



# TOTAL SOLUTION SYSTEM





### **HEALTHCARE**

Fujifilm is renowned as one of the world's largest imaging companies, pioneering high-definition diagnostic imaging and information systems for healthcare facilities and medical institutions.

Our clinically proven products and technologies are constantly being developed and refined to make the work of health professionals more effective and efficient.

At Fujifilm we are constantly innovating, creating new solutions that address the practical needs of our global customers in various business fields including healthcare, graphics systems, optical devices, recording media and photographic technologies.

Every year we invest around seven per cent of our consolidated turnover in research and development including dedicated research and the nurturing of close working relationships with international specialists. This ensures that we do not only meet the highest quality requirements but also contribute to the advancement of culture, science, industry and technology as well as improved health and environmental protection in society.

At Fujifilm, we are continuously developing new technologies, products and services that inspire and excite people everywhere and offer the potential to expand the horizons of tomorrow's businesses and lifestyles.

### **ENDOSCOPY**

As one of the leading companies in the development of endoscope technology, Fujifilm is constantly elaborating new opportunities to provide top quality products, excellent services and highly customised business solutions in the world of endoscopy.

We regularly set new benchmarks in the industry, for example, with the development of the 4-LED Multi Light<sup>TM</sup> technology and endoscopic ultrasound systems.

The focus at Fujifilm is firmly on holistic patient care which means that our service portfolio includes expert technical assistance, a comprehensive range of hygiene products and individual consulting.

Today Fujifilm operates in over 55 companies in Europe, employing around 4,000 people engaged in R&D, manufacturing, sales, and service support.



# DEVELOPING UNIQUE TECHNOLOGIES

Our overarching aim is to help to improve the quality of life of people worldwide through the early detection and successful treatment of disease.

Fujifilm's comprehensive portfolio of advanced solutions meets a wide range of diagnostic and therapeutic endoscopic requirements and by linking state-of-the-art technologies we can provide you with some unique possibilities. The continuous enhancement of imaging technologies ensures high precision and excellent quality.



# **SELECTION OF INNOVATIVE TECHNOLOGIES**



### MULTI-LIGHT TECHNOLOGY™

This high performance 4-LED Multi Light technology™ illumination system is the latest innovation in Fujifilm's medical device portfolio. Optimal illumination using variable LED light intensity for highest standards in brightness and contrast.



#### LCI TECHNOLOGY

Increased contrast in red colour leads to improved visibility of mucosal colour changes.



#### BLI TECHNOLOGY

The combination of special light wavelengths results in improved and accurate contrast imaging.



#### **FICE TECHNOLOGY**

FICE can enhance slight colour differences such as vascular and mucosal patterns without tissue staining. The procedure digitally selects three wavelengths of light and displays reconstructed images.



#### SUPER CCD TECHNOLOGY

The Super CCD and high performance optical system ensures high quality images. It provides brilliant images which can facilitate procedures for detection and treatment of lesions.



#### HD TECHNOLOGY

Combine equipment displaying this logo to ensure that you view HDTV images on your monitor.



#### **DICOM TECHNOLOGY**

The goal of the DICOM standard is to achieve compatibility and improve workflow efficiency between imaging systems and ohter imformation systems.



### ANTI-BLUR FUNCTION

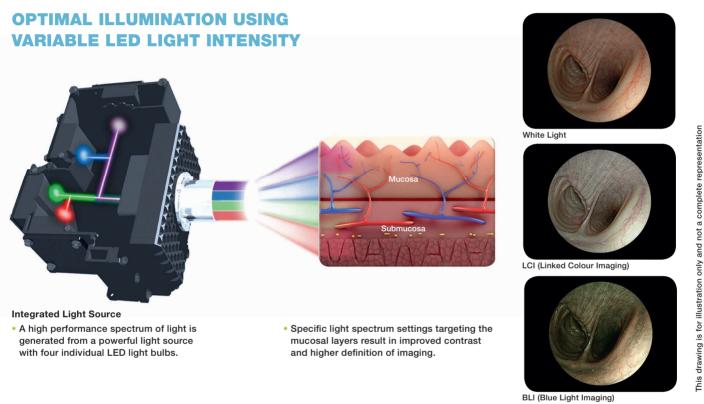
The clearest image among multiple images is automatically selected.



