WABIP Newsletter

Volume 14

Issue 01

January 2026

Inside This Issue

WABIP Newsletter

VOLUME 14, ISSUE 1 JANUARY 2026

WABIP 2025 Webinar Brings Global Community Together for Knowledge Exchange in Interventional Pulmonology

The World Association for Bronchology and Interventional Pulmonology convened its highly anticipated webinar on September 13-14, 2025, uniting 1,349 registrants from around the globe for two intensive days of learning and collaboration. Featuring 32 chairs and speakers across 29 lectures, the event provided a comprehensive platform for discussing the latest advances in bronchoscopy and interventional pulmonology while maintaining focus on evidence-based practice and equitable global access.

Day 1: From Fiberoptic to Robotic-Assisted Bronchoscopy

The opening day began with a tribute to Dr. Shigeto Ikeda, whose pioneering work laid the foundation for modern bronchoscopy. Sessions progressed through the evolution of peripheral bronchoscopy techniques, with experts demonstrating advanced approaches including airway mapping, radial EBUS, and fluoroscopic lung biopsy. Particular emphasis was placed on navigating challenging peripheral lung nodules using virtual bronchoscopy combined with real-time imaging and cryobiopsy to maximize diagnostic yield.

A highlight of Day 1 was the comprehensive evaluation of robotic bronchoscopy systems—ION, Monarch, and Galaxy—examining their navigation technologies, diagnostic performance, and integration with advanced imaging modalities such as augmented fluoroscopy and cone beam CT. Speakers addressed practical challenges including CT-to-body divergence, atelectasis management, and optimal patient selection strategies.

The focus then shifted to mediastinal staging, where presenters reinforced EBUS-TBNA as the gold standard for mediastinal evaluation, having largely supplanted traditional mediastinoscopy. Its critical role in obtaining tissue for molecular diagnostics—essential for personalized lung cancer treatment—was emphasized. A pathologist's perspective provided valuable insights into what constitutes "adequate" biopsy samples, stressing that tissue quality and tumor cellularity often matter more than quantity.

Day 1 concluded with a frank roundtable discussion on balancing technological enthusiasm with pragmatism. Panelists from diverse healthcare settings emphasized the need for robust randomized controlled trials to demonstrate real clinical advantages rather than relying on marketing claims alone. Economic barriers to adopting expensive technologies and the importance of patient-centered care emerged as central themes.

Day 2: From Rigid to Flexi-Rigid Thoracoscopy

The second day explored thoracoscopy's evolution since Jacobaeus, highlighting its transformation from diagnostic to operative applications. The pleural disease session delivered practice-changing insights: thoracic ultrasound should be routine for pleural effusions, often surpassing CT for malignancy diagnosis. Notably, thoracoscopy offers the highest diagnostic yield (93%) and best molecular marker sufficiency (95%), crucial given that cytology frequently provides insufficient material for molecular analysis.
Practical updates included the new BTS traffic light pH system for pleural infections and evidence supporting TPA+DNase combination therapy. For malignant effusions, indwelling pleural catheters were positioned as first-line therapy, offering superior symptom control and shorter hospital stays compared to talc pleurodesis.

Innovation sessions showcased emerging techniques including Fantoni translaryngeal tracheostomy for complex airway procedures, robotic rigid bronchoscopy development, and custom 3D-printed stents for complex anatomies. For benign lung disease, advances included polymer sealants enabling valve placement despite incomplete fissures in COPD, and cryobiopsy emerging as a robust alternative to surgical lung biopsy for interstitial lung disease diagnosis.

Global Access and Training: WABIP's Commitment

Perhaps most significant was the concluding discussion on overcoming barriers to technology, training, and expertise access. WABIP's Interventional Pulmonology Institute (IPI) was highlighted as a model program offering free training and financial support to fellows from developing countries. Panelists from Morocco, Russia, Serbia, and Portugal shared local challenges and solutions, advocating for a stepwise technology adoption approach—prioritizing high-impact, cost-effective tools like EBUS over expensive robotics initially.

The webinar reinforced that interventional pulmonology's future depends not merely on adopting advanced technologies, but on judiciously integrating them based on robust evidence, cost-effectiveness, and patient-specific needs. Through initiatives like the IPI and sustained international collaboration, WABIP continues championing its mission: expanding access to high-quality interventional pulmonology care worldwide, ensuring cutting-edge bronchoscopy becomes both effective and equitably accessible across all healthcare settings.

Technology Corner

External Imaging for Bronchoscopy
Digital Tomosynthesis, Cone Beam Computed Tomography, and Augmented Fluoroscopy

Karan Singh, MBBS
Interventional Pulmonary Fellow,
University of Chicago

Ali Musani MD
Professor of Medicine and Surgery
Division Chief, Pulmonary Medicine
Director, Western Region Interventional Pulmonology, Northwell Health
Lenox Hill Hospital

Introduction:

Over the last decade, three external imaging modalities—digital tomosynthesis (DTS), cone-beam computed tomography (CBCT), and augmented fluoroscopy (AF) have emerged as transformative tools in advanced diagnostic bronchoscopy. Each carries unique physics principles, distinctive trade-offs in spatial resolution and radiation exposure, and varying levels of integration with robotic and navigational bronchoscopy platforms. Understanding how these modalities differ is essential for institutions seeking to optimize diagnostic yield while balancing patient safety, workflow, and cost.

