

**OLYMPUS**

## EBUS-TBNA

Looking and Sampling Beyond the Bronchial Wall



## Endobronchial Ultrasound – Transbronchial Needle Aspiration

EBUS-TBNA is a reliable and commonly established technique that enables visualization and sampling of mediastinal, central, and hilar lesions, as well as lymph nodes. With the ultrasound bronchoscope BF-UC190F inserted into the trachea or the esophagus, the accessible lymph node stations can be explored and the lesions outlined while offering you the freedom to select from different EBUS needle lineups and sizes depending on your needs.



### Linear Ultrasound Bronchoscope BF-UC190F

The BF-UC190F is the third generation of the reliable Olympus EBUS-TBNA endoscope. It enables enhanced access and control to allow staging and diagnosis of even difficult-to-reach lymph nodes and lesions.<sup>1</sup>

- **Powerful Angulation:** Up to 160° angulation for enhanced access to challenging target sites.
- **Unique, Compact Distal Tip:** Only 6.6 mm outer diameter and shorter rigid part of 25 mm for improved maneuverability.
- **Increased Puncture Performance:** 5° steeper puncture angle for smooth penetration of the bronchial wall.

This impressive EBUS-TBNA endoscope enables a wider field of application with its compact size while maintaining the large 2.2mm working channel and the compatibility to the full needle portfolio.



### Universal Endoscopic Ultrasound Center EU-ME2

The EU-ME2 brings real clarity to your EBUS procedures, supporting better detection and characterization of lesions. A variety of new features such as harmonic echo and elastography help to explore the future of endosonography. In addition, the EU-ME2 provides compatibility with linear endoscopes and radial ultrasound miniature probes.



### EBUS-TBNA for Reliable Staging and High Yield

EBUS-TBNA has proven not only to be of great value for lymph-node staging (N-staging) but also for the strategic use of cytology and histology samples for molecular analysis. The acquired specimen can be used to obtain a reliable diagnosis as well as for cell-block preparation, immunochemistry, and molecular studies.

### EBUS-TBNA Needles

Olympus is unique in offering a 19G EBUS-TBNA needle in addition to the 21G, 22G, and 25G needles. But now it also provides the second generation of EBUS needles – the ViziShot 2. While the entire portfolio offers the already established safety mechanisms and excellent ultrasound visibility, Olympus now provides a needle for every situation – expanding your possibilities in EBUS-TBNA.

#### ViziShot 2 FLEX

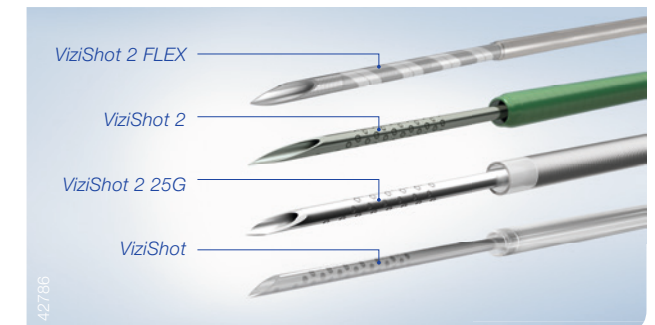
- Largest EBUS needle with a 19G diameter.
- Supports histological sampling for suspected sarcoidosis and lymphoma but also helps to provide more tissue for advanced molecular analyses.
- An ally for special indications but also whenever superior flexibility is needed.

#### ViziShot 2

- The new, improved 21G, 22G, and 25G needles.
- Smooth needle penetration thanks to sharper needle tip.
- Better needle control with the new ergonomic handle design.

#### ViziShot

- The reliable and long-established EBUS-TBNA needle.

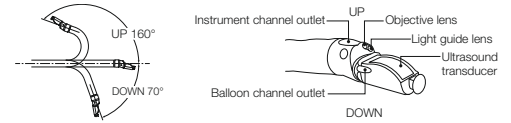


<sup>1</sup> Fujino K, Ujiie H, Igai H, Kinoshita T, Lee C, Hindy S, Effat A, Yasufuku K. Human Ex Vivo Lung Evaluation of the Next Generation Convex Probe Endobronchial Ultrasound Bronchoscope. CHEST Journal 2017;152(4):A884.

