OLYMPUS

EVIS X1

Let’s Be Clear

Elevating the Standard of Endoscopy

85661

EVIS X1

The New Dimension in the Endoscopic World

For over 60 years Olympus has been successfully engaged in research, development and partnership in endoscopy. We have proven innovation leadership and are perceived as the partner of choice in endoscopy.

With the future-proofed EVIS X1 endoscopy system we now introduce a new dimension of technology to endoscopists and hospitals that aims to revolutionize the way upper and lower gastrointestinal and respiratory disorders can be detected, characterized and treated.

In addition to enhanced insertion performance and an even greater versatility of endoscopes, EVIS X1 optimally supports the clinical efficiency and visual sense of the endoscopist thanks to the new imaging technologies TXI, ENDO-AID CADe, RDI and EDOF.

EVIS X1 video

About the features:

TXI CADe NBI RDI EDOF

EVIS X1

Our Focus, Your Benefit

EVIS X1 is designed to improve hospital management and overall profitability in gastrointestinal and respiratory endoscopy.

Improved Visibility may Enhance Patient Management

- The new combination of the innovative features TXI, ENDO-AID CADe, RDI and EDOF has been designed to bring improved endoscopy outcomes.
- Hospital reputation is thus improved, and hospitals may be favored for endoscopic procedures.

Fewer Complications may Reduce Treatment Costs

- Established NBI accurately visualizes lesions prior to resection in the upper gastrointestinal tract and colon, enabling diagnosis of early gastric cancer.[5,6]
- The latest RDI technology can reduce stress and time for hemostasis during endoscopic resections.[4]
- This potentially shortens endoscopic resections and length of stay through improved hemostatic effectiveness and reduced complications.

Advanced LED Technology may Save Costs

- The special “amber” LED in particular enables better identification of bleeding spots.
- While xenon bulbs only last 500 hours, LEDs last about 20 times longer and therefore create a considerable cost advantage.

About the features:

TXI CADe NBI RDI EDOF

EVIS X1

Investment for the Future

EVIS X1 makes endoscopists and hospitals ready for the future. With newly established cross-compatibility between two formerly separate systems, our range of products can be combined to provide an extended portfolio of endoscopes for various procedural needs.

Scope Versatility may Save Costly Additional Purchases

· The one-fits-all concept simplifies the fleet of scopes and improves working efficiency due to versatility of the system.
· Now, with one endoscopy system, portfolio opportunities are optimally expanded, serving clinical requirements.

Hospital Reputation may Increase Hospital Income

· EVIS X1 secures a hospital's reputation as an expert center employing premium quality equipment that safeguards clinical outcomes. Demand for endoscopic procedures may increase along with hospital income.

Staff Satisfaction may Increase Work Efficiency

· The new EVIS X1 platform with the most advanced image quality and the new 4K monitor may enhance endoscopists' concentration with the corresponding impact on efficiency and outcome.
· New features are self-explanatory and ready to use without training — saving time and money.
· Increased levels of staff satisfaction reduce the turnover of qualified personnel.

EVIS X1 is a secure investment, expanding the options for every endoscopist and the hospital — now and in the future.

About the features:

TXI CADe NBI RDI EDOF

EVIS X1

Improved Ergonomics with EVIS X1

Survey based studies have shown “a 39% to 89% prevalence of potential work related musculoskeletal disorders in endoscopists”[12] due to repetitive, forceful and prolonged endoscopic hand maneuvers.[13] An examiner with constant thumb, wrist, elbow or shoulder pain will not perform as well, or may even be absent on sick leave as a result of the symptoms. Improved ergonomics and ease of use can protect the examiners’ health.[12,13]

Olympus Offers Innovative Ergonomic Features

- The lighter ErgoGrip and improved control section have been designed to increase user comfort and improve operability and user experience, especially during lengthy therapeutic procedures.
- For bronchoscopy the insertion tube rotation function provides more ergonomic hand posture during the procedure, as well as allowing easier access to the biopsy port for the assistant to the endoscopist. A study has reported that there is a significant improvement in ergonomic scores with the rotational-head bronchoscope when targeting the left upper lobe (P=0.036).[13]

Investments by Olympus in improved ergonomics may lead to advantages in terms of staff motivation, reduction of sick days and the ability to perform procedures regularly and speedily.

