

# SOLUTIONS FOR BRONCHOSCOPY

**One Source for Excellent Devices.** 



# **BRONCHOSCOPY**

#### Understanding and Delivering Solutions for Flexible Bronchoscopy Needs.

The treatment possibilities of respiratory diseases are increasingly linked to reliable and effective endoscopic diagnostics. Olympus offers the widest portfolio for diagnostic and therapeutic bronchoscopy, complemented by a semi-flexible pleuroscope for the exploration of the thoracic cavity.

Innovations such as EBUS-TBNA, Narrow Band Imaging (NBI), Autofluorescence Imaging (AFI), and the continuous improvement of white light bronchoscopy broaden the possibilities for interventional pulmonologists. Olympus' role does not stop here. We provide a full line-up of dedicated EndoTherapy instruments, turning your daily challenges into successes.

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## ADVANCING THE ART OF BRONCHOSCOPY

#### EVIS EXERA III Incorporates Innovative Features Pushing Video Bronchoscopy to New Performance Levels.



#### BF-1TH190

#### **Advancing Visualization**

The art of bronchoscopy is about viewing anatomic details and helping to decide on the disease treatment. With EVIS EXERA III an outstanding level of clarity and detail is achieved, enabling the bronchoscopist to perform more precise observation and diagnosis.

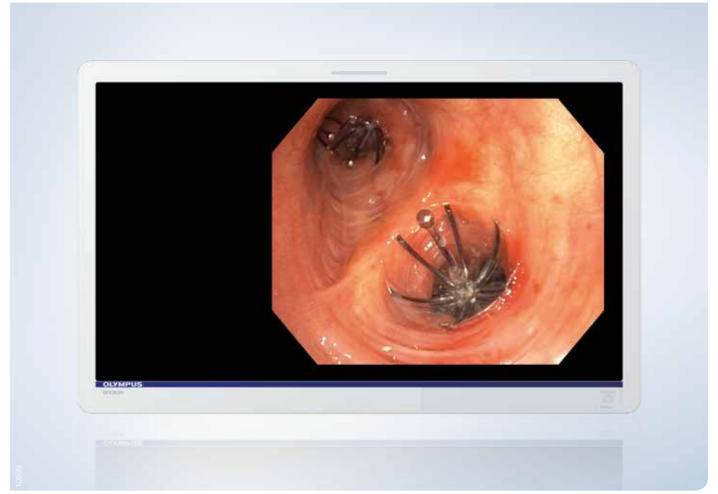
#### **Advancing Maneuverability**

The art of bronchoscopy requires having the right tools to deliver the best possible patient care. EVIS EXERA III bronchoscopes, with their unique insertion tube rotation function, improve handling and in-procedure maneuverability of bronchoscopes, as well as reducing procedural fatigue.

#### **Advancing Versatility**

The art of bronchoscopy is sourced by the wide product line-up for interventional pulmonology. In addition, EVIS EXERA III provides system compatibility with thoracoscopy, gastroenterology, ENT, and surgical endoscopy.





HDTV image taken with BF-1TH190 showing IBV valves

#### OUTSTANDING HANDLING AND SUPERIOR TRACHEOBRONCHIAL ACCESS...

... is enabled by the insertion tube rotation function - a unique technology which is employed on the EVIS EXERA III bronchoscopes. You will easily discover the improved maneuverability in common situations during bronchoscopy.

#### **Improved Therapeutic Capability**

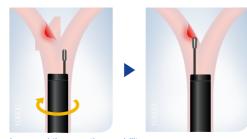
With the insertion tube rotation function, you can easily adjust the position of the distal end of bronchoscopes. Simply keep the handle in a fixed position and rotate the insertion tube and working channel opening to the position most suitable for the biopsy. This facilitates selection of the bronchi where EndoTherapy devices may be inserted.

#### **Smoother Insertion and Less Tiring Maneuvering**

You can fix the endoscope distal end position by holding the rotation ring and rotate the endoscope handle to a more comfortable position while maintaining the position of the insertion tube. This makes the selection of bronchial branches much easier, and it means that you do not need to stand in a unnatural or stressful position when performing bronchoscopies.

#### Easy Access for the Insertion of EndoTherapy Devices

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



Improved therapeutic capability



Repositioning of the instrument channel port



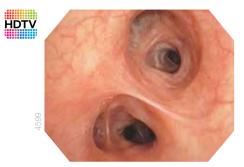
BF-H190 with the Insertion Tube Rotation Function

6 | EVIS EXERA III EVIS EXERA III | 7

# OUTSTANDING IMAGE RESOLUTION SUPPORTING PRECISE OBSERVATION AND TREATMENT

#### **HDTV** Bronchoscopy

With the introduction of EVIS EXERA III, imaging performance has been dramatically improved. True HDTV image resolution is now realized with two flagship video bronchoscopes (BF-H190/BF-1TH190) enabling the bronchoscopist to perform more precise observation and diagnosis of the bronchial mucosa.



