURE FROM J&J VISION



Exceptionally
precise &
accurate
technology



Consistently
smooth
lenticule
removal



Exquisite visual
outcomes and
patient
satisfaction

- Indication: Myopia with/without astigmatism up to -12 DS, up to -6 DC, with sum of sphere and cylinder between -1.00 D and -12.00 D using minus cylinder convention
- Biconvex lenticule shape designed to preserve corneal integrity and improve nerve regeneration
- Post-docking centration and cyclotorsion adjust

What is SILK?

Unlike the iFS advanced femtosecond laser (Johnson & Johnson Vision) which has a pulse duration of 600-800 femtoseconds and energy of 150 nJ,¹ the ELITA femtosecond laser has a pulse duration approximating 150 femtoseconds and energy of 60 nJ with a spot-to-spot distance of 1 μm . Uniquely, there is no spot separation, which is achieved through a combination of shorter pulse duration, tighter spot pacing, and smaller spot size, compared to the iFS. This not only results in faster, but also smoother cuts.

As with all LE procedures, the anterior and posterior planes of the lenticule are dissected sequentially; however, the extracted lenticule is biconvex. This novel lenticule shape was chosen because, theoretically, a biconvex lens has the smallest antero-posterior dimension whereas a meniscus lens has the largest antero-posterior dimension. Mathematical modelling of customized corneal ablations has previously shown that a greater depth of central photoablation could induce an increase in corneal prolateness, i.e., minimal changes in corneal asphericity (Q-value).² Most human corneas have a prolate elliptical shape whereby they flatten from the centre to the periphery and thus have negative asphericity.² Loss of asphericity has been suggested to be the predominant factor that results in a decrease in functional vision.³ Therefore, the smaller antero-posterior dimensions of a biconvex lenticule may better preserve corneal asphericity and, potentially, lead to better visual outcomes.

Visual acuity and quality outcomes from a two-centre clinical study

Two cohorts of patients with myopia/myopic astigmatism underwent SILK to correct myopia and astigmatism in a prospective, single-arm, non-comparative clinical study. A nomogram was only implemented in cohort two. Based on interim data from cohort two, surgeons rated the ease of lenticule removal as requiring no or minimal additional dissection in 97% of cases. All cornea were clear at the postoperative day 1 and week 1 visits. By postoperative month 1, 89% of eyes in cohort two had an uncorrected visual acuity (UCVA) of 20/20 or better. In fact, within 1 week after surgery, 85% and 98% of eyes in cohort two achieved a UCVA of 20/20 or better and 20/25 or better, respectively. All eyes in cohort one were targeted for emmetropia and by postoperative month 3, 90% of eyes had a manifest refractive spherical equivalent (MRSE) within ± 0.5 D of the intended target, with low variability (standard deviation of 0.14 D; Fig. 3A). In cohort 2, after implementation of the nomogram, 90% of eyes had a MRSE within ± 0.5 D of the intended target by postoperative month 1 (standard deviation of 0.28 D; Fig. 3B)

Quality of vision can be affected by collateral changes in the corneal epithelium and nerves, tear film, and depth of focus. Epithelium remodelling is one of the major changes following refractive surgery. An analysis of eyes from both cohorts showed that there were no epithelial irregularities or hyperplasia after SILK, with preoperative and postoperative only varying by a few microns. In this study, patients demonstrated faster and more optimal regeneration of corneal nerves after SILK than what is typically observed post-LASIK. This may have an added advantage in patients with early dry eye disease, as their corneal nerve fibre length is typically lower. A double-pass aberrometer, which provides an objective clinical evaluation of the eye's optical quality (ocular scatter index [OSI]), showed that postoperative visual acuity was as good or better than the

Epithelium remodelling is one of the major changes following refractive surgery.

preoperative status. We have previously measured the depth of focus of emmetropic, post-LASIK, and post-SMILE eyes at distance (20 feet), intermediate (60 cm), and near (40 cm) targets.⁴ In this study, all measured outcome parameters were comparable between post-SILK and emmetropic eyes within the same age group, i.e., at distance, intermediate, and near targets for spherical power; cylindrical power; spherical equivalent; visual acuity; spherical aberration; defocus aberration, higher-order root mean square (HORMS); and lower-order root mean square (LORMS). In summary, SILK delivered seamless lenticule removal with either no or minor tissue adhesions. Corneal biomicroscopy was unremarkable on postoperative day 1 and week 1. When a nomogram was implemented, patients undergoing SILK experienced faster visual recovery. SILK also resulted in faster corneal nerve regeneration, good tear film optics, controlled change in asphericity and resulting aberrations, and a postoperative depth of focus similar to emmetropic eyes.

