



Advancing the Art of Bronchoscopy

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.

Advancing the Art of Bronchoscopy

with the world’s only fully rotatable bronchoscopes and newly evolved image quality



As the world leader in endoscopy, OLYMPUS provides cutting-edge medical technology to healthcare professionals around the globe. Our commitment to research and development and our collaborative efforts with the medical community improve both the underlying technology and the quality of patient care it helps to deliver.

In the respiratory field, OLYMPUS provides a wide range of innovative solutions — not only bronchoscopes but also solutions for endobronchial ultrasound, peripheral and pediatric bronchoscopy, as well as medical endoscopy and medical thoracoscopy.

OLYMPUS continually innovates in order to provide the most advanced equipment to support progress in respiratory diagnosis and treatment. With the introduction of the EVIS LUCERA ELITE lineup of bronchoscopes and its stunning new features, we advance techniques and procedures — advancing the art of bronchoscopy.

EVIS LUCERA
ELITE



EVIS LUCERA ELITE pursues perfection in the art of bronchoscopy, with major advances in visualisation, and manoeuvrability.

Advancing Visualization

The new HDTV bronchoscopes achieve an outstanding level of clarity and detail enabling the bronchoscopist to perform more precise observation and diagnosis. Even the ultra-slim bronchoscopes with outer diameters of around 4 mm or less now use a videoscope (chip on tip) optical system for dramatically improved image quality.

Advancing Manoeuvrability

New features such as the insertion tube rotation function improve handling and in-procedure manoeuvrability of bronchoscopes.

Advancing Visualization

with HDTV clarity and image enhancement technologies

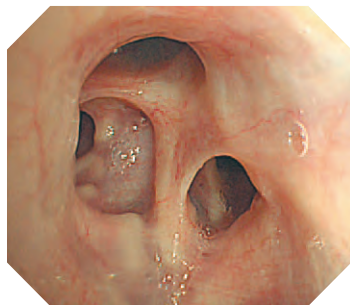
HDTV bronchoscopy



High-definition observation is now realised with HDTV image quality (BF-H290). These sharp, clear images provide much more detailed and precise observation of bronchial surfaces.



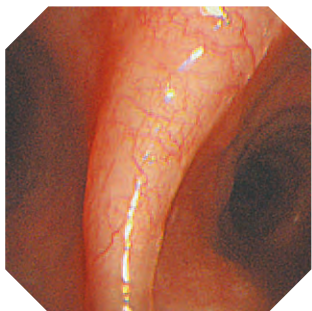
BF-6C260



BF-H290

Standard and treatment type scopes with high image quality

Without sacrificing insertion tube diameter, the BF-Q290 and BF-1TQ290 have significantly improved image quality compared to the BF-260 and BF-1T260. The quality achieved is comparable to that of the BF-6C260.



BF-Q290

Ultra-slim-design true videoscope

While maintaining an ultra-slim design, the BF-P290's and BF-XP290's newly developed micromini CCD on the tip provides tremendously improved image quality over conventional hybrid scopes (BF-P260F/BF-XP260F). Detailed observation helps to support better observation at the peripheral bronchi.



BF-P260F



BF-XP260F

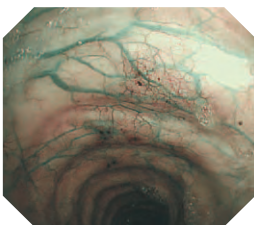


BF-P290/BF-XP290

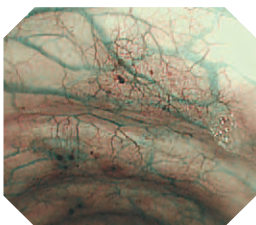
High-definition electronic magnification

Close observation is possible with electronic magnification of 1.4x, 1.6x, 1.8x, maintaining a high-quality image.

•BF-H290 only.



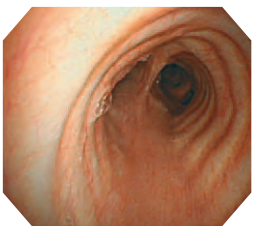
1.0x



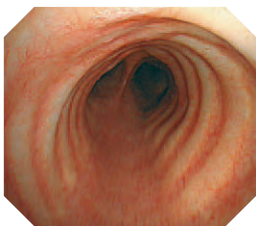
1.6x

Enhanced image quality

The clear, high-resolution images of the latest EVIS LUCERA ELITE generation are achieved through the advanced OLYMPUS optics, the improved image sensors employed, and a new CV-290 image processor that minimises halation and image noise.