HDTV with BF-H190/BF-1TH190

# **Narrow Band Imaging**

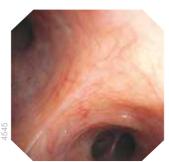
All EVIS EXERA III specifications incorporate Narrow Band Imaging (NBI), an optical image enhancement technology, improving the visualization of vessels on the mucosal surface.



NBI with BF-H190

#### **Routine Bronchoscopy**

The versatile routine video bronchoscope (BF-Q190) has significantly improved image quality when compared to conventional models, while providing a slim 4.8 mm distal end outer diameter.



BF-Q190

#### **Slim Design True Videoscopes**

The world's slimmest chip-on-the-tip videobronchoscopes (BF-P190/BF-XP190) provide stunning image quality while offering compatibility to a wide range of EndoTherapy instruments enhancing the diagnosis in the thinner lumen.



BF-XP190

## **High definition LCD Monitor OEV-262H**

26-inch full HD LCD Panel with a 16:9 aspect ratio, high brightness, high contrast, and high gradation images to realize the full potential of the Olympus Endoscope System.

# Most advanced image processing, providing

**Video System Center CV-190** 

**EVIS EXERA III** 

enhanced color reproduction, reduced halation, and minimized image noise. Also incorporating a new pre-freeze function that assures the automatic selection of the sharpest still image.

#### **EVIS EXERA III Xenon Light Source CLV-190**

Increased Xenon power intelligently managed by sophisticated light adjustment solutions which provide ideal illumination. New features include the one-touch connection of EVIS EXERA III endoscopes as well as newly designed cooling fans which considerably reduce the operating noise.

# Image Management Hub 20 (IMH-20)

Providing seamless recording, management, and editing of vivid HD images and videos. Its advanced compression technology allows for extended recording time and is compatible with various media.



8 | EVIS EXERA III EVIS EXERA III | 9

## SELECTING THE RIGHT TOOLS FOR THERAPEUTIC INTERVENTIONS

Designed to support therapeutic procedures, Olympus has four therapeutic video bronchoscope specifications available, offering working channel sizes from 2.8 mm to 3.0 mm and to 3.2 mm. A large selection of therapeutic EndoTherapy devices can be used with these bronchoscopes, ranging from baskets and forceps for foreign body removal, balloon catheters for hemoptysis control, electrosurgical probes, snares, forceps, and knives to name just a few.

With EVIS EXERA III bronchoscopes, the position of the distal end of bronchoscopes can be adjusted using the insertion tube rotation function, facilitating selection of the bronchi where EndoTherapy instruments may be inserted.

# The ESG-100 is the Olympus Electrosurgical Generator for the Respiratory System

- · Easy and comfortable to use
- · Provides the highest level of safety for patient and user
- · Produces less smoke for better endoscopic view
- · Less expensive than laser

10 | Therapeutic Interventions

· More versatile than cryotherapy



20001

Hot biopsy forceps (FD-7C-1 and FD-6C-1), diathermic snares (SD-18C-1 and SD-7C-1), coagulation electrode (CD-6C-1), electrosurgical knife (KD-31C-1), (top to bottom)



BF-1T180 with coagulation electrode CD-6C-1



BF-XT160 with hot biopsy forceps FD-7C-1



Therapeutic Interventions | 11

BF-1TH190 with diathermic snare SD-7C-1 on the wide screen monitor OEV-262H

# REACHING THE SUB-SEGMENTAL BRONCHI AND BEYOND...

...by selecting from a range of bronchoscope specifications from the EVIS EXERA III range, featuring a 2.0 mm or 1.2 mm working channel, depending on the outer diameter of the endoscope.

Olympus EndoTherapy instruments for diagnostic bronchoscopy range from classical TBNA needles, catheters, GuideSheathKits, and cytology brushes to biopsy forceps, both available in standard 2.0 mm and 1.2 mm working channel versions.



