

Complete Solutions for GI Endoscopy

Improving Performance and Outcomes





IMAGINE...

Biopsies Were Needless

Clinically Proven Solutions, Helping to Perfectly Balance Clinical Quality And Procedural Efficiency

Olympus is the only provider of gastroenterological solutions covering the entire clinical process and the associated interfaces. From diagnosis and therapy to documentation, reprocessing, and maintenance, Olympus supports professionals in day-to-day hospital operations with solutions developed hand-in-hand with experts in the field of gastroenterology.

As a foundation, the EVIS EXERA III endoscopy system contains a variety of innovative technologies such as Narrow Band Imaging (NBI), Dual Focus, and Responsive Insertion Technology (RIT). These technologies have been proven in numerous clinical studies to enhance diagnostic and therapeutic quality, save resources, and help to provide greater comfort to patients.

Integrated Solutions That Save Time

Increasing demand on clinical practice, advanced diagnostic tools, and the enhanced potential of IT solutions are converging to optimize workflows and the use of resources. By covering the entire clinical process for GI procedures, Olympus helps to achieve greater efficiency throughout the department.

Unique, clinically proven technologies, outstanding service, full traceability, and a focus on patient outcomes – learn more about the clinical and economic benefits of working with Olympus in this brochure.

Complete Solutions for Endoscopic Applications That Enhance Efficiency and Patient Care

Being the only full-service provider in endoscopy, Olympus offers hospitals and clinics an integrated system, providing the latest technologies for diagnostics and therapy, systems integration, and reprocessing. This results in optimized workflows and faster diagnosis and therapy, meaning clinical staff have more time for patient care.



Optical Diagnosis – Expanding Opportunities in Endoscopy

A new era in endoscopy has begun. Olympus’ innovations enable accurate neoplasia detection and optical diagnosis.

Improved Diagnostic Accuracy with Fewer Biopsies

Olympus’ Narrow Band Imaging (NBI) and Dual Focus have been shown to improve the quality and efficiency of diagnostics. NBI-targeted biopsies in Barrett’s Esophagus detect more neoplasia than white light random biopsies (30% versus 21%), thereby reducing the number of biopsies by 50%.¹ NBI is shown to be as effective as standard chromoendoscopy and to detect 34% more neoplastic lesions.² In terms of squamous cell carcinoma, NBI may be a safe and more patient-friendly alternative to Lugol staining in the surveillance of high-risk patients. NBI is furthermore shown to be more accurate and specific (77% versus 68% and 75.2% versus 64% respectively).³

Optical Diagnosis

NBI and Dual Focus technologies permit the histology prediction of colorectal polyps with a high degree of accuracy.⁴ For NBI, an international classification scheme called NICE is available.⁵ This classification helps to differentiate between hyperplastic and adenomatous colorectal lesions with regard to their color, vessel structure, and mucosal pattern.^{5, 6, 7}

Improve Confidence in Decision-Making

Although they pose only a low risk of developing into colorectal cancer (CRC), the endoscopic management and histologic workup of large numbers of diminutive polyps have a high impact on hospital costs. In order to improve the cost-efficiency of screening colonoscopy without jeopardizing the quality of outcome, research clarifying the feasibility of optical diagnosis has become a priority.

DISCARD is a polyp management strategy that uses optical diagnosis to detect and leave rectosigmoid diminutive hyperplastic polyps in situ, while resecting and discarding adenomas smaller than 5mm. The surveillance interval for the patient is to be suggested based solely on the optical diagnosis. In order to ensure that the quality of service is equivalent to conventional diagnosis, the ASGE requires a threshold of 90% NPV for optical diagnosis of neoplastic histology and 90% agreement of surveillance interval recommendation between optical diagnosis vs. conventional pathology. These are the so-called PIVI criteria.

An RCT that scrutinized the feasibility of DISCARD showed that the ASGE PIVI criteria were achieved in both standard NBI view and Dual Focus NBI view. Moreover, Dual Focus further increased the proportion of high confidence decisions by 12%.⁷ NBI has also been shown to achieve a diagnostic sensitivity of 91.1% and specificity of 82.6% in predicting histology.⁸ Thus, NBI fulfills the PIVI criteria and may be used for DISCARD upon guideline implementation.

Improve Performance with Training

Current ESGE guidelines suggest that optical diagnosis must be adequately photo-documented, and should only be performed by experienced endoscopists who are adequately trained and audited.⁹ Olympus therefore supports professional NBI training courses throughout Europe and also aims to verify the effectiveness of these training courses by consecutive testing of participants. Still-image and video-based training modules have already been shown to effectively increase diagnostic performance.^{10, 11}

How it Works: NBI



Narrow Band Imaging (NBI) is an optical image enhancement technology. It is made up of filtered light that matches the absorption spectrum of the hemoglobin in the blood, enhancing the contrast and visualization of vessel patterns in the mucosa, for accurate diagnosis of tissue changes.

> www.nbi-portal.eu

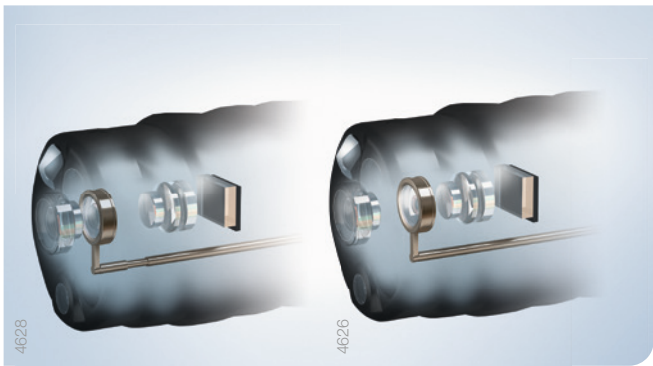
Dual Focus



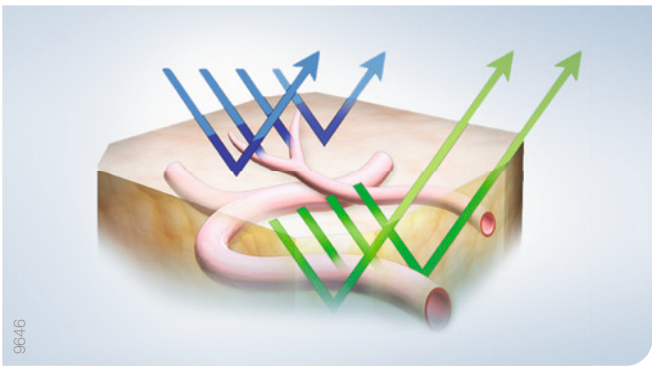
Dual focus is a two-stage optical lens technology from Olympus that allows physicians to switch from normal to near focus mode with the push of a button, bringing a new level of visualization in an easy-to-use package.