# MULTI-LIGHT TECHNOLOGY

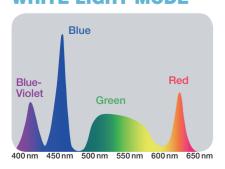


See More. Detect More. This high performance illumination system is the latest innovation in Fujifilm's medical device portfolio, and ensures that the quality of imaging meets the highest standards in brightness and contrast providing the innovative observation modes LCI and BLI. The ELUXEO™ in combination with the 500 series bronchoscopes provide detailed high-resolution imaging for both diagnosis and pre-therapeutic assessment.

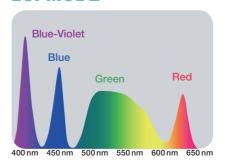


High-intensity illumination based on 4-LED Multi Light technology™ creates high-quality images with White Light Imaging and the new observation modes LCI (Linked Colour Imaging) and BLI (Blue Light Imaging). With the involvement of numerous clinical experts, the ideal composition of four LEDs for each observation mode has been developed to achieve the optimal results in illumination. With a simple push of a button, you can easily switch between the following observation modes:

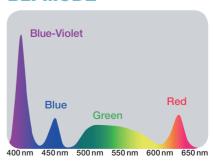
## WHITE LIGHT MODE



### **LCI MODE**



**BLI MODE** 



# ADVANCING IN ENDOSCOPIC BRON





# **CHIAL CARE**

# EB-580 SERIES Electronic Video Bronchoscopes

- High resolution 580 super CCD with close focus for advanced observation
- Larger working channel suitable for various treatments



# **ELUXEO™ 7000 / EPX-3500**

# **Video Processors & Light Source**

- Full HD output and Super CCD technology produce high definition images
- · Anti-blur function extracts the best still image from multiple images
- Advanced workflow enables intuitive and straightforward work processes

### **EB-530US & SU-1**

#### **Ultrasonic Bronchoscopes EB-530US**

- Equipped with the Super CCD for high resolution images
- 10° forward oblique view in combination with a 120° field of view improves manoeuvrability and safety during TBNA procedures

#### **Endoscopic Ultrasonic Processor SU-1**

- High resolution B-Mode images
- Various imaging modes
- User-friendly compact device with easy to clean flat keyboard with touch pad or trackball





### SP-900 & PB2020-M

# **Ultrasonic Mini Probe System**

- High resolution ultrasonic images
- Shorter distal rigid section to insert the probe more smoothly when the endoscope is bent
- Small, lightweight system as a stand-alone solution as well as part of a larger endoscopy system

# EB-580S / EB-580T VERSATILE AND



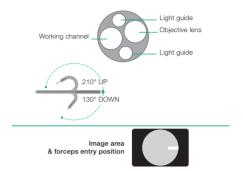


# RELIABLE

# VIDEO BRONCHOSCOPE **EB-580S** Standard Type



Viewing direction	0° (Forward)
Field of view	120°
Observation range	2-100 mm
Bending capability	Up 210°/Down 130°
Distal end diameter	5.3 mm
Flexible portion diameter	5.1 mm
Working channel diameter	2.2 mm
Working length	600 mm
Total length	870 mm



#### 2.2 MM WORKING CHANNEL FOR FASTER SUCTION POWER

Faster suctioning offers quicker vision recovery, even during bleeding and taking biopsy. The strengthened tube of the working channel can improve durability.

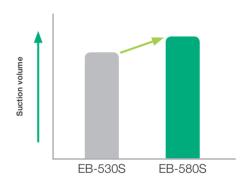
#### 210° UP ANGLE PROVIDES GREAT APPROACH ABILITY

Excellent bending capability (up angle: 210°) can improve reachability, especially to the upper lobe bronchus (B1-B3).