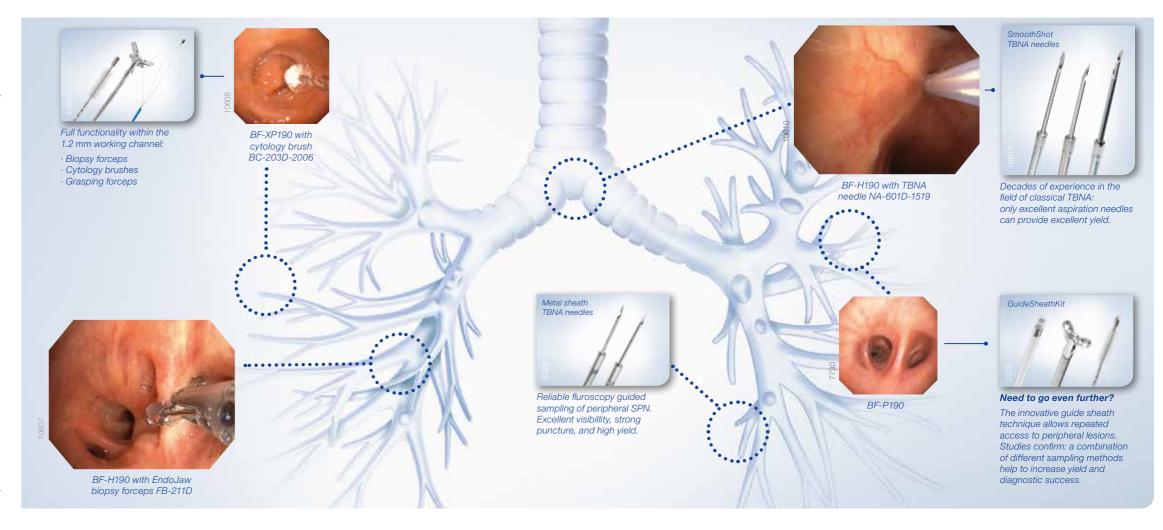
Micro bristle cytology brushes

Tests showed that thin micro bristles can provide between 50% to 100% more cells for cytopathologic diagnosis than standard bristles.<sup>1</sup>



EndoJaw biopsy forceps

Many pathologists confirm: cutting biopsies provide better diagnostic possibilities than tearing biopsies.



12 | Diagnostic Bronchoscopy

<sup>&</sup>lt;sup>1</sup>Sato, M., et. al. Journal of Bronchology 2002; Vol. 9 (3): 177-181

#### LOOKING BEYOND THE BRONCHIAL WALL WITH ENDOSCOPIC ULTRASOUND

With the increasing role of lung cancer staging, EBUS-TBNA is considered by leading experts to be this century's most significant improvement in bronchoscopy. Olympus' progress in further developing EBUS-TBNA - since having introduced the first scope to the market in 2004 - provides compatibility to different ultrasound processors of the Aloka Prosound series and Olympus' universal ultrasound system center EU-ME2. Maintaining a slim insertion tube diameter, the second generation of EBUS-TBNA scopes offer an increased working channel diameter for better suction capability and the freedom to select from EndoTherapy devices like the dedicated 22G or 21G EBUS-TBNA needles.

Adding EUS-FNA with the stunning GF-UCT180 and the entire range of EZShot2 needles in 19G, 22G, 25G as well as 22G with side port, Olympus provides the complete portfolio for endoscopic ultrasound-guided mediastinal staging.



21G and 22G ViziShot needles, 22G EZShot2 needles with and without side port



Universal Endoscopic Ultrasound Center EU-ME2



BF-UC180F

With the increasing importance of molecular analysis for customized therapy, the quality and quantity of tissue samples in lung cancer diagnosis is becoming essential. Multiple studies have shown that specimens obtained by EBUS-TBNA can be used for cell-block preparation, immunohistochemistry, and molecular studies. EBUS-TBNA is thus an ideal approach that allows combined pathological and molecular analysis of metastatic lymph nodes\*.



EBUS-TBNA with Olympus EU-ME2 (left), EBUS-TBNA with Aloka Prosound α7 (right)

14 | Mediastinal Lymph Node Staging | 15

<sup>\*</sup> Nakajima T, Yasufuku K: How I Do It-Optimal Methodology for Multidirectional Analysis of Endobronchial Ultrasound-Guided Transbronchial Needle Aspriation Samples. J Thorac Oncol. 2011, 6:203–206.

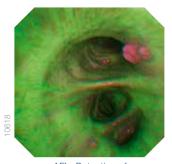
### ENDOSCOPIC DETECTION AND CONFIRMATION OF EARLY CANCER...

...is in many cases not possible using white light endoscopy. Results can be improved by using Olympus' unique Narrow Band Imaging (NBI) technology. NBI emphasizes vessel structures and thus allows simpler detection of angiogenic changes which accompany carcinogenesis of the bronchial mucosa. Alternatively, areas of thickened bronchial tissue can be spotted using autofluorescence bronchoscopy, as implemented in Olympus' dedicated AFI endoscopy platform, EVIS LUCERA ELITE. As suspicious lesions lie within or adjacent to the bronchial wall, ultrasound diagnostics of the bronchial wall structures is essential for T-staging to decide on ingrowth or compression. The Olympus radial ultrasound miniature probe portfolio has a wide selection of diameters, allowing diagnostics in the main bronchi as well as in peripheral lumina. Radial ultrasound miniature probes also play an essential role in confirming SPN or pulmonary masses as they provide real-time information of the location and extent of the suspicious lesion.

