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Asian Pacific Association for Bronchology and Interventional Pulmonology
(APAB)

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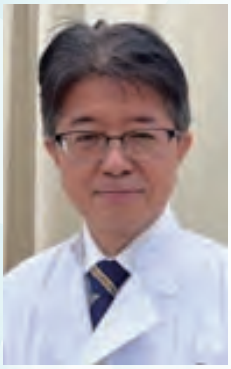
Newsletter

Theme: APCB contributes to improve practice and research

President Remarks



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Welcome to the 5th newsletter from the Asian Pacific Association for Bronchology and Interventional Pulmonology (APAB). We would like to thank our members for their interest in our organization.

The Asian Pacific Association for Bronchology and Interventional Pulmonology (APAB) was established in 2008 with the mission of advancing the art and science of bronchology and interventional pulmonology throughout the Asia-Pacific region. Since the first Asian Pacific Congress for Bronchology and Interventional Pulmonology (APCB) was held in Chiba, Japan, in 2005, we have successfully hosted the biennial congress nine times. Recently, the 9th APCB was held in Putrajaya, Malaysia, on 26th – 28th May 2023 with great success. This year, President Prof. Yuh-Min Chen and the Taiwan Society of Pulmonary and Critical Care Medicine (TSPCCM) will bring the 10th APCB to Taipei. The theme of the congress was " Shaping the Future of Interventional Pulmonology and Precision Medicine" which aimed to inspire and equip healthcare professionals with the knowledge and tools to lead the future of interventional pulmonology and precision medicine.

About Precision Medicine, in the field of lung cancer, biomarker testing using biopsy specimens is often performed before other organs and serves as a guide for daily systemic chemotherapy and immunotherapy. Because most gene searches in addition to PD-L1 immunohistochemistry have been limited to histopathological diagnosis, of note in the clinical trials only histological specimens were allowed, which led to the comprehensive multiplex genotyping and the diagnostic IHC assays only being approved for histology specimens. However, in practice, cytology specimens and cytology cell blocks are widely used for testing, because if not used, a sizeable proportion of NSCLC patients would be excluded from molecular targeted and Immune checkpoint inhibitor therapy. I believe that bronchoscopists need to be reminded of having to increase the importance of the cytology specimens. The role of bronchoscopists is becoming more important than ever.

I want to express my gratitude to everyone. Best wishes to you all.

Shaping the Future of Interventional Pulmonology and Precision Medicine: APCB 2025

The 10th Asian Pacific Congress on Bronchology and Interventional Pulmonology (APCB) will be held in Taipei, Taiwan, in 2025. This landmark event will be hosted by the Taiwan Society of Pulmonary and Critical Care Medicine (TSPCCM), which will lead the planning and organization of the congress. The physical meeting is expected to take place in June 20th - 22nd, 2025.

APCB 2025 will serve as a premier platform for experts from the Asia-Pacific region and beyond to engage in meaningful discussions, share the latest advancements, and explore collaborative opportunities in bronchology and interventional pulmonology. Set against the vibrant backdrop of Taipei, the congress will offer attendees an excellent opportunity to exchange knowledge and insights.

APCB 2025 promises an in-depth exploration of key topics in interventional pulmonology, addressing the latest advancements and techniques. Attendees will delve into cutting-edge approaches for diagnosing and treating peripheral lung nodules, essential mediastinal staging through EBUS-TBNA, and innovative procedures for managing COPD and asthma. The program also covers strategies for central airway obstruction, advances in navigational bronchoscopy, and the evolving role of pleuroscopy in pleural disease. Pediatric bronchoscopy, including airway anomaly management, is also a significant focus, ensuring comprehensive coverage of the field.

The TSPCCM, under its newly elected President in December 2023, will spearhead the meticulous planning and organization of the 10th APCB. The Organizing Committee, to be formed under this new leadership, will be dedicated to crafting a program that not only showcases cutting-edge advancements but also fosters collaborative efforts to propel the field forward.

As we embark on this journey of preparation, the TSPCCM and the Organizing Committee are committed to ensuring that APCB 2025 will be an unparalleled experience. We aim to inspire and equip healthcare professionals with the knowledge and tools to lead the future of interventional pulmonology and precision medicine.

We eagerly anticipate welcoming you to Taipei in 2025 for a landmark gathering that will undoubtedly influence the trajectory of our field for years to come.

