

Amico Yasna Pars

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**“The face is a picture of the mind
with the eyes as its interpreter.”**

- Marcus Tullius Cicero

Dear Valued Partners

The importance of eyes and vision is not hidden from anyone. What makes our perception of the surrounding world possible to a great extent is our vision, and indeed, our other senses exist to complete this sense.

Undoubtedly, it is a great honor to cherish you who are responsible for the important task of protecting our eyesight, and we take advantage of every opportunity for this purpose.

Amico Yasna Pars is proud to offer the latest ophthalmic products from the most prominent companies in the world in order to achieve your important goal of maintaining and improving vision.

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LENS EXTRACTION
PHACOEMULSIFICATION SYSTEM

It's all in
your hands.

CHOOSE A SYSTEM THAT
**EMPOWERS YOUR
EVERY MOVE.**

Setting Parameters for Phaco Fluidics



Filomena Ribeiro MD, PhD, FEBO

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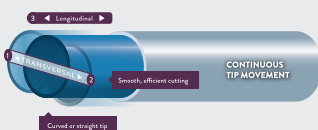
The Peristaltic pump and the Venturi pump are distinctly different types of phacoemulsification technology, and each system has unique advantages and disadvantages. Sometimes a combination of Venturi and Peristaltic technologies can be employed for the ideal assistance when setting parameters for different steps of the cataract surgery, in specific cases. Optimising machine settings for different objectives is an important factor in successful cataract surgery. Surgeons must understand the principles to improve power and fluidics to be efficient, and to maintain a stable anterior chamber and less intraocular trauma. With the Peristaltic pump, we must set flow and vacuum limits. Flow is constant until occlusion, and on complete occlusion the vacuum is at its



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Work the way you want. The **ELLIPS® FX** Handpiece smoothly and efficiently cuts while protecting the eye and giving you total control.

- Continuous, elliptical ultrasound for both power and followability
- Reduced heat generated at the incision
- Less corneal edema
- Lower endothelial cell loss



In both blocked and unblocked conditions, elliptical energy management maintains significantly cooler temperatures than the competitor handpiece.

highest level. The advantage for this pump type is that vacuum-building is safer; however, it may require more time and manipulation to capture nuclear fragments.

The advantages of the Venturi pump are that it is able to create the preset vacuum level without occlusion of the phaco needle tip; there is only one variable to change; it has a rapid rise time; and we can keep the phaco tip in the centre and expect the nuclear pieces to follow. Its only disadvantage is that flow is dependent on the vacuum level.

A Peristaltic pump requires tip occlusion for vacuum to be active, and as a result it does not draw material as easily and quickly to the tip as a Venturi pump does. With the Peristaltic pump, occlusion automatically lowers the vacuum for safety; whereas, with the Venturi pump you can have vacuum without occluding the tip.

Refinement of these systems has resulted in there no longer being a dramatic difference in safety between Venturi and Peristaltic systems. However, the increased efficiency of Venturi systems gives them the advantage when it comes to overall phacoemulsification performance.

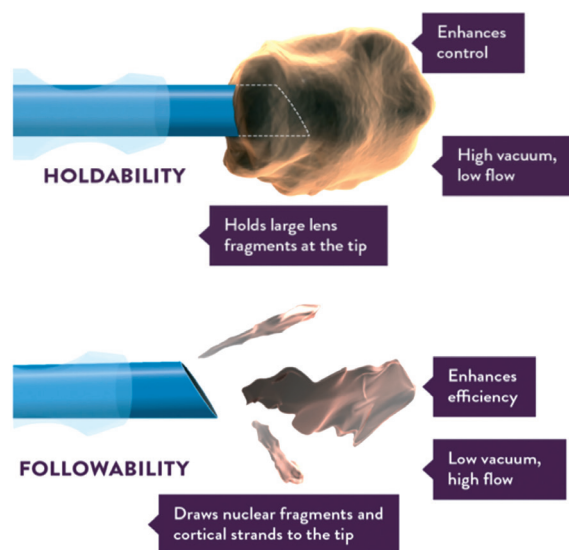


Figure 5. Holdability and Followability are key concepts when considering Venturi and Peristaltic fluidics

Holdability and Followability

When addressing the safety vs efficiency factors of Venturi and Peristaltic systems, “holdability” and “followability” are two key concepts to consider (Figure 5). Holdability, which is associated with the Peristaltic pump, refers to how the pump holds large lens fragments at the tip and enhances control. However, when occlusion breaks, there can be a significant surge, and this is the primary problem of the Peristaltic system. While it is safer than it once was, this is still a problem.