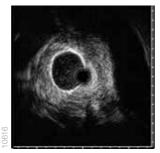
For easy access to difficult target sites, the double-jointed rotatable guiding device helps to position Olympus' unique guide sheath. Serving as an extended working channel for the endoscope, the guide sheath allows easy alternate use of the ultrasound miniature probe, biopsy forceps, and cytology brush, in one diagnostic session. In selected cases, the Olympus SmoothShot cytology TBNA needles have been shown to be compatible with the 2.6 mm working channel GuideSheathKit.



NBI - Neoplastic vessel formation (dotted vessel)



AFI - Detection of suspicious carina



EBUS image of tumor invasion



EBUS balloon probe UM-BS20-26R



EBUS radial ultrasound miniature probe UM-S20-17S



EBUS radial ultrasound miniature probe and guide sheath



Guiding device CC-6DR-1



GuideSheathKit K-201



SmoothShot cytology TBNA needle NA-401/411

16 | Early Cancer Detection and Confirmation | 17

#### EMPHYSEMA AND AIR LEAK TREATMENT

IBV valve treatment is a promising approach for treating a diseased lung in emphysematous patients or a damaged lung resulting in air leaks. The patented one-way IBV valve is a device placed in selected lung airways where it self-expands and limits the airflow to the occluded areas of the lung while still allowing mucus and trapped air to pass by outside of the valve in the proximal direction.

For the treatment of emphysema, the valves allow total occlusion of single lobes resulting in atelectasis. In a prospective pilot trial at 30 and 90 days, significant differences were seen in PFT (FEV<sub>1</sub> + 21.4%) and 6MWD, as well as in mMRC and SGRQ in favor of unilateral treatment. Improvement in RV was only significant after 90 days, but the RV/TLC ratio had already decreased significantly in this group after 30 days.1

For the treatment of air leaks, the valve limits airflow to injured tissue. Prolonged post-surgery and persistent as well as spontaneous secondary air leaks have been treated successfully. Published case reports showed a 94% success rate of treatment of prolonged air leaks. 2, 3, 4



IBV valve



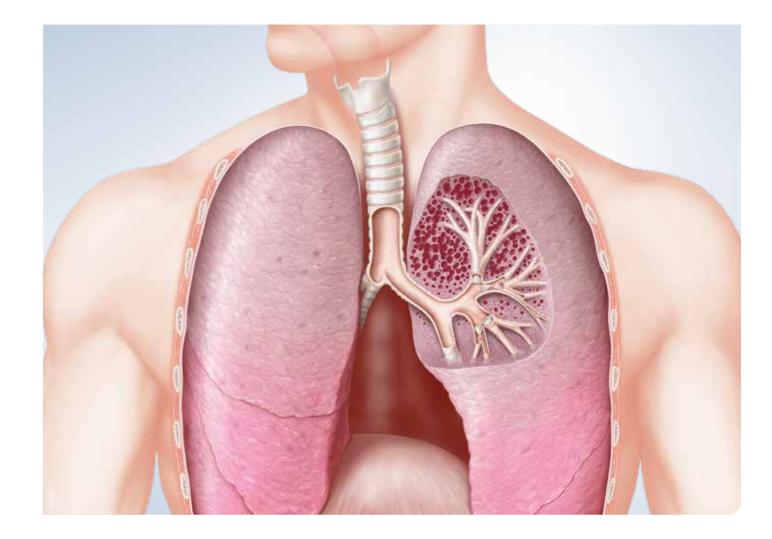
The valve allows mucus and air movement in the proximal direction



The valve itself expands to seal and contracts during breathing



<sup>&</sup>lt;sup>2</sup> Wood D, et al. [Abstract] European Respiratoy Society Congress. September 2010. Abstract nr P4145



18 | Emphysema and Air Leak Treatment Emphysema and Air Leak Treatment | 19

Mahajan AK, et al. J Thorac Cardiovasc Surg. 2013 Mar;145(3):626-30. doi: 10.1016/j.jtcvs.2012.12.003.
 Firlinger I, et al. Ann Thorac Surg. 2013 Apr;95(4):1243-9. doi: 10.1016/j.athoracsur.2012.12.036.

#### OBSERVATION OF THE THINNEST BRONCHI

Flexible bronchoscopy is widely used in the diagnosis of respiratory pathologies in children of all ages. Given its ultraslim specifications, the latest flagship model BF-XP190 can be used in pediatric bronchoscopy with ease. The chip-on-the-tip design realizes drastically improved image quality, while maintaining an ultraslim 3.1 mm distal end outer diameter and a 1.2 mm instrument channel.

Biopsies, bronchial brushing, and foreign body removal present common challenges that can be met by the selection of the appropriate techniques and instruments. Olympus offers a full line-up of instruments for pediatric bronchoscopy which is compatible with a 1.2 mm working channel. This range covers grasping forceps and baskets for foreign bodies of different shapes and surfaces and biopsy forceps and cytology brushes for diagnosis even from the small bronchi.