The Result? Advanced, accurate diagnosis at the touch of a button.

> www.olympus.eu/proven



Dual Focus: two-stage optical lens technology for easy-to-use advanced diagnosis.



NBI: Optical image technology to enhance contrast and visualization of vessel patterns.



Prof. Thierry Ponchon
Edouard Herriot Hospital.
Head of Department
Dept. of Digestive
Diseases
Lyon, France

“NBI is the only virtual chromoendoscopy that uses an internationally validated and acknowledged classification system – the NICE classification – and is ready to be used in daily clinical practice.”

Advancing Quality in Colonoscopy

Colorectal cancer (CRC) is the second most common cause for cancer-related death. Since colonoscopy is considered the most effective screening and surveillance test for CRC and is associated with a reduced mortality rate, screening programs have been implemented across Europe and the US.¹²

However, colonoscopy is known to be a highly technical procedure with risks and complications.^{13,14} In order to ensure quality in colonoscopy, the ESGE guideline therefore recommends to monitor quality indicators. Typical quality indicators include cecal intubation rate (CIR), adenoma detection rate (ADR) and patient discomfort. A successful colonoscopy further depends on patient- and disease-related factors (e.g. gender, age, previous surgery), and, in particular, the insertion technique and the technology being used.^{14,15}

How Do Olympus Technologies Support Quality in Colonoscopy?

ADR is defined as the proportion of screened subjects in whom at least one adenomatous lesion was identified. It has been shown to be directly linked to CRC risk, i.e. a 1% increase in ADR leads to a 3% decrease in CRC risk.¹⁶ In turn, Olympus' Narrow Band Imaging (NBI) technology

as well as HQ image quality have been clinically proven to have a positive effect on ADR.¹⁷ Cecal intubation is the crucial prerequisite for an effective colonoscopy. It improves overall sensitivity and eliminates the need for radiographic procedures or repeated colonoscopy, which consequently reduces associated costs.¹⁵ Excessive loop formation and failing to traverse an angulated, fixed, or constricted sigmoid colon represent the main challenges for CIR.¹⁸

Achieve Improved Cecal Intubation Rate and Time with Responsive Insertion Technology

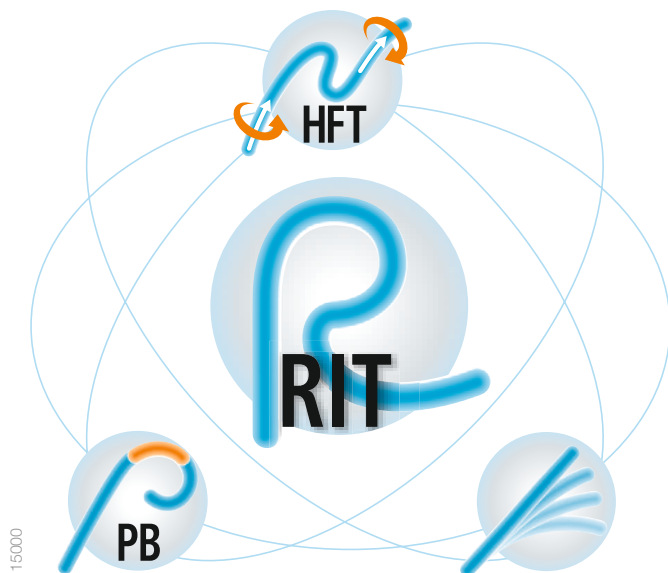
Olympus EVIS EXERA III 190 series colonoscopes are equipped with Responsive Insertion Technology (RIT) – a unique combination of three proprietary Olympus technologies: PB (Passive Bending), HFT (High Force Transmission), and Variable Stiffness (VS).



3D navigation and slim outer diameter: PCF-H190DL/I.



Advanced technologies for outstanding diagnosis: CF-HQ190L/I.



How it Works: Responsive Insertion Technology

Responsive Insertion Technology (RIT) is a unique combination of three proprietary technologies that lead to faster and easier navigation:

- Passive Bending (PB) helps EVIS EXERA III 190 series colonoscopes move through acute bends in the colon.
- High Force Transmission (HFT) provides improved operator control for pushing, pulling, and twisting maneuvers.
- Variable Stiffness (VS) allows the flexibility of Olympus scopes to be adjusted incrementally.

The Result? Smoother intubation and improved patient satisfaction.

www.olympus.eu/proven

Othman MO et al. Variable stiffness colonoscope versus regular adult colonoscope: meta-analysis of randomized controlled trials. *Endoscopy* 2009;41(1):17–24.

Clinical studies have proven the beneficial effect of variable stiffness on CIR in comparison to non-variable stiffness colonoscopes.

Cuesta R et al. Does "responsive insertion technology" improve practice of colonoscopy? Results of a randomized study. *Scand J Gastroenterol.* 2014;49(3):355–61.

Endoscopists using RIT colonoscopes require less time for cecal intubation and the endoscope is easier to handle both for endoscopists and nurses.

Result from EVIS EXERA III Voice of the Customer Survey. 2014

90% of EVIS EXERA III users clearly see benefits of RIT during colonoscopy and are convinced that it reduces patient pain.

Advancing Quality in Colonoscopy

Increase Quality in Colonoscopy by Using ScopeGuide

Olympus' magnetic imaging system ScopeGuide brings tangible benefits to training departments when educating endoscopists but also helps to increase the cecal intubation rate for both experienced and inexperienced endoscopists.¹⁹ It provides a real time, three-dimensional image of the shape and configuration of the colonoscope inside the colon, thereby also lowering the risk of complications during a procedure.²⁰

Olympus offers a complete range of endoscopes and probe-based solutions in order to maximize flexibility and provide ScopeGuide technology wherever needed. Latest development is the pediatric PCF-H190DL/I. Bringing the best of both worlds, this endoscope offers a slim outer diameter coupled with helpful insertion characteristics and built-in ScopeGuide navigation in one device.



ScopeGuide provides guidance through built-in electromagnetic coils, thereby removing the need for x-ray during the procedure.

Non-ScopeGuide compatible colonoscopes benefit from the “through the channel” probe enabling on-demand utilization of ScopeGuide.

Reducing Patient Discomfort During Colonoscopy

Addressing patient discomfort during colonoscopy, around 90% of Olympus EVIS EXERA III users think that RIT reduces patient pain.²¹ The aforementioned VS is further associated with lower abdominal pain scores and a decreased need for sedation.¹⁸ CO₂ insufflation pumps complete Olympus' line-up in quality-supportive tools as CO₂ is highly effective to reduce patient discomfort during and after colonoscopy.^{22,23}

Finally, Olympus offers a wide range of training opportunities to enhance colonoscopy skills. For more information, see page 26.