Traditional CT is still important as it has a broad field of view (FoV) relative to CBCT and DTS, as well as better soft-tissue resolution (the ability to distinguish between objects or structures differing in densities). This superior image quality makes it invaluable for pre-procedure planning, serving as a virtual map for navigation during a diagnostic bronchoscopy procedure.

Background:

Intra-operative systems rely on a cone beam emitter (as opposed to a fan beam in traditional CT scans), which creates a clinically useful 2D image in a single shot. Standard fluoroscopy systems can only perform limited rotations, typically 60 to 100 degrees, which, through post-imaging processing, can be reconstructed to create a three-dimensional image. This is called digital tomosynthesis (DT). More expensive fluoroscopy systems can perform a wider sweep, approaching 200 degrees of rotation, to create a 3D image, which is termed Cone Beam CT(CBCT). Augmented fluoroscopy (AF) is not a standalone imaging modality but rather an overlay technique. It superimposes virtual targets onto live fluoroscopy in real time.

The aim of intra-operative imaging is to identify and minimize discordance between the lung at the time of procedure vs at the time of the pre-procedure CT. Clinicians have identified CT-body-divergence (CTBD) and atelectasis as causes of discordance that affect diagnostic yield. Navigational platforms, whether robotic-assisted or using virtual navigation, rely on a virtual airway map created from a pre-procedural CT scan to locate target lesions. This CT scan is ideally performed at total lung capacity, which cannot be reproduced intraoperatively. The discrepancies between expected and real-time lesion locations—due to changes in lung anatomy—can lead to errors, known as CT-to-body divergence. Respiratory motion poses a significant challenge in biopsies, as peripheral nodules can move throughout the respiratory cycle and are also associated with decreased diagnostic yield. Intraoperative imaging can identify atelectasis; however, it cannot mitigate this, which can be minimized by specialized ventilation strategies.

Radiation exposure:

Radiation dose is derived from two sources: Primary and Scatter. Primary X-ray refers to the radiation emitted directly from the X-ray beam, constituting the dose administered to the patient during imaging. Scatter radiation happens when the main X-ray beam hits objects like the patient or table, causing the X-ray beam to deflect, causing exposure for the staff in the room. This depends on the patient's body size, with higher BMI producing more scatter. Reducing scatter radiation exposure involves three key measures: time, shielding, and distance. The WABIP has addressed radiation principles, protection, and reporting in a published white paper.

Physics:

Digital Tomosynthesis:

Tomosynthesis employs reconstruction algorithms to generate images from exposures of a cone-beam sweep over a defined angular range (1). The X-ray source and detector move circularly, capturing roughly 50 images over an angle range of roughly 50°. Images are reconstructed using an algorithm. The spatial resolution depends on the angular coverage and the number of images for the reconstruction. DT does not produce true volumetric CT data and relies heavily on reconstruction algorithms to suppress blur. As compared to CBCT, DT has a shallower depth of focus and, therefore, isocentering the object of interest is key. If the nodule is outside of the isocenter, the image may be too blurry for proper interpretation

CBCT:
Cone-beam computed tomography differs from tomosynthesis by employing a wider scan angle around the patient, acquiring 180-400 images depending on the protocol. Image reconstruction is complete and lacks blurred versions of the surrounding anatomy. CBCT offers
visibility in multiple planes showing adjacent structures, including bone, soft tissue, and cartilage (20). The use of a larger beam, increased angulation, and a broader field of view contributes to enhanced image quality, albeit at a higher radiation dose. As with tomosynthesis, additional scans will increase the radiation dose.

Augmented Fluoroscopy:

AF identifies and labels a lung lesion on a standard 2D fluoroscopy image as well as the pre-planned pathways, allowing for real-time visualization of the relationship between the nodule and biopsy tools. There is no additional radiation from AF.

Clinical Applications:

DTS and CBCT are both increasingly used in conjunction with electromagnetic navigation (EMN) and robotic bronchoscopy. Both can confirm tool-in-lesion accuracy, but have different characteristics summarized in Table 1

Currently, there are three RAB platforms on the market: the Monarch platform by Auris Health, the Ion endoluminal robotic bronchoscopy platform by Intuitive Surgical and the Galaxy System by Noah Medical. The Galaxy System is the only one that integrates proprietary DTS software, while other systems can use third-party systems like the AI-powered Lung Vision(Body Vision Medical) or Illumsite (Medtronic). The Ion system also integrates with mobile CT platforms like Cios or OEC.

Conclusion:

Digital tomosynthesis, cone-beam CT, and augmented fluoroscopy each offer unique contributions based on their physics principles, image quality, and safety profiles. DTS provides low-dose, rapid quasi-3D lesion visualization; CBCT delivers unmatched volumetric accuracy for small and difficult targets; and AF enhances real-time navigation through intelligent overlays. Together, these technologies mitigate CT-to-body divergence, improve tool-in-lesion confirmation, and elevate diagnostic yield in peripheral pulmonary lesion evaluation. The future of bronchoscopy lies in adaptive, multimodal imaging ecosystems that dynamically pair the right modality with the right patient and lesion.

	Digital Tomosynthesis	Cone beam CT
Radiation dose	Less	Significantly higher
Need for special Fluoroscopy machine	No	Yes
Tool in lesion	Yes	Yes
Resolution	Provides high quality 2D images with low resolution compared to CBCT. Lung nodules are able to be visualized	High-resolution, 3D images. Can view some soft tissue components as well
Spin and processing time	Less	More
Cost	Less	More
Concomitant augmented fluoroscopy	Yes(multiple platforms)	Yes(Ion)

Table 1.