About the features:

TXI CADe NBI RDI EDOF

EVIS X1

Good Perspectives for Respiratory Indications

We expect EVIS X1 to have a strong impact on gastrointestinal diagnostics and therapeutic interventions as well as for bronchoscopy and medical thoracoscopy, especially through the TXI and RDI imaging modalities.

EVIS X1 is compatible with an already well established portfolio for peripheral bronchoscopy, valve replacement for emphysema and thorascoscopy.

EVIS X1 is a cutting edge platform to foster future growth with increased high quality examinations triggered through the upcoming lung screening programs.

About the features:

TXI CADe NBI RDI EDOF

Olympus Service for Your Equipment

A Modular Concept

Clinicians need to be able to rely on their equipment to provide high quality patient care every day. By choosing Olympus, customers can be assured that they are getting the most value from their equipment.

Equipment availability is optimized, whilst all OEM guidelines and standards are always considered in order to keep equipment in top working condition. Moreover, caregivers have complete assurance that their devices are safe and reliable to use.

Your Olympus partner will be happy to consult you on your long-term equipment management and on securing your new investment.

About the features:

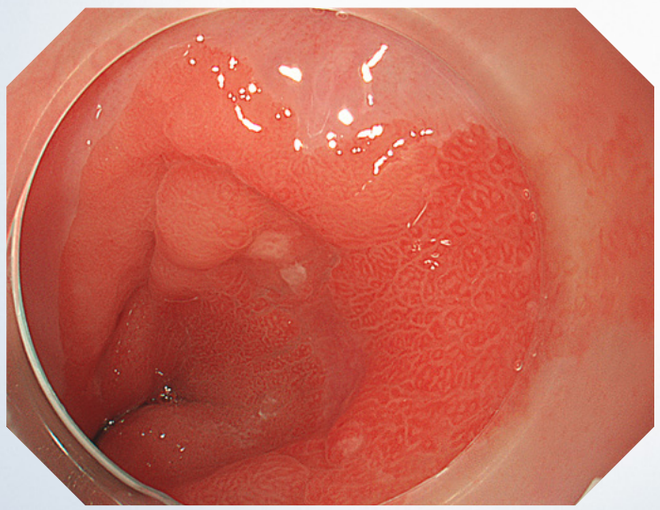
TXI CADe NBI RDI EDOF

TXI: The New White Light

Texture and Color Enhancement Imaging

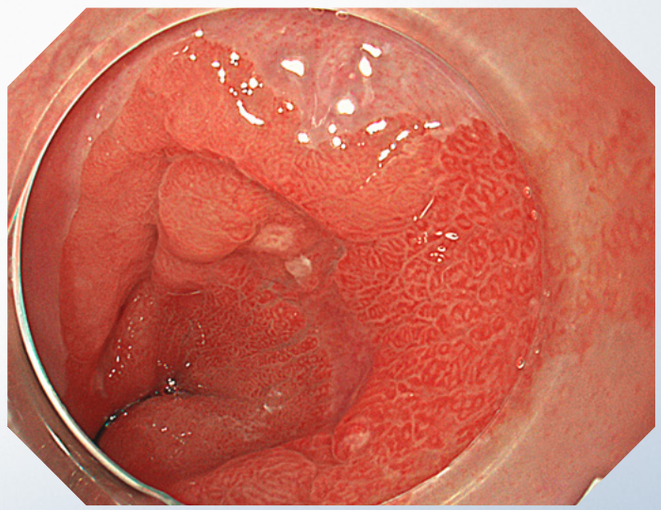
TXI

TXI technology enhances the visibility of potentially suspicious tissue using a new white light imaging effect that improves color, structure and brightness.



86366

White light image



86367

TXI image

Early detection is critical for cancer prevention and decreasing mortality.[1]

Through texture and color enhancement, TXI aims to contribute to higher detection rates.

