



All India Institute of Medical Sciences, Bhubaneswar
At - Sijua (Patrapada), Post - Dumuduma, Bhubaneswar (Odisha) - 751 019

To be uploaded in Website: www.aiimsbhubaneswar.edu.in (Tender) and www.eprocure.gov.in (CPPP)

Reference No: J-11039(044)/2021-22/S&P.

Dated: 07 /06/2022

Sub: Procurement of Phacoemulsification Machine Make-Alcon Laboratories, Inc., USA, Model- Centurian Vision System with Active Sentry for the Department of Ophthalmology at AIIMS, BBSR on Proprietary basis - Inviting Comments thereon.

The Department of Ophthalmology of AIIMS, Bhubaneswar has projected for Procurement of Phacoemulsification Machine Make-Alcon Laboratories, Inc., USA, Model- Centurian Vision System with Active Sentry from Axess Medicom Pvt. Ltd., Bhubaneswar authorised distributor of Alcon Laboratories (India) Pvt. Ltd, Bengaluru affiliated Company of the PAC firm Alcon Laboratories, Inc, USA.

The Notice is being uploaded for general information of prospective manufacturer/Authorized Distributor/Dealers to submit their objection/proposal/comments if any, on proprietorship of the item. In case the product of any manufacturer/Authorized distributor/Dealer conforms to the enclosed specifications, they may submit their proposal for the supply of the same along with the brochures, point by point compliance of the enclosed specifications along with all documentary evidence. One quotation of the product may also be submitted.

The objections/comments/proposal should be sent in sealed cover to the Office of Sr. Procurement Cum Stores Officer, AIIMS, Bhubaneswar (Odisha) - 751019 or through E-mail to spo@aiimsbhubaneswar.edu.in & aso.dkmahana@aiimsbhubaneswar.edu.in & stokee.gagan@aiimsbhubaneswar.edu.in, so as to reach on or before date: 22 -06-2022 failing which it will be presumed that no other firm is interested to offer comments/protest/object and case will be decided on its merits.

The Ref. No. - J-11039(044)/2021-22/S&P dt: 07 -06-2022, due on dated: 22 -06-2022 should be superscripted on sealed envelope.

Sr. Procurement-cum-Stores Officer

Enclosure:

1. PAC from Indenting Officer of Department of Ophthalmology, AIIMS, Bhubaneswar. Annexure-I
2. PAC of Alcon Laboratories (India) Pvt. Ltd, Bengaluru . Annexure-II
3. Manufacturing Certificate. Annexure-III
4. Authorisation distributor Letter for Axess Medicom Pvt. Ltd., Bhubaneswar. Annexure-IV
5. Specification. Annexure-V
5. Quotation from M/s Axess Medicom Pvt. Ltd., Bhubaneswar - Annexure-VI
6. Technical Brochure - Annexure-VII

Copy to:

1. Indenting Officer, Department of Ophthalmology
2. Accounts Officer
3. IT Cell

for information please
for information please
for hoisting in the website.

Sr. Procurement-cum-Stores Officer

Proprietary Article Certificate
Valid for the Current Financial Year

File No. and Date Reference :			
1	Description of article		
2	Forecast of quantity /annual requirement		
3	Approximate estimated value for above quantity		
4	Maker's name and address		
5	Name(s) of authorized dealers/ stockists		
6	I approve the above purchase on PAC basis and certify that :- Note- Tick to retain only one out of (b), C-1) or (c-2) whichever is applicable and cross out others. Please do confirm (a) by ticking it - without which PAC certificate will be invalid.		
6 (a)	This is the only firm who is manufacturing / stocking this item. AND		✓
6 (b)	A Similar article is not manufactured / sold by any other firm, which could be used in lieu OR		
6 (c-1)	No other make/brand will be suitable for following tangible reasons (like OEM/ Warranty, spares.):		✓
6 (c)	No other make/brand will be suitable for following intangible reasons (if PAC was also given in the last procurement cycle, please also bring out efforts made since then to locate more sources): OR 1. Unique features like Active fluidics and Ozik technology		✓
7	Reference of concurrence of finance wing to the proposal :		Fund avail during the year 2021-22
History of PAC Purchase of this item for past three years may be given below :			
Name of the Supplier			
Order/ Tender Reference & Date	Quantity Ordered	Basic Rate on Order (Rs.)	Adverse Performance Reported if Any
	N/A		

Signature of Approving Authority Mukesh Tripathi
Date Designation of Dr. Mukesh Tripathi
Director
AIIMS, Bhubaneswar

Signature of the Indenting Officer Sucheta Panigrahy
Dr. Sucheta Panigrahy
Additional Professor
Dept. of Ophthalmology
AIIMS, Bhubaneswar-751019

Anand & Co - II

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Alcon

Alcon Laboratories (India) Pvt. Ltd.

Registered Office: 11th Floor, RM2 Square,

Bellary Road, Hebbal, Bengaluru - 560092

Ph : +91-80-4544 4444 / +91-80-4006 4800

Fax : +91-80-4544 4450 / +91-80-4006 4800

Email : alcon.india@alcon.com

CIN No. U33119KA1999FTC025496

Dated: 4-Nov-20

Ref. No- PAC-Nov20-01

To whom so ever it may concern

PROPRIETARY ARTICLE CERTIFICATE

This is to certify that Centurion Vision System with Active Sentry is the sole proprietary product of legal manufacture Alcon Laboratories Inc., Fort Worth, Texas, USA.

Only Alcon Laboratories (India) Private Limited is supplying this product in India.

Thanking you,

For Alcon Laboratories India Pvt. Ltd.

Anand,
Kaushik



Kaushik Anand
Authorized Signatory



Sucheta Parija

14/7/2024

Dr. Sucheta Parija
Additional Professor
Dept. of Ophthalmology
IMS, BH
751019



Annexure - III



6201 South Freeway
Fort Worth, Texas 76134-2099

Phone: +1(817)-568-6599
Email: naim.moses@alcon.com
www.alcon.com

November 6, 2020

MANUFACTURER's CERTIFICATE

To Whom It May Concern:

This is to certify that Alcon Laboratories, Inc. ("ALI") has a primary place of business at 6201 South Freeway, Fort Worth, Texas, USA, and is an established and reputable ophthalmic company. ALI is responsible for manufacturing ophthalmic products, instruments, accessories and consumables. ALI is under common ownership and control with the following affiliated company:

Alcon Laboratories (India) Private Limited
11th Floor, RMZ Azure, Bellary Road,
Hebbal, Bengaluru - 560092, India.

The aforesaid Indian affiliate has the right to submit quotations and sell all Alcon ophthalmic products, instruments, accessories and consumables in India directly or through authorized distributors and/or representatives.

Alcon Laboratories (India) Private Limited is also responsible and specialized in servicing and providing spare parts for Alcon equipment.

The certificate is valid until **December 31, 2023**.

Kind regards,

Naim Moses
Executive Director, Regulatory Law

14/9/2021

Dr. Sucheta Parija
Additional Professor
Dept. of Ophthalmology
IIIMS, Bhubaneswar-751019

Annexure - IV

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Alcon

Alcon Laboratories (India) Pvt. Ltd.
Registered Office: 11th Floor, RMZ Azure,
Bellary Road, Hebbal, Bengaluru - 560092
Ph : +91-80-4544 4444 / +91-80-4006 4800
Fax : +91-80-4544 4450 / +91-80-4006 4800
Email : alcon.india@alcon.com
CIN No. U33119KA1999FTC025496

Date: 16th June, 2021

To,
The Officer,
Store and Purchase Department,
AIIMS, Bhubaneswar

Subject: Intimation regarding change in Authorized Distributor.