Followability, which is associated with the Venturi pump, equates to low vacuum with high flow. This means the vacuum exists without occlusion, and

we are always controlling the vacuum. Of course, it is important to recognise that steadily applied vacuum can put the iris and capsular bag at risk. Followability draws nuclear fragments and cortical strands to the tip, enhances efficiency and enables low vacuum and high flow.

Best of Both

When the advantages of followability and holdability are combined, we have the best of both worlds. This is what we see with the dual-pump systems, such as the Whitestar Signature phaco system. On-Demand Fluidics enable the surgeon to have it both ways: the Peristaltic pump affords control when needed, and the Venturi pump, provides for the option of efficient extraction, excellent chamber stability, and ultrasound efficiency.

As no two cataract surgeries are identical, you should not limit your options. More choices and extra flexibility are always preferable during surgery. By using the strong point of each pump, with easy transition, we are able to be safer and more efficient.

We can use one type of pump if its capabilities will suffice for the type of cataract we are removing. However, we can also easily transition between Peristaltic and Venturi pumps if necessary (Figure 6). For instance, use Peristaltic with holdability for chopping and Venturi with enhanced followability to remove pieces of the nucleus.

Use the Venturi irrigation/aspiration to remove the cortex. With the vacuum on all the time with the Venturi system, cortical removal is extremely efficient. The fusion of different technologies into one system is purported to offer flexibility for the surgeon and may even improve efficiency.

Case Examples

In the case of a moderate cataract, for instance, where we are using only Venturi, we can do the crack easily maintaining the tip in the centre of the anterior chamber where it is safer to do all the surgery. With this kind of pump, we can use lower vacuum levels and it makes it easy to drive the fragments to the tip without approaching the periphery for the fragments. One thing to point out is that it is important always to have a good balance between inflow and outflow, which means good anterior chamber stability, and a successfully created incision.

In another example, the Venturi pump is quite effective in the case of a white cataract. Intumescent cataracts usually have a high pressure intracapsular bag, so we first perform a small capsular puncture to aspirate all the liquified cortex. After that, we can more safely start to perform the capsulorrhexis. The hydrodissection must be soft with this type of cataract. The Venturi pump can be very useful in these cases thanks to the followability.

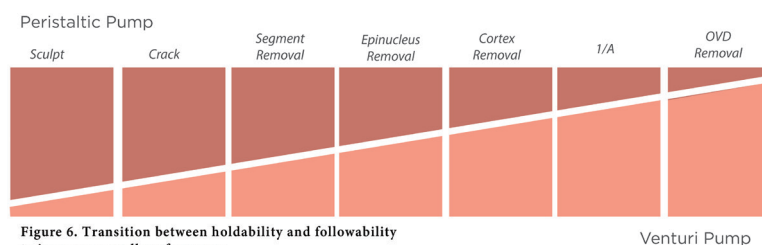


Figure 6. Transition between holdability and followability to increase overall performance

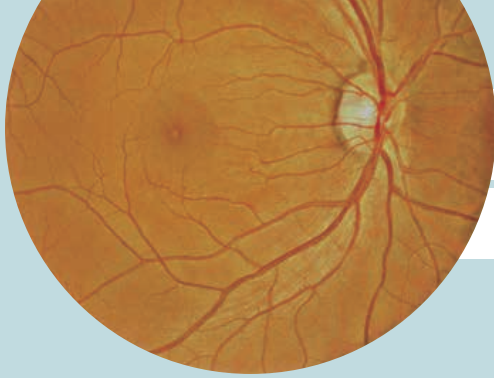
The case of a floppy iris – with the triad iris billowing and floppiness, iris prolapse and progressive miosis – is an excellent vehicle to illustrate how important holdability and followability are to a safe and efficient outcome. In this case, use a Venturi pump system, work in the centre of the anterior chamber, and focus on using followability. In conclusion, Venturi and Peristaltic fluidics, and holdability and followability each play an important role in phaco.