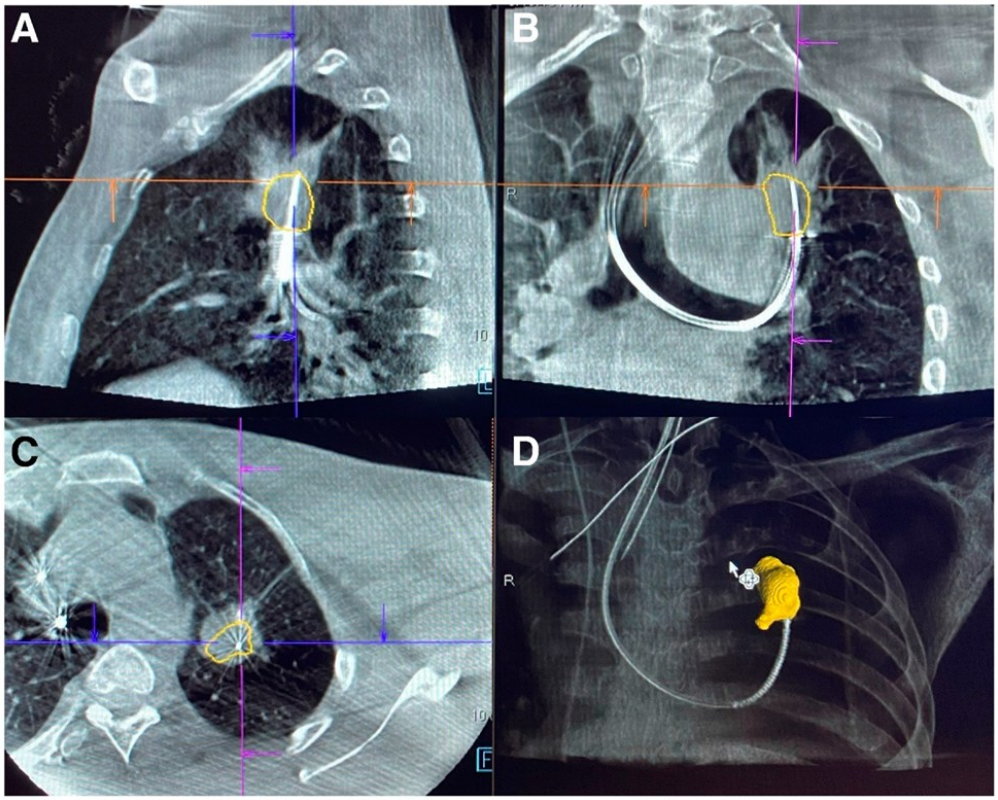


Figure 1. Multi-plane images from fixed CBCT of lung mass with biopsy needle in lesion using robotic bronchoscopy. (A) Sagittal section. (B) Coronal section. (C) Axial section. (D) 3D reconstruction. (3)