Respected Sir,

This is to inform you that, we **Alcon Laboratories (India) Private Limited** having our registered office at 11th Floor, RMZ Azure, Bellary Road, Hebbal, Bengaluru - 560092 are affiliate of M/s. Alcon Laboratories Inc., USA, are highly customer-oriented organization and to provide better services to your esteemed institute/ organization, we are changing our current authorized distributor **Emcotech Equipment Pvt. Ltd.** with immediate effect.

We would like to introduce our new distributor "**AXESS Medicom Private Limited**, having their office at **Plot No. 8/105, Chandaka Industrial Area Patia, Bhubaneswar - 751024**" for all future accessories and consumables orders, RCs & CMC Agreements.

Seeking your support for initiating the process of transferring of existing Performance Bank Guarantees (if any), CMC and other formalities in the name of "**AXESS Medicom Private Limited**"

Please note that, from the date of receipt of this letter, any supply against Alcon Group manufactured Products done by any other distributor other than "**AXESS Medicom Private Limited**" we will not be responsible for quality, warranty and service of the product.

We hereby request you that, any future order & pending orders (if any) needs to be issued / transferred in the name of "**AXESS Medicom Private Limited**"

We hope the above is in line and looking forward to receive your support on the same and we assure you for the seamless services in future.

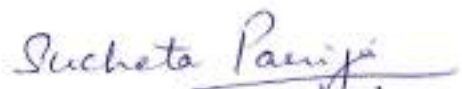
For Further Details you can get in touch with below mentioned person:

For Alcon Laboratories (India) Private Limited, Mr. Sudip Chatterjee Mobile - +91- 9007334503 Email - sudip.chatterjee@alcon.com	For Axess Medicom Private Limited - Mr. Kalyan Chhotoroy Mobile - +91- 7008669559, 9778837701 Phone - 0674- 2969594, +91- 9938784782 Email - md@axessmedicom.com
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For Alcon Laboratories (India) Private Limited


Tarun Saxena
Head: Government Business

Cc: 1) HOD - Department of ophthalmology/ Eye


14/6/2021
Dr. Sucheta Parija
Additional Professor
Dept. of Ophthalmology
AIIMS, Bhubaneswar

TECHNICAL SPECIFICATION FOR ADVANCED PHACOEMULSIFICATION SYSTEM

The Phacoemulsification system should be of the latest model with advanced features and facilities as specified below:

Fluidics:

1. The system fluidics should allow the surgeon to target intraocular pressure in the eye for the "system" during surgery. The IOP fluctuations can be detected and compensated during surgery thus enables chamber stability.
2. Should have the facility to use Vacuum level of 650+mm Hg and reach Aspiration Flow Rates of 60 CC/Min.
3. Dual Segment Pump with Advanced Fragmented Pump design
4. Optical Pressure Sensor (OPS) *Preferably. For*
5. Highly non complaint tubing.
6. Slow almost zero venting of air in fluidics system.

Phacoemulsification:

1. Best in class Phaco : Torsional Hand piece and facility with high efficiency " Balance Tip" which accounts for the least heat generation at the wound site.
2. The system should indicate the Patient Eye Level (PEL) at all times during the surgery.
3. The system should also give warning for the Irrigation emptying bag.

Other Features :

1. AutoSert - Motorized/Automated IOL injection.(Optional)
2. Ergonomic Wireless Footswitch
3. Facility for integration with " Digital Surgical Guidance" system and also display of machine parameters and guidance parameters as Heads UP Display in the microscope as well by means of external accessory/adaptation as described below.
4. Details of the Vacuum, AR,Flow rate must be displayed in the screen
5. Facility to integrate " High Definition Media Center" archiving system when connected to the system.
6. HD Recording on built-in-hard driver or USB
7. The system should be able to drive have 23ga anterior vitrectomy probe with high speed cut rates of 4000 CPM.
8. System should have a wireless remote control for easy changing of functions etc during surgery, a full fledged Graphic User Interface (GUI) complete with voice feed back when parameters are changed etc.
9. The manufacturer Company should have been supplying this to countries like USA, UK, FRANCE, JAPAN, GERMANY at least 02 of there.
10. 5 years warranty with subsequent 5 years CMC to be provided.

Sucheta Ranjan
Dr. Sucheta Ranjan
Additional Professor
Dept of Ophthalmology
AIIMS, Bhubaneswar-751019

B. W. Nayak
Dr. Bhagabati Nayak
Assistant Professor
Department of Ophthalmology
AIIMS, Bhubaneswar-751019

Expert Signature

For
Dr. Sanjeev Kumar Mittal
Dr. Sanjeev Kumar Mittal
Professor and Head
Dept. of Ophthalmology
AIIMS, Bhubaneswar-751019

Sucheta Ranjan



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Date: 08.07.2021

The Director,
All India Institute of Medical Sciences,
Bhubaneswar, Odisha.

Subject: Budgetary Proposal for "Vision Systems with Active Sentry"

Dear Madam,

We extend our hearty thanks for your kind courtesy and active patronage for Alcon Make Equipments and your continuous support in our efforts in making things better on a day to day for Ophthalmology treatment.

We here with provide you our Budgetary Proposal for the below mentioned equipment for your kind perusal and consideration.

BUDGETARY QUOTATION

Sl. No.	Description	Product code	IRIS material Code	Qty	Price (in Rs)
	Akon's Centurian Vision System with Active Sentry				
1	Console	8065753057	100176096	1	88,39,286.00
2	Foot Switch	8065751762	100054925	1	
3	Operators Manual	8065751772	900296165	1	
4	Remote Control	8065751774	100055063	1	
5	Dust Cover	8065751773		1	
6	ACTIVE SENTRY Handpiece	8065752914	100176095	1	
7	Ultraflow II Handpiece	8065751795	100055065	1	
8	INTREPID I/A TIP	8065751012	100004370	2	
9	CENT FMS PACK, ACT, BASIC 6	8065752180	100009908	12	
10	Active FMS Pack, 0.9mm Intrepid Ultra, EQUINOX ABS 45	8065752201	100009963	6	
11	BSS Sterile Irrigating Solution, 500 ml Bag	7950157	100185858	24	
12	23 Ga CENTURION UltraVIT Anterior Vitrectomy Probe	8065752134	100010865	2	
13	Silicon Reusable Bipolar Cable 12ft pvc	8065128402	100002002	1	
14	Bipolar Forceps	8065129301	100002228	1	
15	Memory Card	8065750254	100003809	1	
16	Metal Wrench	IND6512124	100193802	2	
GST @ 12%					10,60,714.00
Grand Total Price F.O.R Destination					99,00,000.00
In Words (Rupees Ninty Nine Lakh Only)					

Cost of Equipment including GST 99,00,000/-
Cons. incl. GST - 21,83,972/-

Total. 1,20,83,972/-

Sucheta Parija
14/7/2021

Dr. Sucheta Parija
Additional Professor
Dept. of Ophthalmology
IMS, Bhubaneswar-751019



COMPREHENSIVE MAINTENANCE CONTRACT PRICES. (CMC)

YEAR	TOTAL CMC PRICE INCLUSIVE OF TAXES
6th Year	Rs. 4,00,000.00
7th Year	Rs. 4,17,500.00
8th Year	Rs. 4,35,875.00
9th Year	Rs. 4,55,169.00
10th Year	Rs. 4,75,428.00

2183972

TERMS AND CONDITIONS:

1. Order: The equipment order to be placed on Axess Medicom Pvt. Ltd., Bhubaneswar with a copy to Alcon Laboratories (I) Pvt. Ltd., Bangalore-560092 for execution and supply.
2. Prices: All the above prices are with inclusive of taxes.
3. Payment Terms: 100% Advance along with the order in favour of Axess Medicom Pvt. Ltd.,
4. Delivery: within 4-6 weeks from the date of confirmed order along with advance.
5. Validity: This offer is valid for 180 days from the date of offer.
6. Warranty: i. The equipment offered is covered by 1 default warranty and + 4 years of extended warranty under proper use for faulty material or workmanship. The default warranty cover will start either 12 months from date of installation or 18 months from the date of invoice whichever is earlier.
ii. The warranty is limited to 180 days for Phaco hand piece & probes.
iii. No warranty is applicable for disposables, accessories & consumables.
iv. This warranty is subject to the equipment/ instrument having been stored at the recommended temperature and in the prescribed humidity and other environmental conditions as mentioned in the operational manual.
7. The sale shall be subject to Bangalore jurisdiction. All matters or disputes arising thereof shall be subject to the courts in Bangalore only.