Huvitz

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SEE MORE, DO MORE, SAVE MORE HUVITZ OCT





Full Color Fundus Image

Insight of Posterior Segment of Eye :
for Comprehensive diagnosis

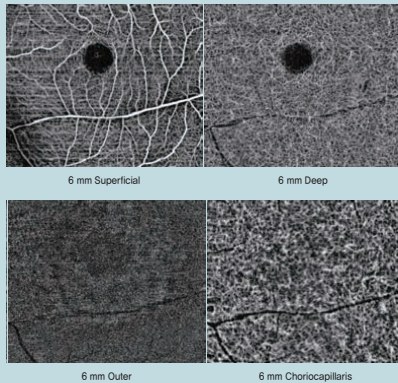
Color Retinal Images optimized with high-resolution and contrast are very useful in analysis and clinical diagnosis.

Best images are provided by Low intensity of flash, fast capture speed, quiet operation, small pupil mode and automatic flicker detection.

Anterior Measurement

One Single System :
Start and finish in one place, making patient more comfortable

Anterior Segment Module allows measurement and analysis of cornea thickness, angle and 3D image. It helps users work more efficiently by acquiring both anterior and posterior in one place.



Innovative Angiography

68,000 scan/sec by One Button :
High-Resolution Images with Quantified Index

By One-Button, accurate details are provided with high-resolution images for vessels of retina & choroid and data of FAZ, flows, density.

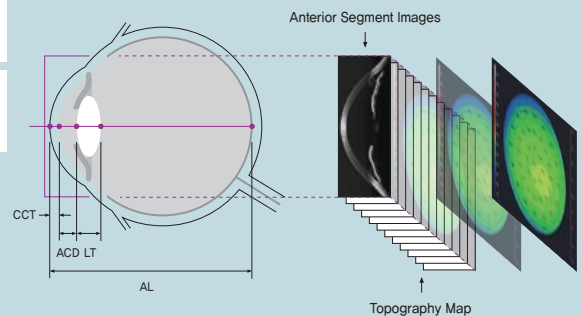
OCT Biometry + Topography

Innovative Fusion :
A Paradigm shift in OCT Technology

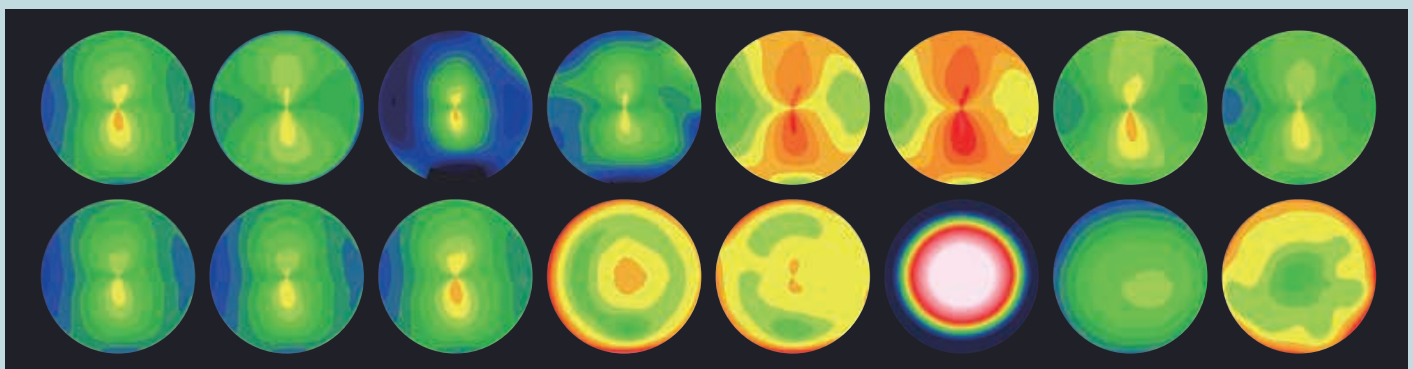
It analyzes Biometry and Topography comprehensively. HOCT provides all the data you need for quick and easy calculations for optimizing the IOL lens power.