EVIS LUCERA SPECTRUM



EVIS LUCERA ELITE

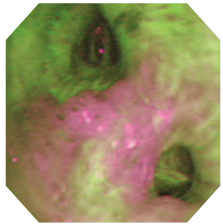
AFI (Auto Fluorescence Imaging)



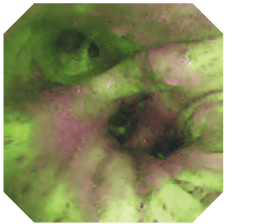
CV-290 and CLV-290SL provide smooth, accurate imaging with high quality and minimised noise, enhancing detection capability and supporting accurate observation of mucosal conditions.

•BF-F260 only.

► For further technical details, please refer to p11.



EVIS LUCERA SPECTRUM



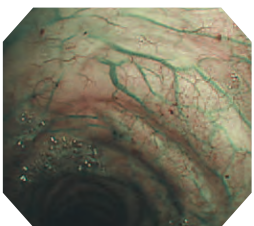
EVIS LUCERA ELITE

NBI (Narrow Band Imaging)

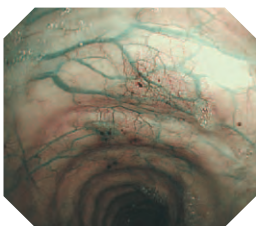


NBI is now twice as bright as 260 Series scopes, offering improved visualisation of vasculature. This can advance examination efficiency by helping to decrease examination time and reduce the need to take extra biopsies.

► For further technical details, please refer to p11.



EVIS LUCERA SPECTRUM and BF-6C260



EVIS LUCERA ELITE and BF-H290

Advancing Manoeuvrability

with outstanding handling and superior tracheobronchial access

Insertion tube rotation function

Always looking for ways to improve operability, OLYMPUS has developed a unique technology that is employed on every EVIS LUCERA ELITE bronchoscope. The insertion tube rotation function allows the bronchoscopist to change the insertion tube's angle of approach by rotating a ring on the control section. This enhances manoeuvrability, helping to improve diagnostic and therapeutic capabilities, especially when trying to reach a target in the lung periphery.

Precise control

This function gives bronchoscopists precise control of the insertion tube. The operator can change the direction of the insertion tube by turning the rotation control ring instead of turning the bronchoscope's control section.

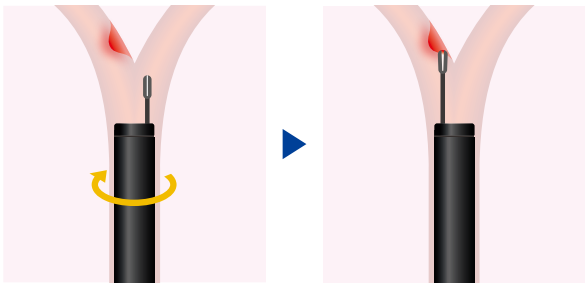


Smoother insertion and less tiring to manoeuvre

This means that bronchoscopists need not assume unnatural, stressful positions when performing bronchoscopy. This unique function makes selection of bronchial branches much easier. Bronchoscopists can turn the control section back to a comfortable position while maintaining the position of the insertion tube.

