

Be Visionary

The New Endoscopic Visualization Platform That Grows With You



Introducing the New Endoscopic Visualization Platform

VISERA ELITE III

Be Bold

Be Pioneering

Be Innovative

VISERA ELITE III

Created to accelerate procedures and learning curves for improved patient outcome with advanced imaging, **VISERA ELITE III is the future-proof endoscopic visualization platform** with software upgrades and technology that allows you to focus on your procedures, while significantly reducing future costs.

The insufflator is for display and demonstration purposes only and will be released soon.

Introducing the New Endoscopic Visualization Platform

VISERA ELITE III

Technology That Powers Your Vision



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Configurations and Compatibilities

Future-Ready Flexible Standard

One System for All

Designed to meet the needs of multiple specialties like general surgery, urology, gynecology, ENT and more, VISERA ELITE III offers **3D and 4K imaging, impressive fluorescence-guided surgery, well-proven Narrow Band Imaging (NBI), the new Yellow Enhancement (YE) mode** and more to come in the future, all in one system. Benefit from compatibility with rigid and flexible scopes, camera heads and ENDOEYE series of the latest generation¹ to **efficiently reduce investment costs**.

- Specialties
- Basic Setup
- Software Updates



Innovation That Grows With You

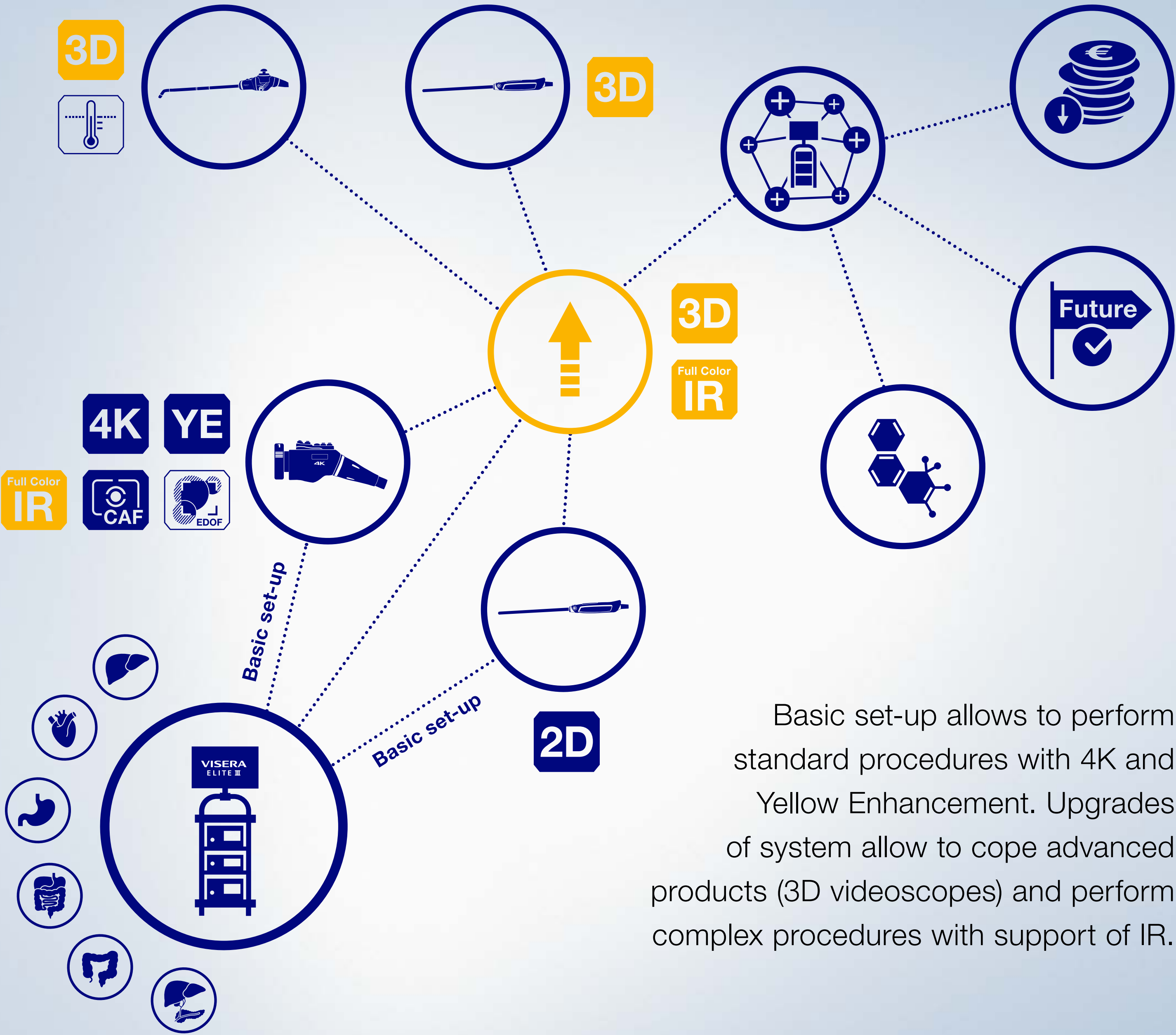
Future-Ready Flexible Standard

Versatility Is the New Standard – Use One Platform to Connect All

It starts with one platform that is tailored to your specific requirements and gives you always access to the latest technology.

Simply upgrade functions like 3D and IR to grow the system with your individual hospital needs via software upgrade to cover patients needs across specialties with only one system

The future is digital – no need to switch to another platform to access new technologies via software activation.



Basic set-up allows to perform standard procedures with 4K and Yellow Enhancement. Upgrades of system allow to cope advanced products (3D videoscopes) and perform complex procedures with support of IR.