Get a real-time, three-dimensional image of the inserted scope, and benefit from shorter learning curves and increased CIR using ScopeGuide.

Key Benefits

- Many scientific studies prove the benefits of unique Olympus technologies in order to improve ADR, CIR, and patient discomfort during colonoscopy.
- ScopeGuide is clearly recognized as an efficient training tool for inexperienced doctors, helping to provide efficient training to shorten the colonoscopy learning curve.
www.olympus.eu/scopeguide3
- Olympus offers a unique range of products and features to optimize colon insertion and reduce patient burden which have been proven beneficial in clinical trials.
www.olympus.eu/proven
- Current EVIS EXERA III users confirm the study findings – and see the benefit in their daily clinical routine.



Olympus offers a complete range of instruments for polyp management including cutting, injection, coagulation, and biopsy devices.

ESD – Proceeding Endoscopy

Endoscopic Submucosal Dissection (ESD) allows en-block resection even of larger laterally spreading lesions and thus offers an ideal alternative to open surgery for certain indications. Olympus has pioneered this innovative technique, making treatment more effective and less invasive.

Complete Range of Products

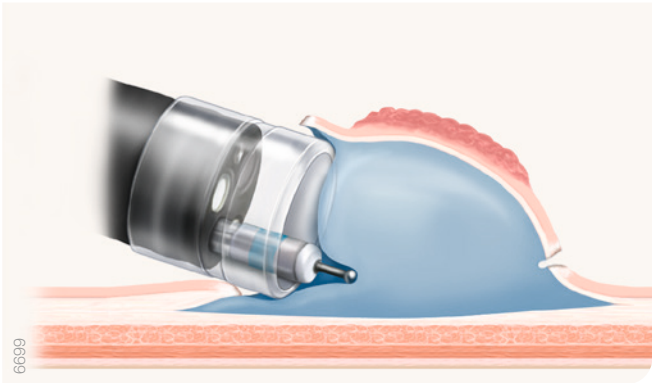
With forward-thinking concepts, Olympus offers a complete range of instruments for ESD – from distal attachments to high-performance electrosurgical knives and hemostasis and traction devices. Advanced endoscope technologies such as Dual Focus, **excellent** bending characteristics, as well as an auxiliary water channel incorporated into the endoscope insertion tube give operators further opportunities to maximize diagnosis and therapy.

Training

As ESD requires significant skills, training in models is highly recommended before starting clinical procedures.²⁴ Olympus takes an active role in providing training and education in the Medical Expert Training (for more information, see page 26).

DualKnife J – More Reliable and More Effective

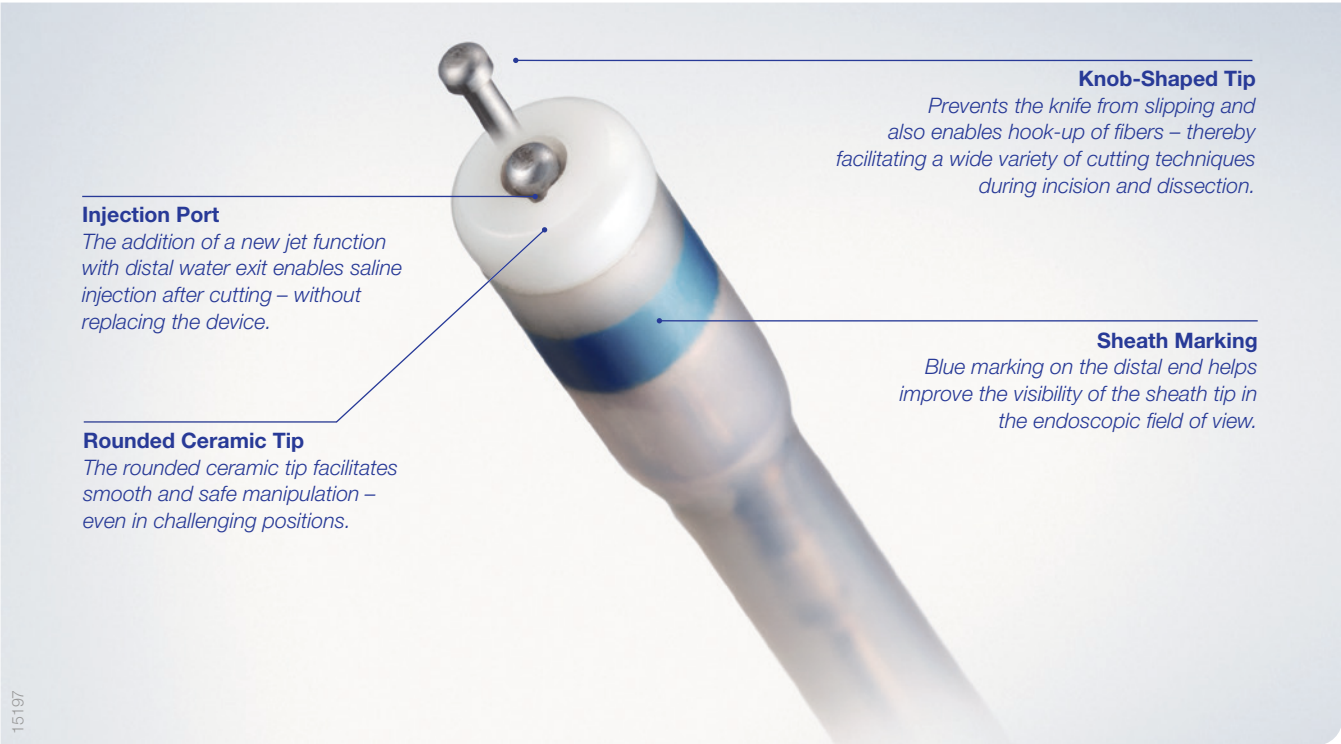
With the addition of a convenient jet, the new and evolved DualKnife J makes operations easier and reduces the time it takes to perform an ESD procedure.



Dissection during ESD.



DualKnife J with jet function.



Prof. Naohisa Yahagi
Keio University
School of Medicine,
Cancer Center,
Division of Research and
Development for Mini-
mally Invasive Treatment,
inventor of DualKnife J.

“DualKnife has been designed to allow very sharp and precise cutting during ESD. The new DualKnife J maintains all these features without any compromises. Adding the new jet function allows a smooth procedure flow – without changing of instruments – and helps to shorten the procedure time.”

A Full Range of ERCP Devices for More Efficient Therapy

First established as a diagnostic procedure, Endoscopic Retrograde Cholangiopancreatography (ERCP) has evolved into a primarily therapeutic application and to an even more complex procedure that is an important tool in the treatment of bilio-pancreatic diseases. With clinically proven innovations such as the unique 0.025-inch VisiGlide and VisiGlide 2 guidewire, Olympus has ensured that ERCP can be performed more efficiently and with greater safety.