Thanking you once again for your support and our keen interest to establish professional relationship with the esteemed organization for all time to come.

Yours very truly,

For Axess Medicom Pvt. Ltd.,


Kalyan S Chhotaray
Managing Director



Alcon



Centurion

VISION SYSTEM WITH ACTIVE SENTRY HANDPIECE

Smooth phaco performance

that prioritizes outcomes as much as you do

SAFETY, CONSISTENCY, AND CONTROL

EFFICIENCY

HANDPIECE AND TIPS



Appendix - VII

Sucheta Parag
14/2/2024

Alcon



THE WORLD'S MOST ADVANCED CONTROL CENTER, AT YOUR FINGERTIPS

The CENTURION® Vision System with ACTIVE SENTRY® Handpiece places superior science at your fingertips with an integrated pressure sensor, delivering unprecedented safety, consistency and control.

Smooth phaco performance that prioritizes outcomes as much as you do

The CENTURION® Vision System with ACTIVE SENTRY® Handpiece is redefining phacoemulsification performance. Its innovative design and real-time surge reduction can help you offer a new standard of safety, consistency and control to every cataract patient.

SAFETY, CONSISTENCY AND CONTROL

- **Unprecedented responsiveness^{1,2}**

- The ACTIVE SENTRY® Handpiece is the first and only phaco handpiece equipped with a pressure sensor

- **Superior surge reduction³**

- The handpiece communicates with hardware and software for more consistent procedures

- **Stability from start to finish³**

- CENTURION® Active Fluidics™ Technology dynamically manages IOP in a wide range of surgical settings^{1,3}

- **Taking safety to the next level**

- The INTREPID® Hybrid Tip incorporates proprietary polymer technology to reduce damage to the capsular bag and other tissues⁴



Smooth phaco performance that prioritizes outcomes as much as you do

The CENTURION® Vision System with ACTIVE SENTRY® Handpiece is supported by advanced procedural technologies designed to add even more efficiency to your phaco experience.

EFFICIENCY

- **Streamlined phacoemulsification⁵⁻⁷**
 - INTREPID® BALANCED Tip versus older design:
 - Superior torsional performance⁵⁻⁷
 - Shorter ultrasound and aspiration times^{5,6}
 - Reduced energy use^{5,6}
 - Minimal heat production⁵
 - Less fluid needed⁵
 - INTREPID® Hybrid Tip:
 - Designed to provide efficient performance similar to the INTREPID® BALANCED Tip



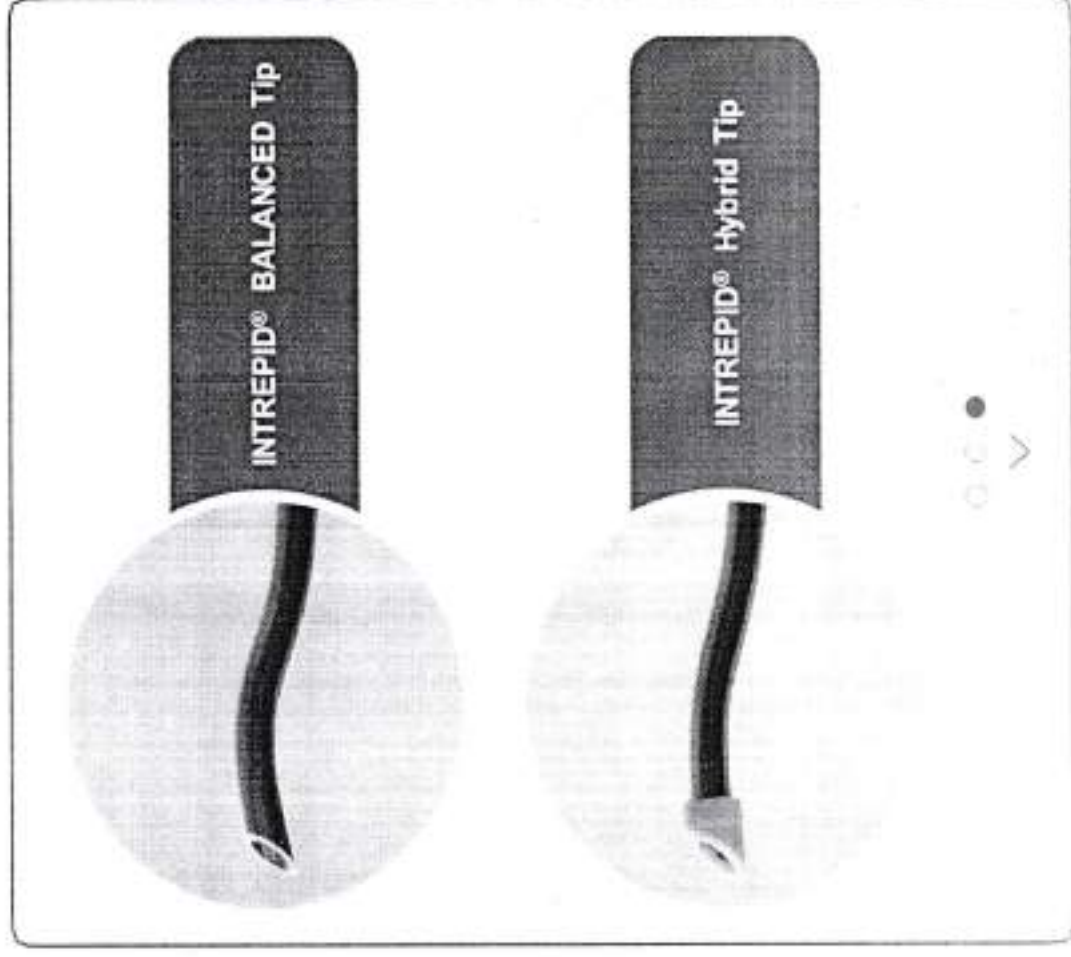
Alcon



Centurion[®]
Vision System With ACTIVE SENTRY[®] Handpiece

Smooth phaco performance

that prioritizes outcomes as much as you do



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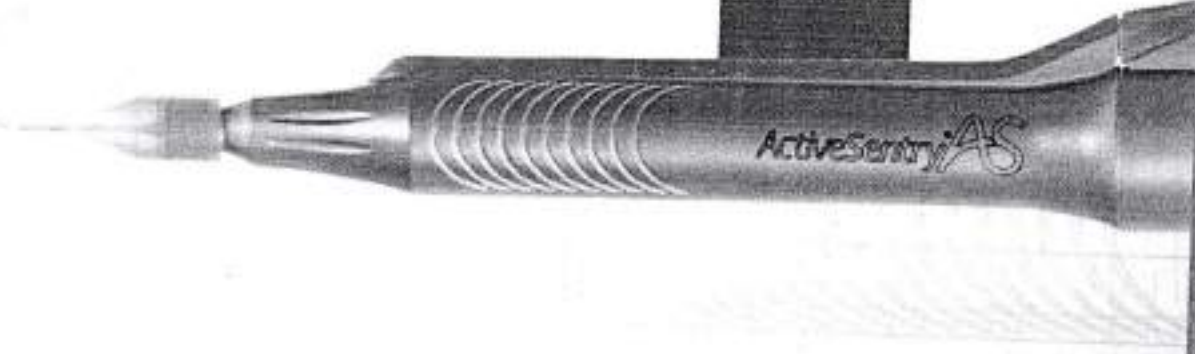


Scientific innovation has never been so uneventful

When your procedures match your expectations, you can provide a new standard of safety, consistency and control for your patients. Designed to **reduce post-occlusion surge**, the ACTIVESENTRY® Handpiece helps to **maintain stability in the anterior chamber and improve consistency during every procedure**. With less variance in surge amplitude, you'll be able to minimize yet another variable in the surgical experience.