Optimized Individual Investments

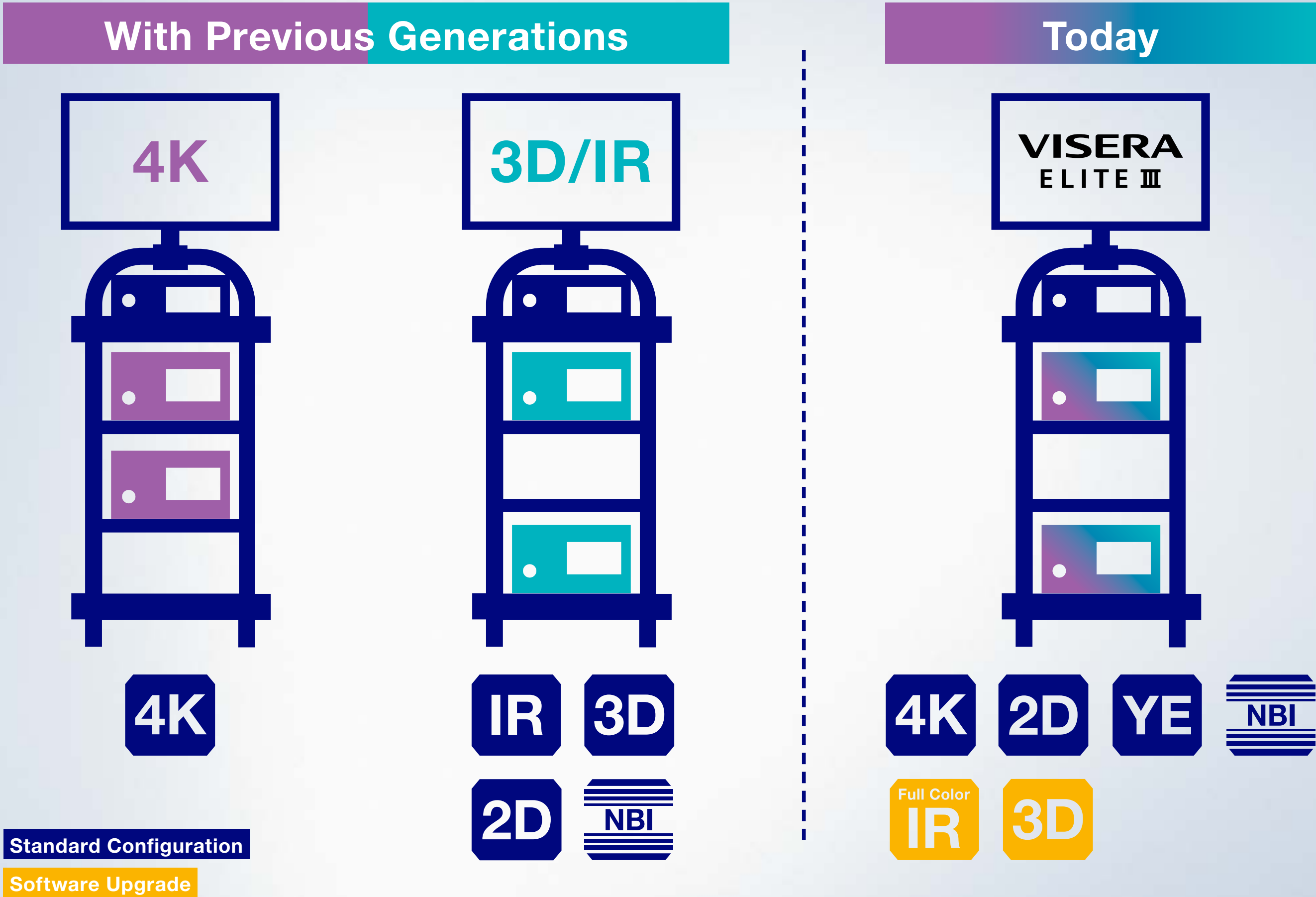
Future-Ready Flexible Standard

An Optimized Investment as Flexible as Your Needs

VISERA ELITE III is setting a new OR standard along with true flexibility. Instead of always investing in a full system, you **only pay for what you need**. Select upgrades to be activated via software licensing when needed without interruption of workflows and by minimizing OR downtime for the upgrade process.

Combination of all technologies in one platform leads to savings in hardware investment as of high versatility of the system.

Upgrade only what you need and when you need it for optimal resource allocation and maximum savings.



Combining 4K Vision and CAF

Improved Surgical Outcome

Experience sharp images through 4K CMOS and constantly keep the focus with the Continuous Auto Focus (CAF) function.



True 4K image quality

The exclusive 4K image sensor from Sony produces true 4K image quality, enabling the camera head to deliver fine detail.



Continuous Auto Focus (CAF)

The CAF function maintains constant focus and eliminates the need for focus adjustments.



Extended Depth of Field (EDOF)

The EDOF function allows precise endoscopic observations through continuous broad focus and seamless magnification.

Focus on the Patient

Improved Surgical Outcome

- **Easy handling** with flexible cable.
- Designed **as well for smaller hands**.*
- **Light and ergonomic** design.*
- **Stress relief**.



“Finally, light and ergonomic as you wish.”

Dr. Sara Pizzacalla, MD
Specialist in Gynecology and Obstetrics
Rome, Latium, Italy

CH-S700-XZ-EA

4K Camera Head

- Full 4K CMOS Image Sensor.
- Small and light autoclavable design: 270 g.
- IR, NBI and YE observation featured.
- One-touch digital zoom and continuous auto focus activation.



Observe More

Improved Surgical Outcome

Olympus is your partner to increase patient safety and improve surgical outcome making you to see more and even the invisible.

The systems are designed for better orientation in surgical plains and decision support for experienced professionals combining capability to reduce OR time and decrease incident rates.

Young professionals could increase the own confidence level in meeting the right decision and face a shorter learning curve.



See the Invisible

VISERA ELITE III offers

- Multiple **observation modes** to improve diagnostics and patient outcome during surgery.
- **As a default**, benefit from Narrow Band Imaging (**NBI**), a feature that visualizes minor vascular structures
- Yellow Enhancement (**YE**), to distinguish between fatty tissue and other structures.
- If needed, simply add Infrared (**IR**) Imaging **via software upgrade** for better perfusion control and identification of vital structures.

Fluorescence Guided Surgery






Improved Surgical Outcome

Fluorescence Imaging

Fluorescence imaging (FI) in the laparoscopic field enables the visualization of vital structures, perfusion and lymphatic systems, which are invisible in white light normally used for minimally invasive surgery. The operating surgeon needs a near-infrared-light radiation (IR) imaging system and the fluorescence dye indocyanine green (ICG).

In the following section, the procedures with clinical benefits are introduced as an example.

In recent years, ICG has been used in laparoscopic surgery to optimize the visualization of anatomical structures.⁶ This finds application in several different surgical disciplines such as:

-  Thoracic surgery
-  Upper GI
-  Lower GI
-  Gynecology
-  HPB

Confident Decision Support with IR in Real Time during Colorectal Surgery

Improved Surgical Outcome



Fluorescence Imaging in **Colectomy**

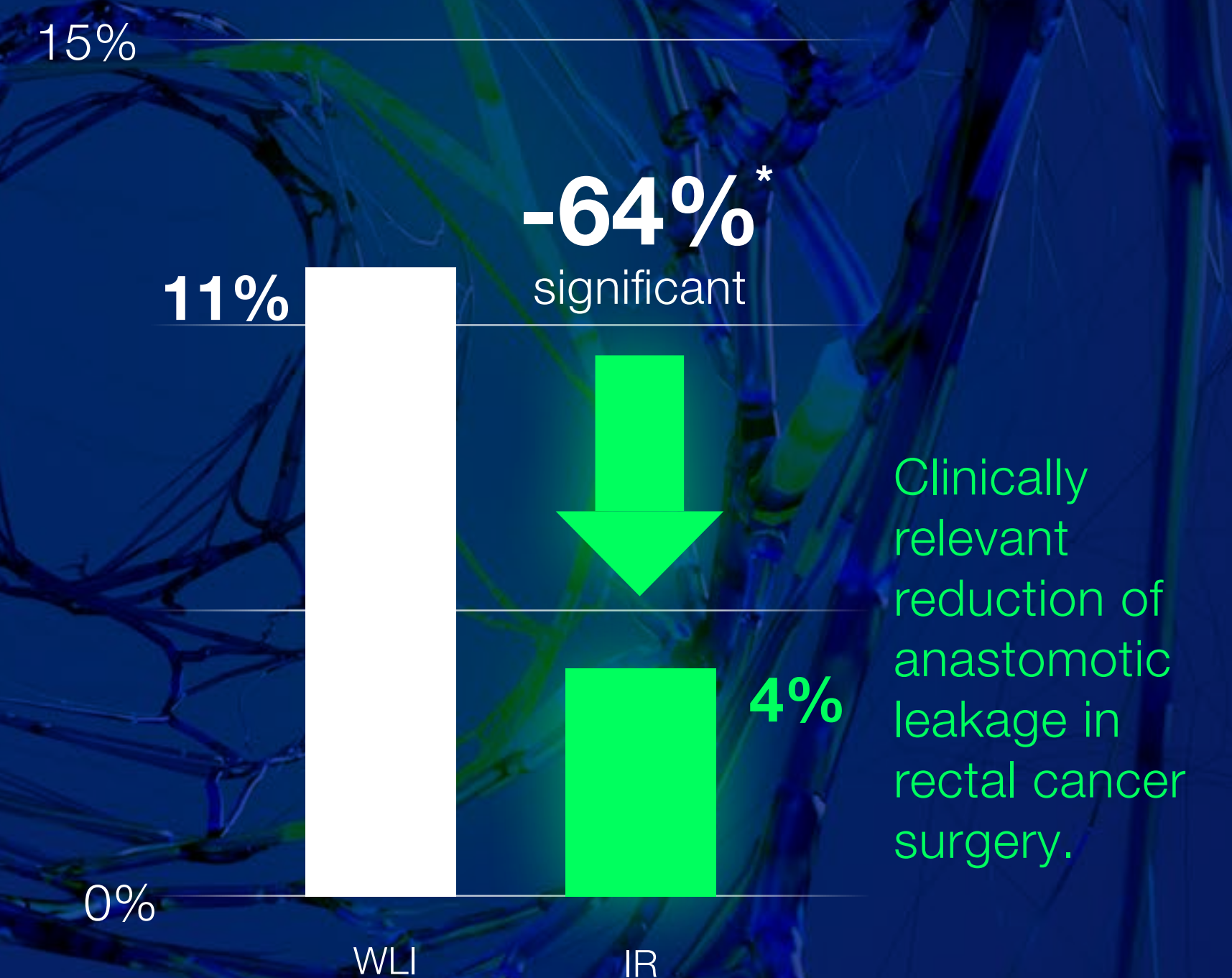
How IR can support your clinical performance in Colectomy:

