



The 26th Congress of the Asian Pacific Society of Respirology

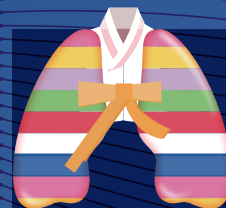
APSR 2022

17-20 November 2022

Coex, Seoul, Korea

“Above and Beyond”

PROGRAM BOOK



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APSR 2022
The 26th Congress of the
Asian Pacific Society of Respirology

APSR 2022

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WELCOME MESSAGES

FROM THE LOCAL CONGRESS COMMITTEE OF APSR 2022

Dear Colleagues and Friends,

It is our great pleasure to invite you to the 26th Congress of the Asian Pacific Society of Respiriology (APSR 2022), which will take place on 17-20 November 2022 at Coex in Seoul, Republic of Korea.

This is the second time that Korea has been given the honor to host this prestigious event since the 2009 congress in Seoul. At the APSR 2022, under the theme "Above and Beyond" a large number of professors, doctors, researchers, nurses, and distinguished leaders from Asia will get together to discuss recently emerging issues and exchange the latest information in the field of Respiratory Diseases, Critical Care Medicine, Oncology, and Clinical Immunology.

The APSR 2022 scientific program will propose high-quality scientific sessions that will provide deeper knowledge and new perspectives on the related themes. The program will be a highly rewarding international platform for all the participants and will contribute to enhancing the scientific level and quality of our field.

Seoul, the host city of the APSR 2022. Rich in historical and cultural heritage, it also offers all the possible conveniences and world-class facilities of the international megalopolis that it has become today. November, with its pleasant weather, is the best time to enjoy the beautiful natural scenery that the capital has to offer.

We look forward to welcoming you and your colleagues to the APSR 2022, which promises to be meaningful and fruitful to all the participants.

Warmest Regards,



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WELCOME MESSAGES

FROM THE APSR PRESIDENT

Above and beyond – time to move on and catch up

With the COVID-19 pandemics over the past three years, one APSR Congress was deferred from 2020 to 2021 to become the APSR Congress Kyoto in 2021 that was held in a hybrid format. This APSR Congress in Seoul 2022 will be held in a close to previous format of physical attendance and meeting like what we used to have before the pandemics. This represented a bold commitment from APSR and the Congress committees towards recovery from COVID-19 pandemics. We do hope to stay connected with members in the region and collegiate society members around the world.

Besides the rich contents as previous APSR Congress program fully packed this time with postgraduate courses, scientific symposia, plenary sessions, oral and poster presentation sessions, with internationally renowned experts invited to speak and to chair discussion sessions, we have introduced two new sessions.

On the first day of the Congress, there will be a new Big 5 Lung Diseases Workshop where APSR, WHO and the Union have gathered new population and community management models for important respiratory diseases including asthma, chronic obstructive pulmonary diseases, pneumonia, tuberculosis and lung cancer for discussion and evaluation by leaders from WHO, ATS, ERS and the Union. On the fourth day of the Congress, there is another new session of Joint APSR-GOLD where representatives from the GOLD committee will discuss and bring us updates on COPD management.

On behalf of APSR, I would like to take this chance to thank both the Central and the Local Congress Committees in Korea for making this Congress happened. May I extend our warm APSR welcome to all society leaders, delegates and participants, and wish you all an enjoyable and memorable APSR Congress in Seoul 2022!







David CL Lam

President, Asian Pacific Society of Respiriology

OVERVIEW

Congress Overview

Title	The 26th Congress of the Asian Pacific Society of Respiriology (APSR 2022)
Thema	Above and Beyond
Date	17-20 November 2022
Venue	Coex, Seoul, Korea
Hosted by	 Asian Pacific Society of Respiriology (APSR)  The Korean Academy of Tuberculosis and Respiratory Diseases (KATRD)
Sponsored by	 Korea Tourism Organization  Seoul Metropolitan Government
Expected Participants	2,000 Delegates from 50 Countries
Official Language	English
Program	Lecture, Symposium, Oral and Poster Discussion, Sponsored Symposium, Post-graduate Course, Opening/Closing Ceremony, Welcome Reception, Gala Dinner, Social Program, Tour Program, Exhibition, etc.
Website	www.apsr2022.org

Congress Logo



The logo for APSR 2022 was inspired by the 'Saekdongjeogori' (Hanbok), a Korean traditional attire. The harmony of the colorful stripes symbolizes the Asia-Pacific countries.

The logo represents a variety of countries in the region, which come together for cooperation and advancement in the field of respirology so that members of APSR go above and beyond the current limitations and make a great leap forward.

ABOUT THE APSR & KATRD

Asian Pacific Society of Respiriology



Having been established in 1986, the Asian Pacific Society of Respiriology (APSR) held its first academic conference in Tokyo, Japan in October, 1988, before turning it into an annual occurrence in 2000. It has enjoyed continued growth and is now recognized as being almost on par with the American Thoracic Society (ATS) and the European Respiratory Society (ERS). APSR is aimed at promoting friendship and the sharing of the latest knowledge and research findings among physicians, nurses, lung function technicians, and respiratory rehabilitation therapists involved in the treatment of respiratory diseases in such Asia-Pacific countries/regions as Japan, Australia, New Zealand, Korea, China, Taiwan, Thailand, Singapore, and the Philippines.

KATRD in Service of Humanity's Respiratory Health and Happiness



Started as an academic arm of the Korean National Tuberculosis Association (KNTA) in November 1953, KATRD has become a society that boasts a long history and tradition. Despite significant challenges in the wake of the Korean War, the society's first academic conference took place on November 7, 1953 thanks to its passion for research and its resolve for tuberculosis eradication. It was re-launched as the Korean Academy of Tuberculosis in 1961 and then renamed the Korean Academy of Tuberculosis and Respiratory Diseases (KATRD) in 1989.

KATRD's focus on academic advances through exchanges and harmony among its members has been the catalyst for both its continued growth over the last 65 years and its unrivaled position as a prime organization in the research and treatment of respiratory diseases like tuberculosis. It now has more than 1,620 members and has hosted 127 academic conferences. Its official journal, "Tuberculosis and Respiratory Diseases (TRD)," has been listed on PubMed, contributing to the international dissemination of its research findings, and it strives to elevate the journal to the SCI level.

With today's increased risks of respiratory diseases such as chronic obstructive pulmonary disease, lung cancer, bronchial asthma, and lung injury, KATRAD has designated Lung Day to promote the importance of pulmonary health and giving up smoking. This campaign to increase awareness among the general public has earned KATRD recognition as an exemplary academic society that fulfills its social responsibilities.

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Hojoong Kim	Sungkyunkwan University School of Medicine, Republic of Korea
Hongseok Yoo	Sungkyunkwan University School of Medicine, Republic of Korea
Hun-Gyu Hwang	Soonchunhyang University Gumi's Hospital, Republic of Korea
Hye Jung Park	Gangnam Severance Hospital, Republic of Korea
Hye Ryou Kim	Korea Institute of Radiological and Medical Sciences, Republic of Korea
Hye Sook Choi	Kyung Hee University School of Medicine, Republic of Korea
Hye Yun Park	Sungkyunkwan University School of Medicine, Republic of Korea
Hyeon-Kyoung Koo	Inje University College of Medicine, Republic of Korea
Hyun Lee	Hanyang University College of Medicine, Republic of Korea
In-Jae Oh	Chonnam National University, Republic of Korea
Jae Ha Lee	Inje University College of Medicine, Republic of Korea
Jae Seung Lee	University of Ulsan College of Medicine, Republic of Korea
Jae-Joon Yim	Seoul National University College of Medicine, Republic of Korea
James Chalmers	University of Dundee, United Kingdom
Jann-Yuan Wang	National Taiwan University, Taiwan
Jason Phua	National University Hospital, Singapore
Jeong Eun Lee	Chungnam National University School of Medicine, Republic of Korea
Ji Ye Jung	Yonsei University College of Medicine, Republic of Korea



Speakers

Ji-Eun Park	Ajou University School of Medicine, Republic of Korea
Ji-yong Moon	Hanyang University College of Medicine, Republic of Korea
Jin Woo Song	University of Ulsan College of Medicine, Republic of Korea
Jin-won Huh	University of Ulsan College of Medicine, Republic of Korea
Jinwoo Lee	Seoul National University Hospital, Republic of Korea
Joo Hun Park	Ajou University School of Medicine, Republic of Korea
Joo-Hee Kim	Hallym University College of Medicine, Republic of Korea
Jun-Pyo Myong	The Catholic University of Korea College of Medicine, Republic of Korea
June Hong Ahn	Yeungnam University Medical Center, Republic of Korea
Jung Hwa Hwang	Soonchunhyang University College of Medicine, Republic of Korea
Jung Seop Eom	Pusan National University Hospital, Republic of Korea
Jung-Kyu Lee	Seoul National University, Republic of Korea
Jung-Wan Yoo	Gyeongsang National University Hospital, Republic of Korea
Jung-Yien Chien	National Taiwan University Hospital, National Taiwan University College of Medicine, Taiwan
Karin Klooster	University Medical Center Groningen, Kingdom of the Netherlands
Kazuhide Sato	Nagoya University, Japan
Kazuhisa Takahashi	Juntendo University, Japan
Kenneth R. Chapman	Toronto General Hospital Research Institute, Canada
Koichiro Asano	Tokai University School of Medicine, Japan
Konstantinos Kostikas	University of Ioannina, Greece
Kwang Ha Yoo	Konkuk University School of Medicine, Republic of Korea
Kwun Fong	The University of Queensland, Australia
Kyoung-Hee Sohn	Kyung Hee University School of Medicine, Republic of Korea
Kyung Hyun Oh	World Health Organization Regional Office for the Western Pacific, Philippines
Kyung Soo Chung	Severance Hospital, Republic of Korea
Ian Pavord	University of Oxford, United Kingdom
Lina Madaniyazi	Nagasaki University, Japan
Martie Van Tongeren	The University of Manchester, United Kingdom
Martijn A. Spruit	Maastricht University Medical Center, Kingdom of the Netherlands

Speakers

Martin Kolb	McMaster University, Canada
Mi-Ae Kim	CHA University, Republic of Korea
Min-Jong Kang	Yale University, U.S.A.
Ming-Cheng Chan	Taichung Veterans General Hospital, Taiwan
Mona Bafadhel	King's College London, United Kingdom
Moo Suk Park	Yonsei University College of Medicine, Republic of Korea
Motoo Yamauchi	Nara Medical University, Japan
Neil Schluger	Tuberculosis Control Branch, California Department of Public Health, U.S.A.
Nick Kim	Critical Care & Sleep Medicine, University of California San Diego, U.S.A.
Nicola Hanania	Baylor College of Medicine, U.S.A.
Omar S Usmani	National Heart and Lung Institute (NHLI), Imperial College London, United Kingdom
Parameswaran Nair	McMaster University, Canada
Patricia Rivera	University of Rochester Medical Center, U.S.A.
Phuong Phan Thu	Bach Mai Hospital, Viet Nam
Richard Russell	University of Oxford, United Kingdom
Ruth Murray	Director Medscript Ltd NZ & Research Fellow, OPC, New Zealand
Sang Haak Lee	Eunpyeong St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Republic of Korea
Satoshi Mitarai	The Research Institute of Tuberculosis, Japan
Se Hee Lee	CHA University, Republic of Korea
Sei Won Kim	The Catholic University of Korea College of Medicine, Republic of Korea
Seiya Kato	The Research Institute of Tuberculosis, Japan
Seok Jeong Lee	Yonsei University Wonju College of Medicine, Republic of Korea
Seong Yong Lim	Sungkyunkwan University School of Medicine, Republic of Korea
Seong-Hoon Yoon	Pusan National University Yangsan Hospital, Republic of Korea
Seung Hyun Yong	Yonsei University College of Medicine, Republic of Korea
Seung Won Ra	Ulsan University Hospital, Republic of Korea
So Ri Kim	Chonbuk National University Medical School, Republic of Korea
So Young Park	Hallym University College of Medicine, Republic of Korea

Speakers

Soo-Jong Hong	University of Ulsan College of Medicine, Republic of Korea
Soon Ho Yoon	Seoul National University College of Medicine, Republic of Korea
Stefano Aliberti	University of Milan, Italy
Sun Mi Choi	Seoul National University College of Medicine, Republic of Korea
Sun-Young Kim	National Cancer Center, Republic of Korea
Sung Yong Lee	Korea University College of Medicine, Republic of Korea
Sung Yoon Lim	Seoul National University College of Medicine, Republic of Korea
Sunghye Park	Soonchunhyang University Hospital Bucheon, Republic of Korea
Sungjune Kim	H. Lee Moffitt Cancer Center, U.S.A.
Tai Joon An	Yeouido St. Mary Hospital, College of Medicine, Catholic University of Korea, Republic of Korea
Takashi Ogura	Kanagawa Cardiovascular and Respiratory Center, Japan
Takeshi Johkoh	Kansai Rosai Hospital, Japan
Takeshi Kaneko	Yokohama City University, Japan
Talant Sooronbaev	National Center of Cardiology and Internal Medicine, Kyrgyzstan
Toby Maher	University of Southern California, U.S.A.
Tsu F. Yeh	Taipei Medical University, Taiwan
Won Chul Cha	Samsung Medical Center, Sungkyunkwan University School of Medicine, Republic of Korea
Won-Il Choi	Myongji Hospital, Republic of Korea
Won-Young Kim	Chung-Ang University Hospital, Republic of Korea
Woo Jin Kim	Kangwon National University, Republic of Korea
Woo-Jung Song	University of Ulsan College of Medicine, Republic of Korea
Yasuhiro Kondoh	Tosei General Hospital, Japan
Yeol Kim	National Cancer Center, Republic of Korea
Yeon Wook Kim	Seoul National University, College of Medicine, Republic of Korea
Yeon-Mok Oh	University of Ulsan College of Medicine, Republic of Korea
Youlim Kim	Konkuk University School of Medicine, Republic of Korea
Young-Jae Cho	Seoul National University College of Medicine, Republic of Korea
Yuming Guo	School of Public Health and Preventive Medicine, Monash University, Australia

AWARDS

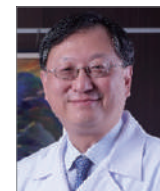
APSR Medal



Yoichi Nakanishi

Kitakyushu City Hospital Organization
Japan

Michiyoshi Harasawa Research Award



Chong-Jen Yu

National Taiwan University College of Medicine
Taiwan

Ann Janet Woolcock Research Award



Anne Chang

Menzies School of Health Research
Australia

Fukuchi Award for Best Original Research Paper in Respiriology



Peter Wark

Hunter Medical Research Institute
Australia

"ACE2 expression is elevated in airway epithelial cells from older and male healthy individuals but reduced in asthma"

Peter A B Wark, Prabuddha S Pathinayake, Gerard Kaiko, Kristy Nichol, Ayesha Ali, Ling Chen, Erika N Sutanto, Luke W Garratt, Sukhwinder S Sohal, Wenying Lu, Mathew S Eapen, Christopher Oldmeadow, Nathan Bartlett, Andrew Reid, Punnam Veerati, Alan C-Y Hsu, Kevin Looi, Thomas Iosifidis, Stephen M Stick, Philip M Hansbro, Anthony Kicic



Stephanie Yerkovich

University of Queensland
Australia

"Outcomes of protracted bacterial bronchitis in children: A 5-year prospective cohort study"

Tom J C Ruffles, Julie M Marchant, Ian B Masters, Stephanie T Yerkovich, Danielle F Wurzel, Peter G Gibson, Greta Busch, Katherine J Baines, Jodie L Simpson, Heidi C Smith-Vaughan, Susan J Pizzutto, Helen M Buntain, Gregory Hodge, Sandra Hodge, John W Upham, Anne B Chang

APSR ATS Young Investigator Award



Alejandro A Pezzulo

University of Iowa
U.S.A.



Rachel S. Knipe

Massachusetts General Hospital
U.S.A.

APSR ERS Young Investigator Award



Yong Suk Jo

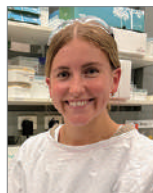
Seoul St Mary Hospital, College of
Medicine, The Catholic University of Korea
Republic of Korea



Apisara Suriyakul

Thammasat University Faculty of Medicine
Thailand

APSR TSANZ Young Investigator Award



Olivia Carroll

The University of Newcastle and the Priority Research Centre for
Healthy Lungs, Hunter Medical Research Institute - Newcastle
Australia

APSR JRS Young Investigator Award



Yusuke Shiraishi

Graduate School of
Medicine, Kyoto
University
Japan



Ho Namkoong

Keio University
School of Medicine
Japan



Takanori Asakura

University of North
Carolina at Chapel Hill
U.S.A

APSR Travel Award



Yina Wang

The Second Xiangya
Hospital, CSU
China



**Jamaluddin
Madolangan**

Hasanuddin University
Indonesia



**Thi Mai Phuong
Nguyen**

National Lung Hospital
Viet Nam



Benjo Ato

Southern Philippines
Medical Center
Philippines



**Dhammika Leshan
Wannigama**

Chulalongkorn
University
Thailand



**Narongkorn
Saiphoklang**

Thammasat University
Faculty of Medicine
Thailand



Nagesh Dhadge

Central Health
Services
India



Pyng Lee

National University
of Singapore
Singapore



Brian Nelson Ong

Lung Center of the
Philippines
Philippines



Ji-Young Lee

Inflammation-Cancer Microenvironment Research
Center/College of Medicine, Ewha Womans University
Republic of Korea

APSR Young Investigator Award



Stephanie Palacios

West Visayas State University
Medical Center
Philippines



Yiting Tang

Sengkang General Hospital
Singapore



Adhitri Anggoro

Medical Faculty of Airlangga University
/ Dr. Soetomo General Academic Hospital
Indonesia



Jooyeon Lee

Kangwon National University
Republic of Korea



Yedham Kang

Korea University Ansan Hospital
Republic of Korea



Jimin Jang

Kangwon National University
Republic of Korea



Shih-Yu Chen

National Taiwan University Hospital
Hsin-Chu Branch
Taiwan



Shinya Otsuka

National Hospital Organization
Hakodate National Hospital
Japan



Song-I Lee

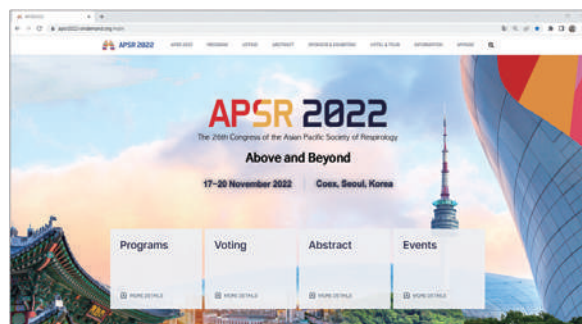
Chungnam National University Hospital
Republic of Korea



Yoshifumi Suzuki

Juntendo University Faculty of Medicine
and Graduate School of Medicine
Japan

ON-DEMAND PLATFORM



Go to the On-demand Platform

apsr2022-ondemand.org

On-demand platform is available for both web and mobile versions.



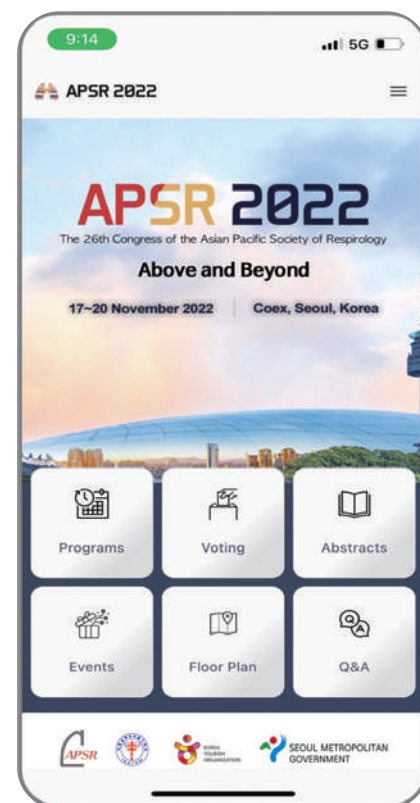
Scan for the On-demand platform

*On-demand platform will be available for 1 month after the congress.
(Until 31 January 2023)

How to use

You could log in the app and on-demand platform with e-mail address that you put for the registration.

MOBILE APP



Android



iOS

1. Scan QR Code

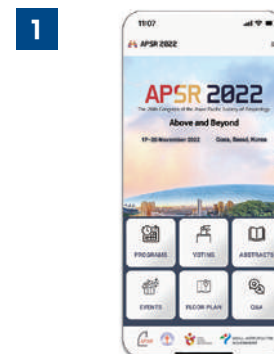
Turn on camera or QR Code reader app for scanning.

2. Search the App at Mobile Store

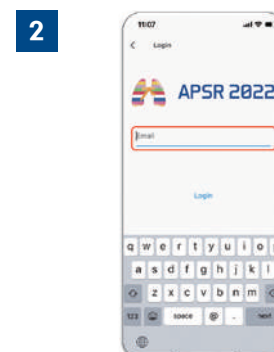
Install after searching 'APSR 2022' at Google play store or apple app store.

VOTING

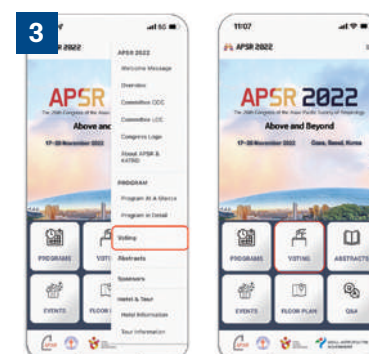
Voting App Implementation



Open APSR 2022 app.

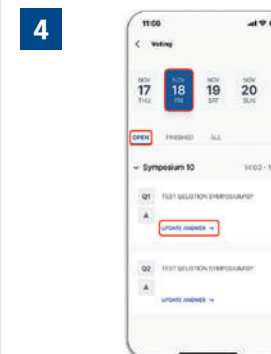


Log in with the email on registration.



Click voting menu.
(Click 'Voting' on Main icon or menu.)

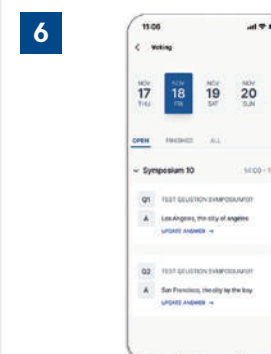
Voting Participation



Click the date and check the on-going voting list, and click 'UPDATE ANSWER'.

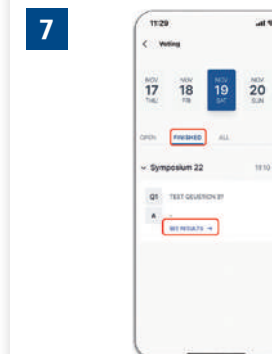


Check question and options for answers and cast a vote.
-> When answer selection is completed will pop up.

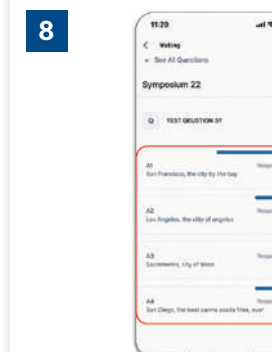


For the case of voting that you selected an answer, the answer is seen on the list.

Check Completed Voting



Click 'Finished' and check the list of completed voting.
-> Click 'SEE RESULT' and check the voting result.



Check voting result statistics.
-> Check the final result of voting count.

GENERAL INFORMATION

Abstract & Publication

Abstract of the APSR 2022 (oral/poster) is only published a mobile application and on-demand program.

(*the application access ID is your registration email).
Final version of the Respiriology web publication will be announced later on the website.

Certificate of Attendance

Certificate of attendance will be sent through email after the congress.

APSR 2022 APP

Search APSR 2022 to install the congress interactive mobile app to your smartphone and portable device to access all the information you need!

Exhibition

Exhibition is held in Hall D2. The Lounges for Diamond Sponsors are located at the lobbies of Hall D2 (3rd floor), Auditorium (3rd floor) and Grand Ballroom (1st floor).

Badges

Name badges must be worn for admittance to all APSR 2022 programs. There will be a US\$50 fee for replacement of badges.

Poster Exhibition

- Venue: Hall D (3F) lobby
- Date & Time : 09:20-19:00, 18-19 November
- Detail information of poster exhibitions are available on APSR2022 official website:
Program> Oral Presentation & Poster Exhibition
(or Board> Download Center)

Camera and Recording

Any electronic recording as well as photograph taking are NOT allowed in session rooms nor in the exhibit and poster areas.

Time Zone

Korea is 9 hours ahead of Greenwich Mean Time (GMT +9) and does not observe daylight savings time.

Weather

In November average day temperature is from 13°C to 14°C (SP to 57°F). Warm days and cool nights, so a light coat is useful. For detailed information, please visit the official website of Korea Metrological Administration.

Language

The official language of the congress is English. Simultaneous translation will NOT be provided.

Insurance

The Local Congress Committee (LCC) will take no liability for personal injuries sustained by, or for loss or damage to property belonging to congress participants, either during or as a result of the congress. It is, therefore, advised that participants arrange their own personal health, accident and travel insurance.

Mobile Phone (Roaming)

CDMA cellular systems are widely used in Korea. SK Telecom, KT and LG U+ provide a SIM card roaming service to allow you to use your GSM subscription in Korea. At Incheon International Airport, you can rent a special CDMA cellular phone which accepts your SIM card.

Currency & Foreign Exchange

Currency in Korea is KRW(South Korean Won) and there are four bill nominations of 1,000, 5,000, 10,000 and 50,000 won. As of November 2022, 1 US dollar is equivalent to 1,350 Korean Won. Foreign currencies could be easily exchanged to KRW at airports, major hotels, bank branches and foreign exchange booths. Please refer to Currency Converter on the Internet for the latest exchange rate.

Credit Cards

Major credit cards like VISA, Master Card, American Express and Diners Club are widely accepted, but some small shops, restaurants and traditional markets only accept cash. For cash withdrawal or exchange, banks and ATMs are easy to find throughout Korea.

Tipping & Taxes

Tipping is not a Korean custom. A 10% service charge is added to your bill at all tourist hotels and tips are not expected. It is not necessary to tip a taxi driver unless he assists you with luggage or provides extra service. Visitors can receive a refund on a receipt for a minimum purchase of KRW 30,000.

Electricity

Standard electricity supply is 220 volts AC at 60Hz (with 2 round holes). Some hotels may provide outlet converters for 110 and 220 volts. Participants are advised to check with the hotel beforehand or bring an adapter.

Smoking Policy

Smoke free Area

Prayer Room

3rd Floor (Near by Conference Room E)
Opening Hours: 03:00-22:00

Internet Access

As a leading nation in information technology, Korea provides one of the best internet connections worldwide. Take privilege of the world's fastest internet speed through Wi-Fi for your convenience during your time in Korea.

- At Coex: Choose "COEX Free Wi-Fi Zone" or "SK wifi zone 5G" (ID: apsr2022 / PW: seoul2022) on your mobile device.
- At Starfield Coex Mall: Choose "Public Wi-Fi Free" on your mobile device.

Secretariat Office

Service are available in room 205A during business hours :

Wednesday 16 November	07:00-22:00
Thursday 17 November	06:30-22:00
Friday 18 November	06:30-22:00
Saturday 19 November	06:30-22:00
Sunday 20 November	06:30-15:00

Registration & Tours & Accommodation

Grand Ballroom Lobby during business hours:

Wednesday 16 November	14:00-17:00
Thursday 17 November	07:30-18:00
Friday 18 November	07:30-18:00
Saturday 19 November	07:30-18:00
Sunday 20 November	07:30-13:00

FAPSR Lounge

Service are available in room 210 during business hours:

Thursday 17 November	09:30-18:00
Friday 18 November	09:30-18:00
Saturday 19 November	09:30-18:00
Sunday 20 November	09:00-13:00

Preview Room & Speaker's Lounge (201)

Speakers may preview and upload their presentation(s) in room 201 during business hours:

Wednesday 16 November	14:00-18:00
Thursday 17 November	08:00-18:00
Friday 18 November	07:30-18:00
Saturday 19 November	07:30-18:00
Sunday 20 November	07:30-13:00

Venue

Address. 513, Yeongdong-daero, Gangnam-gu, Seoul 06164, Korea

Tel. +82-2-6000-0114

Website. <https://www.coexcenter.com>

Map. <https://goo.gl/maps/SFuprQpckL2bDp7H6>

OPENING CEREMONY AND SOCIAL PROGRAMS

Opening Ceremony & Welcome Reception

All registered participants and exhibitors are cordially invited to the Opening Ceremony. You are kindly requested to wear your badge for recognition. After the Opening Ceremony, all attendees are invited to attend the Welcome Reception, giving you a taste of Korea.

Date: Thursday 17 November 2022
Time: 17:30-20:30
Venue: Hall D1, 3F, Coex
Entrance: All Delegates
Dress Code: Business casual



Gala Dinner

Catch up with experts from all over the globe and enjoy the selection of Korean cuisines during the dinner. Award winners will be presented at the event.

Date: Saturday 19 November 2022
Time: 19:30-21:30
Venue: Hall D1, 3F, Coex
Entrance: Invitation and ticket only
Dress Code: Business casual



Closing Ceremony

Next congress will be introduced during Closing Ceremony.

Date: Sunday 20 November 2022
Time: 12:50-13:20
Venue: Grand Ballroom 103,1F, Coex
Entrance: All Delegates
Dress Code: Business casual

APSR ASSEMBLY MEETINGS

Friday 18 November 2022, 17:30-19:00

Location		Assembly
2nd FL	206A	Pulmonary Circulation
	206B	Respiratory Neurobiology and Sleep
	207	Cell and Molecular Biology
	211	Asthma
3rd FL	R1	Respiratory Infections (non-tuberculous)
	R2	COPD
4th FL	R3	Interstitial Lung Disease
	R4	Clinical Respiratory Medicine

Saturday 19 November 2022, 17:30-19:00

Location		Assembly
2nd FL	206A	Respiratory Structure and Function
	206B	Paediatric Lung Disease
	207	Clinical Allergy & Immunology
	211	Environmental & Occupational Health and Epidemiology
3rd FL	R1	Tuberculosis
	R2	Lung Cancer
4th FL	R3	Critical Care Medicine
	R4	Bronchoscopy and Interventional Techniques

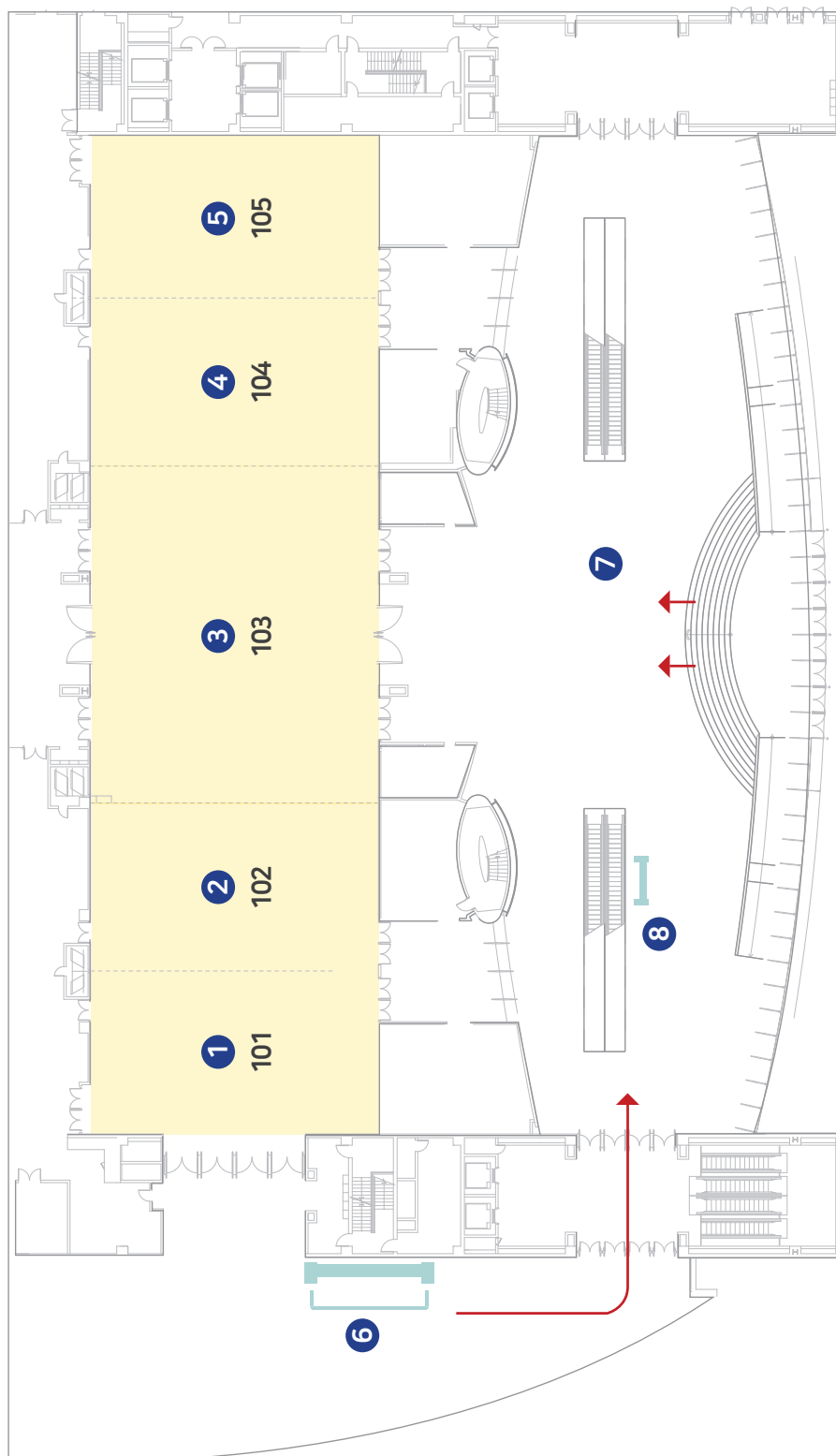
APSR Annual General Meeting (AGM)

Thursday 17 November, 16:45-17:15

Location: 2nd FL 209A&B

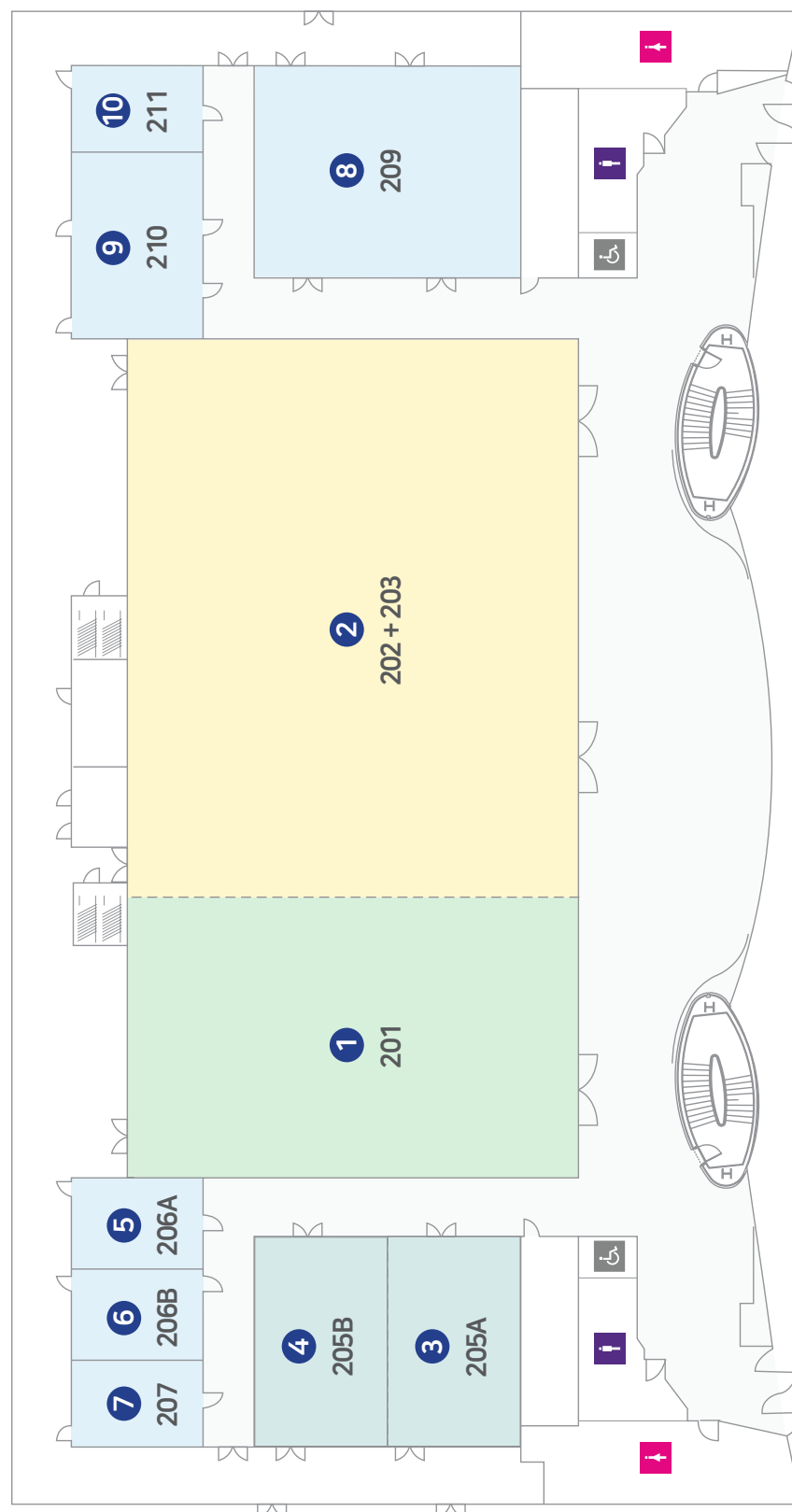
VENUE MAP

1st Floor



- | | | | |
|---|--|---|---|
| 1 | Pre-congress Workshop, Assembly Symposium, Industrial Symposium | 5 | Pre-congress Workshop, Industrial Symposium, Oral Session |
| 2 | Pre-congress Workshop, Assembly Symposium, Industrial Symposium | 6 | Registration |
| 3 | Pre-congress Workshop, Assembly Symposium, Industrial Symposium, Oral Session | 7 | Company Lounge |
| 4 | Pre-congress Workshop, Industrial Symposium, Young Investigator Awards, Oral Session | 8 | KTO Promotion Booth |

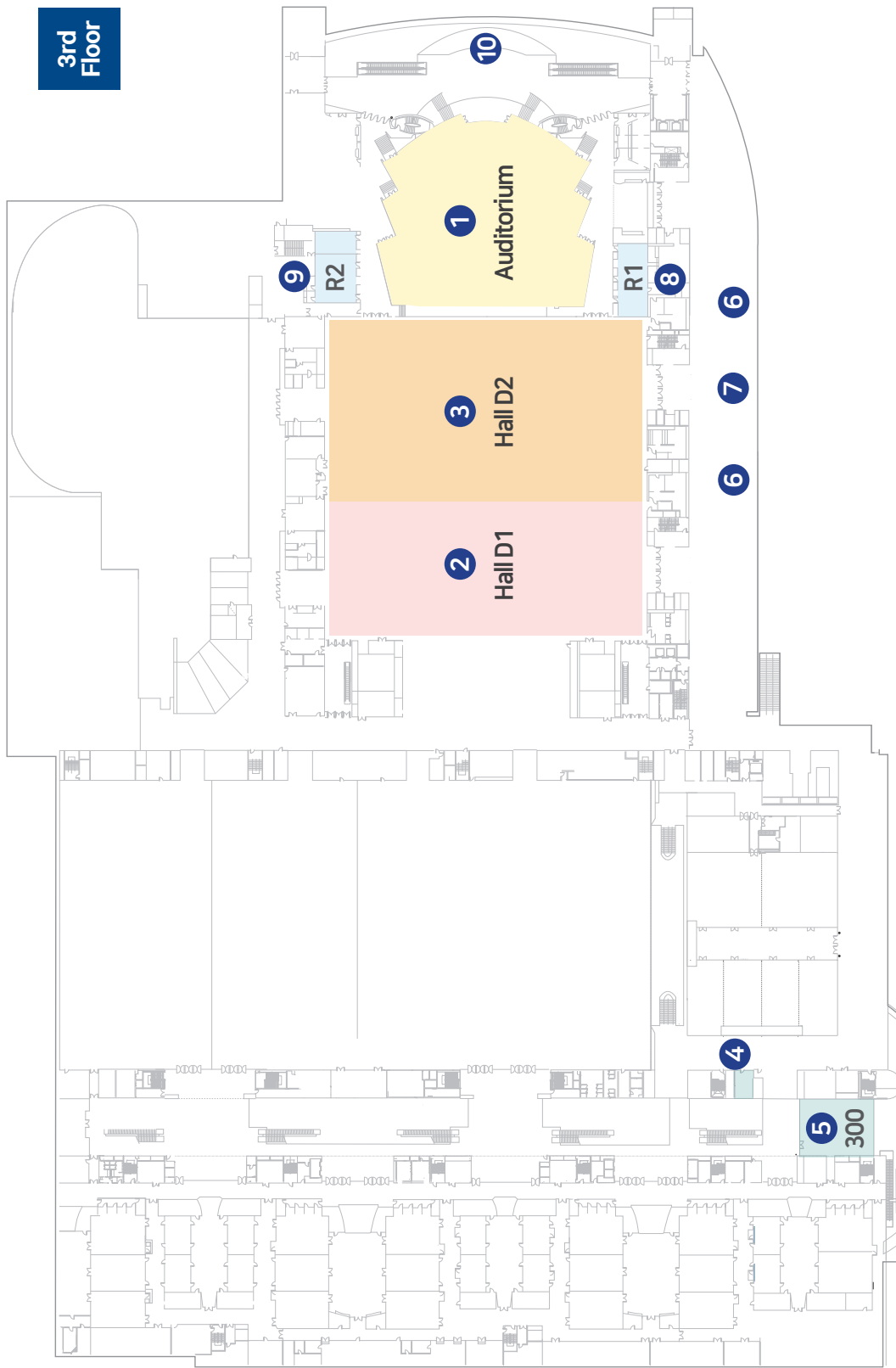
2nd Floor



- | | | | |
|---|------------------------------------|-------|-----------------------|
| 1 | Preview Room and Speaker Lounge | 5 6 7 | APSR Assembly Meeting |
| 2 | Industrial Symposium, Oral Session | 8 | APSR Business Meeting |
| 3 | Secretariat | 9 | FAPSR Lounge |
| 4 | VIP & LCC Room | 10 | APSR Assembly Meeting |

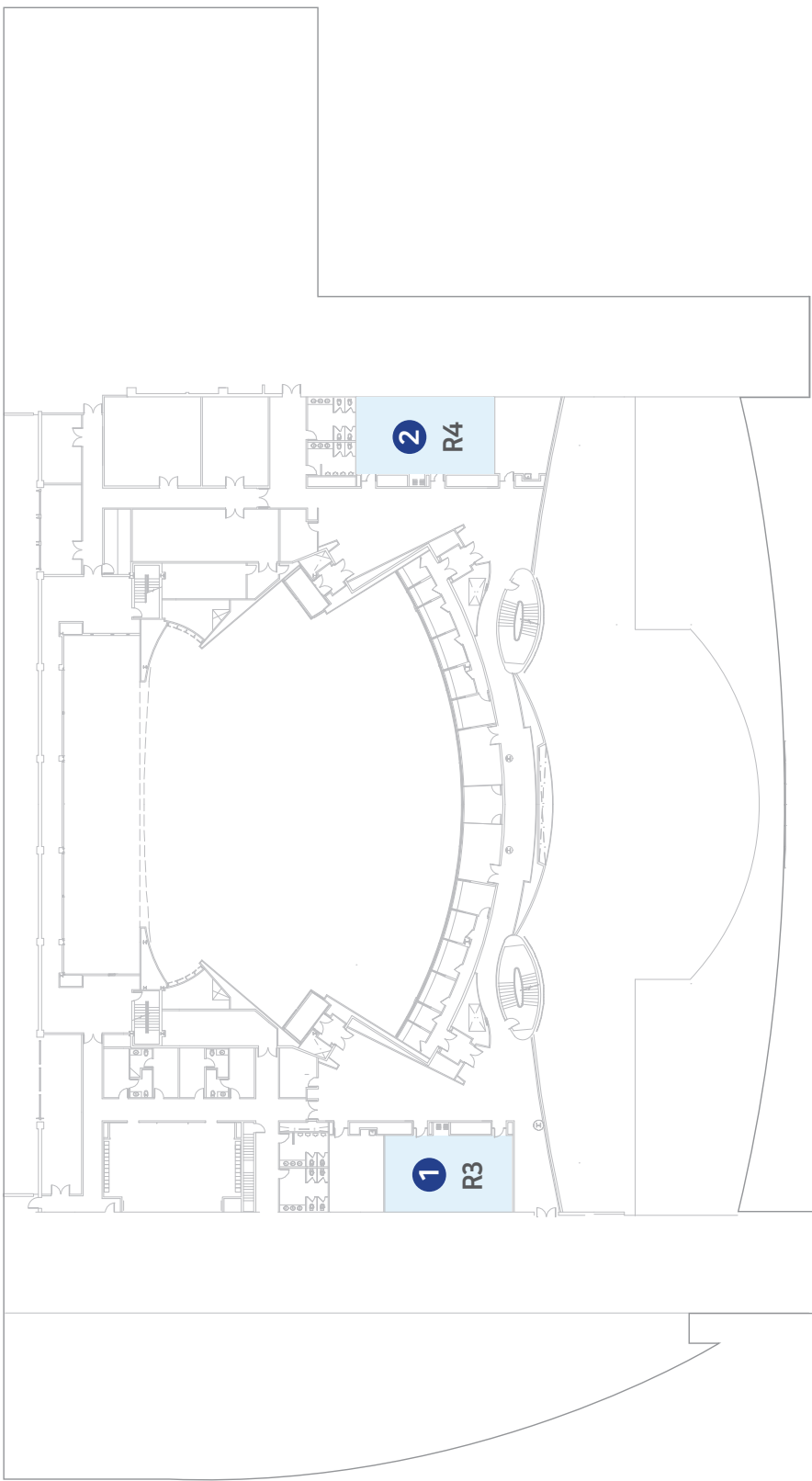


3rd Floor



- 1 Plenary Lecture, Assembly Symposium
- 2 Opening Ceremony, Welcome Reception and Gala Dinner
- 3 Exhibition
- 4 Prayer Room
- 5 Big 5 Lung Diseases Workshop
- 6 Poster Exhibition
- 7 10 Company Lounge
- 8 9 APSR Assembly Meeting

