

MagniView endoscopes

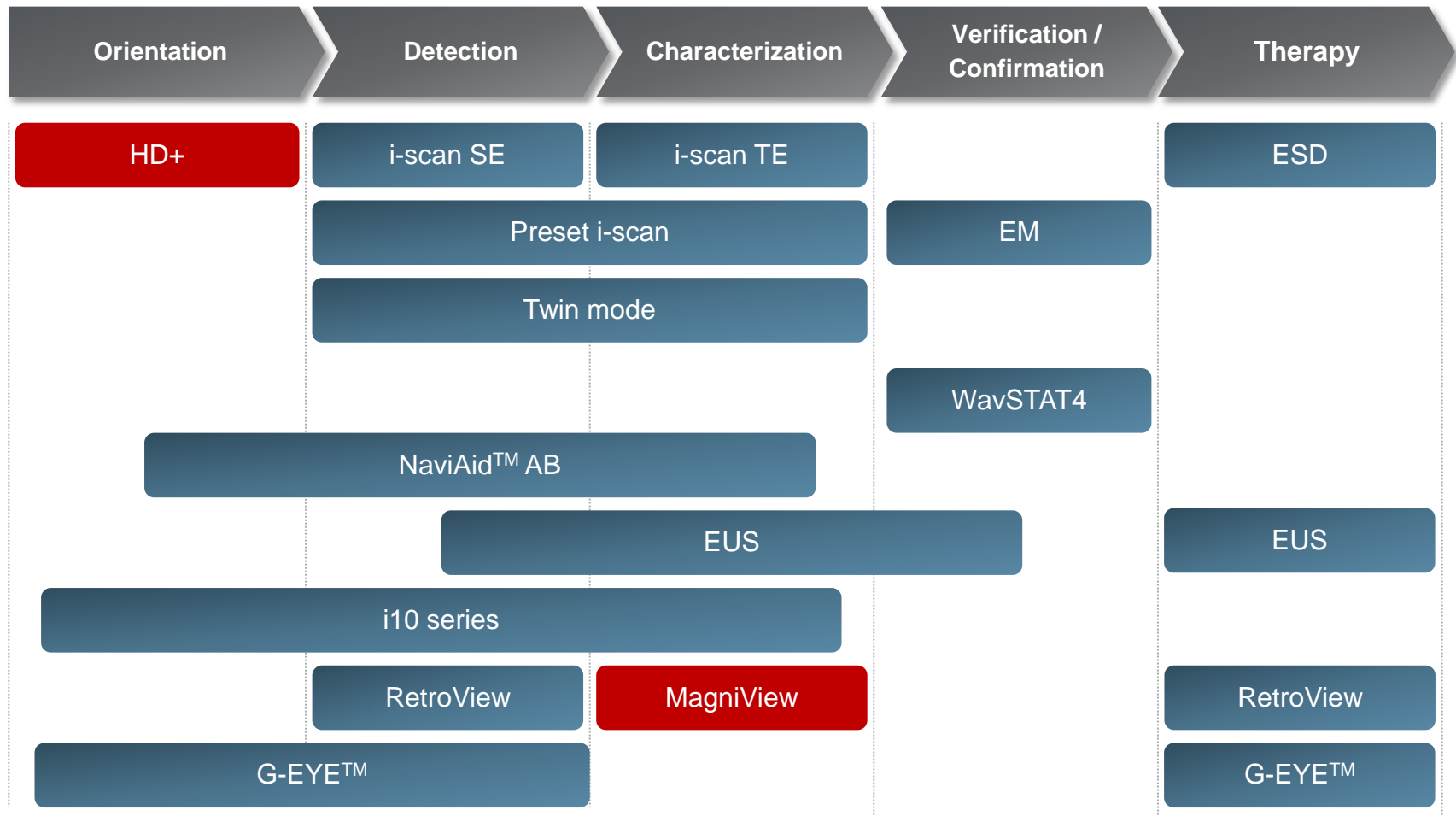
A step forward in characterization



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MEDICAL
Excellence in Focus

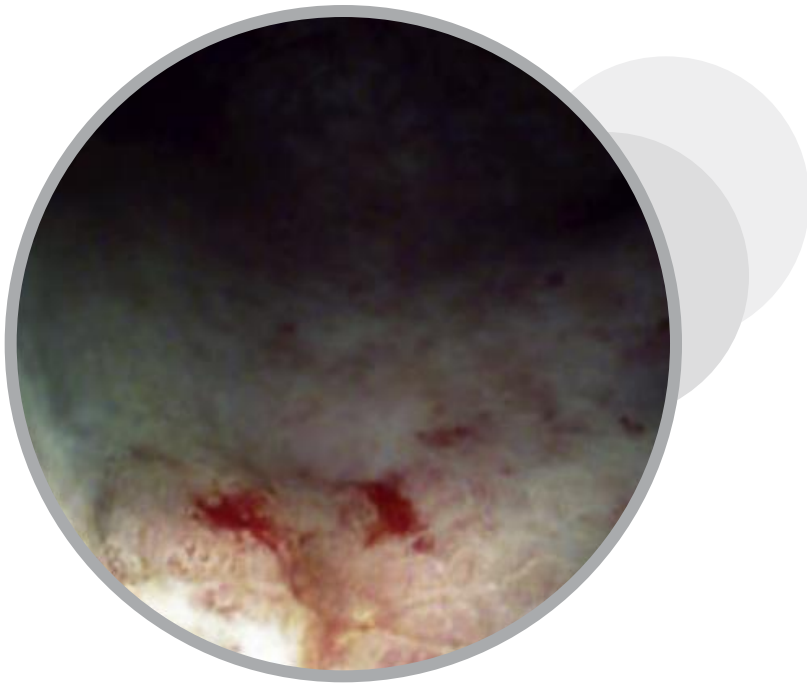
PENTAX Medical GI integrated offer

Along the clinical pathway



Main Challenge