Better Cannulation for More Control

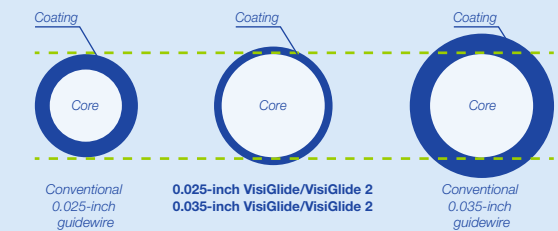
Accessing the cystic and pancreatic ducts is a particularly complex procedure. Not only must the physician have excellent navigation skills and control, but the procedure also requires guidewires adapted to the patient's anatomy.

The Olympus VisiGlide line makes all of this possible. A special inner core achieves one-to-one torque control that shines during delicate procedures such as navigating biliary structures. A hydrophilic tip provides state-of-the-art ductal navigation while a special fluorine coating reduces friction, making device manipulation virtually effortless.

The unique 0.025-inch guidewire concept significantly expands the range of applications. This has been proven to enable quicker cannulation with fewer guidewires which, in turn, lowers associated costs.²⁵

How it Works: ERCP Technologies

The 0.025-inch guidewire concept includes a state-of-the-art coating technology that makes it possible to manufacture VisiGlide with a wider core. This provides optimal shaft stiffness – comparable to a conventional 0.035-inch guidewire – while maintaining a smaller overall guidewire diameter.



The Result? Easier cannulation and wider range of applicable procedures.



Prof. Jörg Albert
Department of
Internal Medicine,
Robert-Bosch-
Krankenhaus,
Stuttgart, Germany

“VisiGlide can replace using a combination of flexible and stable guidewires, and increase the success rate of cannulation while decreasing the procedure time.”

Secure Locking when Needed

The V-System's Locking Mechanism – a technology developed by Olympus – achieves fast and reliable locking. The locking mechanism reliably locks 0.035-inch and 0.025-inch guidewires, allowing for simple and quick ERCP device exchange with both conventional long wires and short guidewires.



Expand Your Options



Olympus's comprehensive line of EndoTherapy devices ensures reliability and flexibility in ERCP.

Guidewire Preloaded Sphincterotome

Evidence shows that the wire-guided cannulation technique is related to higher primary cannulation success and to a lower risk of post-ERCP pancreatitis.²⁶ Therefore, it may be beneficial to perform the wire-guided technique for deep biliary cannulation. The CleverCut 3 V sphincterotome is available preloaded with a guidewire to simplify efficient cannulation.



Endoscopic Ultrasound for Accurate Diagnosis

Endoscopic ultrasound (EUS) combines the advantages of the two medical disciplines: Endoscopy and ultrasonography. The ultrasound transducer is integrated in the distal end of the endoscope which allows close positioning of the transducer at the region of interest, providing a high local resolution of the ultrasound image. In contrast to CT and MRI technology, an EUS procedure enables collecting of tissue samples during the examination.

Minimally Invasive and Highly Efficient EUS

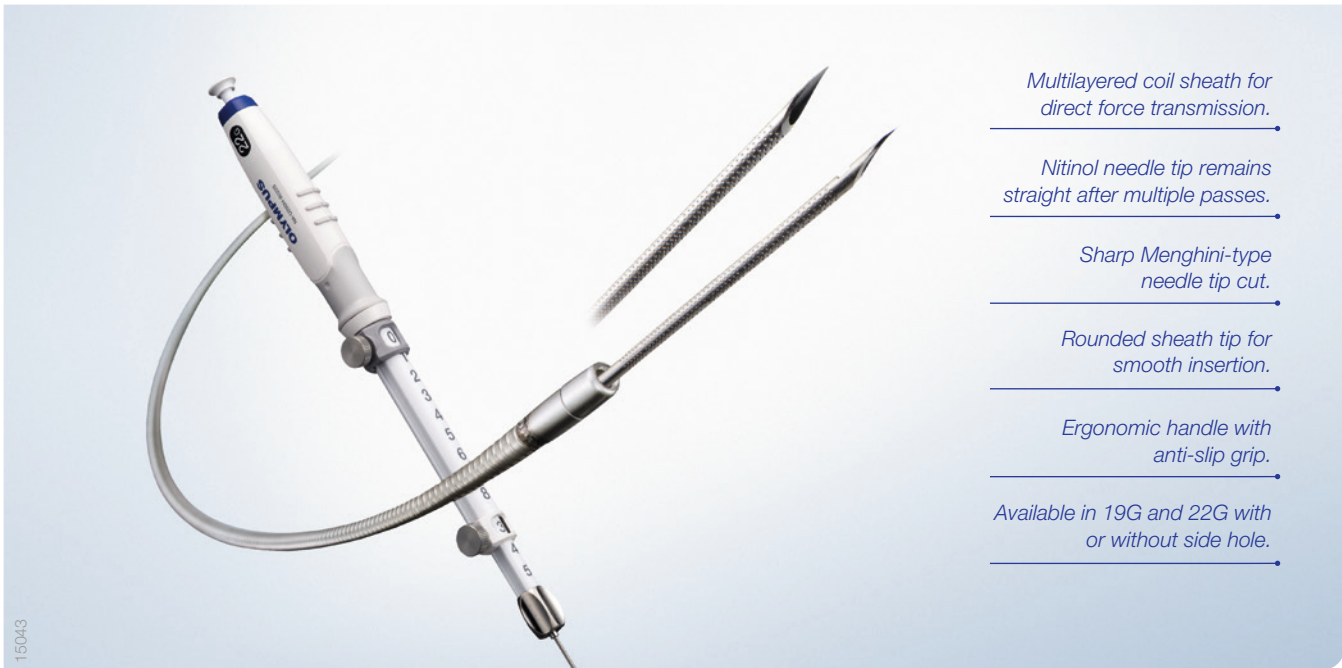
The local high image resolution makes it possible to diagnose and stage various lesions located in and around the GI tract. That's why EUS examinations became an essential part in the diagnostic flow, delivering complementary information to other examinations such as standard endoscopy, MRI, or CT scans. Moreover, EUS can collect tissue samples for performing pathological diagnosis in a minimally invasive way from areas which could otherwise only be reached via invasive surgery.

High Performance at the Tip of the Endoscope

EUS scopes can be differentiated by the design of the ultrasound transducer. A linear echo endoscope like the GF-UCT180 comes with a 180° scanning range and also

differs in the direction of the ultrasound scanning plane. In addition to the clear ultrasound visualization supporting the diagnostic analysis, it is designed to continuously visualize the progress of the needle insertion into the tissue when performing an EUS-FNA procedure or other therapeutic procedures, such as drainage or any injection directly into a lesion.