4th Floor



- 1 APSR Assembly Meeting
- 2 APSR Assembly Meeting



APSR 2022
The 26th Congress of the
Asian Pacific Society of Respiriology

SCIENTIFIC PROGRAM

■ PROGRAM AT-A-GLANCE	46
■ DAILY PROGRAM	
17 November	51
18 November	55
19 November	65
20 November	75

PROGRAM AT-A-GLANCE

Time/Room	Auditorium (3F)	Grand Ballroom 101 (1F)	Grand Ballroom 102 (1F)	Grand Ballroom 103 (1F)	Grand Ballroom 104 (1F)
Thursday 17 November 2022					
09:00-12:00		Pre-congress Workshop 1 (Hands on Session)		Pre-congress Workshop 2	Pre-congress Workshop 3
		Critical Care Medicine		Lung Cancer	COPD
12:15-13:45		Lunch			
14:00-17:00		Pre-congress Workshop 5 (Hands on Session)		Pre-congress Workshop 6	Pre-congress Workshop 7
		Bronchoscopy and Interventional Techniques		Pulmonary Circulation	Asthma
17:30-20:30					
Friday 18 November 2022					
08:10-09:10	Presidential Lecture 1 Presidential Lecture 2				
09:20-10:50	Symposium 1 COPD	Symposium 2 Tuberculosis	Symposium 3 Critical Care Medicine	Symposium 4 Lung Cancer	Oral 1 Asthma
10:50-11:10	Coffee Break				
11:10-12:40	Symposium 5 Asthma	Symposium 6 Bronchoscopy and Interventional Techniques	Symposium 7 Pulmonary Circulation	Symposium 8 Interstitial Lung Disease	Oral 4 Tuberculosis
12:50-13:50		Luncheon Symposium 1 Sponsored by DAEWON Pharmaceutical Co., Ltd.	Luncheon Symposium 2 Sponsored by Boehringer Ingelheim Korea	Luncheon Symposium 3 Sponsored by GSK	Luncheon Symposium 4 Sponsored by AstraZeneca Korea
14:00-15:30	Symposium 9 Clinical Respiratory Medicine	Symposium 10 Environmental & Occupational Health and Epidemiology	Symposium 11 Respiratory Neurobiology and Sleep	Symposium 12 Respiratory Infections (non-tuberculous)	Oral 7 COPD
15:30-15:50	Coffee Break				
15:50-17:20	Symposium 13 Asthma	Symposium 14 Cell and Molecular Biology	Symposium 15 Lung Cancer	Symposium 16 Interstitial Lung Disease	Young Investigator Awards 1
17:30-18:30		Evening Symposium 1 Sponsored by OLYMPUS KOREA CO., LTD	Evening Symposium 2 Sponsored by Thermo Fisher Scientific Korea	Evening Symposium 3 Sponsored by Boryung Co.	Evening Symposium 4 Sponsored by GSK
18:30-19:00					

Time/Room	Grand Ballroom 105 (1F)	ASEM Ballroom 202+203 (2F)	206A, 206B, 207, 211 (2F), 300 (3F) / R1, R2 (3F) / R3, R4 (4F), Etc.	Hall D (3F)	Hall D Foyer (3F)
Thursday 17 November 2022					
09:00-12:00	Pre-congress Workshop 4 Tuberculosis		BIG 5 LUNG DISEASES WORKSHOP organised by APSR, UNION APR, WHO SEARO and WHO WPRO Room 300 (3F) 09:00-16:00		
12:15-13:45	Lunch				
14:00-17:00	Pre-congress Workshop 8 Interstitial Lung Disease				
17:30-20:30				Opening Ceremony & Welcome Reception (Hall D1)	
Friday 18 November 2022					
08:10-09:10					
09:20-10:50	Oral 2 Cell and Molecular Biology	Oral 3 Interstitial Lung Disease			
10:50-11:10	Coffee Break				
11:10-12:40	Oral 5 Lung Cancer	Oral 6 Respiratory Infections (non-tuberculous)			
12:50-13:50	Luncheon Symposium 5 Sponsored by sanofi	Luncheon Symposium 6 Sponsored by YUHAN			
14:00-15:30	Oral 8 Lung Cancer	Oral 9 Interstitial Lung Disease			
15:30-15:50	Coffee Break				
15:50-17:20	Oral 10 COPD	Oral 11 Critical Care Medicine			
17:30-18:30	Evening Symposium 5 Sponsored by GSK	Evening Symposium 6 Sponsored by Boehringer Ingelheim Korea	APSR Assembly Meetings		
18:30-19:00					

Exhibitor
(Hall D2)
09:00-17:00

Poster Exhibition Day 1

Time/Room	Auditorium (3F)	Grand Ballroom 101 (1F)	Grand Ballroom 102 (1F)	Grand Ballroom 103 (1F)	Grand Ballroom 104 (1F)
Saturday 19 November 2022					
08:10-09:10	Memorial Lecture 1 Memorial Lecture 2				
09:20-10:50	Symposium 17 COPD	Symposium 18 Tuberculosis	Symposium 19 Paediatric Lung Disease	Symposium 20 Lung Cancer	Oral 12 Asthma
10:50-11:10	Coffee Break				
11:10-12:40	Symposium 21 Asthma	Symposium 22 Clinical Respiratory Medicine	Symposium 23 Respiratory Structure and Function	Oral 15 Respiratory Infections (non-tuberculous)	Oral 16 Tuberculosis
12:50-13:50		Luncheon Symposium 7 Sponsored by KOLON PHARMA	Luncheon Symposium 8 Sponsored by Boehringer Ingelheim Korea	Luncheon Symposium 9 Sponsored by Boryung Co.	Luncheon Symposium 10 Sponsored by AstraZeneca Korea
14:00-15:30	Symposium 24 COPD	Symposium 25 Respiratory Infections (non-tuberculous)	Symposium 26 Critical Care Medicine	Oral 18 Environmental & Occupational Health and Epidemiology	Oral 19 Tuberculosis
15:30-15:50	Coffee Break				
15:50-17:20	Symposium 27 Interstitial Lung Disease	Symposium 28 Environmental & Occupational Health and Epidemiology	Symposium 29 Clinical Allergy & Immunology	Oral 22 Respiratory Infections (non-tuberculous)	Young Investigator Awards 2
17:30-18:30		Evening Symposium 7 Sponsored by bioMerieux Asia Pacific Pte Ltd	Evening Symposium 8 Sponsored by Abbott Korea	Evening Symposium 9 Sponsored by GSK	Evening Symposium 10 Sponsored by Ildong Pharmaceutical
18:30-19:00					
19:30-21:30					
Sunday 20 November 2022					
08:10-09:10	Keynote Lecture Invited Lecture				
09:20-10:50	APSR - GOLD Joint Session 09:20-11:00	Symposium 30 Critical Care Medicine	Symposium 31 Lung Cancer	Symposium 32 Interstitial Lung Disease	Oral 25 Clinical Respiratory Medicine
10:50-11:10		Coffee Break			
11:10-12:40		Symposium 33 Asthma	Symposium 34 Clinical Respiratory Medicine	Symposium 35 COPD	Oral 27 Respiratory Structure and Function
12:50-13:20				Closing Ceremony	

Time/Room	Grand Ballroom 105 (1F)	ASEM Ballroom 202+203 (2F)	206A, 206B, 207, 211 (2F) 300 (3F) / R1, R2 (3F) / R3, R4 (4F), Etc.	Hall D (3F)	Hall D Foyer (3F)	
Saturday 19 November 2022						
08:10-09:10						
09:20-10:50	Oral 13	Oral 14		Exhibitor (Hall D2) 09:00-17:00	Poster Exhibition Day 2	
	Pulmonary Circulation	Critical Care Medicine				
10:50-11:10	Coffee Break					
11:10-12:40	Oral 17	JRS Symposium				
	Lung Cancer					
12:50-13:50	Luncheon Symposium 11	Luncheon Symposium 12				
	Sponsored by MSD Korea	Sponsored by Novartis				
14:00-15:30	Oral 20	Oral 21				
	Clinical Allergy & Immunology	Respiratory Neurobiology and Sleep				
15:30-15:50	Coffee Break					
15:50-17:20	Oral 23	Oral 24				
	COPD	Bronchoscopy and Interventional Techniques				
17:30-18:30	Evening Symposium 11	Evening Symposium 12				
	Sponsored by sanofi	Sponsored by YUHAN	APSR Assembly Meetings			
18:30-19:00						
19:30-21:30				Gala Dinner (Hall D1)		
Sunday 20 November 2022						
08:10-09:10						
09:20-10:50	Oral 26				Exhibitor (Hall D2) 09:00-12:00	
	Paediatric Lung Disease					
10:50-11:10	Coffee Break					
11:10-12:40	Oral 28					
	Respiratory Infections (non-tuberculous)					
12:50-13:20						



SCIENTIFIC PROGRAM

17 November

Pre-congress Workshop 1		09:00-12:00	Grand Ballroom 101 +102 (1F)
Critical Care Medicine			
Chair	Sunghoon Park (Hallym University College of Medicine, Republic of Korea)		
09:00-09:20	PW01-1	Pre-survey & Basic Approach of PoCUS in ICU Young-Jae Cho (Seoul National University College of Medicine, Republic of Korea)	
09:20-09:40	PW01-2	Lung US for Respiratory Failure Jinwoo Lee (Seoul National University Hospital, Republic of Korea)	
09:40-10:00	PW01-3	POCUS in Pleural Disease Tai Joon An (Yeouido St. Mary Hospital, College of Medicine, Catholic University of Korea, Republic of Korea)	
10:00-10:20	PW01-4	POCUS in COVID-19 Pneumonia Sung Yoon Lim (Seoul National University College of Medicine, Republic of Korea)	
10:20-10:40	PW01-5	POCUS in MV Weaning Kyung Soo Chung (Severance Hospital, Republic of Korea)	
10:40-11:40	PW01-6	Simulation of Various Clinical Cases (Hands-on) Young-Jae Cho, Jinwoo Lee, Tai Joon An, Sung Yoon Lim, Kyung Soo Chung, Ji-Eun Park	
11:40-12:00	PW01-7	Wrap up & Post Survey Ji-Eun Park (Ajou University School of Medicine, Republic of Korea)	

Pre-congress Workshop 2		09:00-12:00	Grand Ballroom 103 (1F)
Lung Cancer			
Chair	Yoon Soo Chang (Yonsei University College of Medicine, Republic of Korea)		
09:00-09:30	PW02-1	History and Current Status of National Lung Cancer Screening Program in Korea Yeol Kim (National Cancer Center, Republic of Korea)	
09:30-10:00	PW02-2	USPSTF Lung Cancer Screening Patricia Rivera (University of Rochester Medical Center, U.S.A.)	
10:00-10:30	PW02-3	Optimal Management of Pulmonary Nodules Yeon Wook Kim (Seoul National University, College of Medicine, Republic of Korea)	
10:30-11:00	PW02-4	Blood-Based Biomarkers Chaeuk Chung (Chungnam National University, College of Medicine, Republic of Korea)	

Pre-congress Workshop 3		09:00-12:00	Grand Ballroom 104 (1F)
COPD			
Chair	Yeon-Mok Oh (University of Ulsan College of Medicine, Republic of Korea)		
09:00-09:30	PW03-1	Genetics of COPD	
		Woo Jin Kim (Kangwon National University, Republic of Korea)	
09:30-10:00	PW03-2	What is Early COPD and Why is It Important?	
		Youlim Kim (Konkuk University School of Medicine, Republic of Korea)	
10:00-10:30	PW03-3	Natural History of COPD	
		Joo Hun Park (Ajou University School of Medicine, Republic of Korea)	
10:30-11:00	PW03-4	COPD & Microbiome	
		Se Hee Lee (CHA University, Republic of Korea)	
11:00-11:30	PW03-5	Goals of COPD Treatment; Focus on Symptom and Exacerbation	
		Deog Kyeom Kim (Seoul National University College of Medicine, Republic of Korea)	
11:30-12:00	PW03-6	What is COPD Exacerbation? Current Definition, Pitfalls, Challenges and Opportunities for Improvement	
		Richard Russell (University of Oxford, United Kingdom)	

Pre-congress Workshop 4		09:00-12:00	Grand Ballroom 105 (1F)
Tuberculosis			
Chair	Seung Heon Lee (Korea University College of Medicine, Republic of Korea)		
09:00-09:30	PW04-1	Global Diagnostic Gap in TB	
		Neil Schluger (Tuberculosis Control Branch, California Department of Public Health, U.S.A.)	
09:30-10:00	PW04-2	Rapid Molecular Diagnosis of TB and Drug Resistance	
		Chang Ki Kim (Seoul Clinical Laboratories, Republic of Korea)	
10:00-10:30	PW04-3	The Role of WGS/NGS in TB Diagnosis and Transmission	
		Jann-Yuan Wang (National Taiwan University, Taiwan)	
10:30-11:00	PW04-4	The Role of Chest Image and Advances in TB Diagnosis	
		Soon Ho Yoon (Seoul National University College of Medicine, Republic of Korea)	
11:00-11:30	PW04-5	Non-Sputum Based Diagnosis of TB	
		Satoshi Mitarai and Seiya Kato (The Research Institute of Tuberculosis, Japan)	
11:30-12:00	PW04-6	Diagnostic Challenge in Pediatric TB (including LTBI)	
		Byeong Wook Eun (Nowon Euji Medical Center, Republic of Korea)	

Pre-congress Workshop 5		14:00-17:00	Grand Ballroom 101 +102 (1F)
Bronchoscopy and Interventional Techniques (Hands on Session)			
Chair	Young Sik Park (Seoul National University College of Medicine, Republic of Korea)		
14:00-17:00	PW05-1	Bronchial Branch Tracing First step for RP-EBUS procedures	
		Jung Seop Eom (Pusan National University Hospital, Republic of Korea)	
	PW05-2	How to perform TBLB using radial probe EBUS	
		June Hong Ahn (Yeungnam University Medical Center, Republic of Korea)	
	PW05-3	Hands on Practice	
		Seung Hyun Yong (Yonsei University College of Medicine, Republic of Korea)	

Pre-congress Workshop 6		14:00-17:00	Grand Ballroom 103(1F)
Pulmonary Circulation			
Chairs	Yee Hyung Kim (Kyung Hee University School of Medicine, Republic of Korea) Hun-Gyu Hwang (Soonchunhyang University Gumi's Hospital, Republic of Korea)		
14:00-14:30	PW06-1	Natural History and Pathophysiology of VTE	
		Jung-Wan Yoo (Gyeongsang National University Hospital, Republic of Korea)	
14:30-15:00	PW06-2	Diagnosis and Management Algorithm for Acute PE	
		Talent Sooronbaev (National Center of Cardiology and Internal Medicine, Kyrgyzstan)	
15:00-15:30	PW06-3	Practical Guidance for Anticoagulation in the Treatment of VTE	
		Hang Jea Jang (Inje University Haeundae Paik Hospital, Republic of Korea)	
15:30-16:00	PW06-4	Evolution of PAH and CTEPH	
		Nick Kim (Critical Care & Sleep Medicine, University of California San Diego, U.S.A.)	
16:00-16:30	PW06-5	Pulmonary Hypertension in Chronic Lung Disease	
		Jae Seung Lee (University of Ulsan College of Medicine, Republic of Korea)	
16:30-17:00	PW06-6	Pulmonary Arteriovenous Malformation	
		Won-Young Kim (Chung-Ang University Hospital, Republic of Korea)	

18 November

Pre-congress Workshop 7		14:00-17:00	Grand Ballroom 104(1F)
Asthma			
Chair	Ji-yong Moon (Hanyang University College of Medicine, Republic of Korea)		
14:00-14:30	PW07-1	Biomarkers of Asthma	
		So Ri Kim (Chonbuk National University Medical School, Republic of Korea)	
14:30-15:00	PW07-2	Immunotherapy in Allergic Asthma	
		Ga-Young Ban (Hallym University College of Medicine, Republic of Korea)	
15:00-15:30	PW07-3	Microbiome in Asthma	
		Kyoung-Hee Sohn (Kyung Hee University School of Medicine, Republic of Korea)	
15:30-16:00	PW07-4	Asthma-COPD Overlap	
		Hye Jung Park (Gangnam Severance Hospital, Republic of Korea)	
16:00-16:30	PW07-5	Biologic Therapy in Severe Asthma	
		Joo-Hee Kim (Hallym University College of Medicine, Republic of Korea)	
16:30-17:00	PW07-6	Treatment Beyond Biologics in Severe Asthma	
		Woo-Jung Song (University of Ulsan College of Medicine, Republic of Korea)	

Pre-congress Workshop 8		14:00-17:00	Grand Ballroom 105(1F)
Interstitial Lung Disease			
Chair	Jong Sun Park (Seoul National University College of Medicine, Republic of Korea)		
14:00-14:30	PW08-1	How to Approach to Patients with ILD?	
		Byoungsoo Kwon (Seoul National University College of Medicine, Republic of Korea)	
14:30-15:00	PW08-2	Key HRCT Findings in ILDs for Pulmonologist	
		Jung Hwa Hwang (Soonchunhyang University College of Medicine, Republic of Korea)	
15:00-15:30	PW08-3	Update of IPF: Diagnosis and Management	
		Jae Ha Lee (Inje University College of Medicine, Republic of Korea)	
15:30-16:00	PW08-4	New Concept of Progressive Pulmonary Fibrosis: Definition and Management	
		Won-Il Choi (Myongji Hospital, Republic of Korea)	
16:00-16:30	PW08-5	Update of Hypersensitivity Pneumonitis	
		Hongseok Yoo (Sungkyunkwan University School of Medicine, Republic of Korea)	
16:30-17:00	PW08-6	Treatment Strategies for CTD Associated ILD	
		Hye Sook Choi (Kyung Hee University School of Medicine, Republic of Korea)	

Presidential Lecture		08:10-09:10	Auditorium (3F)
Chairs	Yoichi Nakanishi (Kitakyushu City Hospital Organization, Japan) Ki-Suck Jung (Hallym University College of Medicine, Republic of Korea)		
08:10-08:40	PL01-1	Management of Progressive Fibrotic ILD	
		Carlos Robalo Cordeiro (University of Coimbra, Portugal)	
08:40-09:10	PL01-2	Lung Cancer - Highlights on the Journey from Screening and Early Detection Through to Management	
		David CL Lam (The University of Hong Kong, Hong Kong)	

Symposium 1		09:20-10:50	Auditorium (3F)
COPD - Meet the Professor: Bronchoscopic Treatment of Emphysema			
Chair	Chin Kook Rhee (The Catholic University of Korea College of Medicine, Republic of Korea)		
09:20-10:50	S01-1	The Art of Endobronchial Valve Insertion	
		Karin Klooster (University Medical Center Groningen, Kingdom of the Netherlands)	

Symposium 2		09:20-10:50	Grand Ballroom 101 (1F)
Tuberculosis - Where Are We for TB Management?			
Chairs	Yi-Wen Huang (Chung Shan Medical University, Taiwan) Jae-Joon Yim (Seoul National University College of Medicine, Republic of Korea)		
09:20-09:50	S02-1	Changing Epidemiology of TB in Asia (in the Era of COVID-19)	
		Kyung Hyun Oh (World Health Organization Regional Office for the Western Pacific, Philippines)	
09:50-10:20	S02-2	Recent Concept of Latent TB Infection and Its Clinical Implication	
		Jann-Yuan Wang (National Taiwan University, Taiwan)	
10:20-10:50	S02-3	Role of New Drugs for TB Control	
		Neil Schluger (Tuberculosis Control Branch, California Department of Public Health, U.S.A.)	

Symposium 3		09:20-10:50	Grand Ballroom 102 (1F)
Critical Care Medicine - What's New in ARDS Management?			
Chairs	Ming-Cheng Chan (Taichung Veterans General Hospital, Taiwan) Gee Young Suh (Department of Pulmonology and Critical Care Medicine, Samsung Medical Center, Republic of Korea)		
09:20-09:50	S03-1	VILI and p-SILI	
		Ming-Cheng Chan (Taichung Veterans General Hospital, Taiwan)	
09:50-10:20	S03-2	EIT Monitoring in ARDS	
		Atsuko Shono (Showa University School of Medicine, Japan)	
10:20-10:50	S03-3	When and How to Apply VV ECMO	
		Chi Ryang Chung (Samsung Medical Center, Republic of Korea)	

Symposium 4		09:20-10:50	Grand Ballroom 103 (1F)
Lung Cancer - Meet the Professor			
Chair	Sita Andarini (University of Indonesia, Persahabatan Hospital, Indonesia)		
09:20-10:50	S04-1	Natural history, diagnosis and treatment of driver mutations Kwun Fong (The University of Queensland, Australia)	

Symposium 5		11:10-12:40	Auditorium (3F)
Asthma - ISAR in Asia Pacific			
Chairs	Diahn-Warng Perng (Taipei Veterans General Hospital, Taiwan) Kwang Ha Yoo (Konkuk University School of Medicine, Republic of Korea)		
11:10-11:40	S05-1	Current ISAR State in Korea Kwang Ha Yoo (Konkuk University School of Medicine, Republic of Korea)	
11:40-12:10	S05-2	Current ISAR State in Taiwan Diahn-Warng Perng (Taipei Veterans General Hospital, Taiwan)	
12:10-12:40	S05-3	Current ISAR State in the World Ruth Murray (Director Medscript Ltd NZ & Research Fellow, OPC, New Zealand)	

Symposium 6		11:10-12:40	Grand Ballroom 101 (1F)
Bronchoscopy and Interventional Techniques - Bronchoscopy; Present and Future			
Chairs	Phan Nguyen (The Royal Brisbane and Women's Hospital, Australia) Hojoong Kim (Sungkyunkwan University School of Medicine, Republic of Korea)		
11:10-11:40	S06-1	Rigid Bronchoscopy for Benign and Malignant Diseases Hojoong Kim (Sungkyunkwan University School of Medicine, Republic of Korea)	
11:40-12:10	S06-2	EBUS-TBNA for Lung Cancer Staging: An Update Bin Hwangbo (National Cancer Center, Republic of Korea)	
12:10-12:40	S06-3	Advanced Bronchoscopy for the Peripheral Lesions Fumihito Asano (Gifu Prefectural General Medical Center, Japan)	

Symposium 7		11:10-12:40	Grand Ballroom 102 (1F)
Pulmonary Circulation - COVID-19 and Pulmonary Circulation			
Chairs	Talant Sooronbaev (National Center of Cardiology and Internal Medicine, Kyrgyzstan) Yang-Ki Kim (Soonchunhyang University College of Medicine, Republic of Korea)		
11:10-11:40	S07-1	COVID-19 Associated Coagulopathy Hun-Gyu Hwang (Soonchunhyang University Gumi's Hospital, Republic of Korea)	
11:40-12:10	S07-2	Prevention and Therapeutic Strategies for VTE in Patients with COVID-19 Nick Kim (Critical Care & Sleep Medicine, University of California San Diego, U.S.A.)	
12:10-12:40	S07-3	Differences in Pulmonary Circulation among COVID-19, HAPE (High Altitude Pulmonary Edema) and ARDS Talant Sooronbaev (National Center of Cardiology and Internal Medicine, Kyrgyzstan)	

Symposium 8		11:10-12:40	Grand Ballroom 103 (1F)
Interstitial Lung Disease - Hot and Current Topics in ILD			
Chairs	Takashi Ogura (Kanagawa Cardiovascular and Respiratory Center, Japan) Yangjin Jegal (University of Ulsan College of Medicine, Republic of Korea)		
11:10-11:40	S08-1	Health Effect of Air Pollution in ILD Sun-Young Kim (National Cancer Center, Republic of Korea)	
11:40-12:10	S08-2	The Impact of COVID-19 on Patients with Underlying Interstitial Lung Disease (ILD) Takashi Ogura (Kanagawa Cardiovascular and Respiratory Center, Japan)	
12:10-12:40	S08-3	Progressive Pulmonary Fibrosis: Where are We Now? Jin Woo Song (University of Ulsan College of Medicine, Republic of Korea)	

Symposium 9		14:00-15:30	Auditorium (3F)
Clinical Respiratory Medicine - with COVID-19			
Chairs	Ki-Suck Jung (Hallym University College of Medicine, Republic of Korea) Jae Yeol Kim (Chung-Ang University College of Medicine, Republic of Korea)		
14:00-14:30	S09-1	Post-Covid Sequelae Eun Young Heo (Seoul National University College of Medicine, Republic of Korea)	
14:30-15:00	S09-2	COVID-19 and Lung fibrosis Hee-Young Yoon (Soonchunhyang University College of Medicine, Republic of Korea)	
15:00-15:30	S09-3	Covid & Airway Diseases Seok Jeong Lee (Yonsei University Wonju College of Medicine, Republic of Korea)	

Symposium 10		14:00-15:30	Grand Ballroom 101 (1F)
Environmental & Occupational Health and Epidemiology - Climate Change and Respiratory Diseases			
Chairs	Yuming Guo (School of Public Health and Preventive Medicine, Monash University, Australia) Hyoungkyu Yoon (The Catholic University of Korea College of Medicine, Republic of Korea)		
14:00-14:30	S10-1	Global Trends in Climate Change Ho Kim (Graduate School of Public Health, Seoul National University, Republic of Korea)	
14:30-15:00	S10-2	Role of Climate Change and Viral Infection on Seasonality of Mortality Lina Madaniyazi (Nagasaki University, Japan)	
15:00-15:30	S10-3	Asia-Pacific Aspect of Climate Change Yuming Guo (School of Public Health and Preventive Medicine, Monash University, Australia)	

Symposium 11		14:00-15:30	Grand Ballroom 102 (1F)
Respiratory Neurobiology and Sleep - Personalised Approach to Treatment of Sleep Apnea			
Chair	Chol Shin (Korea University College of Medicine, Republic of Korea)		
14:00-14:30	S11-1	Treatment strategies for asymptomatic OSA	
		Sei Won Kim (The Catholic University of Korea College of Medicine, Republic of Korea)	
14:30-15:00	S11-2	Current Practice and Future Directions in Sleep Apnea Treatment	
		Motoo Yamauchi (Nara Medical University, Japan)	
15:00-15:30	S11-3	Is the Apnea-Hypopnea Index Sufficient to Predict the Severity of Sleep Apnea? And What Else?	
		Sang Haak Lee (Eunpyeong St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Republic of Korea)	

Symposium 12		14:00-15:30	Grand Ballroom 103 (1F)
Respiratory Infections (non-tuberculous) - Frontiers in Respiratory Infection			
Chairs	Jung-Yien Chien (National Taiwan University Hospital, National Taiwan University College of Medicine, Taiwan) Soo-Jung Um (Dong-A University College of Medicine, Republic of Korea)		
14:00-14:30	S12-1	Effect of AI-Chest PA Diagnosis on Emergency Physicians	
		Won Chul Cha (Samsung Medical Center, Sungkyunkwan University School of Medicine, Republic of Korea)	
14:30-15:00	S12-2	The Role of Multiplex PCR on the Management of Ventilator Associated Pneumonia?	
		Jung-Yien Chien (National Taiwan University Hospital, National Taiwan University College of Medicine, Taiwan)	
15:00-15:30	S12-3	Phages and Endolysins as Novel Antibacterials	
		Hee Joon Myung (Lysentech, Republic of Korea)	

Symposium 13		15:50-17:10	Auditorium (3F)
Asthma - Pro/Con: As Needed ICS-Formoterol in Step 2 Treatment of Asthma			
Chair	Yeon-Mok Oh (University of Ulsan College of Medicine, Republic of Korea)		
15:50-15:55	Introduction & Voting		
15:55-16:15	S13-1	Pro: As Needed ICS-Formoterol in Step 2 Treatment of Asthma	
		Phuong Phan Thu (Bach Mai Hospital, Viet Nam)	
16:15-16:35	S13-2	Con: As Needed ICS-Formoterol in Step 2 Treatment of Asthma	
		Mi-Ae Kim (CHA University, Republic of Korea)	
16:35-16:50	Comment		
16:50-17:05	Q&A		
17:05-17:10	Voting & Closing		

Symposium 14		15:50-17:20	Grand Ballroom 101 (1F)
Cell and Molecular Biology - New Potential Therapeutics in Respiratory Diseases: From Bench to Clinic			
Chairs	Gregory P. Downey (University of Colorado School of Medicine, U.S.A.) Chul-Gyu Yoo (Seoul National University College of Medicine, Republic of Korea)		
15:50-16:20	S14-1	Mitochondrial Regulation of Innate Immune Signaling and Pulmonary Diseases	
		Min-Jong Kang (Yale University, U.S.A.)	
16:20-16:50	S14-2	Immune Mechanisms Driving Pulmonary and Systemic Inflammation in COVID-19	
		Gregory P. Downey (University of Colorado School of Medicine, U.S.A.)	
16:50-17:20	S14-3	When Bronchoscopy Meet Cancer Immunotherapy: Photoimmunotherapy in Lung Cancer	
		Kazuhide Sato (Nagoya University, Japan)	

Symposium 15		15:50-17:20	Grand Ballroom 102 (1F)
Lung Cancer - Recent Updated Immunotherapy			
Chairs	Patricia Rivera (University of Rochester Medical Center, U.S.A.) Sei Hoon Yang (Wonkwang University School of Medicine, Republic of Korea)		
15:50-16:20	S15-1	Immunotherapy Related Pneumonitis	
		Patricia Rivera (University of Rochester Medical Center, U.S.A.)	
16:20-16:50	S15-2	Integration of Radiotherapy with Immunotherapy for Non-Small Cell Lung Cancer: A Radiation Oncologist's Perspective	
		Sungjune Kim (H. Lee Moffitt Cancer Center, U.S.A.)	
16:50-17:20	S15-3	The Role of Immune Checkpoint Inhibitors in Small Cell Lung Cancer	
		In-Jae Oh (Chonnam National University, Republic of Korea)	

Symposium 16		15:50-17:10	Grand Ballroom 103 (1F)
Interstitial Lung Disease – Pro/Con: Controversy in Corticosteroid Pulse Therapy for the Treatment of AE of IPF			
Chair	Sung-Woo Park (Soonchunhyang University College of Medicine, Republic of Korea)		
15:50-15:55	Introduction & Voting		
15:55-16:15	S16-1	Pro: Corticosteroid Pulse Therapy Should be Included in Treatment of Acute Exacerbation of IPF	
		Yasuhiro Kondoh (Tosei General Hospital, Japan)	
16:15-16:35	S16-2	Con: Corticosteroid Pulse Therapy is Not Necessary in Treatment of Acute Exacerbation of IPF	
		Moo Suk Park (Yonsei University College of Medicine, Republic of Korea)	
16:35-16:50	Comment		
16:50-17:05	Q&A		
17:05-17:10	Voting & Closing		

Luncheon Symposium 1		12:50-13:50	Grand Ballroom 101 (1F)
Sponsored by DAEWON Pharmaceutical Co., Ltd.			
Acute Bronchitis			
Chair	Jae Jeong Shim (Korea University College of Medicine, Republic of Korea)		
12:50-13:50	LS01-1	Clinical Value and Advantages of New Antitussive Seong Yong Lim (Sungkyunkwan University School of Medicine, Republic of Korea)	

Luncheon Symposium 2		12:50-13:50	Grand Ballroom 102 (1F)
Sponsored by Boehringer Ingelheim Korea			
IPF - Evidence-Based Approach in Early Treatment for IPF			
Chair	Man Pyo Chung (Sungkyunkwan University School of Medicine, Republic of Korea)		
12:50-12:55	Welcome & Introduction		
12:55-13:25	LS02-1	Clinical Course of IPF & Evidence Based Approach in Early Treatment for IPF with RWE Patient Cases	
		Martin Kolb (McMaster University, Canada)	
13:25-13:45	Discussion	• Man Pyo Chung (Sungkyunkwan University School of Medicine, Republic of Korea) • Amornpun Wongkarnjana (King Chulalongkorn Memorial Hospital, Thailand) • Martin Kolb (McMaster University, Canada)	
13:45-13:50	Summary & Conclusion		

Luncheon Symposium 3		12:50-13:50	Grand Ballroom 103 (1F)
Sponsored by GSK			
COPD			
Chair	Gregory King (Royal North Shore Hospital, Australia)		
12:50-13:15	LS03-1	Importance of Maximal Bronchodilation from the Start	
		Hye Yun Park (Sungkyunkwan University School of Medicine, Republic of Korea)	
13:15-13:40	LS03-2	The Real World Evidence of Single Inhaler Triple Therapy	
		Gregory King (Royal North Shore Hospital, Australia)	
13:40-13:50	Q&A		

Luncheon Symposium 4		12:50-13:50	Grand Ballroom 104 (1F)
Sponsored by AstraZeneca Korea			
COPD			
Chair	Kwang Ha Yoo (Konkuk University School of Medicine, Republic of Korea)		
12:50-13:50	LS04-1	Management Strategies to Reduce the Clinical Burden of COPD Mona Bafadhel (King's College London, United Kingdom)	

Luncheon Symposium 5		12:50-13:50	Grand Ballroom 105 (1F)
Sponsored by sanofi			
Asthma			
Chair	HyoungKyu Yoon (The Catholic University of Korea College of Medicine, Republic of Korea)		
12:50-13:50	LS05-1	Evolution in the Management of Severe Asthma Chin Kook Rhee (The Catholic University of Korea College of Medicine, Republic of Korea)	

Luncheon Symposium 6		12:50-13:50	ASEM Ballroom 202+203 (2F)
Sponsored by YUHAN			
Cancer			
Chair	Jae Cheol Lee (University of Ulsan College of Medicine, Republic of Korea)		
12:50- 13:50	LS06-1	New Era of NSCLC EGFR Mutation Treatment Updated Overall Survival Analysis: 3G EGFR TKI Lazertinib Sung Yong Lee (Korea University College of Medicine, Republic of Korea)	

Evening Symposium 1		17:30-18:30	Grand Ballroom 101 (1F)
Sponsored by OLYMPUS KOREA CO., LTD			
Bronchoscopy and Interventional Techniques			
Chair	Bin Hwangbo (National Cancer Center, Republic of Korea)		
17:30-18:30	ES01-1	Clinical Tips for Transbronchial Biopsy Using Radial Probe EBUS Jung Seop Eom (Pusan National University Hospital, Republic of Korea)	

Evening Symposium 2		17:30-18:30	Grand Ballroom 102 (1F)
Sponsored by Thermo Fisher Scientific Korea			
Procalcitonin			
Chair	Gee Young Suh (Department of Pulmonology and Critical Care Medicine, Samsung Medical Center, Republic of Korea)		
17:30-18:30	ES02-1	Procalcitonin Usefulness to Monitor ABx for Pneumonia Patients Stefano Aliberti (University of Millan, Italy)	

Evening Symposium 3		17:30-18:30	Grand Ballroom 103 (1F)
Sponsored by Boryung Co.			
Carbapenem Sparing			
Chair	Sang Bum Hong (University of Ulsan College of Medicine, Republic of Korea)		
17:30-18:30	ES03-1	HAP & VAP: Importance of Carbapenem-sparing Strategy Bong Young Kim (Hanyang University Hospital, Republic of Korea)	

Evening Symposium 4		17:30-18:30	Grand Ballroom 104 (1F)
Sponsored by GSK			
Severe Asthma			
Chair	Yeon-Mok Oh (University of Ulsan College of Medicine, Republic of Korea)		
17:30-17:55	ES04-1	The Clinical Development of Mepolizumab in Severe Asthma: The First Treatment Targeting a Specific Treatable Trait	
		Ian Pavord (University of Oxford, United Kingdom)	
17:55-18:20	ES04-02	The Clinical Benefits of Mepolizumab for Severe Eosinophilic Asthma in Real-World Study	
		Gregory King (Royal North Shore Hospital, Australia)	
18:20-18:30	Q&A		

Evening Symposium 5		17:30-18:30	Grand Ballroom 105 (1F)
Sponsored by GSK			
Infectious Diseases			
Chair	Eunjo Choo (Soonchunhyang University Hospital Bucheon, Republic of Korea)		
17:30-18:30	ES05-1	Shingles Vaccine in COPD, Asthma Patient (Infectious Diseases) Sunghee Park (Soonchunhyang University Hospital Bucheon, Republic of Korea)	

Evening Symposium 6		17:30-18:30	ASEM Ballroom 202 + 203 (2F)
Sponsored by Boehringer Ingelheim Korea			
COPD - Current Pharmacological Approaches in COPD			
Chair	Yong Bum Park (Hallym University College of Medicine, Republic of Korea)		
17:30-17:35	Opening		
17:35-17:50	ES06-1	Current Therapeutic Approaches in COPD	
		Youlim Kim (Konkuk University School of Medicine, Republic of Korea)	
17:50-18:05	ES06-2	Device Selection for COPD	
		James Chalmers (University of Dundee, United Kingdom)	
18:05-18:20	ES06-3	“Keep the Balance” in ICS Containing Regimens	
		James Chalmers (University of Dundee, United Kingdom)	
18:20-18:30	Q&A		

19 November

Young Investigator Awards 1		15:50-17:20	Grand Ballroom 104 (1F)
Chair	Albert Yick-Hou Lim (Tan Tock Seng Hospital, Singapore)		
15:50-15:58	YIA-1-1	The Role of Airway Epithelia in Sarcoidosis	
		Alejandro A Pezzulo (U.S.A.)*, Miles Hagner, Brandon Bettis, Huiyu Gong, Andrew Thurman, Nabeel Hamzeh	
15:58-16:06	YIA-1-2	Loss of Endothelial Sphingosine-1-Phosphate Receptor 1 (S1PR1) Exacerbates Injury-Induced Pulmonary Fibrosis	
		Rachel S. Knipe (U.S.A.)*, Patricia L. Brazee, Clemens K. Probst, Jason Griffith, Lida Hariri, Timothy Hla, Benjamin D. Medoff	
16:06-16:14	YIA-1-3	Correlation between hand grip strength and peak inspiratory flow rate in patients with stable chronic obstructive pulmonary disease	
		Apisara Suriyakul (Thailand)*, Narongkorn Saiphoklang, Igor Barjaktarevic, Christopher Cooper	
16:14-16:22	YIA-1-4	Prevalence, Characteristics, and Risk of Exacerbation in Young patients with Chronic Obstructive Pulmonary Disease	
		Yong Suk Jo (Republic of Korea)*, Kyung Joo Kim, Chin Kook Rhee, Kwang Ha Yoo, Ki-Suck Jung, Yong-Bum Park	
16:22-16:30	YIA-1-5	A Relationship between Female Sex Hormones, Cellular Metabolism, and Asthma	
		Olivia Carrol (Australia)*, Alexandra Brown, Jemma Mayall, Henry Gomez, Richard Kim, Chantal Donovan, Evan Williams, Bronwyn Berthon, James Pinkerton, Philip Hansbro, Paul Foster, Katie Wynne, Hayley Scott, Lisa Wood, Jay Horvat	
16:30-16:38	YIA-1-6	Distinct impacts of centrilobular vs. paraseptal emphysema on annual decline in pulmonary function in COPD	
		Yusuke Shiraishi (Japan)*, Naoya Tanabe, Kaoruko, Shimizu, Akira Oguma, Ryo Sakamoto, Tsuyoshi Oguma, Atsuyasu Sato, Masaru Suzuki, Hironi Makita, Shigeo Muro, Masaharu Nishimura, Susumu Sato, Satoshi Konno, Toyohiro Hirai	
16:38-16:46	YIA-1-7	Genome-wide association study in patients with pulmonary Mycobacterium avium complex disease	
		Ho Namkoong (Japan)*	
16:46-16:54	YIA-1-8	Non-cystic Fibrosis Bronchiectasis (NCFB) is a Bronchiolectatic Disease Characterized by MUC5B-dominated Mucus Hyperproduction	
		Takanori Asakura (United States of America)*, Kenichi Okuda, Gang Chen, Takafumi Kato, Yu Mikami, Rodney Gilmore, Selene Margarita Barbosa Cardenas, Michael Chua, Yohei Masugi, Peadar Noone, Carla Maria Pedrosa Ribeiro, Kenneth Olivier, Naoki Hasegawa, Scott Randell, Wanda O'Neal, Richard Boucher	
16:54-17:02	YIA-1-9	The lung microbiota in nontuberculous mycobacterial pulmonary disease	
		Bo-Guen Kim (Republic of Korea)*, Noeul Kang, Su-Young Kim, Dae Hun Kim, Hojoong Kim, O Jung Kwon, Hee Jae Huh, Nam Yong Lee, Jhingook Kim, Byung Woo Jhun	
17:02-17:10	YIA-1-10	Diagnostic Utility of Adenosine Deaminase in Differentiating Tuberculous and Non-Tuberculous Exudative Pleural Effusions	
		Boon Hau Ng (Malaysia)*, Hsueh Jing Low, Andrea Yu-Lin Ban, Nik Nuratiqah Nik Abeed, Mohamed Faisal Abdul Hamid	
17:10-17:18	YIA-1-11	Risk factors associated with treatment response in patients with idiopathic nonspecific interstitial pneumonia	
		Dong-Hyun Joo (Republic of Korea)*, Sun Mi Choi	

Memorial Lecture		08:10-09:10	Auditorium (3F)
Chairs	Carlos Robalo Cordeiro (University of Coimbra, Portugal) Jae Jeong Shim (Korea University College of Medicine, Republic of Korea)		
08:10-08:40	PL02-1	[Michiyoshi Harasawa] Chronic lung diseases: COPD and bronchiectasis	
		Chong-Jen Yu (National Taiwan University College of Medicine, Taiwan)	
08:40-09:10	PL02-2	[Ann Janet Woolcock] Why Improve the Management of Chronic Cough in Children Through Clinical Care and Research?	
		Anne Chang (Menzies School of Health Research, Queensland University of Technology, Australia)	

Symposium 17		09:20-10:50	Auditorium (3F)
COPD - Microbiome/Infection			
Chairs	Richard Russell (University of Oxford, United Kingdom) Sang-Do Lee (University of Ulsan College of Medicine, Republic of Korea)		
09:20-09:50	S17-1	Up-To-Date Research of Microbiome in COPD and Clinical Implication	
		Don Sin (University of British Columbia, St. Paul Hospital, Canada)	
09:50-10:20	S17-2	Who Needs ICS in COPD	
		Richard Russell (University of Oxford, United Kingdom)	
10:20-10:50	S17-3	BCO (Bronchiectasis COPD Overlap): Severe Phenotype or Simple Comorbidity?	
		Ji Ye Jung (Yonsei University College of Medicine, Republic of Korea)	

Symposium 18		09:20-10:50	Grand Ballroom 101 (1F)
Tuberculosis - Towards TB Elimination Post-Pandemic Era in APSR Members' Countries			
Chairs	Jennifer Ann Wi (Dagupan Doctors Villaflor Memorial Hospital, Philippines) Tae Sun Shim (University of Ulsan College of Medicine, Republic of Korea)		
09:20-09:50	S18-1	Experience Sharing from High Burden Country: Challenges and Strategies	
		Erlina Burhan (Universitas Indonesia, Indonesia)	
09:50-10:20	S18-2	Lessons Learned from Intermediate Burden Countries: Success Story of Each Country 1	
		Seiya Kato (The Research Institute of Tuberculosis, Japan)	
10:20-10:50	S18-3	Lessons Learned from Intermediate Burden Countries: Success Story of Each Country 2	
		Hee Jin Kim (Korean National Tuberculosis Association, Republic of Korea)	