About the features:

TXI CADe NBI RDI EDOF

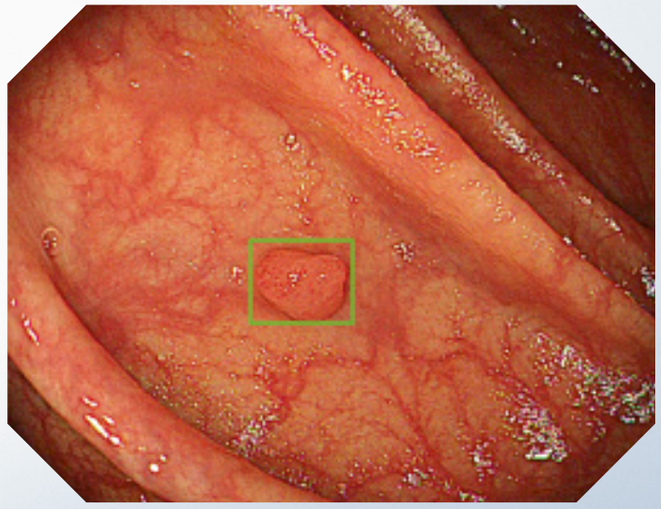
ENDO-AID CADe

Artificial Intelligence Supporting Detection in Colonoscopy

ENDO-AID CADe

ENDO-AID CADe uses artificial intelligence (AI) to support the detection of colonic lesions.

White light image



ENDO-AID CADe with marker

Assisting the identification of potentially malignant areas can contribute to better detection rates (ADR) and associated long-term benefits in patient care.

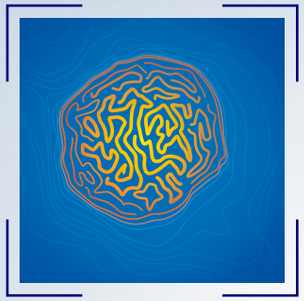
Using AI can be seen as reducing the human error factor and thus as leading further from eminence- to evidence-based diagnostics. By using ENDO-AID CADe, performance levels could increase in centers without the high levels of experience that high-volume centers have.

About the features:

TXI CADe NBI RDI EDOF

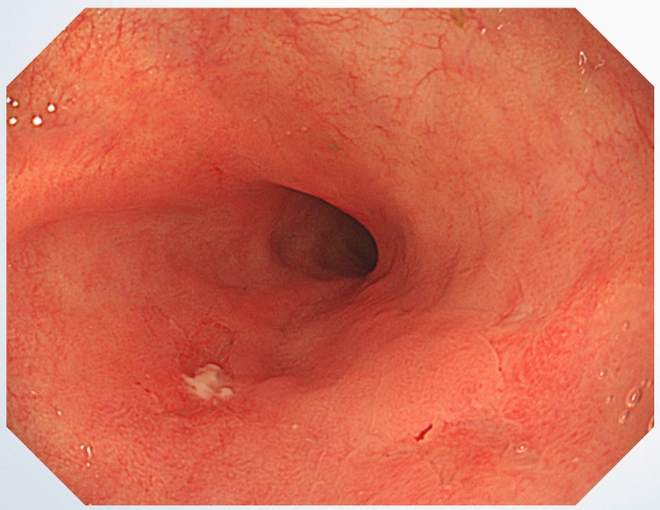
NBI: The Power of Accurate Diagnosis

Narrow Band Imaging



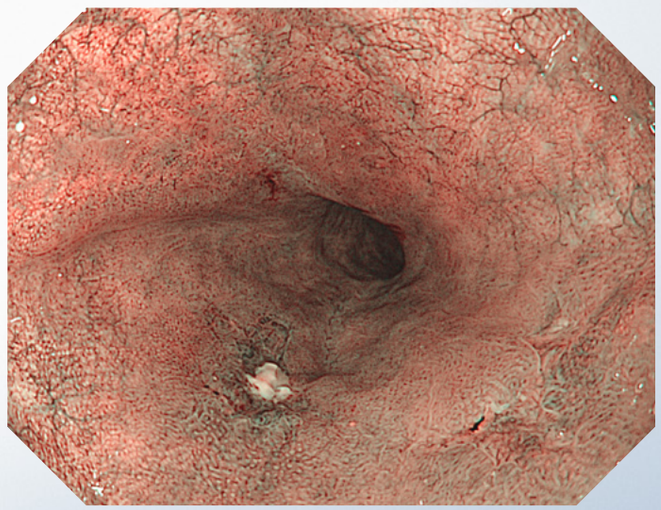
NBI

NBI utilizes specific blue and green light bands which are absorbed by hemoglobin. NBI therefore creates a strong contrast between vessels and the surrounding mucosa.[11]



86369

White light image



86368

NBI image

Accurate optical diagnosis is important to guide therapy decisions.