The **first and only** phaco handpiece
with a **built-in fluidics pressure**
sensor.



PRESSURE SENSOR

SURGE REDUCTION

RISK MITIGATION

PROCEDURAL CONSISTENCY

Superior surge reduction³

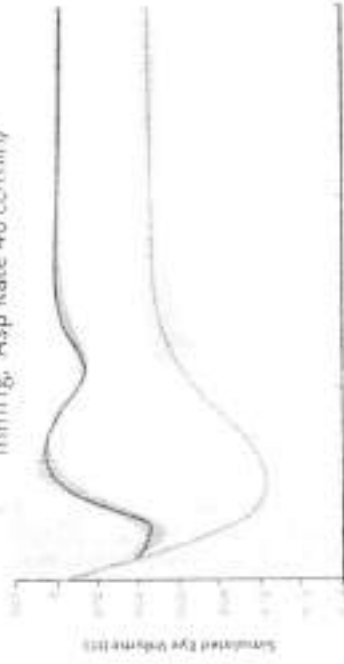
The ACTIVE SENTRY® Handpiece communicates with hardware and software for more consistent procedures.



The ACTIVE SENTRY® Handpiece alerts Active Fluidics™ Technology as fluctuation occurs in the anterior chamber, triggering **immediate adjustments** designed to **stabilize the anterior chamber** and **ensure consistency**.³

Simulated Eye Volume After Occlusion Break²

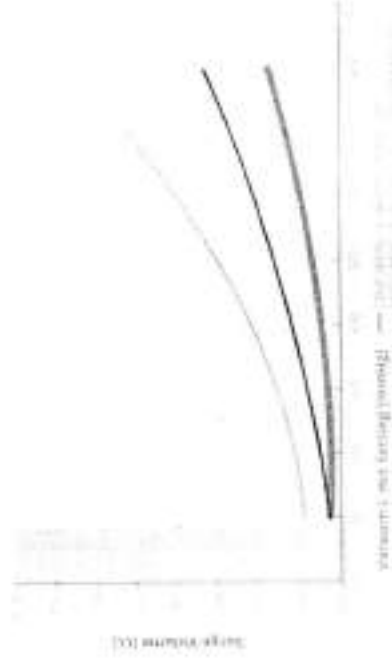
(IOP 50 mmHg; Vac Setting 500 mmHg; Asp Rate 40 cc/min)



Time after Occlusion Break (sec)

— No Active Sentry — Active Sentry

The ACTIVESENTRY® Handpiece provides real-time, superior surge reduction after occlusion breaks, ensuring more consistent volume and IOP.^{1,3}



Vacuum (mmHg)

— No Active Sentry — Active Sentry

SURGE REDUCTION

STABILITY

ENDOCAM CONSISTENCY

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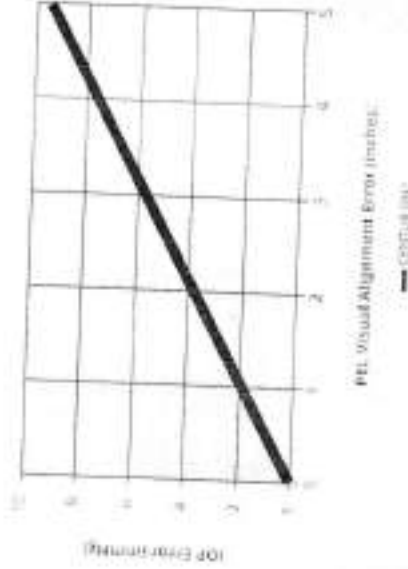
Mitigating risks to safeguard your outcomes³

The ACTIVE SENTRY[®] Handpiece performs at a higher level when variables arise, reducing potential issues that could otherwise endanger outcomes.

Maintains target IOP across cases

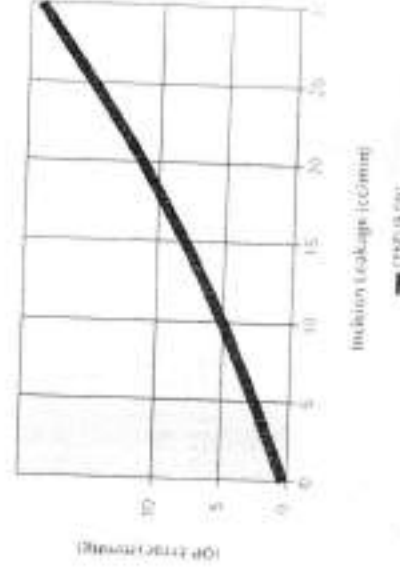
- Sensor automatically recognizes patient eye level (PEL) in every case
- Eliminates need for manual adjustments

IOP Error vs. PEL Offset³



Compensates for average incision leakage

- Sensor automatically detects difference in aspiration and irrigation rates
- Increases irrigation flow for consistent pressure



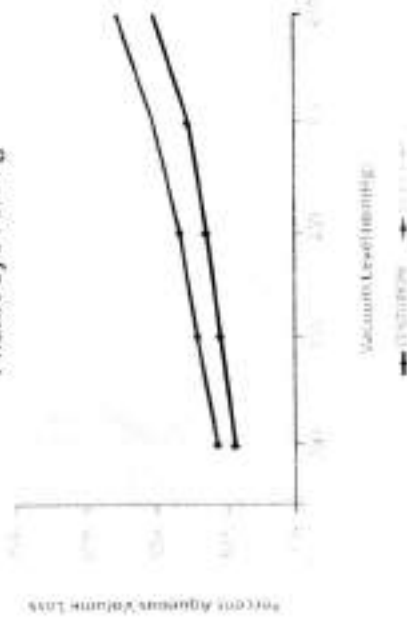
Engineered for safe, controlled phaco performance³

The CENTURION® Vision System with ACTIVE SENTRY® Handpiece consistently preserves more volume, for less surge and greater safety across a variety of vacuum levels.³

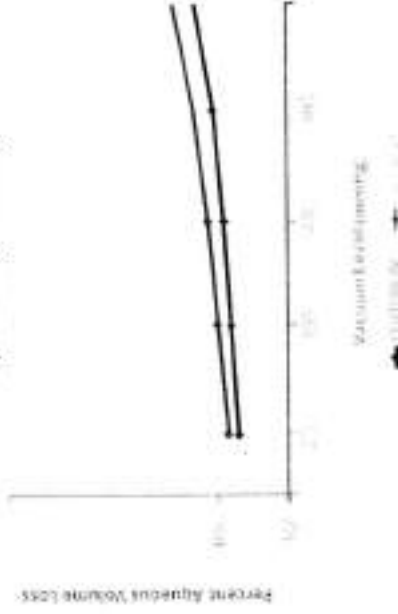
The CENTURION® Vision System with ACTIVE SENTRY® Handpiece consistently preserves more volume, for less surge and greater safety.³

Engineered for safe, controlled phaco performance across a variety of vacuum levels³

Phakic Eye Testing¹⁰



Aphakic Eye Testing¹⁰



CENTURION® Vision System	Vacuum Limit (mmHg)	Surge Volume (µL)	Percent Volume Loss in Phakic Eye	Percent Volume Loss in Aphakic Eye
AMO Signature	200-600	36-101	7%-31%	4%-17%
DORC EVA	200-600	17-165	12%-41%	7%-22%
DORC S	200-600	17-165	15%-66%	10%-35%