Detect and characterize



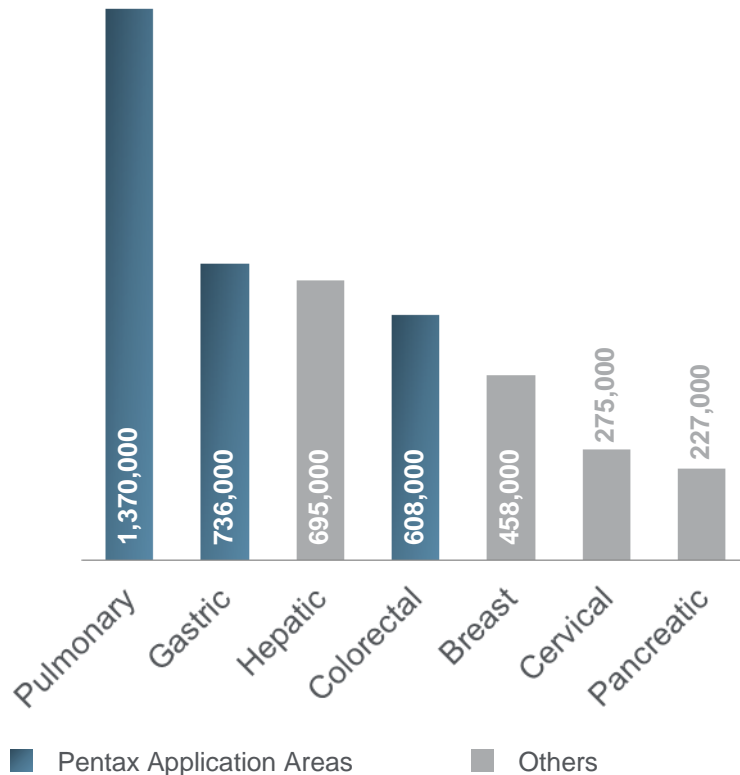
»The biggest diagnostic challenge in endoscopy is to **improve** dysplasia **detection** and **reduce the miss rate** in detection of gastrointestinal lesions.

That's why detected lesions need to be **carefully characterized** for a **successful therapy**.«