Symposium 19		09:20-10:50	Grand Ballroom 102 (1F)
Paediatric Lung Disease - Rare but Becoming Prevalent Pediatric Chronic Lung Disease			
Chairs	Anne Goh Eng Neo (KK Women's and Children's Hospital, Singapore) Soo-Jong Hong (University of Ulsan College of Medicine, Republic of Korea)		
09:20-09:50	S19-1	What Should We Focus on Managing Children with Non-CF Bronchiectasis? Anne Goh Eng Neo (KK Women's and Children's Hospital, Singapore)	
09:50-10:20	S19-2	Measures to Prevent Bronchopulmonary Dysplasia in Premature Neonates Tsu F. Yeh (Taipei Medical University, Taiwan)	
10:20-10:50	S19-3	Still Ongoing Issues of Pediatric Humidifier Disinfectant-Related Lung Injury Soo-Jong Hong (University of Ulsan College of Medicine, Republic of Korea)	

Symposium 20		09:20-10:40	Grand Ballroom 103 (1F)
Lung Cancer - Pro/Con: Sequential Treatment for Advanced EGFR M(+) NSCLC			
Chair	Kwun Fong (The University of Queensland, Australia)		
09:20-09:25	Introduction & Voting		
09:25-09:45	S20-1	Pro: Sequential Treatment for Advanced EGFR M(+) NSCLC	
		Jeong Eun Lee (Chungnam National University School of Medicine, Republic of Korea)	
09:45-10:05	S20-2	Con: Sequential Treatment for Advanced EGFR M(+) NSCLC	
		Diana Yuwung Yeh (School of Medicine, Fu Jen Catholic University, Taiwan)	
10:05-10:20	Comment		
10:20-10:35	Q&A		
10:35-10:40	Voting & Closing		

Symposium 21		11:10-12:40	Auditorium (3F)
Asthma - Meet the Professor			
Chair	Yong Chul Lee (Chonbuk National University Medical School, Republic of Korea)		
11:10-12:40	S21-1	Management of T2-Low Asthma Parameswaran Nair (McMaster University, Canada)	

Symposium 22		11:10-12:40	Grand Ballroom 101 (1F)
Clinical Respiratory Medicine - Lung Aging and Chronic Lung Diseases			
Chairs	David A. Schwartz (University of Colorado School of Medicine, U.S.A.) Man Pyo Chung (Sungkyunkwan University School of Medicine, Republic of Korea)		
11:10-11:40	S22-1	Physiologic and Structural Consideration in the Aging Lung Won-Il Choi (Myongji Hospital, Republic of Korea)	
11:40-12:10	S22-2	An Airway Centric View of Idiopathic Pulmonary Fibrosis David A. Schwartz (University of Colorado School of Medicine, U.S.A.)	
12:10-12:40	S22-3	Similarity Dissimilarity between Aging and ILD/IPF (or Chronic Lung Diseases) Yasuhiro Kondoh (Tosei General Hospital, Japan)	

Symposium 23		11:10-12:40	Grand Ballroom 102 (1F)
Respiratory Structure and Function - Physiologic Phenotype of Respiratory Disease			
Chairs	Martijn A. Spruit (Maastricht University Medical Center, Kingdom of the Netherlands) Seong Yong Lim (Sungkyunkwan University School of Medicine, Republic of Korea)		
11:10-11:40	S23-1	The Role of the Physiome: Physiologic Phenotyping and Treatable Traits in Pulmonary Disease Martijn A. Spruit (Maastricht University Medical Center, Kingdom of the Netherlands)	
11:40-12:10	S23-2	Challenging Spirometry: Newer Lung Function Test Other than FEV1 David G. Chapman (University of Technology Sydney, Australia)	
12:10-12:40	S23-3	States of Art: Recent Update of Pulmonary Rehabilitation Seung Won Ra (Ulsan University Hospital, Republic of Korea)	

JRS Symposium		11:10-12:40	ASEM Ballroom 202 + 203 (2F)
11:10-11:40	JRS-1	Challenge to overcome drug resistance in non-small cell lung cancer (Video Recording) Kazuhisa Takahashi (Juntendo University, Japan)	
11:40-12:10	JRS-2	Role of airway mucus hypersecretion in the pathogenesis of COPD: implications for therapy (Video Recording) Takeshi Kaneko (Yokohama City University, Japan)	

Symposium 24		14:00-15:20	Auditorium (3F)
COPD – Pro/Con: Application of Bioinformatic Artificial Intelligence to Current Clinical Practice in the Management of COPD			
Chair	Alejandro A Pezzulo (University of Iowa, U.S.A.)		
14:00-14:05	Introduction & Voting		
14:05-14:25	S24-1	Pro: Application of Bioinformatic Artificial Intelligence to Current Clinical Practice in the Management of COPD	
		Chin Kook Rhee (The Catholic University of Korea College of Medicine, Republic of Korea)	
14:25-14:45	S24-2	Con: Application of Bioinformatic Artificial Intelligence to Current Clinical Practice in the Management of COPD	
		Konstantinos Kostikas (University of Ioannina, Greece)	
14:45-15:00	Comment		
15:00-15:15	Q&A		
15:15-15:20	Voting & Closing		

Symposium 25		14:00-15:30	Grand Ballroom 101 (1F)
Respiratory Infections (non-tuberculous) - Updated Clinical Approach in Respiratory Infection			
Chairs	Chieh-Liang Wu (Taichung Veterans General Hospital, Taiwan) Jae Hwa Cho (Yonsei University College of Medicine, Republic of Korea)		
14:00-14:30	S25-1	Treatment of miscellaneous pulmonary infections: actinomycosis and cryptococcosis	
		Hyun Lee (Hanyang University College of Medicine, Republic of Korea)	
14:30-15:00	S25-2	Recent Advances in the Aspiration Pneumonia	
		Chieh-Liang Wu (Taichung Veterans General Hospital, Taiwan)	
15:00-15:30	S25-3	Advances in the Management of Fungal Pneumonia in Critically Ill Patients	
		Jin-won Huh (University of Ulsan College of Medicine, Republic of Korea)	

Symposium 26		14:00-15:30	Grand Ballroom 102 (1F)
Critical Care Medicine - Meet the Professor			
Chair	Sang Bum Hong (University of Ulsan College of Medicine, Republic of Korea)		
14:00-14:40	S26-1	ARDS, Beyond & Next	
		Carolyn S. Calfee (University of California, San Francisco, U.S.A.)	
14:40-15:30	Discussion		

Symposium 27		15:50-17:20	Auditorium (3F)
Interstitial Lung Disease - Interstitial Lung Abnormalities: State of the Art			
Chairs	Grace H. Kim (UCLA, U.S.A.) Jin Woo Song (University of Ulsan College of Medicine, Republic of Korea)		
15:50-16:20	S27-1	ILA: Natural Course and Clinical Implication	
		Takeshi Johkoh (Kansai Rosai Hospital, Japan)	
16:20-16:50	S27-2	Evaluation of ILA by Automatic Quantification System	
		Grace H. Kim (UCLA, U.S.A.)	
16:50-17:20	S27-3	ILA in Asian Population	
		Gong Yong Jin (Jeonbuk National University, Republic of Korea)	

Symposium 28		15:50-17:20	Grand Ballroom 101 (1F)
Environmental & Occupational Health and Epidemiology - The Past, Present, and Future of Occupational Health Surveillance			
Chairs	Martie Van Tongeren (The University of Manchester, United Kingdom) Woo Jin Kim (Kangwon National University School of Medicine, Republic of Korea)		
15:50-16:20	S28-1	UK Occupational and Environmental Surveillance Program	
		Martie Van Tongeren (The University of Manchester, United Kingdom)	
16:20-16:50	S28-2	A Surveillance of Nanoparticle Exposed Workers and Their Respiratory Function, Japan Experience	
		Akira Ogami (University of Occupational and Environmental Health, Japan)	
16:50-17:20	S28-3	Hospital Based Nation-Wide Surveillance of Asbestos Related Diseases in Korea	
		Jun-Pyo Myong (The Catholic University of Korea College of Medicine, Republic of Korea)	

Symposium 29		15:50-17:20	Grand Ballroom 102 (1F)
Clinical Allergy & Immunology - Advances in Clinical Allergy and Immunology			
Chairs	Koichiro Asano (Tokai University School of Medicine, Japan) Chang-Keung Kim (Inje University College of Medicine, Republic of Korea)		
15:50-16:20	S29-1	The Effect of Tezepelumab in Asthma	
		Asger Sverrild (University Hospital Bispebjerg, Denmark)	
16:20-16:50	S29-2	Diagnosis and Treatment of ABPA	
		Koichiro Asano (Tokai University School of Medicine, Japan)	
16:50-17:20	S29-3	Treatment of Biologics in Comorbidities of Asthma	
		Ji-yong Moon (Hanyang University College of Medicine, Republic of Korea)	

Luncheon Symposium 7			12:50-13:50	Grand Ballroom 101 (1F)
Sponsored by KOLON PHARMA				
Asthma				
Chair	Hyoungkyu Yoon (Yeouido ST. Mary's Hospital, The Catholic University of Korea College of Medicine, Republic of Korea)			
12:50-13:50	LS07-1	SAD in Asthma Omar S Usmani (National Heart and Lung Institute (NHLI), Imperial College London, United Kingdom)		

Luncheon Symposium 8		12:50-13:50	Grand Ballroom 102 (1F)
Sponsored by Boehringer Ingelheim Korea			
Progressive Fibrosing Interstitial Lung Diseases (PF-ILD)-Management Strategies in Clinical Practice			
Chair	Jin Woo Song (University of Ulsan College of Medicine, Republic of Korea)		
12:50-12:55	Welcome & Introduction		
12:55-13:15	LS08-1	Diagnosis for Progression & Monitoring in PF-ILD	
		Sun Mi Choi (Seoul National University College of Medicine, Republic of Korea)	
13:15-13:40	LS08-2	Current Treatment Approaches in PFILD and Treatment Initiation Criteria with RWE Patient Cases	
		Toby Maher (University of Southern California, U.S.A.)	
13:25-13:45	Discussion	· Sun Mi Choi (Seoul National University College of Medicine, Republic of Korea) · Toby Maher (University of Southern California, U.S.A.)	
13:45-13:50	Summary & Conclusion		

Luncheon Symposium 9			12:50-13:50	Grand Ballroom 103 (1F)
Sponsored by Boryung Co.				
Airway Disease - In-depth Review of Mucus				
Chair	Seong Yong Lim (Sungkyunkwan University School of Medicine, Republic of Korea)			
12:50-13:50	LS09-1	Recent Update Chronic Bronchitis Chin Kook Rhee (The Catholic University of Korea College of Medicine, Republic of Korea)		

Luncheon Symposium 10			12:50-13:50	Grand Ballroom 104 (1F)
Sponsored by AstraZeneca Korea				
Severe Asthma				
Chair	Joo Hun Park (Ajou University School of Medicine, Republic of Korea)			
12:50-13:50	LS10-1	'First Do No Harm': Using Biomarkers and Biologics to Minimize Systemic Steroid Exposure in Asthma David Jackson (Guy's and St Thomas' Hospital, King's College London, United Kingdom)		

Luncheon Symposium 11			12:50-13:50	Grand Ballroom 105 (1F)
Sponsored by MSD Korea				
Cancer				
Chair	Sung Yong Lee (Korea University College of Medicine, Republic of Korea)			
12:50-13:50	LS11-1	Reimagine More TOMORROWS Together with Pembrolizumab in the 1st-line mNSCLC Treatment Seong-Hoon Yoon (Pusan National University Yangsan Hospital, Republic of Korea)		

Luncheon Symposium 12		12:50-13:50	ASEM Ballroom 202 + 203 (2F)
Sponsored by Novartis			
Asthma			
Chair	Yeon-Mok Oh (University of Ulsan College of Medicine, Republic of Korea)		
12:50-13:40	LS12-1	Simplified Triple Therapy for Asthma	
		Kenneth R. Chapman (Toronto General Hospital Research Institute, Canada)	
13:40-13:50	Q&A		

Evening Symposium 7	17:30-18:30	Grand Ballroom 101 (1F)
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Sponsored by bioMerieux Asia Pacific Pte Ltd

IPF		
Chair	Young Sam Kim (Yonsei University College of Medicine, Republic of Korea)	
17:30-18:30	ES07-1	How Rapid Multiplex PCR Technology Revolutionizes Antimicrobial Stewardship for Pneumonia Management and Values in Post-pandemic Era Vanya Gant (University College London Hospital, United Kingdom)

Evening Symposium 8	17:30-18:30	Grand Ballroom 102 (1F)
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Sponsored by Abbott Korea

Asthma		
Chair	Do-Jin Kim (Soon Chun Hyang University College of Medicine, Republic of Korea)	
17:30-18:30	ES08-1	The Role of Sublingual Allergen Specific Immunotherapy in the Treatment of House Dust Mite Driven Asthma Eike Wüstenberg (ALK Corporate Headquarter, Vice President Medical Affairs, Denmark)

Evening Symposium 9	17:30-18:30	Grand Ballroom 103 (1F)
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Sponsored by GSK

Asthma		
Chair	Yong Bum Park (Hallym University College of Medicine, Republic of Korea)	
17:30-17:55	ES09-1	A Benefit/Risk Analysis of Regular Maintenance vs. Infrequent or As-needed Inhaled Corticosteroid Use in Asthma Nobert Berend (University of Sydney, Australia)
17:55-18:20	ES09-2	Role of Ima and benefit of single inhaler triple therapy in Asthma Gregory King (Royal North Shore Hospital, Australia)
18:20-18:30	Q&A	

Evening Symposium 10	17:30-18:30	Grand Ballroom 104 (1F)
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Sponsored by Ildong Pharmaceutical

IPF		
Chair	Moo Suk Park (Yonsei University College of Medicine, Republic of Korea)	
17:30-18:05	ES10-1	Pirfenidone in Progressive Fibrosing ILD Takafumi Suda (Hamamatsu University School of Medicine, Japan)
18:05-18:30	ES10-2	Efficacy of Lowe Dose Pirfenidone for the Treatment of IPF Yong Hyun Kim (Bucheon St. Mary's Hospital, The Catholic University of Korea College of Medicine, Republic of Korea)

Evening Symposium 11	17:30-18:30	Grand Ballroom 105 (1F)
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Sponsored by sanofi

Asthma		
Chair	Kwang Ha Yoo (Konkuk University School of Medicine, Republic of Korea)	
17:30-18:30	ES11-1	Biological Treatment for Type 2 Severe Asthma: The Role and Contribution of IL-4/IL-13 Nicola Hananiah (Baylor College of Medicine, U.S.A.)

Evening Symposium 12	17:30-18:30	ASEM Ballroom 202 + 203 (2F)
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Sponsored by YUHAN

Cancer		
Chair	Kye Young Lee (Konkuk University School of Medicine, Republic of Korea)	
17:30-18:30	ES12-1	Oncogene Driven NSCLC: Targeted Therapies, Lessons Learnt & Future Directions Sai-Hong Ignatius (University of California, U.S.A.)

20 November

Young Investigator Awards 2		15:50-17:20	Grand Ballroom 104 (1F)
Chair	Kwang Ha Yoo (Konkuk University School of Medicine, Republic of Korea)		
15:50-15:58	YIA-2-1	Determination of Ability of Individual Inflammatory Markers in Predicting Critical COVID and Mortality: a Retrospective Cohort Study Catherine Jordan (Philippines)*, Ma. Janeth Samson	
15:58-16:06	YIA-2-2	Comparison of electromagnetic navigation bronchoscopy and transthoracic needle biopsy for diagnosing bronchus sign positive pulmonary lesions Yeon Wook Kim (Republic of Korea)*, Hyung-Jun Kim, Sung Hyun Yoon, Myung Jin Song, Byoung Soo Kwon, Sung Yoon Lim, Yeon Joo Lee, Jong Sun Park, Young-Jae Cho, Jae Ho Lee, Choon-Taek Lee	
16:06-16:14	YIA-2-3	Analysis of brain functional connectivity in COPD patients with functional brain MRI Yoomi Yeo (Republic of Korea)*, Ji Tak Rhu, Hanjoon Jo, Sung-Ho Jang, Joonho Choi, Dong Woo Park, Tae-Hyung Kim	
16:14-16:22	YIA-2-5	Children respiratory health during Covid-19 lockdown and after 6-month re-exposure to poor air quality. Hong Le (Australia)*, An Pham, Vinh Nguyen, Robert Ware, Dung Phung, Phong Thai, Sarath Ranganathan, Dang Tran, Hien To, Peter Sly	
16:22-16:30	YIA-2-6	Clinical Significance of Normalized FEV1/FVC in the Patients Diagnosed with Chronic Obstructive Pulmonary Disease (COPD). Yun Seok Kim (Republic of Korea)*, Kwang Ha Yoo, Chin Kook Rhee, Ki-Suck Jung, Yong Bum Park, Joon Young Choi	
16:30-16:38	YIA-2-7	Late diagnosis of Congenital Pulmonary Airway Malformation (CPAM) in a child with recurrent respiratory symptoms Sokchinda Kong (Cambodia)*, Khemuoy Um, Michael Wall	
16:38-16:46	YIA-2-8	Tuberculous Lymphadenitis in Children: Experience From a Referral Tertiary Hospital in a High-Burden Country Muhammad Akbar Tirtosudiro (Indonesia)*, Usman, Hermin Aminah, Cesilia Citra, Nataprawira, Heda Melinda	
16:46-16:54	YIA-2-9	The stability of blood eosinophil count and clinical outcomes in Thai chronic obstructive pulmonary disease patients: A prospective study Punchalee Kaenmuang (Thailand)*, Siwasak Juthong, Sirikorn Densrisereekul	
16:54-17:02	YIA-2-10	Low compliance factors of NSCLC patients who refuse chemotherapy at dr. zainoel abidin hospital banda aceh Juvenita Sartika Dewi (Indonesia)*, Ferry Dwi Kurniawan, Irmaini Irmaini, Novita Andayani	
17:02-17:10	YIA-2-11	Remote telemonitoring among patients on home non-invasive ventilation (NIV): the Sarawak experience Mei Ching Yong (Malaysia)*, Sze Shyang Kho, Swee Kim Chan, Siew Teck Tie	

Keynote & Invited Lecture		08:10-09:10	Auditorium (3F)
Chairs	Young Whan Kim (Konkuk University School of Medicine, Republic of Korea) Jae Ho Lee (Seoul National University College of Medicine, Republic of Korea)		
08:10-08:40	PL03-1	[Keynote Lecture] Shorter Treatment for Tuberculosis: Where Do We Stand? Jae-Joon Yim (Seoul National University College of Medicine, Republic of Korea)	
08:40-09:10	PL03-2	[Invited Lecture] Role of Proteinases and the Extracellular Matrix in ARDS Pathobiology Gregory P. Downey (University of Colorado School of Medicine, U.S.A.)	

Symposium 30		09:20-10:50	Grand Ballroom 101 (1F)
Critical Care Medicine - Reorganizing ICU after COVID-19 Pandemic			
Chairs	Jason Phua (National University Hospital, Singapore) Sang-Min Lee (Seoul National University College of Medicine, Republic of Korea)		
09:20-09:50	S30-1	Therapeutics of Critical COVID-19 Patients Carolyn S. Calfee (University of California, San Francisco, U.S.A.)	
09:50-10:20	S30-2	Management of Acute Respiratory Failure in COVID-19 Jason Phua (National University Hospital, Singapore)	
10:20-10:50	S30-3	Reorganizing ICU after COVID-19 Pandemic Young-Jae Cho (Seoul National University College of Medicine, Republic of Korea)	

Symposium 31		09:20-10:50	Grand Ballroom 102 (1F)
Lung Cancer - Palliative Care in Patients with Lung Cancer			
Chairs	Sita Andarini (University of Indonesia, Persahabatan Hospital, Indonesia) Chang-Min Choi (University of Ulsan College of Medicine, Republic of Korea)		
09:20-09:50	S31-1	Evolution of Palliative Care and Models of Care Delivery David Hui (MD Anderson Cancer Center, U.S.A.)	
09:50-10:20	S31-2	Benefits and Barriers of Early Integrated Palliative Care in Lung Cancer Patients Hye Ryoung Kim (Korea Institute of Radiological and Medical Sciences, Republic of Korea)	
10:20-10:50	S31-3	Symptom Relief Management in End-of Life Care So Young Park (Hallym University College of Medicine, Republic of Korea)	

Symposium 32		09:20-10:50	Grand Ballroom 103 (1F)
Interstitial Lung Disease - Meet the Professor			
Chair	Moo Suk PARK (Yonsei University College of Medicine, Republic of Korea)		
09:20-10:50	S32-1	The Role of Genetics in Idiopathic Pulmonary Fibrosis	
		David A. Schwartz (University of Colorado School of Medicine, U.S.A.)	

Symposium 33		11:10-12:40	Grand Ballroom 101 (1F)
Asthma - Biomarker and Genetic Marker in Severe Asthma			
Chairs	Olivia Carroll (The University of Newcastle and the Priority Research Centre for Healthy Lungs, Hunter Medical Research Institute - Newcastle, Australia) Yong Bum Park (Hallym University College of Medicine, Republic of Korea)		
11:10-11:40	S33-1	Biomarker for Severe Asthma	
		Nicola Hanania (Baylor College of Medicine, U.S.A.)	
11:40-12:10	S33-2	Microbiome in Severe Asthma	
		Jung-Kyu Lee (Seoul National University, Republic of Korea)	
12:10-12:40	S33-3	Eosinophil-Mucus Complex Interplay in Severe Asthma	
		Parameswaran Nair (McMaster University, Canada)	

Symposium 34		11:10-12:40	Grand Ballroom 102 (1F)
Clinical Respiratory Medicine - From Cough to Exacerbation			
Chairs	Anne E. Vertigan (The University of Newcastle, Australia) Jin Woo Kim (The Catholic University of Korea College of Medicine, Republic of Korea)		
11:10-11:40	S34-1	Heterogenous Aspect of Chronic Cough: Differing Profile	
		Hyeon-Kyoung Koo (Inje University College of Medicine, Republic of Korea)	
11:40-12:10	S34-2	What to do and where to go with exacerbations of COPD?	
		Mona Bafadhel (King's College London, United Kingdom)	
12:10-12:40	S34-3	The State of the Art for Refractory Cough: Multidisciplinary Approach	
		Anne E. Vertigan (The University of Newcastle, Australia)	

Symposium 35		11:10-12:40	Grand Ballroom 103 (1F)
COPD - Early COPD			
Chairs	Don Sin (University of British Columbia, St. Paul Hospital, Canada) Seung Won Ra (University of Ulsan College of Medicine, Republic of Korea)		
11:10-11:40	S35-1	Importance of Early COPD in Young Adults for Development of Clinical COPD	
		Don Sin (University of British Columbia, St. Paul Hospital, Canada)	
11:40-12:10	S35-2	Defining of Early COPD in Korea	
		Youlim Kim (Konkuk University School of Medicine, Republic of Korea)	
12:10-12:40	S35-3	Early Intervention of COPD with Mild Airflow Limitation	
		Diahn-Warng Perng (Taipei Veterans General Hospital, Taiwan)	

APSR-GOLD Joint Session		09:20-11:00	Auditorium (3F)
Updates of the GOLD Strategy and Its Implementation into Asia			
Chair	David Hui (The Chinese University of Hong Kong, Hong Kong)		
09:20-09:50	GOLD Update Presentation		
	Don Sin (University of British Columbia, St. Paul Hospital, Canada)		
09:50-10:15	Implementation of the GOLD Strategy into a Local COPD Guideline - Comparison of the GOLD Strategy vs. the Korean COPD Guideline.		
	Yeon-Mok Oh (University of Ulsan College of Medicine, Republic of Korea)		
10:15-10:40	Management of COPD in Asia		
	Chin Kook Rhee (The Catholic University of Korea College of Medicine, Republic of Korea)		
10:40-11:00	Panel Discussion		
	- David Hui (The Chinese University of Hong Kong, Hong Kong)		
	- Yeon-Mok Oh (University of Ulsan College of Medicine, Republic of Korea)		
	- Chin Kook Rhee (The Catholic University of Korea College of Medicine, Republic of Korea)		
	- Don Sin (University of British Columbia, St. Paul Hospital, Canada)		
	- Diahn-Warng Perng (Taipei Veterans General Hospital, Taiwan)		



APSR 2022
The 26th Congress of the
Asian Pacific Society of Respiriology

ORAL PRESENTATION & POSTER EXHIBITION

18 November	80
19 November	123
20 November	165

ORAL PRESENTATION

18 November

Oral 1		09:20-10:50	Grand Ballroom 104 (1F)
Asthma			
Chair	Yu-Il Kim (Chonnam National University Medical School, Republic of Korea)		
09:20-09:30	A001-1	Severe asthma is associated with the adverse COVID-19 outcome - A Big Data Study	
		Jong Seung Kim (Republic of Korea)*, Jae Seok Jeong, Yeon Seok You, Jong-Hwan Lee, Sang Woo Yeom, Yong Chul Lee	
09:30-09:40	A001-2	Demographic and Clinical Characteristics of Patients with Severe Asthma in the Asian Pacific Region: data from the International Severe Asthma Registry (ISAR)	
		David Price (United Kingdom)*, Chin Kook Rhee, Trung N. Tran, Rohit Katial, Neil Martin, Matthew Peters, Eve Denton, John W. Upham, Philip Bardin, Belinda Cochrane, Peter G Middleton, Paul Reynolds, Christine Jenkins, Diahn-Warng Perng, Hao-Chien Wang, Chau-Chyun Sheu, Ming-Ju Tsai, Erick Wan-Chun Huang, Ying-Chun Chien, Jeng-Yuan Hsu, Pin-Kuei Fu, Ching-Hsiung Lin, Sheng-Hao Lin, Sheng-Yeh Shen, Shih-Feng Liu, Kang-Yun Lee, Kuo-Chin Chiu, Horng-Chyuan Lin, Ming-Shian Lin, Chu-Kuang Chou, Sundeep Salvi, You Sook Cho, Kwang Ha Yoo, Takashi Iwanaga, Yuji Tohda, Hajime Fujimoto, Hiroshi Tanaka, Kazutaka Nogami, Kiyoshi Sekiya, Mayumi Matsunaga, Hozawa Soichiro,Takao Fujisawa, Tatsuya Nagano, Tetsu Kobayashi, Tsuyoshi Oguma, Yoshihiro Nishimura, Lakmini Bulathsinhala, Indu Joshi, Neva Eleangovan, Derek Skinner, Victoria Carter, Chris Price, Ruth Murray	
09:40-09:50	A001-3	Ending the reign of short-acting β2-agonists in Australia?	
		David Price (United Kingdom)*, Ruth Murray, Christine Jenkins, Kerry Hancock, Rebecca Vella, Florian Heraud, Porsche Le Cheng, Sinthia Bosnic-Anticevich, Fabio Botini, Victoria Carter, Angelina Catanzariti, Joe Doan, Ata Kichkin,Thao Le, Chantal Le Lievre, Chi Ming Lau, Dominique Novic, John Pakos, Kanchanamala Ranasinghe, Alex Roussos, Josephine Samuel-King, Anita Sharma, Bruce Willet, Eric Bateman	
09:50-10:00	A001-4	Pharmacological characterization of T cell-dependent steroid-resistant asthma model using several kinase inhibitors	
		Akio Mori (Japan)*, Satoshi Kouyama, Akemi Ohtomo-Abe, Yuichiro Kawasaki, Maki Iwata, Yuto Nakamura, Yuto Hamada, Yosuke Kamide, Kiyoshi Sekiya, Yuma Fukutomi, Takayuki Ohtomo, Osamu Kaminuma	
10:00-10:10	A001-6	Dupilumab sustains improvements in clinical efficacy and reductions in OCS use in patients with severe, OCS-dependent asthma: LIBERTY ASTHMA TRAVERSE study	
		Hye Yun Park (Republic of Korea)*, Mark Gurnell, Christian Domingo, Klaus F. Rabe, Andrew Menzies-Gow, David Price, Guy Brusselle, Michael E. Wechsler, Changming Xia, Nami Pandit-Abid, Rebecca Gall, Juby A. Jacob-Nara, Paul J. Rowe, Yamo Deniz, Shahid Siddiqui	
10:10-10:20	A001-7	The association of short-acting β2-agonist overuse with asthma control and severe exacerbations: an Australian perspective	
		David Price (United Kingdom)*, Ruth Murray, Christine Jenkins, Kerry Hancock, Rebecca Vella, Florian Heraud, Porsche Le Cheng, Sinthia Bosnic-Anticevich, Fabio Botini, Victoria Carter, Angelina Catanzariti, Joe Doan, Ata Kichkin, Thao Le, Chantal Le Lievre, Chi Ming Lau, Dominique Novic, John Pakos, Kanchanamala Ranasinghe, Alex Roussos, Josephine Samuel-King, Anita Sharma, Bruce Willet, Eric Bateman	
10:30-10:40	A001-8	Correlation of pulmonary function measured by Forced Oscillation Technique, Spirometry and asthma control questionnaire	
		Nagesh Dhadge (India)*, Pinaki Sengupta, Kameshwar Rao, Aneesha Mohan, Narendra Singh Bhati, Reenkal Ahire	

Oral 2		09:20-10:30	Grand Ballroom 105 (1F)
Cell and Molecular Biology			
Chair	Sei Won Lee (University of Ulsan College of Medicine, Republic of Korea)		
09:20-09:30	A002-1	CVA11 infection exerts potent immunogenic oncolytic activity in human malignant pleural mesothelioma via ICAM-1 receptor	
		Koji Okamura (Japan)*, Hiroyuki Inoue, Kentaro Tanaka, Yuki Ikematsu, Rie Furukawa, Keiichi Ota, Yasuto Yoneshima, Eiji Iwama, Isamu Okamoto	
09:30-9:40	A002-2	Study of genetic variability of production strains of M. bovis BCG	
		Dmytro Butov (Ukraine)*, Oleksii Solodiankin Natalia Rudova, Alex Rosenthal, Andrei Gabrielian, Michael Harris, Madeline Galac, Brendan Jeffrey, Andriy Zavhorodnii, Anatoly Gerilovych, Tetiana Butova, Olga Bilogortseva, Valery Minukhin, Nadiya Sklyar, Olena Peretyatko, Anton Tkachenko	
09:40-09:50	A002-3	Glyoxalase-1 is essential for the definitive endoderm and alveolar development of human pluripotent stem cells	
		Suji Jeong (Republic of Korea)*, Hyebin Koh, Jong-Hee Lee, Seok-Ho Hong	
09:50-10:00	A002-4	GHS-R1a deficiency mitigates lipopolysaccharide-induced lung injury in mice via the downregulation of macrophage activity	
		Hironobu Tsubouchi (Japan)*, Ryota Tanida, Shigehisa Yanagi, Takafumi Shigekusa, Taiga Miyazaki, Masamitsu Nakazato	
10:00-10:10	A002-5	Therapeutic blockade of SIRT1 in lipopolysaccharide-induced acute lung injury in mice	
		Hyejoo Bae (Republic of Korea)*, Wankyung Kim, Hae Jin Park, Kyung Hwa Park, So Ri Kim, Yeong Hun Choe, Jae Seok Jeong, Yong Chul Lee	
10:10-10:20	A002-6	Curcumin-like diarylpentanoid analogues inhibit influenza A virus (H1N1) replication and pro-inflammatory cytokines production in A549 lung epithelial cells	
		Kong Yen Liew (Malaysia)*, Hui-Yee Chee, Faridah Abas, Sze Wei Leong, Hanis Hazeera Harith, Daud Ahmad Israf, Chau Ling Tham	

Oral 3		09:20-10:50	ASEM Ballroom 202 + 203 (2F)
Interstitial Lung Disease			
Chair	Yong Hyun Kim (The Catholic University of Korea College of Medicine, Republic of Korea)		
09:20-09:30	AO03-1	Short leukocyte telomere lengths correlate with poorer survival and absolute FVC decline from baseline independent of ILD diagnosis	
		Michelle Li Wei Kam (Singapore)*, Siao Ting Chong, Ee Ling Chew, Sock Hoai Chan, Nur Diana Bte Ishak, Su Ying Low, Joanne Yuen Yie Ngeow	
09:30-09:40	AO03-2	Role of ornithine aminotransferase in idiopathic pulmonary fibrosis: lung function decline and fibrogenesis	
		Sung Woo Park (Republic of Korea)*, Jong-Uk Lee, Jisu Hong, Hyesun Shin, Ae-Rin Baek, An Soo Jang, Do Jin Kim	
09:40-09:50	AO03-3	Direct hemoperfusion with polymyxin B-immobilized fibre column for acute exacerbation of idiopathic pulmonary fibrosis: A nationwide observational study	
		Nobuyasu Awano (Japan)*, Taisuke Jo, Takehiro Izumo, Minoru Inomata, Naoyuki Kuse, Keita Sakamoto, Yutaka Muto, Kazushi Fujimoto, Yoshihiro Furukawa, Kojiro Morita, Hiroki Matsui, Kiyohide Fushimi, Takahide Nagase, Hideo Yasunaga	
09:50-10:00	AO03-4	Impact of initial dose of corticosteroid on clinical outcomes in acute exacerbation of idiopathic pulmonary fibrosis	
		Kwonhyung Hyung (Republic of Korea)*, Jimyung Park, Sun Mi Choi	
10:00-10:10	AO03-5	Monocyte Counts and the Clinical Outcomes in the Idiopathic Nonspecific Interstitial Pneumonia	
		Tae Hun Kim (Republic of Korea)*, Hyung-Jun Kim, Myung Jin Song, Byoung Soo Kwon, Yeon Wook Kim, Sung Yoon Lim, Yeon Joo Lee, Young-Jae Cho, Jae Ho Lee, Choon-Taek Lee, Jong Sun Park	
10:10-10:20	AO03-6	Therapeutic potential of an indole derivative in fatal fibrosing interstitial lung diseases	
		Yeogha Yoon (Republic of Korea)*, Wanky Kim, Hae Jin Park, Kyung Hwa Park, So Ri Kim, Yeong Hun Choe, Jae Seok Jeong, Yong Chul Lee	
10:20-10:30	AO03-7	Effect of aspirin on mortality in patients with idiopathic pulmonary fibrosis; An analysis using the Korean National Health Insurance Service database from 2010 to 2020.	
		Eun Young Kim (Republic of Korea)*, A La Woo, Song Yee Kim, Chang Hoon Han, Moo Suk Park	
10:30-10:40	AO03-8	Immunogenicity and safety of ChAdOx1 nCoV-19 vaccine in interstitial lung disease patients with immunosuppressive therapy	
		Tinn Hongboontry (Thailand)*, Sasipak Nithiworanan. Amornpun Wongkarnjana, Picha Pattrapruettada, Supparerk Disayabutr	

Oral 4		11:10-12:40	Grand Ballroom 104 (1F)
Tuberculosis - Drug Sensitive Tuberculosis			
Chair	Young Ae Kang (Yonsei University College of Medicine, Republic of Korea)		
11:10-11:20	AO04-1	Comparison of active tuberculosis case finding strategies for immigrants in South Korea: epidemiology and cost-effectiveness analysis	
		Yedham Kang (Republic of Korea)*, Sangwook Park, Chaegyung Sung, Hangseok Choi, Yeo Wool Lee, Hee-Jin Kim, Hae-Young Kim, In-Hwan Oh, Seung Heon Lee	
11:20-11:30	AO04-2	People with disabilities are at risk of tuberculosis: a nationwide serial cross-sectional study	
		Jinsoo Min (Republic of Korea)*, So Young Kim, Jong Eun Park, Yeon Yong Kim, Jong Hyock Park	
11:30-11:40	AO04-3	Diagnostic performance of XPERT-MTB/RIF and XPERT-MTB/RIF Ultra on thoracoscopic pleural biopsy specimens for diagnosing pleural tuberculosis - A single center experience of 534 patients.	
		Chetan Rao Vaddepally (India)*, Virender Pratibh Prasad, Abdul Naseer Mohammed, Venkata Nagarjuna Maturu	
11:40-11:50	AO04-4	Clinical course and risk factors associated with paradoxical responses in patients with mediastinal lymph node tuberculosis	
		Areum Han (Republic of Korea)*, Junsu Choe, Sun Hye Shin, Hongseok Yoo, Byung Woo Jhun, Kyungjong Lee, Kyeongman Jeon, Sang-Won Um, Hojoong Kim, Byeong-Ho Jeong	
11:50-12:00	AO04-5	Comparison of different types of fixed-dose combination regimen for treatment of tuberculosis in elderly patients in Taiwan	
		Ko-Yun Chang (Taiwan)*, Shin-Shin Liu, Yu-Che Lee, Hui-Chen Chen, Ming-Feng Wu, Wei-Chang Huang	
12:00-12:10	AO04-6	The treatment outcome of pulmonary tuberculosis with or without pyrazinamide for patients under or over the age of 80 in Osaka city, Japan.	
		Myung Mi Cho (Japan)*, Jun Komukai, Tetsuo Morimoto	
12:10-12:20	AO04-7	Real-world experience of rifampicin sparing treatment for drug-susceptible pulmonary tuberculosis	
		Hyung-Jun Kim (Republic of Korea)*, Myung Jin Song, Byoung Soo Kwon, Yeon Wook Kim, Sung Yoon Lim, Yeon-Joo Lee, Jong Sun Park, Young-Jae Cho, Choon-Taek Lee, Jae Ho Lee	

Oral 5		11:10-12:30	Grand Ballroom 105 (1F)
Lung Cancer - Basic research and Screening			
Chair	Young Kyoon Kim (The Catholic University of Korea College of Medicine, Republic of Korea)		
11:10-11:20	AO05-1	Study on the mechanism of msc-mirna-198-exos regulating mapk1 in malignant pleural effusion associated with non-small cell lung cancer	
		Yanan Wang (China (Mainland))* [*] , Yan Gu	
11:20-11:30	AO05-2	KCNK3 inhibits proliferation and glucose metabolism of lung adenocarcinoma via activation of AMPK-TXNIP pathway	
		Lanlan Lin (China (Mainland))* [*] , Xiaohui Chen, Guofu Lin, Yuan Xu, Yiming Zeng	
11:0-11:40	AO05-3	Integrated profiling of endoplasmic reticulum stress-related DERL3 in prognostic and immune features of lung adenocarcinoma	
		Lanlan Lin (China (Mainland))* [*] , Guofu Lin, Xiaohui Chen, Yuan Xu, Yiming Zeng	
11:40-11:50	AO05-4	Pilot study: comparative analysis of immune related gene expression in lung adenocarcinoma tissues between never smokers, non-emphysematous smokers and emphysematous lungs	
		Jeong Uk Lim (Republic of Korea)* [*] , Tai Joon An, Young Jo Sa, Chan Kwon Park, Hyoung Kyu Yoon, Tae-Jung Kim	
11:50-12:00	AO05-5	Single-cell RNA sequencing reveals distinct molecular features of high-grade lung adenocarcinoma subtypes.	
		Shin Yup Lee (Republic of Korea)* [*] , Jusung Lee, Ji Yun Jeong, Jong Kyung Kim, Mi Jeong Hong, Jin Eun Choi, Hyo-Gyoung Kang, Jang Hyuck Lee, Sunwoong Lee, Young Woo Do, Eung Bae Lee, Ji Eun Park, Sun Ha Choi, Hye Won Seo, Yong Hoon Lee, Seung Soo Yoo, Jaehee Lee, Seung Ick Cha, Chang Ho Kim, Jae Yong Park	
12:00-12:10	AO05-6	Artificial intelligence-based personalized survival prediction using clinical and radiomics features in patients with advanced non-small cell lung cancer	
		Junji Koyama (Japan)* [*] , Masahiro Morise, Taiki Furukawa, Shintaro Oyama, Reiko Matsuzawa, Ichidai Tanaka, Keiko Wakahara, Hideo Yokota, Tomoki Kimura, Yoshimune Shiratori, Yasuhiro Kondoh, Naozumi Hashimoto	
12:10-12:20	AO05-7	Lung Cancer Screening with Low-Dose CT in Never Smokers and Smokers: the real-world data in South Korea	
		Yunjoo Im (Republic of Korea)* [*] , Chohee Kim, Jinyoung Lee, Jung Hye Hwang, Sun Hye Shin, Byeong-Ho Jeong, Kyungjong Lee, Hojoong Kim, Ho Yun Lee, Sang-Won Um	
12:20-12:30	AO05-8	Assessment of traditional risk factors in Lung Cancer Patients who do not fit into NLST criteria	
		Sean Chee Hong Loh (Singapore)* [*] , Jiashen Zhao, Daniel Jia Ming Ang, Wui Mei Chew, Jansen Meng Kwang Koh	

Oral 6		11:10-12:40	ASEM Ballroom 202+203 (2F)
Respiratory Infections (non-tuberculous) - Covid-19 infection - Diagnosis and Predictive factors			
Chair	Jang-Won Sohn (Hanyang University College of Medicine, Republic of Korea)		
11:10-11:20	AO06-1	The correlation of serum fibrinogen levels and the degree of pulmonary fibrosis among COVID-19 patients using post mortem core biopsy	
		Adhitri Anggoro (Indonesia)* [*] , Isnin Anang Marhana, Etty Hary Kusumastuti	
11:20-11:30	AO06-2	Clinical characteristics and risk factors associated with mortality of patients with COVID-19 at Bussarakham Field Hospital, Thailand	
		Thotsaporn Morasert (Thailand)* [*] , Kittisak Agsornwong, Kornkrit Limsommut, Phongsak Nitikaroon, Osaree Akaraborworn, Jintana Srisompong, Direk Deesiri, Kavalin Chuencharoensuk, Kanchanat Sangnak, Nitipatana Chierakul	
11:30-11:40	AO06-3	Exploratory study of predictive factors of disease progression in the early stage of COVID-19	
		Yoshifumi Suzuki (Japan)* [*] , Tetsutaro Nagaoka, Yuichi Nagata, Takashi Yoshida, Takeo Tsutsumi, Sachiko Kuriyama, Yoko Tabe, Kazuhisa Takahashi	
11:40-11:50	AO06-4	Prognostic factors for pulmonary fibrosis followed by pneumonia in patient with COVID-19	
		Inhan Lee (Republic of Korea)* [*] , Joohae Kim, Ji Yeon Lee, Ina Jeong, Joon-Sung Joh, Gayeon Kim, Min-Kyung Kim, Jaehyun Jeon, Bum Sik Chin, Yeonjae Kim, Yohwan Yeo, Yup Yoon, Sung Chan Jin, Junghyun Kim	
11:50-12:00	AO06-5	Association between Cardiovascular Diseases with Pneumonia COVID-19 Clinical Outcome in Jakarta, Indonesia: a Retrospective Cohort Multi-center Study	
		Farhan Mubarak (Indonesia)* [*] , Erlina Burhan, Siti Aliyah Said Utriyani, Cut Yulia Indah Sari, Efriadi Ismail, Puji Astuti	
12:00-12:10	AO06-6	The Changes in Antibody Responses Induced by the BNT162b2 mRNA COVID-19 Vaccine in Healthcare Workers in a Single Community Hospital in Japan	
		Shinya Otsuka (Japan)* [*] , Kei Hiraoka, Masato Suzuoki, Hideki Ujiie, Tatsuya Kato, Isao Yokota, Kazuya Yonezawa, Keiji Oguma, Nozomu Iwashiro, Mototsugu Kato, Masanori Ohara	
12:10-12:20	AO06-7	'Long covid' is more common, underestimated, important health issue in Post covid-19 care setting: Prospective, observational and interventional study of 6000 cases in tertiary care setting in India.	
		Shital Patil (India)* [*] , Rajesh Patil, Gajanan Gondhali, Laxman Kasture, Uttreshwar Dhumal, Ganesh Narwade, Abhijit Acharya	

Oral 7		14:00-15:30	Grand Ballroom 104 (1F)
COPD			
Chair	So Ri Kim (Chonbuk National University Medical School, Republic of Korea)		
14:00-14:10	AO07-1	The effect of N-acetylcysteine nebulizer therapy on chronic obstructive pulmonary disease	
		Chin Kook Rhee (Republic of Korea)*, Seong Yong Lim, Won-Yeon Lee, Ji Ye Jung, Yong Bum Park, Chang Youl Lee, Yong Il Hwang, Jin Woo Song, Won-Il Choi, Kwang Ha Yoo	
14:10-14:20	AO07-2	Association of N-terminal proB-type Natriuretic Peptide (NT-proBNP) with airflow limitation and exacerbation in COPD	
		Hey Soo Kim (Republic of Korea)*, Youlim Kim, Ji yong Moon, Yong Bum Park, Kyeong-Cheol Shin, Deog Kyeom Kim, Yong Il Hwang, kyung Hoon Min, Su Jung Um, Woo Jin Kim, Hyung Gyu Yoon, Kwang Ha Yoo, Ki Suk Kwon, Jun Kuk Lee, Ji Ye Jung	
14:20-14:30	AO07-3	Development of a scoring model for the prediction of the effects of discontinuation or addition of inhaled corticosteroid in chronic obstructive pulmonary disease patients	
		Jang Ho Lee (Republic of Korea)*, Sehee Kim, Yeon-Mok Oh	
14:30-14:40	AO07-4	Identification of hub genes of airway epithelial cells in chronic obstructive pulmonary disease	
		Lanlan Lin (China (Mainland))* , Xiaohui Chen, Yuan Xu, Yiming Zeng	
14:40-14:50	AO07-5	Image standardization through kernel conversion of CT in KOCOSS cohort	
		Youlim Kim (Republic of Korea)*, Sojung Shin, Hyun Lee, Chin Kook Rhee, Yong Bum Park, Ki Suck Jung, Kwang Ha Yoo, Kum Ju Chae	
14:50-15:00	AO07-6	Risk of tuberculosis caused by fluticasone propionate versus budesonide in chronic obstructive pulmonary disease: a nationwide population based study	
		Iseul Yu (Republic of Korea)*, Se Hwa Hong, Sunmin Park, Min-Seok Chang, Seok Jeong Lee, Suk Joong Yong, Won-Yeon Lee, Sang-Ha Kim, Ji-Ho Lee	
15:00-15:10	AO07-7	Association of 18F--FDG uptake in semi-quantitative PET/CT with emphysema progression in smokers: a retrospective observational study	
		Kensuke Fukuda (Japan)*, Hirotaka Matsuzaki, Yukihiro Nomura, Takahiro Nakao, Toshihiro Yamaguchi, Shouhei Hanaoka, Akira Saito, Takahide Nagase, Takeharu Yoshikawa	
15:10-15:20	AO07-8	COPD is a risk factor for COVID-19, but does not confer increased severity of the disease	
		Jong Seung Kim (Republic of Korea)*, Jae Seok Jeong, Yeon Seok You, Jong-Hwan Lee, Sang Woo Yeom, Yong Chul Lee	