# 580 SUPER CCD & CLOSE FOCUS (2 MM)



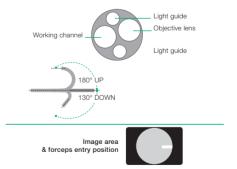
580 Super CCD and Close Focus can achieve increased secure screening and a more precise diagnosis of bronchial lesion and lung cancer.



# VIDEO BRONCHOSCOPE **EB-580T** Treatment Type



Viewing direction	0° (Forward)
Field of view	120°
Observation range	2-100 mm
Bending capability	Up 180°/Down 130°
Distal end diameter	5.8 mm
Flexible portion diameter	5.9 mm
Working channel diameter	2.8mm
Working length	600 mm
Total length	870 mm



## 2.8 MM WORKING CHANNEL SUPPORTING THERAPEUTIC PROCEDURES

The larger working channel of 2.8 mm allows to use various therapeutic devices, and it provides accelerated suction of blood and bodily fluids for a clearer view during observation and treatment.

# 530 SERIES FULL SUPPORT FOR ALL





# **PROCEDURES**

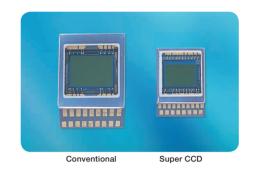
#### THE RIGHT ENDOSCOPE FOR THE JOB

The 530 series consists of five types of bronchoscope designed for both standard and treatment functions so that you can always choose the endoscope best suited to your purpose.

# LIGHT-WEIGHT G5-GRIP ESPECIALLY FOR LONGLASTING THERAPEUTIC USAGE

The light weight grip reduces strain on the endoscopist during the procedure and is designed to fit naturally into the hands to increase manoeuvrability.





#### SUPER CCD IMAGE SENSOR

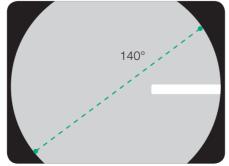
The 530 series endoscopes are equipped with a specially designed Super CCD image sensor for ultra-slim endoscopes. Using RGB filtering, the image sensor also provides vivid colors in the red spectrum which are important in endoscopic diagnoses.



### EB-530H: HIGH QUALITY IMAGES WITH A 140° FIELD OF VIEW

The EB-530H has an improved field of view of 140°, which is 20° wider than the conventional view. This enables a wider observation field to be displayed in high quality without using the digital zoom-out, supporting more effective and detailed diagnoses.





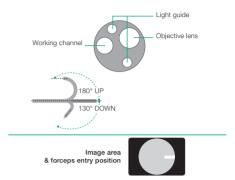
EB-530H



# ELECTRONIC VIDEO BRONCHOSCOPE EB-530P Slim Type





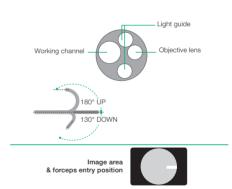


**SLIM DIAMETER** 

# ELECTRONIC VIDEO BRONCHOSCOPE EB-530\$ Standard Type



Viewing direction	0° (Forward)
Field of view	120°
Observation range	3-100 mm
Bending capability	Up 180°/Down 130°
Distal end diameter	4.9 mm
Flexible portion diameter	4.9 mm
Working channel diameter	2.0 mm
Working length	600 mm
Total length	870 mm



HIGH FREQUENCY COMPATIBILITY

# ELECTRONIC VIDEO BRONCHOSCOPE EB-530H Standard Type



Viewing direction	0° (Forward)
Field of view	140°
Observation range	3-100 mm
Bending capability	Up 180°/Down 130°
Distal end diameter	5.4 mm
Flexible portion diameter	4.9 mm
Working channel diameter	2.0 mm
Working length	600 mm
Total length	870 mm

Working channel

180° UP

130° DOWN

Image area
& forceps entry position

HIGH FREQUENCY COMPATIBILITY WIDE VIEW 140°

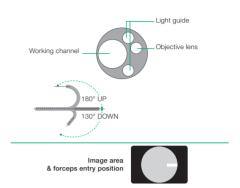


# ELECTRONIC VIDEO BRONCHOSCOPE EB-530T Treatment Type





Viewing direction	0° (Forward)
Field of view	120°
Observation range	3-100 mm
Bending capability	Up 180°/Down 130°
Distal end diameter	5.8 mm
Flexible portion diameter	5.9 mm
Working channel diameter	2.8 mm
Working length	600 mm
Total length	870 mm