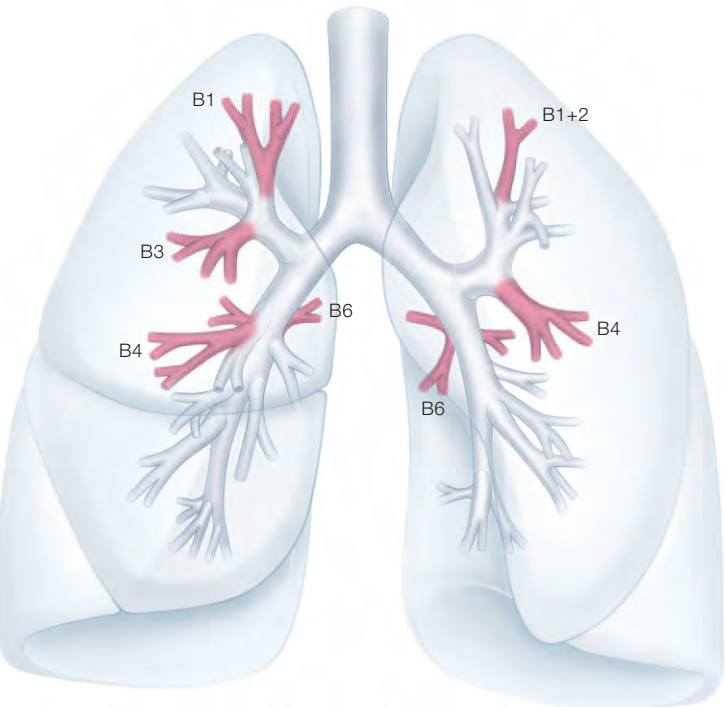
Improved therapeutic capability

Now, bronchoscopists can easily adjust the position of the distal end of bronchoscopes. This facilitates selection of the bronchi where EndoTherapy devices may be inserted.



Smoother insertion of EndoTherapy devices

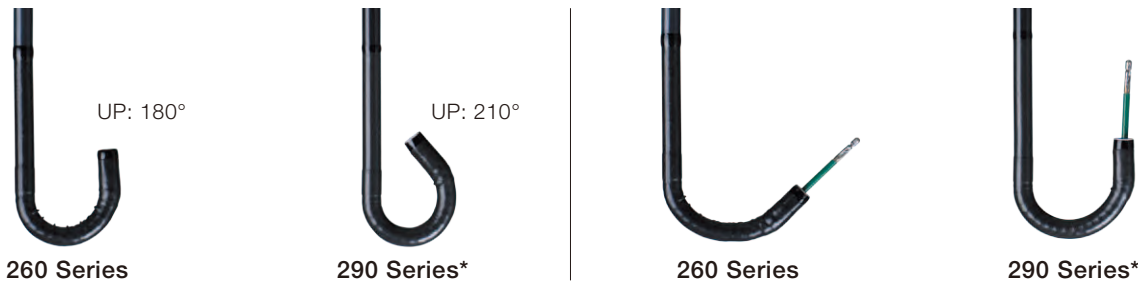
The operation of EndoTherapy devices involves both the bronchoscopist and assistant. The insertion tube rotation function can be used to adjust the instrument port to the most convenient and simple-to-reach position for the whole team.



Smoothen insertion areas with EVIS LUCERA ELITE scopes

Wide angulation range

Compared to predecessors, the BF-H290 and BF-Q290 have a wider angulation range allowing smoother insertion into the upper lobe bronchi and more of a bend in the scope while inserting an EndoTherapy device.



*Except BF-1TQ290

Wider channel diameter

The instrument channel diameter of the BF-1TQ290 has been increased to 3.0 mm, compared to 2.8 mm in the BF-1T260. This expands the ability to use various types of EndoTherapy devices such as large-cup biopsy forceps, enabling the collection of larger amounts of specimens, while increasing suction volume.



One-touch connector

The newly designed EVIS LUCERA ELITE endoscopes allow one-step connection to the light source and processor. Unlike previous generations of endoscopes, the EVIS LUCERA ELITE endoscopes do not require a water-resistant cap, simplifying reprocessing and minimising accidental water damage. The enhanced efficiency delivered by the one-touch connector can also help expedite procedure room setup and turnover.



One-touch connector

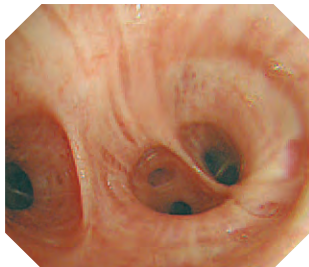
Diverse scope lineup for EVIS LUCERA

A wide-ranging selection supports precise observation and treatment, whether central or peripheral.

EVIS LUCERA ELITE Bronchovideoscope
OLYMPUS BF-H290

Diagnostic bronchoscope with superb HDTV image quality

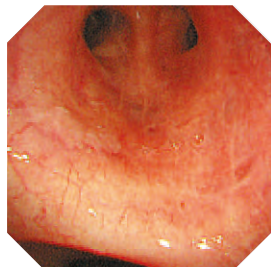
- Distal end outer diameter: 6.0 mm
- Insertion tube outer diameter: 5.7 mm
- Instruments channel diameter: 2.0 mm



EVIS LUCERA ELITE Bronchovideoscope
OLYMPUS BF-1TQ290

Therapeutic bronchoscope with high-resolution image quality

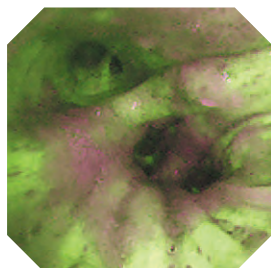
- Distal end outer diameter: 5.9 mm
- Insertion tube outer diameter: 6.0 mm
- Instruments channel diameter: 3.0 mm