Oral 8		14:00-15:30	Grand Ballroom 105 (1F)
Lung Cancer - Diagnosis and Epidemiology			
Chair	Seung Joon Kim (The Catholic University of Korea College of Medicine, Republic of Korea)		
14:00-14:10	AO08-1	Clinical utility of endobronchial ultrasound-guided transbronchial needle aspiration in clinical N1 non-small cell lung cancer patients	
		Bo-Guen Kim (Republic of Korea)*, Sun Hye Shin, Hongseok Yoo, Kyungjong Lee, Sang-Won Um, Hojoong Kim, Jong Ho Cho, Jhingook Kim, Young Mog Shim, Byeong-Ho Jeong	
14:10-14:20	AO08-2	The superiority of bronchial washing fluid for detection of EGFR mutations by droplet digital PCR in lung adenocarcinoma	
		Woo Kyung Ryu (Republic of Korea)*, Seung Hyun Yong, Sang Hoon Lee, Hye Ran Gwon, Chi Young Kim, Yoon Soo Chang, Eun Young Kim	
14:20-14:30	AO08-3	A Prospective Phase 2 Study of Rapid Detection and EGFR-TKI Initiation by EV-based BALF Liquid Biopsy in Advanced NSCLC Patients	
		In Ae Kim (Republic of Korea)*, Jae Young Hur, Hee Joung Kim, Wan Seop Kim, Kye Young Lee	
14:30-14:40	AO08-4	Diff-Quik smears from EBUS TBNA procedures: evaluating measures of tumour cellularity and feasibility of whole genome sequencing (WGS)	
		David Fielding (Australia)*, Andrew Dalley, Mahendra Singh, Lakshmy Nandakumar, Vanessa Lakis, Haarika Chittoory, Farzad Bashirzadeh, Michael Bint, Carl Pahoff, Jung Son, Alan Hodgson, Sowmya Sharma, David Godbolt, Kylie Coleman, Lenore Whitfield, Nicola Waddell, Sunil Lakhani, Katia Nones, Gunter Hartel, Peter Simpson	
14:40-14:50	AO08-5	Successful culture of lung cancer organoid derived from cryo-biopsy sample of lung cancer	
		Chaeuk Chung (Republic of Korea)*, Dongil Park, Dahye Lee, Yeon-Jae Lee, Yoonjoo Kim, Da Hyun Kang, Jeong Eun Lee, Min-Kyung Yeo	
14:50-15:00	AO08-6	Establishment of human lung cancer organoids using EBUS-TBNA specimens and surgical tissues	
		Sang-Won Um (Republic of Korea)*, Mina Hwang, Seonae Jang, Hyeon-Jun Choi	
15:00-15:10	AO08-7	COX-2 and IL-6 are associated with progressive stages and metastasis process in advanced NSCLC	
		Santoso Arif (Indonesia)*, Mustang Ahmad, Munawarrah Sitti	
15:10-15:20	AO08-8	The Associations of Hypertension Medication with Lung Cancer Risk and related Mortality	
		Juwhan Choi (Republic of Korea)*, Sue In Choi, Dong Won Park, Sung Yong Lee	

Oral 9		14:00-15:30	ASEM Ballroom 202+203 (2F)
Interstitial Lung Disease			
Chair	Rachel S. Knipe (Massachusetts General Hospital, U.S.A.)		
14:00-14:10	AO09-1	The preventive effects of statin on lung cancer development in patients with idiopathic pulmonary fibrosis using National Health Insurance Service Database in Korea	
		Yoo Jung Lee (Republic of Korea)*, Junghyun Nam, Eung Gu Lee, Jiwon Ryoo, Soon Seog Kwon, Yong Hyun Kim, Hye Seon Kang	
14:10-14:20	AO09-2	Health-related quality of life in a multi-ethnic Asian interstitial lung disease cohort	
		Gin Tsen Chai (Singapore)*, Geak Poh Tan, Grace Phua, Hwee Pin Phua, Wei-Yen Lim, Han Yee Neo	
14:20-14:30	AO09-3	Monitoring of cough in patients with ILD by smartphone application: Preliminary results	
		Jong Sun Park (Republic of Korea)*, Byoung Soo Kwon, Cathering Song, Jiyoung Jung	
14:30-14:40	AO09-4	Prognostic implication of 1-year decline in diffusing capacity in newly diagnosed IPF	
		Hyeonsu Lee (Republic of Korea)*, Jimyung Park, Sun Mi Choi	
14:40-14:50	AO09-5	Clinical characteristics and outcomes of hypersensitivity pneumonitis in South Korea	
		Sungmin Zo (Republic of Korea)*, Man Pyo Chung, Hongseok Yoo	
14:50-15:00	AO09-6	The incidence and risk factors of persistent pulmonary fibrotic change after COVID-19 infection.	
		Yongjae Choi (Republic of Korea)*, Ganghee Chae, Chui Yong Park, Jin Hyoung Kim, Kwang Won Seo, Seung Won Ra, Jong Joon Ahn, Yangjin Jegal	
15:00-15:10	AO09-7	Quantitative evaluation of changes in three-dimensional CT density distributions in pulmonary alveolar proteinosis after GM-CSF inhalation	
		Miku Oda (Japan)*, Kentaro Yamaura, Haruyuki Ishi, Hirofumi Nonaka, Takahiro Tanaka, Yoshikazu Inoue, Shinya Ohkouchi, Nobutaka Kitamura, Koh Nakata	
15:10-15:20	AO09-8	Acute exacerbation of progressive fibrosing interstitial lung disease: incidence and outcomes	
		Jiyoul Yang (Republic of Korea)*, Jin Woo Song	
15:20-15:30	AO09-9	Impact of non-tuberculous mycobacterial pulmonary disease on clinical outcomes in idiopathic pulmonary fibrosis: a landmark analysis	
		Jin-Young Huh (Republic of Korea)*, Sehee Kim, Kyung-Wook Jo, Tae Sun Shim, Jin Woo Song	

Oral 10		15:50-17:20	Grand Ballroom 105 (1F)
COPD			
Chair	Ji-Hyun Lee (CHA University, Republic of Korea)		
15:50-16:00	AO10-1	Developing and Validating the NEAR Models for Integrated Prediction of the 30-day Re-exacerbation and Readmission in Patients Hospitalized with Acute Exacerbation of COPD in China	
		Ye Wang (China (Mainland))* , Ruoxi He, Xiaoxia Ren, Ke Huang, Fen Dong, Jieping Lei, Ting Yang, Chen Wang	
16:00-16:10	AO10-2	Validation and optimization of COPD population screener questionnaire (COPD-PS) in Chinese population: A national multicenter study	
		Yan Chen (China (Mainland))* , Zijie Zhan, Yiming Ma, Yahong Chen, Jing Zhang, Wen Li, Zhiyi He, Jungang Xie, Haijin Zhao, Anping Xu, Kun Peng, Gang Wang, Qingping Zeng, Ting Yang, Chen Wang	
16:10-16:20	AO10-3	Clinical characteristics of tuberculosis-destroyed lung chronic obstructive pulmonary disease	
		Tai Joon An (Republic of Korea)*, Seohyun Kim, Jeong-Uk Lim, Chan Kwon Park, Hyoung-Kyu Yoon	
16:20-16:30	AO10-4	Heart-rate recovery immediately after exercise is useful in exacerbation prediction in chronic obstructive pulmonary disease when spirometry is not available	
		Shih-Yu Chen (Taiwan)*, Chun-Kai Huang, Chia-Ling Wu, Hui-Chuan Peng, Chong-Jen Yu, Jung-Yien Chien	
16:30-16:40	AO10-5	Evaluation of the effectiveness of the advanced Evidence-Based Practice (EBP) Programme – Bundle of care to prevent COPD unplanned readmission	
		P K Maggie Lit (Hong Kong)*, S W Ng, C E Tai, YHG Chan, MC Chow, CM Li, H C Chui, P K Ng, K L Cheng, Y M Lee, CML Li, K M Mak, KYR Lau, C Y Pong, K F Cheng, Y K Ho, SKS Wong, SLE Wong, KCH Lam	
16:40-16:50	AO10-6	Mobile application based pulmonary rehabilitation in patients with chronic obstructive pulmonary disease	
		Chiwook Chung (Republic of Korea)*, Min-Woo Jo, Sei Won Lee	
16:50-17:00	AO10-7	Prognostication using the severity classification based on Rome proposal for acute exacerbation of chronic obstructive pulmonary disease	
		Hyo Jin Lee (Republic of Korea)*, Hyun Woo Lee, Jung-Kyu Lee, Tae Yeon Park, Eun Young Heo, Deog Kyeom Kim	
17:00-17:10	AO10-8	Association between depression and anxiety index and frequency of acute exacerbation in chronic obstructive pulmonary disease.	
		Yu Jin Hong (Republic of Korea)*, Ki-Suck Jung, Kwang Ha Yoo, Chin Kook Rhee, Joon Young Choi	

Oral 11		15:50-17:20	ASEM Ballroom 202+203 (2F)
Critical Care Medicine - COVID			
Chair	Chi Ryang Chung (Sungkyunkwan University School of Medicine, Republic of Korea)		
15:50-16:00	AO11-1	Clinical characteristics and risks to mortality among severe patients with COVID-19 from B.1.617.2 (Delta) variant	
		Giap Vu Van (Viet Nam)*, Thanh Do Van, Toshie Manabe, Vuong Nong Minh, Yuji Fujikura, Dung Phan, Cuong Do Duy, Nguyen Nguyen Trung, Thai Nguyen Quoc, Thanh Dong Van, Chinh Luong Quoc, Dan Kambayashi, Anh Hoang Viet, Nhan Vu Van, Giang Trinh Kim, Son Do Ngoc, Chi Nguyen Van, Tuan Dang Quoc, Koichiro Kudo, Co Dao Xuan	
16:00-16:10	AO11-2	The Utility of Estimating the Shunt Fraction of Critical Patients with COVID-19 in determining the outcome of High Flow Nasal Cannula at Lung Center of the Philippines, a pilot study.	
		Sheila Grail Ganangan-Mandaiyas (Philippines)*, Marvic Raymond Gabitan, Dennis Teo, Newel Nacpil	
16:10-16:20	AO11-3	Extracorporeal membrane oxygenation or prone positioning for COVID-19 acute respiratory distress syndrome: a prospective multicenter observational study	
		Won-Young Kim (Republic of Korea)*, Ganghee Chae, Chi Ryang Chung, Young-Jae Cho, Jinwoo Lee, Yangjin Jegal, Junghyun Kim, Joon-Sung Joh, Tae Yun Park, Jung Hwa Hwang, Bo Da Nam, Jin Woo Song	
16:20-16:30	AO11-4	'Radiological Phenotypes' in Covid-19 Pneumonia: Retrospective, Multicentric study of 6000 cases in tertiary care setting in India	
		Shital Patil (India)*, Rajesh Patil, Gajanan Gondhali, Laxman Kasture, Uttreshwar Dhumal, Ganesh Narwade, Abhijit Acharya	
16:30-16:40	AO11-5	Comparison of pulmonary fibrosis between delta and non-delta variant periods in critically ill patients with SARS-CoV-2: A multicenter observational study in South Korea	
		Jung-Wan Yoo (Republic of Korea)*, Ganghee Chae, Won-Young Kim, Chi Ryang Chung, Young-Jae Cho, Jinwoo Lee, Yangjin Jegal, Junghyun Kim, Joon-Sung Joh, Tae Yun Park, Ae-Rin Baek, Joo Hun Park, Bo Da Nam, Jung Hwa Hwang, Jin Woo Song	
16:40-16:50	AO11-6	Association of corticosteroid or paralytic use with mortality in patients with H1N1, non-H1N1/COVID-19, and COVID-19 acute respiratory distress syndrome: a nationwide cohort study	
		Won-Young Kim (Republic of Korea)*, Kyoung-Eun Kwon, Sun-Young Jung, Moon Seong Baek, Hae In Jung	
16:50-17:00	AO11-7	Treatment outcomes and healthcare resource use in critically ill COVID-19 patients in Korea: a nationwide multi-center cohort study	
		Woo Hyun Cho (Republic of Korea)*, Jin Ho Jang, Eunjeong Son, Doosoo Jeon, Yun Seong Kim, Taehwa Kim	

POSTER EXHIBITION

Poster Exhibition	
Clinical Respiratory Medicine	
AP01-1	Effects of vaccination by age subgroup on the respiratory outcomes in patients with breakthrough COVID-19 infections
	Jieun Kang (Republic of Korea)*, Jiyeon Kang, Woo Jung Seo, So Hee Park, Hyung Koo Kang, Hyeon-Kyoung Koo, Hye Kyeong Park, Sung-Soon Lee
AP01-2	Association between ferritin serum level and oxygen supporting demand in COVID-19 patient during hospitalization
	Russilawati Russilawati (Indonesia)*, Irvan Medison, Elsa Purnama Sari, Masrul Basyar, Dewi Wahyu Fitriana, Afriani Afriani
AP01-3	Comparative Study of Clinical Outcomes of Severe and Critical COVID-19 Patients With and Without Hemoperfusion Admitted in a Referral Hospital
	Ralph Moses Royeca (Philippines)*, Maebritt Wincent Tibubos, Glynna Ong-Cabrera, Paul Rilhelm Evangelista, Mary Claire Orden, Amor Patrice Estabillo, Ramon Mora
AP01-4	Pulmonary function tests in the aftermath of covid infection in a cohort of national level athletes
	Ruwanthi Jayasekara (Sri Lanka)*, Wijitha Nissanka, Rukmal Karunanayake, Lal Ekanayake, Suresh Chathurantha, Amitha Fernando
AP01-5	Tent using for MOTT patient undergoes antibiotics nebulizer to minimise environmental contamination under COVID 19 Pandemic
	Pui Chi Ling (Hong Kong)*, Chau Ho Kristy Chan, Mei Yu Chan, Sin Man Kerrie Leung
AP01-6	Clinical Characteristics of COVID-19 between ICU and non-ICU patients
	Tuan Muhammad Syukri Tuan Kob (Malaysia)*, Allim Khairuddin, Muhammad Syafiek Mohd Razali, M Ridhwan Abd Razak, Zahiah Abd Aziz, Juita Hassan, Muhammad Amin Ibrahim
AP01-7	Pulmonary alveolar proteinosis after COVID-19 infection: a possible association.
	Ayesha Jayawardana (Sri Lanka)*, Madushi Nanayakkara, Chandana Dahanayake, Malinda Hettiarachchi, Eshanth Perera
AP01-8	Clinical Outcome of Supervised Pulmonary Telerehabilitation Program among Adult Patients with Post-Acute COVID-19 Symptoms (PACS): A Case Series
	Nikko John Dalisay (Philippines)*, Bernice dela Cruz, Percival Punzal, Ma. Encarnita Limpin
AP01-9	PSI, CRB-65 and MuLBSTA scores for predicting severity and mortality among hospitalized COVID-19 Pneumonia patients at Chinese General Hospital and Medical Center
	Yonica Marie Dy (Philippines)*, Jamie Chua
AP01-10	Predictors of Poor Outcomes in Unvaccinated COVID Pneumonia Patients: A Retrospective Study
	Safa Shafee (Sri Lanka)*, Duminda Yasaratne, Arjuna Madagama, Nuwani Nissanka
AP01-11	Severe melioidosis after covid pneumonia: a chameleon to watch out
	Ruwanthi Jayasekara (Sri Lanka)*, Lakmini Dassanayake, Amitha Fernando



AP01-12	Dapsone induced Methemoglobinemia: A case of hypoxia overlooked in a patient during covid pandemic
	Sadia Sultana Resma (Bangladesh)*, Tazrin Farhana, Sheikh Shahinur Hossain, Kazi Saifuddin Bennoor, Mohammad Ferdous Wahid, Mohammad Ali Hossain, Fateh Akram
AP01-13	Effect of excessive high-dose corticosteroids in patients with ARDS caused by COVID-19
	Kyung-Eui Lee (Republic of Korea)*, Hyo-Jin Lee, Tae Yeon Park, Kwang Young Choi, Hyun Woo Lee, Jung-Kyu Lee, Deog Kyeom Kim, Eun Young Heo
AP01-14	An Observational Study of Demographic and Clinical Profile of COVID-19 Suspected Patients Attending in a Tertiary Care Hospital in Bangladesh
	K. M. Monir Hossain (Bangladesh)*, M. Haque Mollah, M. A. Jalil Ansari, Lubaib Manzoor, Humaira Tabassum
AP01-15	Clinical Profiles of COVID-19 Patients Associated with Acute Hypoxemic Respiratory Failure (AHRF) requiring High Flow Nasal Cannula (HFNC) Therapy in a Tertiary Hospital in Metro Manila
	Angelica Pearl Reyes (Philippines)*, Patrick Gerald Moral, Isaías Lanzona
AP01-16	Physiotherapy practices when treating patients with COVID-19 during a pandemic: A survey study
	Anthony Trojman (Australia)*, Judith Hough, Julie Hides, Louise Gustafsson, Orlando Flores, Jennifer Paratz
AP01-17	Persistent hiccups: “An unsung presentation of Covid 19 pneumonia with delta variant”
	Niranjan Chandramal (Sri Lanka)*, Asha Samaranayake, Sameera Gamlath, Arthihai Srirangan, Ravini Karunathilaka
AP01-18	Immunosuppressant and SARS-CoV-2 vaccine antibody response after lung transplantation
	Eun Jeong Choi (Republic of Korea)*, Hye Ju Yeo, Seung Eun Lee
AP01-19	Screening for respiratory disease abnormalities with cough sounds collected by smartphones: A prospective study
	Kyoung Min Moon (Republic of Korea)*, Ji-Ho Lee, JinHee Jeon, Choongki Min, Kyungnam Kim, Sanghoon Han, Taejin Kim, Myung Pyo Kim, Young Mi Park
AP01-20	Acute oxygen therapy: an audit of oxygen charting practices at a tertiary hospital in Sydney, Australia
	Dong Seok Yi (Australia)*, Ryan Kahn, Darrin Penola, Yasmina Serinel, Katrina O Tonga
AP01-21	The Efficacy of High Flow Nasal Cannula as First Line Oxygen Therapy in Patients with Acute Cardiogenic Pulmonary Edema: A Meta-Analysis
	Feliciano Jan Christian (Philippines)*, Dela Torre-Mangente Rachelle Kaye, Albay Albert
AP01-22	Heterogeneity of Asthma-Chronic obstructive pulmonary disease (COPD) overlap by comparison of ACO from severe asthma and COPD cohort
	Yong Suk Jo (Republic of Korea)*, Kwang Ha Yoo, Ki-Suck Jung, Hyoung Kyu Yoon, Chin Kook Rhee
AP01-23	Can Patients Achieve Sufficient Peak Inspiratory Flow Rate (PIFR) With Turbuhaler ® During Acute Exacerbation of Asthma?
	Nur Azimah Mohd Rhazi (Malaysia)*, Jaya Muneswarao, Fatimatuazzahra Abdul Aziz, Baharudin Ibrahim, Azlan Kamalludin

AP01-24	Comparison Between Fractional Exhaled Nitric Oxide (FeNO) In Patients With Rheumatoid Arthritis And Normal Population
	Anas Mat Asis (Malaysia)*, Mohd Arif Mohd Zim, Hazlyna Baharuddin, Shereen Ch'ng Suyin, Muhammad Amin Ibrahim
AP01-25	Intrapleural fibrinolysis is non-inferior to surgery for management of pleural infection refractory to antibiotics and thoracostomy drainage
	Xinxin Hu (Australia)*, Bapti Roy, Peter Wu
AP01-26	A diagnostic dilemma of Tuberculous pleurisy in a patient with Systemic Lupus Erythematosus
	Tharmini Ethirmannasingham (Sri Lanka)*, Ravini Karunathilaka, Monika De Silva, Sameera Gamlath
AP01-27	Catamenial pneumothorax in a young Sri Lankan female – An uncommon aetiology for recurrent pneumothorax
	Sameera Gamlath (Sri Lanka)*, Tharmini Ethirimannasingham, Malika Udugama
AP01-28	Bilateral chylothorax in a 63-year old Female: how come?
	Marelyn Jao (Philippines)*, Richmond Gregorio
AP01-29	“Fate of a TACE”: A rare case of Empyema developed following Trans Arterial Chemo Embolization (TACE) for hepatocellular Carcinoma (HCC).
	Niranjan Chandramal (Sri Lanka)*, Chandana Dahanayaka, Madushi Nanayakkara, Ravini Karunathilaka, Eshanth Perera
AP01-30	A Case of Tuberos Sclerosis Complex-Associated Lymphangioleiomyomatosis presenting as Recurrent Seizures
	Camille Anne San Miguel (Philippines)*, Eloisa Trina Generoso
AP01-31	Pulmonary lymphangioleiomyomatosis and renal angiomyolipoma in a patient with systemic lupus erythematosus: A case report
	Jeong Suk Koh (Republic of Korea)*, Sina Oh, Chaeuk Chung
AP01-32	Transudative chylothorax - a rare manifestation of liver cirrhosis with portal hypertension
	Boon Hau Ng (Malaysia)*, Hsueh Jing Low, Andrea Yu-Lin Ban, Nik Nuratiqah Nik Abeed, Mohamed Faisal Abdul Hamid
AP01-33	Pulmonary sequestration in adult patients: a single-center retrospective study
	Yan Hu (China (Mainland))* , Siying Ren, Lulu Yang, Ying Xiao
AP01-34	Metastatic pulmonary calcification: an exceptional complication associated with end-stage renal disease mimicking transbronchial infection
	Napat Jirawat (Thailand)*, Vorawut Thanthitaweewat
AP01-35	Plastic bronchitis presenting as incessant sputum expectoration: a case report
	Kriselle Felicia Lumunsad (Philippines)*, Emily Aventura, Christine Chavez, Jay Andrew Ilagan, Noel Michael Supremo, Annaleene Michelle Ferrater-Alcober, Mirasol Aboga-Pacheco
AP01-36	The interest of bronchoscopy in diagnosis of the patients with non-resolving pneumonia in Calmette Hospital, Phnom Penh, Cambodia
	Menghak Heng (Cambodia)*, Bunpaul Chhar, Sarin Chan, Chanty Ny, Mich Vann

Cell and Molecular Biology	
AP02-67	M1 macrophages ameliorate pulmonary fibrosis and promote alveolar regeneration via paracrine actions
	Dongwook Cho (Republic of Korea)*, Ji-Young Kim, Suji Jeong, Seok-Ho Hong
AP02-68	Conventional and Electronic Cigarettes Aggravate Inflammation in Rats Induced High-Fat Diet
	Ahmad Alvin Noor Muchtar (Indonesia)*, Naufal Arif Ismail, Dwi Nur Ahsani
AP02-69	Profibrotic role of high mobility group box1 in tuberculous pleural effusion
	Wei-Lin Chen (Taiwan)*, Chi-Li Chung
AP02-70	Enhanced fatty-acid oxidation slows the contribution of AT2 stem cells in the lung repair process after a fibrosis-inducing injury
	Ahmed E Hegab (Japan)*, Mari Ozaki, Shizuko Kagawa, Koichi Fukunaga
AP02-71	In silico modification of TRPM8 ligand menthol
	Eugene Borodin (Russia)*, Pavel Timkin, Eduard Timofeev
AP02-72	Myeloperoxidase activity and the percentage of neutrophils in the airways of patients with asthma depending on the airway responsiveness to physical stimuli
	Juliy Perelman (Russia)*, Aleksey Pirogov, Anna Prikhodko, Leonid Nakhamchen
AP02-73	PINK1 Preserves Pulmonary Endothelial Barrier Integrity in Human Pulmonary Microvascular Endothelial Cells
	Junghyun Kim (Republic of Korea)*, Minhee Ha, Jisoo Park, So Young Lee, Jinhyung Huh, Se Hee Lee, Eun Kyung Kim, Ji Hyun Lee, Mi Ae Kim
AP02-74	Single cell transcriptomics in blood of patients with COPD
	Yeonjeong Heo (Republic of Korea)*, Jeeyoung Kim, Da Hye Moon, Jeongwon Heo, Yoonki Hong, Seok-Ho Hong, Seon-Sook Han, Seung-Joon Lee, Woo Jin Kim
Clinical Allergy & Immunology	
AP03-77	BioNTech (BNT) vaccine induced immune neuropathy
	Nurgul Naurzvai (Turkey)*, Bekir Enes Demiryurek
AP03-78	Anti Tuberculous Drugs, A double edged sword
	Madhushi Nanayakkara (Sri Lanka)*, Chandana Dahanayaka, Samadara Nakalanda, Malinda Hettiarachchi, Eshanth Perera
Environmental and Occupational Health and Epidemiology	
AP04-87	Lady with the Black lung; A case of Anthracosis associated with Pulmonary Tuberculosis
	Chandana Dahanayake (Sri Lanka)*, Madhushi Nanayakkara, Ayesha Jayawardena, Sandaroo De Silva, Malinda Hettiarachchi, Eshanth Perera
AP04-88	Soil-Water Aspiration Pneumonia on Tin Miner: A Case Report
	Liyah Giovana (Indonesia)*, Radian Savani, Halim Thamrinksudi, Febrina Adriani Purba

AP04-89	Silicotuberculosis among Indonesian underground gold miner: a case report
	Malsephira Hasmeryasih (Indonesia)*, Agus Dwi Susanto, Erlang Samoedro, Feni Fitriani Taufik, Triya Damayanti, Sita Andarini, Ratnawati Ratnawati, Budhi Antariksa
AP04-90	A Comparison of Atrial Fibrillation Incidence Among Physicians and the General Population
	Weisyun Hu (Taiwan)*
AP04-91	Comparison of respiratory symptoms among adults with versus without vaping, smoking, and dual-use: A cross-sectional study in a call center in quezon city
	Catherine Joy R Tubig (Philippines)*, MA. Encarnita B Limpin
AP04-92	Vaping Causes Lung Injury
	Brendon Colaco (United States of America)*, Vichaya Arunthari
AP04-93	Racial/ethnic specific factors influencing cardiovascular symptoms of midlife women during the menopausal transition
	Wonshik Chee (United States of America)*, Eun-Ok Im
AP04-94	Pulmonary function among rural residents in high air pollution area in northern Thailand
	Pitchayapa Ruchiwit (Thailand)*, Narongkorn Saiphoklang, Kanyada Leelasittikul, Apiwat Pugongchai, Orapan Poachanukoon
AP04-95	Evaluation of enzyme-linked immunosorbent assay for diagnostic accuracy of Orientia tsutsugamushi
	Yue-Ting Huang (China (Mainland))* , Yi-Ni Li, Chu-Ting Zhang, Xiang-Qing Shen, Pei-Ying Huang, Min Lin, Chun-Di Hu, Guo-Dong Zhu, Xu-Guang Guo
AP04-96	Cardiorespiratory Symptoms of Midlife Women During the Menopausal Transition: A Cluster Analysis
	Wonshik Chee (United States of America)*, Eun-Ok Im
AP04-97	Arsenic concentration in drinking water and risk of lung cancer
	Mohammad Imroz (India)*, Mohammad Azharuddin
AP04-98	Lung function and serum c-reactive protein level of non-asthmatic amateur marathon runners
	Siyu Dai (China (Mainland))* , Dingbo Shu, Fanjing Meng, Jianping Ding
AP04-99	Risk Factors of Pediatric Extrapulmonary Tuberculosis from Highly Urbanized Barangays within Cebu City Admitted at Chong Hua Hospital
	Joseph Raevin Pelayo (Philippines)*, Sheena Cecilia Caputol-Dajab
Respiratory Infections (non-tuberculous)	
AP05-112	The clinical features and 6 month outcomes for SARS-CoV-2 patients in 2020 and 2021: A prospective cohort study in Sydney, Australia
	Titus Auyeung (Australia)*, William Lin, Teresa Louie, Vicky Chang,



AP05-113	Risk factors for Pulmonary Fibrosis Followed by Severe Pneumonia in Patients with COVID-19 infection: A Prospective Multi-Center Study
	Junghyun Kim (Republic of Korea)*, Ganghee Chae, Hee-Young, Yoon Won-Young Kim, Chi-Ryang Chung, Young-Jae Cho, Jinwoo Lee, Yangjin Jegal, Joon-Sung Joh, Tae Yun Park, Jung Hwa Hwang, Bo Da Nam, Jin Woo Song
AP05-114	Implication of admission eosinophil count and prognosis of Coronavirus disease 2019 (COVID-19) in elderly patients – A territory wide cohort study
	Wang Chun Kwok (Hong Kong)*, Yat Fung Shea, James Chung Man Ho, David CL Lam, Terence Chi Chun Tam, Anthony Raymond Tam, Mary Sau Man Ip, Ivan Fan Ngai Hung
AP05-115	Factors affecting Pulmonary and Cardiovascular Outcomes in Adult Covid-19 Confirmed Cases admitted at the Lung Center of the Philippines
	Aleli de Guzman-Pamplona (Philippines)*, John Paul Serafica, Glynnna Ong-Cabrera, Marie Magno
AP05-116	PREDICTORS FOR SEVERITY OF CORONAVIRUS DISEASE 2019 (COVID-19) PNEUMONIA IN PATIENTS ADMITTED AT A TERTIARY HOSPITAL IN CEBU CITY, PHILIPPINES: A RETROSPECTIVE SINGLE CENTER COHORT STUDY
	Rio May Llanes (Philippines)*, Karlo Mayol, Maria Teresa Canete, Neil Wayne Salces
AP05-117	Japan COVID-19 Task Force: a nation-wide consortium to elucidate host genetics of COVID-19 pandemic in Japan
	Ho Namkoong (Japan)*, Japan COVID-19 Task Force members
AP05-118	Chronic respiratory disease and resource utilization associated with diabetes mellitus in COVID-19 patients: A meta-analytic synthesis of observational studies
	Md Azharuddin (India)*, Manju Sharma
AP05-119	Clinical characteristics and outcomes of COVID-19 infection in lung transplantation recipients
	Ala Woo (Republic of Korea)*, Moo Suk Park, Song Yee Kim, Kyung Soo Jung, Jin Gu Lee, Hyo Chae Paik, Ah Young Leem, Young Sam Kim, Ji Ye Jung, Seung Hyun Yong, Youngmok Park, Su Hwan Lee, Eun Young Kim, Sang Hoon Lee, Young Ae Kang
AP05-120	COVID 19 and pneumomediastinum: A case report from Sri Lanka
	Heshani De Silva (Sri Lanka)*, Saman Kularatne, Sampath Liyanage
AP05-121	Association of severity with hospital mortality of COVID-19 at Persahabatan Hospital, Jakarta, Indonesia
	Putri Aisyah (Indonesia)*, R R Diah Handayani, Menaldi Rasmin
AP05-122	A Case Report : Giant Lung Abscess - HIV, HIV Patient Survives With Giant Lung Abscess Without Surgery
	Atikanur Atikanur (Indonesia)*, Indra Yovi
AP05-123	Pneumectomy for Long standing bronchiectasis with recurrent severe symptom in adult
	Rahmadiana Rahmadiana (Indonesia)*, Teuku Zulfikar, Ferry Dwi Kurniawan, Yopie Afriandi Habibie

AP05-124	Dual Pathology in one lung - An interesting case report
	Sugeesha Wickramasinghe (United Kingdom)*, Syed Mehdi, Nidhal Bittar, Lipsita Patnaik
AP05-125	Clinical case report of lung aspergillosis infection
	Tumen-Od Dagva (Mongolia)*, Sarantuya Gidaagaya, Munkhtuya Erdenedereg, Khulan Khurelsukh
AP05-126	Casirivimab-imdevimab and sotrovimab induce a stronger SARS-CoV-2 neutralizing antibody response than remdesivir
	Yuto Yasuda (Japan)*, Satoru Mutsuo, Kana Fujimoto, Soichi Arasawa, Noriyuki Tashima, Daisuke Iwashima, Ken-ichi Takahashi
AP05-127	A critically ill Covid-19 pneumonia case with concurrent polymicrobial (bacterial, fungal and viral) secondary infections
	Affida Ahmad (Malaysia)*, Nasrul Mustafa, Aisya Natasya Musa, Mohd Arif Mohd Zim, Muhammad Amin Ibrahim
AP05-128	Foreign body aspiration mimicking an endobronchial mass: A case report
	Heidi Avediz Del Fuerte (Philippines)*, Nazario Macalintal
AP05-129	Lung biomarker ACE2, IL6, IL10, KL6, TGF Beta of COVID-19 patients: Sex, Geriatric, Brixia, Severity, and Outcome Multi-Analysis Variables
	Alfian Nur Rosyid (Indonesia)*, Arina Dery Puspitasari, Anggraini Dwi Sensusiaty, Erika Soebakti, Jusak Nugraha, Muhammad Amin
AP05-130	A case of Mycobacterium abscessus treated with modified regime antibiotic in continuation phase
	Nik Nuratiqah Nik Abeed (Malaysia)*, Boon Hau Ng, Yu Lin Andrea Ban, Mohamed Faisal Abdul Hamid
AP05-131	Necrotizing Pneumonia in a Patient with Tuberculosis Relapse
	Muchamad Regi Sonjaya (Indonesia)*, Mohamad Isa, Ira Nurasyidah
AP05-132	The Clogged Airway : A Tough Roe to Hoe
	Haly Rozie Ahmad (Malaysia)*, Siti Rohani Mohd Yakop, Mohd Syahin Syahira Lilah, Syazatul Syakirin Sirol Aflah
AP05-133	HRCT chest findings in moderate to severe post COVID-19 patients at 4 to 8 weeks follow up.
	Sharmin Afroze (Bangladesh)*, Mohammad Mohiuddin Ahmad, Aminul Islam, Hena Khatun, Md Touhiduzzaman, Md. Mamun Newaz, Anal Chandra Das, Sharmin Sultana, Mohammad Abdun Nur Sayem
AP05-134	Recurrent hemoptysis in aspergilloma due to post tuberculosis patient
	Andi Nurul Ilmi ilmi (Indonesia)*, Irawaty Djaharuddin ira, Edward Pandu Wiriansya edward
AP05-135	Inhospital death and laboratory features of deceased COVID-19 patient in Dr. Moewardi Hospital, Surakarta, Indonesia
	Jatu Aphridasari (Indonesia)*, Reschita Adityanti, Rida Rizki Amalia
AP05-136	The frequency and clinical characteristics and incidence determinant of COVID-19 among pulmonologists and pulmonology residents working in the greater Jakarta Area, Indonesia
	Aisyah Ayu Safitri (Indonesia)*, Elisna Syahrudin, Erlina Burhan

AP05-137	The Tropical Masquerader: Tropical Pulmonary Eosinophilia masquerading as miliary tuberculosis
	Malika Udugama (Sri Lanka)*, Nirasha Jayathilaka, Bandu Gunasena
AP05-138	Oxidative stress and cataract in patients with COVID-19
	Eugene Borodin (Russia)*, Leila Nagieva
AP05-139	Post COVID-19 symptoms at one month of discharge among a vaccinated population
	Lakshani Kaushalya (Sri Lanka)*, Gayan Bowatte, Duminda Yasaratne, Prasadini Perera, Nuwani Nissanka, Safa Farwin Mohamed Shafee
AP05-140	Effectiveness of Corticosteroid Administration (Dexamethasone, Methylprednisolone, and Hidrocortison) on LDH, CRP, D-Dimer and PaO2/FiO2 Ratio in COVID 19 Confirmed Critical Degree at Ulin Hospital, Banjarmasin
	Ira Nurrsyidah (Indonesia)*, Muhammad Zubaidi, Mohamad Isa
AP05-141	Geriatric with Atypical COVID-19 Symptoms
	Siti Chandra Widjanantie (Indonesia)*, Irwin Tedja, Muhammad Alkaff, Krisnugra Ramadhani, Dwi Astiny, Cahya Rini, Agus Dwi Susanto
AP05-142	A COVID 19 confirmed patient who presented with cough and unilateral scrotal pain : A case report
	Catherine Joy Tubig (Philippines)*
AP05-143	Chronic aspergillosis causing eosinophilia and invasive aspergillosis with bronchopleural fistula, a case report
	Madhushi Nanayakkara (Sri Lanka)*, Chandana Dahanayaka, Ayesha Jayawardana, Malinda Hettiarachchi, Eshanth Perera
AP05-144	An unusual complication in a case of COVID-19: large para-aortic haematoma representing significant internal organ bleeding
	Dawpadee Dharmasena (United Kingdom)*, Sanka Vijayabandara, Osei Kankam
AP05-145	An Analysis of Antibody Positive Rate after COVID-19 Vaccination in a Homeless nursing facility
	Haesook Seo (Republic of Korea)*, Jeeyeon Suh, Shinae Park, Chongkyung Kim, Jeongeun Suh, Yonngsoo Cho, Semin Hwang
AP05-146	Lung Abscess development after administration of methylprednisolone in a critically-ill COVID-19 patient
	Everly Joy Balino (Philippines)*
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	Tatiana Luchnikova (Russia)*, Valerii Voitsekhovskiy, Tatiana Zabolotskikh, Olga Prikhodko, Irina Sayapina, Irina Kostrova, Elena Romantsova
AP15-648	Incidental Finding of CTEPH in a Patient Presenting with Seizure, Acquired Arteriovenous Fistula, and Obstructive Sleep Apnea
	Aprille Anne Octaviano (Philippines)*, Franklin Yu
AP15-649	“Double edged sword” ; Bilateral Mycotic Pulmonary Artery Aneurysm with Acute Deep Venous Thrombosis Presenting With Massive Hemoptysis with Marfanoid Features
	Catherine Joy Tubig (Philippines)*, Sherwina Juljani, Lucas Emir Sheik Saturinas, Fernando Ayuyao, Maria Paz Mateo

Interstitial Lung Disease	
AP016-656	Interstitial lung abnormality in health screening examinees: prevalence and progression
	Jooae Choe (Republic of Korea)*, Ju Hyun Oh, Han Na Noh, Eun Jin Chae, Jin Woo Song
AP016-657	Comparison of the efficacy of pirfenidone in patients with combined pulmonary fibrosis and emphysema and idiopathic pulmonary fibrosis without emphysema
	Hye Ran Gwon (Republic of Korea)*, Song Yee Kim, Jong Sun Park, Moo Suk Park, on behalf of Korean ILD study group
AP016-658	Pulmonary langerhans' cell histiocytosis in a non-smoker
	Malika Udugama (Sri Lanka)*, Nirasha Jayathilaka, Bandu Gunasena
AP016-659	A rare case of interstitial lung disease presenting with intractable shortness of breathing
	Sameera Gamlath (Sri Lanka)*, Tharmini Ethirimannasingham, Arthihai Srirangan, Ravini Karunathilake
AP016-660	Heading: Familial interstitial lung disease in four members of one family in Bangladesh A case series
	Sadia Sultana Resma (Bangladesh)*, Kazi Saifuddin Bennoor, Tazrin Farhana, Sheikh Shahinur Hossain, Mohammad Ali Hossain, Abdus Shakur Khan, Ferdous Wahid
AP016-661	Characteristics of dyspnea in patients with progressive fibrotic phenotype of interstitial lung diseases (ILD) associated with coronary heart disease (CHD).
	Alexander Medvedev (Russia)*, Anver Abubikirov, Mikhail Chushkin, Larisa Masaeva, Evgeniy Smelev
AP016-662	An unusual presentation of a known entity - The great masquerader
	Sugeesha Wickramasinghe (United Kingdom)*, Syed Ahmad, Syed Mehdi, Mohommed Munawar, Susan Kearney, Laxmi Narayan Gudur
AP016-663	The triple trouble - severe connective tissue disease related interstitial lung disease complicated with pneumomediastinum and pulmonary embolism
	Sampath Liyanage (Sri Lanka)*, Harshana Bandara, Dawpadee Dharmasena, Saman Kularatne, Amila Rathnapala, Sumudu Paliawadana
AP016-664	Case of Idiopathic pleuroparenchymal fibroelastosis with pneumomediastinum
	Lakmini Dassanayake (Sri Lanka)*, Amitha Fernando, Madushanka Rathnayake
AP016-665	Rapidly progressive Interstitial Lung Disease (ILD) in a patient with features of Dermatomyositis - A case report
	Malinda Hettiarachchi (Sri Lanka)*, Dilanka Tilakaratne, Chandana Dahanayake, Madhushi Nanayakkara, Ayesha Jayawardhana, Samalie Perera, Sumudu Paliawadana, Eshanth Perera
AP016-666	Lung cancer emerging in a case of fibrotic interstitial lung disease
	Benjamin Gan (Malaysia)*, Syazatul Syakirin Sirol Aflah, Zuhani Abdul Hamid
AP016-665	Challenges in management of lung cancer coexisting with idiopathic pulmonary fibrosis
	Minalosani Arumugam (Malaysia)*, Albert Iruthiaraj Lourdesamy Anthony

AP016-668	Rituximab induced pneumonitis in a patient with Sero-positive Rheumatoid arthritis - A rare complication
	Sugeesha Wickramasinghe (United Kingdom)*, Saleel Punnilath, Thyusha Deveneni, Mohommed Munawar, Syed Mehdi
AP016-669	Organizing pneumonia following neoadjuvant chemotherapy in a patient with breast carcinoma. A diagnostic challenge
	Madushanka Rathnayake (Sri Lanka)*, Lakmini Dassanayake, Ruvanthi Jayasekara, Amitha Fernando
AP016-670	A Rare Cause of Rapidly Progressive Respiratory Failure
	Vichaya Arunthari (United States of America)*, Brendon Colaco
AP016-671	A rare case of Combined pulmonary fibrosis and emphysema associated with systemic sclerosis
	Lakmini Dassanayake (Sri Lanka)*, Amitha Fernando, Madushanka Rathnayake, Ruwanthi Jayasekara
AP016-672	Methotrexate induced acute interstitial pneumonia in a patient with seronegative rheumatoid arthritis -a case report
	Yasith Abeysekera (Sri Lanka)*, Shifa Azher, Amila Rathnapala, Chandima Sapurugala
AP016-673	A Lady with rough hands and a rash presenting with exertional shortness of breath
	Chandana Dahanayake (Sri Lanka)*, Madhushi Nanayakkara, Ayesha Jayawardena, Sandaroo De Silva, Malinda Hettiarachchi, Eshanth Perera
AP016-674	The tale of a dyspneic lady with cystic lungs. A case of primary Sj gren syndrome complicated with lymphoid interstitial pneumonia
	Madushanka Rathnayake (Sri Lanka)*, Ruwani Perera, Sampath Liyanage, Sandamal Serasinghe, Ruvanthi Jayasekara, Amitha Fernando, Monika de Silva
AP016-676	Pleuroparenchymal fibroelastosis associated with invasive aspergillosis
	Malika Udugama (Sri Lanka)*, Nirasha Jayathilaka, Bandu Gunasena
AP016-677	A case of a mixed connective tissue disease presenting with features of interstitial lung disease and underlying pulmonary tuberculosis
	Sameera Gamlath (Sri Lanka)*
AP016-678	Brigatinib induced severe interstitial pneumonitis
	Dawpadee Dharmasena (United Kingdom)*, Sanka Vijayabandara, Osei Kankam, Agnes Hurter
AP016-679	Interstitial Lung Disease in association with Anti myositis antibodies: a series of 6 cases.
	Gaurav Sahu (India)*, Alkesh Kumar Khurana, Abhishek Goyal, Sai Tej Pavirala, Bhupinder Kumar Rajak, Amit Singh
AP016-680	Diagnosis Dilemma: Pulmonary Veno-occlusive disease- A rare cause of pulmonary hypertension
	Arthihai Srirangan (Sri Lanka)*, Niranjan Chandramal, Asha Samaranayake, Ravini Karunathilaka