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2. Gatlin D, et al. Analysis of customized corneal ablations: theoretical limitations of increasing negative asphericity. Invest Ophthalmol Vis Sci. 2002;43(4):941-8.
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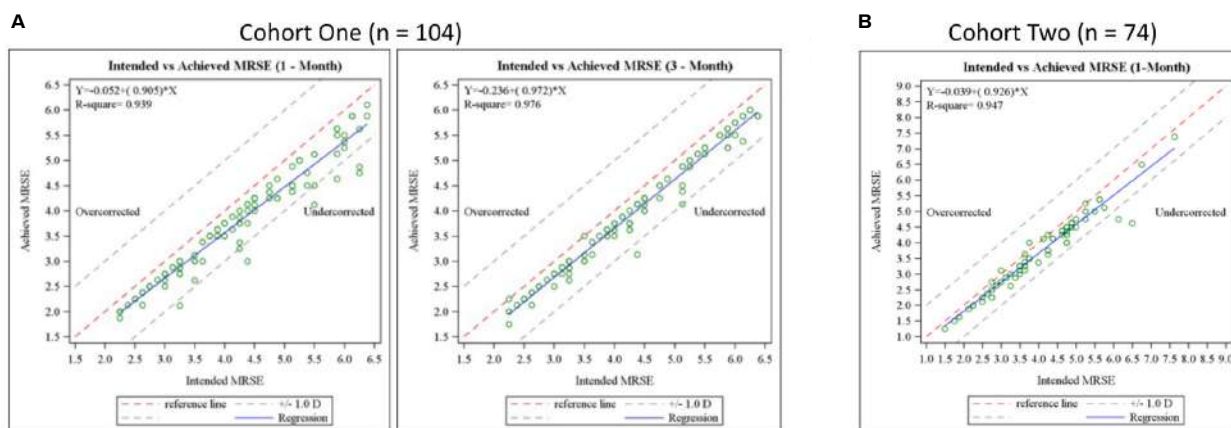
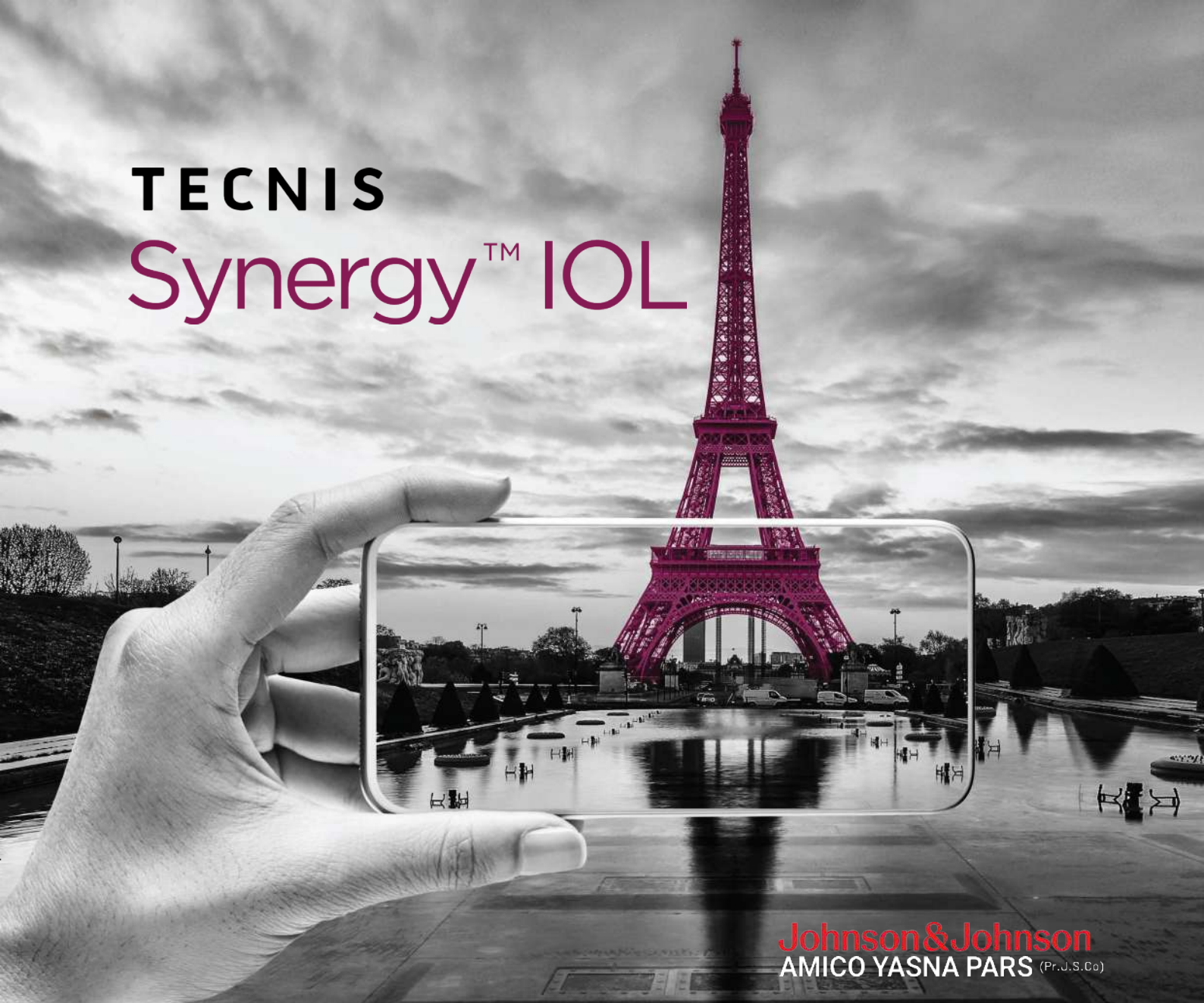