Prof. Yuh-Min Chen, MD., PHD.
Congress President, 10th APCB
President, TSPCCM

APCB 2027
MANILA, PHILIPPINES

The Interventional Pulmonology Council of the Philippine College of Chest Physicians excitedly prepares for the upcoming APCB 2027 in Manila.

Join leading experts for in-depth learning opportunities and hands-on workshops. Meet and engage with new and old friends who share the same passion in the field.

But there are more-- explore the vibrant culture, the stunning attractions of Manila and its surrounding islands, and experience the world-famous brand of Filipino hospitality.

The organizing committee of the APCB 2027 looks forward to warmly welcome you to Manila in March 2027 for a unique blend of professional growth and cultural adventure.

Julius J. Dalupang
Christine Chavez
Chairs
APCB 2027 Organizing Committee

Julius Caesar J. Dalupang, MD, FPCCP

Christine L. Chavez, MD, FPCCP

Pioneering National Lung Cancer Screening: Korea's Journey and Achievements

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In 2015, the National Cancer Center of Korea established an evidence-based guideline for lung cancer screening using low-dose CT (LDCT). This guideline formed the foundation for the Korean Lung Cancer Screening Project (K-LUCAS), which ran from 2017 to 2018 across 14 general hospitals. The project aimed to evaluate the feasibility of a structured, nationwide lung cancer screening program.

Building on the findings of K-LUCAS, the Korean government launched the Korean National Lung Cancer Screening Program (KNLCS) in August 2019. The program identifies high-risk populations—smokers aged 54–74 years with a 30 pack-year history—through questionnaires distributed via national health screening and smoking cessation programs. Eligible participants receive LDCT screening in hospitals equipped with advanced multi-detector CT scanners. KNLCS employs a cloud-based quality control system (Figure 1) featuring AI-powered computer-aided detection (CAD) technology (Figure 2) to assist radiologists in analyzing lung nodules based on Lung-RADS criteria.

Since its inception, KNLCS has seen a significant increase in participation, with uptake rates rising from 24.7% in 2019 to 51.2% in 2023. In 2023, approximately 166,000 smokers were screened by KNLCS. Positive screening rates (Lung-RADS categories 3 and 4) have decreased, reflecting improved screening efficiency (9.1% in 2019 to 7.0% in 2023). Notably, follow-up rounds demonstrated lower positive rates compared to initial screenings.

This program exemplifies Korea's dedication to advancing lung cancer management and highlights the need for ongoing efforts to increase participation, improve quality control, and support smoking cessation. The increase in nodule detection due to lung cancer screening has placed a greater burden on respiratory physicians, with a growing demand for diagnosing peripheral pulmonary nodules using bronchoscopy. The field of bronchoscopy must also expand its capacity in response to the rising demand brought about by the increased screening.

Figure 1. Network-Based Quality Control System for Lung Cancer Screening Using Artificial Intelligence Program