AP016-681	Hemoptysis with progressive breathlessness in an otherwise healthy adult, a common presentation of a rare disease
	Sanjeewa Malinda Hettiarachchi (Sri Lanka)*, Chandana Dahanayake, Madhushi Nanayakkara, Ayesha Jayawardana, Sumudu Palihawadana, Eshanth Perera
AP016-682	Erasmus Syndrome: A Case Report and Review of Literature
	Jan Michael Jesse Lomanta (Philippines)*, Mary Antonette Atienza, Juan Raphael Gonzales, Eric Jason Amante, Sheen Urquiza, Hanna Lucero-Orilaza, Joel Santiaguel
AP016-683	Using antifibrotic drugs as an add-on treatment for lung fibrosis after Covid-19 infection: Two case reports from Vietnam
	Huy Le Ngoc (Viet Nam)*, Luong Dinh Van, Ngoc Nguyen Thi Bich, Thinh Nguyen Hoang
AP016-684	Prevalence and risk factors of uveitis in patients with newly diagnosed sarcoidosis in Korea
	Jang Ho Lee (Republic of Korea)*, Jiyoul Yang, Junyeop Lee, Ho Cheol Kim
AP016-685	Metastatic gastric signet ring cell carcinoma presenting as interstitial lung disease
	Margie Angelica Sigue (Philippines)*, Daniel Tan, Roberto De Guzman, Katrina Luna, Renelene Macabeo
AP016-686	The clinical efficacy of a Mixture of Ivy Leaf Extract and Coptidis rhizome in patients with idiopathic pulmonary fibrosis
	Ji Hoon Jang (Republic of Korea)*, Hang-Jae Jang, Jae Ha Lee
AP16-687	Description of Monocyte Counts and Interstitial Lung Disease: A Single ILD Referral Centre in Malaysia.
	Jin Lee Lim (Malaysia)*, Normaszuhaila Ab Hamid, Noraishah Sulaiman, Syazatul Syakirin Sirol Aflah

ORAL PRESENTATION

19 November

Oral 12		09:20-10:50	Grand Ballroom 104 (1F)
Asthma			
Chair	Tae-Hyung Kim (Hanyang University College of Medicine, Republic of Korea)		
09:20-09:30	AO12-1	CSN5 is involved in asthma via interaction with PD-L1	
		An-Soo Jang (Republic of Korea)*, Seon-Muk Choi, Pureun-Haneul Lee, Da Yeon Hwang, Shinhee Park, Ae Rin Baek, Min-Hyeock Ahn	
09:30-09:40	AO12-2	Effects of human adipose tissue- and bone marrow-derived mesenchymal stem cells on airway inflammation and remodeling in a murine model of chronic asthma 	
		Joon Young Choi (Republic of Korea)*, Jung Hur, Sora Jeon, Chang Kwon Jung, Chin Kook Rhee	
09:40-09:50	AO12-3	Candidate miRNA genes as biomarker in allergic asthma disease	
		Halime Yildirim (Turkey)*, Ender Coskunpinar, Betul Akcesme, Sevgi Kalkanli Tas, Engin Aynaci	
09:50-10:00	AO12-4	Septal deviation could be associated with the development of bronchial asthma: a nationwide cohort study	
		Jong Seung Kim (Republic of Korea)*, Sam Hyun Kwon, Jae Seok Jeong, Yeon Seok You, Jong-Hwan Lee, Sang Woo Yeom, Doo Hwan Kim, Yong Chul Lee	
10:00-10:10	AO12-5	Montelukast and pranlukast related neuropsychiatric events in adults with asthma and rhinitis	
		Jae-Woo Kwon (Republic of Korea Young-Woo Jo, Hyouk-Soo Kwon, Joonhong Min, Young Her	
10:10-10:20	AO12-6	Improvements of Clinical Symptoms and Lung Function in Asthma Patients After Montelukast Therapy at Harum Melati Clinic, Pringsewu Regency, Lampung Province, Indonesia 2017-2020	
		Dimas Trend Pinaka Baladika (Indonesia)*, Retno Ariza Soeprihatini Soemarwoto, Hetti Rusmini, Jordy Oktobiannobel, Siti Indriyani, Diyan Ekawati, Adityo Wibowo	
10:20-10:30	AO12-7	Selecting representative questions in Asthma Control Test	
		Min Seok Chang (Republic of Korea)*, Iseul Yu, Sunmin Park, Ji-Ho Lee, Seok Jeong Lee, Won-Yeon Lee, Suk Joong Yong, Sang-Baek Koh, Sang-Ha Kim	
10:30-10:40	AO12-8	Dupilumab improved lung function and reduced exacerbation rates in patients with moderate-to-severe asthma and prior exacerbations: LIBERTY ASTHMA TRAVERSE study	
		Chin Kook Rhee (Republic of Korea)*, Jonathan Corren, Mario Castro, Jorge F. Maspero, Marc Humbert, David M.G. Halpin, Arman Altincatal, Nami Pandit-Abid, Xavier Soler, Shahid Siddiqui, Juby A. Jacob-Nara, Yamo Deniz, Paul J. Rowe	

Oral 13		09:20-10:50	Grand Ballroom 105 (1F)
Pulmonary Circulation - VTE and PH (venous thromboembolism and pulmonary hypertension)			
Chair	Masayuki Hanaoka (Japan)		
09:20-09:30	AO13-1	Culin5/TRAF6/NF-kb/VEGF-mediated endothelial dysfunction aggravates hypoxic pulmonary hypertension	
		Lei Wang (China (Mainland))* ¹ , Jie Liu	
09:30-09:40	AO13-2	Combination of CARSKNKDC (CAR) peptide with sildenafil in the treatment of pulmonary hypertension associated with emphysema induced by SU5416 in rats	
		Norihiko Goto (Japan)* ¹ , Yosuke Wada, Yoshiaki Kitaguchi, Masanori Yasuo, Masayuki Hanaoka	
09:40-09:50	AO13-3	Clinical experiences of high-risk pulmonary thromboembolism receiving extracorporeal membrane oxygenation in single institution	
		Joonyong Jang (Republic of Korea)* ¹ , Bo Young Lee, Ki-Up Kim, Yang-Ki Kim, Soo-taek Uh, So-My Koo, Youngeun Jang, Wonho Chang	
09:50-10:00	AO13-4	Anticoagulation in Patients with Antiphospholipid Syndrome-associated Venous Thromboembolism: A Nationwide Study	
		Hun-Gyu Hwang (Republic of Korea)* ¹ , Ju Hyun Lee, Sang-A Kim, Yang-Ki Kim, Myung-Shin Kim, Junshik Hong, Ho-Young Yhim, Soo-Mee Bang	
10:00-10:10	AO13-5	Correlation of pulmonary artery enlargement in chest CT with Mortality of COVID-19 patients admitted at Manila Doctors Hospital from March-August 2020: A Retrospective Cohort	
		Olivia Faye Listanco (Philippines)* ¹ , Jhakelinn Veerichah Galang, Albert Albay Jr	
10:10-10:20	AO13-6	Independent Predictors of Pulmonary Embolism in Severe SARS-CoV-2	
		Aisya Natasya Musa (Malaysia)* ¹ , Mohd Shahril Ahmad Saman, Bushra Johari, Roqiah Fatmawati Abdul Kadir, Natasha Mohd Arifin, Aida Abdul Aziz, Mohd Arif Mohd Zim	
10:20-10:30	AO13-7	Submassive Pulmonary Embolism Case Series - A Single Tertiary Centre Experience	
		Hui Xin Tan (Malaysia)* ¹ , Nurafna binti Mohd Jaafar, Syaza Naqibah Mohamed Noor Rahim, Yen Shen Wong, Mohd Zhafran Zainal Abidin, Muhammad Amin Ibrahim, Aisya Natasya Musa, Mohd Arif Mohd Zim	
10:30-10:40	AO13-8	Clinical characteristics and outcomes of pulmonary hypertension patients who underwent right heart catheterization in Thailand: 5-year retrospective single-center study	
		Nichanun Chiansirikraivuti (Thailand)* ¹ , Tunlanut Sapankaew, Pattarin Pirompanich	

Oral 14		09:20-10:50	ASEM Ballroom 202+203 (2F)
Critical Care Medicine - Non-covid			
Chair	Young-Jae Cho (Seoul National University College of Medicine, Republic of Korea)		
09:20-09:30	AO14-1	Association of Clonal Hematopoiesis of Indeterminate Potential with Increased Risk of Acute Respiratory Distress Syndrome	
		Eunhye Bae (Republic of Korea)* ¹ , Jung-Ki Yoon, Su-Gyeong Kim, Jimyung Park, Jaeyoung Cho, Nakwon Kwak, Sun Mi Choi, Jinwoo Lee, Young Sik Park, Chang-Hoon Lee, Chul-Gyu Yoo, Sang-Min Lee	
09:30-09:40	AO14-2	Diaphragm thickening fraction for predicting weaning success in COPD patients	
		Pongpat Klumusuk (Thailand)* ¹ , Apichart Kanitsap, Pattarin Pirompanich, Pitchayapa Ruchiwit, Narongkorn Saiphoklang, Thiti Sricharoenchai	
09:40-09:50	AO14-3	Association between mechanical power and intensive care unit mortality according to the use of neuromuscular blockade in patients under pressure-controlled ventilation	
		Jae Kyeom Sim (Republic of Korea)* ¹ , Sang-Min Lee, Hyung Koo Kang, Kyung Chan Kim, Young Sam Kim, Yun Seong Kim, Won-Yeon Lee, Sunghoon Park, So Young Park, Ju-Hee Park, Yun Su Sim, Kwangha Lee, Yeon Joo Lee, Jin Hwa Lee, Heung Bum Lee, Chae-Man Lim, Won-Il Choi, Ji Young Hong, Won Jun Song, Gee Young Suh	
09:50-10:00	AO14-4	Influences of do-not-resuscitate orders and physician orders for life-sustaining treatment of patients in the medical intensive care unit	
		Song-I Lee (Republic of Korea)* ¹ , Chaeuk Chung, Dongil Park, Da Hyun Kang, Ye-Rin Ju, Jeong Eun Lee	
10:00-10:10	AO14-5	Mechanical ventilation in idiopathic pulmonary fibrosis patients in Korea: a nationwide population-based study	
		Jae Kyeom Sim (Republic of Korea)* ¹ , Seok Joo Moon, Jae Jeong Shim	
10:10-10:20	AO14-6	The impact of early sedation depth on clinical outcomes in mechanically ventilated patients in Korean intensive care units	
		Dong-gon Hyun (Republic of Korea)* ¹ , Jee Hwan Ahn, Ha-Yeong Gil, Chung Mo Nam, Choa Yun, Chae-Man Lim	
10:20-10:30	AO14-7	Endothelial Fgfr1 deficiency worsen LPS induced ALI/ARDS.	
		Yue Deng (China (Mainland))* ¹ , Yan Hu, Bisen Ding, Chen Wang	
10:30-10:40	AO14-8	A survey of the awareness and understanding of healthcare staff on rehabilitation for critically ill patients	
		Won Jin Lee (Republic of Korea)* ¹ , Eunjeong Son, Jin Ho Jang, Taehwa Kim, Doosoo Jeon, Hye Ju Yeo, Woo Hyun Cho, Seung Eun Lee, Yun Seong Kim	



Oral 15		11:10-12:40	Grand Ballroom 103 (1F)
Respiratory Infections (non-tuberculous) - Covid-19 infection - Treatment and Post recovery			
Chair	Do-Jin Kim (Soonchunhyang University College of Medicine, Republic of Korea)		
11:10-11:20	AO15-1	A community-base pulmonary rehabilitation programme for the elderly recovered from Coronavirus 2019 (COVID-19)	
		Ching Man Tiffany Choi (Hong Kong)*, Kin Kenneth Au Yeung, Kwok Cheong George Wong	
11:20-11:30	AO15-2	Steroid and/or Antifibrotic Treatment on Improvement of Post Covid Lung Function	
		Ahmed Masum (Bangladesh)*, Md Zahir Kamruzzaman, Baqui Billah Syed Muhammad, Kayesh A J M Emrul, Hoshen Mohammad Shahdat, Khan F R, Alam Md Hasibul	
11:30-11:40	AO15-3	Remdesivir Efficacy in Coronavirus Disease: A Randomized trial	
		Ibrahim Salaheldin Ibrahim (Egypt)*, Mohammed hantera, Mohammed Tork, Sherif Abdelslam	
11:40-11:50	AO15-4	Combining Fluvoxamine with Bromhexine prevents clinical deterioration in outpatients with mild to moderate symptomatic SARS-CoV-2, A Randomized Clinical Trial	
		Dhammika Leshan Wannigama (Thailand)*, Cameron Hurst, Phatthranit Phattharapornjaroen, Peter N Monk, Shuichi Abe, Paul G. Higgins, Katika Akksilp, Natchalaikorn Sirichumroonwit, Kanokpoj Chanpiwat, Angela M. Reiersen, Farid Jalali, Stephen M Stick, Anthony Kicic, Parichart Hongsing, Tanittha Chatsuwana	
11:50-12:00	AO15-5	Different treatment response to systemic corticosteroids according to white blood cell counts in severe COVID-19 patients	
		Kwang Yong Choi (Republic of Korea)*, Dong Hyun Kim, Kwang Nam Jin, Hyo Jin Lee, Tae Yun Park, Borim Ryu, Jung-Kyu Lee, Eun Young Heo, Deog Kyeom Kim, Hyun Woo Lee	
12:00-12:10	AO15-6	The effect of nintedanib in post-COVID-19 lung fibrosis: an observational study	
		Pimchanok Patanayindee (Thailand)*, Narongkorn Saiphoklang, Pitchayapa Ruchiwit	
12:10-12:20	AO15-7	Short Term Effects in Pulmonary Function and Chest High Resolution Computed Tomography Scan Among COVID-19 Recovered Adult Patients in a Tertiary Hospital in Davao City	
		Benjo Ato (Philippines)*, Christoper John Quadra, Jessie Orcasitas, Maria Theresa Sanchez, Al Patrick Alajas	
12:20-12:30	AO15-8	Characteristics, Management, and Outcomes of COVID-19 Patients Admitted in a Tertiary Private Hospital in Naga City, Camarines Sur: A Retrospective Cohort Study	
		Angelo Roleo Battung (Philippines)*, James Omana, Jose Manuel Ranola III	
12:30-12:40	AO15-9	Methyprednisolone versus Dexamethasone for severe COVID-19 infection: A retrospective comparative analysis of our early experience.	
		Chun Ian Soo (Malaysia)*, Khai Vern Poon, Atiqah Ayub, Hui Wen You, Cai Xian Tan, Jia Juin Kenneth Loh, Chai Hui Carolyn Eng, Leng Cheng Sia, Nur Husna Ibrahim, Ka Kiat Chin, Thian Chee Loh, Vijayan Munusamy, Mau Ern Poh, Jiunn Liang Tan, Yong Kek Pang, Chong Kin Liam, Chee Kuan Wong	

Oral 16		11:10-12:40	Grand Ballroom 104 (1F)
Tuberculosis - Tuberculosis and Others			
Chair	Joonsung Joh (National Medical Center, Republic of Korea)		
11:10-11:20	AO16-1	Comparison between phenotypic and whole-genome sequencing drug susceptibility testing in multi-drug resistant Mycobacterium tuberculosis isolates from South Korea	
		Seung Heon Lee (Republic of Korea)*, Jee Youn Oh, Taehee Woo, Jake Whang, Sungkyoung Choi, Sungweon Ryu, Hyung Seok Kang, Jungmin Choi, Shinhee Park, Eung gu Lee, Joon Hyuk Lim, Yon Ju Ryu, Yong Il Hwang, Jaekap Lee	
11:20-11:30	AO16-2	False positive rifampicin resistant results by Xpert MTB/RIF point-of-care testing at the Singapore Tuberculosis Control Unit	
		Caroline Victoria Choong (Singapore)*, Jerlyn Huixian Woo, Lovel Galamay, Cynthia Bin Eng Chee	
11:30-11:40	AO16-3	Frequency and probe distribution of rpoB mutations detected by Xpert MTB/RIF in Tuberculosis Control Unit Singapore	
		Jerlyn Huixian Woo (Singapore)*, Caroline Victoria Choong, Lovel Galamay, Cynthia Bin Eng Chee	
11:40-11:50	AO16-4	Minimum Inhibitory Concentration of Bedaquiline and Clofazimine in Drug resistant Mycobacterium Tuberculosis clinical isolates in Korea	
		Hee Joo Lee (Republic of Korea)*, Seungmo Kim, Hwi-Jun Kim, Ryeun Heo, Youn Jung Jun, Hyeon-Su Kim, Jong-Myun Song, Dae-Seon Han, Hongsu Jeong, Sodan Nam, Choi Jimin, Sujin Chae, Gyeongin Lee, Seung-Heon Lee, Hyejin Kim	
11:50-12:00	AO16-5	Isoniazid-resistant tuberculosis is associated with hepatotoxicity: a prospective multicenter cohort study of pulmonary tuberculosis	
		Jiwon Ryoo (Republic of Korea)*, Yeonhee Park, Ju Sang Kim, Hyung Woo Kim, Sung Kyoung Kim, Jin Woo Kim, Yong Hyun Kim, Sang Haak Lee, Jinsoo Min	
12:00-12:10	AO16-6	The proportion of latent tuberculosis infection using interferon gamma release assay in household contact with drug-resistant tuberculosis patients at persahabatan hospital: Preliminary report	
		Cahyo Guntoro (Indonesia)*, Fathiyah Isbaniah, Heidy Agustin	
12:10-12:20	AO16-7	Cardiac dysfunction in Active Pulmonary Tuberculosis: Prospective, Observational and Interventional study in tertiary care setting in India	
		Shital Patil (India)*, Rajesh Patil, Gajanan Gondhali, Laxman Kasture, Abhijit Acharya	
12:20-12:30	AO16-8	Nutritional Status of Hospitalized Tuberculosis Patients In South Kalimantan, Indonesia	
		Elok Hikmatun Nikmah (Indonesia)*, Mohammad Isa, Ira Nurasyidah, Ali Assagaf, Haryati Haryati, Erna Kusumawardhani, Desi Rahmawaty	
12:30-12:40	AO16-9	Clinical Profile and Outcomes of Covid 19 Patients with Concomitant Pulmonary Tuberculosis: A Cross Sectional Study at Veterans Memorial Medical Center	
		Geramie Acebuque (Philippines)*, Chona De Vera	

Oral 17		11:10-12:40	Grand Ballroom 105 (1F)
Lung Cancer - Treatment and Biomarker			
Chair	Seung Hun Jang (Hallym University College of Medicine, Republic of Korea)		
11:10-11:20	AO17-1	Identification of predictive factors for early relapse in patients with unresectable stage III NSCLC receiving consolidation durvalumab after concurrent chemoradiation	
		Jung Hyun Nam (Republic of Korea)*, Chang Dong Yeo, Chan Kwon Park, Sung Kyoung Kim, Ju Sang Kim, Yong Hyun Kim, Jin Woo Kim, Seung Joon Kim, Sang Hak Lee, Hye Seon Kang	
11:20-11:30	AO17-2	Evaluation of Blood Tumor Mutation Burden for Efficacy of Second- Line Atezolizumab Treatment in Non-small Cell Lung Cancer: BUDDY trial	
		Cheol-Kyu Park (Republic of Korea)*, Ha Ra Jun, Hyung-Joo Oh, Ji-Young Lee, Hyun-Ju Cho, Young-Chul Kim, Jeong Eun Lee, Sung Hoon Yoon, Chang Min Choi, Jae Chul Lee, Sung Yong Lee, Shin Yup Lee, Sung-Min Chun, In-Jae Oh	
11:30-11:40	AO17-3	Soluble PD-L1 levels correlate with efficacy of PD-1/PD-L1 inhibitors in lung cancer	
		Da Hyun Kang (Republic of Korea)*, Jeong Suk Koh, Chaeuk Chung, Dongil Park, Song-I Lee, Jeong Eun Lee	
11:40-11:50	AO17-4	Real-world analysis of the EGFR T790M mutation in plasma and tissue biopsy from advanced non-small cell lung cancer	
		Eun Hye Lee (Republic of Korea)*, Se Hyun Kwak, Chi young Kim, Sang Hoon Lee, Eun Young Kim, Yoon Soo Chang	
11:50-12:00	AO17-5	Clinicopathologic characteristics of NSCLC patients with uncommon EGFR mutations in Korea	
		Hye Seon Kang (Republic of Korea)*, Kyu Yeon Kim, Jeong Uk Lim, Chang Dong Yeo, Ju Sang Kim, Seung Joon Kim, Sang Haak Lee	
12:00-12:10	AO17-6	The clinical outcomes of different first-line treatment strategies in advanced non-small cell lung cancer patients with EGFR exon 20 insertion mutation	
		Wei-Fan Ou (Taiwan)*, Yen-Hsiang Huang, Kuo-Hsuan Hsu, Jeng-Sen Tseng, Po-Hsin Lee, Tsung-Ying Yang	
12:10-12:20	AO17-7	Never-smoker small cell lung cancer had better chemotherapeutic response than smoker	
		Ha-Young Park (Republic of Korea)*, Hyung-Joo Oh, Bo Gun Kho, Hong-Jun Shin, Cheol Kyu Park, Yu-Il Kim, Young-Chul Kim, Taebum Lee, Yoo-Duk Choi, In-Jae Oh	
12:20-12:30	AO17-8	Prognostic values of baseline pulmonary functions in patients with non-small cell lung cancer under immunotherapy	
		Jeong Uk Lim (Republic of Korea)*, Hye Seon Kang, Chang Dong Yeo, Ju Sang Kim, Chan Kwon Park, Jin Woo Kim, Seung Joon Kim, Sang Haak Lee	

Oral 18		14:00-15:30	Grand Ballroom 103 (1F)
Environmental & Occupational Health and Epidemiology			
Chair	Jun-Pyo Myong (The Catholic University of Korea College of Medicine, Republic of Korea)		
14:00-14:10	AO18-1	Clinical Profile of COVID-19 Vaccinated Individuals who Developed Breakthrough Infections: A Systematic Review	
		Stephanie Palacios (Philippines)*, Glenford Refre, Patricio Palmes	
14:10-14:20	AO18-2	Involvement of RAGE and oxidative stress in chronic inflammation	
		Jimin Jang (Republic of Korea)*, Jooyeon Lee, Hyosin Baek, Jaehyun Park, Sang-Ryul Cha, Se Bi Lee, Se-Ran Yang	
14:40-14:50	AO18-3	Combined association of climatic change, air pollution, and green space exposure with risk of respiratory diseases in 6-month-old infants	
		Ji-Young Lee (Republic of Korea)*, Eunji Lee, Jongmin Oh, Dirga Kumar Lamichhane, Yun-Chul Hong, Hye-Sook Park, Yanho Kim, Mina Ha, Eunhee Ha, Jin Hwa Lee	
14:50-15:00	AO18-4	Priming with cytokine B enhances therapeutic capacities of mesenchymal stem cells in acute lung injury (ALI)	
		Jooyeon Lee (Republic of Korea)*, Hyosin Baek, Jimin Jang, Jaehyun Park, Sang-Ryul Cha, Se Bi Lee, Se-Ran Yang	
15:00-15:10	AO18-5	Trends of five year ambient air pollutant levels and hospitalization rate due to respiratory viral infection in Korean children	
		Jung Yeon Shim (Republic of Korea)*, Hyung Gyu Park, Sinae Kim, Miyeon Lee	
15:10-15:20	AO18-6	Effects of PM2.5 exposure on early alveolar development and DNA methylation using human pluripotent stem cell-derived alveolar organoid system	
		Minje Kang (Republic of Korea)*, Seok-Ho Hong	
15:20-15:30	AO18-7	Incidence of silicosis and dust exposure among small-scale gold miners in Mongolia	
		Densenbal Dansran (Mongolia)*, Ichinnorov Dashtseren, Solongo Bandi, Naransukh Damiran, Byambadolgor Dagviikhorol, Bayanmunkh Tseden	

Oral 19		14:00-15:30	Grand Ballroom 104 (1F)
Tuberculosis - Drug Resistant Tuberculosis			
Chair	Yong Soo Kwon (Chonnam National University Medical School, Republic of Korea)		
14:00-14:10	AO19-1	Features of radiological signs in patients with multidrug-resistantWextensively drug-resistant pulmonary tuberculosis	
		Dmytro Butov (Ukraine)*, Mykhailo Kuzhko, Mykola Gumeniuk, Nadiya Sapelnik, Olena Borysova, Tetiana Butova	
14:10-14:20	AO19-2	Infiltrate lesion area as a predictor of the likelihood of drug resistance tuberculosis in Indonesia South Sumatera	
		Alif Fathurrachman (Indonesia)*, Miyuki Sari, Zen Ahmad, Linda Andriani, Sudarto Sudarto, Rouully Pasaribu, Ahmad Rasyid, Erial Bahar, Yusri Muhamad	
14:20-14:30	AO19-3	Effectiveness of the WHO short treatment (STR) Regimen of MDR-TB	
		Sadia Sultana Resma (Bangladesh)*, Naeem Hossain, Tazrin Farhana, Kazi Saifuddin Bennoor, Md Ali Hossain, Mustafijur Rahman, Sheikh Shahinur Hossain, Mohammad Abdus Shakur Khan	
14:30-14:40	AO19-4	Treatment outcomes of multidrug-resistant tuberculosis with selective use of bedaquiline/ delamanid guided by an expert committee: a nationwide cohort study in South Korea	
		Yong-Soo Kwon (Republic of Korea)*, Jung En Shin, Hyungseok Kang, Doosoo Jeon, Jae-Joon Yim, Tae Sun Shim	
14:40-14:50	AO19-5	Effectiveness and safety of Bedaquiline-based, modified shorter treatment regimen for Rifampicin resistant Tuberculosis in Vietnam	
		Thi Mai Phuong Nguyen (Viet Nam)*, Thi Hai Minh Le, Corinne Simone Collette Merle, Debora Pedrazzoli, Nhat Linh Nguyen, Tom Decroo, Binh Hoa Nguyen, Thi Thanh Thuy Hoang, Viet Nhung Nguyen	
14:50-15:00	AO19-6	The myelosuppressive effect of linezolid among drug-resistant tuberculosis patients in Mongolia	
		Bolyskhan Baigabyl (Mongolia)*, Myadagmaa Jaalkhorol, Manaljav Tseden-Ish, Ichinnorov Dashtseren, Odgerel Tsogbadrakh	
15:00-15:10	AO19-7	Ethionamide-induced hypothyroidism in drug-resistance tuberculosis children: how frequently does it happen?	
		Citra Cesilia (Indonesia)*, Muh. Akbar Tirtosudiro, Heda Melinda N. Nataprawira	
15:10-15:20	AO19-8	Sad TB lung: screening of anxiety and depression among multi drug resistant tuberculosis in a tertiary hospital	
		Jodie Bancod (Philippines)*	
15:20-15:30	AO19-9	Analysis of treatment success rates of drug resistant tuberculosis with all oral regimens in South sulawesi	
		Jamaluddin Madolangan (Indonesia)*, Irawaty Djaharuddin, Andi Julia Junus, Ratna Tahir, Uswatun Khasanah, Nurjanah Lihawa	

Oral 20		14:00-15:30	Grand Ballroom 105 (1F)
Clinical Allergy & Immunology			
Chair	Tae-Bum Kim (University of Ulsan College of Medicine, Republic of Korea)		
14:00-14:10	AO20-1	Correlation of COVID-19 vaccine history and the duration of negative conversion time of COVID-19 patients in Labuang haji hospital and Asrama haji field hospital	
		Jamaluddin Madolangan (Indonesia)*, Irawaty Djaharuddin	
14:10-14:20	AO20-2	Bronchial Thermoplasty or Biologics for Severe Asthma: A Systematic Review and Network Meta-Analysis	
		Pyng Lee (Singapore)*, Khi Yung Fong, Nicholas Syn, Joseph Zhao	
14:20-14:30	AO20-3	The effectiveness of IL-6 and PD-1 antibody blockade combination therapy in a murine model of sepsis	
		Song-I Lee (Republic of Korea)*, Nayoung Kim, Chaeuk Chung, Dongil Park, Da Hyun Kang, Jeong Eun Lee	
14:30-14:40	AO20-4	Severe asthma is associated with adverse COVID-19 outcomes	
		Yong Chul Lee (Republic of Korea)*, Jae Seok Jeong, Hae Jin Park, Kyung Hwa Park, Hee Jung Kim, Yeong Hun Choe, So Ri Kim	

Oral 21		14:00-15:30	ASEM Ballroom 202+203 (2F)
Respiratory Neurobiology and Sleep			
Chair	Sang Haak Lee (The Catholic University of Korea College of Medicine, Republic of Korea)		
14:00-14:10	AO21-1	Effects of chronic intermittent hypoxia on bleomycin induced interstitial pulmonary fibrosis elderly mouse model	
		Heayon Lee (Republic of Korea)*, Sei Won Kim, Hwan Hee Kim, Sukjin Bae, In Kyoung Kim, Chang Dong Yeo, Sang Haak Lee	
14:10-14:20	AO21-2	Prevalence of cognitive impairment and the effect of continuous positive airway pressure (CPAP) towards cognition among patients with obstructive sleep apnoea (OSA)	
		Muhammad Farid Mohd Fauad (Malaysia)*, Ahmad Izuanuddin Ismail, Shalini Bhaskar, Noor Azleen Ahmad Tarmizi	
14:20-14:30	AO21-3	Impact of change in CPAP initiation practice during COVID-19 pandemic on acceptance and short-term adherence.	
		Yiting Tang (Singapore)*, Jonathan Teow Koon Goh, Heng Lun Lee, Muhammad Nur Hakim Bin Abdul Rahim, Karen Chin, Kathy Chan, Ryan Loh, Cherlyn Koh, Chu Qin Phua, Rui Ya Soh	
14:30-14:40	AO21-4	OSAHS can induce retinal microvascular abnormalities	
		Yina Wang (China (Mainland))* , Silei Deng, Jingjie Kuan, Xiao Xiao, Liang Zhou	
14:40-14:50	AO21-5	Factors affecting CPAP adherence in Thai patients with obstructive sleep apnea	
		Narongkorn Saiphoklang (Thailand)*, Kanyada Leelasittikul, Apiwat Pugongchai, Shayada Suksupakit, Nithita Sattaratpajit	
14:50-15:00	AO21-6	Intermittent hypoxia up regulates mTOR expression in hepatic macrophages through CX3CL1/CX3CR1	
		Yayong Li (China (Mainland))* , Yina Wang	
15:00-15:10	AO21-7	IH can induce apoptosis of macrophage	
		Yina Wang (China (Mainland))* , Jingjie Kuang, Silei Deng, Xiao Xiao, Yuanguo Chen, Yayong Li	
15:10-15:20	AO21-8	A systematic review and meta-analysis on the efficacy of telemedicine compared to face-to-face consultations in promoting CPAP compliance among OSA patients	
		Brian Nelson Ong (Philippines)*, Ryan Martin Denopol, Racquel Ibanez, Maria Cecilia Jocson	

Oral 22		15:50-17:20	Grand Ballroom 103 (1F)
Respiratory Infections (non-tuberculous) - NTM			
Chair	Jusang Kim (The Catholic University of Korea College of Medicine, Republic of Korea)		
15:50-16:00	AO22-1	Risk factors for mortality and progressive disease of nontuberculous mycobacterial lung disease: a systematic review and meta-analysis	
		Hyeontaek Hwang (Republic of Korea)*, Jung-Kyu Lee, Eun Young Heo, Deog Kyeom Kim, Hyun Woo Lee	
16:00-16:10	AO22-2	Risk of Mycobacterium avium complex-lung disease and single nucleotide polymorphisms in programmed cell death-1 gene	
		Sheng-Wei Pan (Taiwan)*, Chin-Chung Shu, Jia-Yih Feng, Lawrence Shih-Hsin Wu, Jann-Yuan Wang, Wei-Juin Su, Yuh-Min Chen, Hao-Chien Wang, Chong-Jen Yu	
16:10-16:20	AO22-3	Spatial analysis and population genomics study of Mycobacterium kansasii in southern Taiwan	
		Bo-Chen Liu (Taiwan)*, Hung-Ling Huang, Po-Liang Lu, Inn-Wen Chong, Jann-Yuan Wang, Hsien-Ho Lin	
16:20-16:30	AO22-4	Another Step into the BACES: Validation of the Prognostic Score for Nontuberculous Mycobacterial Pulmonary Disease	
		Hyung-Jun Kim (Republic of Korea)*, Myung Jin Song, Byoung Soo Kwon, Yeon Wook Kim, Sung Yoon Lim, Yeon-Joo Lee, Jong Sun Park, Young-Jae Cho, Choon-Taek Lee, Jae Ho Lee	
16:30-16:40	AO22-5	Nomogram for Predicting Mortality in Patients with Mycobacterium avium Complex Pulmonary Disease	
		Sol Kim (Republic of Korea)*, Youngmok Park, Yoon Ho Noh, Young Ae Kang	
16:40-16:50	AO22-6	The clinical characteristics of Mycobacterium fortuitum pulmonary disease and the treatment outcomes	
		Sae Rom Kim (Republic of Korea)*, Byung Woo Jhun	
16:50-17:00	AO22-7	Effect of computed tomography-measured body composition on the prognosis of Mycobacterium avium complex pulmonary disease patients in Koreans.	
		Eun Ki Chung (Republic of Korea)*, Young Mok Park, Moo Suk Park, Young Sam Kim, Hye Jeong Lee, Young Ae Kang	
17:00-17:10	AO22-8	Mediastinal masses and collections in culture-positive melioidosis: 4-year review in northern Sabah, Borneo	
		Larry Ellee Nyanti (Malaysia)*, Amalina Abu Othman, Yen Lik Chia, Valerie Toh, Nur Siti Fatimah Mohamad Jamil, Hema Yamini Ramarmuty, Kunji Kannan, Sivaraman Kannan	
17:10-17:20	AO22-9	A study on the relationship of differenct comorbidities with morbid histopathological changes in COVID-19 patients using minimally invasive tissue sampling	
		Animesh Ray (India)*	



Oral 23		15:50-17:20	Grand Ballroom 105 (1F)
COPD			
Chair	Chong-Jen Yu (Taiwan)		
15:50-16:00	AO23-1	Benefits of budesonide/glycopyrronium/formoterol fumarate dihydrate triple therapy versus dual therapies in patients with COPD and additional asthma features: post-hoc analysis of KRONOS and ETHOS	
		Munehiro Seki (Japan)*, Shigeo Muro, John R. Hurst, David Petullo, Patrick Darken, Ayman Megally, Mehul Patel	
16:00-16:10	AO23-2	Risk factors of disease progression in young patients with COPD	
		Juye Bae (Republic of Korea)*, Hyun Woo Lee, Kwang Yong Choi, Hyo-Jin Lee, Jung-Kyu Lee, Tae Yeon Park, Deog Kyeom Kim, Eun Young Heo	
16:10-16:20	AO23-3	Exercise performance on the prognosis of mild and moderate COPD	
		Ji Won Park (Republic of Korea)*, Joo Hun Park, Ji Eun Park, Kwang Ha Yoo, Ki-Suck Jung, Chin Kook Rhee	

Oral 24		15:50-17:20	ASEM Ballroom 202+203 (2F)
Bronchoscopy and Interventional Techniques			
Chair	Kyung Jong Lee (Sungkyunkwan University School of Medicine, Republic of Korea)		
15:50-16:00	AO24-1	Safety and Efficacy of Transbronchial Lung CrYO Biopsy vs Forceps Biopsy in diagnosis of Fibrotic Lung Disease - "Biopsies and Beyond"	
		Umang Shah (India)*	
16:00-16:10	AO24-2	Cryobiopsy for peripheral pulmonary lesions using 1.1 mm cryoprobe and guide sheath without fluoroscopy	
		Dongil Park (Republic of Korea)*, Jeong Eun Lee, Chaeuk Chung, Da Hyun Kang	
16:10-16:20	AO24-3	Transbronchial biopsy by radial probe endobronchial ultrasound followed by cryobiopsy using a novel 1.1-mm diameter cryoprobe	
		Jung Seop Eom (Republic of Korea)*, Soo Han Kim, Jeongha Mok, Mi Hyun Kim, Eun Jong Jo, Kwangha Lee, Ki Uk Kim, Hye-Kyung Park, Min Ki Lee	
16:20-16:30	AO24-4	Thoracic Vent versus Conventional Intercostal Tube Drainage in Management of Pneumothorax in University Kebangsaan Malaysia Medical Centre (UKMMC): A Pilot Study	
		Nik Nuratiqah Nik Abeed (Malaysia)*, Azat Azrai Azmel, Andrea Yu-Lin Ban, Boon Hau Ng, Mas Fazlin Mohamad Jailaini, Syed Zulkifli Syed Zakaria, Mohamed Faisal Abdul Hamid	
16:30-16:40	AO24-5	The value of finer rigid medical thoracoscope in “APC-plus” for the treatment of primary spontaneous pneumothorax (PSP)	
		Hua Zhang (China (Mainland))* , Guangwei Xue, Zhongmei Sun, Wei Zhang, Weiwei Xu, Zongtao Liu, Changsheng Ge, Zhigang Zheng	
16:40-16:50	AO24-6	Endobronchial valves for emphysema and persistent air-leak: 9-year experience in one Asian Country	
		Jin-Young Huh (Republic of Korea)*, Byeong-Ho Jeong, Ho il Yoon, Hojoong Kim, Young-Jae Cho, Changhwan Kim, Seung Jun Lee, Hwan hee Kim, Seung Won Ra, Ye Jin Lee, Beong Ki Kim, Sung Kyoung Kim, Ki Hyun Seo, Sei Won Lee	
16:50-17:00	AO24-7	Feasibility and safety of pleural biopsy using rigid forceps in semi-rigid medical thoracoscopy	
		Ganghee Chae (Republic of Korea)*, Chuiyong Pak, Jin Hyoung Kim, Seung Won Ra, Yangjin Jegal, Kwang Won Seo, Jong Joon Ahn, Taehoon Lee	
17:00-17:10	AO24-8	Clinical outcomes of bronchoscopic cryotherapy for central airway obstruction in adults: 11-year experience of single center	
		Jong Hwan Jeong (Republic of Korea)*, Wonjun Ji, Chang-Min Choi	
17:10-17:20	AO24-9	Trends and an online survey on the use of rigid bronchoscopy in Korea: Too old style to be used recently?	
		Byeong-Ho Jeong (Republic of Korea)*, Sang Haak Lee, Hwan Hee Kim, Ho Il Yoon, Jung Seop Eom, Young Sik Park, Jaeyoung Cho, Taehoon Lee, Seung Joon Kim, Hyeong Jun Cho, Chan Kwon Park, Yousang Ko, Yong-Soo Kwon, Changhwan Kim, Wonjun Ji, Chang-Min Choi, Kihyun Seo, Hae-Seong Nam, Hojoong Kim	

POSTER EXHIBITION

Poster Exhibition	
Clinical Respiratory Medicine	
AP01-37	Plastic bronchitis presenting as incessant sputum expectoration: a case report Kriselle Felicia Lumunsad (Philippines)*, Emily Aventura, Christine Chavez, Jay Andrew Ilagan, Noel Michael Supremo, Annaleene Michelle Ferrater-Alcober, Mirasol Aboga-Pacheco
AP01-38	The interest of bronchoscopy in diagnosis of the patients with non-resolving pneumonia in Calmette Hospital, Phnom Penh, Cambodia Menghak Heng (Cambodia)*, Bunpaul Chhar, Sarin Chan, Chanty Ny, Mich Vann
AP01-39	Rapidly growing tracheal granulation causing tracheal obstruction: a case report Shun Takao (Japan)*, Shoshi Akieda, Ren Seike, Jun Yano, Shohei Mishima, Yusuke Takayama, Takahiro Mimae, Hiroyasu Shoda, Yoichi Hamai, Kentaro Tamura, Yasuo Iwamoto, Yoshihiro Miyata
AP01-40	An incidental finding of an endobronchial lesion. Wei Lien Rita Lai (Singapore)*, Kim Hoong Yap, Wei Keong Alan Ng
AP01-41	Bronchial mass in meningioma patient: A case report and review of literature Harik Firman Thahadian (Indonesia)*, Nur Rahmi Ananda, Ika Trisnawati, Heni Retnowulan, Bambang Sigit Riyanto, Eko Budiono, Sumardi Sumardi
AP01-42	Pulmonary edema after propofol infusion in the operative and postoperative periods Youngeun Jang (Republic of Korea)*, Ki Up Kim, Bo Young Lee, Soo-taek Uh, Yang Ki Kim, So My Koo, Se Yoon Park, Bo-Da Nam, Young-Woo Park, June Young Jang
AP01-43	Feasibility study of home-based Pulmonary Rehabilitation (PR) in Bangladesh GM Monsur Habib (Bangladesh)*, Roberto Rabinovich, Nazim Uzzaman, Aftab Uddin, Hilary Pinnock
AP01-44	Effectiveness of an outpatient pulmonary rehabilitation program in patients with chronic obstructive lung diseases; a pilot study Mohamed Rikas (Sri Lanka)*, Chamoda Jayasinghe, Renuka Dasanayaka, Surangika Wadugodapitiya, Duminda Yasaratne
AP01-45	Patient's perception of Pulmonary Rehabilitation in Bangladesh GM Monsur Habib (Bangladesh)*, Roberto Rabinovich, Nazim Uzzaman, Aftab Uddin, Hilary Pinnock
AP01-46	A Case of Necrotizing Sarcoidosis with Reversible Cognitive Disorder and Mimicking Cushing syndrome Yuka Nagae (Japan)*, Saeko Nagai, Ayako Ito, Touhei Yamaguchi, Nobuhisa Yonemitsu, Koujiro Nakao, Kouichiro Takemoto, Yuji Sagara, Hiroaki Senju, Misato Adachi, Yoshifumi Soejima
AP01-47	Guillain-Barre syndrome as a rare initial presentation of Antiphospholipid syndrome Nurgul Naurzvai (Turkey)*, Nurdan Kokturk, Bijen Nazliel, Melda Turkoglu
AP01-48	The Sleeping Giant Finally Awakens : Diagnostic and Therapeutic Dilemmas of A Large Solitary Fibrous Tumor of the Diaphragm Krista Mae Paulino (Philippines)*, Christina Uy

AP01-49	Low frame rate dynamic chest radiography as a tool for investigating diaphragm dysfunction Thomas Simon FitzMaurice (United Kingdom)*, Caroline McCann, Ram Bedi, Dilip Nazareth, Martin Walshaw
AP01-50	A lady with blistering skin rash and "Lungs on Fire" Niranjan Chandramal (Sri Lanka)*, Asha Samaranayake, Buddhika Alahakoon, Ananda Jayanaga, Harindra Karunathilaka, Ravini Karunathilaka
AP01-51	The impact of colony morphotype on clinical courses of patients with Mycobacterium avium complex pulmonary disease Jihoo Lee (Republic of Korea)*, Jaejoon Yim, Nakwon Kwak, Hyeryung Oh, Jeonseong Yan, Jake Whang
AP01-52	Understanding the implementation of PR in Bangladesh using Normalization Process Theory GM Monsur Habib (Bangladesh)*, Roberto Rabinovich, Nazim Uzzaman, Aftab Uddin, Hilary Pinnock
AP01-53	Can we combine advances in evidence based medicine and behavioural economics strategies to improve diagnosis in respiratory medicine? Tow Keang Lim (Singapore)*, Chia Meng Teoh, Mei Ying Chew, Jeff Ng
AP01-54	Clinical outcome and patient characteristics of community acquired pneumonia in a secondary care hospital in central Sri Lanka; are severity indexes and scores universally applicable? Sanjaya Sumanasinghe (Sri Lanka)*, Hasitha Dissanayake, Thilina Munasinghe, Kokilaa Wijerathne, Sumedha Samankantha
AP01-55	Impacts of clinical training on experience and knowledge of respiratory diseases among post-graduate year (PGY) 1 and 2 residents. Yoko hamakawa (Japan)*, Satoshi Marumo, Ryo Yamanaka, Hiromitsu Ueki, Ryota Kishi, Yuta Sakano, Hirotaka Tamesada, Shiori Jinnno, Chie Morimoto, Takamitsu Imoto, Takamasa Kitajima, Daiki Inoue, Motonari Fukui
AP01-56	MALT Lymphoma Masquerading as Organizing Pneumonia as the First Manifestation Mohd Zhafran Zainal Abidin (Malaysia)*, Hui Xin Tan, Yen Shen Wong, Affida Ahmad, Aisya Natasya Musa, Mohd Arif Mohd Zim
AP01-57	Clinical audit on Discharge Summary Post-Non invasive ventilation Dawpadee Dharmasena (United Kingdom)*, Sanka Vijayabandara, Osei Kankam, Theresa Christopherson
AP01-58	Oxygenation Parameters as Predictors of Clinical Outcomes among Non-oxygenated Hospitalized Adult Patients with Moderate Covid-19 Infection Eliezer James Aguila (Philippines)*, Trinidad Tim
AP01-59	Recurrent spontaneous pneumomediastinum in adolescents: a rare case in healthy adolescents with an infrequently reported entity. Wutthichai Sae Chen (Thailand)*, Virissorn Wongsrichanalai
AP01-60	Compliance of non-invasive ventilation among patients with myotonic dystrophy complicated with type 2 respiratory failure Sugeesha Wickramasinghe (United Kingdom)*, Verity Ford, Emily Nuttall