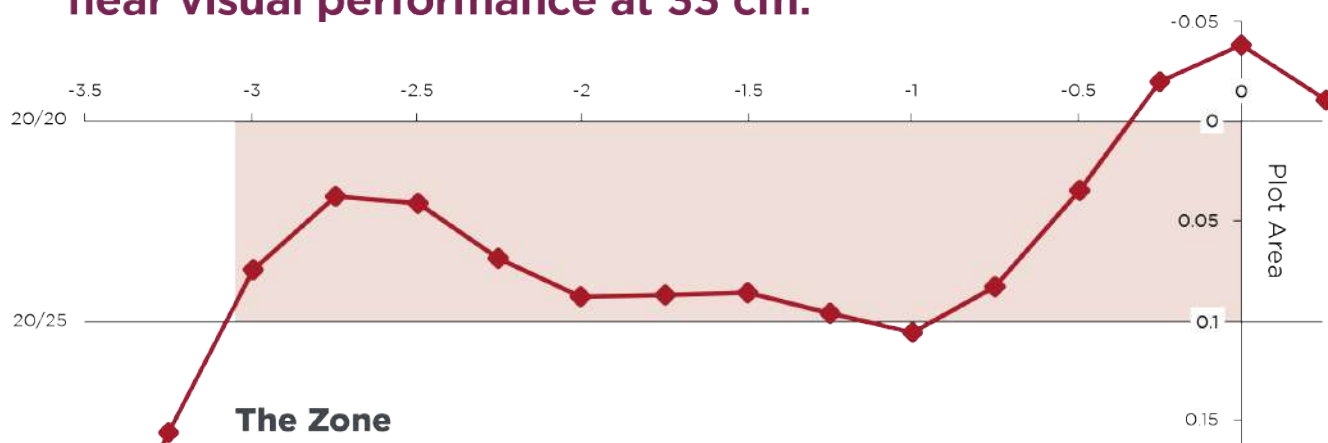
FIGURE 3: VISUAL OUTCOMES FOLLOWING SILK FOR THE TREATMENT OF MYOPIA WITH OR WITHOUT ASTIGMATISM IN TWO PATIENT COHORTS. A NOMOGRAM WAS IMPLEMENTED IN COHORT TWO. COURTESY OF ROHIT SHETTY, DNB, FRCS, PHD.

TECNIS Synergy™ IOL



Johnson & Johnson
AMICO YASNA PARS (Pr. J. S. Co)

TECNIS Synergy™ IOL: Unparalleled “in the zone” vision that outperforms trifocal IOLs, including outstanding near visual performance at 33 cm.