PROCEDURAL CONSISTENCY

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Alcon



Centurion

Vision System With ACTIVE SENTRY™ Handpiece

Engineered for safe, controlled phaco performance³

CENTURION® Vision System	Vacuum Limit (mmHg)	Surge Volume (µL)	Percent Volume Loss in Phakic Eye	Percent Volume Loss in Aphakic Eye
AMO Signature™	200-600	30-103	12%-41%	7%-22%
DORC EVA™	200-600	47-165	19%-66%	10%-36%
B&L Stellaris PC™	200-400	67-163	27%-65%	15%-35%



PRESSURE SENSOR

SURGE REDUCTION

RISK MITIGATION

PROCEDURAL CONSISTENCY

The evolution of fluidics in phaco



Gravity fluidics

Uses bottle height to regulate IOP



Hyper-pressurized fluidics

Uses air pump to achieve high irrigation pressure in bottle



Active Fluidics™ Technology

Uses compression plates to maintain surgeon-selected target IOP



Active Fluidics™ Technology with ACTIVE SENTRY® Handpiece

Combines Active Fluidics™ Technology with irrigation pressure sensor in handpiece



3. Active Fluidics™ Technology

Uses compression plates to adjust pressure on BSS™ irrigating solution bag, compensating for changes in the eye

1. Fluidics pressure sensor

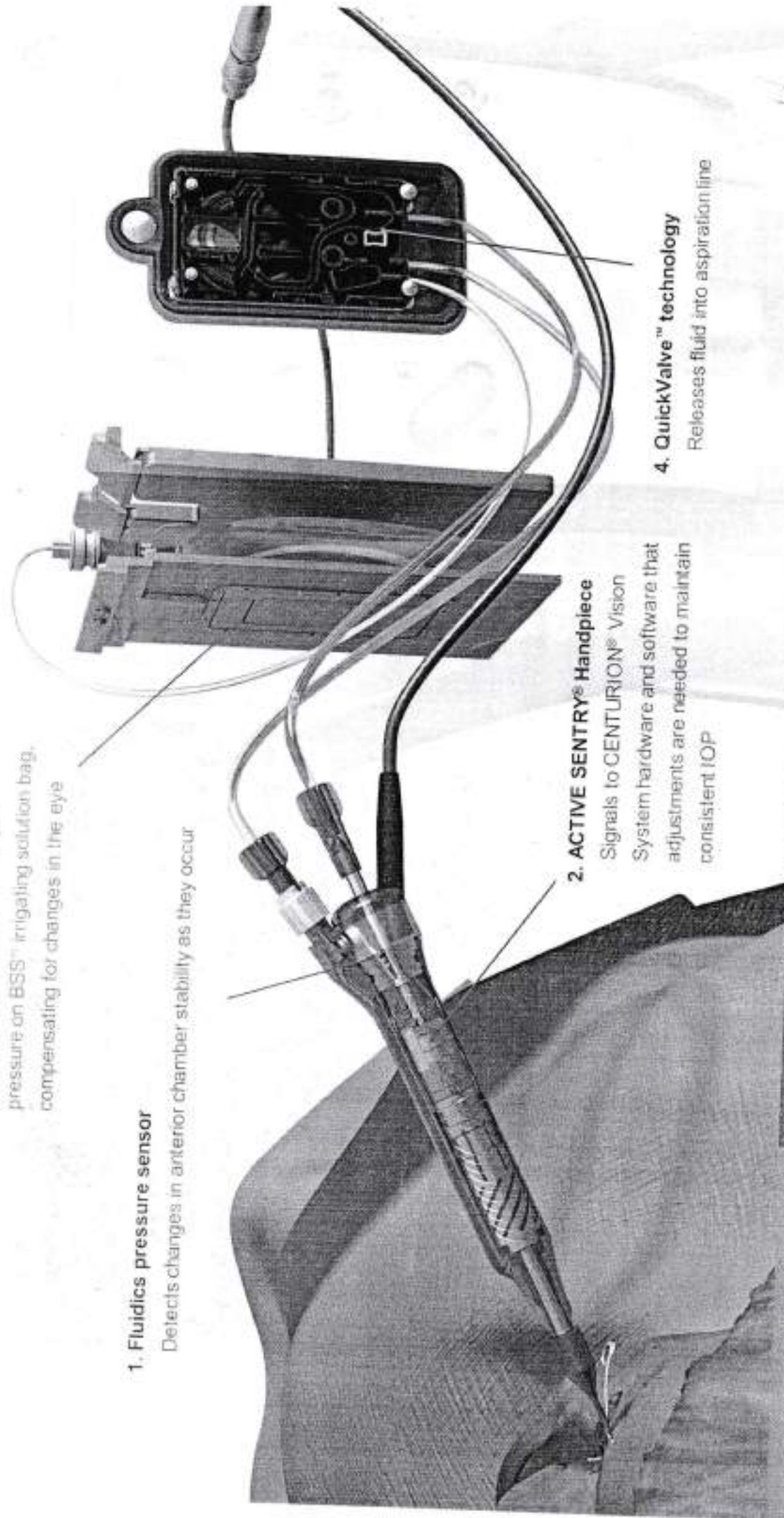
Detects changes in anterior chamber stability as they occur

2. ACTIVE SENTRY® Handpiece

Signals to CENTURION® Vision System hardware and software that adjustments are needed to maintain consistent IOP

4. QuickValve™ technology

Releases fluid into aspiration line



Chamber stability at every moment, control throughout every procedure

Active Fluidics™ Technology uses compression plates to apply and release pressure on the BSS® irrigating solution bag as changes in the anterior chamber are detected, actively working to maintain target IOP.³

- **Compensates for varying aspiration flow rates** in real time^{3,11}
- **Less IOP fluctuation** versus gravity and pressurized

"With the CENTURION® Vision System with ACTIVE SENTRY® Handpiece, there was less movement of the posterior capsule with a faster recovery of chamber and bag volume."

- Cesar Espiritu, MD, vice-chairman of the
 Manila Doctors Hospital ophthalmology department

† Past Alcon Consultant

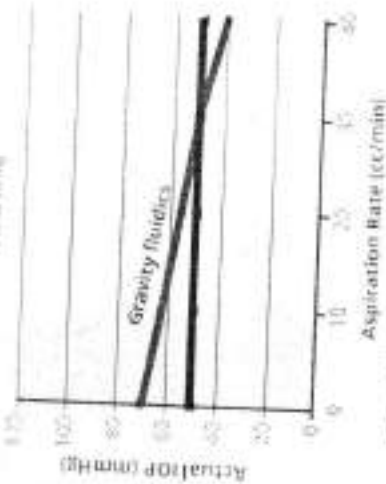


Dynamic IOP control^{1,3}

Flow rates vary during every case. Unlike gravity and pressurized fluidics, Active Fluidics™ Technology detects and compensates to help maintain surgeon-selected IOP.

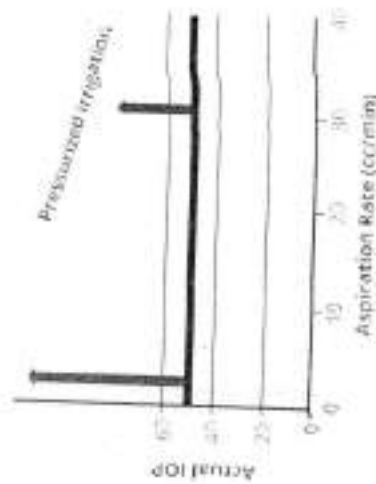
IOP as Aspiration Rate Rises: Gravity vs. Active Fluidics™

Overall range of variability due to aspiration:
(3 to 40 cc/min)



Legend:
— Gravity Fluidics
— Active Fluidics™ Vision System
* IOP is maintained at 55 mmHg

IOP vs. Aspiration Flow Rate: Pressurized Bottle Compared with Active Fluidics™



Legend:
— Pressurized Irrigation
— Active Fluidics™ Vision System
* IOP is maintained at 55 mmHg

* Trademarks are the property of their respective owners.