The Olympus GF-UE160 is an electronic radial-scanning scope with a 360° ultrasound view, comparable to computer tomography. The circumferential view for EUS is ideal for diagnostics and might reduce examination time by making scope control and orientation within the gastrointestinal tract easier.



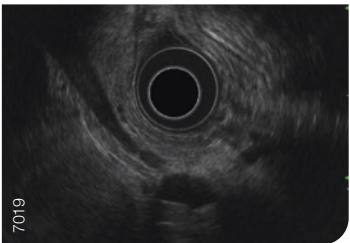
EZShot 3 Plus: Designed for uncompromised access to the pancreatic head.

Enhanced Ultrasound Processing

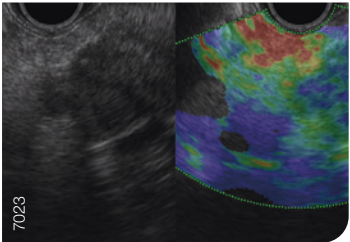
The EU-ME2 is a compact ultrasound processor dedicated to EUS applications. Apart from the superb B-mode image quality, making it possible to support more efficient localization of tumors and more accurate identification of tissue properties and boundaries, various new features help to bring clarity to EUS procedures, e.g.: Tissue Harmonic Echo (THE), Contrast Harmonic EUS (CH-EUS), and Elastography.

Those new technologies are developed to contribute to a better detection and characterization of lesions. For instance, a recent study showed the performance of CH-EUS for the diagnosis of pancreatic adenocarcinoma and was able to give guidance for the patient treatment when EUS-FNA was inconclusive.²⁷

Improved B-mode:
The superb B-mode image quality supports the localization of tumors and more accurate identification of tissue properties and boundaries.



Elastography: An advanced form of ultrasound, elastography displays the relative stiffness of tissues by taking advantage of the deformation caused by the compression or vibrations generated by the heartbeat or vascular pulsations.



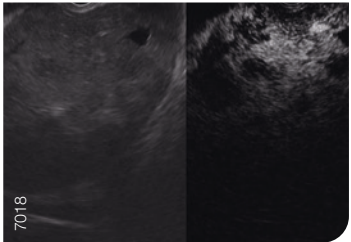
Miniproboscopes – for Specific Clinical Situations

In addition to the high performance ultrasound gastrovideoscopes, Olympus also offers ultrasound miniproboscopes, which expands the benefits of ultrasonography into very narrow lumens such as the pancreatobiliary ducts. For instance, due to its very small diameter (1.7mm at the distal end), the UM-S20-20R ultrasonic probe can be pushed through the working channels of standard endoscopes with 2.2mm diameter channels and operates with a high frequency of 20 MHz for high-resolution. Moreover, Olympus offers miniproboscopes, which are able to perform Dual-Plane Reconstruction (DPR). DPR scanning makes it possible to display both radial and linear ultrasound images simultaneously in real time, supporting a better understanding of the tissue invasion.

Tissue Harmonic Echo (THE):
The potential advantages of harmonic imaging include improved resolution, an improved signal-to-noise ratio, and fewer artifacts.



Contrast Harmonic EUS (CH-EUS):*
Using technology designed to depict higher harmonics, the CH-EUS mode is expected to help realize enhanced sensitivity to tumors and other abnormal growths.



Rodica Gincul, MD
Gastroenterology
Hôpital Privé Jean Mermoz, Lyon, France
Edouard Herriot Hospital
Lyon, France

“The performance of CH-EUS for the diagnosis of pancreatic adenocarcinoma was excellent. The good intra- and interobserver concordances suggest an excellent reproducibility. CH-EUS could help to guide the choice between surgery and follow-up when EUS-FNA is inconclusive.”²⁷

* Note: Regulations and usage of ultrasound contrast agents vary according to the country where they are used and the type of agents. Please use the ultrasound contrast medium according to the instructions provided with the product.

Enteroscopy – Fast Detection with Less Patient Burden

Managing small bowel diseases is a complex topic requiring a lot of skills, staff, time, and a variety of diagnostic modalities. In the last decade new modalities such as capsule endoscopy and balloon-assisted enteroscopy opened new ways to detect and treat small bowel diseases.

Challenges in Small Bowel Endoscopy

Although small bowel diseases are comparatively rare, the increased use of new oral anticoagulants (NOACs) to prevent heart stroke is increasing the risk of gastrointestinal bleedings.²⁸ The small bowel seems to be particularly affected as the major indication for this organ is bleeding.²⁹ Treatment options improved with the advent of device-assisted enteroscopy allowing inspection of the small bowel in full length. However, it is not only the organ length making enteroscopy difficult, but also the fact that the small bowel is only fixed at two points – the ligament of Treitz and the cecum. Accordingly, a complete examination is not only technically challenging and time-consuming, it also presents a high burden for the patient. Capsule endoscopy is therefore considered a patient-friendly and easy alternative to detect lesions and guide a proper treatment approach.



Capsule endoscopy – patient-friendly and clinically effective.

Capsule Endoscopy

With a pooled detection rate of 60.5% for obscure GI bleeding (OGIB), capsule endoscopy has been shown to be most efficient in detecting bleeding sources in the small bowel.²⁹ The latest ESGE guideline therefore recommends capsule endoscopy as a firsthand modality in OGIB patients.³⁰

To support an efficient procedure and optimize clinical outcomes, ENDOCAPSULE-10 provides sharp image quality and offers advanced recording equipment and software.

- Easy and quick setup with 30% less PC interaction and belt-type antenna.
- Optimizes detection and diagnosis with high image quality, long battery life of >12h and a larger field of view.
- New Omni Mode: Significantly reduces reading time while safeguarding detection thanks to a revolutionary algorithm.
- Assists in planning suitable patient follow-up and treatment strategies by offering a 3D visualization of the capsule location.
- Safe and convenient data management due to networking capabilities including seamless integration via Endobase.

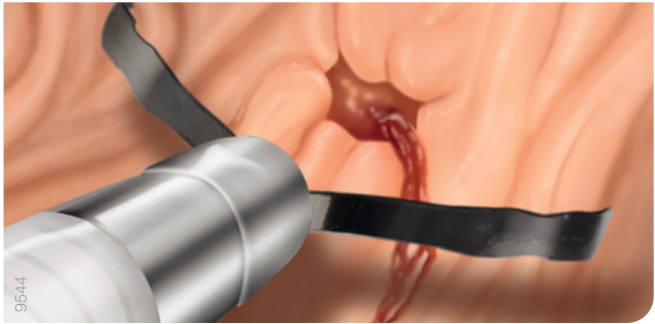
Single-Balloon Enteroscopy

Medical Benefits

- Shorter reading times for capsule endoscopies with the new Omni Mode with minimal risk of skipping lesions.
➤ www.olympus.eu/capsule
- Quicker preparation and shorter insertion times with single-balloon enteroscopy without comprising quality or clinical outcome.