Main Challenge

Early detection

Cancer deaths worldwide

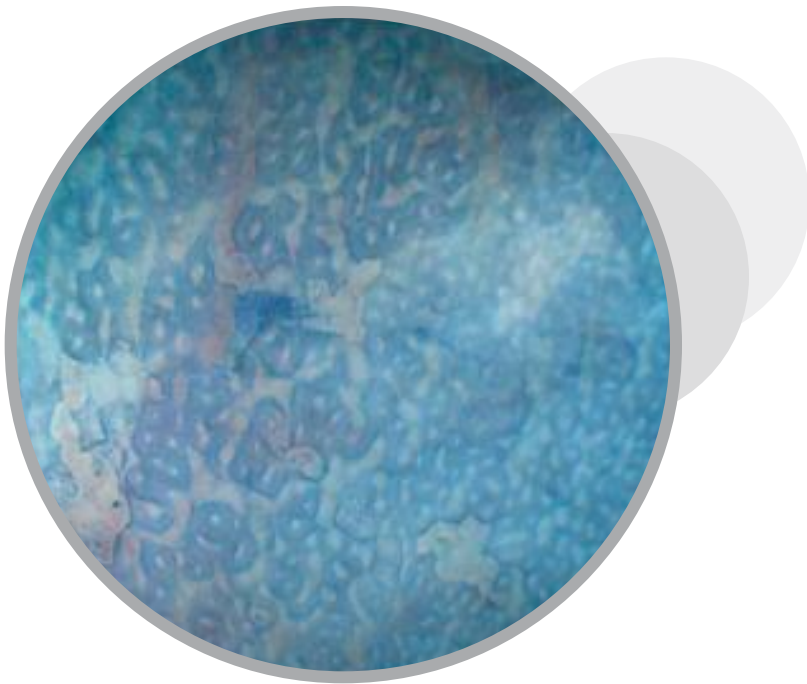


Gastrointestinal malignancies continue to be **second leading cause of cancer-related deaths** in the world. The **early detection** of preneoplasms has been demonstrated to **significantly improve patient survival**.

Source: Leonardo Sosa Valencia and Erika Rodriguez-Wulff: "Topics in Prevention of Diseases in Gastroenterology";
In: Alfonso J. Rodriguez-Morales: Current Topics in Public Health (2008), P. 423.

Main Opportunities

Optical magnification



The demand for optical magnification scopes that offer full functionality continues to increase, especially with the introduction of imaging enhancement technologies such as i-scan.

- To meet the market demand, **EG-2990Zi** and **EC-3890Zi** endoscopes have been developed to support not only observation but also detection and characterization in combination with i-scan technology.

Our Promise

MagniView, a step forward in characterization

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The PENTAX **MagniView** endoscopes are the best combination of **excellent HD image quality** with **powerful optical magnification** for detailed surface structure observation and **potential improvement of diagnostic accuracy**.

Easy to use and applicable to a wide range of procedures, the **MagniView in combination with i-scan** define a step forward in the characterization in GI endoscopy.



Clinical
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Positioning

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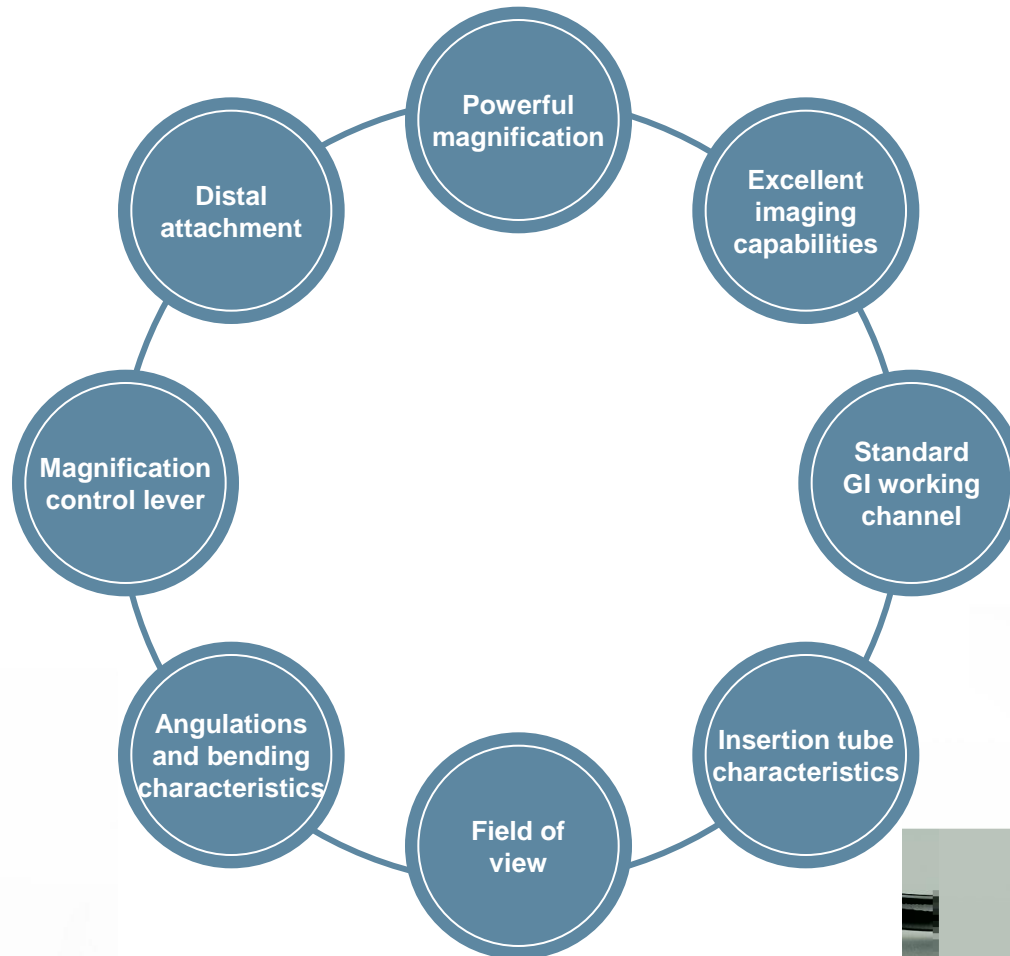
Services