BF-XP190

The mini biopsy forceps (FB-56D-1) allows successful sampling also with the slimmest channel bronchoscopes. Their elongated rat tooth cups enable a reliable biopsy. Optimized cytological yield can be obtained with the single-use mini cytology brush (BC-203D-2006) with a brush diameter of 2.0 mm. For retrieval of smooth round objects in children, Olympus offers a selection of single-use mini grasping baskets. In case of the removal of long, thin objects, a single-use mini foreign body removal snare (FG-36D) with an integral handle design comes in handy.



FB-56D-1 Reusable mini oval rat tooth biopsy forceps



BC-203D-2006 Single-use mini cytology brushes



FG-55D Single-use mini grasping baskets



FG-36D Single-use mini foreign body removal snare



20 | Pediatric Bronchoscopy | 21

# PORTABLE AND FLEXIBLE - BRONCHOSCOPY ANYWHERE, ANYTIME

Respond to requests from the ward, the ICU, or emergency room with ease and flexibility for local anesthesia, sputum removal, foreign body removal, emergency hemostasis, and intubation. The complete standalone design incorporates a 2.5-inch monitor, a LED light source, battery, and storage capability of still images and video sequences in a single unit. This versatile endoscope enables observation without peripherals or cables, providing it with an unprecedented level of mobility.



1581

PW-6C-1
Efficient local anesthesia with a minimum consumption of medication: spray catheter with spray valve



4294

Grasping Forceps
In case of an acute bronchial occlusion, foreign body retrieval is possible with baskets and V-shaped or rat tooth grasping forceps.





B5-2C Emergency short time hemostasis tamponade with the B5-2C balloon catheter



The 2.5-inch monitor which can be tilted to adjust the orientation enables observation and control operations in a single view.



MAF-TM – the mobile bronchoscope MAF-GM – the mobile intubation scope

22 | Mobile Bronchoscopy | 23

## **EXPLORING THE THORACIC CAVITY**

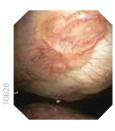
Specially designed to perform medical thoracoscopy, the LTF-160 offers the same ease of use and familiarity that a chest physician experiences with bronchoscopy. Medical thoracoscopy, also referred to as pleuroscopy, can be performed under local anesthesia with conscious sedation in a single-port procedure and offers a less invasive approach as compared to two-port procedures or VATS.

The overall advantages of the Olympus LTF-160 semi-flexible pleuroscope are easy to recognize. With its integrated working channel, pleural effusion can be removed while the pleural cavity is inspected. Furthermore, every angle of the pleural cavity can be accessed.

For diagnostics and therapy, use the large rotatable SwingJaw biopsy forceps with needle (FB-55CR-1) and the washing pipe (PR-2B-1) for rinsing and sampling.











Video Pleuroscope LTF-160







Catheter PR-2B-1

24 | Medical Thoracoscopy

# EXCELLENT DEVICES IN A WIDE VARIETY OF SPECIFICATIONS – ALWAYS THE RIGHT CHOICE

|                      | Insertion Tube OD<br>(mm) | Distal End OD<br>(mm) | Channel ID<br>(mm) | Bending<br>(up/down) | Rotation Function (left/right) | NBI          | Comments        |
|----------------------|---------------------------|-----------------------|--------------------|----------------------|--------------------------------|--------------|-----------------|
| Video Bronchoscopes  | S                         |                       |                    |                      |                                |              |                 |
| BF-1TH190*           | 6.0                       | 6.2                   | 2.8                | 180°/130°            | 120°/120°                      | ✓            | HDTV, OT        |
| BF-H190*             | 5.1                       | 5.5                   | 2.0                | 210°/130°            | 120°/120°                      | $\checkmark$ | HDTV, OT        |
| BF-Q190*             | 4.9                       | 4.8                   | 2.0                | 210°/130°            | 120°/120°                      | $\checkmark$ | OT              |
| BF-P190*             | 4.1                       | 4.2                   | 2.0                | 210°/130°            | 120°/120°                      | $\checkmark$ | OT              |
| BF-XP190*            | 2.8                       | 3.10                  | 1.2                | 210°/130°            | 120°/120°                      | $\checkmark$ | OT              |
| BF-1TQ180            | 6.2                       | 6.3                   | 2.8                | 180°/130°            | -                              | ✓            | -               |
| BF-1T180             | 6.0                       | 6.0                   | 3.0                | 180°/130°            | -                              | $\checkmark$ | -               |
| BF-Q180-AC           | 5.3                       | 5.5                   | 2.0                | 180°/130°            | -                              | $\checkmark$ | autoclavable    |
| BF-Q180              | 5.1                       | 5.5                   | 2.0                | 180°/130°            | -                              | $\checkmark$ | -               |
| BF-P180              | 4.9                       | 4.9                   | 2.0                | 180°/130°            | -                              | $\checkmark$ | -               |
| BF-XT160***          | 6.3                       | 6.2                   | 3.2                | 180°/130°            | -                              | -            | _               |
| BF-3C160***          | 3.8                       | 3.8                   | 1.2                | 180°/130°            | -                              | -            | _               |
| BF-1T260**           | 6.0                       | 5.9                   | 2.8                | 180°/130°            | -                              | -            | -               |
| BF-F260*             | 5.4                       | 5.5                   | 2.0                | 180°/130°            | -                              | -            | -               |
| BF-260**             | 4.9                       | 4.9                   | 2.0                | 180°/130°            | -                              | -            | _               |
| Mobile Airwayscopes  |                           |                       |                    |                      |                                |              |                 |
| MAF-TM               | 5.2                       | 5.1                   | 2.6                | 180°/130°            | -                              | -            | fibervideoscope |
| MAF-GM               | 4.1                       | 3.9                   | 1.5                | 120°/120°            | -                              | -            | fibervideoscope |
| Video Pleuroscope (M | ledical Thoracoscopy)     |                       |                    |                      |                                |              |                 |
| LTF-160              | 7.0                       | 7.0                   | 2.8                | 160°/130°            | -                              | -            | autoclavable    |