Single-balloon enteroscopy – the quicker way into the small bowel.



Device-assisted enteroscopy has been truly acknowledged as best option to confirm and treat small bowel lesions. The detection rate of bleeding sites after positive capsule endoscopy has been shown to reach 75%.³¹ Accordingly, the ESGE guideline recommends device-assisted enteroscopy as a next step if a previous capsule endoscopy detected lesions.³⁰ As a full-solution provider in endoscopy, Olympus offers a single-balloon enteroscopy system that seamlessly integrates into the usual Olympus endoscopy equipment.

The single-balloon enteroscope – SIF-Q180 – maintains high image quality, while offering a variety of benefits in operability and functionality.

- Quicker insertion due to simple handling and only one balloon to control.³²
- Narrow Band Imaging that has been shown to predict intestinal lymphoma and villous atrophy in celiac disease.^{33,34}
- Simple setup speeds up system preparation.
- Latex-free splinting tube.

QuickClip 2 is a dedicated enteroscopy clip which can be rotated in two loops for easier targeting of the bleeding. The single-use grasping basket can be used for the retrieval of the EndoCapsule, foreign bodies, and resected tissue. The advanced rotation mechanism helps to improve performance.



Dr. Dirk Hartmann
Sana Klinikum
Lichtenberg,
Clinic for Internal
Medicine, Berlin,
Germany

“Single-balloon enteroscopy is an easy-to-handle and quick-to-set-up modality to diagnose and effectively treat small bowel lesions.”

Reprocessing – Holistic Workflow Approach

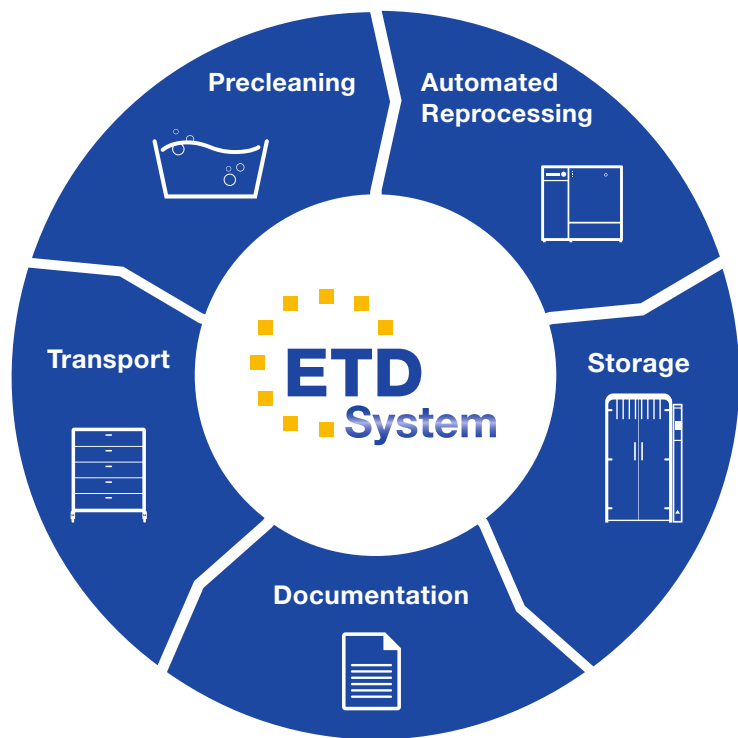
Increasing demands on hospital hygiene, fueled by discussions on multiresistant pathogens, have brought reprocessing of medical endoscopes into central focus of clinical quality management. Olympus reprocessing products not only fulfil latest international hygiene standards, but also offer economic benefits.

The Complete Approach

Olympus offers the full range of products which are needed for reliable and sophisticated endoscope reprocessing. This includes a variety of ETD products for endoscope reprocessing and EDC products for drying and storage purposes. ETD System products typically have almost all accessories already included. Aside from the reprocessing chemicals, there is no further need for other consumables like filters. This helps to keep regular maintenance costs at a moderate level. Olympus offers quick and effective Service Solutions prepared for the full range of maintenance and validation activities. This improves uptimes of all Olympus products in the reprocessing workflow.

Cost-Efficiency

Reprocessing has an essential impact on the daily number of patient examinations. Olympus products are not only designed for easy and quick use. Olympus also takes care to optimize downtime of the ETD washer disinfectors. This supports the predictable planning of the daily endoscopy agenda.



CDS Products:



ETD Double

- Capacity for three endoscopes
- Clear separation of dirty from clean area
- All loading and unloading activities can be performed independently
- Full traceability of endoscopes, user and process chemistry



ETD 4

- Capacity for two endoscopes
- Front loader and easy to integrate into existing workflows
- Product options for PAA or GA process
- Full traceability of endoscopes and users



EDC Plus

- Modular System with capacity for either 4, 8, 12, or 16 endoscopes
- Touch screen display
- Multicolor LED for quick guidance on status of endoscopes
- Fully transparent door



Dr. Stephán Suchanek
Division of
Gastroenterology,
Military University Hospital
Prague, Czech Republic

“The Olympus CDS Product concept offers me the full lineup of products that I need within my endoscopy unit. ETD4 and EDC Plus support me and my staff to achieve an optimized workflow. Hence, my focus can remain on taking care of patients and performing endoscopies!”

Systems Integration – Creating an Optimal Working Environment for Medical Endoscopy

Olympus’ systems offer a complete platform of solutions for endoscopy, consisting of modular components that can be combined to meet the hospital’s individual needs. Our solutions for flexible endoscopy will help gastroenterology and respiratory medicine teams to get more out of their equipment and workspace. The Olympus integration solutions may be used to optimize efficiency, simplify the capture and use of information, and improve communication. The goal is always to increase staff satisfaction and allow the team to focus more on what really matters: Patient care.

Getting More from Tools and Environment Examination Room

- Improve the comfort, ergonomics, and hygiene of the exam room.
- Make the most of video equipment by allowing for flexible image placement.
- Easily integrate any image into the patient file and/or PACS.

