



## Gastrointestinal Endoscope History - Gastrocamera to EVIS X1 -

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- I'm Takaharu Yamada of GI Endoscopy Business, Global.
- I'd like to start off with the history of EVIS X1.
- Let's look back on the history.

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## Next Generation GI Endoscopy System

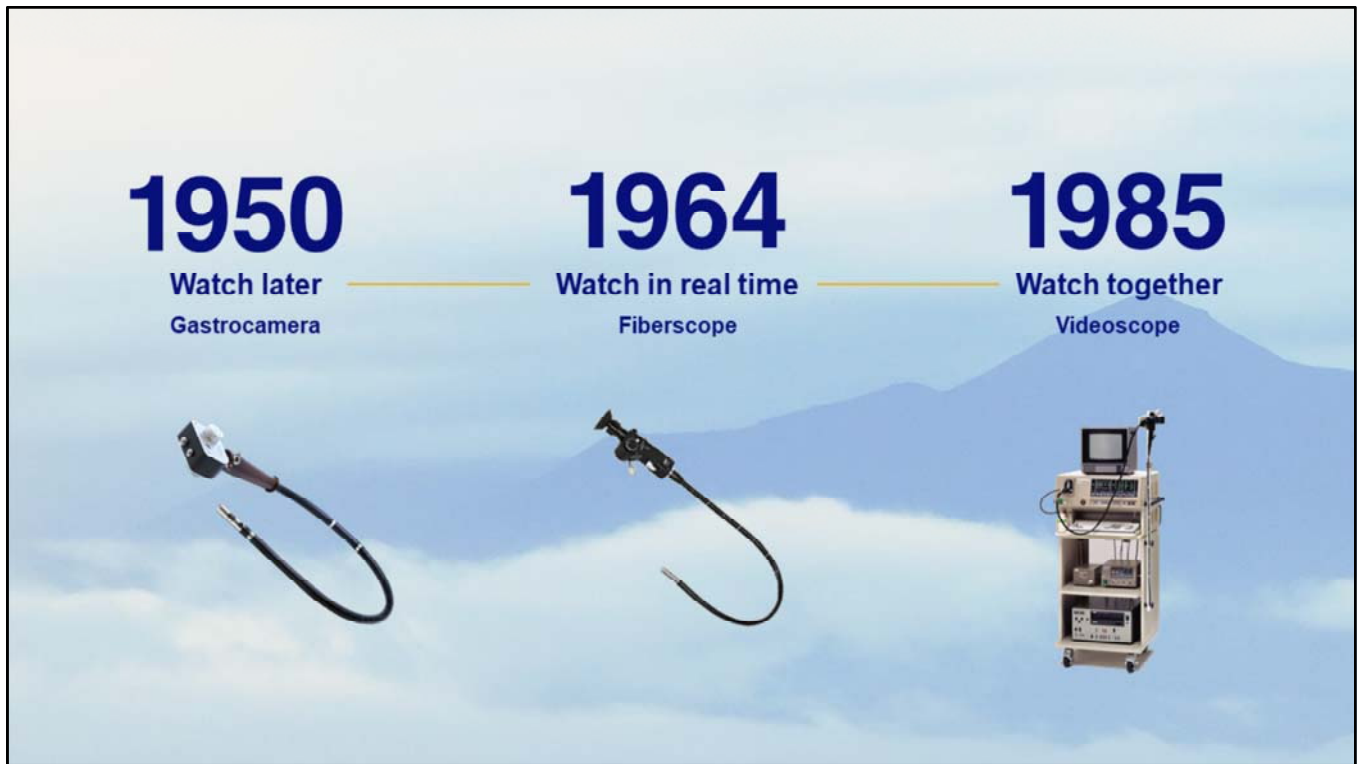
EVIS X1

- EVIS** : Endoscopic Video Information System
- X** : Globally unified platform
- 1** : Among the high-end GI endoscope models,  
#1 endoscopy system  
#1 partner

EVIS X1



- About the brand name, EVIS X1.
- EVIS stands for “endoscopic video information system.”
- It was the name given to Olympus’ first video endoscope in 1985, and it has been used ever since then.
- “X” refers to a globally unified platform and “1” refers to the Number 1 endoscopy system, representing our hope to continue to be the Number 1 partner.



- The widely known gastrocamera was put into practical use in 1950, and this year marks its 70-year anniversary.
- Back then, photos were taken in the dark of the stomach and then developed and examined later.
- It was in 1964 that the sales of fiberscopes started.
- This allowed lumens such as the stomach or colon to be watched in real time.
- However, it was basically only possible for one physician to watch them in real time, and based on what I heard from doctors who used it, the procedures were very complicated.
- To respond to such feedback and meet the expectations of many endoscopists, we completed the new video endoscopy system in 1985.