NBI facilitates the visibility of vascular and mucosal structures that are predictive for distinct histopathologies. [7-10]

Additional costs of investigations (resection and histopathological work-up) may be avoided.

About the features:

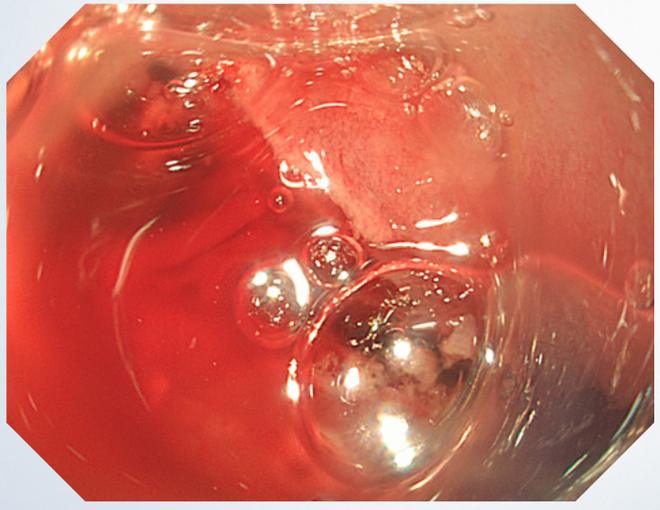
TXI CADe NBI RDI EDOF

RDI: The Safeguard for Endoscopic Therapy

Red Dichromatic Imaging

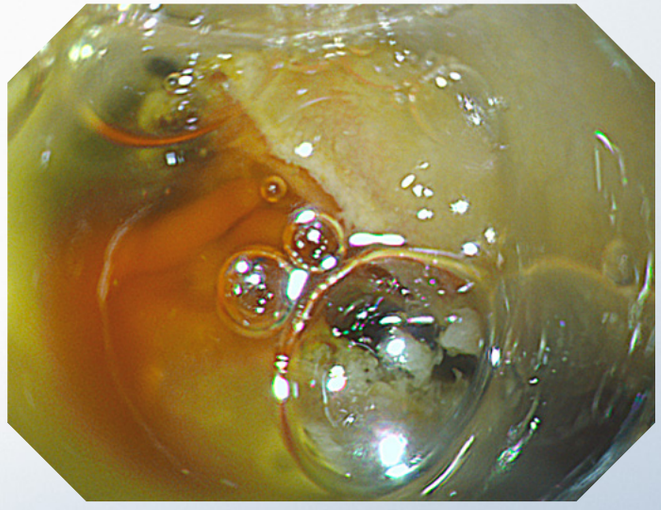
RDI

Using specific green, amber and red light bands, RDI provides details on larger vessels in the tissue layers below the submucosa, and enables a better visualization of bleeding points. RDI, especially in bronchoscopy, may therefore help in selecting an appropriate biopsy site with less risk of bleeding.



86365

White light image



86364

RDI image

Gastrointestinal bleeding is a serious challenge, involving considerable mortality of 5-15% and high management costs.[2,3]