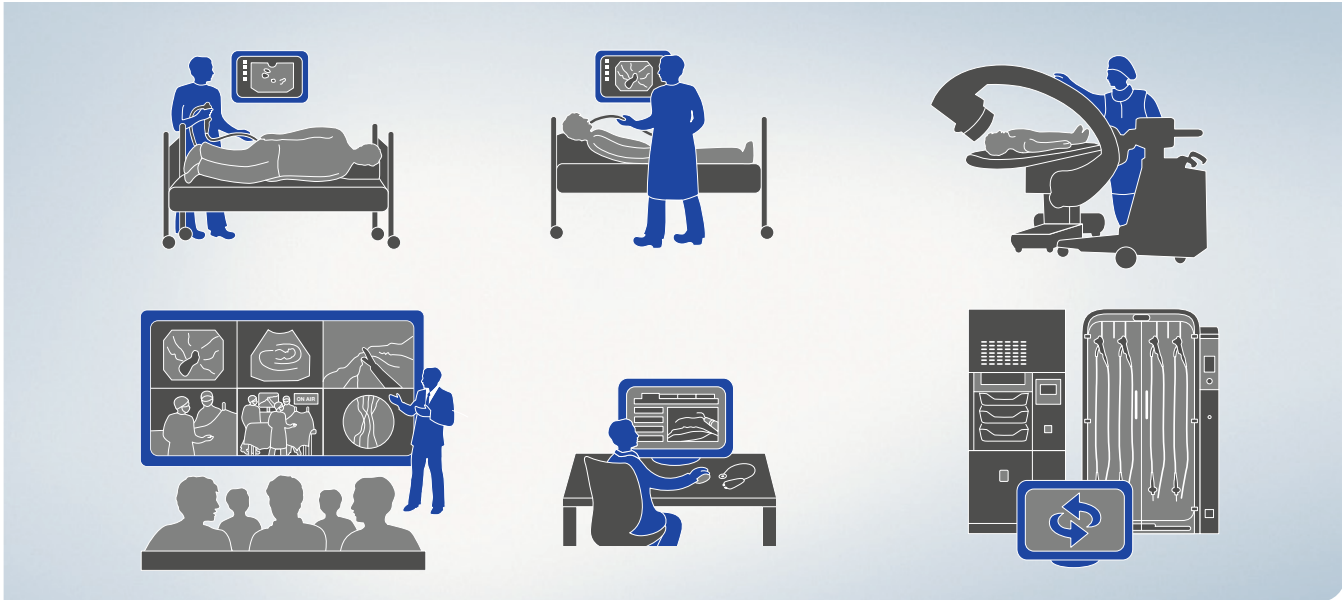
- Display up to 16 live videos at a time.
- Benefit from bidirectional audio for consultation, mentoring, or teaching.

Integrated Documentation

- Improve organization of information by integrating patient and procedure data and images into a single database.
- Automatically exchange data and images with central information systems (HIS and PACS).
- Fast and easy creation of reports with automation tools. Full traceability of reprocessing and scope history included.

Training / Conference Room

- Improve training, courses, and seminars with live video from any exam room.



Easier and better management of data and images, tools to improve and standardize workflow, full traceability of the reprocessing cycle.



Antoni Castells, MD
Director
Institute of Digestive and Metabolic Diseases
Hospital Clinic
Barcelona, Spain

“The improvement in staff satisfaction is the one change that has impressed me most of all. The staff loves working in that room and I am convinced that they work better in it.

The first step in integrating this new technology was to implement the computerized documentation and reporting function. We were immediately able to create better reports faster and photos are easier to store and find electronically. That made things easier for our doctors and admins. And now that the system exchanges data with the hospital’s central IT systems and captures the use and reprocessing of the scopes, we really feel confident that we are recording all of the important information and with much less effort. Since we do more than 18,000 procedures a year, complete, organized documentation is essential for us!

Later we added advanced communications by redesigning the exam rooms with boom arms and blue and white lighting and introducing live video and bidirectional audio between the exam rooms and our meeting room. The centralized video has been useful for teaching and meetings, but the thing that really sticks out in my mind is how happy the staff is with the new work environment.

After seeing the positive reaction from the team, last year we decided to take the room design to the next level by renovating a room and introducing glass walls, video routing and an additional large monitor for teaching and other uses. It has been another big hit! The staff loves working in that room and I am convinced that they work better in it. We now plan to renovate the remaining rooms one by one. For us, it is really an investment in our people.”

Professional Service for High Uptime and a Secure Investment

Olympus provides a level of service support that extends far beyond mere repairs. Unique service solutions increase equipment uptime and keep processes running reliably. Professionally qualified Olympus service technicians conduct specialist maintenance procedures complying fully with Original Equipment Manufacturer (OEM) standards to ensure a secure investment for customers.

A Strong and Reliable Service Network

Olympus' strong and reliable service network provides the basis to deliver beneficial service solutions to customers.

- **High equipment uptime.** More than 1,000 Olympus technicians and service specialists tend to all customer needs throughout Europe.
- **Valuable equipment maintained by experience.** Olympus' highly experienced technicians conduct 70,000 repairs annually in accordance with global OEM standards.
- **Service complies with the latest technological developments and quality standards.** The professional qualification of the Olympus staff is based on more than 20,000 hours of training per year.



Dedicated Service Portfolio

Olympus provides a dedicated service concept for different types of equipment. The portfolio supports customers with solutions for all situations in their working environment. It includes:

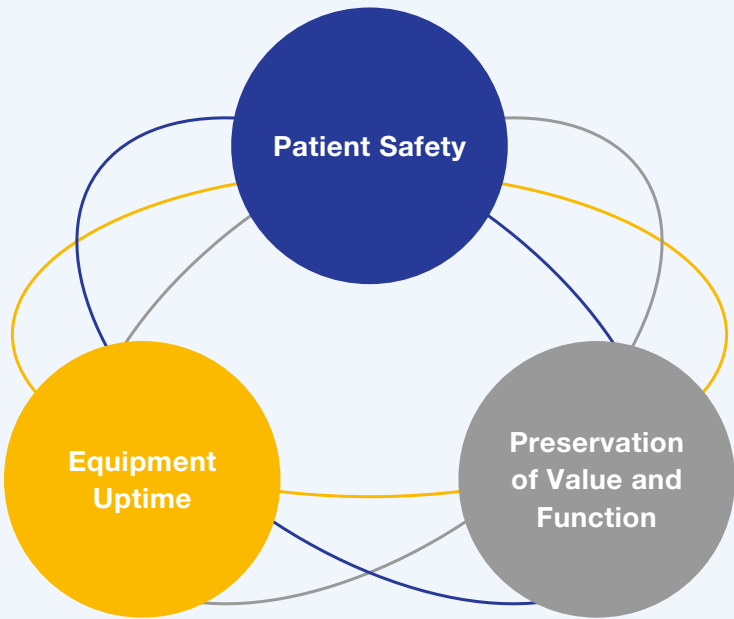
- **Field Visits** provide expert attention on-site in the event of technical breakdown or for preventive maintenance activities.
- **Preventive Maintenance** increases overall equipment lifetime and maintains optimal system performance with scheduled checks.
- **Corrective Maintenance** is performed in accordance with OEM standards including new original spare parts.
- **Loaner Equipment** is available to ensure processes remain up and running during repairs.
- **Help Desk** support provides contact to specialists to solve problems as quickly as possible.
- **Software Updates and Upgrades** help to remain ahead and attain the best cost/benefit ratio for all medical devices.
- **Remote Service** enables Olympus specialists to rectify minor malfunctions before they become major problems.
- **Training** provides the whole team with professional knowledge and practical skills.