The Zone

Area of visual performance between 20/20 and 20/25 from 33 cm to distance

Your surgical day just got easier.

veritas **True Ease.
Total Control.**



Johnson & Johnson
AMICO YASNA PARS (Pr.J.S.Co)

Cataract surgery necessitates technologies that improve surgical efficiency and can be enhanced for safety



Anterior chamber stability is a key to **successful outcomes** for patients undergoing cataract surgery



Imbalance in fluid flow during phacoemulsification can lead to anterior chamber instability and **increase the risk of complications**



Post-occlusion surge (POS) is a **main source of chamber instability** during cataract surgery

The VERITAS™ Vision System is optimized for fluidics management



Advanced Tubing System enhances aspiration pump to maintain **chamber stability**



Peristaltic and venturi Dual Pump capability offers flexibility for **optimal fluidics management**



Chamber Stabilization Intelligence **automatically** regulates vacuum to reduce POS



WHITESTAR™ Micropulse Technology enables **ultra-efficient lens extraction with less energy**

Optical **Biometry** with Full Corneal Topography System

HBM-1



All 10 examinations at once

10 types of data for IOL Power calculation ; All accurate result values are based on the NO.6th AL, NO.8th ANT measurement data Standard Deviation(STD). Fast measurement speed minimizes patient discomfort.

10 methods data measurement :

Axial Length(AL), Anterior Chamber Depth(ACD), Central Corneal Thickness(CCT), Lens Thickness(LT), Keratometry, Topography, Keratoconus, Zernike Coefficients, Pupillometry, White to white



Precise Corneal Information and K Values

The HBM-1 provides accurate analysis and measurement data regarding the overall Cornea Axial, Tangential, Refractive Power, Elevation Map

Data Measurement:

Keratometry, Topography, Keratoconus, Zernike Coefficients, Pupillometry, White to white

IOL Power value with the various Formula

The measured result value suggests the IOL Power value after calculation through the various Formulas & IOL.

10 methods data measurement :

Axial Length(AL), Anterior Chamber Depth(ACD), Central Corneal Thickness(CCT), Lens Thickness(LT), Keratometry, Topography, Keratoconus, Zernike Coefficients, Pupillometry, White to white

DCM(Dense Cataract Mode) for Dense Cataract Measurement

The DCM functionality is designed for patients with dense cataracts, enabling the measurement of the AL value through sophisticated algorithm-driven technology, ensuring accuracy even in challenging cases.

Premium Lens Prescription

Prescribes premium lenses that can correct astigmatism, myopia, and presbyopia at the same time while improving cataracts.

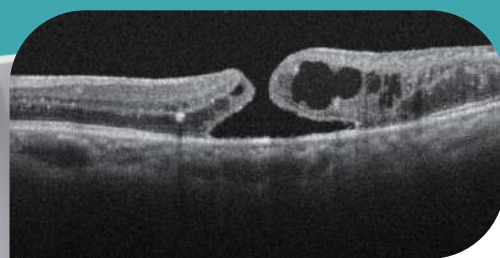
Toric IOL for astigmatism, correction of presbyopia for multifocal IOL, Spherical IOL for clear visibility, etc, It guides the user in selecting the optimal IOL to correct refractive errors.

Optical Coherence Tomography

with Fundus Camera, Angiography, Biometry and Topography

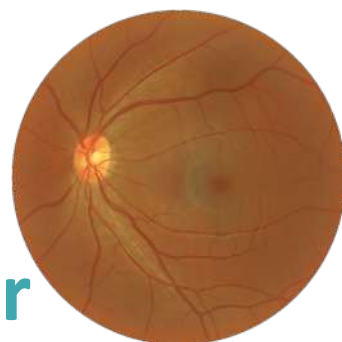


HOCT-1/1F

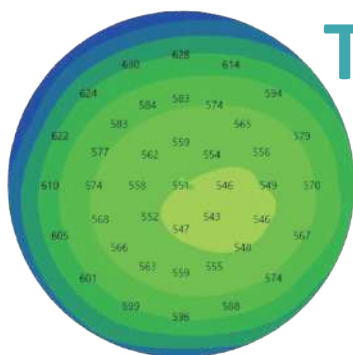


Anterior OCT

Pachymetry & Epithelium Map

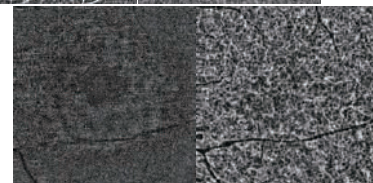
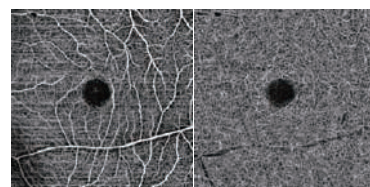


Full Color Fundus Image



Topography

16 Maps for Anterior & Posterior



Innovative Angiography

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