# EBUS-TBNA

## Specifications at a Glance

### BF-UC190F



<b>Optical System</b>	Field of View	80°
	Direction of View	20° forward oblique
	Depth of Field	2–50 mm
<b>Insertion Tube</b>	Distal End Outer Diameter	6.6 mm
	Insertion Tube Outer Diameter	6.3 mm
	Working Length	600 mm
<b>Instrument Channel</b>	Channel Inner Diameter	2.2 mm
	Direction from Which EndoTherapy Accessories Enter and Exit the Endoscopic Image	
<b>Bending Section</b>	Angulation Range	Up 160°, down 70°
<b>Total Length</b>		890 mm

### Compatible Ultrasound Systems

The subset of features listed here refers to the usage of the ultrasound processors in conjunction with the BF-UC190F endoscope.

#### Hitachi Arietta 850



83564

#### Olympus EU-ME2 Premier Plus



7038

<b>Ultrasound Cable</b>	MAJ-2056 with junction box JB-294	MAJ-2056
<b>Display Mode</b>	B mode, M mode, eFLOW mode, THI-HdT mode, Elastography*	B mode, H-FLOW mode, THE mode, Elastography*
<b>Scanning Method</b>	Electronic curved linear array	
<b>Scanning Direction</b>	Parallel to the insertion direction	
<b>Frequency</b>	5/7.5/10/12 MHz	5/6/7.5/10/12 MHz
<b>Scanning Range</b>	65°	
<b>Other compatibilities</b>	Compatible with extracorporeal ultrasound probes	Compatible with EBUS radial miniature probes
<b>Contact Method</b>	Balloon method**, Direct-contact method	

\* Further modes available, please check instruction manual for details.

\*\* Balloon MAJ-1351 can be used with the BF-UC190F.

### EBUS-TBNA Needles

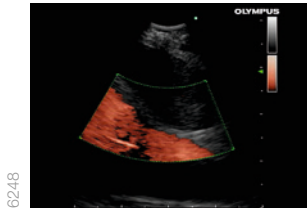
#### ViziShot and ViziShot 2

Article Name	Min. Working Channel Ø	Needle Length	Needle Gauge
NA-201SX-4021	2.0 mm	20–40 mm	21G
NA-201SX-4022	2.0 mm	20–40 mm	21G
NA-U401SX-4021	2.0 mm	20–40 mm	21G
NA-U401SX-4022	2.0 mm	20–40 mm	22G
NA-U403SX-4019	2.2 mm	20–40 mm	19G
NA-U401SX-4025N	2.0 mm	20–40 mm	25G

Olympus reserves the right of errors, modification and changes of the service and/or product offerings.

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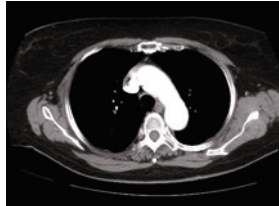


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**4R** Enlarged paratracheal lymph node. Power flow mode confirms a vessel in close vicinity to the lymph node.



6252

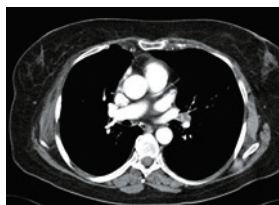


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**4L** Staging procedure in a patient with NSCLC.



6255



10672

**11L** Staging procedure in a patient with NSCLC.

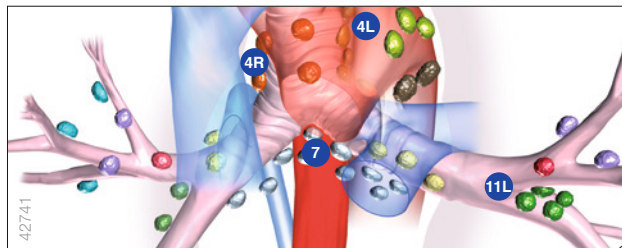


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6254

**7** A patient suspected of having mediastinal lymphoma was referred for EBUS-TBNA and diagnosed as having sarcoidosis.



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For more information, please visit

[www.olympus.eu/pulmonology](http://www.olympus.eu/pulmonology) [www.olympus.eu/et-catalog](http://www.olympus.eu/et-catalog)

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