Olympus Service Contracts

Olympus offers service contracts that combine the above services in attractive packages. By choosing a service contract from Olympus, customers benefit from:

- **Increased Equipment Uptime** due to fast repairs in accordance with OEM standards including new original spare parts and loaner equipment.
- **Budget Control** through transparent contract costs.

Benefits at a Glance



Medical Expert Training – Contributing to Quality and Efficiency in Daily Work

Progress in research and technology can offer tremendous medical benefits to hospitals and patients. However, it also increases the complexity of applications and necessitates continuing education for the medical team. Olympus’ Medical Expert Training fortifies the skills of healthcare professionals and optimizes and accelerates workflows to ensure that the medical team makes the most of these state-of-the-art technologies.

Combining Theory and Practice

Olympus supports professional training throughout Europe and also aims to verify the effectiveness of that training through consecutive testing of participants. Still-image and video-based training modules have already been shown to effectively increase the diagnostic performance of NBI.³⁵ Medical Expert Training has been created to provide a

platform for working on the appropriate use of Olympus’ medical devices as well as related diagnoses and treatments in order to continuously improve patient care. Ranging in duration from half a day to three days, the procedure-based training modules have three elements: Lectures, practical hands-on sessions, and/or live procedures.

Medical Expert Training

Fundamentals

- Effective Colonoscopy Techniques
- Thoracoscopy for Chest Physicians
- Pediatric Bronchoscopy

Advanced Diagnostics

- NBI Optical Diagnosis
- Endoscopic Ultrasound – Diagnostics and Staging of Lung Cancer
- ENDOCAPSULE

Interventional Procedures

- Endoscopic Submucosal Dissection
- ERCP
- Air Leak Treatment with Intrabronchial Valves
- Advanced Patient Selection Methods for Emphysema Valve Therapy
- Interventional Pulmonology

Academy and Training Center

The ENDO CLUB Academy (ECA) at the campus of the University Medical Center Hamburg-Eppendorf is the result of a collaboration between the ENDO CLUB NORD and Olympus Europa with the aim of providing postgraduate practical training in medical endoscopy. The ECA provides six fully equipped hands-on stations for up to 30 participants who can be trained in relevant diagnostic and therapeutic flexible endoscopy procedures on a wide range of realistic anatomical and biological models.

Additionally, there are two more Olympus training centers in Hamburg, both providing a comprehensive minimally invasive surgery setup.



Optimized Training Quality through Peer-to-Peer Tutoring

Quality is of crucial importance to the whole business. In order to ensure high quality standards, Medical Expert Training follows international healthcare compliance guidelines. The continuous credentialing of Olympus’ course instructors is an effective measure to ensure those high quality standards. Accreditations by medical councils confirm the success of these efforts.

Overall, the peer-to-peer transfer of knowledge and skills plays a key role in Olympus’ training partnerships. Medical Expert Training offers participants the opportunity to apply their newly acquired skills directly in their daily work.

Olympus developed its reference center network with its external partners not only to provide trainees with the expert knowledge and skills needed for diagnostic and therapeutic procedures, but also to offer training in the field of cleaning and disinfection of instruments.

 www.olympus.eu/gastro-training

The Trainees Are Enthusiastic³⁶

“ It was great and very useful training. I gained a lot of skills and knowledge in order to improve my performance. ”

“ One of the best training courses I have ever taken. ”

“ Thank you for a wonderful course. The Japanese master’s teaching was priceless. ”

“ It was a great course with a good mixture of practice and theory. ”

Olympus Pioneering Partnership

Olympus is one of the world’s leading manufacturers of optical and digital equipment including endoscopes and microscopes for medical, scientific, and industrial use, as well as cameras and voice recorders. Founded in Japan in 1919, Olympus has stood for pioneering spirit and innovation for almost 100 years. Olympus is dedicated to developing state-of-the-art technologies that meet the diverse needs of medical professionals and their patients, both now and in the future.

More Than 90 Years of Innovation

As an innovative system provider with an overall understanding of the clinical process and detailed knowledge of workflows, Olympus is a trusted and reliable partner for the entire medical sector. Since the development of the first gastroscope in 1950, Olympus has worked continuously to achieve advanced developments in the field of endoscopy for various forms of early diagnosis of diseases and minimally invasive treatment. With groundbreaking innovations such as Narrow Band Imaging (NBI) for easier detection of tumors in early stages, and the integration of 3D visualization into surgical endoscopy, Olympus has become the leading manufacturer of GI endoscopy devices.

A Holistic Approach to Optimizing Procedures

For all of its technological innovations, Olympus’ aim is not only to enhance medical quality but also to improve workflows and efficiency. Olympus’ holistic approach, which includes a comprehensive range of products and system solutions, seamless documentation, a full spectrum of support services, and a variety of training opportunities, helps hospitals and clinics make the best use of their most important resources – time, personnel, and money – while also providing patients with the best possible care. A pioneering partnership.

Medical Endoscopy



EndoTherapy



Service Solutions



Reprocessing



Surgical Endoscopy



Surgical Energy



Systems Integration



Medical Training



2015

ETD Double

Pass-through washer-disinfector, enabling clear separation of dirty and clean endoscopes during reprocessing.



2013

LTF-S190-3D

3D EndoEye with chip-on-the-tip technology and a 100° bendable tip in all directions.



2012

THUNDERBEAT

The world’s first fully integrated bipolar and ultrasonic technology.



1997

First Video Laparoscope

Autoclavable all-in-one design.



1982

EU-M1

The world’s first ultrasound endoscope to support the early detection of pancreatic cancer.



1950

Birth of Gastrocamos

Development of the world’s first practical gastroscope.



2013

EU-ME2

High-performance endoscopic ultrasound center.



2012

EVIS EXERA III

Latest endoscopic system for sharp image quality and enhanced scope maneuverability.



2002

ScopeGuide

Navigation through the colon becomes easier through real-time 3D view of endoscope position.



1988

ETD1

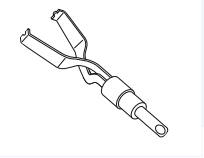
Olympus’ first fully automated endoscope washer disinfector.



1975

HX-1

Olympus’ first endoscopic clip to enable on-site hemostasis.



1963

Foundation of Olympus Optical Co.

As European Headquarters in Hamburg.



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➤ Explore the evidence: www.olympus.eu/proven



Complete Solutions for GI Endoscopy

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

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