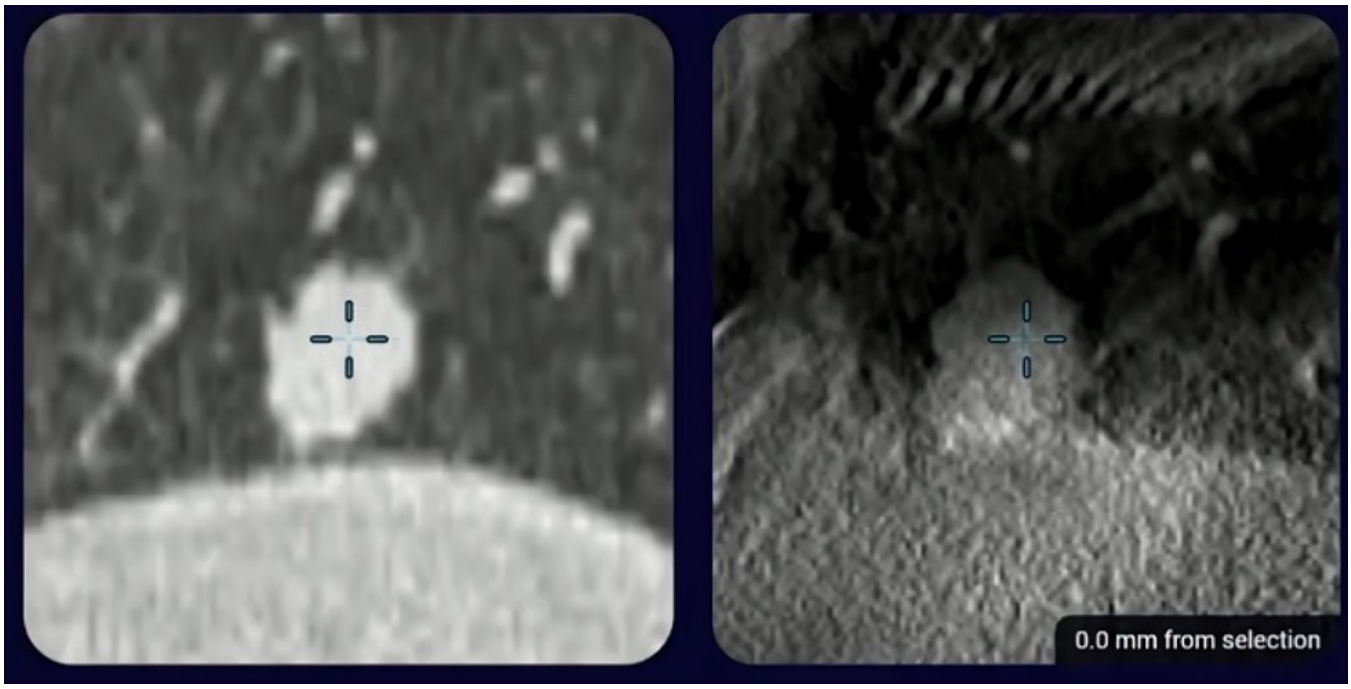


Figure 2: Digital Tomosynthesis: digital tomosynthesis on the right with the representative pre-op CT chest on the left (Author generated figure).

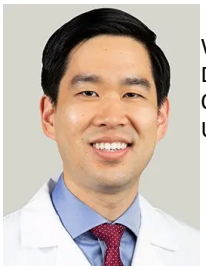
References

1. Podder et al. Thoracic Dis. *17*(9), 7379.
2. Pritchett MA et al. J Bronchology Interv Pulmonol. 2018;25:274-823.
3. Jain A et al. Diagnostics 2023. 13, 2580. https://doi.org/10.3390/diagnostics13152580

Ultrasound and Bronchoscopy for Tracheostomy

Karan Singh, MBBS
Division of Interventional Pulmonology, University of Chicago

Shreya Podder, MD
Division of Interventional Pulmonology, University of Chicago



William **Gao, MD**
Division of Otorhinolaryngology, University of Chicago

Introduction

The earliest recorded percutaneous tracheostomy dates back to 1626, when an Italian surgeon Sanctorio Sanctorius used a “ripping needle” to introduce a silver cannula into the tracheal lumen before withdrawing the needle. Percutaneous dilatational tracheostomy (PDT) has become the most commonly utilized approach in many ICUs across the world for patients needing prolonged mechanical ventilation.

Ultrasound and bronchoscopy serve complementary roles in the performance of this procedure. Ultrasound helps define anatomy and identify contraindications to the percutaneous approach and bronchoscopy allows identification of the correct interrcartilagenous space between the tracheal rings for puncture, measurement of distance from the cords and also facilitates suction to clear bloody secretions. The rates of procedural complications are similar with either technique(1)

Planning for Tracheostomy using Ultrasound

Pre-procedure ultrasound serves as a roadmap, allowing clinicians to tailor the approach to each patient. Ultrasound anatomy of the trachea and its surrounding structures was first described in 1995(2), and the first real-time ultrasound-guided PDT was reported in 1999(3). Although pre-procedural ultrasound is ideally used in every patient, it is especially valuable in those with obesity or short necks where anatomy may be obscured and in patients with prior neck surgery or radiation, raising uncertainty about vascular anatomy.

A high frequency vascular probe is preferred for its superior image quality. While its depth of penetration is limited compared with phased-array or curvilinear probes, this is not a drawback for this procedure. Scanning is performed in both transverse and longitudinal planes, with careful attention to identify the innominate artery. The probe is positioned in the sternal notch to visualize the pleural line as a hyperechoic band between the acoustic shadows of the sternoclavicular junction. The probe is then swept caudally to cephalad until the innominate artery is identified as a pulsatile structure crossing anterior to the trachea. Occasionally, a high riding innominate artery is seen (Figure 1) which is a contraindication to this procedure.

Next, the pre tracheal structures are identified. Tracheal rings appear as inverted U-shaped structures with a hyperechoic line in the posterior region that are accompanied by reverberation artifacts at the mucosa-air interface. The thyroid lobes and isthmus are located lateral and anterior to the trachea, respectively. They are identified as isoechoic structures posterior to the sternohyoid muscle. Occasionally, veins can be identified in the path of the puncture site. Veins larger than 4mm are associated with an increased bleeding risk (Figure 2) and may be considered a relative contraindication(4). . Almost all fatal complications of PDT result from vascular injury(5) and preoperative ultrasound may identify patients at higher risk.

One limitation of ultrasound is that the needle can be visualized only until it enters the trachea and inadvertent posterior wall puncture cannot be identified. Nonetheless, ultrasound can measure the pretracheal distance and the distance to the tracheal midpoint, helping operators assess the margin of safety for needle insertion and even decide on type of trachesotomy tube selection (i.e. choosing a proximal XLT) While ultrasound is used as a “point and poke” modality, real-time needle tracking can be applied in challenging cases.

Post procedure, pneumothorax can be identified with ultrasound as well. While the sensitivity of ultrasound for identifying pneumothorax is higher than chest radiography, it is not very specific. For this reason, lung sliding is assessed both before and after the procedure, with new absence of sliding suggesting pneumothorax and allowing early confirmation before obtaining a chest radiograph. Chest radiograph can identify other complications beside pneumothorax and should be considered in patients where bronchoscope guidance was not used or where operator noted difficulty with procedure(5,6)

Performing the tracheostomy with bronchoscopy

Bronchoscopic visualization allows for confirmation of midline placement of the needle and guide wire, safe withdrawal of the endotracheal tube, and avoidance of paratracheal placement or injury to the posterior tracheal wall. Potential drawbacks include hypercapnia, increased cost and damage to the bronchoscope from the needle. The degree of ventilatory impairment is inversely proportional to the size of the endotracheal tube (ETT). Usage of a disposable bronchoscope negates the fear of bronchoscope damage but may increase overall cost and there are environmental sustainability concerns about single use scopes.