- Increased quality in assessment of blood perfusion.
- Better amendment of resection margin.
- Significant reduction in anastomotic leakage.^{7,8,9,10}

Economical benefits:

- Better perfusion identification can prevent high-cost reoperations and reduce mortality.⁸
- Better recognition of well-perfused areas and ischemic parts lowers risk of anastomotic leakage and prevents increase of hospital stay.^{9,10}

Incidence of Anastomotic Leakage in Laparoscopic Rectal Cancer Surgery⁸



* relative change vs. WL application

Confident Decision Support with IR in Real Time during Laparoscopic Cholecystectomy

Improved Surgical Outcome



Fluorescence Imaging in **Cholecystectomy**

How IR can support your clinical performance in Cholecystectomy:

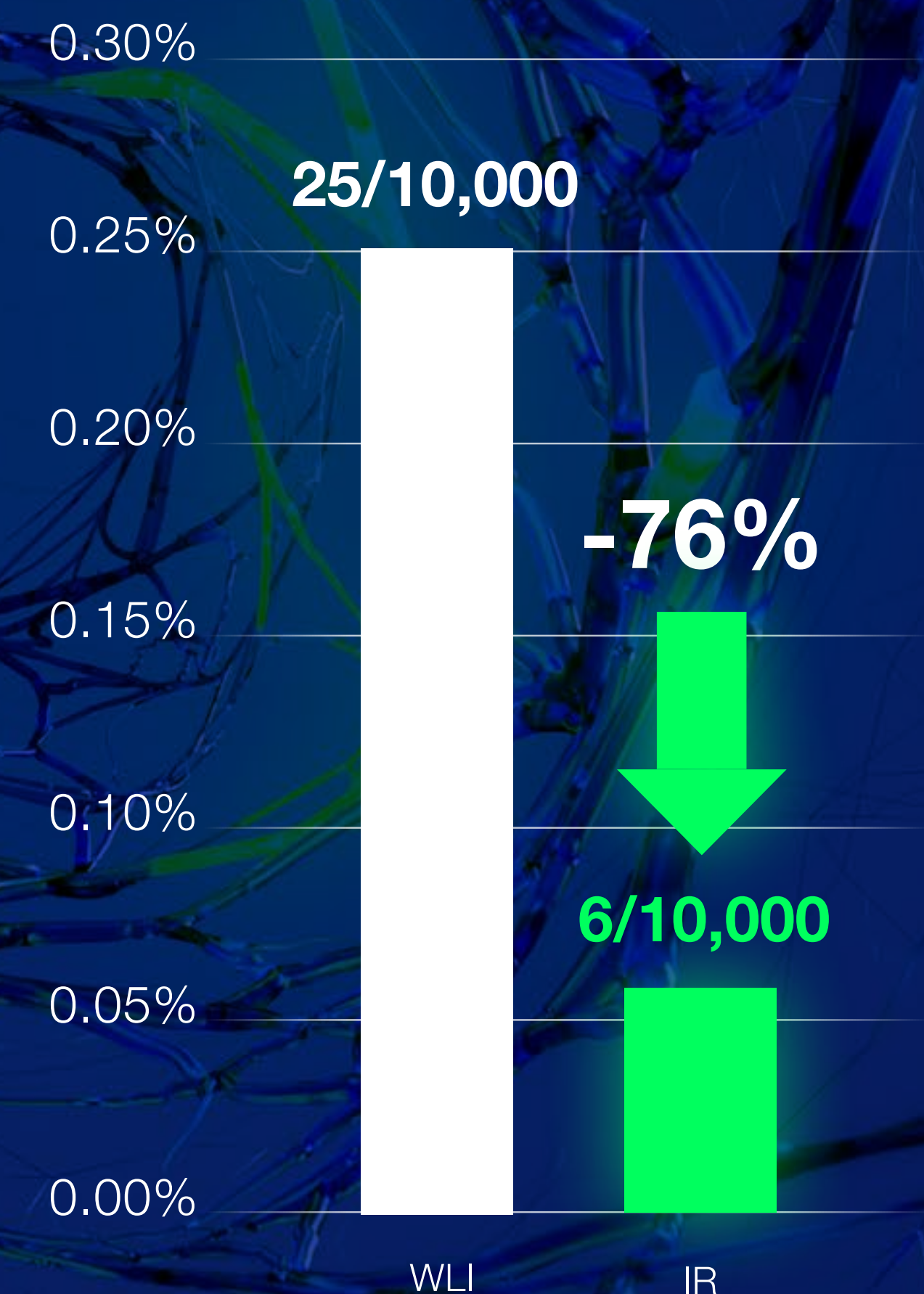
- Easier identification of biliary structures.
- Clear visualization of structures including **fatty tissues** during complicated cases.
- Fewer bile duct injuries with IR than with white light.^{11,12,13}

Economical benefits:

- Save operation time in complicated cases such as acute cholecystitis and pancreatitis using IR.¹⁴
- Better identification of vital structures can lower the risk of mortality and reduce total costs of hospital stay.^{11,12}
- Decreased total length of hospital stay.¹³

The number of cases with injuries as a percentage of total cases was much lower with IR than with WLI.¹³

Percentage of Cholecystectomy Cases with Injuries¹³ – Lap Chole BDI



Introducing Fluorescence Guided Surgery With VISERA ELITE III

Improved Surgical Outcome

Choose the IR gain that suits best and experience three selectable IR modes.