Key Benefits Features

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EC-3890Zi

EG-2990Zi



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Key Benefits

EG-2990Zi and EC-3890L / F / M Zi

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1 Powerful magnification

136 times magnified image allows **detailed surface structure observation**. Smooth transition from normal image to magnification image due to control lever.

2 Excellent imaging capabilities

High definition CCD provides clear and **high quality image**, potentially improving detection of lesions.

3 Standard GI working channel

2.8 mm and 3.8 mm instrument channel for EG-2990Zi and EC-3890Zi respectively, allowing the use of **a wide range of conventional standard accessories**.

4 Insertion tube characteristics

Equivalent outer diameter with diagnostic GI scopes.
Improved scope handling.

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EG-2990Zi and EC-3890L / F / M Zi

5 Field of view

140° field of view for EG-2990Zi for good orientation and navigation in the GI tract.

6 Angulations and bending characteristics

Allows **efficient manoeuvrability** of the GI tract.

7 Magnification control lever

Easy control of magnification adjustment ensuring smooth transition from normal to magnified image.

8 Distal attachment

The **hood** allows for **optimal spacing** between the **scope** and the **mucosa**.

Product overview

For best clinical results

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EG-2990Zi
+ **OE-A58**



EC-3890L / F /
M Zi + OE-A59



EPK-i5000



EPK-i7000

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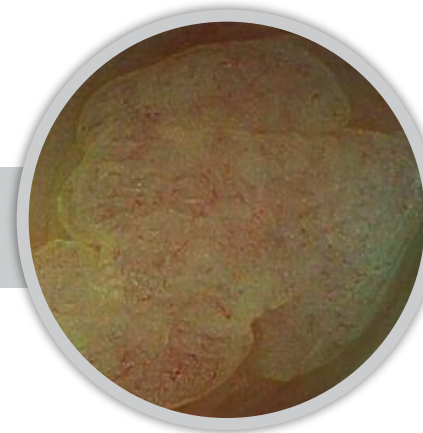
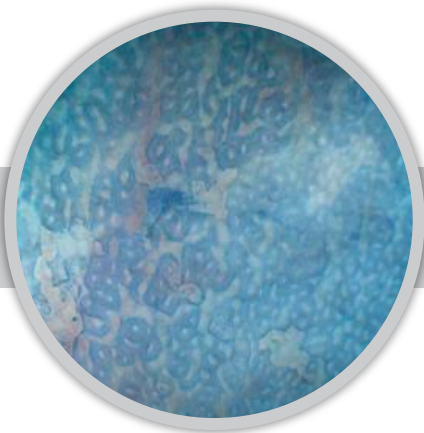
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Clinical Application

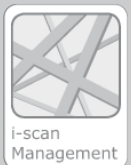
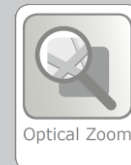
Detect and characterize

MagniView for detailed surface structure and vascular observation.