AP01-61	Comparing current treatment practice in patients with bronchiectasis in tertiary respiratory care setting with standard international guidelines - An audit
	Sugeesha Wickramasinghe (Sri Lanka)*, Saman Kularatne
AP01-62	Outcome of telepharmacy service in asthma and COPD clinic in Thailand.
	Sirin Phenphinan (Thailand)*, Watchara Boonsawat, Sunee Lertsinudom
AP01-64	High Flow Nasal Cannula in Hypoxemic Patients with COVID-19 in Philippine Heart Center: a cross-sectional study
	Kristine Gail Sy (Philippines)*, Ma. Encarnita Limpin
AP01-65	Diffuse Alveolar Hemorrhage After an Ovum Pick-Up Procedure Induced by Inhalational Sevoflurane - A case report
	Hye Sung Khil (Republic of Korea)*, Sue In Choi, Byung Keun Kim, Won jai Jung, Eun Joo Lee, Sang Yeub Lee
AP01-66	Pulmonary rehabilitation in the time of pandemic: outcomes of online pulmonary rehabilitation in a tertiary institution.
	Rachelle Mae Legaspi (Philippines)*, Camille San Miguel, Guinevere Dy-Agra, Rodolfo Pagcatipunan, Celeste Mae Campomanes, Kurt Tolentino, Matthew Lee
AP01-718	Case report and literature review of Plastic bronchitis characterized by refractory hemoptysis.
	Yan Gu (China (Mainland))* , Wanting Zhang
Cell and Molecular Biology	
AP02-75	Comparison of the phenotype of united airway disease between fungus-induced severe allergic lung inflammation and respiratory SARS-CoV-2 infection in mice
	Yeogha Yoon (Republic of Korea)*, Wanky Kim, Hae Jin Park, Kyung Hwa Park, So Ri Kim, Yeong Hun Choe, Jae Seok Jeong, Yong Chul Lee
AP02-76	Patient-derived lung organoid on a chip platform as a new alternative method for pulmonary disease modeling and drug discovery
	Seo-Hee Yang (Republic of Korea)*, Eun-Young Eo, Ji-Yeon Park, Hyung-Jun Kim, Young-Jae Cho
Clinical Allergy & Immunology	
AP03-79	Effect of supplement vitamin C on IL-6 (interleukin 6) and IL-10 (interleukin 10) level health care worker in dr. soetomo academic hospital in COVID-19 pandemic
	Nisya Hapsari (Indonesia)*, Laksmi Wulandari
AP03-80	The impact of one-year treatment with dupilumab in patients with severe asthma
	Sumiko Abe (Japan)*, Norihiro Harada, Yuuki Sandhu, Hitoshi Sasano, Yuuki Tanabe, Sonoko Harada, Ai Goto, Takayasu Watanabe, Yoshihiko Sato, Takayasu Nishimaki, Yukari Kato, Shoko Ueda, Tomohito Takeshige, Jun Ito, Ryo Atsuta, Kazuhisa Takahashi
AP03-81	The role of IL-1 β and IL-10 as a predictive factors for COVID-19 severity
	Sakina Sakina (Indonesia)*, Resti Yudhawati
AP03-82	NLRP3 inflammasome is critically implicated in SARS-CoV-2-induced aggravation of severe asthma in mice
	Jae Seok Jeong (Republic of Korea)*, Hae Jin Park, Kyung Hwa Park, Hee Jung Kim, Yeong Hun Choe, So Ri Kim

AP03-83	Aero allergen sensitivity pattern in patients with Allergic Rhinitis and Asthma in Southern India
	Manimaran Marappan (India)*
AP03-84	Lungs and kidneys tying the knot in the era of covid pandemic
	Madhushi Nanayakkara (Sri Lanka)*, Chandana Dahanayaka, Ayesha Jayawardana, Malinda Hettiarachchi, Dinith Galabada, Eshanth Perera
AP03-85	Qualitative serologic antibody response using lateral flow immunoassay (Rapid IgG/IgM Diagnostic Test) in the different illness severity of COVID-19 Pneumonia
	Mark Christian Agase (Philippines)*, Ma. Encarnita Limpin, Emily Aventura
AP03-86	CD2 shown to facilitate CD4+ cell differentiation in Visceral Leishmaniasis patients, a receptor based study
	Sukrat Sinha (India)*
Environmental and Occupational Health and Epidemiology	
AP04-100	A case of humidifier lung diagnosed after repeated admission
	Seoung Ju Park (Republic of Korea)*, Hwan Jin Lee, Yeong Hun Choe, Heung Bum Lee
AP04-101	Effect of fine dust on lung disease
	Yejin Lee (Republic of Korea)*
AP04-102	Progressive Massive Fibrosis, a case of diagnostic dilemma.
	Madhushi Nanayakkara (Sri Lanka)*, Chandana Dahanayaka, Ayesha Jayawardana, Praveen Sumithrarachchi, Malinda Hettiarachchi, Ramani Punchihewa, Sumudu Palihawadana, Eshanth Perera
AP04-103	Can a Web-App based physical activity promotion program improve cardiovascular symptoms of midlife women?
	Wonshik Chee (United States of America)*, Eun-Ok Im
AP04-104	A Retrospective Cohort Study on the Outcomes of Participants of the DOH-LCP Quitline Program from 2017-2020
	Marra Monique Cantela (Philippines)*, Glynn Cabrera
AP04-105	Toxicity evaluation of environmental pollutant using human small airway epithelial cells (SAEC) cultured under the air-liquid interface (ALI)
	Sun Young Kyung (Republic of Korea)*, Eun Suk Son, Se-Hee Kim, Young Eun Lee, Jeong-Woong Park, Sung Hwan Jeong
AP04-106	Various daily health practices to reduce particulate matter in vulnerable and susceptible individuals
	Hyun Woo Ji (Republic of Korea)*, Dae Ryoung Kang, Yong Jin Lee, Jin-Bae Kim, Yeong-Bae Lee, Changsoo Kim, Jaelim Cho, Mi-Ji Kim, Jungwoo Sohn, Ji Ye Jung
AP04-107	Gene expression changes in lung induced by subacute inhalation of PM10-rich particulate matter in mice
	Sung-Woo Park (Republic of Korea)*, Jisu Hong, Jong-Uk Lee, Hyesun Shin, Su Sie Chin, Ki-Joon Jeon, Sung Hwan Jeong

AP04-108	Characteristics and advantages of silicosis utilized a murine model
	Hyosin Baek (Republic of Korea)*, Se-Ran Yang, Jooyeon Lee, Jaehyun Park, Jimin Jang, Sang-Ryul Cha, Sebi Lee
AP04-109	Long-term air pollution exposure are associated with PRISm and chronic respiratory symptoms: Predictive Value of Inflammatory Biomarkers and FEV1 for COPD (PIFCOPD) Study
	Shanshan Wei (China (Mainland))* , Jiping Liao, Tao Xue, Xiuhua FU, Ruiying Wang, Xiaomin Dang, Cheng Zhang, Hua Qiao, Shujuan Jiang, Jianhong Xiao, Lixia Dong, Jinzhi Yin, Xixin Yan, Weihua Jia, Guifang Zhang, Rui Chen, Bo Zhou, Beibei Song, Jing Li, Mengyu Yin
AP04-110	Anti-fibrotic effect of dipeptide A during progression of chronic fibrosis
	Jaehyun Park (Republic of Korea)*, Jooyeon Lee, Hyosin Baek, Jimin Jang, Sang-Ryul Cha, Se Bi Lee, Se-Ran Yang
AP04-111	Associations between particulate matter and COPD-related genes using RNA-sequencing analysis
	Jeeyoung Kim (Republic of Korea)*, Hawon Song, Sun Shim Choi, Chang-Hoon Lee, Chang Hyun Lee, Woo Jin Kim
Respiratory Infections (non-tuberculous)	
AP05-180	Deep learning-based chest radiograph severity score and its change predict all-cause mortality of patients with Mycobacterium avium complex pulmonary disease
	Joong-Yub Kim (Republic of Korea)*, Hyun Woo Lee, Hyung-Jun Kim, Jae Ho Lee, Jae-Joon Yim, Nakwon Kwak, Soon Ho Yoon
AP05-181	Characteristics of patients with idiopathic bronchiectasis in South Korea
	Seo-Young Hwang (Republic of Korea)*, Yeon-Mok Oh
AP05-182	Analysis of influencing factors for quality of life in patients with bronchiectasis based on clinical research
	Feng Song (China (Mainland))* , Yan Wang, Zile Ji, Baichuan Xu, Peng Zhang, Yang Xie
AP05-183	Correlation between lactate dehydrogenase and severity clinical degree of COVID-19 patients
	Halina Julia (Indonesia)*, Fajrinur Syarani, Muntasir Abdullah, Putri Chairani Eyanoer, Ranti Permatasari
AP05-184	Clinical Features of SGTF-infected Patients of SARS-CoV-2
	Triya Damayanti (Indonesia)*, Siti Aliyah Said Utriyani, Nurindah Saloka Trisnaningrum, Primadea Kharismarini, Azlina Darsaniya Wandawa, Mohamad Rizki, Budi Haryanto, Aisyah Aminy Maulidina, Erlina Burhan
AP05-185	Detection of Mycobacterium avium-intracellulare complex by bronchial lavage culture and the relation with titers of anti-glycopeptidolipid-core IgA antibodies in the sera of the patients
	Masafumi Seki (Japan)*, Daishi Shimada
AP05-186	The duration of acute empyema affects intraoperative/postoperative course
	Yuki Yagi (Japan)*, Hiromitsu Domen, Yuta Toji, Mariko Hayashi, Hironobu Takano, Kazuomi Ichinokawa, Yachiyo Iwamura, Hidehisa Yamada

AP05-187	A descriptive cross-sectional study on prevalence of respiratory diseases among patients visiting Jiri District Hospital, Nepal.
	Kiran Paudel (Nepal)*, Durga Rijal, Tara Ballav Adhikari, Sandesh Bhusal, Rajan Paudel, Bikram Paudel, Milan Gaihre, Surya Devkota
AP05-188	Esophagopleural fistula due to foreign body leads to a persistent left sided pyopneumothorax: a rare case
	Katerine Junaidi (Indonesia)*, Russilawati Russilawati, Oea Khairsyaf, Deddy Herman, Afriani Afriani
AP05-189	Covid infection complicated with bilateral spontaneous pneumothoraces - A rarely described entity
	Sugeesha Wickramasinghe (United Kingdom)*, Syed Mehdi, Sharada Gudur
AP05-190	The treatment outcomes of cavitary Mycobacterium avium complex pulmonary disease according to the use of amikacin or streptomycin
	Seong Min Kim (Republic of Korea)*, Tae Sun Shim, Kyung-Wook Jo
AP05-191	Comparison of the pneumonia incidence on chest radiography according to vaccination among COVID-19 patients under 50 years old
	Yong Shik Kwon (Republic of Korea)*, Seong Hwan Youn, Mi-ae Kim, Hyun Jung Kim, Jae Seok Park, Sun Hyo Park, Ji Yeon Lee, Jin Young Kim
AP05-192	Risk of psychological distress in pulmonologist and its associated factors during the COVID-19 pandemic in Jakarta, Indonesia
	Shintawati Ramdhani Zaenudin (Indonesia)*, Elisna Syahrudin, Erlina Burhan, Pelita V Sinaga
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AP07-393	The characteristic of decision making withdrawal or withholding in patients with terminal chronic pulmonary disease in tertiary hospital after The Hospice, palliative Care, and Life-sustaining treatment decision-making Act.
	Hyo Jin Kim (Republic of Korea)*, Sung Hyung Kim, Mi-Young Kim, Hyun-Kyung Lee, Hongyeul Lee
AP07-394	Utility of 6 minute walk test (6MWT) as a screening tool to assess the disease severity of stable chronic obstructive pulmonary disease (COPD) patients
	Anal Chandra Das (Bangladesh)*, Mohammad Mohiuddin Ahmad, Mohammad Aminul Islam, Hena Khatun, Mohammad Tuhiduzzaman, Md. Mamun Newaz, Sharmin Afroze, Sharmin Sultana
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	Bo Ra Lee (Republic of Korea)*, Jae Seung Lee
AP07-396	Concurrent validity comparison between conventional pulmonary function test device to verify the clinical usefulness of the portable pulmonary function device ‘The Spirokit’ for COPD patients.
	Byeong-Soo Kim (Republic of Korea)*, Sung-Soo Jung, Hong-Jun Kim, Dong-Il Park Park, Seong-Dae Woo, Ji-Su Kim, So-Yeon Park, Myung-Mo Lee
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	Heemoon Park (Republic of Korea)*, Kwang Young Choi, Hyo-Jin Lee, Hyun Woo Lee, Tae Yeon Park, Eun Young Heo, Deog Kyeom Kim, Jung-Kyu Lee
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	Jing Liu (China (Mainland))* , Fan Wu, Huanhuan Fan, Ningning Zhao, Yumin Zhou, Pixin Ran
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	Samia Hassan (Bangladesh)*, Saifuddin Bennoor Kazi, Taskina Ali, Md Ali Hossain, Mustafijur Rahman, Md Abdus Shakur Khan

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	Titus Auyeung (Australia)*, Osborne Jiang, Vicky Chang, Benjamin Kwan
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	Duangjun Phantayuth (Thailand)*, Benjamas Chuaychoo, Salee Supaporn, Arth Nana
AP07-404	Evaluation of compliance of pulmonary rehabilitation program in COPD patients
	Eun So Lee (Republic of Korea)*, Areum Han, Jae Deog Ahn, Sung Min Zo, Sae Rom Kim, Yun Joo Im, Bo Guen Kim, Hye Yun Park, Sun Hye Shin
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	Ekaterina Kulik (Russia)*, Valentina Pavlenko, Svetlana Naryshkina, Margarita Sulima, Larisa Reshetnikova, Irina Soluyanova, Olga Goncharova, Anastasia Bakina, Viktor Bardov
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	Tae Woo Kim (Republic of Korea)*, Seung Hyeun Lee
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	Hirsh Koyi (Sweden)*, Eva Branden, Nikolaos Melas
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	Da Som Jeon (Republic of Korea)*, Ho Cheol Kim, Se Hee Kim, Tae-Jung Kim, Hong Kwan Kim, Mi Hyung Moon, Kyongmin Sarah Beck, Yang-Gun Suh, Changhoon Song, Jin Seok Ahn, Jeong Eun Lee, Jeong Uk Lim, Jae Hyun Jeon, Kyu-won Jung, Chi Young Jung, Jeong Su Cho, Yoo-Duk Choi, Seung-Sik Hwang, Chang-Min Choi
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	So Jeong Kim (Republic of Korea)*, Na Young Kim, Soojie Chung, Jeong Hee Choi, In Gyu Hyun, Hee-Sung Lee
AP12-622	Intrapleural Streptokinase and DNase: A cheaper alternative?
	Hema Yamini Ramarmuty (Malaysia)*, Sarvin Vignesh, Shan Min Lo, Kannan Sivaraman Kannan
AP12-623	Effects of patient-selected music and deep meditation music during bronchoscopy
	Naplika Kongpolprom (Thailand)*, Chayanon Vividhwara, Supinya Sukjit, Paphawee Chiarakiat, Patcharee Chawthanasit, Supawich Sornwanee, Nattaporn Sritippayawan
AP12-624	Study on the application of hybrid operation "one stapler plus one needle" to reduce the volume of giant emphysematous bulla
	Hua Zhang (China (Mainland))* , Wei Zhang, Guangwei Xue, Weiwei Xu, Changsheng Ge, Zhigang Zheng, Zongfang Li, Lei Wang, Jinming Yang, Jieliang Zhang, Renyan Zhao
AP12-625	Transbronchial lung cryobiopsy for diffuse and localized peripheral pulmonary lesions: A retrospective review of our early experience
	Chun Ian Soo (Malaysia)*, Boon Hau Ng, Mona Zaria Nasaruddin, Ummi Nadira Daut, Noorul Afidza Muhammad, Khai Lip Ng, Nur Husna Mohd Aminudin, Nai Chen Huan, Fatimah Azmah Mohammad, Sanusi Zulkifli, Hean Fui Liow, Muhammad Asyraf Abdul Onny, Andrea Yu-Lin Ban, Jamalul Azizi Abdul R
AP12-626	Ultrasound Guided Transthoracic Needle Biopsy : A Pulmonologist Perspective
	Haly Rozie Ahmad (Malaysia)*, Nagarani Naupa, Yu Kuan Tan, Megat Razeem Abdul Razak, Aishah Ibrahim, Soon Hin How
AP12-627	Clinical outcomes of cryobiopsy for peripheral pulmonary lesions - a prospective pilot study
	Soo Han Kim (Republic of Korea)*, Jeongha Mok, Jung Seop Eom
AP12-628	Virtual bronchoscopy navigation combined with thin bronchoscope to diagnose pulmonary tuberculosis: A randomised trial
	Jeongha Mok (Republic of Korea)*, Jung Seop Eom, Seyeon Park

AP12-629	Utility of endobronchial ultrasound guided re-biopsy of non-small cell lung cancer with acquired resistance after EGFR tyrosine kinase inhibitor
	Jin Mo Cho (Republic of Korea)*, Kyung Soo Hong, Kwan Ho Lee, Jin Hong Chung, Kyeong Cheol Shin, Eun Young Choi, Hyun Jung Jin, Jong Geol Jang, June Hong Ahn
Paediatric Lung Disease	
AP13-630	A case report of an infant with congenital lobar emphysema at Angkor Hospital for Children
	Khe Muoy Um (Cambodia)*, Michael Wall, Sokchinda Kong, Pises Nget, Chanpeaktra Ngoun
AP13-631	LEGA-Kid Efficacy and Safety in Children with Pneumonia
	Nur Izyani Abdul Halim (Malaysia)*, Asiah Kassim, Syuhadah Abd Rahman, Nur Haziqah Mohamed Hizam, Sornaletchumi Koran, Sahrinah Mohd Shahardin, Karuthan Chinna, Jia Yueh Chong, Shangari Kunaseelan, Pazlida Pauzi, Udhaya Moorthy, Nanthini Mahalingam, N. Fafwati Faridatul Akmar Mohamed, Radhiyah Abdul Rashid, Hishamshah Mohd Ibrahim
AP13-632	Lung metastatic of rhabdomyosarcoma: report a case with delayed diagnosis of primary tumor due to COVID &ndash; 19
	Tuan Anh Tran Thi (Viet Nam)*, Thanh Tuan Phan, Trung Tho Le
AP13-633	Multiple rib destructions as an extremely rare complication of Kasabach-Merritt syndrome in a-2-years old female child: A case report
	Citra Cesilia (Indonesia)*, Elmi Ridar, Hariadi Hatta, Andreas Makmur, Wiwit Ade Fw, Heda Melinda N Nataprawira
Respiratory Structure and Function	
AP14-642	Bleomycin-induced fibrosis and the effectiveness of cantella asiatica as treatment
	Yabestin Alfrianus Pakpahan (Indonesia)*, Noni Novisari Soeroso, Muhammad Ichwan
AP14-643	Multi-data-integrated pulmonary function test reports in COPD patients
	So Yeon Kim (Republic of Korea)*, Yong Sik Park
AP14-644	The airway occlusion pressure (P0.1) after COVID-19
	Olga Savushkina (Russia)*, Alexander Cherniak
AP14-645	Dynamic chest radiography as a rapid tool to assess thoracic dynamics following diaphragm plication surgery
	Thomas Simon FitzMaurice (United Kingdom)*, Caroline McCann, Ram Bedi, Dilip Nazareth, James Greenwood, Martin Walshaw
Pulmonary Circulation	
AP15-650	A rare case of pulmonary arterio venous malformation.
	Madhushi Nanayakkara (Sri Lanka)*, Chandana Dahanayaka, Ayesha Jayawardana, Pradeep Wijerathna, Malinda Hettiarachchi, Chandrike Ponnampereuma, Dhammika Rasnayake, Eshanth Perera
AP15-651	Rare cause of pulmonary hypertension
	Lakmini Dassanayake (Sri Lanka)*, Amitha Fernando, Ruwanthi Jayasekara, Madushanka Rathnayake, Ruwani Perera

AP15-652	Pulmonary Arteriovenous Malformation as a Cause of Embolic Stroke
	Boon Hau Ng (Malaysia)*, Hsueh Jing Low, Andrea Yu-Lin Ban, Nik Nuratiqah Nik Abeed, Mohamed Faisal Abdul Hamid, Prapatricca Shanmugam, Isa Azzaki Zainal
AP15-653	A case of definite hereditary hemorrhagic telangiectasia presenting as a refractory migraine
	Madushanka Rathnayake (Sri Lanka)*, Lakmini Dassanayake, Ruvanthi Jayasekara, Amitha Fernando, BMP Bandaranayake
AP15-654	Multimodalities in treating intermediate-high risk pulmonary embolism
	Muhammad Amin Ibrahim (Malaysia)*, Nadirah Abdul Wahid, Wong Soo Fen
AP15-655	Long-term results of surgical and medical treatment of pulmonary embolism
	Eugene Borodin (Russia)*, Anton Kazantsev, Alexander Korotkikh, Alina Zharova, Roman Lider, Elizaveta Kazantseva
Interstitial Lung Disease	
AP16-688	Rapidly progressive interstitial lung disease associated with anti-NXP2 antibody
	Nataphon Wuthithepbuncha (Thailand)*, Viboon Boonsarngsuk, Jakkrit Laikitmongkhon, Pimpin Incharoen, Warawut Sukkasem
AP16-689	Efficacy of Low-Dose Nintedanib in Idiopathic Pulmonary Fibrosis, a retrospective single institute analysis.
	Natsumi Watanabe (Japan)*, Yoshinori Tanino, Takefumi Nikaido, Yuki Sato, Ryuichi Togawa, Takaya Kawamaya, Naoko Fukuhara, Tomoyoshi Lee, Riko Sato, Takumi Onuma, Mikako Saito, Hikaru Tomita, Mami Rikimaru, Julia Morimoto, Yasuhito Suzuki, Hiroyuki Minemura, Junpei Saito, Kenya Kanazawa, Yoko Shibata
AP16-690	The Impact of MDT meetings and addition of Clinical Pathway on diagnosis and cost analysis in DPLD patients from two tertiary centers in Klang Valley.
	Giritharan Muniandy (Malaysia)*, Andrea Ban, Faisal Abdul Hamid, Boon Hau Ng, Nik Nuratiqah Nik Abeed, Syazatul Syakirin Sirol Aflah, Aniza Ismail, Shahrir Mohamed Said, Imree Azmi, Zuhanis Abdul Hamid
AP16-691	Double whammy: a case of post severe COVID pneumonia - anti mda 5 associated interstitial lung disease
	Wang Jie Tan (Malaysia)*, Noorul Afidza, Mona Zaria, Chiou Perng Lee, Jamalul Azizi
AP16-692	Organizing pneumonia in patients who are in post COVID state or develop late onset symptoms of COVID-19
	Chang-Seok Yoon (Republic of Korea)*, Jae-Kyeong Lee, Young-Ok Na, Hwa Kyung Park, Bo Gun Kho, Ha Young Park, Tae-Ok Kim, Hong-Joon Shin, Yong-Soo Kwon, Yu-Il Kim, Sung-Chul Lim
AP16-693	Rare case of acute exacerbations of post COVID-19 interstitial lung disease
	Lakmini Dassanayake (Sri Lanka)*, Amitha Fernando, Ruwanthi Jayasekara, Madushanka Rathnayake
AP16-694	Sarcoidosis associated pulmonary artery stenosis and pulmonary hypertension - A Challenging case
	Arthihai Srirangan (Sri Lanka)*, Niranjan Chandramal, Asha Samaranayake, Ravini Karunathilaka

AP16-695	Assessment of disease severity of diffuse parenchymal lung disease (DPLD) patients by 6-minute walk test (6MWT)
	Mamun Newaz (Bangladesh)*, Mohammad Mohiuddin Ahmad, Mohammad Aminul Islam, Hena Khatun, Mohammad Tuhiduzzaman, Anal Chandra Das, Sharmin Afroze, Sharmin Sultana
AP16-696	Are blood vessels a target organ for sarcoidosis?
	Evgeniy Shchepikhin (Russia)*, Evgeniy Shmelev, Anna Zaitseva
AP16-697	Peripheral blood monocyte count as a prognostic biomarker in idiopathic interstitial pneumonia other than idiopathic pulmonary fibrosis
	Yuki Sato (Japan)*, Yoshinori Tanino, Takefumi Nikaido, Ryuichi Togawa, Takaya Kawamata, Natsumi Watanabe, Naoko Fukuhara, Tomoyoshi Lee, Riko Sato, Takumi Onuma, Hikaru Tomita, Mikako Saito, Mami Rikimaru, Julia Morimoto, Yasuhito Suzuki, Hiroyuki Minemura, Junpei Saito, Kenya Kanazawa, Yoko Shibata
AP16-698	VISTA is a novel diagnostic and prognostic biomarker in idiopathic pulmonary fibrosis
	Hee-Young Yoon (Republic of Korea)*, Ganghee Chae, Sang Eun Lee, Su-jin Moon, Jin Woo Song
AP16-699	Plasma adiokines predict diagnosis and prognosis in patients with idiopathic pulmonary fibrosis
	Ju Hyun Oh (Republic of Korea)*, Ganghee Chae, Su-Jin Moon, Jin Woo Song
AP16-700	The Efficacy of Pulmonary Rehabilitation in Patients with Idiopathic pulmonary fibrosis
	Ji Hoon Jang (Republic of Korea)*, Hee Eun Choi, Jae Ha Lee
AP16-701	Birt-Hogg-Dub Syndrome in Korean family with a Novel Folliculin Gene Mutation
	Yon Ju Ryu (Republic Of Korea)*, Jiyeon Bae
AP16-702	Usefulness of software-based quantification for a computed tomography image analysis in patients with combined pulmonary fibrosis and emphysema
	Yoshiaki Kitaguchi (Japan)*, Takumi Kinjo, Yusuke Suzuki, Norihiko Goto, Masamichi Komatsu, Fumika Ueno, Yosuke Wada, Masanori Yasuo, Hiroshi Yamamoto, Kiyoyasu Fukushima, Masayuki Hanaoka
AP16-703	Benefits of Systemic Corticosteroid in Post-COVID-19 Interstitial Lung Disease.
	Yun Seok Kim (Republic of Korea)*, Tai Joon An, Ye Jin Lee, Ji Eun Park, Eung Gu Lee, Youlim Kim, Sung-Yoon Kang, Hyonsoo Joo, Joon Young Choi
AP16-704	Broncho-obstructive syndrome (BOS) in patients with different forms of hypersensitivity pneumonitis (HP).
	Galina Kuklina (Russia)*, Evgeny Shmelev
AP16-705	Single time point scores for predicting 1-year progression and 5-year overall survival in idiopathic pulmonary fibrosis: A validation study of Imaging Signature IPF (IS-IPF)
	Kyungjong Lee (Republic of Korea)*, Ju Hyun Oh, S. Samuel Weight, Jonathan Goldin, Bianca Villages, Jin Woo Song, Grace Hyun J. Kim
AP16-706	RNA-recognizing immune sensor regulates bleomycin-induced activation of macrophages, lymphocytes, and neutrophils and subsequent lung fibrosis
	Takashi Ishii (Japan)*, Yusuke Murakami, Tomoya Narita, Takahide Nagase, Naomi Yamashita

AP16-707	The analysis of the effect of statin therapy on the clinical course of IPF
	Seung Hoon Kim (Republic of Korea)*, Shin Young Kim, So Hyang Song, Chi Hong Kim, Sung Kyoung Kim
AP16-708	Obstructive Sleep Apnea in Patients with Idiopathic pulmonary fibrosis: Prevalence and Predictive Factors
	Ji Hoon Jang (Republic of Korea)*, Hyun Kuk Kim, Jae Ha Lee
AP16-709	Importance of clinical history of antigen exposure and anti-Trichosporon asahii antibody evaluation for diagnosis of summer-type hypersensitivity pneumonitis in patients with chronic interstitial lung diseases
	Takaya Kawamata (Japan)*, Yoshinori Tanino, Takefumi Nikaido, Yuki Sato, Ryuichi Togawa, Natsumi Watanabe, Naoko Fukuhara, Tomoyoshi Lee, Riko Sato, Takumi Onuma, Hikaru Tomita, Mikako Saito, Mami Rikimaru, Yasuhito Suzuki, Hiroyuki Minemura, Junpei Saito, Kenya Kanazawa, Yoko Shibata
AP16-710	Clinical significance of vitamin D deficiency in lung transplant recipients
	Min Seo Ki (Republic of Korea)*, Ala Woo, Song Yee Kim, Moo Suk Park, Young Sam Kim, Ha Eun Kim, Jin Gu Lee, Hyo Chae Paik
AP16-711	Polymyxin-B hemoperfusion in patients with acute exacerbation of idiopathic pulmonary fibrosis: A single center prospective pilot study
	Min Jee Kim (Republic of Korea)*, Jiyoul Yang, Jin Woo Song
AP16-712	COVID-19 vaccine-related pneumonitis in Korea
	Ji Young Park (Republic of Korea)*, Joo-Hee Kim, Sunghoon Park, Yong Il Hwang, Hwan Il Kim, Ki-Suck Jung, Seung Hun Jang
AP16-713	Oleanolic acid acetate alleviates bleomycin-induced pulmonary fibrosis in mice
	Jae-Wan Jung (Republic of Korea)*, Ki-Eun Hwang, Chul Park, Hyun Lim, Joo-Un Park, Ui-Ri An, Hak-Ryul Kim
AP16-714	Evaluation of fibrocytes in silica-induced and bleomycin-induced pulmonary fibrosis model in mice by single cell RNA-seq analysis
	Kazuya Koyama (Japan)*, Seidai Sato, Hiroshi Kawano, Atsushi Mitsunashi, Kojin Murakami, Yuya Yamashita, Keiko Haji, Kozo Kagawa, Hirohisa Ogawa, Yasuhiko Nishioka
AP16-715	New prognostic scoring system for mortality in idiopathic pulmonary fibrosis modifying the GAP model with desaturation during six-minute walk test
	Jae Ha Lee (Republic of Korea)*, Ji Hoon Jang, Moo Suk Park
AP16-716	Longitudinal evaluation of patients with lymphangioleiomyomatosis with lower level of serum VEGF-D.
	Masaki Hirose (Japan)*, Toru Arai, Takayuki Takimoto, Yoshikazu Inoue
AP16-717	Pulmonary fibrosis in critically ill patients with COVID-19: prevalence and outcome : A multicentre retrospective cohort study in South Korea
	Dae Hong Cho (Republic of Korea)*, Ganghee Chae, Junghyun Kim, Joon-Sung Joh, Tae Yun Park, Ae-Rin Baek, Won-Young Kim, Yang Jin Jegal, Chi Ryang Chung, Jinwoo Lee, Joo Hun Park, Jae Wook Lee, Soyeoun Lim, Jin Woo Song

ORAL PRESENTATION

20 November

Oral 25		09:20-10:50	Grand Ballroom 104 (1F)
Clinical Respiratory Medicine			
Chair	Sung Yoon Lim (Seoul National University College of Medicine, Republic of Korea)		
09:20-09:30	AO25-1	Risk factors for hospitalized bronchiectasis exacerbation based on blood eosinophil level at stable state and incorporation of phenotype into FACED score	
		Wang Chun Kwok (Hong Kong)*, James Chung Man Ho, Ting Fung Ma, David CL Lam, Johnny Wai Man Chan, Mary Sau Man Ip, Terence Chi Chun Tam	
09:30-09:40	AO25-2	The association between changes in BMI and acute exacerbation in non-CF bronchiectasis	
		Hyeon Kyeong Bae (Republic of Korea)*, Hyun Lee, Hayoung Choi, Yun Su Sim, Shinhee Park, Woo Jin Kim, Kwang Ha Yoo, Seung Jun Lee, Tae-Hyung Kim, Bumhee Yang, Ina Jeong, Soo-Jung Um, Deog Kyeom Kim, Ji-Hyun Lee, Byoung Soo Kwon, Young-Jae Cho, Hye Yun Park, Chang-Hoon Lee, Chin Kook Rhee, Ji Ye Jung	
09:40-09:50	AO25-3	Predictors of mortality in COVID-19 associated pneumothorax/pneumomediastinum patients without a history of invasive mechanical ventilation: the CoBiF score	
		Wongi Woo (Republic of Korea)*, Vincent Kipkorir, Du-young Kang, Adina Marza, Alessandro Belletti, Shadi Hamouri, Abdulqadir Nashwan, Giuseppe Fiorentino, Muhammad Mohsin Khan, Ayat Alhakeem, Sarya Swed, Moezedin Javad Rafiee, Wooshik Kim, Duk Hwan Moon, Jae Il Shin, Sungsoo Lee	
09:50-10:00	AO25-4	A national survey of non-invasive respiratory management in COVID-19 patients with acute respiratory failure using COVIREGI-JP database	
		Kazuko Yamamoto (Japan)*, Keisuke Tomii, Motoya Izumi, Naoyuki Akiyama, Nobuyuki Ashizawa, Naoki Iwanaga, Takahiro Takazono, Shinnosuke Takemoto, Hiroshi Ishimoto, Noriho Sakamoto, Yasushi Obase, Masato Tashiro, Takeshi Tanaka, Momoko Yamauchi, Naoki Hosogaya, Koichi Izumikawa, Katsunori Yanagihara, Hiroshi Mukae	
10:00-10:10	AO25-5	Effect of Intravenous N-acetylcysteine on Prevention of Mechanical Ventilation and Mortality among COVID-19 Patients: A Meta-Analysis	
		Karen Anne Claridad (Philippines)*, Roland Reuben Angeles, Lenora Fernandez	
10:10-10:20	AO25-6	Assessment of Dysfunctional Breathing in a cohort of post covid patients and the impact of Breathing Retraining Physiotherapy	
		Ruwanthi Jayasekara (Sri Lanka)*, Suresh Chathurantha, Amitha Fernando	
10:20-10:30	AO25-7	SUPER to Characterize Pleural Effusion	
		Astrid Gardiner (Singapore)*, Ryan Ling, Zhaojin Chen, Yiong-Huak Chan, Pyng Lee	



Oral 26		09:20-10:50	Grand Ballroom 105 (1F)
Paediatric Lung Disease			
Chair	Anne Chang (Menzies School of Health Research, Queensland University of Technology, Australia)		
09:20-09:30	AO26-1	The effect of the coronavirus disease (COVID-19) pandemic on hospital admissions among children due to the respiratory illnesses and the respiratory pathogens.	
		Sze Chiang Lui (Malaysia)*, Fauziah Ripin, Nor Diyana Ismail, N Fafwati Faridatul Akmar Mohammad, Yi Cheau Chua, Hazilawati Hussein, Maria Kamal, Sabeera Begum Kader Ibrahim, Asiah Kassim	
09:30-09:40	AO26-2	Pulmonary function and complications in children who have received hematopoietic stem cell transplantation	
		Panuwat Srichaisawat (Thailand)*, Jitladda Deerojanawong, Chanthana Harnruthakorn	
09:40-09:50	AO26-3	Correlation of lung function using forced oscillation technique with spirometry in children aged (4-18 years) with cystic fibrosis (CF)	
		Sachin Singh (India)*, Meenu Singh, Joseph Mathew	
09:50-10:00	AO26-4	Pneumorrhachis Complicated by Spontaneous Pneumomediastinum in Pediatric Patients: An 11-year Retrospective Study in Taiwan	
		Yu-Wei Liu (Taiwan)*, Yu-Tang Chang, Chieh-Ni Kao, Yu-Ling Huang, Hung-Hsing Chiang, Jui-Ying Lee, Hsien-Pin Li, Po-Chih Chang, Shah-Hwa Chou	
10:00-10:10	AO26-5	Risk factors of adverse respiratory outcome after scoliosis surgery in neuromuscular disorder patients	
		Kyeong Hun Lee (Republic of Korea)*, Ji Hye Kim, Dong In Suh, Ji Soo Park	
10:10-10:20	AO26-6	Multicenter Surveillance of Cystic Fibrosis in Korean Children	
		Kyung Won Kim (Republic of Korea)*, Hyung Young Kim, Soo-Jong Hong, Kangmo Ahn, Dong In Suh, Shin Hye Noh, Soo Yeon Kim, Jinho Yu, Jung Min Ko, Min Goo Lee	

Oral 27		11:10-12:40	Grand Ballroom 104 (1F)
Respiratory Structure and Function			
Chair	Sang-Ha Kim (Yonsei University Wonju College of Medicine, Republic of Korea)		
11:10-11:20	AO27-1	Lung fuction and bronchiectasis incidence: nationwide population-based cohort study	
		Shinyoung Kim (Republic of Korea)*, Sungkyoung Kim, Chihong Kim, Sohyang Song, Seunghoon Kim, Kyungdo Han	
11:20-11:30	AO27-2	Impact of Bronchopulmonary Dysplasia on Functional and Structural Changes in the Lungs of School-aged Children	
		Ji Ye Jung (Republic of Korea)*, Jeong Eun Shin, Jungho Han, Soon Min Lee, Joohee Lim, Haerin Jang, Ho Seon Eun, Min Soo Park, Soo Yeon Kim, Myung Hyun Sohn, Mi-Jung Lee, Kyung Won Kim	
11:30-11:40	AO27-3	Characterising the effect of body mass index on thoracic mechanics in adults with cystic fibrosis using dynamic chest radiography	
		Thomas Simon FitzMaurice (United Kingdom)*, Caroline McCann, Dilip Nazareth, Martin Walshaw, Paul Stephen McNamara	
11:40-11:50	AO27-4	Standalone electrical impedance tomography system can infer spirometric indices providing global and regional lung function assessment	
		Wang Chun Kwok (Hong Kong)*, Fedi Zouari, Wei Yi Oon, Dipyaman Modak, Peng Cao, Wei-Ning Lee, Terence Chi Chun Tam, Eddie C. Wong, Russell W. Chan	
11:50-12:00	AO27-5	The anatomical variations in tracheobronchial tree through videobronchoscope	
		Samruddhi Chougale (India)*, Amir Khoja	
12:00-12:10	AO27-6	Prevalence of positive bronchodilator response in a real-world clinical setting.	
		Geak Poh Tan (Singapore)*, Gin Tsen Chai, Danqing Qi, John Arputhan Abisheganaden	

Oral 28		11:10-12:40	Grand Ballroom 105 (1F)
Respiratory Infections (non-tuberculous) - Pneumonia			
Chair	Jong Wook Shin (Chung-Ang University College of Medicine, Republic of Korea)		
11:10-11:20	AO28-3	Changes in respiratory infection trends during the COVID-19 pandemic in the hematologic malignancy patients	
		Jiwon Ryoo (Republic of Korea)*, Seok Chan Kim, Jongmin Lee	
11:20-11:30	AO28-4	Long Term Predictors of Fatal Pneumonia in a Japanese population	
		Minh Nguyen (United States of America)*	
11:30-11:40	AO28-5	Combining a novel cyclic peptide with antibiotics to treat acute and chronic pulmonary infections with multidrug resistance gram-negative bacteria	
		Dhammika Leshan Wannigama (Thailand)*, Cameron Hurst, Peter N Monk, Shuichi Abe, Paul G. Higgins, Stephen M Stick, Anthony Kicic, Tanittha Chatsuwan	
11:40-11:50	AO28-6	A hybrid AI model with the first 3-day features of CXR and clinical data to predict the survival discharge of pneumonia patients within seven hospital days	
		Chieh Liang Wu (Taiwan)*, Wei Cheng Chen, Lun-Chi Chen, Ruey-Kai Sheu, Kai-Chih Pai, Yu-Cheng Wu	
11:50-12:00	AO28-7	Comparison of beta-lactam monotherapy and combination with fluoroquinolone therapy as initial empiric treatment in patients with hospital-acquired pneumonia: a Korean multicenter cohort study	
		Moon Seong Baek (Republic of Korea)*, Sang-Bum Hong, Kyeongman Jeon, Hye Kyeong Park, Woo Hyun Cho, Soohyun Bae, Heung Bum Lee, Hyun-Kyung Lee, Changhwan Kim, Jae Young Moon, Jin Hyoung Kim, Youjin Chang, Hyun-Il Gil, Beomsu Shin, Kwang Ha Yoo, Kyung Hoon Min, Jee Youn Oh, Ae-Rin Baek	
12:00-12:10	AO28-8	Correlation of fungal infection risk factor on fungal colonization in pulmonary tuberculosis sequelae patients with recurrent hemoptysis in labuang baji hospital	
		Jamaluddin Madolangan (Indonesia)*, Irawaty Djaharuddin	

SPONSORSHIP & EXHIBITION

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SPONSORSHIP & EXHIBITION

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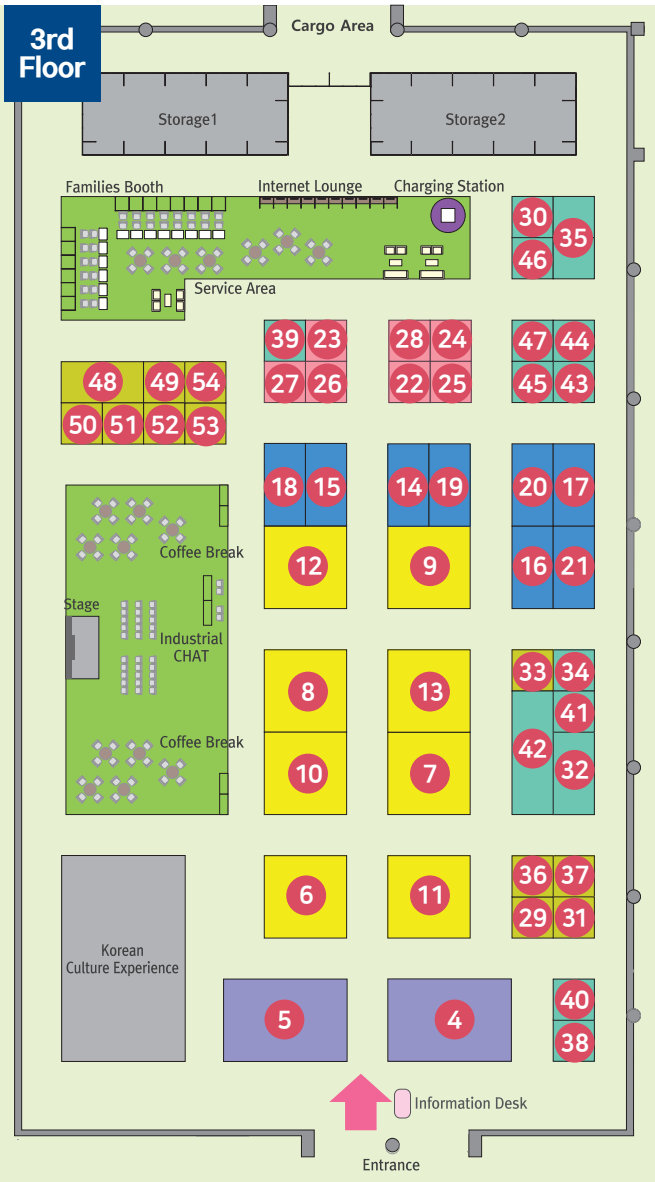
EXHIBITION

Exhibit Floor Plan and Listing

During the APSR 2022, all participants have access to the industry exhibition, which is located in Hall D1 Lobby, Hall D 3F and Grand Ballroom Lobby, 1F Coex. Coffee Break will be served in the exhibition area.


Exhibit Hours

Friday 18 November 09:00-17:00
Saturday 19 November 09:00-17:00
Sunday 20 November 09:00-12:30




Industrial CHAT Hours

Friday 18 November


Daewon Pharmaceutical

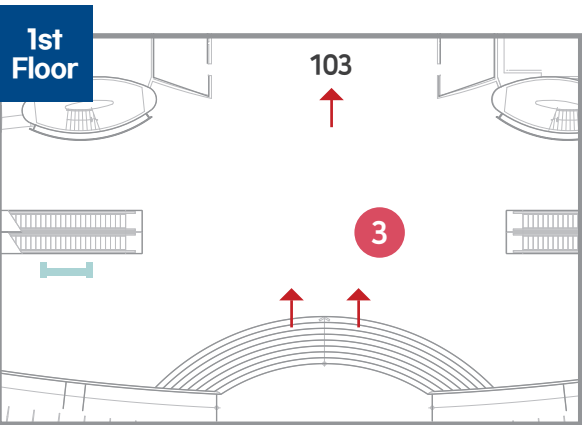
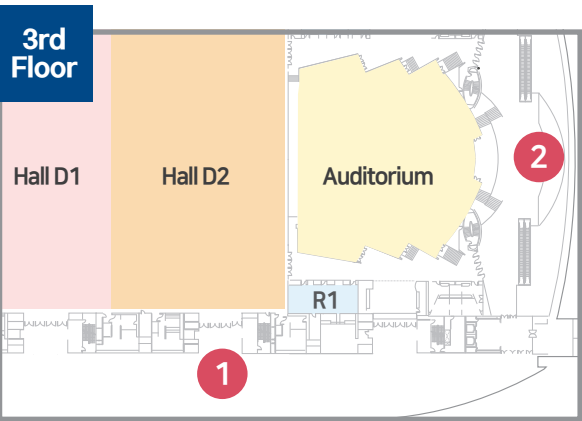
Codaewon S 10:55-11:05
Clinical Value and Advantages of New Antitussive
Seong Yong Lim (Sungkyunkwan University School of Medicine, Republic of Korea)

Saturday 19 November


HANLIM PHARM

Bronpass Tab. 10:55-11:05
Experimental and Clinical Evidence of Bronpass®
Joon Young Choi (Incheon St. Mary Hospital, Catholic University of Korea, Republic of Korea)

Ulistin Inj. 15:35-15:45
Ulinastatin in ICU
Dong-Hyun Lee (Dong-A University Hospital, Republic of Korea)



No	Exhibitor	Booth No.
1	Boryung Co.	D-1 (3F, Hall D Lobby)
2	GSK	D-2 (3F, Auditorium Lobby)
3	YUHAN	D-3 (1F, Grand Ballroom Lobby)
4	DAEWON Pharmaceutical Co., Ltd.	P-1
5	Novartis	P-2
6	AstraZeneca Korea	G-1
7	Boehringer Ingelheim Korea	G-2
8	Hanmi Pharm.Co.,Ltd.	G-3
9	Ildong Pharmaceutical	G-4
10	KOLON PHARMA	G-5
11	ORGANON KOREA Co., Ltd.	G-6
12	SAMA PHARM Co., Ltd.	G-7
13	sanofi	G-8
14	Ahngook Pharm	S-1
15	Chong Kun Dang pharmaceutical	S-2
16	GeneX Inc.	S-3
17	MEKICS Co., Ltd	S-4
18	MSD Korea	S-5
19	Pfizer Korea	S-6
20	Shinhan Medical Co., Ltd.	S-7
21	Takeda Pharmaceuticals Korea CO., Ltd.	S-8
22	AJU PHARM CO., LTD.	B-1
23	BUKWANG PHARM. CO., LTD.	B-2
24	DaeWoong Pharmaceuticals Korea CO., Ltd.	B-3
25	HANLIM Pharm. CO., LTD.	B-4
26	Janssen Korea	B-5

No	Exhibitor	Booth No.
27	Roche Korea Co., Ltd	B-6
28	Teva-Handok	B-7
29	Abbott Korea	E-1
30	BCworld Pharm.	E-2
31	Broncus Medical	E-3
32	Erbe Medical	E-4
33	FCU Co., Ltd.	E-5
34	Fisher & Paykel Healthcare Asia Ltd.	E-6
35	GE Healthcare Korea	E-7
36	Handok	E-8
37	Hunan Vathin Medical Instrument Co.,Ltd.	E-9
38	Korea Otsuka Pharmaceutical Co.,Ltd	E-10
39	Kwangdong Pharmaceutical	E-11
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Profiles

BORYUNG

Boryung Co.