Full-Color IR White-Light Overlay Mode

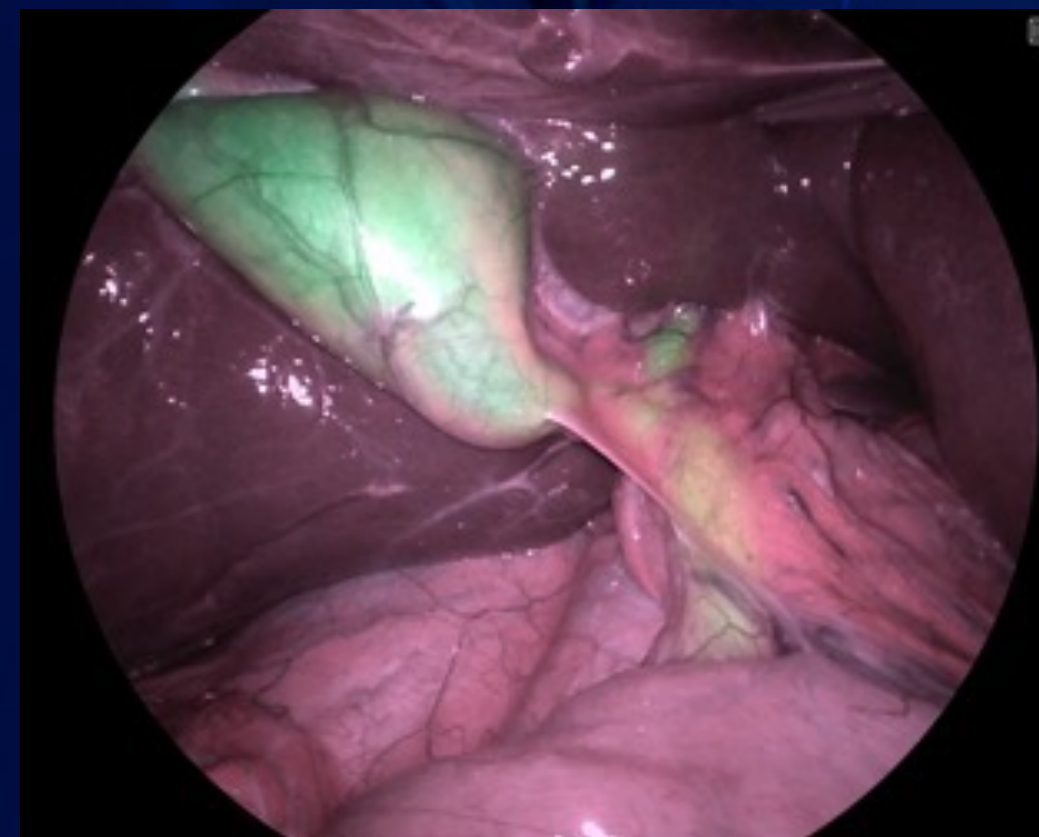
providing real-time 4K fluorescence imaging during white-light observation.



Fluorescence imaging during white-light observation (full-color IR white-light overlay mode).

IR Magenta Mode

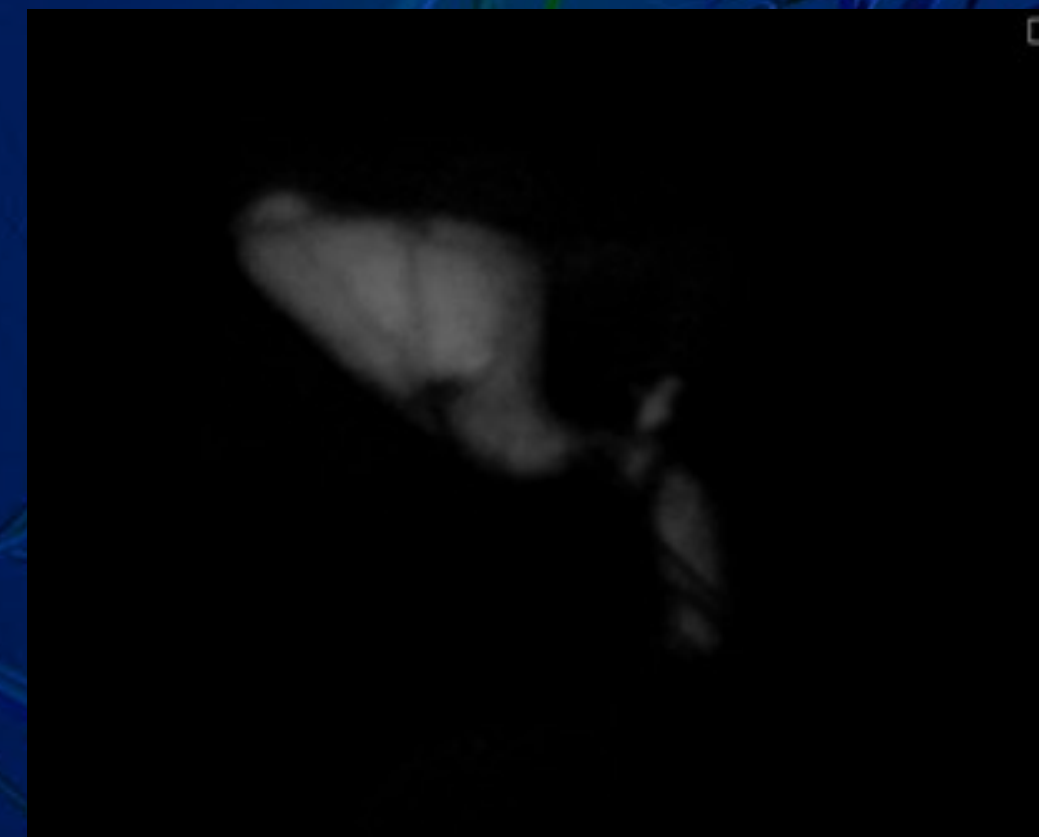
providing the classically known magenta IR image with fluorescence.



Partial white light and IR light at the same time (IR magenta mode).

IR Independently Black-and-White-Only Mode

allowing to generally check blood perfusion with independent infrared light.



Pure black-and-white IR light (IR independent mode).



Adjustment of the IR Gain

Adjust the visibility of the fluorescence by controlling IR gain to meet the best visualization regardless of scope, tissue or environment changes. The IR gain can be adjusted in three levels: low, medium and high, and the higher the level, the stronger the fluorescence is expressed.

Yellow Enhancement

Improved Surgical Outcome

Yellow Enhancement (YE) is a newly added default function with VISERA ELITE III. It **emphasizes yellow and is designed to support identification of structures**. In YE mode, the system performs a color conversion that make orange-yellow tissue appear clearly yellow. This enhances the contrast to anatomical structures of interest.

YE is designed for multiple disciplines and makes VISERA ELITE III a **perfect choice for hospitals with multi specialties focus and the need for versatility of used systems**. It offers decision support and has the benefit that it is immediately available with Camera head and ENDOEYE since it doesn't require further preparation steps as dye administration.