EVIS LUCERA Bronchovideoscope
OLYMPUS BF-F260

Enables AFI observation with high image quality

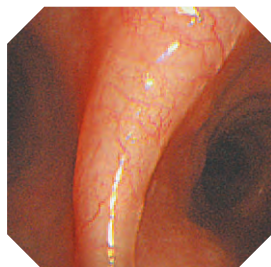
- Distal end outer diameter: 5.5 mm
- Insertion tube outer diameter: 5.4 mm
- Instruments channel diameter: 2.0 mm



EVIS LUCERA ELITE Bronchovideoscope
OLYMPUS BF-Q290

Versatile high-resolution image bronchoscope

- Distal end outer diameter: 4.8 mm
- Insertion tube outer diameter: 4.9 mm
- Instruments channel diameter: 2.0 mm



EVIS LUCERA ELITE Bronchovideoscope
OLYMPUS BF-P290

Ultra-slim videoscope with 2.0 mm instrument channel

- Distal end outer diameter: 4.2 mm
- Insertion tube outer diameter: 4.1 mm
- Instruments channel diameter: 2.0 mm



EVIS LUCERA ELITE Bronchovideoscope
OLYMPUS BF-XP290

Extremely slim videoscope for observation of thinner bronchi

- Distal end outer diameter: 3.1 mm
- Insertion tube outer diameter: 2.8 mm
- Instruments channel diameter: 1.2 mm

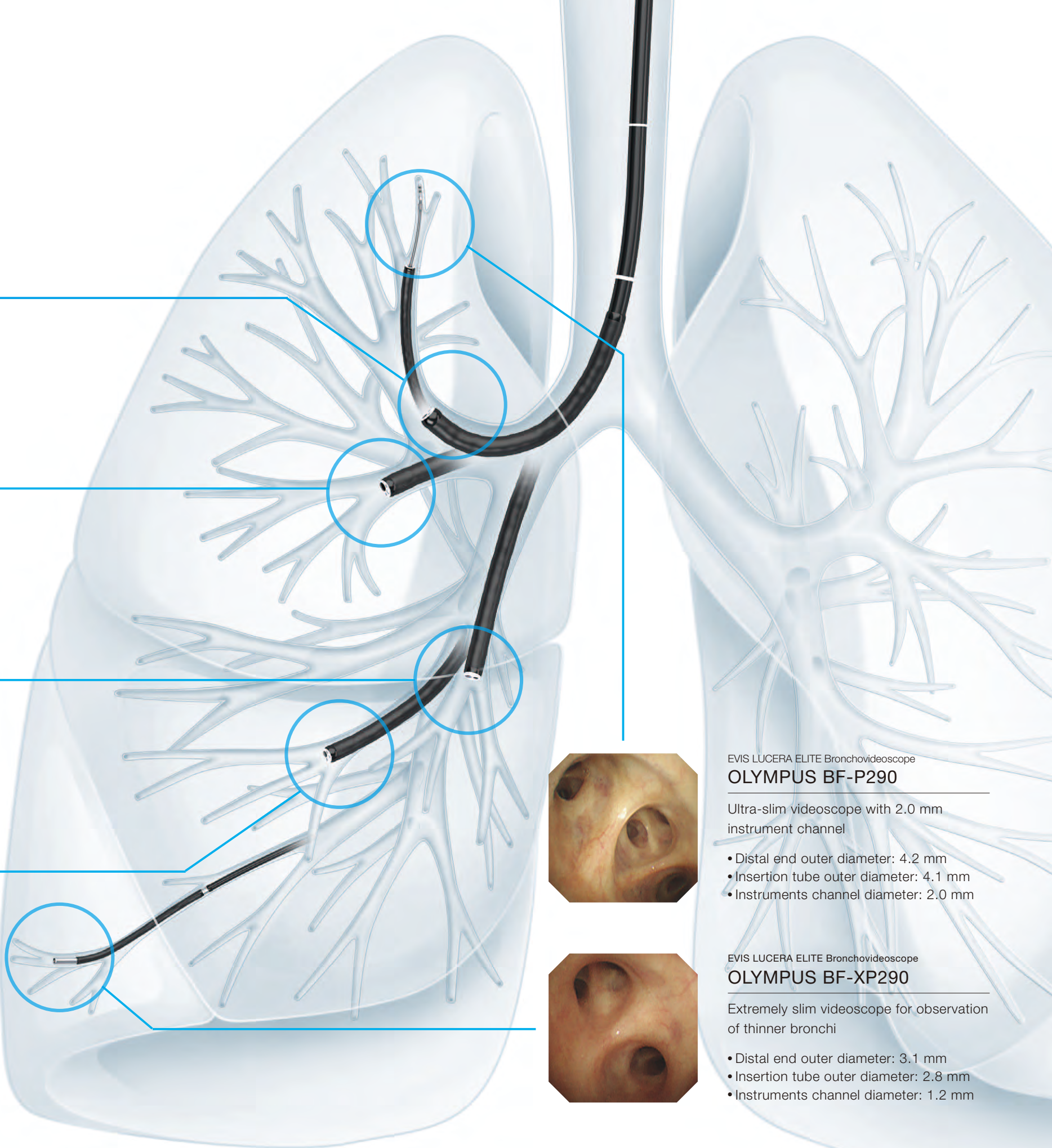
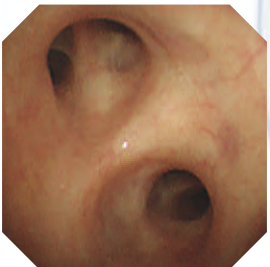