# 1985

## EVIS-1



- It was a revolutionary system that allowed everyone to examine images in real time.
- We named it “EVIS-1” and promoted its introduction worldwide.
- And through the introduction, we learned that preferences, or preferred points, of video endoscope images differ among physicians in different countries.



## **Different preferences among endoscopists in different countries**

Through the introduction of EVIS-1, our first production model, we found that the needs of endoscopists differ by country.

- Excellent real-time images, smooth and natural movements to be reproduced
- Excellent image reproducibility, high-quality still images

**OLYMPUS**

- There were
  - needs that prioritized real-time images, smooth and natural movements to be reproduced
  - and
  - needs that prioritized image reproducibility, high-quality still images.
- With technologies available at the time, it was not possible for a single product to meet these two needs, so Olympus' management decided to try to do so with two systems.

# 1985-2012



**1985**

**EVIS-1**



**1989**

**100 Series  
EVIS**

**200 Series  
EVIS**

**1996**

**100 Series  
EVIS**

**200 Series  
EVIS**

**2001**

**100 Series  
EVIS EXERA**

**200 Series  
EVIS  
LUCERA**

**2005**

**100 Series  
EVIS EXERA II**

**200 Series  
EVIS LUCERA  
SPECTRUM**

**2012**

**100 Series  
EVIS EXERA III**

**200 Series  
EVIS LUCERA  
ELITE**

- In 1989, the EVIS 100 and 200 series were born to meet such needs in different countries.
- And these two brands continue to be the driving force behind global endoscopy services.
- This video endoscopy system has a history of about 35 years.

The scope of endoscopy treatment expanded along with the evolution from fiberscope to video endoscope.

## 1985

EVIS-1

**Olympus' first video endoscopy system\***

\* The video endoscope used a CCD to convert images into electrical signals transmitted to the monitor. This allowed for examination while looking at the monitor.

## 1989

EVIS-100/130 series  
EVIS-200/230 series

**Introduction of 100/200 series with different image sensors to meet local needs**

**100 series: Simultaneous method**  
Excellent real-time images, smooth and natural movements to be reproduced

**200 series: Sequential-frame method**  
Excellent image reproducibility, high-quality still images

## 1996

EVIS-140 series  
EVIS-240 series

**Improved basic endoscopic performance, including image quality and insertability**

- Image quality
- Optical performance
- Smaller diameter
- Improved insertability
  - New insertion section
  - Variable hardness function
  - Scope guide
- Improved reprocessability

- Looking back at the decade after its introduction in 1985, we can see that endoscopy medical services have evolved from fiberscope to video endoscope. It was an era we expanded greatly from endoscopic screening to endoscopic therapy.
- Future generations improved not only image quality but also insertability and other aspects of basic performance.

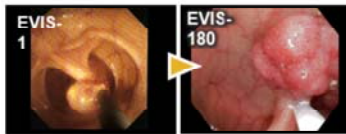


Advances in optical and image processing technologies led to a new stage of diagnosis.

## 2001

100 Series  
**EVIS EXERA**  
200 Series  
**EVIS LUCERA**

**Downsized CCD**  
Introduction of endoscopes with HD technology

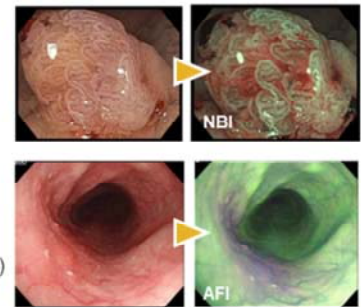


## 2005

100 Series  
**EVIS EXERA II**  
200 Series  
**EVIS LUCERA SPECTRUM**

Introduction of IEE (Image-enhanced endoscopy) with spectroscopic imaging technology

- NBI (Narrow Band Imaging)
- AFI (Auto Fluorescence Imaging)



- In the 2000s, endoscope technology reached a turning point.
- We saw advances in CCD technology, the introduction of HD endoscopes, and technology that makes full use of spectroscopic imaging, which is one of Olympus' strengths.

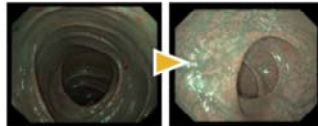
For further development of endoscopic diagnosis and wider use of endoscopes

## 2012

100 Series  
**EVIS EXERA III**  
200 Series  
**EVIS LUCERA ELITE**

- IEE: NBI with enhanced brightness
- Improved optical technology (magnified imaging)
- Evolution of operability technologies
- Use of AI technologies

### NBI with enhanced brightness



### Improved optical technology (magnified imaging)



### Improved insertability



### Use of AI technologies



- From 2012 to the present, video endoscopes have seen further advances in optical technology and operability technology, and recently we have started to provide a diagnostic support service technology, called computer-aided diagnosis or CAD, using AI technology in cooperation with partner companies.