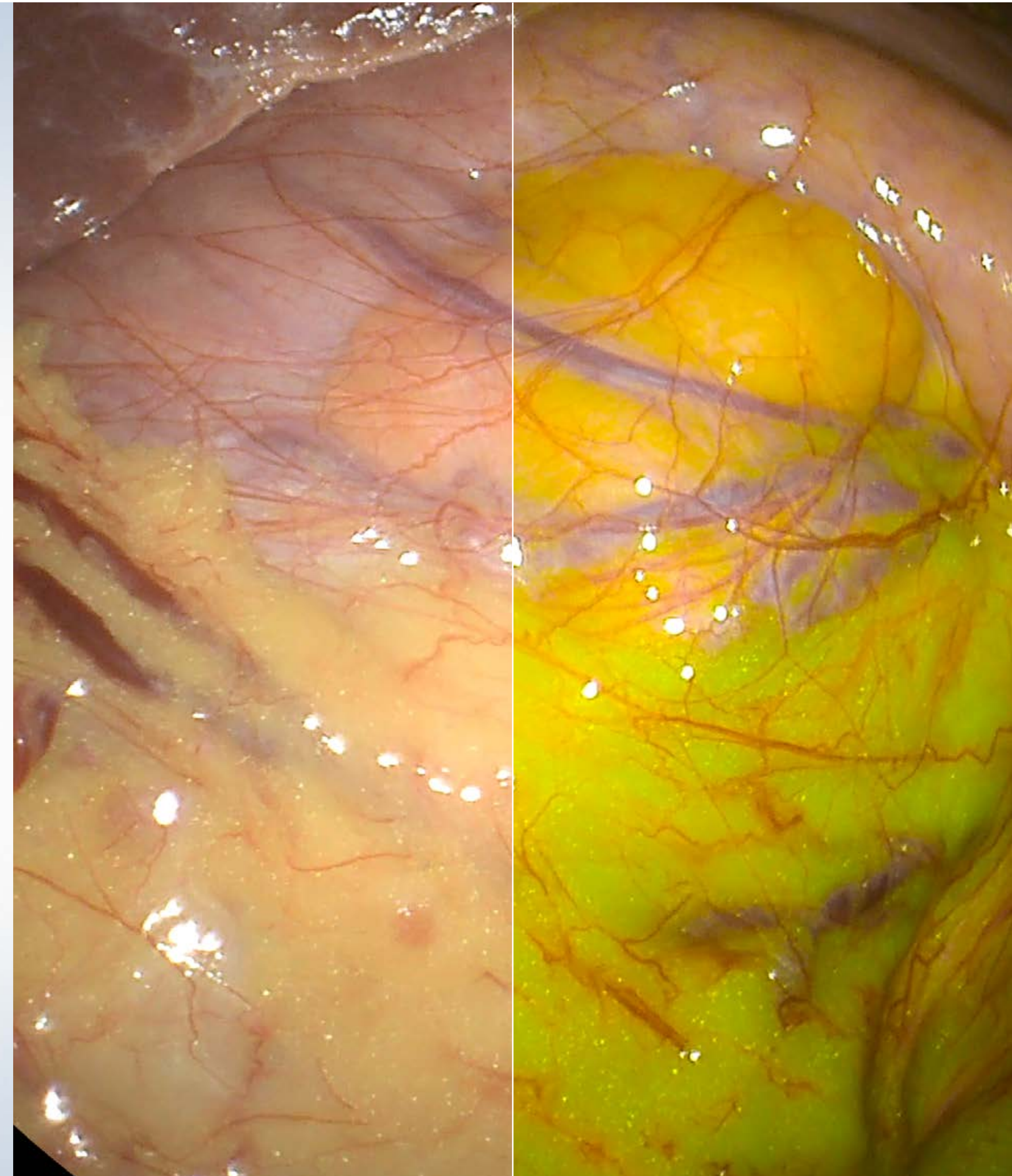
White light (colon embedded in fascia)

126945



Yellow Enhancement (colon embedded in fascia)

126946



Yellow Enhancement in Multiple Specialties

Improved Surgical Outcome

Yellow Enhancement (YE) is designed to deliver decision support for surgical teams in a cross-disciplinary environment. It can contribute to support:



GI

- Identification of vessel structures in fatty tissue.
- To improve orientation in the deep peritoneal space.
- To identify Bowel, fat and vascular structure due to contrast increase.
- Identification of lymph nodes and nerves.



Gynecology

- Identification of Ureter and nerves in fatty tissue..



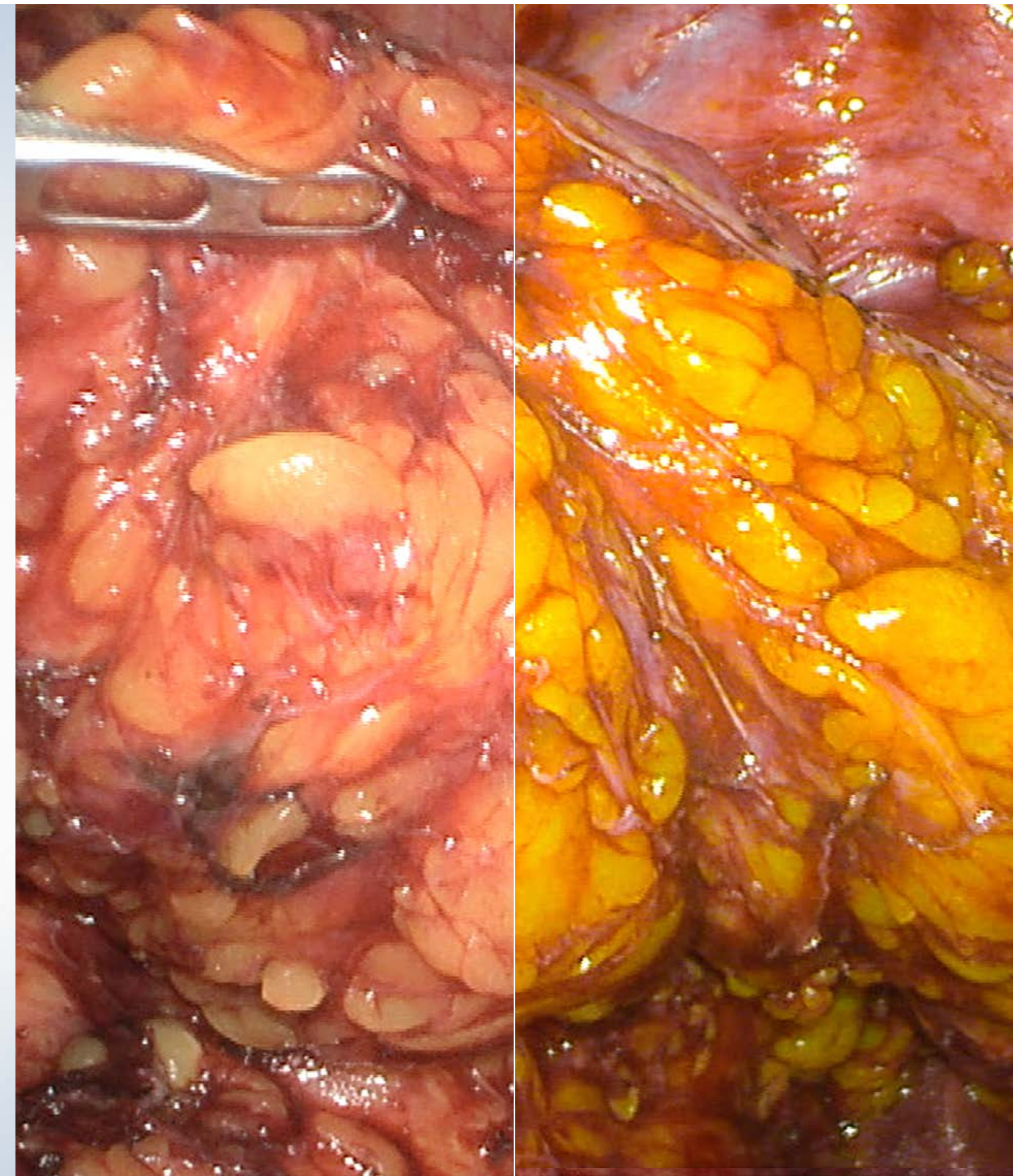
HPB

- Identification of pancreatic borders especially in obese patients dissection around vessels and veins.
- Assessment of quality of pancreatic tissue for anastomosis.



Urology

- Identification of Gerota's fascia and surrounding fats.
- Identification of intestinal tract.



Narrow Band Imaging (NBI)

Improved Surgical Outcome

NBI in Urology

The Latest Technology To Fight Bladder Cancer

NBI is the world's only patented endoscopic light technology that enables effective targeting of bladder tumor biopsies not seen under white light without the need for dyes or drugs.