16 Map Types for Customized Treatment

HOCT provides 16 map types including the anterior & posterior surfaces of the cornea. Users can display a wide variety of options to analyze and diagnose. In particular, posterior corneal surface measurements that allow for more accurate surgical outcomes.



Axial (Anterior)	Axial (Posterior)	Tangential (Anterior)	Tangential (Posterior)	Refractive Power (Kerato)	Refractive Power (Anterior)	Refractive Power (Posterior)	Refractive Power (Total)
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Net	Axial True Net	Equivalent Keratometer	Elevation (Anterior)	Elevation (Posterior)	Height	Pachymetry	Epithelium
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HIGH PATIENT AND ECP PREFERENCE FOR AIR OPTIX® PLUS HYDRAGLYDE® CONTACT LENSES



■ Melissa Barnett, OD, FAAO, FSLs
Sacramento, California

Dr. Melissa Barnett was compensated by Alcon for her authorship of this advertorial.

The daily lives of contact lens wearers are full of obstacles to comfortable lens wear, including dry or smoky air, digital device use and long days of lens wear. These obstacles have their impact: in a survey, 2/3 of contact lens wearers said they experience dryness/discomfort with their current lenses.

At my practice, my goal is to provide contact lenses with improved technologies that promote patient comfort, healthy eyes and contact lens compliance. Studies show that monthly and daily replacement lenses promote better replacement compliance than 2-week lenses.^{2,3} Patients and ECPs agree that AIR OPTIX® plus HydraGlyde® monthly replacement contact lenses, combined with a nightly lens care system that contains HydraGlyde® Moisture Matrix technology, provide a positive wearing experience.

I participated in a survey of contact lens satisfaction in habitual wearers of 2-week or monthly replacement contact lenses (N = 229). We surveyed our patients about their habitual brand, and then about AIR OPTIX® plus HydraGlyde® contact lenses after a 1-month trial. Patients used CLEAR CARE® PLUS Cleaning and Disinfecting Solution or OPTI-FREE® PureMoist® Multi-Purpose Disinfecting Solution for daily lens care. Both of these lens care products feature HydraGlyde® Moisture Matrix. At the end of the trial period, patients surveyed expressed strong satisfaction with AIR OPTIX® plus HydraGlyde® contact lenses: more than 9 out of 10 patients surveyed agreed these lenses felt comfortable upon insertion each day, and four times as many agreed (vs disagreed) that AIR OPTIX® plus HydraGlyde® lenses felt comfortable through the end of the day. Finally, four times more patients surveyed preferred AIR OPTIX® plus HydraGlyde® contact lenses (plus daily HydraGlyde® lens care), over their previous lenses, after wearing them for 1 month.

Among the eye care professionals who participated in the survey (N = 20), three out of four agreed that AIR OPTIX® plus HydraGlyde® contact lenses will be the preferred monthly replacement lens in their practices. The same ratio also agreed they would proactively recommend their 2-week and monthly replacement wearers switch to AIR OPTIX® plus HydraGlyde® contact lenses.

The outstanding experience reported by patients and eye care professionals is supported by a combination of two proprietary technologies. Smart-

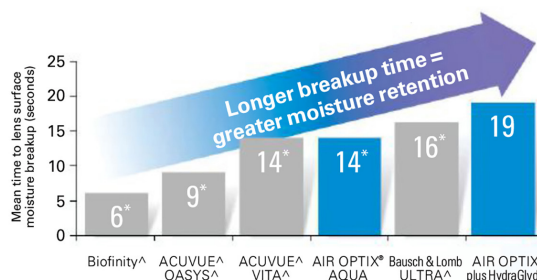


Figure: AIR OPTIX® plus HydraGlyde® Contact Lenses Provide Long-Lasting Lens Surface Moisture Retention After 16 Hours of Simulated Wear¹²
Mean time to lens surface moisture breakup after 16-hour soak in phosphate-buffered saline solution. Ten lenses per brand were analyzed.
*P<0.05 vs AIR OPTIX® plus HydraGlyde® contact lenses.
^ΔTrademarks are the property of their respective owners.