Our practice begins with a quick airway examination through the endotracheal tube (ETT). The ETT is then slowly retracted under bronchoscopic guidance to the level of the cricoid cartilage after which the cuff is deflated. Retraction of ETT is continued until the cricothyroid membrane is visualized, allowing identification of the cricoid cartilage. The ETT tip is positioned at the level of the cricoid cartilage and the cuff of the ETT is re-inflated. Bronchoscopy then confirms midline placement of the needle, and cannula and identifies any injury to the tracheal rings during dilation. Proper positioning of the tracheostomy tube is also confirmed bronchoscopically with care taken to make sure there is no pressure on the posterior wall or sidewalls of then trachea, which could promote granulation tissue formation(Figures 3-6)

After placement of the tracheostomy tube, we document the distance from carina to the distal tracheostomy tube as well as distance from vocal cords to the stoma.

Quality Control

Incorporation of ultrasound findings and bronchoscopic confirmation into procedural notes fosters accountability and provides traceable documentation for morbidity reviews. Storing short video clips of needle entry or tracheal visualization can be a valuable educational and quality improvement tool as well.

Conclusion

Incorporating ultrasound and bronchoscopy into PDT is not just about using more tools–it is about seeing more, understanding more, and reducing uncertainty. Ultrasound refines entry while bronchoscopy safeguards the airway. Together, they transform tracheostomy from a technically feasible act to a precisely guided, team-based intervention.

References

1. Gobatto ALN. Intensive Care Med. 2016 Mar;42(3):342-351. doi: 10.1007/s00134-016-4218-6. Epub 2016 Feb 1. PMID: 26831676
2. Bertram S et al. J Oral Maxillofac Surg 1995;53(12):1420–4
3. Sustic A et al. Acta Anaesthesiol Scand 1999;43(10):1078–80
4. Meredith S et al. J Intensive Care Med. 2024 May;39(5):447-454. doi: 10.1177/08850666231212858. Epub 2023 Nov 6. PMID: 37931902
5. Gilbey P. Am J Otolaryngol. 2012 Nov-Dec;33(6):770-3. doi: 10.1016/j.amjoto.2012.07.001. Epub 2012 Aug 22. PMID: 22921243
6. Datta D et al. Chest. 2003 May;123(5):1603-6. doi: 10.1378/chest.123.5.1603. PMID: 12740280
7. Yeo WX et al. Clin Otolaryngol. 2014 Apr;39(2):79-88. doi: 10.1111/coa.12233. PMID: 24575958

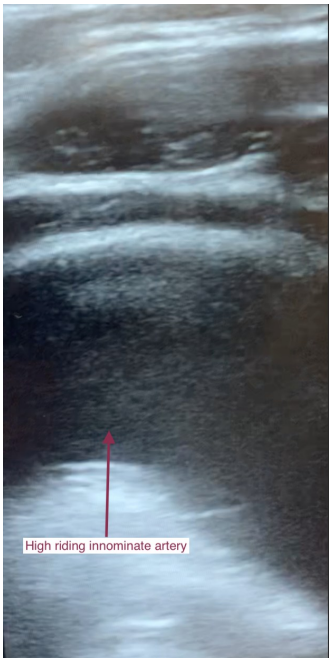


Figure 1.

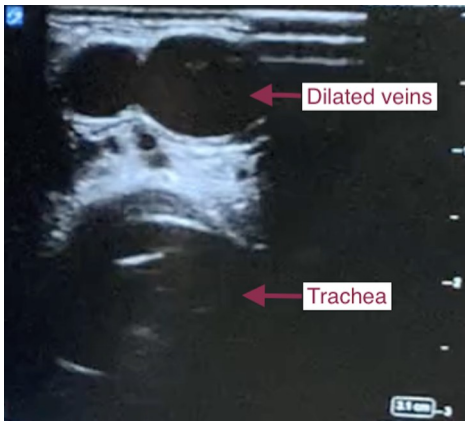


Figure 2.

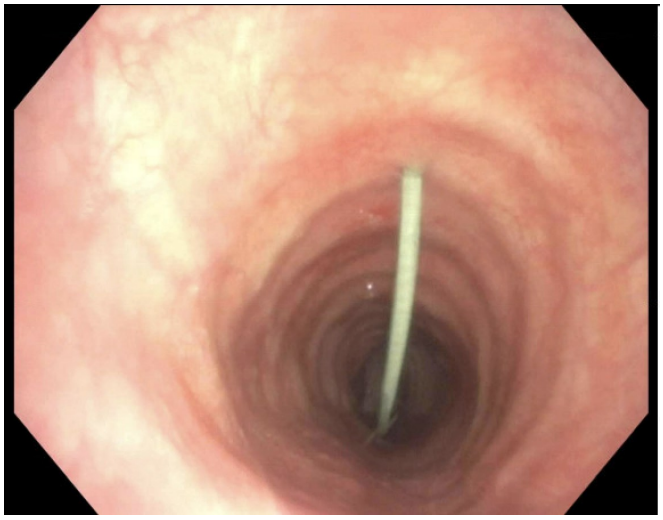


Figure 3.