Studies have shown that NBI visualized:¹⁵

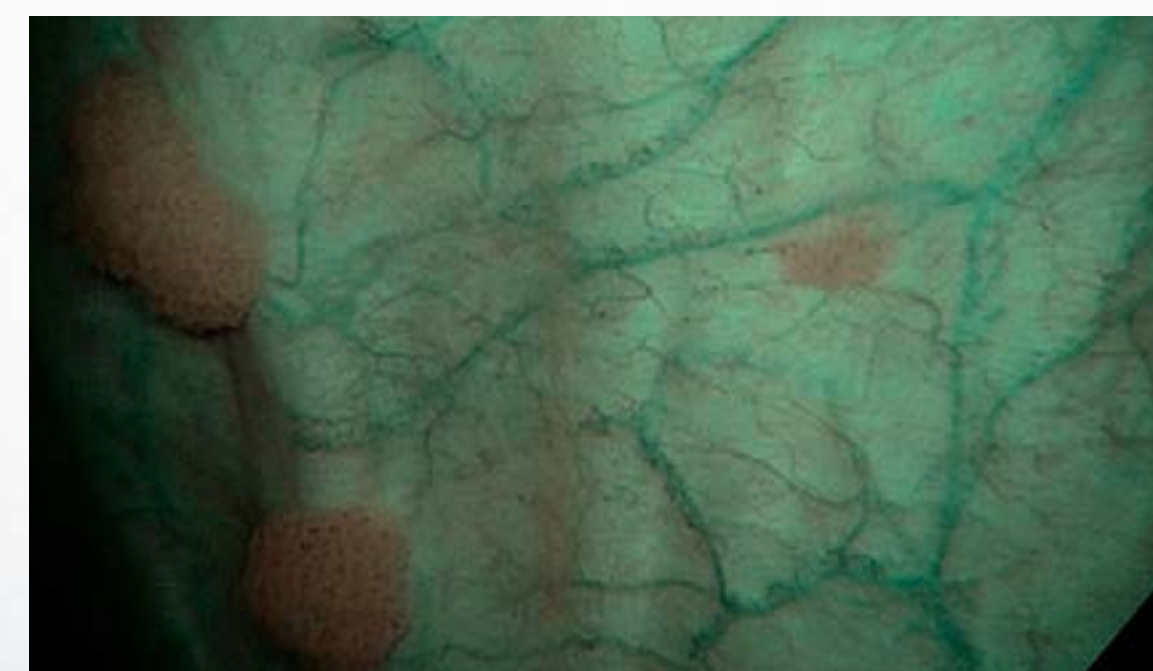
+17% additional patients with NMIBC.

+24% additional tumors.

+28% additional Carcinoma in Situ (CIS).



White light



NBI light

NBI in ENT

For Your Patients Safety – NBI is Clinically Proven to Diagnose More Laryngeal Cancer

Particularly when combined with the high resolution of VISERA ELITE III, NBI can provide a more-detailed and higher-contrasted visualization of blood vessels than other endoscopic procedures.¹

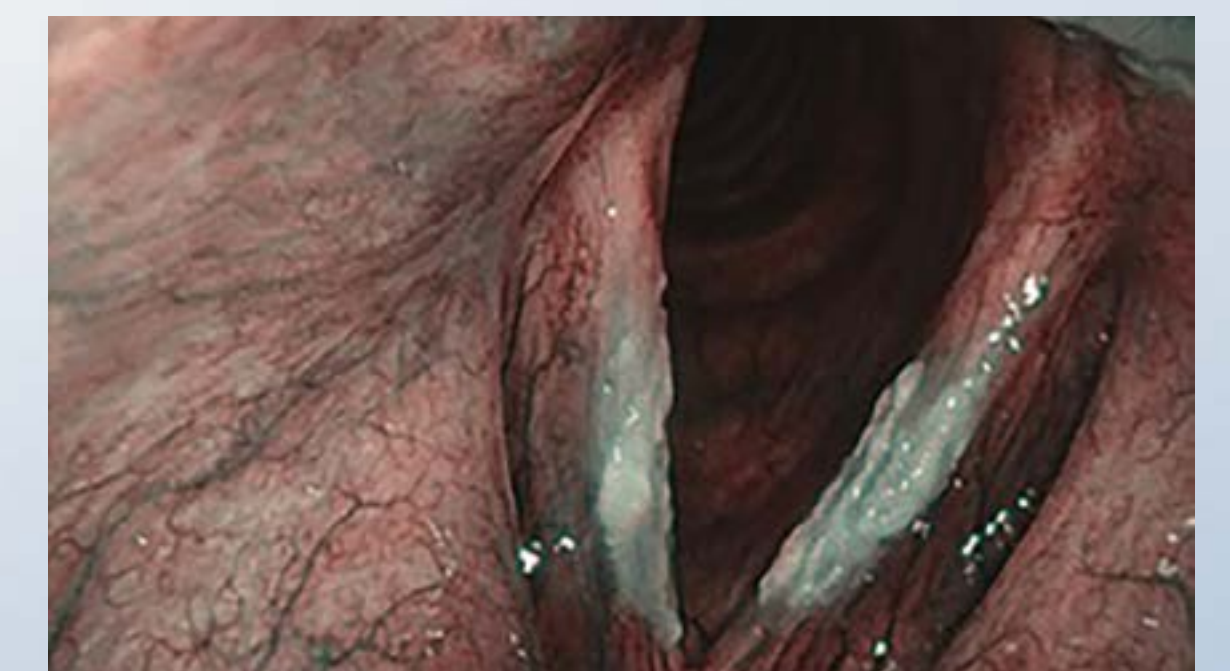
+18% Detects 18% more true-positive laryngeal cancer lesions.¹⁸

+23% Increases sensitivity by 23% in the identification of laryngeal cancer¹⁹ while maintaining high specificity (96%).

-85% Reduces 85% of superficial positive margins.²⁰



White light



NBI light

Figurs compared to white-light endoscopy

Olympus Video-Laparoscopes

Improved Surgical Outcome

ENDOEYE Rigid

Change the direction of view while maintaining a stable horizon. ENDOEYE Rigid 30° supports your continuous critical view and always provides you with reliable orientation, even at challenging viewing angles, with its continuous mechanical rotation function.

ENDOEYE – 2D/3D Laparoscope

Image Rotation without Loss of Horizon

- Change of the view direction while maintaining horizontal orientation of images, enabling a continuous critical view.

Chip-on-the-Tip Technology

- Bright, clear and natural 3D depth perception.
- Focus-free handling; no manual focusing required.

Autoclave Compatibility

- Reduced costs compared with other sterilization methods.

Ergonomics

- Integrated all-in-one design.
- Plug-and-play concept.
- Slim grip and smooth rotation for one-handed use.



The World Only Video-Laparoscope With a Flexible Tip

Improved Surgical Outcome

ENDOEYE Flex

Easily shift the field of view with ENDOEYE Flex 3D by simply using the joystick and smoothly moving the tip up to 80° to the desired location. With even better access to narrow cavities, obtain the best viewing angle of the structures being visualized. In particular, observation performance is improved around the rectum, VATS, pelvic cavity, retroperitoneal approach to urology, etc.

Joystick Handle

- Intuitive and up to 80° smooth angulation of the tip.

Focus-Free Handling

- Greater depth of field.
- No need for manual focusing.

Lightweight and Ergonomic Design

- Comfortable and smooth handling.



3D Vision in Laparoscopy

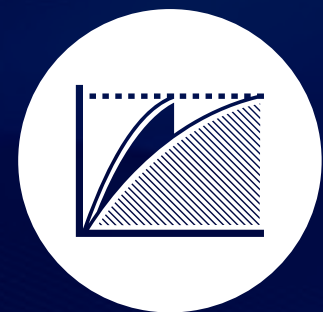
Improved Surgical Outcome

Improving Clinical Outcome



Shorter OR Time

... through natural spatial perception, enabling efficient surgery outcomes.