| Olliasofiic Efiaoscopes for Ebor                                |                                     |                                 |           |                                 |  |
|---|-------------------------------------|---------------------------------|-----------|---------------------------------|--|
| BF-UC180F   | 6.3                                 | 2.2                             | 120°/190° | -                               | 600  |
| Ultrasonic Endoscopes for EUS-                                  | -FNA                                |                                 |           |                                 |  |
| GF-UC140P-AL5   | 11.8                                | 2.8                             | 130°/90°  | 90°/90°                         | 1250   |
| GF-UCT140-AL5   | 12.6                                | 3.7                             | 130°/90°  | 90°/90°                         | 1250   |
| GF-UCT180   | 12.6                                | 3.7                             | 130°/90°  | 90°/90°                         | 1250   |
|   | Frequency<br>(MHz)                  | Working Lengtl<br>(mm)          | 1         | OD<br>(mm)                      | Min. Working Channel<br>(Ø)  |
| Ultrasonic Probes for EBUS                                      |                                     |                                 |           |                                 |  |
| UM-S20-17S  | 20                                  | 2150                            |           | max. 1.8                        | 2.0  |
| UM-S20-20R  | 20                                  | 2050                            |           | max. 2.0                        | 2.2  |
| UM-BS20-26R   | 20                                  | 2050                            |           | max. 2.6                        | 2.8  |
| 0101-0320-2011  | 20                                  | 2030                            |           | IIIax. 2.0                      | 2.0  |
| ON-BOZO-ZON   | Insertion Tube OD (mm)              | Distal End OD (mm)              |           | Channel ID (mm)                 | Bending<br>(up/down)   |
| Fibre Bronchoscopes   | Insertion Tube OD                   | Distal End OD                   |           | Channel ID                      | Bending  |
|   | Insertion Tube OD                   | Distal End OD                   |           | Channel ID                      | Bending  |
| Fibre Bronchoscopes   | Insertion Tube OD<br>(mm)           | Distal End OD<br>(mm)           |           | Channel ID<br>(mm)              | Bending<br>(up/down)   |
| Fibre Bronchoscopes BF-1T60                                     | Insertion Tube OD (mm)              | Distal End OD (mm)              |           | Channel ID (mm)                 | Bending<br>(up/down)   |
| Fibre Bronchoscopes BF-1T60 BF-P60                              | Insertion Tube OD (mm)  6.0 5.0     | Distal End OD (mm) 5.9 4.9      |           | Channel ID (mm)  3.0 2.2        | Bending<br>(up/down)<br>180°/130°<br>180°/130°                           |
| Fibre Bronchoscopes BF-1T60 BF-P60 BF-MP60                      | Insertion Tube OD (mm)  6.0 5.0 4.4 | Distal End OD (mm)  5.9 4.9 4.0 |           | 3.0<br>2.2<br>2.0               | Bending<br>(up/down)<br>180°/130°<br>180°/130°<br>180°/130°              |
| Fibre Bronchoscopes  BF-1T60  BF-P60  BF-MP60  BF-XP60          | 6.0<br>5.0<br>4.4<br>2.8            | 5.9<br>4.9<br>4.0<br>2.8        |           | 3.0<br>2.2<br>2.0<br>1.2        | Bending<br>(up/down)<br>180°/130°<br>180°/130°<br>180°/130°              |
| Fibre Bronchoscopes  BF-1T60  BF-P60  BF-MP60  BF-XP60  BF-3C40 | 6.0<br>5.0<br>4.4<br>2.8<br>3.6     | 5.9<br>4.9<br>4.0<br>2.8<br>3.3 |           | 3.0<br>2.2<br>2.0<br>1.2<br>1.2 | Bending<br>(up/down)<br>180°/130°<br>180°/130°<br>180°/130°<br>180°/130° |