Booth No. D-1 (3F, Hall D Lobby)

The history of Boryung began in 1957 with the opening of the Boryung Pharmacy in Jongno 5-ga, based on the spirit of the founder Kim Seung-ho, who used to ride his bicycle around the city to get medicines for sick people no matter how hard they were to find.

The founder's deep devotion with great sincerity to provide "medicine for the sick" has been expanded since 1957 and passed onto our current mission to become an indispensable to human health.

We kindly ask for your consistent attention to our new challenges and journey under the new name Boryung in 2022.

GSK

GSK

Booth No. D-2 (3F, Auditorium Lobby)

GSK is a global biopharma company with a purpose to unite science, technology and talent to get ahead of disease, aiming to impact the health of 2.5 billion people over the next 10 years.

 **YUHAN**

YUHAN

Booth No. D-3 (1F, Grand Ballroom Lobby)

The way of Yuhan

Yuhan corporation, a group loved by the people and grown together with the people for the last 90 years, the corporate culture of honesty and integrity, and the strong beliefs in social responsibility are what made Yuhan what it is today. Looking back on the path that we moved on and thinking of the path ahead, Yuhan will make the leap as a global pharmaceutical company through innovative new drug development, and by enabling healthiness and happiness for all the people in the world. In the next 100 years, Yuhan Corporation will follow the noble spirit of our founder, Dr. New Ilhan, and write the history of challenge and development moving forward. Our challenge has already begun.

Daewon

Pharmaceutical

DAEWON Pharmaceutical Co., Ltd.

Booth No. P-1

Founded in 1958, Daewon Pharmaceutical has always been a reliable companion for medical professionals and patients. As one of the largest therapeutic agent manufacturer in Korea, Daewon will always be your unchanging partner, wherever and whenever.

 **NOVARTIS**

Novartis

Booth No. P-2

Novartis - Reimagine Medicine

Across 142 countries worldwide, 110,738 persons work at Novartis and 769m patients are treated with Novartis products. Novartis is building therapeutic area depth as no. of drugs in pipeline from 2018 to 2020 among the top 25 global pharmaceutical firms in the world.

In Korea, Novartis contributes to innovation through scientific collaboration and networking and continues to support neighbors in need with local communities.

AstraZeneca 

AstraZeneca Korea

Booth No. G-1

We are focused on creating genuinely innovative medicines and improving access to them. In this way, we deliver the greatest benefit to patients, healthcare systems and societies globally. We have three priorities designed to deliver our growth through innovation strategy.

 **Boehringer
Ingelheim**

Boehringer Ingelheim Korea

Booth No. G-2

The pharmaceutical company Boehringer Ingelheim was founded in 1885 by Albert Boehringer in Ingelheim. The company has contributed to human health by continuing to research and develop innovative drugs over the past 130 years.

Day by day, the 50,000 employees of Boehringer Ingelheim create value through innovation with a clear goal to provide more health and improve the lives of both humans and animals. As part of research and development activities for innovative drugs, the company focuses primarily on the therapeutic areas of cardiovascular disease, respiratory diseases, diseases of the central nervous system, metabolic diseases, and oncology.

Boehringer Ingelheim Korea was founded in 1976 and creates value through innovation in the business areas: human medicine, animal medicine.

Among the human pharmaceutical department, anti-cancer drug department is dedicated to shedding light on the unresolved problems of oncology and improving quality of life of patients through steady research based on scientific evidence.

Hanmi Hanmi Pharm.

Hanmi Pharm.Co.,Ltd.

Booth No. G-3

Creativity & Innovation

Hanmi jumps up to be a global leading pharmaceutical company with development of new biologics, new chemical entities, and innovative new drugs. The slogan of Hanmi is 'creation and challenge' as Hanmi tries to make new ways for the domestic pharmaceutical market. We have started a distribution revolution with RFID technology, the nation's very first success of US expansion with IMD, and R&D collaboration with global companies.

No.1 R&D

In 2014, Hanmi invested over 150 billion won in R&D for the first time. Based on this, Hanmi focuses on developing new drug projects such as LAPSCOVERY and anticancer drugs targeting the global market. The synergy effect of research and development is expected from our "Open Innovation" strategy, which opened other excellent R&D capabilities.

ILDONG

Ildong Pharmaceutical

Booth No. G-4

Since Ildong Pharmaceutical Group was founded in 1941 under the philosophy of 'pharmaceuticals are rooted in humans', we have strived for the healthier lives of people placing our highest value on humanity and lives.

It is our belief that we at Ildong Group exist to bring health and well-being to people around the world. We have created and shared significant value for health and prosperity throughout many years and will continue this endeavor.

Ildong has become one of the leading pharmaceuticals in South Korea with powerful brand lineups including Aronamin, Biovita, and other major OTC products. We developed robust product pipelines for ethical drugs using our advanced technologies and diverse strategic partnerships.

Following the successful development of Besivo, a new drug for chronic hepatitis B treatment, we are focusing our resources and efforts on the success of various ongoing R&D projects and pipelines.

Ildong Bioscience, Ildong Hyaltech, Ildong E-commerce, Ildong Healthcare, Uni Communications, Rutec, and all other affiliates are actively promoting the health and well-being of people in various areas- food, health supplement products, distribution, marketing, and IT.

At Ildong Pharmaceutical Group, we continue to make our utmost efforts to create a healthier and brighter tomorrow and adhere to our corporate philosophy of 'being a leading global organization that helps people live healthier and happier lives.'

KOLON PHARMA

KOLON PHARMA

Booth No. G-5

KOLON PHARMA is striving to become the most trusted company by customers based on transparent and ethical management in a rapidly changing pharmaceutical environment.

In addition, we are concentrating our competencies to develop new excellent brand new products and leading health care products that will lead future growth, and to supply high-quality products, and are making continuous achievements.

ORGANON

ORGANON KOREA Co., Ltd.

Booth No. G-6

Organon is a global healthcare company formed through a spinoff from Merck (known as MSD outside of the U.S. and Canada) with a mission to deliver impactful medicines and solutions for a healthier every day. We build upon our strong foundation of more than 60 medicines and other products across a range of areas including reproductive health, heart disease, dermatology, allergies and asthma.

We bring these important therapies around the world, with an international footprint that serves people in more than 140 markets. We believe the diversity of our business provides a sustainable engine of growth so we can continue to invest in and advance new medicines and treatments for women that are so urgently needed.

We are here for her health.

sama 삼아제약

SAMA PHARM Co., Ltd.

Booth No. G-7

Since SAMA was founded in 1945, we have continuously committed to researching and working to improve the health and the quality of life of people with a core belief in our Respect for Human Dignity and Life. At the same time, we have been practicing precision management as an exemplary pharmaceutical company.

SAMA will continue our utmost efforts in research and development to improve the quality of life through our constant change and innovation. We will also continue to practice our business based on our core value of Respect for Human Dignity.

We wish all of you the good health and happiness.

sanofi

sanofi

Booth No. G-8

Sanofi's specialty care business unit focuses on rare diseases, rare blood disorders, neurology, immunology, and oncology. Sanofi's ambition is to leverage science and innovation to improve people's lives and be the industry leader in immunology and oncology. Its approach is shaped by a long history of developing highly specialized treatments and forging close relationships with physician and patient communities.

Ahngook pharm.

Ahngook Pharm

Booth No. S-1

For a better life! Realizing human health and happiness through the development of excellent pharmaceuticals

1. We offer safer and more differentiated health care products to our customers by integrating medical technology and digital information.
2. We leap forward as a K-Health company that improves the quality of life for people who take advantage of Ahn-gook's Total Healthcare service.



Chong Kun Dang pharmaceutical

Booth No. S-2

[About Chong Kun Dang]

Manufacture and sale of medicines

Chong Kun Dang Pharmaceutical Corp. is one of leading Korean pharmaceutical manufacturers and has a great strength on domestic sales not only with prescription drugs indicated for anti-hypertension, anti-hyperlipidemia and anti-diabetics but also with OTC drugs such as Penzal, Prefemine, Modcol and consumer health such as insecticides, hairdye, etc.

[Our strategy]

We focus on finding new medicines and diagnostics and establishing data-based insights that evolve the practice of medicine and help patients live longer, better lives.

[OUR MISSION]

Better Life through Better Medicine

Contributing to improved quality of life and public welfare by developing quality medicine

[Chong Kun Dang]

Dedicated to pharmaceuticals since its foundation, Chong Kun Dang has overcome many challenges, while continuing to grow and contribute to the advancement of Korea's pharmaceutical industry.

In the days when Korea imported 100% of the raw materials required for medicines from abroad, we built Korea's largest plants for chemical synthesis and fermentation, making it possible to produce pharmaceutical ingredients locally using our own technology. From there, we had driven Korean Pharmaceutical Industry with this breakthrough on the path toward modernization.

Furthermore, we became the first Korean pharmaceutical company to export products to the US market through the obtainment of the U.S. FDA

approval. Now, on its 77th anniversary, we promise to put all efforts to lead continuous change and innovation, positioning Chong Kun Dang as a global pharmaceutical company with a competitive edge in the international market.



GeneX Inc.

Booth No. S-3

GeneX Inc. was established in 2013 and contracted with Cepheid Inc. as the sole authorized distributor. we consistently found innovative products from a number of agencies, introducing them to domestic hospitals.

In particular, we have focused on sophisticated products related to molecular diagnostics and IVD based on Real-time PCR product.



MEKICS Co., Ltd

Booth No. S-4

MEKICS is taking the lead in providing total respiratory care solutions by developing 'OmniOx' equipped with HFNC and NIV functions for the first time in the world based on its proprietary respiratory therapy convergence technology and establishing a diverse line-up.

We provide evidence for the effects of demographic and environmental changes on the respiration health of the world's population through continuous and diverse research and create the possibility of extending respiratory therapy, which is limited by time and space to daily life. And we committed by providing products and services suitable for the respiratory therapy environment extended to satisfy both clinician and patient through continuous communication with the medical field



MSD Korea

Booth No. S-5

We have always been and always will be inventing for the single greatest purpose: Life

We aspire to be the premier research-intensive biopharmaceutical company in the world.

For more than 125 years, MSD has been inventing for life, bringing forward medicines and vaccines for many of the world's most challenging diseases in pursuit of our mission to save and improve lives. We've been guided by the view that great medicines and vaccines change the world. Our legacy of inventing medicines and vaccines continues to this day. We adapt our business not only for the next quarter but for the next quarter century.

We demonstrate our commitment to patients and population health by increasing access to health care through far-reaching policies, programs and partnerships.

Today, we continue to be at the forefront of research to prevent and treat diseases that threaten people and animals – including cancer, infectious diseases, such as HIV and Ebola, and emerging animal diseases.



Pfizer Korea

Booth No. S-6

Breakthroughs That Change Patients' Lives

We apply science and our global resources to bring therapies to people that extend and significantly improve their lives. We strive to set the standard for quality, safety & value in the discovery, development and manufacture of health care products.



Shinhan Medical Co., Ltd.

Booth No. S-7

Since 1983, Shinhan Medical Co. has been importing high-tech medical equipment specialized in respiratory diagnostics. Beyond importing and supplying the equipment, Shinhan Medical aims to provide the best customer care with our team of well-experienced engineers and educators. Not only that, Shinhan Medical thrives to continuously research and study the matters related to respiratory care to equip ourselves with sound knowledge.

Along with the new Vyntus Series' recent successful launch, now networking the devices and syncing EMR has never been easier.

We promise to provide the best possible quality and value for the patients and physicians.

For more details, please visit our website or contact one of our friendly representatives.



Takeda Pharmaceuticals Korea CO., Ltd.

Booth No. S-8

Takeda Oncology, the Global Oncology Business Unit of Takeda Pharmaceutical, is headquartered in Massachusetts. By concentrating the power of leading scientific minds and the vast resources of a global pharmaceutical company, we are finding innovative way to improve the treatment of cancer.

- ALUNBRIG (brigatinib) Approved for FIRST-LINE USE in ALK+ Metastatic NSCLC
- EXKIVITY (mobocertinib) is an oral therapy that targets epidermal growth factor receptor (EGFR) Exon20 insertion mutations for people who have been on chemotherapy



AJU PHARM CO., LTD.

Booth No. B-1

Since 1953, we have strived to not only treat the sick but also to help everyone live healthier and happier lives through our pharmaceutical, medical device, CMO, and consumer health businesses.

While providing high-quality products through technical innovations and investments in manufacturing facilities, Aju Pharm continually endeavors to create new products through R&D and open innovation.



BUKWANG PHARM. CO., LTD.

Booth No. B-2

Trusted Company

Bukwang Pharmaceutical Co., Ltd. was established on October 17th, 1960 and has since continued to produce excellent medications with the aim of improving global health for the last 55 years. Since Bukwang was listed in the Korea Stock Exchange in 1988, Bukwang is proud to have kept a healthy financial status and stable track record that earned trust from its employees and shareholders. Bukwang's operating profit is at the top of the rank in the industry, nearing 20% as of financial year 2014.

Bukwang's armamentarium consists of more than 100 products in various therapeutic areas: liver disease treatments such as Levovir and Legalon, diabetic complication products such as Dexid and Thiocetacid, CNS disorder drugs including Lonasen, Ixel and Orfil, and respiratory disease treatments such as Azeptin and Asima. Bukwang continues to grow its original drug business through consistent focus on new drug development.



DaeWoong Pharmaceuticals Korea CO., Ltd.

Booth No. B-3

Since its foundation in 1945, Daewoong Pharmaceutical has grown into Korea's leading pharmaceutical firm through endless challenges and innovations in line with our corporate philosophy of 'developing quality medicine to safeguard the health of the people and contribute to a healthier society.'

Daewoong Pharmaceutical is consolidating its global competitiveness and R&D capabilities.

Daewoong Pharmaceutical has established itself as Korea's leading pharmaceutical company that researches, develops and manufactures medicines to compete in the global market by engaging in a wide range of partnerships with leading healthcare companies worldwide and building the most number of regional infrastructures compared to other Korean pharmaceutical firms.

In particular, we have obtained International Standard Certifications including the environmental management systems (ISO 14001), occupational health and safety systems (ISO 45001, KOSHA-MS), and quality management systems (ISO 9001). We have acquired GMP Certifications from regulatory agencies of developed countries such as the US Food and Drug Administration (FDA) and European Medicines Agency (EMA), demonstrating our highly developed quality management system.

We strive endlessly to fulfill our goal of producing the world's first-in-class and best-in-class new drug through continuous R&D investment and open collaboration. Our unceasing effort is channeled towards diversifying our new drug pipeline and platform technology to ultimately progress human health and quality of life.

Daewoong Pharmaceutical believes that the growth of employees translates into the growth of the company.

Based on the management principle that the "company grows as its employees grow", Daewoong practices a Smart-Work Office to foster an autonomous and immersive work environment, in addition to introducing Career Development Program (CDP), flexible working, Daewoong Global Talent Program, and Daewoong AI/Bigdata Academy(DABA). We are dedicated to cultivating industry-leading corporate culture and institution.

Daewoong Pharmaceutical will leap beyond Korea and into the world.

Daewoong Pharmaceutical aspires to move beyond its title as Korea's leading pharmaceutical company to become a healthcare group of global reputation. We will promote sustainable future growth by strengthening internal stability through responsible management, and responding quickly and flexibly to external environmental changes.

Daewoong Pharmaceutical will devote itself to become a global healthcare group that creates new values to advance human health and quality of life based on continuous innovation.



HANLIM Pharm. CO., LTD.

Booth No. B-4

Since HANLIM Pharm. was established in 1974, we have constantly put our entire effort to develop and provide a wide range of pharmaceutical products. We will strive to create significant and sustainable values in the future and expand our research and development pipeline in various therapeutic areas.



Janssen Korea

Booth No. B-5

At Janssen, we're creating a future where disease is a thing of the past. We're the Pharmaceutical Companies of Johnson & Johnson, working tirelessly to make that future a reality for patients everywhere by fighting sickness with science, improving access with ingenuity, and healing hopelessness with heart. We focus on areas of medicine where we can make the biggest difference: Cardiovascular & Metabolism, Immunology, Infectious Diseases & Vaccines, Neuroscience, Oncology, and Pulmonary Hypertension.

* We Are Pioneers: We have 40,000 people around the world who show up every day to achieve the unimaginable. This work requires heart, science, and ingenuity. We never stop imagining a future where the most challenging diseases are a thing of the past.

* We Are Focused: We are driven by the fact that patients are waiting for breakthroughs. We focus on six areas of medicine where the need is high, the science is compelling, and the opportunity to make a difference is great.

* We Are Partners: In order to make the greatest impact, we collaborate with experts at every stage, from early discovery to market access.



Roche Korea Co., Ltd

Booth No. B-6

Roche Korea is a Korean affiliate of the pharmaceutical division of Roche Group, a global leader in cancer treatment and personalized healthcare. Since its foundation, it has constantly provided innovative treatments for cancer, the No.1 cause of death in Korea, establishing itself as the nation's largest cancer-drug provider. It builds all the business activities on Patient-centricity. It works with researchers from nearly 500 medical institutions in Korea for the development of innovative drugs and strives to expand patient access to them. In immunotherapy, a promising field of cancer treatment, it has been able to improve patient access by adding non-small cell lung cancer and urothelial cancer to the reimbursed indications of its immuno-oncology drug Tecentriq through the reimbursement negotiations, where it was able to remove restrictions on the reimbursement, including PD-L1 expression. Its impressive move has been once again observed in July this year when it was able to add extensive-stage small cell lung cancer to the reimbursed indication of its immunotherapy. Roche Korea strives to build a fast and efficient corporate culture by adopting agile methods and practices in its operations to offer innovative drugs to more patients faster. It has been on the list of Korea's top 100 best workplaces for two years in a row—2018 and 2019—for constantly creating new opportunities for employment and offering better working condition. Roche Korea is making various endeavors to provide greater treatment options to patients and healthcare professionals and create a better healthcare environment where patients have affordable access to treatment. With bold investment in R&D, it hosts 45% of the oncology trials and 30% of early phase trials, carried out by the global headquarters. Going forward, it will continue to dedicate itself to the development and delivery of novel drugs. Based on the "One Roche" team spirit, shared with Roche Diagnostics Korea, a Korean office of the Diagnostics division, it will provide innovative solutions for personalized healthcare that combine the diagnostics, treatment, and monitoring of diseases, taking the lead in a journey towards a healthier Korea.



Teva-Handok

Booth No. B-7

Teva-Handok is a pharmaceutical company established in October 2013, a joint venture established by joint investment of Teva, a global pharmaceutical company, and Handok with a 68-year tradition in Korea. Teva-Handok provides innovative new drugs and generic drugs to fulfill its vision of "giving more benefits to more patients", and plans to launch drugs in various fields in the future.



Abbott Korea

Booth No. E-1

Since 1980, Abbott Korea has been dedicated to helping Koreans live healthier lives through a diverse range of diagnostics tools, medical devices and branded generic pharmaceuticals.

Abbott established pharmaceuticals business specializes in the following high-growth therapeutic areas: gastroenterology, women's health, cardiometabolic, pain management/central nervous system, respiratory and influenza vaccines. Abbott is the only global company with a pharmaceutical business that is 100 percent focused on emerging markets. We have built our pharmaceuticals business to be driven locally and powered globally, which helps us meet local health needs. Abbott will continue to strive to do more. Offer more affordable medicines, offer more health solutions and keep more people healthy.



BCworld Pharm.

Booth No. E-2

BCWP is expertized in the formulation and process development to provide quality generics. BCWP not only has been certified as Korea Innovative pharmaceutical company but also designated as Advanced Technology Center. BCWP is specialized in DDS technologies by way of proactive investments. In facilities complied with EU/ cGMP standards, liquid and powder injection, lyophilized injection, and oral solid forms are manufactured. In 2019, the manufacturing site dedicated to Carbapenem injections completed its construction in Wonju city.



Broncus Medical

Booth No. E-3

Broncus, a pioneer in the field of Interventional Pulmonology, is a medical device company specializing in the global development and distribution of innovative lung solutions. Broncus' integrated whole lung access navigation platform addresses the clinical challenges and unmet needs of existing technologies in the diagnosis and treatment of lung disease. Our vision is to be a global leader in the transformation of lung disease treatment. Our mission is to establish bronchoscopic diagnostic and therapeutic solutions as the gold standard for the diagnosis and treatment of lung disease.



Erbe Medical

Booth No. E-4

ERBE ELEKTROMEDIZIN GMBH

Setting standards since 1851

As a family-owned and operated business, Erbe develops, manufactures and markets surgical systems for professional use in various medical disciplines all over the world.



FCU Co., Ltd.

Booth No. E-5

We develops and manufactures Mobile ultrasound imaging systems and Ultrasound probes. As a professional medical device manufacturer, we have ISO13485/KGMP/MFDS/CE/FDA-certificated products. In particular, we have the world's first needle navigation mobile ultrasound that shows the expected needle path and the expected destination of the needle tip in real time. It has not only Best-in-class image quality for diagnosis but also Needle guide system. It provides medical staff with accurate and safe procedures to avoid hazardous areas. It will increase their convenience and keep the patient safe.



Fisher & Paykel Healthcare Asia Ltd.

Booth No. E-6

At Fisher & Paykel Healthcare, we fully understand the life-changing impact that can result from delivering inspired and world-leading healthcare solutions.

After all, we changed the way the world delivers respiratory humidification to critically ill patients in hospital, and were the first organization in the world to make a humidifier specifically for use in the treatment of patients with obstructive sleep apnea.

Today, through an unrivalled commitment to innovation; to doing the right thing; and doing what is best for the patient, we continue to inspire world-leading healthcare solutions.

Our team of self-motivated, empathetic and committed individuals is our strength. It is this team; our originality; the value we place on relationships; our international perspective; and the utmost care for all patients, customers, suppliers, shareholders, as well as the environment, that will ultimately ensure we will be the healthcare company of choice.



GE Healthcare Korea

Booth No. E-7

As a leading global medical technology, pharmaceutical diagnostics, and digital solutions innovator, GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications and services, supported by its Edison intelligence platform.

We are committed to fostering an inclusive culture of respect, transparency, and unyielding integrity. We're working to solve the greatest challenges in healthcare that patients and clinicians face to and in the future. Together, we are not only building a healthier future but living our purpose to create a world where healthcare has no limits.



Handok

Booth No. E-8

The Health Innovator, Handok.

Handok (Chairman & CEO Young-Jin Kim) is committed to innovation and its business has grown both through strategic partnerships with other companies as well as through innovative research. Handok was founded in 1954 and has been listed on the Korea Stock Exchange since 1976. The company has never recorded a deficit year since establishment.

Handok grew as a joint venture with Hoechst/Aventis/Sanofi from 1964 to 2012. Handok has also established strategic collaborations in several areas with multiple multinational pharmaceutical companies. Handok ended its joint venture relationship with Sanofi in 2012 and became an independent company again. Handok changed its company name from Handok Pharmaceutical Co., Ltd to Handok Inc. and declared its vision to become "The Health Innovator" and as Korea's leading global healthcare company. Handok introduces new products to the Korean market through partnerships, internal R&D, and state-of-the-art manufacturing while maintaining a global standards compliance program.

Handok is a total healthcare company. Handok's businesses mainly focus on prescription drugs along with consumer health care products, medical devices and in vitro diagnostics, food supplements and medical nutrition.

Handok is one of the leading pharmaceutical companies which highly value ethical business practices. It has fully implemented comprehensive codes of conduct. This commitment has been recognized with the Special Ethical Management Award conferred by the Health Industry CEO Summit in 2008 and the Excellence prize for Transparent Management by Korea's five major economic organizations including KEF, FKI in 2010.



Hunan Vathin Medical Instrument Co.,Ltd.

Booth No. E-9

Vathin specializes in the production , development and sales of single-use bronchoscopes. Core employees of Vathin have more than 20 years' experience in materials, optics, structure, electronics, software, manufacturing and other fields. In addition, our company dedicated on the guideline of " Safe Simply Smart " and has carried forward of the corporate spirit of " Humanism, innovation and preciseness" .



Korea Otsuka Pharmaceutical Co.,Ltd

Booth No. E-10

Korea Otsuka Pharmaceutical is the Korean subsidiary of esteemed global pharmaceutical company Otsuka Pharmaceutical. Despite being a subsidiary of a multinational pharmaceutical company, Korea Otsuka Pharmaceutical has established a self-reliant operational foundation in South Korea and contributed to the advancement of Korea's pharmaceutical industry by investing the revenue generated from the sales of pharmaceutical products back into production equipment and clinical research.

Equipped with a large-scale production facility in South Korea, Korea Otsuka Pharmaceutical contributes to the country's job creation and economic development by supplying superior pharmaceutical products, both domestically and internationally. In addition, we help to treat diseases and to maintain and improve the everyday health of Koreans by developing new drugs and creating added value for our products. Korea Otsuka Pharmaceutical is diligently fulfilling our role and mission as a company that contributes to the healthy life of Koreans, providing continuous values based on a deep understanding of customers, the market and corporate social responsibility.



Kwangdong Pharmaceutical

Booth No. E-11

Kwangdong was founded with the goal of providing high quality pharmaceuticals to our customers. We have developed pharmaceuticals and healthcare products for the improvement of human life.



National Hospice Center

Booth No. E-12

The National Hospice Center (NHC) strives to establish holistic care environment by improving availability, quality, evidence, and cooperation for end-of-life care. To effectively achieve the above goals, NHC currently functions in the following areas: monitoring quality of care, developing and distributing educational program, raising public awareness and producing evidence on end-of-life care. The National Cancer Center has been designated as a NHC by the Ministry of Health and Welfare since 2017, and has played various roles in improving the quality of life of terminally ill patients and their families.



NAUMED Inc.

Booth No. E-13

NAUMED Inc. is constantly striving to create greater value for healthcare workers and patients and to provide the best products and services.

"Provision of the latest medical technology"

NAUMED Inc. is trying to provide innovative and advanced products in high quality to the Korean medical market and to introduce new medical technology to the Korean market in line with the trends of the medical industry.

"Best Technical Support"

Our employees constantly receive training internally and receive training by overseas headquarters regularly to ensure that our customers are comfortable using innovative and up-to-date medical equipment and that patients receive optimal treatment.

"Growing Company, Pursuing Change and Innovation"

With rapid changes in the medical environment, NAUMED Inc. always studies and experiences in the field and strives to grow with the medical community without fear of change and innovation. Through this, we want to create corporate value and promote the development of our members.



OLYMPUS KOREA CO., LTD

Booth No. E-14

Olympus Korea (OKR) was established in 2000 as the sixth overseas corporation of Olympus Group. After establishing, OKR has shared Olympus' brand value in the Korean market by providing various our products such as endoscope, Endo-therapy accessories and surgical products.

As a leading medical technology company, our medical business uses innovative capabilities in medical technology, therapeutic intervention, and precision manufacturing to help healthcare professionals deliver diagnostic, therapeutic, and minimally invasive procedures to improve clinical outcomes, reduce overall costs, and enhance the quality of life for patients and their safety. Olympus' Medical portfolio includes endoscopes, laparoscopes, and video imaging systems, as well as surgical energy devices, system integration customer solutions, medical services, and a wide range of endotherapy instruments for endoscopic and therapeutic applications.



PENTAX Medical Korea

Booth No. E-15

PENTAX Medical is a division of HOYA Group delivering endo-imaging solutions. Established in 1919 in Japan, PENTAX Medical is a globally diversified company with R&D innovation and manufacturing centers in Japan, Europe and the United States. Through leading-edge optical technologies, PENTAX Medical is providing the most advanced clinically relevant endo-imaging solutions. Together with comprehensive customer service offerings, PENTAX Medical is collaborating with customers worldwide to create long-term partnerships and customer satisfaction.



ResMed Korea

Booth No. E-16

* About ResMed

Every day we come to work with a focus on building and supporting technology that helps people live healthier, happier lives. It began over 30 years ago with the invention of a machine that helped people breathe easier and sleep better. And it continues today with digital health solutions that help keep people out of the hospital.

* Our drive to innovate

We're leading the way in cloud-connected medical devices that transform care for people with sleep apnea, COPD and other chronic diseases. Our comprehensive out-of-hospital software platforms support the professionals and caregivers who help people stay healthy in the home or care setting of their choice.



Thermo Fisher Scientific Korea

Booth No. E-17

Thermo Fisher Scientific Inc. (NYSE: TMO) is the world leader in serving science, with annual revenue of approximately \$40 billion. Our Mission is to enable our customers to make the world healthier, cleaner and safer. Whether our customers are accelerating life sciences research, solving complex analytical challenges, increasing productivity in their laboratories, improving patient health through diagnostics or the development and manufacture of life-changing therapies, we are here to support them. Our global team delivers an unrivaled combination of innovative technologies, purchasing convenience and pharmaceutical services through our industry-leading brands, including Thermo Scientific, Applied Biosystems, Invitrogen, Fisher Scientific, Unity Lab Services, Patheon and PPD. For more information, please visit www.thermofisher.com.



YUNGJIN PHARM

Booth No. E-18

Yungjin Pharm. Co., Ltd was established in 1952, has been playing a major role as a forerunner in the Korean pharmaceutical industry for half a century. With our inspiring mission statement, "To relieve the suffering of mankind from diseases with our innovative, effective and safe pharmaceutical products", we have shown our successful contribution not only within Korea, but also through global expansion. As a result, we have received a total of 25 awards including the President Award for Superior Product Development, the Prime Minister Award, Industry Award and many more. These accomplishments demonstrate our sustainability and commitment to the development of innovative products and business excellence in both overseas and domestic segments.



YUYU Teijin Medicare

Booth No. E-19

Yuyu Teijin Medicare was established in 2006 as a joint venture with Yuyu pharma (Korea) and the Teijin group(Japan), and now is the leading provider of home healthcare service including home oxygen therapy(HOT), Ventilator and sleep apnea treatment in Korea.

About Yuyu Pharma

Yuyu Pharma(KRX: 000220) is a pharmaceutical company founded in 1941. The company manufactures, distributes, and does marketing for pharmaceutical products, medical devices, and medical foods in South Korea and Southeast Asia. Currently, Yuyu Pharma is focusing on developing new drugs for treating enlarged prostates and dry eye syndrome.

About the Teijin Group

Teijin (TSE: 3401) is a technology-driven global group offering advanced solutions in the areas of environmental value; safety, security and disaster mitigation; and demographic change and increased health consciousness. Its main fields of operation are high-performance fibers such as aramid, carbon fibers & composites, healthcare, films, resin & plastic processing, polyester fibers, products converting and IT.



APSR

Booth No. E-20

The objectives of the APSR are the advancement and promotion of knowledge of the respiratory system in health and disease. The Society strives to encourage research, improve clinical practice through training, increase awareness of health problems and promote the exchange of knowledge among respirologists in the Asia-Pacific region and beyond.



APSR 2023

Booth No. E-21

The 27th Congress of the Asian Pacific Society of Respiriology

The Congress brings together the world's respiratory experts to present and discuss the latest scientific and clinical advances across the field of Respiratory Medicine. It is a valuable platform for all to learn from the leading experts, exchange ideas and stay up-to-date in Respiriology. The theme for APSR Congress 2023 is Current Practice Future Care.

Whether you are a healthcare professional, researchers, scientist, academic or industry expert, there will be something for you!



American Thoracic Society

Booth No. E-22

The American Thoracic Society improves global health by advancing research, patient care, and public health in pulmonary disease, critical illness, and sleep disorders. Founded in 1905 to combat TB, the ATS has grown to tackle asthma, COPD, sepsis, acute respiratory distress, sleep apnea, and more.



European Respiratory Society

Booth No. E-23

The European Respiratory Society (ERS) is an international organisation that brings together physicians, healthcare professionals, scientists and other experts working in respiratory medicine. It is one of the leading medical organisations in the respiratory field, with a growing membership representing over 160 countries worldwide. Its mission is to promote lung health in order to alleviate suffering from disease and drive standards for respiratory medicine globally. www.ersnet.org



Japanese Respiratory Society

Booth No. E-24

The Japanese Respiratory Society (JRS) was founded in 1961. There are now approximately 13,000 members making it the biggest scientific respiratory society in Asian-Pacific Region.

JRS contributes to the promotion of respiratory health and welfare by engaging innovative science, culture, education, and clinical research in the field of respiratory health and diseases.

The 63rd Annual Meeting of the JRS will be held in Tokyo, 28-30 April 2023 under the presidency of Kazuhisa Takahashi. The theme of the Annual Meeting will be "Future of pulmonology pioneered by the fusion of knowledge"

Since Annual Meeting of 2001, the JRS began integrating international programs, which have been continuing with exchange and liaison with the Asian Pacific Society of Respiriology, the American Thoracic Society and the European Respiratory Society.

The 10 JRS assemblies have been working actively.

- Cell and Molecular Biology
- Structure and Function
- Diffuse Lung Disease
- Thoracic Oncology
- Clinical Problems
- Allergy, Immunology and Inflammation
- Obstructive Lung Disease
- Infections and Tuberculosis
- Respiratory Care
- Pulmonary Circulation and Lung Injury

"Respiratory Investigation" is an official journal, published in English. The journal publishes original manuscripts on clinical investigations of a variety of respiratory diseases and medicines, along with articles concerning basic physiology, pathology, and cellular/molecular biology relating to any pulmonary diseases. The journal accepts contributions from members and non-members of the Society.

JRS invites you to apply for the Study Abroad Support for Foreign Researchers (Harasawa) Fellowship. The Fellowship aims to provide support to young researchers and specialised respiratory clinicians from countries other than Japan, who are pursuing studies abroad and wish to contribute to the progress and development of respiratory study.



KATRD

Booth No. E-25

The Korean Academy of Tuberculosis and Respiratory Diseases is preceded by the Academic Division of the Korean National Tuberculosis Association which was established on November 6, 1953 with the goal of advancing the research and study on tuberculosis and respiratory diseases and eradicating tuberculosis in Korea.

KATRD has 1,930 members as of November 2022. The Busan Chapter was formed in 1977, the Daegu Kyungbuk Chapter in 1985, the Kwangju Cheonnam Chapter in 1987, the Cheonbuk Chapter in 1989, the Kangwon Chapter in July 2003, the Daejeon Chapter in August 2007, and Jeju Chapter in 2012. The chapters are actively involved in academic exchanges and building fellowship among its members in manners that befit the respective regions.

Official Journal of the Asian Pacific Society of Respiriology

Respirology

Respirology Editorial Office

Booth No. E-26

Respirology and Respirology Case Reports are the official peer-reviewed journals of the APSR, publishing research papers and clinical cases in all fields of respiratory medicine. APSR members receive free access to both publications, and a 50% discount on the article publication charge for Respirology Case Reports



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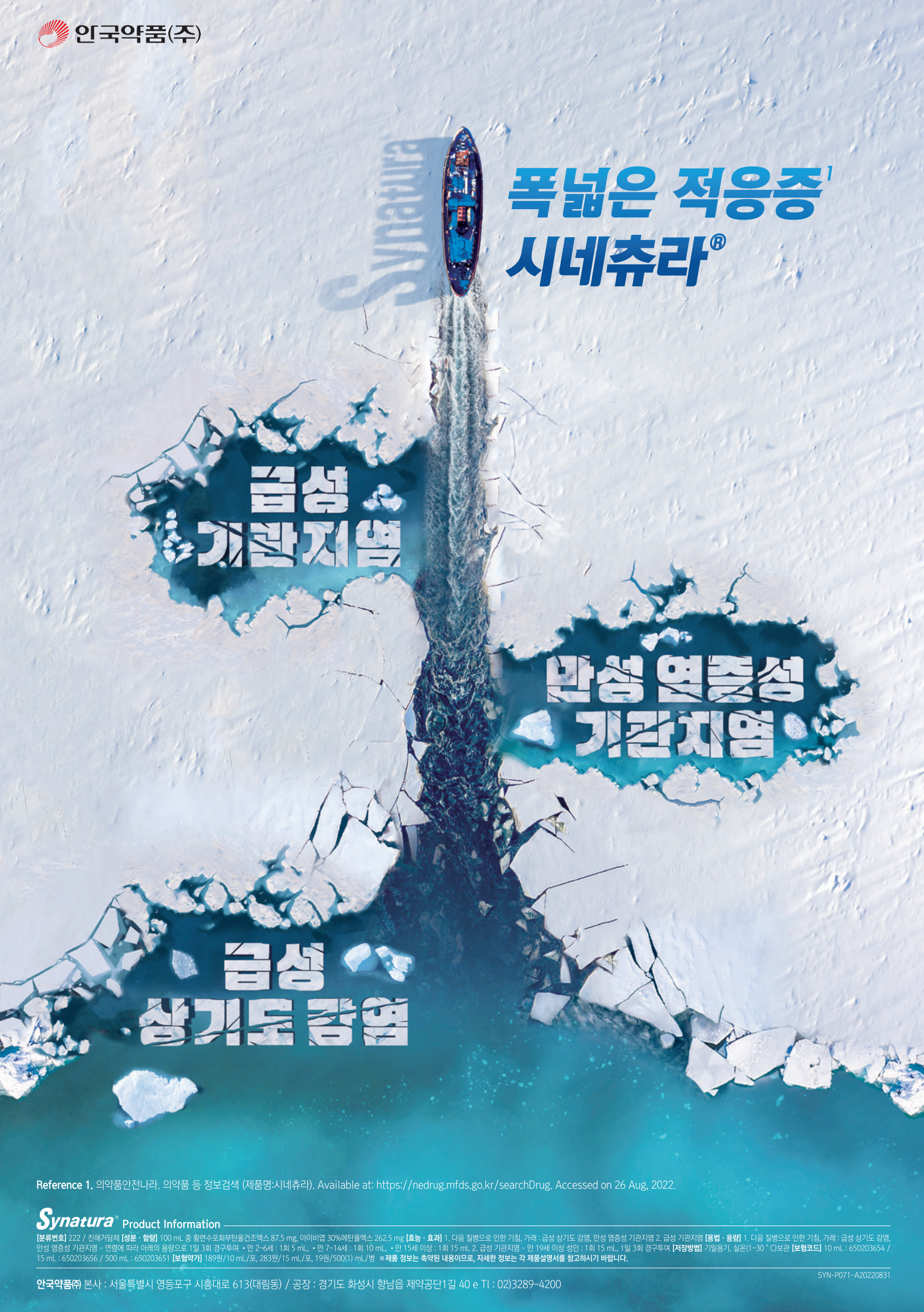
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아주약품은 1953년 설립되어, 국내 최초의 결핵치료제 출시를 시작으로 현재까지 세계적 수준의 품질로 인정받는 의약품, 의료기기, 건강식품 등을 공급하는 손꼽히는 국내 대표 장수 기업 이자 글로벌 헬스케어 솔루션 기업입니다.

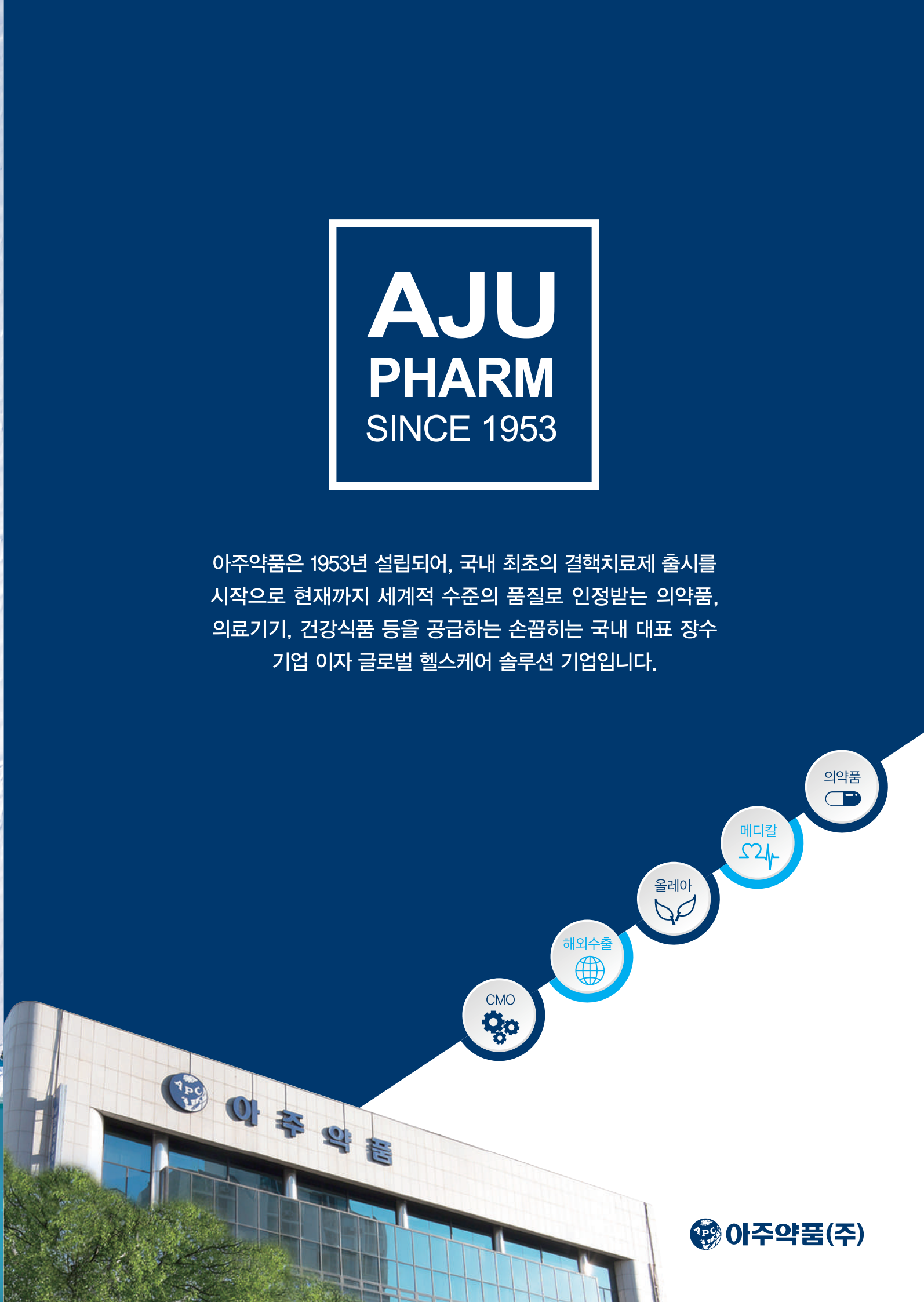


Reference 1. 의약품안전나라. 의약품 등 정보검색 (제품명:시네츄라). Available at: <https://nedrug.mfds.go.kr/searchDrug>. Accessed on 26 Aug. 2022.