MagniView disease application

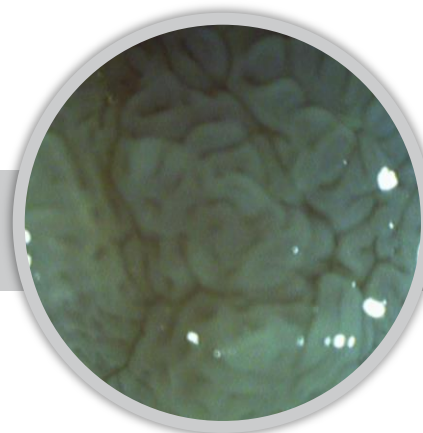
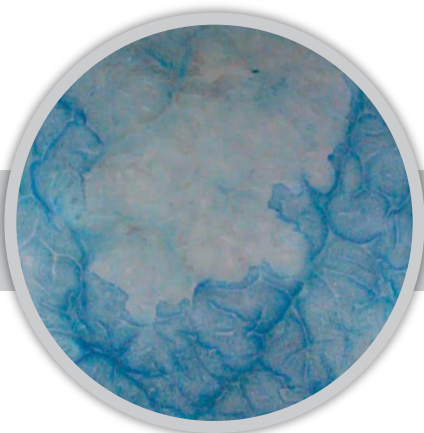
- Patients suspected of early cancer for pharyngeal, esophageal, gastric, and colon
- Patients with Ulcerative colitis / Irritable bowel disease
- Small bowel transplant patients
- Patients with Barrett's esophagus
- Pre / post lesion resection



Clinical Application

Detect and characterize

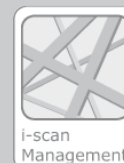
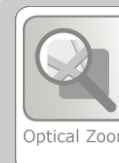
MagniView for detailed surface structure and vascular observation.



Video 

Clinical benefits of using MagniView

- Detailed surface structure and vascular observation
- Mucosa surface architecture observation for esophageal, gastric and colorectal tumors.
(e.g. support of pit pattern classification of colorectal tumors)
- Microvascular architecture observation for esophageal, gastric and colorectal tumors.
(e.g. support of IPCL- intra-epithelial papillary capillary loop – classification of esophageal tumors)



Clinical Application

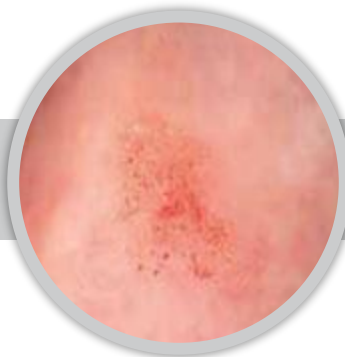
For best results

The HD+ MagniView together with i-scan is the perfect combination for improved characterization.



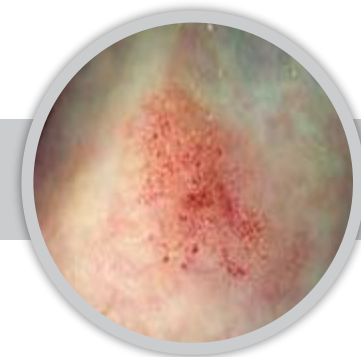
HD+ Flat lesion

- Fast detection with significant improvement in the visibility and evaluation of minute lesions



i-scan Surface Enhancement

- i-scan SE retains the natural colour tones
- Accentuation of tissue structures
- Mucosal enhancement potentially supports the detection of flat lesions



i-scan Tone Enhancement

- Allows more accentuated display of mucosal structures which may support lesion characterization
- Virtual chromoendoscopy may help to improve endoscopic diagnosis

Clinical Application

Barrett's esophagus

Figure 1: Normal non-neoplastic Barrett's epithelium

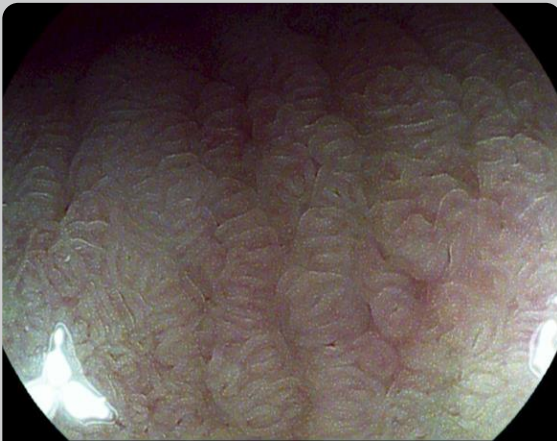


Figure 2: High grade dysplasia



Prof. Dr. Raf Bisschops

Endoscopy gastrointestinal motility, University Hospitals Leuven, Department of Gastroenterology, Leuven, Belgium

Clinical benefit (case report)

- A large slightly elevated lesion was detected during white light HD endoscopy.
- Magnifying endoscopy using the zoom gastroscope shows normal villous ridge patterns in figure n°1 and a distorted neoplastic in figure n° 2 (combined with i-scan 2 settings).