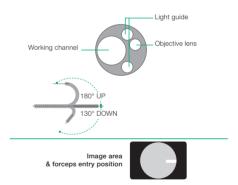
# HIGH FREQUENCY COMPATIBILITY **BIG CHANNEL 2.8 MM**

# ELECTRONIC VIDEO BRONCHOSCOPE EB-530XT Treatment Type





Viewing direction	0° (Forward)
Field of view	120°
Observation range	3-100 mm
Bending capability	Up 180°/Down 130°
Distal end diameter	6.2 mm
Flexible portion diameter	6.3 mm
Working channel diameter	3.2 mm
Working length	600 mm
Total length	870 mm



**HIGH FREQUENCY COMPATIBILITY LARGEST CHANNEL 3.2 MM** 

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# ULTRASONIC SYSTEM: EB-530US &

The EB-530US has excellent manoeuvrability and insertion capability to reduce patient discomfort and improve operator efficiency, while the high quality images and imaging modes provided by the Fujifilm ultrasonography processor SU-1 support accurate punctures.





# **SU-1 PROCESSOR**

# ULTRASONIC BRONCHOSCOPE EB-530US





### **EQUIPPED WITH A SUPER CCD IMAGE SENSOR**

The Super CCD image sensor in the tip of this ultrasonic bronchoscope provides high resolution endoscopic images.



# APPROPRIATE BENDING ANGLE (UP 130°/DOWN 90°)

A large bending angle facilitates paracentesis at the target site.

#### **DUAL LIGHT TO SUPPORT EBUS-TBNA**

Two lights ideally positioned on opposite sides illuminate the front and eliminate shadows during paracentesis. An appropriate needle angle facilitates smooth paracentesis at the target site.



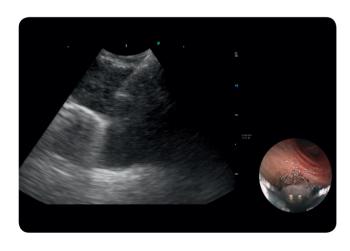




# FNDOSCOPIC ULTRASONIC PROCESSOR SU-1

### **HIGH QUALITY IMAGING**

The Fujifilm ultrasonography processor SU-1 is equipped with proprietary image processing technology and a variety of imaging modes, including the high resolution B-Mode, designed to support accurate diagnosis.



# SU-1 -H- SU-1 -S-

Power rating	AC 100-240 V
Frequency rating	50 Hz / 60 Hz
Power consumption	2.0-1.2 A
Dimensions	390 × 135 × 485 mm
Weight	13 kg
Scanning method	Electronic scanning
Probe types	Curved linear array / Radial
Scanning modes	B, M, CD, PD, PW, THI, and CH
Special modes*	Elastography / CHI
Received gain correction	0-100, 2-step
STC	6-step gain settings per depth
Sound speed correction	Full screen ROI settings
Dynamic Range	40-100 DB, 5-step
PinP	Endoscopic / Ultrasound Imaging
Observation screen	Hospital / Date / Time / Patient
Curved linear array	EB-530US
Frequency	5 MHz, 7.5 MHz, 10 MHz, and 12 MHz
DVI image input terminal	1

<sup>\*</sup> CHI and Elastography modes are available only in SU1-H

### PICTURE-IN-PICTURE IMAGE

Keyboard operation facilitates smooth examinations and allows switching between an ultrasound image, an endoscopic image, and a picture-in-picture screen.



# SP-900 & PB2020-M NEW ULTRASONIC

Fujifilm developed this very compact, user-friendly ultrasonic mini probe system to make it possible to approach a peripheral pulmonary lesion effectively. Offering enhanced operability, SP-900 and PB2020-M are designed for a more precise and efficient examination.





# PROBE SYSTEM

#### **CLEAR IMAGES**

High resolution ultrasonic images can be obtained through the digital video signal output and digital corrections of the imaging artefacts.