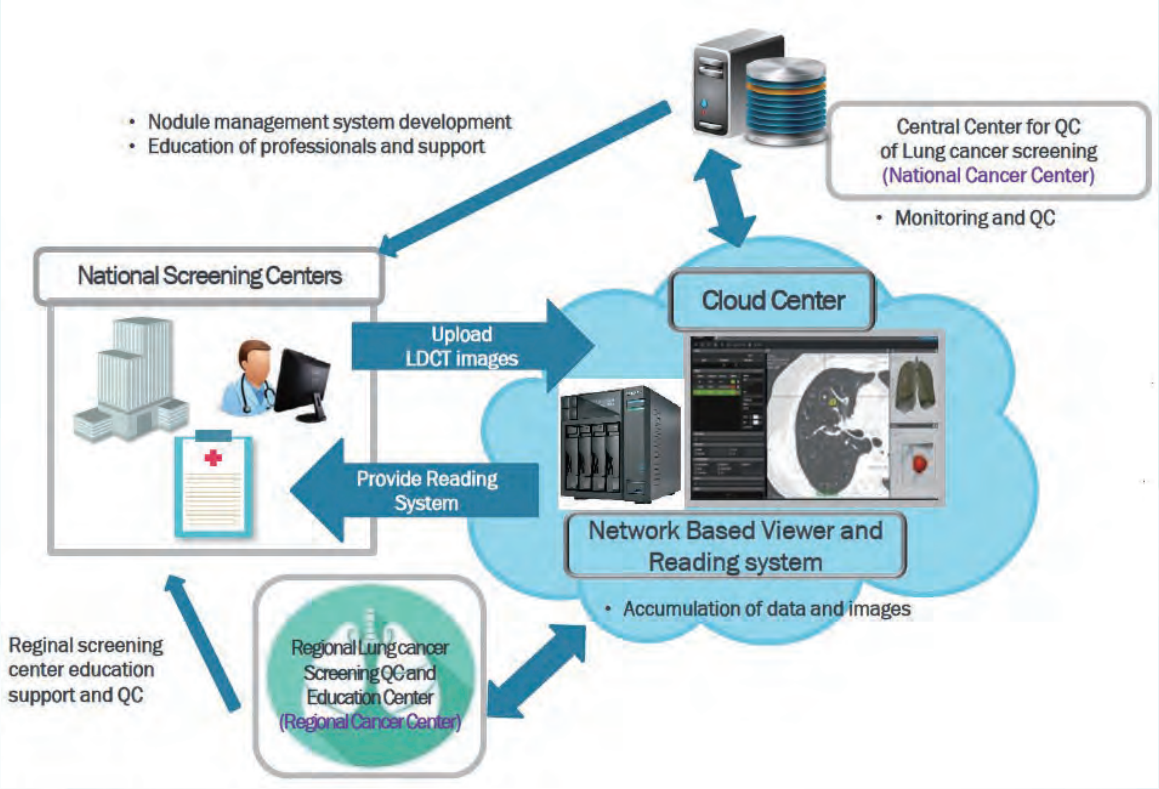

Figure 2. Artificial Intelligence-Based Computer-Aided Diagnosis for Detection of Pulmonary Nodule

PD-L1 immunohistochemistry for lung cancer cytology cell blocks obtained by transbronchial fine needle aspiration cytology

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INTRODUCTION

In non-small cell lung cancer (NSCLC), immunohistochemical (IHC) staining for programmed death-ligand 1 (PD-L1) is utilized to predict the response to immune checkpoint inhibitors. Cytologic specimens obtained from transbronchial needle aspiration (TBNA) or transbronchial fine needle aspiration cytology (TABC) and histologic specimens from transbronchial lung biopsy (TBLB) are often the available cancer tissue materials used to analyze PD-L1 expression. In this study, we evaluate the effectiveness of PD-L1 immunohistochemistry on lung cancer cell blocks obtained through transbronchial fine needle aspiration cytology and assess the concordance of PD-L1 expression compared to the histologic specimens.

MATERIALS and METHODS

Study population, bronchoscopic procedure, and evaluated for PD-L1 immunohistochemistry both cell blocks and Transbronchial lung biopsy

Sixty patients were entered into the study. They included 27 with adenocarcinoma, 26 with squamous cell carcinoma, and 7 with NSCC that were seen at the Department of Chest Surgery, JRC Narita Hospital in Narita, from June 2017 to December 2018. All participants provided written informed consent before enrolment into the study. 42 patients were males and 18 patients were females and their ages ranged from 43 to 89 years (mean 73.4 years). 44 of the patients were current smokers and 16 patients were non-smokers. Sixty patients with suspected lung cancer underwent bronchoscopy in the diagnosis of lung cancer with both transbronchial fine needle aspiration cytology (TABC) and transbronchial lung biopsy (TBLB). TBAC was always the first diagnostic modality. After the rapid on-site cytological evaluation and sufficient malignant cells were obtained, we performed a second TBAC for the cytology cell blocks. The second TBAC specimens were collected directly into a 20ml saline and cell concentrates from centrifuged saline were prepared for sodium alginate cell blocks. TBLB was the final diagnostic modality. Cytological diagnosis were made and histological examinations using haematoxylin and eosin staining were made of both cell blocks and TBLB specimens.

RESULTS

PD-L1 immunohistochemistry was examined with 49 of 54 cases of TBAC cell blocks (Five were not sufficient) and 37of 38 cases of TBLB specimens, (One was not sufficient) each containing at least 100 malignant cells for the evaluation of PD-L1 staining. Tumor proportion score(TPS) was categorized as Negative <1%, Low-Positive <1-49% and High-Positive ≧50% tumor cells.