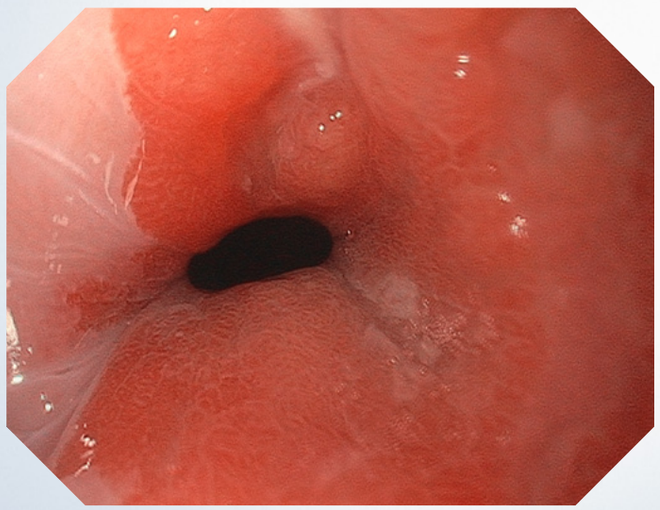
About the features:

EDOF: The Phenomenon of Full Focus

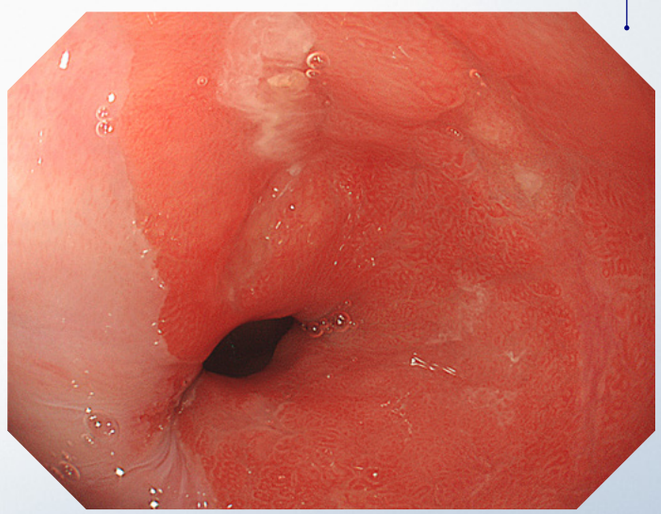
Extended Depth of Field

EDOF

Light entering the scope's objective lens is split into two separate beams. The beams are simultaneously projected onto an image sensor to generate a single image with an extremely wide depth of field, reducing the necessity for focal adjustments.



GIF-HQ190 image



GIF-EZ1500 image

The gastrointestinal tract poses challenges in keeping an endoscopic image stable and in focus.

EDOF maintains a sharp image regardless of organ movements, easing detailed observation and optical diagnosis. This may contribute to easier identification and a more confident diagnosis.

About the features:

TXI CADe NBI RDI EDOF

Let’s Be Clear: Elevating the Standard of Endoscopy

References

[1] American Cancer Society. Colorectal Cancer Facts & Figures 2017-2019; p 15; available at https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-andstatistics/colorectal-cancer-facts-and-figures/colorectal-cancer-factsandfigures-2017-2019.pdf.

[2] Lanas et al. Am J Gastroenterol 2009;104:1,633-1,641.

[3] Parker et al. J Med Econ 2011;14:279v-287.

[4] Ninomiya et al. Ther Adv Gastroenterol 2016;9(5):679-683.

[5] Furneri et al. PLoS One. 2019 Mar 13;14(3):e0212916.

[6] Solon et al. J Med Econ. 2016 Nov;19(11):1040-1048.

[7] Inoue et al. Annals of Gastroenterology 2015;28, 41-48 (Esophagus-SCC).

[8] Sharma et al. Gastroenterology. 2016 Mar;150(3):591-598.

[9] Yao. Ann Gastroenterol. 2013;26(1):11-22.

[10] Hewett et al. Gastroenterology 2012;143:599-607.

[11] Gono et al. J Biomed Opt. 2004 May-Jun;9(3):568-577.

[12] Shergill et al. Gastrointestinal Endoscopy 2019;90(6):966-970.

[13] Gilbert et al. Bronchol Intervent Pulmonol 2020 Jan;27(1),58-67.

www.olympus.eu/evisx1

M00294EN · 03/21 · OEKG

OLYMPUS

OLYMPUS EUROPA SE & CO. KG

Postbox 10 49 08, 20034 Hamburg, Germany
Wendenstrasse 14–18, 20097 Hamburg, Germany
Phone: +49 40 23773-0, Fax: +49 40 233765
www.olympus-europa.com