Shorter Learning Curve

... for young surgeons, leading to improved surgical proficiency.



Better Patient Outcomes

... through shorter hospital stays, less blood loss, fewer complications and improved quality of surgery as a result.



Improved Surgeon Confidence

... even when performing complex operations and activities laparoscopically.



Potential Cost Savings



Cost of OR Time Savings

... due to increased free capacity of ORs or staff time saved.



Reduction in Cost of Hospital Stay

... due to fewer switches to open surgery procedures and faster patient recovery.

Improved Procedure Results and Reduced OR Time Costs for Many Different Surgical Specialties Proven

Improved Surgical Outcome



Urology

31% reduction of OR time²



Colorectal Surgery

8% reduction of OR time¹



Gynaecology

13% reduction of OR time¹⁵



Hernia

30% reduction of OR time¹²



Bariatrics

20% reduction of OR time¹³

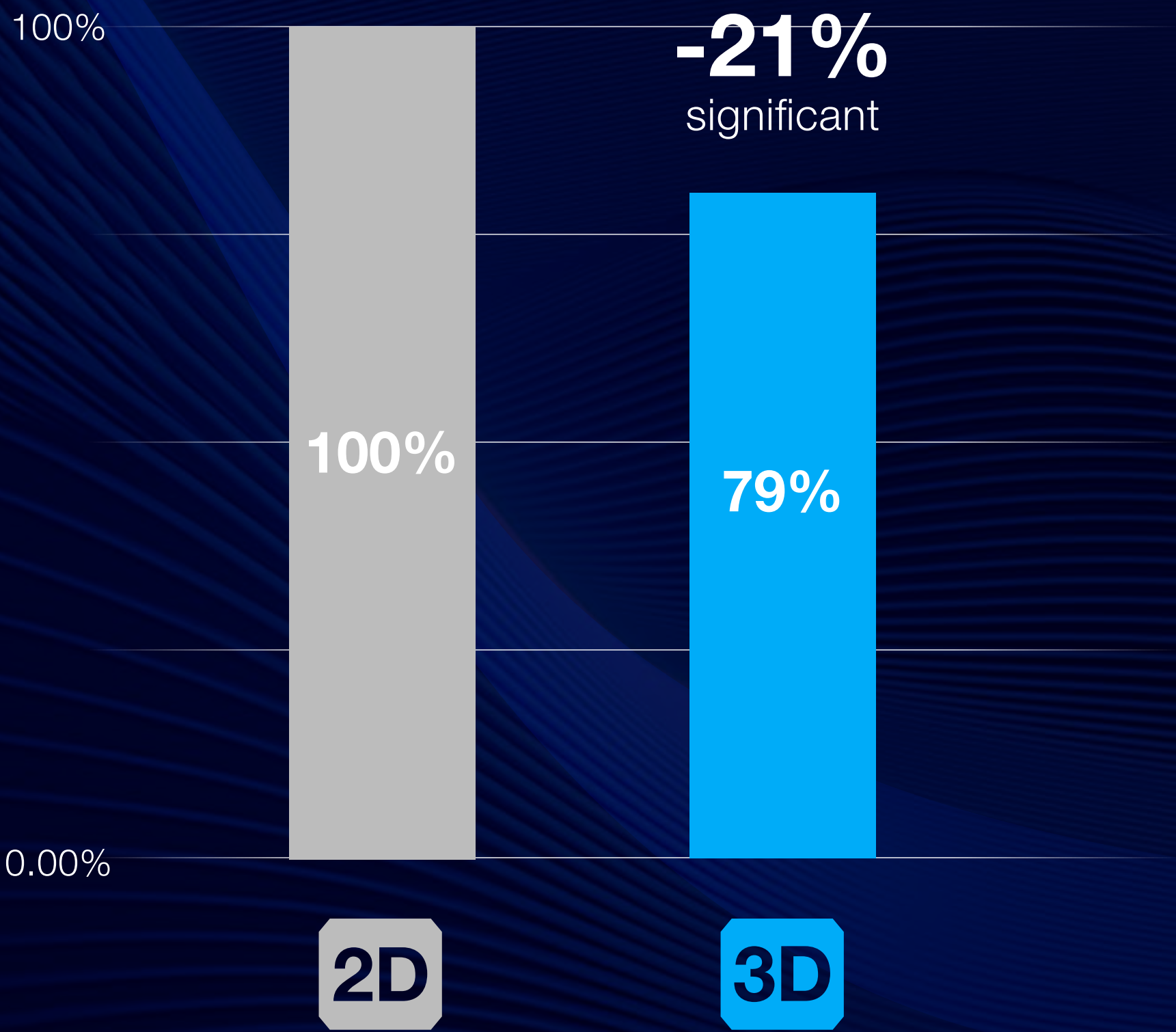


Liver

21% reduction of OR time¹⁴

OR Time in Laparoscopic Procedures²

Against standard 2D image procedures, 3D vision helps to save up to 35% and, on average, 21% operation time.



A Wider Ecosystem of Surgery

Solutions Beyond Imaging

Our wider portfolio for surgery covers generators, hand instruments for multiple specialties, smoke-management solutions, and puts the power of choice in your hands for advanced energy devices.

Advanced Bipolar Energy

POWERSEAL

Advanced bipolar vessel-sealing technology with high control of thermal spread.

Hybrid Energy

THUNDERBEAT

Advanced hemostasis, fastest-in-class tissue cutting, and superior dissection with temperature control.

Ultrasonic Energy

SONICBEAT

Uncompromised cutting with ultrasonic energy and reliable vessel sealing from a single instrument.

Our wider portfolio equips you with the power for your best performance.

Benefit from:

- Increased efficiency from one source.
- High quality of surgery.
- Maximum standardization of processes.



A Wider Ecosystem of Collaboration and Integration

Solutions Beyond Imaging

Integrate content management and collaboration platforms with VISERA ELITE III as part of a wider ecosystem that support clinicians like you at every step.