Channel ID

(mm)

Bending (up/down) Bending (left/right)

Working Length (mm)

Insertion Tube OD

(mm)

Ultrasonic Endoscopes for EBUS-TBNA

\*with CV-190 only \*\*\*with CV-160 or higher •with CV-290/-260SL only ••with CV-290/-260SL/-240/-200 only \*table end 2.9 mm OT = One-Touch Connector

26 | Endoscope Portfolio | 27

# HIGH-QUALITY AND HOLISTIC RANGE OF ENDOTHERAPY INSTRUMENTS

A significant number of different diagnostic and therapeutic applications could be developed as a result of the exciting advancements in bronchoscopy. As a system supplier, Olympus consequently makes use of its expertise and synergies and offers a full range of well-designed, reliable, and versatile EndoTherapy instruments.

These "must-have" instruments will facilitate your daily tasks in the bronchoscopy suite:

#### **Diagnostic Instruments**

|                             | Model         | Article No. | Min. Working Channel Ø | Specifications  |
|-----------------------------|---------------|-------------|------------------------|---|
| Biopsy forceps              | FB-231D       | N1082020    | 2.0 mm                 | swinging oval cups, fenestrated, single-use               |
|                             | FB-211D       | N1081620    | 2.0 mm                 | swinging alligator cups, fenestrated, single-use          |
|                             | FB-52C-1      | 026659      | 2.0 mm                 | swinging alligator cups, rat tooth, fenestrated, reusable |
| Cytology brushes            | BC-202D-2010  | 026049      | 2.0 mm                 | brush: 2 mm diameter, 10 mm length, single-use            |
|                             | BC-202D-3010  | 026050      | 2.0 mm                 | brush: 3 mm diameter,10 mm length, single-use             |
| SmoothShot TBNA needles     | NA-401D-1321  | N1880630    | 2.0 mm                 | 21G, 13 mm length, single-use                             |
|                             | NA-411D-1521  | N1880930    | 2.0 mm                 | 21G, 15 mm length, side-hole, single-use                  |
|                             | NA-601D-1519  | N2369930    | 2.0 mm                 | 19G, 18 mm length, trocar type, single-use                |
| Metal sheath TBNA needles   | NA-1C-1       | 026550      | 2.0 mm                 | 21G, 13 mm length, ideal for TBNA of SPNs                 |
| EBUS-TBNA needles           | NA-201SX-4022 | N1775830    | 2.0 mm                 | 22G, 40 mm length, single-use                             |
|                             | NA-201SX-4021 | N2656630    | 2.2 mm                 | 21G, 40 mm length, single-use                             |
| Guide sheath system for SPN | CC-6DR-1      | N3042230    | 2.0 mm                 | bendable and rotatable guiding device, reusable           |
|                             | K-201         | N3041830    | 2.0 mm                 | GuideSheathKit: sheath, forceps, brush, single-use        |
|                             | K-203         | N3042030    | 2.6 mm                 | GuideSheathKit: sheath, forceps, brush, single-use        |

#### **Pediatric Instruments**

|                  | Model        | Article No. | Min. Working Channel Ø | Specifications                                |
|------------------|--------------|-------------|------------------------|---|
| Biopsy forceps   | FB-56D-1     | 025852      | 1.2 mm                 | rat tooth cups, reusable                      |
| Cytology brush   | BC-203D-2006 | N1077030    | 1.2 mm                 | brush: 2 mm diameter, 6 mm length, single-use |
| Grasping forceps | FG-55D       | 026746      | 1.2 mm                 | four-wire basket, single-use                  |
|                  | FG-54D       | 026742      | 1.2 mm                 | three-prong grasper, single-use               |
|                  | FG-36D       | 026793      | 1.2 mm                 | removal snare, single-use                     |