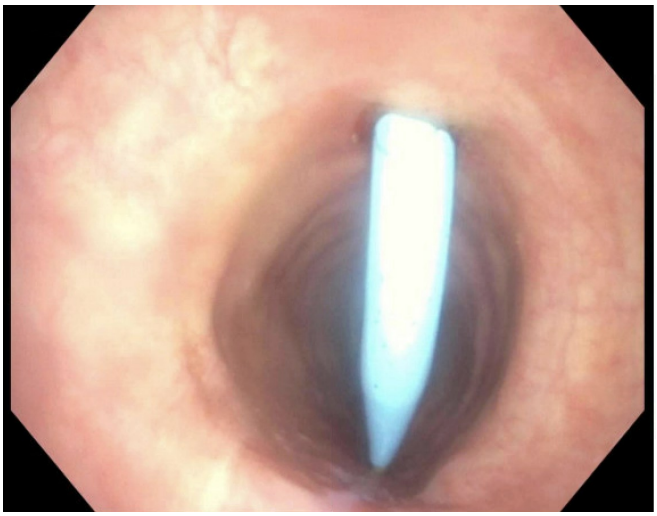
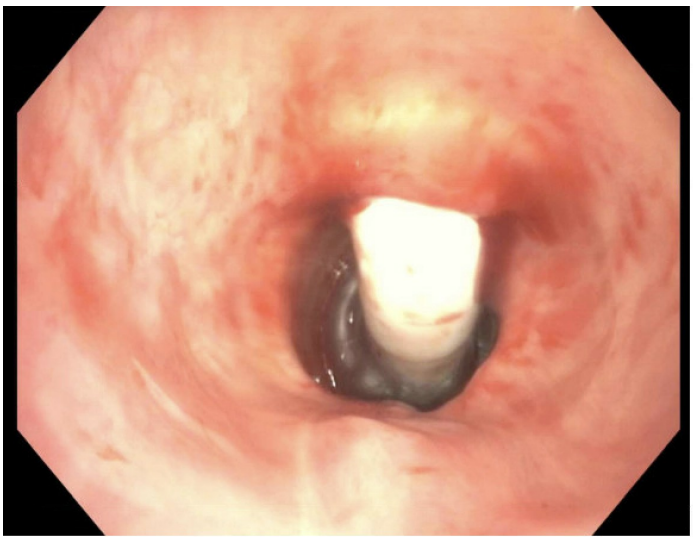


Figure 4.



Figur**e 5.**

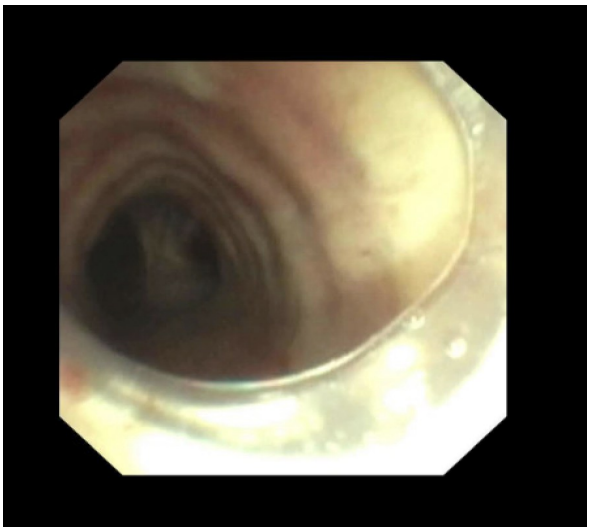


Figure 6.

Best Image Contest

WABIP Best Image Contest 2026

Image 1 of 3

Pleural Diseases

Multiple enumerous pleural hydatid cysts

Credits / Image courtesy of

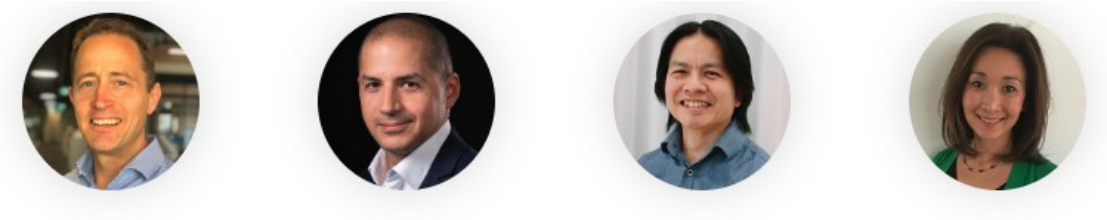
Ahmed Gad

This image is 1 of 3 selected among 100+ submissions to our Best Image Contest held in late 2025. Our next Image Contest will open later this year. We look forward to receiving your image submissions.

We are thrilled to announce that the 24th World Congress of Bronchology and Interventional Pulmonology (WCBIP 2026) will take place 3–6 December 2026 in the vibrant city of Melbourne, Australia.

Hosted by the World Association for Bronchology and Interventional Pulmonology in partnership with the Thoracic Society of Australia and New Zealand, this premier global event will bring together leading experts, innovators, and thought leaders to share cutting-edge research, clinical practices, and advancements in interventional pulmonology.