# 1985-2020



1985



EVIS-1

1989

100 Series  
EVIS100

200 Series  
EVIS200

1996

100 Series  
EVIS140

200 Series  
EVIS240

2001

100 Series  
EVIS EXERA

200 Series  
EVIS  
LUCERA

2005

100 Series  
EVIS EXERA II

200 Series  
EVIS LUCERA  
SPECTRUM

2012

100 Series  
EVIS EXERA III

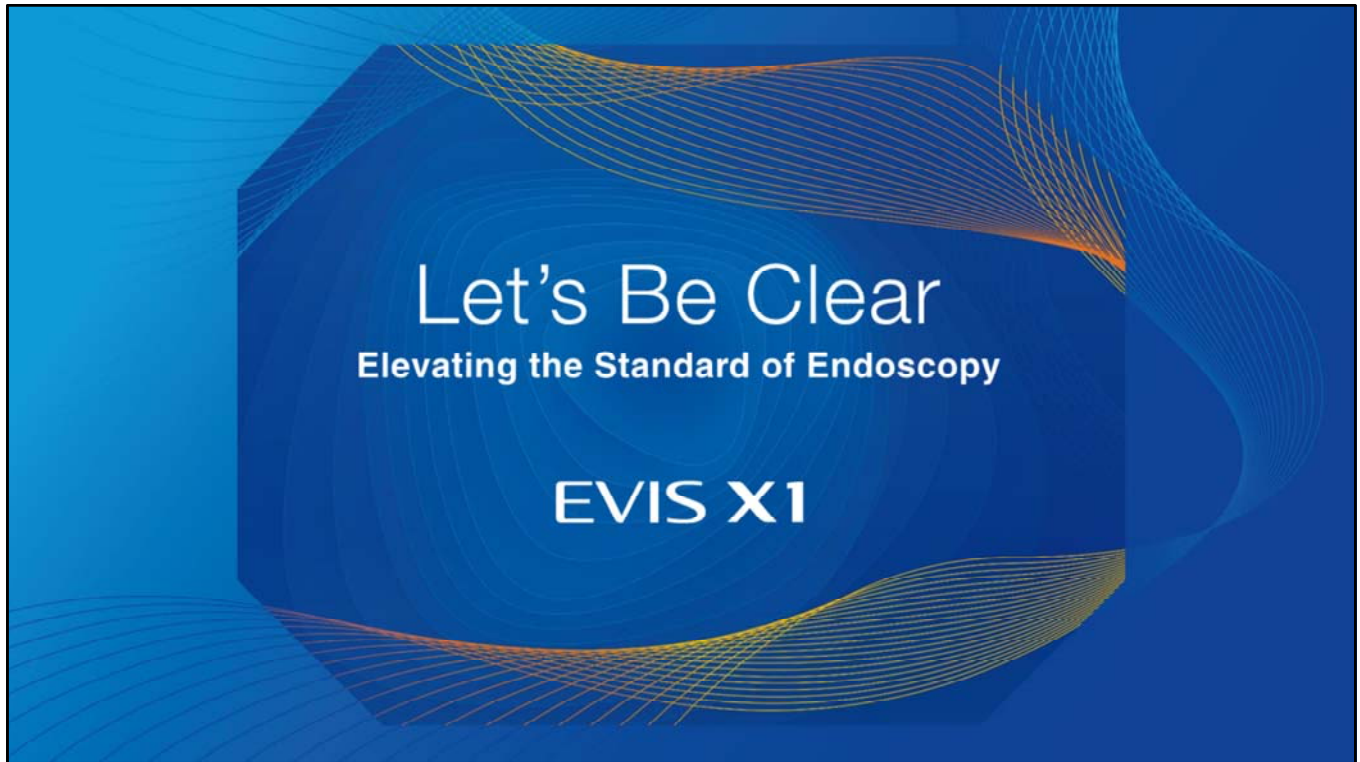
200 Series  
EVIS LUCERA  
ELITE

2020

EVIS X1



- In this way, Olympus' EVIS series has continued to evolve. In 2020, 35 years into its history, we have finally decided to introduce EVIS X1, an globally unified platform.



- The key message for EVIS X1 is “Let’s be clear - Elevating the Standard of Endoscopy.”
- EVIS X1 is made up of various new technologies that embody this key message.



- I have covered the history prior to EVIS X1.
- We hope that this has given you some idea of how we have been able to maintain a high market share.
- Thank you for your patience.
- Now my colleague Kura, who led the development of EVIS X1 for many years, will introduce the latest technologies.