### **IMPROVED INSERTABILITY**

The shorter distal rigid section enables the probe to be inserted more smoothly into the upper lobe bronchus even when the endoscope is bent.

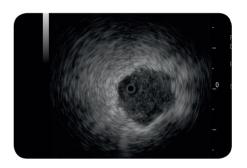
### **FAST AND SIMPLE**

The small and lightweight system can be used as a stand-alone solution as well as part of a larger endoscopy system.

# ULTRASONIC PROCESSOR SP-900



Voltage	AC100-240V
Current consumption (rated)	0.7-0.5A
Scanning mode	B mode
Scanning method	Mechanical radial
Penetration depth	20 mm or more
Frequency	50/60Hz
Dimensions (W x H x D)	377 x 80 x 480 mm
Weight	8.0 kg



# MINI PROBE PB2020-M



Working length	2,150 mm
Distal end diameter	1.4mm
Proximal end diameter	1.9 mm
Acoustic frequency	20MHz ± 15%



# RELIABLE PROCESSOR TECHNOLOGY

Processor technology from Fujifilm provides you with the best processor for whatever application.

Either the high-end video processor ELUXEO™ 7000 system, which in combination with EB-580S enables LCI and BLI observation modes for demanding examinations or the standard EPX-3500HD, also featured with HDTV and anti-blur function.

With ergonomic and intuitive user controls, all our processors help to save valuable time and provide most comfortable examinations.







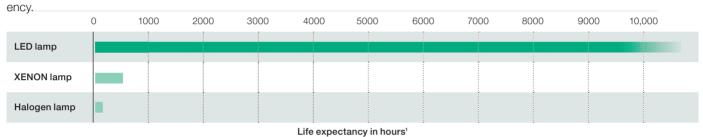


# **ELUXEO**" LIGHT SOURCE **BL-7000**

#### **4-LED LIGHT SOURCE WITH HIGH DURABILITY**

A reliable light source is a prerequisite for use in large clinics as well as smaller outpatient centres to ensure procedures can take place as scheduled. To achieve the highest standards, the eco-friendly ELUXEO<sup>TM</sup> 7000 system features the innovative 4-LED Multi Light<sup>TM</sup> Source, which outperforms conventional Xenon or Halogen light sources: With a 10,000 hours¹ average life expectancy of the LED lights, the ELUXEO<sup>TM</sup> system has a far longer durability while having a much lower energy consumption, resulting in a better cost-effici-

Light source	LED maximum light output: 1400 lm
Light control	Automatic light control by the control signal from video processor
Light cooling method	Forced air cooling
Air supply pump	Available at 4 levels (Hi/Mid/Low/Off)
Power rating	100 - 240 V 50/60 Hz 1.2 - 0.7 A
Dimensions (W x H x D)	390 x 155 x 485 mm (including projection)
Weight	12 kg
Optical radiation safety	Class 1 LED product



## **ELUXEO**" VIDEO PROCESSOR VP-7000









### HIGH PERFORMANCE VIDEO PROCESSOR

The ELUXEO™ video processor VP 7000 enables you to make use of the many features provided by Fujifilm's wide range of scopes along with the innovative 4-LED illumination system and its innovative visualisation modes LCI and BLI. It is compatible with the 530 and 580 series bronchoscopes. The processor creates high quality images and videos displayed in full HD on the monitor. Automatic back-up mode for data storage is integrated and the processor is also DICOM compatible.