The Congress will be led by an exceptional team:



Prof Dan Steinfort
Congress Co-President

A/Prof Arash Badiei
Congress Co-President

Prof Phan Nguyen
Scientific Committee Co-Chair

Dr Elaine Yap
Scientific Committee Co-Chair

Key Dates to Remember

- 22 January 2026 – Earlybird registration and abstract submissions open
- 24 September 2026 – Earlybird registration deadline
- 3–6 December 2026 – Congress dates

Registration

Registration fees are structured to ensure accessibility for the global interventional pulmonology community, with discounted rates based on country income classification (World Bank Index), professional position, and registration timing.

Earlybird rates (until 24 September 2026) start from:

- AUD $550 for students and non-physicians
- AUD $700 for physicians from lower-middle and low-income countries
- AUD $1,100 for physicians from high and upper-middle-income countries

REGISTER NOW at https://wcbip2026.com/registration

Please note: Workshop spaces are limited and expected to sell out quickly, so early registration is strongly encouraged.

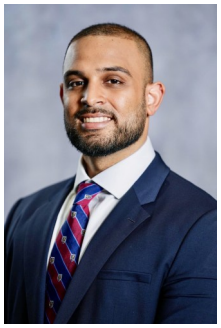
Call for Abstracts

Abstract submissions are now OPEN at https://wcbip2026.com/abstracts Presenting your research at WCBIP 2026 is an incredible opportunity to gain international recognition, receive valuable feedback from leading experts, and contribute to shaping the future of bronchology and interventional pulmonology.

For more information and to register when applications open, visit https://wcbip2026.com

Research

Electrifying insights in bronchoscopic Pulsed Electric Field (PEF) ablation



Mateus Fernandes, MD
Chief Fellow, Division of Pulmonary,
Critical Care and Sleep Medicine
Lenox Hill Hospital, Northwell Health,
New York, NY.

Ali Musani MD
Professor of Medicine and Surgery
Division Chief, Pulmonary Medicine
Director, Western Region Interventional
Pulmonology, Northwell Health
Lenox Hill Hospital

Recent advances in bronchoscopic pulsed electric field (PEF) ablation are reshaping the therapeutic landscape for patients with metastatic malignancies, including lung cancer. PEF utilizes short, high-voltage pulses to permeabilize cell membranes, a process termed electroporation [1,2]. This disrupts membrane integrity, induces nanopore formation, and triggers intracellular signaling cascades, leading to nonthermal cell death, while preserving the extracellular matrix and minimizing collateral damage to adjacent critical structures. Distinct from other modalities of ablation, PEF activation may also lead to the release of tumor antigens, which promote immune activation. The immune response may lead to secondary benefits beyond the focal ablation (abscopal effect), which can be synergistic or additive to other treatment modalities [1-3].

PEF ablation can be performed using a transthoracic or robotic bronchoscopic approach when targeting pulmonary nodules or masses, or under endobronchial ultrasound guidance when targeting mediastinal and hilar lymph nodes [1, 2]. Following tool-in-lesion confirmation, the nodule dimensions are measured, and PEF energy is then administered through the needle (termed a PEF activation), ensuring controlled ablation of the lesion with minimal impact on surrounding tissue [1], as shown in Figure 1.

A recent multicenter retrospective analysis of 41 patients with progressive stage IV non-small cell lung cancer (NSCLC), who had failed prior systemic therapies, demonstrated a marked survival advantage for those treated with PEF [1]. The 1-year progression-free survival (PFS) was 63.2% and overall survival (OS) was 74.3% in the PEF cohort, compared to 11.8% and 33% in a propensity-matched control group receiving standard systemic therapy. Hazard ratios for PFS and OS were 3.66 and 3.5, respectively, both statistically significant, underscoring the potential of PEF to improve outcomes in a population with otherwise poor prognosis.

Research

Prospective data from the AFFINITY trial further support the efficacy of PEF ablation. The AFFINITY trial is a prospective, open-label study evaluating the safety, immunological effects, and preliminary efficacy of the Aliya PEF system in patients with stage IV lung cancer or with metastatic disease to the lung [2]. PEF activations were performed with primarily robotic bronchoscopy to treat lesions in 28 patients, who were then followed closely and received adjuvant therapy at the discretion of the treating physician. Six-month imaging revealed stable disease in 67% of the ablation-only group, while the remaining 33% had a local partial response. In those who received adjuvant therapy, 38% achieved stable disease, 50% had local partial response, and 1 patient showed complete local response. Across both cohorts, only 1 out of 28 patients had local disease progression. These results suggest that PEF can achieve durable local control even in the absence of systemic therapy [2], however longer-term follow-up study is required.

As noted earlier, a unique feature of PEF ablation is its capacity to modulate the tumor microenvironment and stimulate systemic anti-tumor immune response [1-3]. The AFFINITY trial and related translational studies have demonstrated dynamic changes in circulating immune cell populations following PEF, including activation of T cells and plasma cell expansion. In the AFFINITY trial, 58% of patients exhibited increased tumor-specific IgG antibodies post-PEF (measured via ELISA following treatment), with a strong correlation (R=0.80) between antibody levels and plasma cell expansion. [3]

While these early results are compelling, further prospective randomized trials are needed to confirm efficacy, define optimal patient selection, and clarify the role of PEF in combination with systemic therapies. Ongoing research will further elucidate the mechanistic basis of PEF-induced immune activation and its clinical implications. Larger studies are also needed to assess for less common adverse events.