Flow rates vary during every case. Unlike gravity and pressurized fluidics, Active Fluidics™ Technology detects and compensates to help maintain surgeon-selected IOP.

FLUIDICS EVOLUTION

COMPONENTS

CHAMBER STABILITY

IOP CONTROL

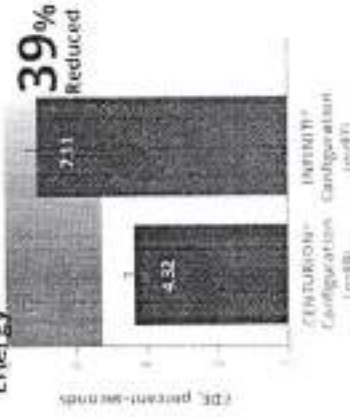
Exceptional efficiency to reduce time, energy and risk^{5,6,12}

The uniquely efficient combination of OZil® technology and innovative fluidics streamlines phacoemulsification procedures while making them easier on patients' eyes.^{5,7,12}

- Accelerated cataract removal^{1,5,6}
- Reduced energy output⁵
- Enhanced torsional efficiency⁵
- Reduced repulsion¹³
- Less fluid use^{5,6}

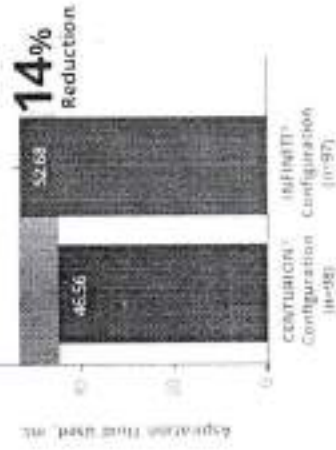


Cumulative Dissipated Energy⁵



Group difference: 95% confidence interval
 → 7.1 to 17.4 J (p < 0.0001) (n=195)
 Data reported from powered report 1, standard error

Aspiration Fluid Used⁶



Group difference: 95% confidence interval
 → 2.21 to 10.62 ml (p < 0.0001) (n=195)
 Data reported from powered report 2, standard error

Aspiration Time⁵



Group difference: 95% confidence interval
 → 15.74 to 26.41 seconds (p < 0.0001) (n=195)
 Data reported from powered report 3, standard error

Centurion and Infinity are both active sentry systems. The active sentry system is a safety feature that automatically stops the handpiece if the surgeon's hand is not in the correct position.
 INFINITY Configuration is a powered system. The powered system is a safety feature that automatically stops the handpiece if the surgeon's hand is not in the correct position.
 No comparison was made between the two systems in the powered report.

EFFICIENCY



Energy delivery designed to protect⁵

Versus traditional and Ellips FX[®] ultrasound modalities, OZIF[®] phaco and the BALANCED Tip deliver 60% less temperature rise and safer heat transfer.¹²

Ellips[®] FX IR

Temperature Recording¹²



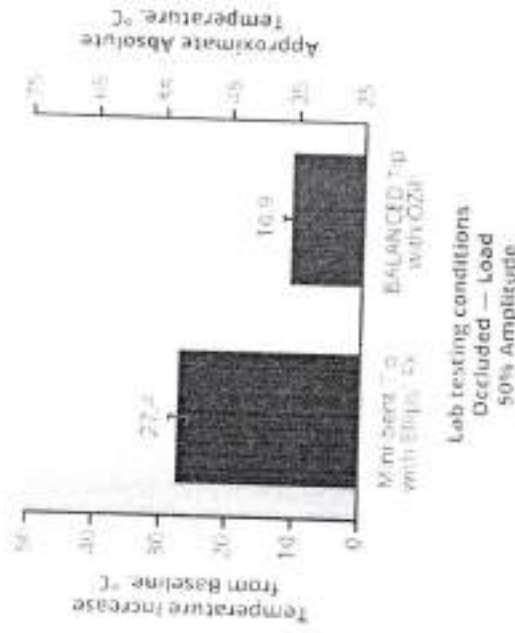
Thermal plot of temperature at incision

OZIF[®] Torsional IR

Temperature Recording¹²



Thermal plot of temperature at incision



¹²Trademarks are the property of their respective owners.

EFFICIENCY

PROTECTION

Taking a legacy of safety to the next level with the **INTREPID® Hybrid Tip**

Elevating the patient protection of the INTREPID® BALANCED Tip with proprietary polymer technology

Two trusted technologies — one innovative design for reducing damage to the capsular bag and other tissues¹:

- Rounded polymer edge designed to reduce the risk of capsular tears
- Cutting performance suitable for cataract densities up to 3+
- Fluidics performance and configuration similar to the INTREPID® BALANCED Tip



INTREPID® BALANCED Tip



INTREPID® Hybrid Tip

5



Sophisticated performance through versatile phaco technology

Efficiency at your fingertips

INTREPID® BALANCED Tip offers:

- More lateral movement at tip, less shaft movement at incision site⁵
- Minimal heat production⁵
- Minimized corneal stromal changes and complications⁵
- Alternative "straight" tip for torsional phaco

Adaptability for a variety of cases

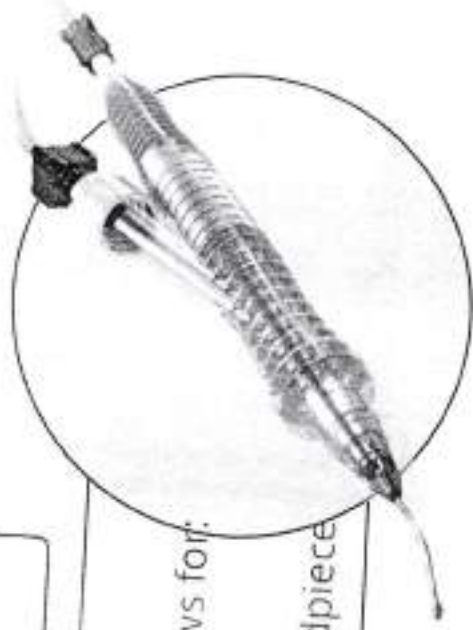
INTREPID® Transformer I/A Handpiece allows for:

- Coaxial or bimanual cortical removal
- Easier transitions with an all-in-one handpiece

More control throughout the procedure

INTREPID® AutoSert® Handpiece delivers:

- Less force to the eye^{14,15}
- Better wound integrity^{14,15}
- Less incisional stretching^{14,15}
- Minimal wound disruption and trauma^{14,15}