Image Management

Healthcare facilities are increasingly concerned about operational efficiencies, which include effective data management, the exchange and filing of data, and enhanced support for staff members. In this area, the EVIS LUCERA ELITE endoscopy system offers two distinct advantages.

Image Management Hub IMH-20

The IMH provides seamless recording, management and editing of vivid HD images and videos. Its advanced compression technology allows extended recording time and is compatible with various media. With its advanced editing and image management capabilities, IMH can help enhance endoscopy operations like never before.



Portable memory MAJ-1925

Portable memory media are now the standard for data exchange. The EVIS LUCERA ELITE endoscopy system uses a dedicated portable memory technology enabling the user to simply connect and upload.



OLYMPUS' unique and innovative imaging technologies

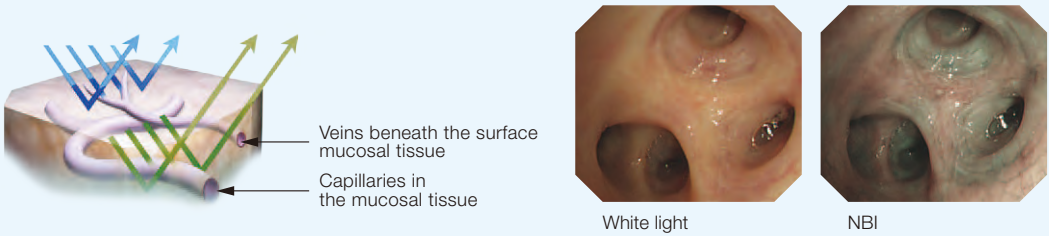
AFI (Auto Fluorescence Imaging)

AFI is a technology that highlights inflamed and neoplastic tissues in sharp, clear, high-contrast images to readily distinguish between healthy and unhealthy tissue, for the early detection of lesions. It operates by irradiating excitation light (390 to 470 nm) to observe auto fluorescence emitted from fluorescent substances such as collagen, and light of a wavelength (540 to 560 nm) that is absorbed by circulating haemoglobin. Auto fluorescence is an extremely weak light that conventional CCDs can barely detect, but combined with OLYMPUS' AFI-compatible scope, which incorporates a high-sensitivity CCD, clear and reliable images can be achieved.



NBI (Narrow Band Imaging)

NBI is an optical image enhancement technology that enhances the visibility of vessels and other tissue on the mucosal surface. NBI works by filtering the white light into specific light wavelengths, which are absorbed by haemoglobin and penetrate only the surface of human tissue. This provides improved visual contrast of the surface structures and fine capillary patterns of mucous membranes, which are normally difficult to distinguish.



Pre-freeze Function

A pre-freeze function saves time and eliminates the physician's frustration when capturing still images. The CV-290 automatically buffers a continuous, rapid series of procedural images. When capturing a still image, the pre-freeze function analyzes the previous images and displays and saves the sharpest image of the desired view. This function helps physicians obtain a clear visual record of the procedure in the shortest possible time.