In summary, bronchoscopic PEF ablation offers a novel, nonthermal approach to local and systemic cancer control in advanced lung cancer, with robust safety, promising efficacy, and unique immunological benefits. The use of robotic bronchoscopy and the tool-in-lesion technique in the AFFINITY trial highlights the precision and safety of this approach in clinical practice.

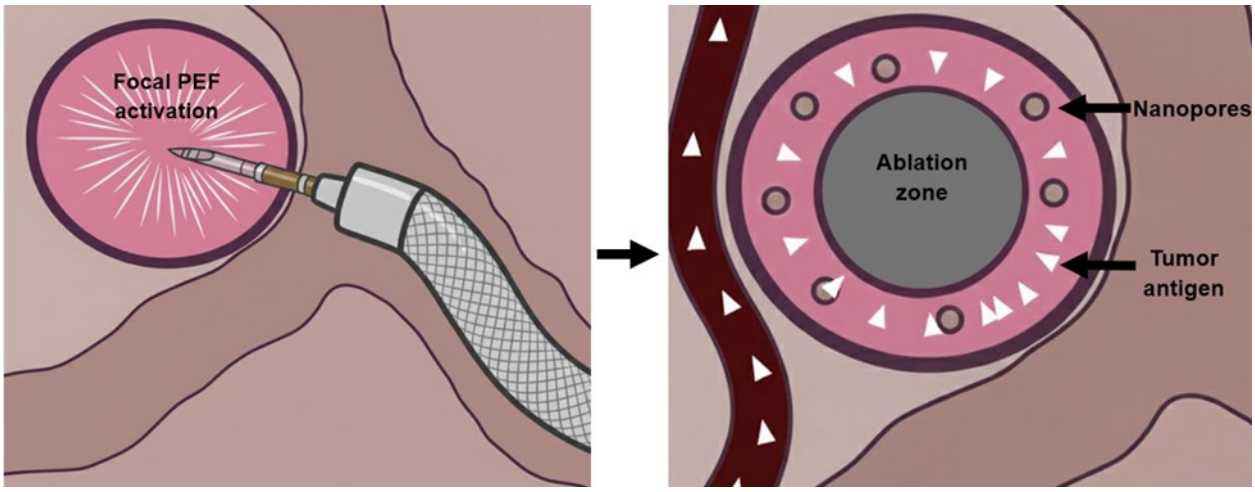


Figure 1: Activation and effects of pulsed electrical field activation within a target lesion. Activation creates a focal ablation zone, leads to nanopore formation, and may release tumor antigen, thus inducing an immune response.

References:

1. **Moore WH et al. Lung Cancer. 2025;204:108575. doi:10.1016/j.lungcan.2025.108575.**
2. **Moreno-Gonzalez A et al. Cancers. 2025;17(21):3495. doi:10.3390/cancers17213495.**
3. **Nafie E et al.. J Clin Oncol. 2025;43(16 suppl):e20503. doi:10.1200/JCO.2025.43.16_suppl.e20503.**

WABIP ACADEMY- WEBCASTS

The WABIP has started a new education project recently: *THE WABIP ACADEMY.* The WABIP Academy will provide free online webcasts with new and hot topics that will interest pulmonologists and interventionalists.

Current webcast topic: **Tissue acquisition for biomarker directed therapy of NSCLC**

You can reach these webcasts by using this link: http://www.wabipacademy.com/webcast/

Links

www.bronchology.com	Home of the Journal of Bronchology
www.bronchoscopy.org	International educational website for bronchoscopy training with u-tube and facebook interfaces, numerous teachiing videos, and step by step testing and assess ment tools
www.aabronchology.org	American Association for Bronchology and I nterventional Pulmonology (AABIP)
www.eabip.org	European Association for Bronchology and Interventional Pulmonology
www.chestnet.org	Interventional Chest/Diagnostic Procedures (IC/DP) NetWork
www.thoracic.org	American Thoracic Society
www.ctsnet.org	The leading online resource of educational and scientific research information for cardiothoracic surgeons.
www.jrs.or.jp	The Japanese Respirology Society
sites.google.com/site/asendoscopiarespiratoria/	Asociación Sudamericana de Endoscopía Respiratoria

OLYMPUS

Enhanced access and control to allow staging and diagnosis

Better access to difficult-to-reach lymph node stations
The powerful angulation supports smoother insertion to the upper/lower lobe bronchi and allows more of a bend in the scope when an EndoTherapy device is inserted in the working channel.

Easier intubation and orientation
The decreased forward oblique angle allows for easier EBUS scope insertion.

Enhanced image quality
The endoscopic image of the BF-UC190F/BF-UC290F has higher resolution than BF-UC180F/BF-UC260FW. This enhances visualization with a clearer image.

EVIS EUS ULTRASOUND BRONCHOFIBERVIDEOSCOPE

BF-UC190F/BF-UC290F

*BF-UC190F and/or BF-UC290F are not available in some areas.

EVIS EUS

OLYMPUS MEDICAL SYSTEMS CORP.
2951 Ishikawa-machi, Hachioji-shi, Tokyo 192-8507, Japan

www.olympusprofed.com

LCR43411V01
F718U


erbe
NOT JUST A PURCHASE.
A PARTNER.
Click and visit
bronchoscopy.erbegroup.com
Erbe Elektromedizin GmbH
erbegroup.com