【Fig 1】

PD-L1 Biomarker Analysis

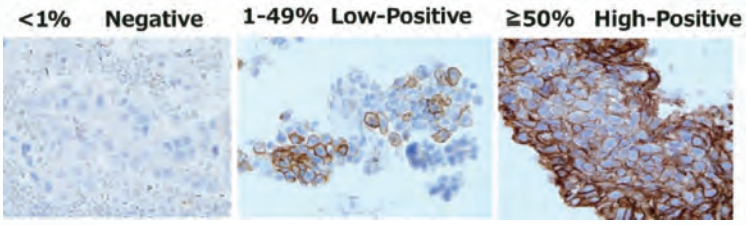
TPS=PD-L1 positive tumor cells /total tumor cells ×100%

・tumor cells demonstrating any membranous or cytoplasmic staining

・at least 100 tumor cells

※PD-L1 immunostaining

(with the use of the commercially available PD-L1 IHC 22C3)



【Fig 2】

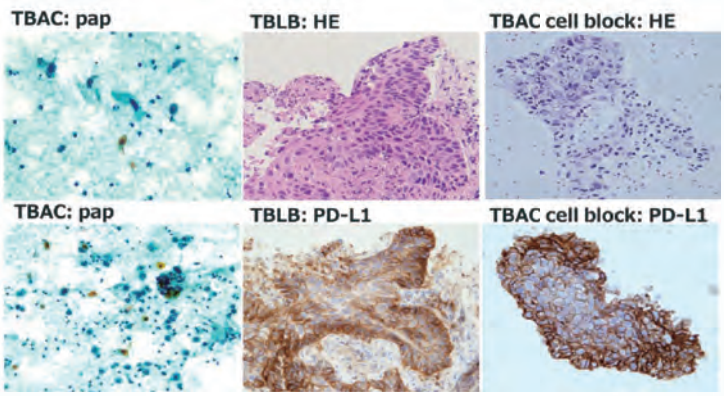
PD-L1 immunostaining matched both TBAC cell blocks and TBLB.

Case 23

Squamous cell carcinoma

TBAC-Cell block showed High-Positive 90%

TBLB showed High-Positive 90%



【Tab 1】

PD-L1 immunostaining in both TBAC cell blocks and TBLB

PD-L1 immunostaining matched both TBAC cell blocks and TBLB.

(A) Tab 1 shows the comparative values of PD-L1 TPS between TBAC cell blocks and TBLB (N = 28).

	TBLB		TBAC-CB	
case	TPS	%	TPS	%
1	-	0	NS	
2	-	0	-	0
3	-	0	NS	
4	-	0	-	0
5	-	0	-	0
6	-	0	1+	20
7	-	0	-	0
8	-	0	-	0
9	-	0	-	0
10	-	0	-	0
11	1+	1	1+	5
12	1+	25	-	0
13	1+	15	1+	5
14	1+	16	1+	3
15	2+	64	2+	60
16	-	0	-	0

	TBLB		TBAC-CB	
case	TPS	%	TPS	%
17	1+	30	NS	
18	2+	60	1+	30
19	1+	4	1+	3
20	1+	30	1+	30
21	1+	45	1+	30
22	2+	65	1+	30
23	2+	90	2+	90
24	2+	70	NS	
25	2+	68	2+	70
26	2+	68	2+	100
27	2+	100	2+	100
28	2+	86	1+	30
29	2+	80	2+	80
30	2+	100	2+	100
31	2+	80	2+	60
32	2+	73	2+	80

- : Negative
1+: Low-Positive
2+: High-Positive
NS: not sufficient
Red: discordant

【Tab 2】

PD-L1 immunostaining in both TBAC cell blocks and TBLB

Comparison of PD-L1 results between paired TBAC cell blocks and TBLB using three cutoffs, negative (tumor cells < 1%), low- (TPS1-49%), and high-positive (TPS ≥ 50%). A total of 28 paired cases were available for PD-L1 expression comparison between paired TBAC cell blocks and TBLB. We obtained a moderate correlation when comparing the PD-L1 classification in three categories (negative, low-, and high-positive). Five cases were discordant, with an overall agreement of 82.1% (23/28) (Table 2).