INTREPID® HYBRID TIP

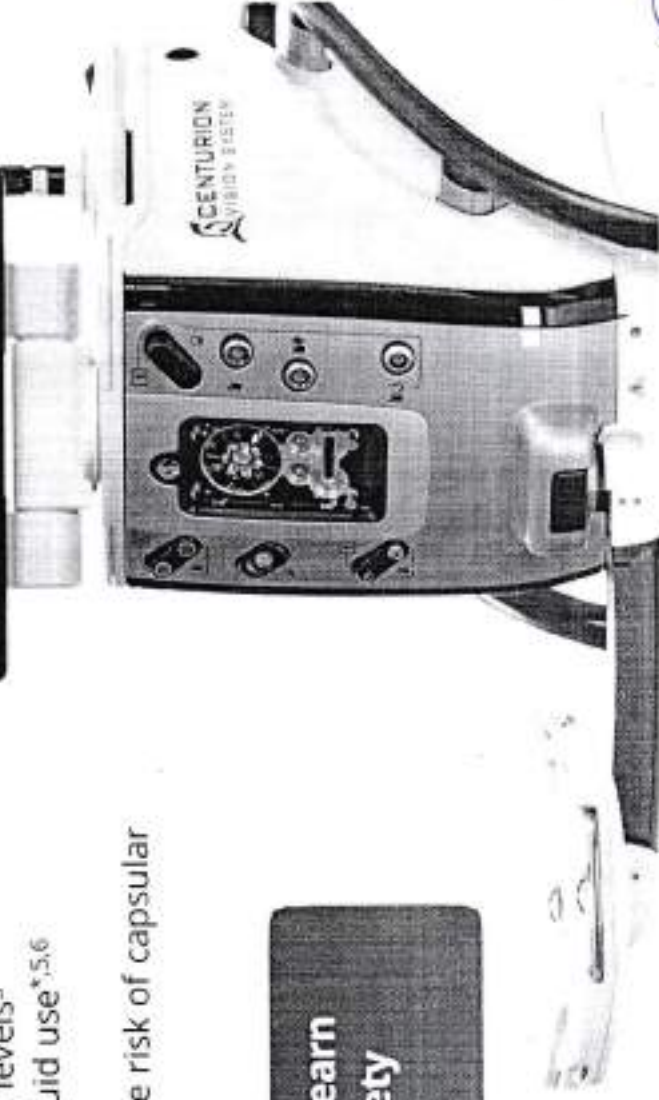
VERSATILE TECHNOLOGY

Safeguard every outcome with controlled phaco performance

The CENTURION® Vision System with ACTIVE SENTRY® Handpiece:

- Reduces surge by detecting pressure and triggering precise adjustments to ensure consistency³
- Maintains target IOP — regardless of PEL — with Active Fluidics™ Technology^{3,11}
- Maintains stability across a variety of vacuum levels³
- Reduces phaco procedure times, as well as fluid use^{5,6}
- Protects patient's eye from heat injury^{5,12}
- With INTREPID® Hybrid Tips, helps reduce the risk of capsular tears and improve patient safety in the OR⁴

 **Contact your Alcon representative to learn
more about bringing a new level of safety
and efficiency to your procedures.**



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Additional resources

Interested to learn more about the CENTURION® Vision System with ACTIVE SENTRY® Handpiece? Explore these resources to learn more about how our superior science delivers unprecedented safety, consistency and control.



Surgeon Presentation



INTREPID® Hybrid Tips Brochure

Important product information

CENTURION® VISION SYSTEM IMPORTANT SAFETY INFORMATION

CAUTION: Federal (USA) law restricts this device to sale by, or on the order of, a physician. As part of a properly maintained surgical environment, it is recommended that a backup IOL Injector be made available in the event the AutoSert® IOL Injector Handpiece does not perform as expected.

INDICATION: The CENTURION® Vision System is indicated for emulsification, separation, irrigation, and aspiration of cataracts, residual cortical material and lens epithelial cells, vitreous aspiration and cutting associated with anterior vitrectomy, bipolar coagulation, and intraocular lens injection. The AutoSert® IOL Injector Handpiece is intended to deliver qualified AcrySof® intraocular lenses into the eye following cataract removal.

The AutoSert® IOL Injector Handpiece achieves the functionality of injection of intraocular lenses. The AutoSert® IOL Injector Handpiece is indicated for use with the AcrySof® lenses SN60WF, SN6AD1, SN6AT3 through SN6AT9, as well as approved AcrySof® lenses that are specifically indicated for use with this inserter, as indicated in the approved labeling of those lenses.

WARNINGS: Appropriate use of CENTURION® Vision System parameters and accessories is important for successful procedures. Use of low vacuum limits, low flow rates, low bottle heights, high power settings, extended power usage, power usage during occlusion conditions (beeping tones), failure to sufficiently aspirate viscoelastic prior to using power, excessively tight incisions, and combinations of the above actions may result in significant temperature increases at incision site and inside the eye, and lead to severe thermal eye tissue damage.

Good clinical practice dictates the testing for adequate irrigation and aspiration flow prior to entering the eye. Ensure that tubings are not occluded or pinched during any phase of operation.

The consumables used in conjunction with ALCON® instrument products constitute a complete surgical system. Use of consumables and handpieces other than those manufactured by Alcon may affect system performance and create potential hazards.

AEs/COMPLICATIONS: Inadvertent actuation of Prime or Tune while a handpiece is in the eye can create a hazardous condition that may result in patient injury. During any ultrasonic procedure, metal particles may result from inadvertent touching of the ultrasonic tip with a second instrument. Another potential source of metal particles resulting from any ultrasonic handpiece may be the result of ultrasonic energy causing micro abrasion of the ultrasonic tip.

ATTENTION: Refer to the Directions for Use and Operator's Manual for a complete listing of indications, warnings, cautions and notes.

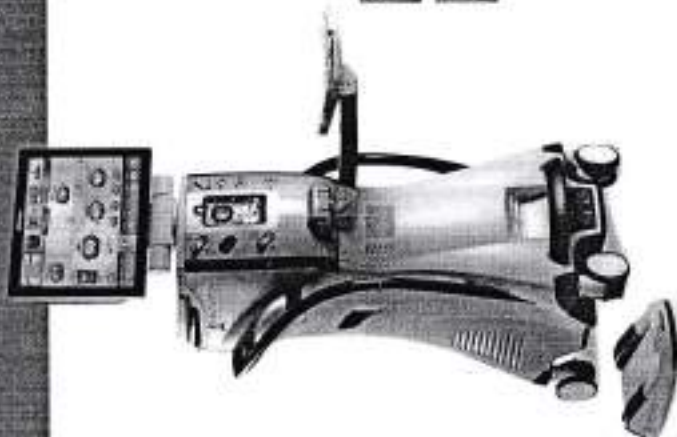


References

1. Smart-Kashani P, Farnley D, Injev V. Comparison of occlusion break responses and vacuum rise times of phacoemulsification systems. *BMC Ophthalmol*. 2014;14:36.
2. Alcon data on file. 2017.
3. Nicoli CM, Damakaria R, Miller K. Experimental anterior chamber maintenance: inactive versus passive phacoemulsification fluidics systems. *J Cataract Refract Surg*. 2016;42(1):57-62.
4. Alcon data on file. 2017.
5. Khokhar S, Aron N, Sen S, Pillay G, Agarwal E. Effect of balanced phacoemulsification tip on the outcomes of torsional phacoemulsification using an active-fluidics system. *J Cataract Refract Surg*. 2017;43(1):22-28.
6. Solomon K, Lorente R, Gianni R, Farnley D. Prospective, randomized clinical study using a new phaco system with intraocular system target pressure control. ASCRS-ASOA Symposium and Congress; April 25-29, 2014; Boston, MA.
7. Zacharias J. Comparative motion profile characterization of the mini flared and balanced phacoemulsification tips. ESCR; September 5-9, 2015; Barcelona, Spain. B. Alcon data on file. 2017.
8. Alcon data on file. 2017.
9. Alcon data on file. 2017.
10. Aravena C, Dyk D, Thorpe A, Farnley D, Miller K. Percent aqueous volume loss associated with post occlusion break surge in 4 phacoemulsification systems. ASCRS-ASOA Symposium and Congress; May 5-10, 2016; New Orleans, LA.
11. Boukhry M, Sorensen G, Gordon R. A novel phacoemulsification system utilizing feedback based IOP target control. ASCRS-ASOA Symposium and Congress; April 25-29, 2014; Boston, MA.
12. Zacharias J. Comparative thermal characterization of phacoemulsification probes operated in elliptical, torsional and longitudinal modalities. ASCRS-ASOA Symposium and Congress; April 25-29, 2014; Boston, MA.
13. Vasavada AR, et al. Comparison of torsional and microburst longitudinal phacoemulsification: a prospective, randomized, masked clinical trial. *Ophthalmic Surg Lasers Imaging*. 2010;41(1):109-114.
14. Allen D, Habib M, Steel D. Final incision size after implantation of a hydrophobic acrylic aspheric intraocular lens: new motorized injector versus standard manual injector. *J Cataract Refract Surg*. 2012;38(2):249-255.
15. Johansson C. Comparison of motorized IOL insertion to traditional manual IOL delivery. ASCRS-ASOA Symposium and Congress; March 25-29, 2011; San Diego, CA.