Digital output	DVI (Resolution 1280 x 1024 px, 1920 x 1080 px) HD-SDI (Resolution 1920 x 1080 px)
Input/Output Connector	DVI-D: 2 channel S VIDEO DVI-I: 2 channel VIDEO HD-SDI: 2 channel RGB TV Input Connector: 1 channel PoP
Control Connector	Light Source I/F (37P): 1 channel Light Source I/F (Mini D-Sub 15P): 1 channel Remote (Bnc): 2 channel Peripherals (D-Sub 9P): 2 channel Keyboard: 1 channel Card reader: 1 channel Digital printer: 1 channel Footswitch: 1 channel Network: 1 channel
Type of colour	NTSC/PAL
Iris	Average/Peak/Auto
Applicable bronchoscope	530/580 series
Power rating	100 - 240 V 50/60 Hz 0.8 - 0.5 A
Dimensions (W x H x D)	390 x 110 x 485 mm (including projection)
Weight	9.0 kg





# VIDEO PROCESSOR EPX-3500HD







### ADVANCED ENDOSCOPIC DIAGNOSTIC AND THERAPY

With its advanced image processing technology, the EPX-3500HD supports both endoscopic diagnostics and therapies. It offers clear images from superior functions such as structure enhancement (FICE), automatic light control and anti-blur. The EPX-3500HD is compatible with our full range of 580 and 530 bronchoscope series.

### THREE PRE-DEFINED FICE PATTERNS AVAILABLE

Digital output	2 x DVI (1280 x 1024p or 1920 x 1080p)
Analog output	1 x RGB TV (PAL, RGB+SYNC), 1 x S-VIDEO (Y/C), 1 x VIDEO (Composite)
Control terminal	2 x Remote, 2 x Peripheral, 1 x Keyboard, 1 x Card reader, 1 x Aux, 1 x Digital printer, 1 x Foot switch, 1 x Ethernet (100/10 Base)
Color adjustment	Brightness, Red, Green, Blue, R-Hue, Chroma, 9 steps
Contrast	3 steps
Structure emphasis	High, Mid, Low, Off
Color emphasis	High, Mid, Low, Off
FICE	3 presets (FICE 0, 1, 8)
Iris	Average/Peak/Auto
Image storage	USB Flash Drive
Power rating	AC 100 - 240V ± 10 % 50/60 Hz 1,0-0,3 A*
Dimensions (W x H x D)	390 x 105 x 460 mm
Weight	8kg









# FIBEROPTIC BRONCHOSCOPES

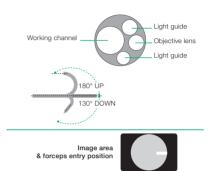
## MOBILE FIBEROPTIC BRONCHOSCOPE FB-120MP

#### FOR EXAMINATIONS AT THE PATIENT'S SIDE

This mobile bronchoscope operates without a light cable, making it extremely versatile in clinical environments. The LED light source does not need to be changed for many years.



0° (Forward)
120°
1-50 mm
Up 180°/Down 130°
4.8 mm
4.9 mm
2.2 mm
600 mm
920 mm
Yes



#### **DURABLE BATTERY**

The smaller battery box, LA-1A, has a CR2 lithium battery for up to 60 minutes continuous use. A rotational mechanism makes the battery switch highly stable.

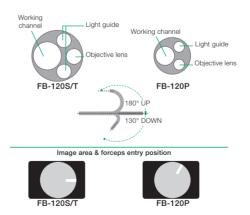


### FIBEROPTIC BRONCHOSCOPE FB-120S/T/P

### COMPATIBLE WITH HIGH FREQUENCY THERAPEUTIC TREATMENTS

Fujifilm's fiberoptic bronchoscopes provide safe and efficient methods of patient care, whether in intubation, examination or therapeutic situations.

	FB-120S	FB-120T	FB-120P
Viewing direction	0° (Forward)		
Field of view	120°		100°
Observation range	1 – 50 mm		
Bending capability	Up 180°/Down 130°		
Distal end diameter	4.8 mm	5.9 mm	2.7 mm
Flexible portion diameter	4.9 mm	5.9 mm	2.8 mm
Working channel diameter	2.2 mm	2.8 mm	1.2 mm
Working length		600 mm	
Total length	900 mm		920 mm