Reference Customers

Original quotations

» *The MagniView gastroscope allows for **detailed inspection** of suspicious areas in the upper gastrointestinal tract. The **combination** with **high definition endoscopy** quality provides **superior high quality detailed** images of the **mucosal architecture**. It has the potential to help making a **more accurate diagnosis** during endoscopy«*

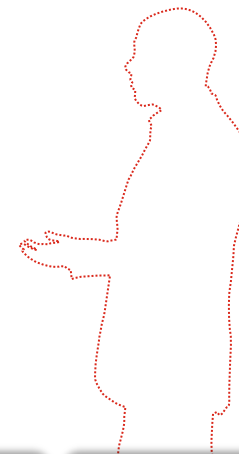
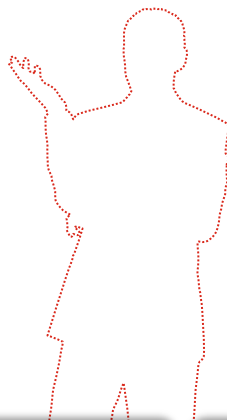
Prof. Dr. Bisschops

University Hospitals Leuven Department
of Gastroenterology, Leuven Belgium

» *PENTAX have done very well to add another **fantastic scope** to their already impressive armoury. The zoom scope utilises a soft cap to enhance the close focus and maintain clarity even with the various I-scan modes. In the context of Barrett's related neoplasia the zoom scope has been **outstanding** at demonstrating irregular mucosal and vascular patterns consistent with dysplasia. This not only helps to **target sampling** of these sites but also **target endotherapy** to these areas. I am looking forward to use it further over the coming months.«*

Dr. Haidry

University College Hospital, London



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EG-2990Zi / EC-3890 L/F/MZi

Specifications (1 / 2)

	Specs	EG-2990Zi	EC-3890Zi
Field of view (°)	Wide	140	140
	Tele	49	49
Depth of field (mm)	Wide	5 – 100	4 – 100
	Tele	2 – 3	2 – 3
Tip deflection (°)	Up / Down	210 / 120	180 / 180
	Right / Left	120 / 120	160 / 160
Ø Distal end width (mm)		10.6	13.0
Ø Insertion tube width (mm)		9.8	13.2

EG-2990Zi / EC-3890 L/F/MZi

Specifications (2 / 2)

	Specs	EG-2990Zi	EC-3890Zi
Ø Instrumental channel width (mm)		2.8	3.8
Working length (mm)		1050	1700 / 1500 / 1300
Water jet		Yes	Yes
Optical magnification*		× 136	× 136
CCD		HD	HD
Compatible video processor**		PENTAX EPK-i series	PENTAX EPK-i series
Compatible distal rubber hood		OE-A58	OE-A59

* When images are displayed on 19-inch monitor

** Regarding possible combinations please refer to EG-2990Zi / EC-3890Zi owner's manual

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MagniView endoscopes at a glance

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HD+ image quality and a powerful optical zoom technology together with i-scan is a step forward in characterization.



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Services

Our portfolio



Personal Consultancy

Advice and guidance in support of customers' performance, e.g.

- Process change
- Operational efficiency analysis
- Total cost of ownership
- Hygiene



Contract Maintenance

Portfolio of maintenance solutions that offers customers both guaranteed reliability and budget security, e.g.

- i-Trust
- Pay-per-use
- Rental



Premium Repair Service

Absolute quality guarantee and a fast repair turnaround time whilst keeping you up and running:

- Loaner program
- Original spare parts
- Small repairs on site
- Extensive repair network



Individual Training

Personalized training to support customers with our know-how and experience, e.g.

- Damage prevention
- Reprocessing and hygiene
- Scope handling and troubleshooting

Click here for more:

<https://network.pentaxmedical.eu>