IN-CNT-2000005

For the use of registered medical practitioners / hospitals only.



EXPERIENCE THE PERFORMANCE

The Centurion[®] Vision System Effect: Snapshot of Data¹

Active Fluidics[™] Technology

- **Helps to Maintain Chamber Stability:**
Detects and compensates to help provide superior chamber stability compared to FEMTEC[®] and Signature[®]
- **Less Surge:**
Less surge or very rapid vacuum level
- **More Consistent IQP[®]:**
Up to 85% less surge area²

Centurion[®] Energy Delivery

- **More Efficient Cataract Removal:**
35% reduced energy³
74% reduction in aspiration fluid³
34% faster aspiration time³
- **Improved Energy Delivery:**
62% less temperature rise³

INTREPID[®] Integration

- **Ongoing Innovation:**
INTREPID[®] Portfolio and Centurion Reflective Suite

¹ See inside for more information.

Contact your Alcon sales representative to schedule a demonstration and experience the Centurion[®] Effect for yourself.

Alcon



BS

Experience the Centurion® Effect

Superior phaco performance^{vs} through superior engineering

The Centurion® Vision System's innovative phacemultification performance helps to enhance the OR experience for you and your patients.

- **Active Fluidics[®]**: Dynamic IOP management designed to enhance chamber stability^{vs}
- **Centurion® Energy Delivery**: Harmonizing QZIF™ Translational Phaco delivery with increased fluidic control to maximize performance
- **INTREPID® Integration**: Micro incisional portfolio designed to enhance surgeon control

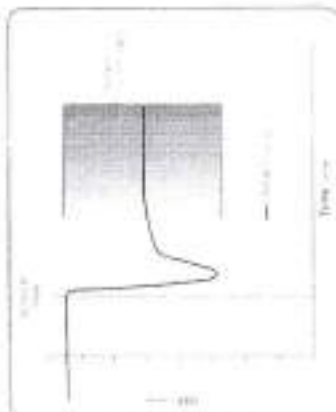
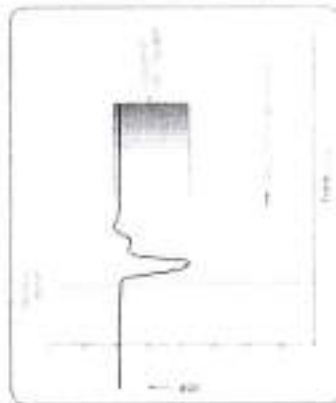


Active Fluidics™ Technology

Designed to reduce surge¹

Through its Active Fluidics™ Technology, the Centurion® Vision System is designed to significantly reduce occlusion bubble surge versus an MFC-based system and provide a more consistent flow rate.

Active Fluidics™ vs. Gravity Fluidics²

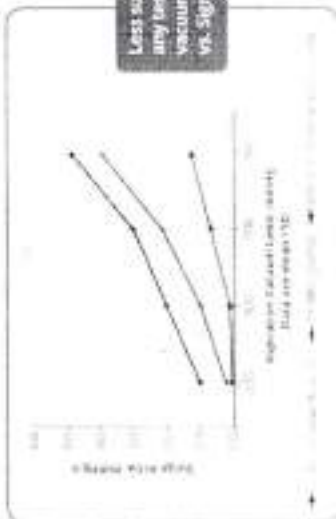


Observed surge area for Centurion® is 98% less than INFINITY® at 400 mmHg¹

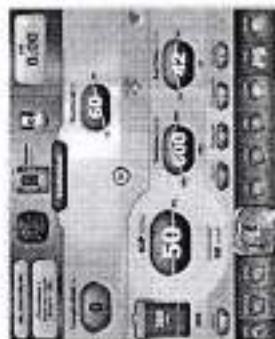
"The Centurion® Vision System gives me the ability to use higher flow rates and higher vacuum levels, even through small incisions. In my experience, this results in faster cases with very stable chambers, all while using less energy and fluid."

- Kerry Solomon, MD¹

Occlusion Break Surge Across Vacuum Limit Range¹



Less surge at any tested vacuum level vs. Signature¹



The Centurion® Vision System maintains a higher velocity compared to gravity and passive air fluidics systems.

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Designed to optimize chamber stability through dynamic IOP management

Active Fluidics™ technology is designed to maintain chamber stability by dynamically adjusting pressure and flow rates.

IOP at Aspiration Rate Based on Gravity vs. Active Fluidics™

Shows how Active Fluidics™ maintains IOP at aspiration rate based on gravity.



Gravity and pressure-based IOP systems are subject to significant IOP fluctuations as aspiration rate changes.

Active Fluidics™ IOP system maintains a stable IOP as aspiration rate changes.

IOP vs. Aspiration Rate Based on Pressurized Bottle Compared with Active Fluidics™

Shows how Active Fluidics™ maintains IOP at aspiration rate based on a pressurized bottle.



During every case, flow rates vary. Unlike gravity and pressurized fluids, Active Fluidics™ Technology detects and compensates to help maintain surgeon-selected IOP.

Active Fluidics™ Vision System

Active Fluidics™ Vision System

Any time pressure of the Endoscopic IOP compensates for flow.

Dual segment pump

Drives back, dissolves, and returns fluid to reservoir.

Rotary valves

Improves timing during surgery.

Tubing

Electrolytic argon gas flow breaks during the procedure.

Dual pressure sensor

Detects pressure of aspirate and vacuum to help maintain target IOP.

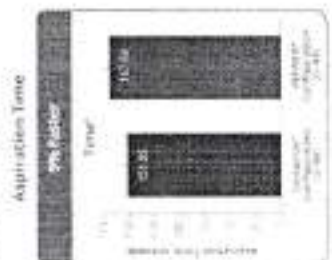
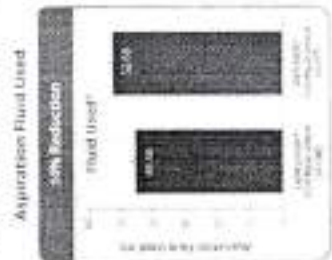
Multi-point FMS calibration

Holds multiple consistency from case pressure to the next.

Centurion® Energy Delivery

Optimized to help procedure efficiency[®]

The Germaine Smith Symposium designed to test the global standard for achieving net-zero CO₂ emissions from the oil and gas industry and promote a vision for achieving net-zero CO₂ emissions from the oil and gas industry.



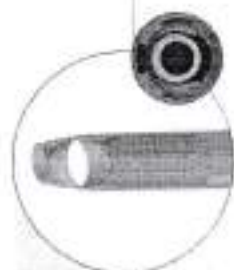
Thank you for reaching out. I'll reply as soon as I can during my regular workday. Hope to hear from you soon!

INTREPID® Integration

The INTREPID® BALANCED Tip

The INTREPID® BALANCED Tip is a novel design for improved efficiency.

- Reducing insertion time at the incision
- Enhancing incision-to-incision movement at the incision
- Providing an additional "steering" tip for horizontal phaco



The INTREPID® BALANCED Tip is a novel design for improved efficiency.

Evolving techniques for smoother IOL insertions^{1,2,3,4}

Developed in 1980, the INTREPID® system with ALCON® Latent-Action technology, the INTREPID® system, then widely considered essential, joined the manual of Ophthalmic Instrument Systems with the benefits of:

- Less time in the eye
- Reduced surgical complexity
- Reduced mechanical (vibrational) stress
- Manual insertion (no phaco and flaccid eye)