#### Therapeutic Instruments

|                        | Model    | Article No. | Min. Working Channel Ø | Specifications  |
|------------------------|----------|-------------|------------------------|---|
| Foreign body removal   | FG-17K-1 | 026755      | 2.0 mm                 | four-wire basket, 32 mm opening width, reusable             |
|                        | MA-479   | 026951      | -                      | handle, for use with FG-17K-1, reusable                     |
|                        | FG-25C-1 | 026244      | 2.6 mm                 | v-shaped forceps, 1.3 mm opening width, reusable            |
|                        | FG-26C-1 | 026233      | 2.6 mm                 | rat tooth forceps, 3.5 mm opening width, reusable           |
|                        | FG-20P-1 | 026266      | 2.0 mm                 | rubber tip jaws forceps, reusable                           |
| Electrosurgery         | CD-6C-1  | N1072530    | 2.0 mm                 | coagulation electrode, reusable                             |
|                        | KD-31C-1 | 026097      | 2.0 mm                 | spatula knife, reusable                                     |
|                        | SD-7C-1  | 026971      | 2.0 mm                 | snare, 23 mm loop diameter, reusable                        |
|                        | MAJ-377  | 028226      | 2.0 mm                 | sheath, for use with SD-7C-1, reusable                      |
|                        | FD-7C-1  | 024880      | 2.0 mm                 | hot biopsy forceps, reusable                                |
|                        | MH-264   | 027004      | -                      | handle, for use with KD-31C-1, SD-7C-1, & FD-6C-1, reusable |
| Injection needle       | NM-4L-1  | 026536      | 2.8 mm                 | 23 G, 4 mm length, single-use                               |
|                        | MAJ-67   | 026991      | 2.8 mm                 | sheath, for use with NM-4L-1, reusable                      |
| Spray catheter         | PW-6C-1  | 026027      | 2.0 mm                 | for fine and even mist, reusable                            |
|                        | MAJ-929  | 026028      | -                      | spray valve, for multiple spraying, reusable                |
| Washing pipe           | PR-2B-1  | 026900      | 2.0 mm                 | for rinsing and lavage, reusable                            |
| Balloon catheter       | B5-2C    | N3530530    | 2.0 mm                 | for lavage, blocking, tamponade, and sizing, single-use     |
|                        | B7-2C    | 026921      | 2.8 mm                 | for lavage, blocking, tamponade, single-use                 |
| Intra bronchial valves | IBV-V5   | N3495330    |                        | bronchial valve, 5 mm, single-use                           |
|                        | IBV-V6   | N3495430    |                        | bronchial valve, 6 mm, single-use                           |
|                        | IBV-V7   | N3495530    |                        | bronchial valve, 7 mm, single-use                           |
|                        | IBV-C26  | N3495230    | 2.6 mm                 | deployment catheter for bronchial valve, single-use         |
|                        | IBV-SK   | N3495630    | 2.0 mm                 | airway sizing kit for bronchial valve, single-use           |

28 | EndoTherapy Instruments | 29

# **USER TRAINING**

#### Dedicated User Training Is Necessary in order to Successfully Integrate Bronchoscopic Techniques into Clinical Practice.

With the support of renowned experts, Olympus is able to offer a broad range of training material and training courses in bronchoscopy, Medical Thoracoscopy, IBV, EBUS, EBUS-TBNA, and EUS-FNA.

| Article No. | Format            | Description  |
|-------------|-------------------|--|
| E0429934    | Poster            | Endoscopic Ultrasound – Diagnostics and Staging of Lung Cancer             |
| E0429849    | Laminated DINA4   | Endoscopic Ultrasound – Diagnostics and Staging of Lung Cancer             |
| E0429865    | Training software | Endoscopic Ultrasound – Diagnostics and Staging of Lung Cancer             |
| 029670      | DVD               | EBUS-TBNA Preparation Video  |
| 028061      | Laminated DINA4   | ViziShot Quick Reference Guide   |
| E0482749    | Laminated DINA4   | Preparation Instructions for the E0429049 GuideSheathKit Brochure          |
|             |                   | '  |
| E0429049    | Brochure          | GuideSheathKit   |
| E0482764    | DVD               | Practical Use of the Guide Sheath Technique                                |
| E0429562    | Reprint           | Ten Years of Scientific Study of EBUS-TBNA                                 |
| E0429415    | Reprint           | Principles and Practice of Endoscopic Ultrasound                           |
| E0482752    | Poster            | The Bronchus through the Bronchovideoscope                                 |
| 029674      | Laminated DINA4   | The Bronchus through the Bronchovideoscope                                 |
| E0429587    | Training software | Light and Sound in Bronchoscopy  |
| E0429431    | Reprint           | NBI Increases the Specificity of Bronchoscopic Early Lung Cancer Detection |
| E0482717    | Brochure          | Autofluorescence Imaging Clinical Cases                                    |
| E0429797    | Training software | Medical Thoracoscopy under Local Anesthesia                                |
| E0429141    | Brochure          | EVIS EXERA III – Advancing the Art of Bronchoscopy                         |
| E0429166    | Brochure          | IBV BLVR Patient Information   |
| E0429175    | Leaflet           | IBV BLVR Patient Selection Overview  |
| E0428870    | Brochure          | IBV Patient Selection Form   |
| E0429259    | Brochure          | IBV BLVR Study Summary   |
| E0429365    | Brochure          | IBV Air Leak Instructions  |
| E0429067    | Laminated DINA4   | IBV Procedure Overview   |
| E0428869    | Brochure          | IBV Emphysema Patient Selection  |





E0429934 Poster: N-staging nomenclature as proposed by IASLC













For ordering the training material, please contact your local sales representative.

Training Material | 31 30 | Training Material

# SOLUTIONS FOR BRONCHOSCOPY