### **EXCELLENT OPTICAL CHARACTERISTICS**

**ENHANCED MANOEUVRABILITY** 



# ACCURATE VISUALISATION

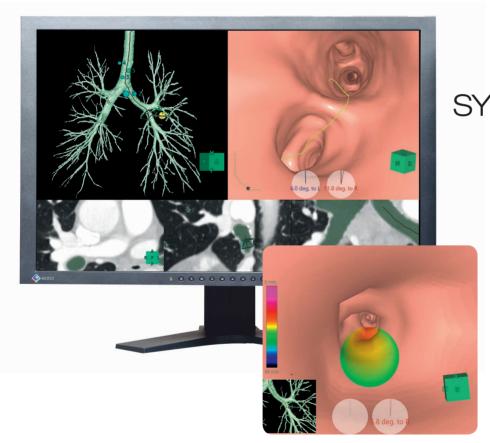
# **SYNAPSE 3D**

#### 3D IMAGING AND VIRTUAL SIMULATION

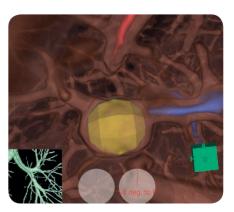
SYNAPSE 3D uses unique image recognition technologies to automatically extract organs and vessels. The technology enables automatic extraction of lung, lung lobes, the bronchi, the pancreas, the colon etc. This feature makes possible a large variety of 3D analysis, such as visualisation of chronic respiratory disease.

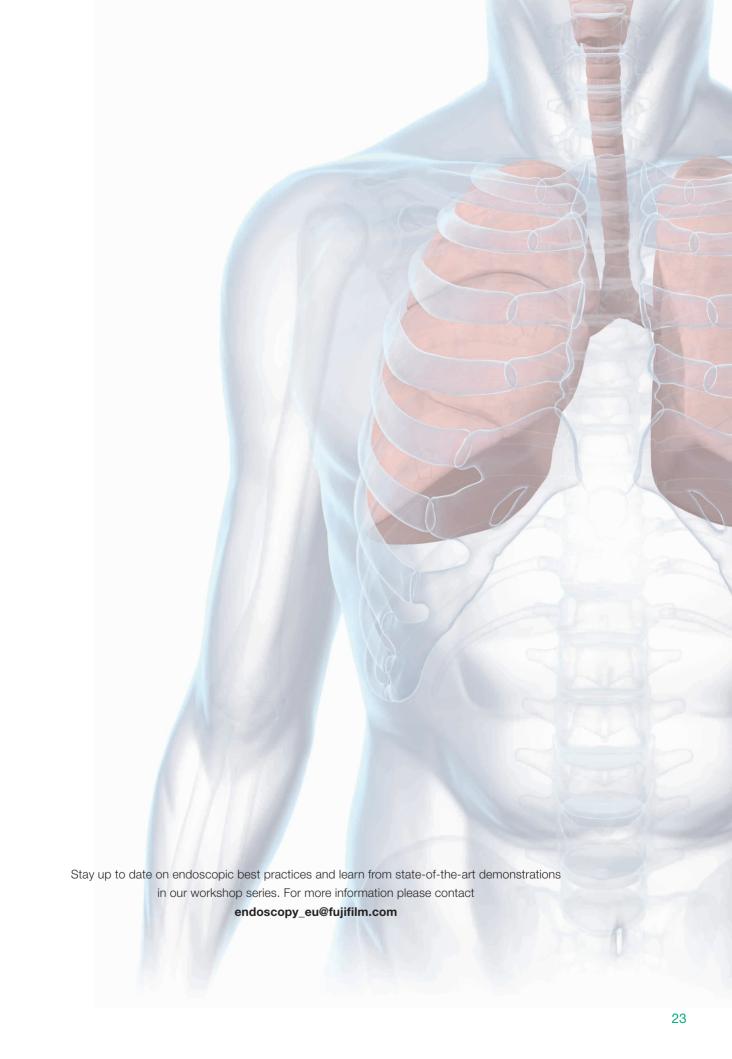
#### **POWERFUL SIMULATION TOOL**

The Bronchus Scope Simulation and Fine Bronchus Extracting functions make it possible to find an optimum bronchus path to reach a lung nodule by using the volume data collected with CT and then to simulate the insertion of the bronchoscope into this path.



SYNAPSE<sup>®</sup>





# ADVANCING DEEPER INSIGHTS IN ENDOSCOPY