Shield® Technology is the permanent surface treatment used in all AIR OPTIX brand lenses. SmartShield® Technology is an ultra-thin permanent protective shield that is bonded to the outer surface of the lens, minimizing the amount of exposed silicone. This proprietary surface treatment helps the lens resist lipid deposits, supports tear film stability, and helps maintain outstanding wettability. HydraGlyde® Moisture Matrix is a proprietary wetting agent that creates an envelope of long-lasting lens surface moisture.

Recent studies demonstrate the wettability of AIR OPTIX® plus HydraGlyde® contact lenses. In one, placido rings were projected onto surfaces of several lenses. A wet surface reflects a stable image of the rings, but as the surface dries, the reflections become distorted. Directly out of pack, AIR OPTIX® plus HydraGlyde® contact lenses showed more stable reflections at 2 minutes than several competitive lenses (P<0.01), demonstrating excellent lens surface moisture retention. In another study, time to lens surface moisture breakup (the time it takes for the first “spot” of dryness to appear on the lens) was measured after soaking lenses in PBS solution for 16 hours.¹² The time to lens surface moisture breakup of AIR OPTIX® plus HydraGlyde® contact lenses was longest (19 seconds), indicating lasting lens surface moisture. (Figure)





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vision with proven
optical quality.



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The TECNIS Symphony™ IOL
is intended to mitigate the
effects of presbyopia so you
can empower your patients
to see clearly across
the full range of vision.



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enhanced functionality
and long-term sustainability
from the TECNIS®
Monofocal 1-Piece IOL.

Johnson & Johnson
VISION

Amico Yasna Pars (Pr. J. S. Co)

**COMMING
SOON!**

TECNIS
Synergy™ IOL

with TECNIS SIMPLICITY
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**A Breakthrough
Innovation**

Going beyond the limits
of current trifocals.
+ Widest range of continuous
vision with best near
+ Superior image contrast
day and night



TECNIS SIMPLICITY®
DELIVERY SYSTEM

**Simplifying IOL Delivery.
Improving Efficiency.**
Safety of a single-use
delivery system
and the optical excellence
of the TECNIS®FAMILY
OF IOLs.

TECNIS
Eyhance™ IOL

with TECNIS SIMPLICITY
Delivery System

**EXPERIENCE
THE DIFFERENCE**

The TECNIS Eyhance™
IOL – defining the future
of Monofocals.

Flight No 3704, a flight from Tehran to eternity



**In memory of engineer Hamed Amiri, one of the
AMICO YASNA PARS members and the anniversary
of his eternal flight**

At 8 o'clock in the cold morning of 29th of February 2016, a flight took off from Tehran's Mehrabad Airport with passengers, pilots and crew, which never landed. It was around 9:32 a.m. on that bitter winter morning when 66 passengers took off and began their eternal flight, leaving us alone with endless sadness.

The flight which had left Tehran for Yasuj, but the peak of Pirkoh Dena embraced all the passengers of the flight.

This day was named Medical Equipment Maintenance Day in memory of one of the purest people who was immortalized in Flight 3704, engineer Hamed Amiri, one of the AMICO YASNA PARS members

Great people are like that.

Great people are those who, in addition to their valuable life, their eternal journey is also a reminder of their fruitful life.

The late engineer Hamed Amiri is one of these great people, and we at AMICO YASNA PARS are proud to have had such colleague by our side, and we mourn his eternal journey every year.

He was always a responsible and diligent person and he made a continuous effort to improve the company's services, and we are determined to continue the path of our late colleague with wider services so that we can make his memory and his efforts more immortal.

God bless him

Amico Yasna Pars (Pr.J.S.Co) Ophthalmology Newsletter



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