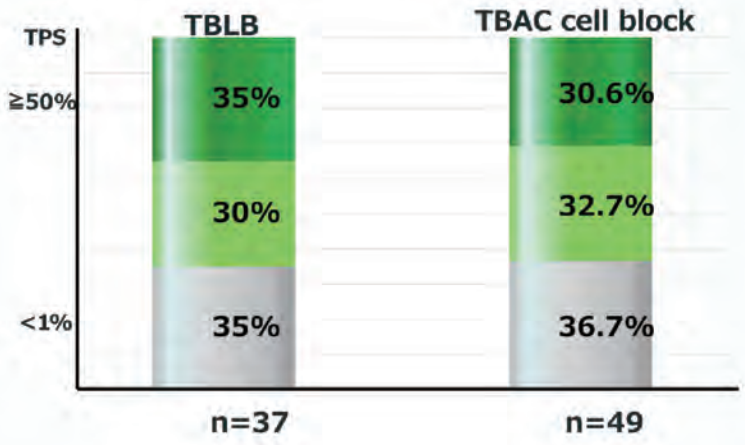
		TBAC-CB			
		Negative	Low-Positive	High-Positive	
TBLB	Negative	8	1	0	9
	Low-Positive	1	6	0	7
	High-Positive	0	3	9	12
		9	10	9	28

【Tab 3】

Distribution of PD-L1 by TPS in this study

Of the 49 TBAC cell blocks, 15 cases (30.6%) as ≧50%, 16 cases (32.7%) as <1-49%, and 18 cases (36.7%) as <1%, were identified as immunohistochemistry. Of the 37 TBLB specimens, 13 cases (35%) as ≧50%, 11 cases (30%) as <1-49%, and 13 cases (35%) as <1%, were identified as immunohistochemistry.

There was no significant difference between the TBAC cell blocks and TBLBs (P = 0.9027 by chi-square Test).



DISCUSSION

As immune checkpoint inhibitors are used in advanced no-small cell lung cancer, histologic specimens from transbronchial lung biopsy (TBLB) have been the main material type for PD-L1 evaluation in treatment studies. Of note in the clinical trials that led to the approval of different ICIs, only histological specimens were allowed, which led to the diagnostic IHC assays only being approved for histology specimens.

However, cytology is seldom the only available material in the clinical setting, and some factors may differ between cytological and histological specimens. The present study aimed to explore if PD-L1 testing in NSCLC is comparable for transbronchial fine needle aspiration cytology specimens and transbronchial lung biopsies specimens based on the bronchoscopic procedures in our department.

We found that cytology and biopsy specimens were scored at PD-L1 TPS ≥1% (63.3% of transbronchial fine needle aspiration cytology specimens and 65% of transbronchial lung biopsies specimens); and also scored at PD-L1 TPS ≥50% (30.6% vs 35%, respectively, there was no significant difference between the TBAC cell blocks and TBLBs, P = 0.9027). (Table 3).

Incidentally, using a conventional 21G TBNA needle to obtain specimens from peripheral lung lesions is not a common practice. However, at the Department of Chest Surgery, JRC Narita Hospital, the first choice was to obtain specimens with a conventional 21G TBNA needle, followed by a transbronchial lung biopsy (TBLB). In peripheral lesions, when biopsy cannot be adequately performed with brush or forceps due to bronchial deviation or stenosis, it is believed that specimen collection with a TBNA needle can reliably collect cells and tissues by puncture aspiration through the fine bronchial wall.

CONCLUSION

Lung cancer cytology cell blocks obtained by TBAC specimens could be used for assessing PD-L1 immunohistochemistry and could be considered useful testing in advanced lung cancer treatment. There is a good concordance for PD-L1 expression in NSCLC between cytology and histology.

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Postscript

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Chiba Foundation for Health Promotion and Disease Prevention

I am really glad to be able to deliver APCB Newsletter 2025. The Newsletter of APAB started from 2020 with the aims of communication between physicians, surgeons, research workers and medical staffs in the field of bronchology and interventional pulmonology of Asian-pacific regions, to overcome COVID-19 pandemic, strongly causing the lack of bonds of communication each other. The pandemic had come to an end because of wisdom including vaccine, infection countermeasure and so on.

I strongly hope that The newsletter will be continued to be an important tool of informational exchange in the field of bronchology and interventional pulmonology in Asian-Pacific countries. I look forward to seeing you in Taipei, at the memorial 10th APCB meeting in near future.