Connect

nCare

Hospital-wide
medical recorder

MedPresence

Telecollaboration
solution

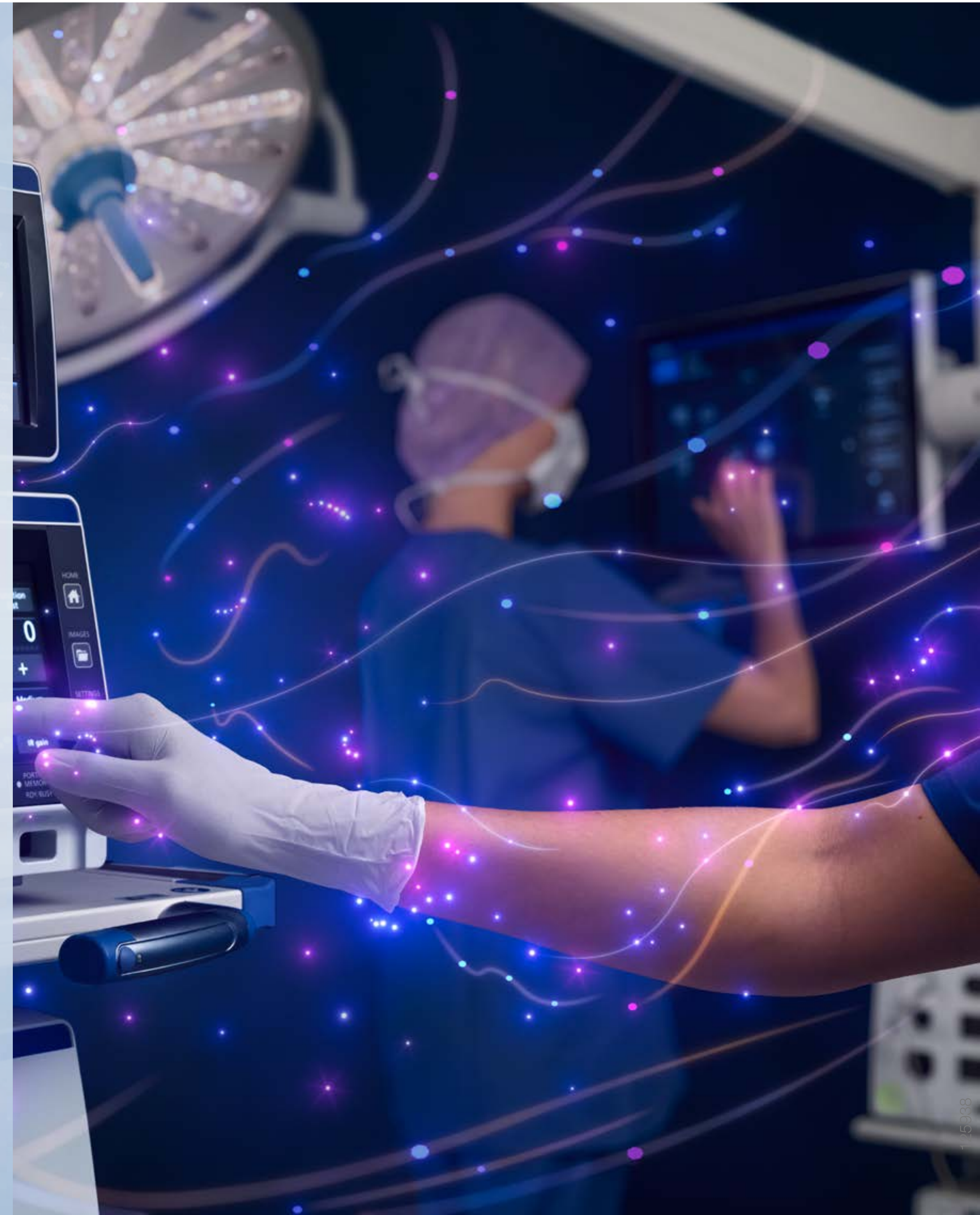
VaultStream

Medical Content
Management solution

View, record, stream, annotate, label and edit surgical video information pre-, intra- and post-operatively. These system extensions can use patient data from HIS and PACS systems to enhance visual clinical insights.

Benefit from:

- connecting teams by simplifying collaboration.
- peer-to-peer live exchanges of second opinions supporting clinical decision-making.
- the possibility of broadcast training.



Core Products

VISERA ELITE III Product Overview^{16,17}

OTV-S700 – VISERA ELITE III Visualization Platform

- All-in-one 4K/3D/IR imaging system for high standardization.
- Customized functions can be upgraded via software upgrades.
- For multiple specialties, compatible with the latest and future generation of scopes.
- Backward compatibility with available scopes.



N6158050

Software Upgrade Activation USB Memory Key

- Scalable software upgrade to suit multiple needs.
- Easy and quick upgrades can be done on-site.
- Simply update as upgrades and innovations become available.



N6189450, N6189550

CLL-S700 – VISERA ELITE III LED Light Source

- Full color IR LED light source for excellent natural color reproduction.
- Full color IR mode for better decision-making.
- Long-life LEDs for reducing maintenance costs.



N6157950

CH-S700-XZ-EA – 4K IR Camera Head

- 4K CMOS for more precise clinical images.
- Continuous Auto Focus (CAF) to minimize distractions.
- Extended Depth of Field (EDOF) to broaden the focus area.
- Autoclave compatibility for cost-effective reprocessing.
- Lightweight of only 270 g.
- Supports IR and NBI.



N6154750

Core Products

VISERA ELITE III Product Overview^{16,17}

IR UHD Telescopes

(0°/30°, 10 mm/5 mm)

- ED glass lens, optimized for high-resolution and razor-sharp images.
- Incorporates design elements for Infrared (IR) imaging.
- Autoclave compatibility for cost-effective reprocessing.



WAIR100A, WAIR130A, WAIR500A,
WAIR530A, WA4KT130

15975

ENDOEYE Rigid 3D/2D

(0°/30°, 10 mm/5 mm)

- (3D) image rotation without loss of horizon to maintain a reliable orientation.*
- Chip-on-tip technology for bright, clear and natural 3D depth perception.*
- Focus-free as no manual focusing required.
- Autoclave compatibility for cost-effective reprocessing.



WA50080A, WA50082A, WA50040A,
WA50042A, WA50050A, WA50052A

15977

ENDOEYE Flex 3D

- Joystick handle for intuitive and smooth shifting of field of view.
- Better access to narrow cavities with the short flexible tip.
- Focus-free as no manual focusing required.



N5781330

18709

ULTRA Telescopes

(0°/30°/45°, 5 mm/10 mm)

- Optimized for high-resolution imaging.

Full autoclavability

- Reduced waste due to full reusability of the telescopes.

Good illumination even at the edges

- The ULTRA telescopes have a homogenous light distribution in the peripheral region.



WA4KL500, WA4KL530, WA4KL545,
WA4KL100, WA4KL130, WA4KL145

16879

*3D only with 3D ENDOEYE

Core Products

VISERA ELITE III Product Overview^{16,17}

Sony LMD-XH320ST/550ST 4K, 3D Medical LCD Monitor

- Available in 32-inch and 55-inch.
- High-quality 4K UHD video images in 3D and 2D.
- High brightness and high contrast.
- Advanced image multiple enhancer (A.I.M.E).
- Clone output.
- 12G SDI.



Sony LMD-XH320ST/550ST

nCare Medical Recorder¹ Secure and Intuitive Design to Support Health Care Teams

- nCare is a connected medical recorder that captures full HD images and videos from up to two surgical devices simultaneously.
- nCare easily, reliably and securely connects clinicians with the critical visual information they need at all times.
- The user-friendly solution can fit nearly anywhere, from an endoscopic cart to an equipment boom.



U9000407, U9000408, U9000409,
U9000410, U9000411, U9000549,
U9000551, U9000550, U9000463

System Chart

VISERA ELITE III Product Overview




Be Visionary – Innovation That Grows With You



Discover More about VISERA ELITE III

If you require more specific details about VISERA ELITE III and its benefits, need detailed information on the single products and components, or want to download individual product specification documents, please visit your local Olympus website.

 www.olympus.com

References

¹ Please contact OLYMPUS for compatibility details.

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¹⁵ Based on a weighted average, studies have shown that using NBI allows physicians to visualize lesion boundaries. NBI is not intended to replace histopathological sampling as a means of diagnosis.

¹⁶ Devices will be available upon declaration of conformity, product registration or market clearance in each country's jurisdiction. Some devices might not be available in some areas. Pending 510(k), not available for sale in the United States.

¹⁷ Manufacturers: Olympus Surgical Technologies Europe, Olympus Winter & Ibe GmbH, Kuehnstraße 61, 22045 Hamburg, Germany, www.olympus.eu | Olympus Medical Systems Corp, 2951 Ishikawa-cho, Hachioji-shi, Tokyo 192-8507, Japan, www.olympus-global.com | Olympus Surgical Technologies America, 800 West Park Drive, Westborough, MA 01581, U.S.A., www.medical.olympusamerica.com | Sony Corporation, 1-7-1 Konan Minato-ku, Tokyo, 108-0075 Japan

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* Data and values are based on studies from Europe and might deviate depending on region.
The content of this material may show products not yet released.

As medical knowledge is constantly growing, technical modifications or changes of the product design, product specifications, accessories and service offerings may be required.