Synatura® Product Information
 [분류번호] 222 / 진해거담제 [성분·함량] 100 mL 중 황편수포화부탄올건조엑스 87.5 mg, 아이비엽 30%에탄올엑스 262.5 mg [효능·효과] 1. 다음 질병으로 인한 기침, 가래 : 금성 상기도 감염, 만성 염증성 기관지염 2. 금성 기관지염 [용법·용량] 1. 다음 질병으로 인한 기침, 가래 : 금성 상기도 감염, 만성 염증성 기관지염 - 연령에 따라 아래의 용량으로 1일 3회 경구투여 • 만 2~6세 : 1회 5 mL, • 만 7~14세 : 1회 10 mL, • 만 15세 이상 : 1회 15 mL 2. 금성 기관지염 - 만 19세 이상 성인 : 1회 15 mL, 1일 3회 경구투여 [저장방법] 기밀용기, 실온(1~30 °C)보관 [보형코드] 10 mL : 650203654 / 15 mL : 650203656 / 500 mL : 650203651 [보형약가] 189원/10 mL/포, 283원/15 mL/포, 19원/500(1) mL/병 *제품 정보는 축약된 내용으로, 자세한 정보는 각 제품설명서를 참고하시기 바랍니다.

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SYMBICORT® IS ANTI INFLAMMATORY RELIEVER

that uses patients' natural relief-seeking behavior to reduce exacerbations across all asthma severities, alone or with maintenance^{1,4}

"2019-2021 GINA Guideline states Symbicort has large body of evidences (SYGMA1 & 2 study) as Anti Inflammatory Reliever and study results such as severe exacerbation reduction with low dose ICS. These RCTs were backgrounds of GINA guideline changes that Symbicort is firstly recommended as preferred reliever."

국내에서는 심비코르트 터부알러 160/4.5µg이 경증천식환자에서 항염증 증상완화요법으로 사용하기 받음

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- Treatment of idiopathic pulmonary fibrosis (IPF)
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[심비코르트는 천식환자의 치료, 중증의 만성폐쇄성폐질환에 허가되어 있습니다. 한국아스트라제네카는 허가되지 않은 적응증, 용량을 권장하지 않습니다.]

Reference 1. Partridge MR, et al. Attitudes and actions of asthma patients on regular maintenance therapy: the INSPIRE study, BMC Pulmonary Medicine 2006, 6:13. **2.** 2019 GINA. **3.** 2020 GINA. **4.** 2021 GINA

Product Information **[성분·함량]** 심비코르트 터부알러 160/4.5µg (1g 중 주성분 : 부데소니드(미분화)(별규) ... 180mg, 포르모테롤푸마르산염수화물(별규) ... 5mg) **[적응증]** 천식환자의 치료, 중증의 만성폐쇄성 폐질환 **[용법·용량]** 천식: 이 약은 천식 증상의 예방과 증상의 완화 그리고 증상악화 위험의 감소를 포함한 전반적인 천식의 조절을 위한 천식의 치료를 목적으로 한다. 이 약은 흡입 코르티코스테로이드의 사용이 적합한 천식 환자들에게 천식의 중증도와 상관없이 투여 가능하며 용량은 질환의 중증도에 따라 개인별로 조절해야 한다. 이는 치료의 시작 시기뿐 아니라 용량 조절 시기에도 고려되어야 한다. 만일 환자 개개인이 복합제로서 가능한 용량 이외의 복합 용량을 필요로 하는 경우 개개 성분의 흡입제에 의한 적절한 용량의 β 2 효능약이나 코르티코스테로이드를 처방하여야 한다. 환자는 정기적으로 의사의 진단을 받아 최적의 용량을 유지할 수 있도록 해야 하며 천식증상을 조절할 수 있는 최저용량으로 유지되어야 한다. 이 약은 아래와 같은 치료 요법들이 있다. 1.항염증 증상완화요법(Anti-inflammatory reliever therapy) 2.항염증 증상완화요법을 포함한 유지요법(Anti-inflammatory reliever plus maintenance therapy) 3.유지요법(Maintenance therapy) 항염증 증상완화요법(경증천식환자): (1) 12세 이상의 청소년 및 성인: 환자는 증상완화를 위하여 필요시 1회를 흡입해야 하며, 천식 조절을 위하여 알레르기원 또는 운동으로 유발된 기관지수축의 예방 목적으로도 사용할 수 있다. 환자가 1회에 6번을 초과하여 흡입하지 않도록 한다. 총 1일 흡입용량은 8번 이하이지만 예외적인 경우에 일시적으로 1일 최대 12번까지 흡입할 수 있다. ·항염증 증상완화요법을 포함한 유지요법: (1) 12세 이상의 청소년 및 성인: 환자들은 추천 유지 용량(1회 1번을 1일 2회 흡입, 아침 1회, 저녁1회씩 흡입 또는 아침에만 2회 흡입 또는 저녁에만 2회 흡입)을 흡입한다. 일부 환자는 최대 1회 2번을 1일 2회 유지요법으로 흡입할 수 있다. 환자는 증상완화를 위하여 필요시 1회를 흡입해야 하며, 만약 증상이 수분동안 지속되면 추가적인 흡입이 필요하다. 환자가 1회에 6번을 초과하여 흡입하지 않도록 한다. 총 1일 흡입용량은 8번 이하이지만 예외적인 경우에 일시적으로 1일 최대 12번까지 흡입할 수 있다. 1일 흡입용량이 8번 이상 요구되는 환자는 추가적인 의학적 처치가 필요하며, 환자의 상태를 재평가하고, 유지요법을 재고하여야 한다. (2) 12세 미만의 소아: 12세 미만의 소아에게 증상완화를 포함한 유지요법은 추천되지 않는다. · 유지요법: (1) 18세 이상의 성인: 1회 1~2번을 1일 2회 흡입하거나 또는 1회 1~2번 1일 1회 흡입한다. 일부환자는 최대 1회 4번을 1일 2회까지 흡입할 수 있다. (2) 12~17세의 청소년: 1회 1~2번을 1일 2회 흡입하거나 또는 1회 1~2번 1일 1회 저녁에 흡입한다. (3) 6세 이상 12세 미만 소아: 1회 1번을 1일 2회 흡입한다. 1일 최대 2번까지 흡입할 수 있다. (4) 6세미만의 소아: 6세 미만의 소아에 대하여 이 약의 투여는 추천되지 않는다. · 이 약 1일 2회 투여로 증상이 조절될 경우, 지속형 기관지 확장제가 증상조절에 필요하다는 의사의 처방이 있는 경우에 한하여, 최저유효용량으로의 용량 조절 범위에 이 약 1회 1일 투여가 포함될 수 있다. · 구제요법으로 사용하는 속효성 기관지확장제의 용량 증가는 기저 질환의 악화를 나타내며 천식 치료가 재평가되어야 한다. · 증상이 조절된 경우, 천식증상을 조절할 수 있는 최저용량으로 유지되어야 한다. 특정환자군 · 노인환자의 경우 용량을 조절할 필요는 없다. · 간이나 신손상 환자에서 이 약의 사용에 대한 자료는 없다. 부데소니드와 포르모테롤은 주로 간대사를 통해 제거되므로 심각한 간경화 환자에게는 노출의 증가가 예상된다. 만성 폐쇄성폐질환 성인: 1회 2번을 1일 2회 흡입 [사용상 주의사항] 다음 환자에는 투여하지 말 것 : 1. 부데소니드나 포르모테롤 또는 흡입 유당에 과민증 (알레르기성)인 환자 2. 6세 미만의 소아 ※ 문헌개정연월일: 2019년 11월 1일 ※보다 자세한 사항은 제품설명서 전문을 참조하시거나 아스트라제네카(주) TEL : (02, 2188, 0800)로 문의 바랍니다. (자세한 내용은 홈페이지 참조) aSYM20191101b

KR-105001 Exp. 2024-02 (Prep. 2022-02)

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ILD, interstitial lung disease; **IPF**, idiopathic pulmonary fibrosis; **PF-ILD**, pregressive fibrosing interstitial lung disease; **SSc-ILD**, systemic sclerosis-associated interstitial lung disease. **References 1.** OFEV® (nintedanib) Prescribing Information (2022.09). **2.** Crestani B, et al. *Lancet Respir Med.* 2019;7(1):60-68. **3.** Distler O, et al. *N Engl J Med.* 2019;380(26):2518-2528. **4.** Flaherty KR, et al. *N Engl J Med.* 2019;381:1718-1727.

OFEV® soft gelatin capsules (Nintedanib esilate) [Composition] OFEV 150 mg (nintedanib esilate) 1 soft capsule contains nintedanib esilate 180.60 mg, OFEV 100mg (nintedanib esilate) 1 soft capsule contains nintedanib esilate 120.40 mg **[Indications and Usage]** Treatment for Idiopathic Pulmonary Fibrosis. Slowing the rate of decline in pulmonary function in patients with Systemic Sclerosis-associated Interstitial Lung Disease. The treatment of chronic fibrosing Interstitial Lung Diseases (ILDs) with a progressive phenotype. **[Dosage and Administration]** It is recommended to administer 150 mg twice daily 12 hours apart in adults. Take the whole capsule with water immediately after meal, it should not be chewed. The capsule should not be opened or crushed. The 100 mg twice daily dose is only recommended to be used in patients who do not tolerate the 150 mg twice daily dose. Treatment with this medicine should be initiated by physicians experienced in the diagnosis and treatment of conditions for which this medicine is indicated. Conduct liver function tests and a pregnancy test when initiating treatment with this medicine. If a dose is missed, administration should resume at the next scheduled time at the recommended dose. If a dose is missed the patient should not be given an additional dose. The recommended maximum daily dose of 300 mg should not be exceeded. **[Precautions in Use]** 1. Contraindications 1) Patients with known hypersensitivity to the active ingredient of this medicine, peanut or soya, or any of the excipients 2) During pregnancy and nursing 3) Patients with moderate hepatic impairment (Child Pugh B) and severe hepatic impairment (Child Pugh C). **[Storage conditions]** Do not store above 25°C. * **For more information about the product, please refer to the latest product label.**

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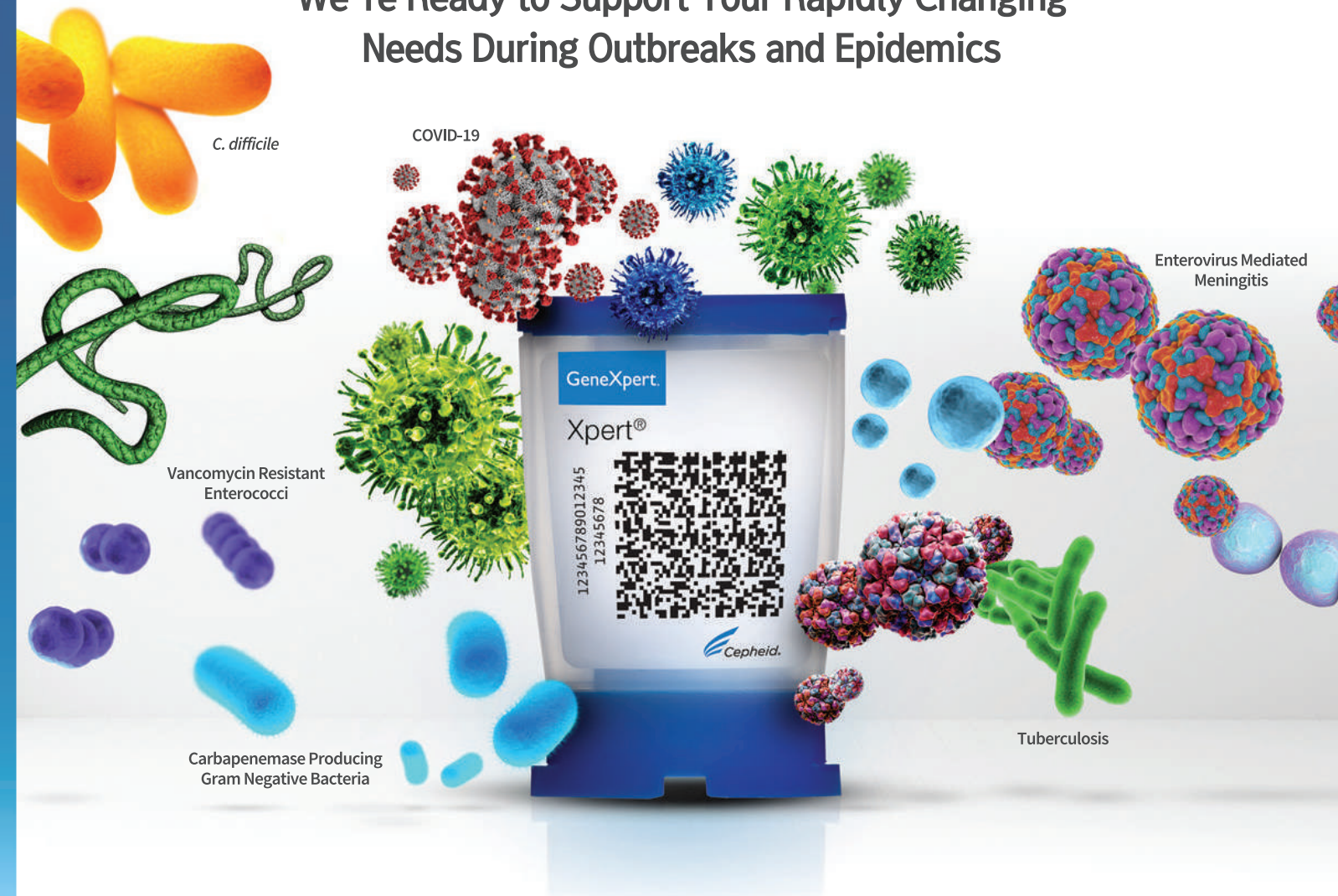


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Ref.> 1. Dal Negro RW, et al. *Eur Respir J*. 2017;50:1700711. 2. Dal Negro RW, et al. Poster presentation. ERS. 2017. PA675. 3. Moretti M, et al. Poster presentation. ERS. 2017. PA685.

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Detection and differentiation of KPC, NDM, VIM, IMP-1 and OXA-48

Test Run Time (Min)
48'

↓ **Xpert[®] MTB/RIF**



Intended Use
Detection of MTB and rifampin resistance mutations

Test Run Time (Min)
110'

↓ **Xpert[®] C. difficile**



Intended Use
Detection of *Clostridium difficile* infection and differentiate 027 strain

Test Run Time (Min)
48'

↓ **Xpert[®] SA Nasal Complete**



Intended Use
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71'

↓ **Xpert[®] EV**



Intended Use
Detection of Enterovirus

Test Run Time (Min)
151'

Genex

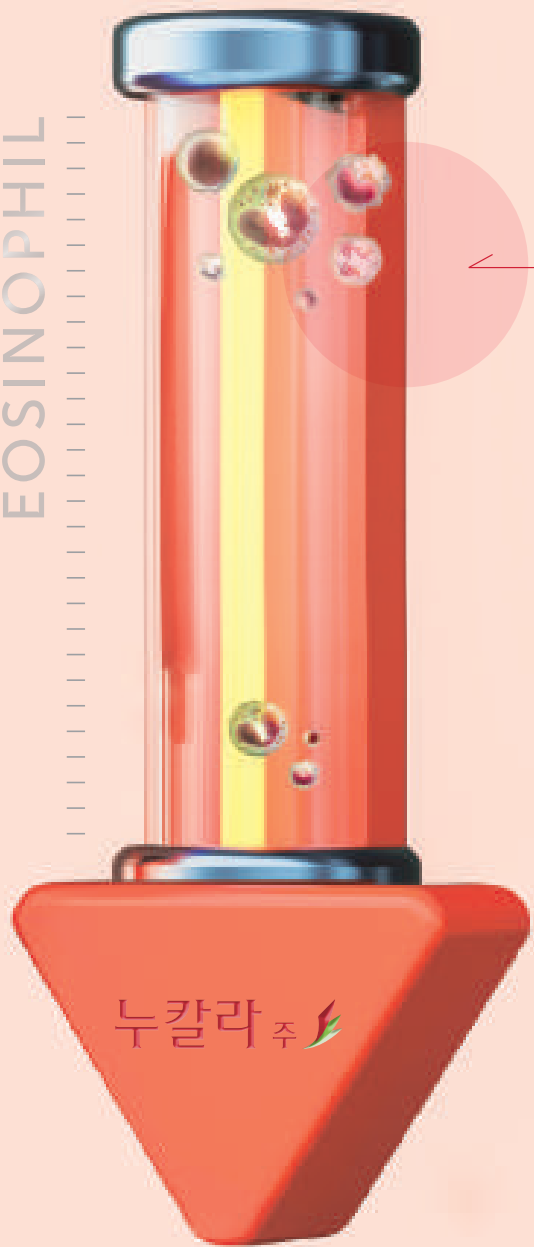
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중증 호산구성 천식 치료제¹

누칼라

Reference: 1. Nucala Prescribing Information.

사용상의 주의사항

주요 시사점은 **투표일이 월요일인 경우**에 비해 **투표일이 화요일인 경우**에 비해 **투표율**이 1.01%포인트 상승한 것으로 나타났다. 특히, **투표일이 화요일인 경우**에 비해 **투표일이 월요일인 경우**에 비해 **투표율**이 1.01%포인트 상승한 것으로 나타났다. 특히, **투표일이 화요일인 경우**에 비해 **투표일이 월요일인 경우**에 비해 **투표율**이 1.01%포인트 상승한 것으로 나타났다. 특히, **투표일이 화요일인 경우**에 비해 **투표일이 월요일인 경우**에 비해 **투표율**이 1.01%포인트 상승한 것으로 나타났다.

Abbreviated Prescribed Information 02 [제품요약정보] 누칼라주(메폴리주입, 유전자재조합) 전문의약품 수입의약품

[illegible]

(주)글락소스미스클라인 서울특별시 용산구 한강대로 92 Tel. 080-901-4100 최신 제품설명서 전문은 kr.gsk.com에서 확인하실 수 있습니다. GSK 제품 사용 중 발생한 이상사례(부작용)는 080-901-4100 또는 kr-medical.drug-safety@gsk.com으로 보고해 주시기 바랍니다.
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【표1】중증의 호신구성 천식 시험자 중 이악 투여군에서 3% 이상 발생하고 위약군보다 더 많이 발생한 유해사례

유형사태	이 약(n = 263) %	위약(n = 257) %
두통	5(19%)	4(16%)
주사부위 반응	20(8%)	8(3%)
어플	14(5%)	9(4%)
피로감	12(5%)	11(4%)
감기	7(3%)	6(2%)
오심/구토	9(3%)	4(2%)
호흡기 통증	7(3%)	5(2%)
기타 증상	7(3%)	5(2%)
손상	9(3%)	11(4%)
결과	7(3%)	11(4%)

주: 주사기 200 μ l에 4 이상 \blacksquare 용변유량이 아홉 개 이상이어야 1 ml (이 약 100 μ l)을 매 4주마다

누칼라 주
(메폴리주합, 유전자재조합)

(메폴리주몹, 유전자재조합)

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[제품명] 브르패스정 [성분·함량] 이 약 396.4mg 중 속지황·목단피·오미자·천문동·황금·행인·백부근연조엑스(1.4~1.7~1~1)·옥수수조분 혼합건조물(4.8:1) 300mg (별규) [성상] 연두색의 타원형 필름코팅 정제 [효능·효과] 급성 기관지염 [용법·용량] 성인 1회 1정, 1일 2회 복용 [사용상의 주의사항] 1. 다음 환자에는 투여하지 말 것 1)신생아 2)임부 또는 임신 가능성 여성 3)수유부 4)이 구상 성분에도 과민증 있는 환자 2. 다음 환자에는 신중히 투여할 것 1)만 65세 이하 고령자 2)전신적 항생제 치료에 효과없는 호흡기 및 전신 감염증 환자 3)약성작용, 종종 폐 질환 환자 4)약성작용, 종종 중추신경계 질환, 신혈관계, 내분비계에 중대한 변화 5)중증 간 기능, 신기능 이상 환자 6)황색 요구(Sunset Yellow FCF) 알레르기 병력 환자 3. 이상반응: 급성기관지염 환자를 대상으로 다기관, 무작위배정, 이중눈가림, 활성군대조 (대조약: 펠라곤니움시도이데스11% 에탄올추출물(1~8~10)·말도텍스트린혼합물(1:4.56)), 평행설계, 제3상 임상시험에서 평가한 결과, 시험군 5.69%(7/123명, 9건) 및 대조군 3.25%(4/123명, 5건)에서 이상 사례가 발생하였으며, 군 간 통계적으로 유의한 차이를 나타내지 않았다. 이 기간 중 1% 이상 흔하게 환자에게 보고된 이상 사례는 관찰되지 않았다. 이 약과 인과관계를 배제할 수 없는 약물 이상반응은 변비 1건, 소화불량 1건, 위식도역류성 질환 1건, 혀의 발진 1건, 알러지마비노제이호소 증가 1건, 아스 파라메티노제이호소 증가 1건, 가슴 두근거림 1건 및 두드러기 1건이었으며 모두 경증으로 나타났다. [저장방법] 기밀용기, 실온(1~30℃)보관 [사용기한] 제조일로부터 36 개월 [보험약가] 183원/정 [포장당량] 30 정/병, 30 정/병

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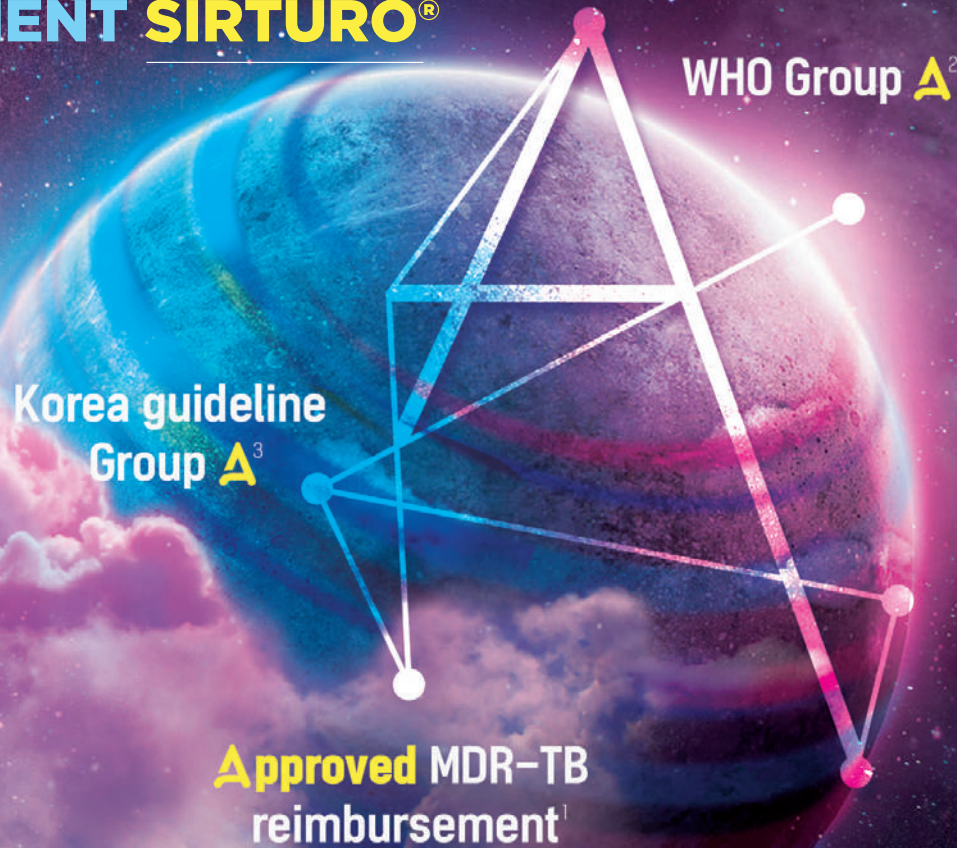


피레스파정 200밀리그램(Pirfenidone 200mg) [전문약품]
[효능·효과] 특발성폐섬유증의 치료 [용법·용량] 성인 : 이 약은 초기용량으로 1일 3회, 1회 1정을 식후에 경구 투여한다. 환자의 반응과 내약성에 따라 2주 간격으로 1회 1정씩 증량하여 1일 3회, 1회 3정까지 증량할 수 있다.
이 약 투여시 위장관계 이상반응이 나타날 경우 환자의 반응을 면밀히 관찰하고 용량 감량 또는 투여 중단을 고려한다. *기타 자세한 내용은 제품설명서를 참조하시기 바랍니다.

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References 1. 보건복지부 고시 제2020-265호 요양급여의 적용기준 및 방법에 관한 세부사항 2. WHO consolidated guidelines on drug-resistant tuberculosis treatment, 2019 3. 질병관리본부, 한국 결핵진료 지침[Internet]. (4판). 2020. Available from : https://www.kdca.go.kr/board/board.es?mid=a20507020000&bid=0019&act=view&list_no=367154

전문의약품
화귀의약품

서튜러 정100밀리그램 [제형요약정보] 【원료약품 및 그 분량】 이 약 1정(약 460.0mg) 중 베다퀸로퀴아르산염(분류) 120.89mg (베다퀸로퀴아르산염 100mg) 【성상】 흰색 내지 거의 흰색의 알갱이 불룩한 원형 정제 【효능・효과】 유류균증 결핵군(Mycobacterium tuberculosis) 적응증 성인(만 18세 이상) 및 청소년(만 12세 이상 18세 미만으로 체중 30kg 이상)의 다제내성 폐결핵에 대한 병용요법 【용법・용량】 이 약은 원제로부터 분리한 균주가 생체 외에서 감수성을 보인 적어도 3가지 이상의 약물과의 병용요법으로만 사용되어야 함. 생체 외 약물-감수성 검사 결과를 이용할 수 없다면, 원제로부터 분리한 균주가 감수성을 보일 가능성이 있는 적어도 4가지 이상의 다른 약물과 병용하여 치료를 시작. **권장 용량** 제 1-2주: 1일 1회 400mg (100mg 4정). 제 3-24주: 일주일에 3회, 매 회 200mg (100mg 2정) (투여 간격은 최소 48시간 이상) 【사용상의 주의사항】 1. 경고 1) 이 약과 기타약물을 24주 동안 병용 투여한 120주의 C208 위약 대조 임상시험에서, 이 약 투여군에서 위약군 대비 사망 위험성 증가가 관찰됨. 이 약은 다른 효과적인 치료 요법을 제공할 수 없을 경우에 사용. 2) 이 약의 투여로 QT 간격 연장이 발생할 수 있음. QT 간격을 연장시키는 다른 약물과의 병용은 QT 연장 증가효과를 일으킬 수 있음. 2. 투여 금지 갈락토오스 불내성(galactose intolerance), Lapp 유당분해효소 결핍증(Lapp lactase deficiency) 또는 포도당-갈락토오스 흡수장애(glucose-galactose malabsorption) 등의 유전적인 문제가 있는 환자 3. 이상반응 대조 임상시험에서 이 약 투여군에서 가장 빈번하게 발생한 약물이상반응(>10.0%)은 오심, 관상동맥 두통, 구토 및 어지러움이었음. 【저장방법】 차광기밀용기, 실온보관 (3-30℃) 【수입판매인】 ㈜ 한국안센 【최근변경일】 2021년 5월 24일

가타 상세한 내용은 제품설명서를 참고하시기 바랍니다.

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개선하고 악화를 예방합니다.⁴⁻⁶

【Prescribing Information】 포스터 100/6 HFA 또는 포스터 넥스트할러 (베클로메타손디프로피오네이트/포마르소스테롤이수화물)

■ 원료약품 및 분량: 1회 분무량 중 베클로메타손디프로피오네이트(EP) 100μg, 포마르소스테롤이수화물(EP) 6μg ■ 효능・효과: 1. 지속성 기관지 확장제와 흡입용 코르티코스테로이드의 병용요법이 적절하다고 판단된 천식의 치료, 2. 정기적인 지속성 기관지 확장제 치료에도 불구하고 반복적 악화 이력이 있는 중증 만성폐쇄성폐질환 환자의 증상 치료 ■ 용법・용량: 1. 천식 1) 유지요법: 성인 1회 1~2번을 1일 2회 흡입, 1일 최대 4회 2) 증상완화요법을 포함한 유지요법 ① 유지요법으로 사용하고, 증상완화를 위하여 필요시 추가 흡입한다. ② 충분히 조절되지 않고 증상완화요법이 필요한 환자, 과거 의료적 개입이 요구되는 천식악화를 경험한 환자에서 특히 고려된다. ③ 추천 용량: 성인 1회 1번, 1일 2회(아침/저녁 1회) 흡입, 필요시 추가적으로 1회 흡입하고 증상이 몇 분 후에도 지속되면, 추가적인 흡입이 요구된다.(1일 최대 8회) 2. 만성폐쇄성폐질환 1) 성인: 1회 2번을 1일 2회 흡입한다. 2) 소아: 18세 미만의 소아에 대한 이 약의 안전성 및 유효성은 확립되지 않았다. 3) 고령자: 고령자에서 투여량을 조절할 필요가 없다. 4) 간장애 또는 신장애 환자: 간장애환자 또는 신장애 환자에게서 이 약의 사용에 대한 자료는 없다. 그러나, 포모스테롤푸마르산염이수화물은 주로 간의 대사를 받으므로 중증의 간장애 환자에게 투약할 경우에는 약물의 노출이 증가될 수 있다. ■ 사용상의 주의사항: 1. 다음 환자에는 투여하지 말 것 1) 이 약의 성분에 대하여 과민증의 기왕력이 있는 환자 2. 다음 환자에는 신중히 투여 할 것 1) 이전의 전신 스테로이드 요법으로부터 부신기능이 손상된 것으로 생각되는 환자 2) 심혈관계 질환 환자 3) QTc 간격이 연장된 환자 4) 갑상선종독증 환자 5) 당뇨병 및 그 병력이 있는 환자 6) 크론치화성세포증 환자 7) 치료되지 않은 저칼륨혈증 환자 8) 폐결핵 환자 3. 일반적 주의 1) 치료 중단 시에는 용량을 점차적으로 줄이는 방법이 추천된다. 2) 갑작스러운 또는 점진적인 천식조절의 악화 시에는 흡입용 혹은 경구용 코르티코스테로이드를 증가하거나, 감염이 의심되는 경우에는 항생제 추가를 고려한다. 3) 천식증상 악화가 투여를 시작해서는 안된다. 4) 증상이 없을 때에도 매일 흡입하며 증상이 잘 조절되면 감량을 고려한다. 5) 운동전 사용과 같은 예방적 차원으로 사용할 수 없다. 6) 고령자를 장기간 연용한 환자에서 쿠싱증후군, 쿠싱양 용모, 부신억제, 소아 및 청소년에서의 성장지연, 골 무기질 밀도 감소, 백내장, 녹내장 등이 발생할 수 있다. 7) 구강인두 칸디다증의 위험을 최소화하기 위해 흡입 후 양치를 하거나 물로 입을 헹궈준다. 8) 전신 및 국소 코르티코스테로이드 사용으로 시작장애가 보고될 수 있다. 환자에게 시야흐림 또는 기타 시력장애와 같은 증상이 나타날 경우, 환자를 안과의사에게 보내어 백내장, 녹내장 또는 전신 및 국소 코르티코스테로이드 사용 후 보고된 중심장맥락망막병(CSCR)과 같은 후기질환을 포함하여 발생 가능한 원인을 평가해 고려해야 한다. ■ 저장방법: 기밀용기, 냉장보관(2~8℃)(포스터 100/6 HFA, 실온보관(1~30℃) (포스터 넥스트할러) ■ 포장단위: 1통(120회)

【Prescribing Information】 포스터 200/6 HFA (베클로메타손디프로피오네이트/포모스테롤푸마르산염이수화물)

■ 원료약품 및 분량: 1회 분무량 중 베클로메타손디프로피오네이트(EP) 200μg, 포모스테롤푸마르산염이수화물(EP) 6μg ■ 효능・효과: 지속성 기관지 확장제와 흡입용 코르티코스테로이드의 병용요법이 적절하다고 판단된 천식의 치료 ■ 용법・용량: 18세 이상의 성인 및 노인: 1회 2번을 1일 2회 경구 흡입한다. 1일 최대 흡입횟수는 4번이다. 이 약은 천식의 초기치료용은 아니며 용량은 질환의 중증도에 따라 개인별로 조절해야 한다. 이는 치료의 시작 시기뿐 아니라 용량 조절 시기에도 고려되어야 한다. 만일 환자 개인이 복합제로서 가능한 용량 이외의 복합 용량을 필요로 하는 경우 개개 성분의 흡입제에 의한 적절한 용량의 β2-agonist나 코르티코스테로이드를 처방하여야 한다. ■ 사용상의 주의사항: 1. 다음 환자에는 투여하지 말 것 1) 이 약의 성분에 대하여 과민증의 기왕력이 있는 환자 2. 다음 환자에는 신중히 투여 할 것 1) 이전의 전신 스테로이드 요법으로부터 부신기능이 손상된 것으로 생각되는 환자 2) 심혈관계 질환 환자: 심장부전, 3도 방실차단, 빈맥, 특발성 대동맥판막부 협착증, 비후성 폐색성심근병증, 중증 심장질환, 급성 심근경색, 허혈성 심장질환, 울혈성 심부전, 폐색성 혈관질환, 동맥경화증, 중증심부전, 중증동맥고혈압 및 동맥류 등 심혈관계 질환의 병력이 있는 환자 3) QTc 간격이 연장된 환자: 포모스테롤 자체가 QTc 간격 연장을 일으킬 수 있다. 4) 갑상선종독증 환자 5) 당뇨병 및 그 병력이 있는 환자 6) 포모스테롤 투여가 혈당 증가를 유발할 수 있으므로, 당뇨병 환자에서는 혈당을 모니터링하여야 한다. 7) 크론치화성세포증 환자 7) 치료되지 않은 저칼륨혈증 환자: β2-agonist를 고용량으로 투여 시 심각한 저칼륨혈증이 나타날 수 있다. 이러한 작용은 저산소증 또는 진전유도제, 스테로이드나 이뇨제의 병용 투여에 의해 악화될 수 있으며, 기관지 확장제의 구제 요법을 수반하는 불안전한 천식환자에 있어서는 주의가 필요하다. 이러한 환자에서는 혈당 모니터링을 모니터링하여야 한다. 8) 폐결핵 환자: 코르티코스테로이드를 함유하는 다른 흡입제와 마찬가지로, 활동성 또는 비활동성 폐결핵 환자, 진균성 또는 바이러스성 기도감염 환자에는 이 약을 신중하게 투여한다. ■ 저장방법: 2~8℃에서 냉장보관하며, 투여시 후에는 25℃ 이하에서 보관 시 최대 3개월까지 사용이 가능하다. ■ 포장단위: 1통 (120회) ■ 판매처: 코오롱제약 ■ 제조사: Chiesi

※제품에 대한 자세한 정보는 www.kolonpharm.co.kr에서 확인하실 수 있습니다.

【Reference】

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【수입판매인】

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The variety of values¹⁻⁸

- Prescribed in over 100 countries since FDA approval in 1998^{1,2}
- Established long term safety profile^{3,a,*†}, Original Montelukast⁴
- Proven effectiveness in patients with pediatric asthma^{5,b,‡}, elderly asthma^{6,c,§}, cough variant asthma^{7,d,¶}

FDA approved drug prescribed in over 100 countries^{1,2}

SINGULAR

[†] [Primary endpoint result (overall incidence of clinical and laboratory adverse events after ≥200-week treatment)] montelukast group, both adult and paediatric (n=1,955) was similar compared to placebo group (n=1,180).^{3,†} [Primary endpoint result (overall satisfaction of children and parents after the 6-month treatment)] motelukast group (n=83) showed a significantly higher score than inhaled beclomethasone group (n=41; p=0.001 and p=0.049, respectively).⁵ [Primary endpoint result (Rate of patients who reached well-controlled asthma status after the 12-week treatment)] Montelukast to low-dose inhaled budesonide group, 36.9% (n=24/65) vs. increasing the dose of inhaled steroid group, 34.9% (n=22/63).⁶ [Primary endpoints result (Change of pulmonary function after the 4-week montelukast treatment)] The cough VAS, Sputum eosinophil count, cough sensitivity were significantly decreased (p=0.0008, p=0.013 and p=0.007(C2)/p=0.039(C5), respectively), whereas, pulmonary function, airway responsiveness and sputum mediator levels remained unchanged (n=23).⁷

FDA: Food and Drug Administration

^aOver 200 weeks (Adults 4.1 years, Pediatric patients 1.8 years)¹

Study design. a. A pooled analysis of safety data from 11 multicentre, randomized, controlled montelukast Phase I/II and III trials and five long-term extension studies were performed. A total of 3,386 adult patients (aged 15-85 years) and 336 paediatric patients(aged 6-14 years) were enrolled in the trials; 2031 adults received 2-200 mg montelukast once daily up to 4.1 years and 257 children received montelukast 5-mg chewable tablet up to 1.8 years. Summary statistics comparing incidences of adverse events among treatment groups were calculated. **b.** The randomized, multicenter, open-label, 6-month extension study of a base study which was randomized, multicenter, open-label crossover for 266 asthmatic children of 6 to 11 years of age in 10 weeks compared once-daily montelukast 5 mg chewable tablets (n=83) with inhaled beclomethasone 100 mcg three times daily (n=41) in terms of safety, FEV₁, parent and patient satisfaction with treatment, asthma related medical resource utilization, school absenteeism, and parental work loss. Eligible children were evaluated in the clinic prior to re-randomization (Month 0) and at regular visits at 1, 3, and 6 months during the extension. **c.** An open-label, multicenter, randomized, prospective trial was conducted in Korea. Asthma patients over 60 years of age who had been diagnosed with asthma more than 6 months before enrollment in the study based on clinical symptoms. Inhaled budesonide at 400 µg/day was given during the 4-week run-in period, following which 140 subjects were randomized to take either 800 µg of inhaled budesonide (n=63) or 400 µg of budesonide plus 10 mg of montelukast (n=65) per day for the 12-week treatment period. The primary endpoint was the proportion of subjects reaching "well-controlled asthma" after the 12-week treatment period based on the GINA guidelines. **d.** This prospective observational study examined the effect of montelukast (10 mg) daily for 4 weeks in 23 consecutive non-smoking adults with anti-inflammatory treatment-naïve cough variant asthma (CVA). 23 patients were evaluated, before and after treatment, the cough visual analogue scale (VAS), pulmonary function (spirometry and impulse oscillation), methacholine airway responsiveness, cough receptor sensitivity, expressed by the concentration of capsaicin inducing 2 or more (C2) and 5 or more (C5) coughs, sputum eosinophil count and levels of inflammatory mediators, including cysteinyl leukotrienes, leukotriene B₄, prostaglandin (PG) D₂, PGE₂, PGF₂ and thromboxane B₂.

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SINGULAR® Selected safety information (Indication and usage) 1) Prophylaxis and chronic treatment for asthma 2) The relief of symptoms of seasonal and perennial allergic rhinitis [Doseage and administration] SINGULAR should be taken once daily. For asthma, SINGULAR should be taken in the evening. For Allergic rhinitis, time of administration may be individualized to suit patient needs. Patients with both asthma and allergic rhinitis, should take only one SINGULAR dose daily in the evening. 1) 10 mg tablet/adults and adolescents 15 years of age and older: once daily 10 mg oral administration 2) Chewable tablet : 5 mg/pediatric patients 6 to 14 years of age, 4 mg/pediatric patients 2 to 5 years of age and older, once daily 1 hour before meals or 2 hours after meals. 3) 4 mg oral granules: for asthma, pediatric patients 2 to 5 years of age, once daily 4 mg oral administration. 12 to 23 months of age once daily 4 mg in the evening oral administration. Safety and effectiveness in pediatric patients younger than 12 months of age with asthma have not been established. For allergic rhinitis, pediatric patients 2 to 5 years of age and 6 to 23 months of age, 4 mg once daily oral administration. Safety and effectiveness in pediatric patients younger than 6 months of age with perennial allergic rhinitis have not been established. SINGULAR can be administered either directly in the mouth, dissolved in 1 teaspoonful (5 mL) of cold or room temperature baby formula or breast milk, or mixed with a spoonful of cold or room temperature soft foods. SINGULAR is not intended to be dissolved in any liquid other than baby formula or breast milk for administration. However, liquids may be taken subsequent to administration. SINGULAR can be administered without regard to the time of meals. [Warnings and precautions] 1) Serious neuropsychiatric events have been reported with use of SINGULAR in the postmarket surveillance. These reports have been highly variable and included to agitation, aggressive behavior, anxiety, insomnia, suicidal thoughts and behavior (including suicide) and so on. SINGULAR-associated NP events are currently not well understood. Discuss the benefits and risks of SINGULAR use with patients and caregivers when prescribing SINGULAR. Advise patients and/or caregivers to be alert for changes in behavior or for new NP symptoms when taking SINGULAR. If changes in behavior are observed, or if new NP symptoms or suicidal thoughts and/or behavior occur, advise patients to discontinue SINGULAR and contact a healthcare provider immediately. In many cases, symptoms resolved after stopping SINGULAR therapy; however, in some cases symptoms persisted after discontinuation of SINGULAR. Continue to monitor and provide supportive care until symptoms resolve. 2) As each 4, 5 mg chewable SINGULAR tablet contains aspartame which metabolized to phenylalanine, hereditary disease phenylketonuric patients who needs to regulate the intake of phenylalanine, should be limited in administration and adjusted the daily intake of aspartame below the WHO recommended dose (40 mg/kg/day/minimum amount as possible). 3. **Contraindication** 1) Hypersensitivity to any component of this product. 2) SINGULAR 10 mg contains lactose. Patients with genetic problem such as galactose intolerance, Lapp lactase deficiency or glucose-galactose malabsorption should not take this product. 3. **Adverse Reactions** 1) In placebo-controlled clinical trials for approximately 2950 adult and adolescent patients 15 years of age and older, the following adverse experiences reported with SINGULAR occurred in greater than or equal to 1% of patients and at an incidence greater than that in patients treated with placebo: (Body as a whole) Asthenia/Fatigue 1.8 vs. placebo 1.2, Fever 1.5 vs. placebo 0.9, Abdominal pain 2.9 vs. placebo 2.5, Tinnitus 1.0 vs. placebo 0.8, [Digestive system] Dyspepsia 2.1 vs. placebo 1.1, Infectious gastroenteritis 1.5 vs. placebo 0.5, Dental pain 1.7 vs. placebo 1.0 (Nervous system) Dizziness 1.9 vs. placebo 1.4, Headache 18.4 vs. placebo 18.1, (Respiratory system) Nasal Congestion 1.6 vs. placebo 1.3, Cough 2.7 vs. placebo 2.4, Influenza 2.4 vs. placebo 1.9 [Skin/Skin Appendage] Rash 1.6 vs. placebo 1.2, [Laboratory adverse experiences] ALT increased 2.1 vs. placebo 2.0, AST increased 1.6 vs. placebo 1.2, Pyruvate 1.0 vs. placebo 0.9, 2) SINGULAR 5 mg has been evaluated for safety in 476 pediatric patients 6 to 14 years of age in double blind 8 weeks clinical trial. Cumulatively, 288 pediatric patients were treated with SINGULAR for at least 6 months, and 241 for one year or longer in clinical trials) The safety profile of SINGULAR in this trial was generally similar to the adult safety profile. Although the relationship with administered drug is not clear, the adverse events occurred with a frequency ≥2% and more frequently than in pediatric patients who received placebo are as follows: pharyngitis, influenza, fever, sinusitis, nausea, diarrhea, dyspepsia, otitis, viral infection, and lymphitis. 3) SINGULAR 4 mg has been evaluated for safety in 573 pediatric patients 2 to 5 years of age in single- and multiple-dose studies. Cumulatively, 426 pediatric patients 2 to 5 years of age were treated with SINGULAR for at least 3 months, 230 for 6 months or longer, and 63 patients for one year or longer in clinical trials. In clinical trials, SINGULAR 4 mg once daily at bedtime is generally well tolerated. In pediatric patients receiving SINGULAR, the following events occurred with a frequency ≥2% and more frequently than in pediatric patients who received placebo: fever, cough, abdominal pain, diarrhea, headache, rhinorrhea, sinusitis, otitis, influenza, rash, ear pain, gastroenteritis, eczema, urticaria, varicella, pneumonia, dermatitis, and conjunctivitis. 4) SINGULAR has been evaluated for safety in 175 pediatric patients 6 to 23 months of age. The safety profile of SINGULAR in a 6-week, double-blind, placebo-controlled clinical study was generally similar to the safety profile in adults and pediatric patients 2 to 14 years of age. SINGULAR 4 mg once daily at bedtime is generally well tolerated. Regardless of the relationship with drug, the following events occurred with a frequency ≥2% and more frequently than in pediatric patients who received placebo: upper respiratory infection, wheezing, otitis media, pharyngitis, tonsillitis, cough and rhinitis. 5) SINGULAR has been evaluated for safety in 2199 adult and adolescent patients 15 years of age and older in placebo controlled-clinical trials. SINGULAR administered once daily in the morning or in the evening had a safety profile similar to that of placebo and generally well tolerated. As the relationship with administered drug is not clear, the following events were reported with SINGULAR with a frequency ≥1% and at an incidence greater than placebo: upper respiratory infection 1.9% of patients receiving SINGULAR vs. 1.5% of patients receiving placebo). The incidence of somnolence was similar to that of placebo in all studies. 6) SINGULAR has been evaluated in 280 pediatric patients 2 to 14 years of age in a 2-week, multicenter, double-blind, placebo-controlled, parallel-group safety study. SINGULAR administered once daily in the evening had a safety profile similar to that of placebo and was generally well tolerated. Although the relationship with administered drug is not clear, the following events occurred with a frequency ≥2% and at an incidence greater than placebo: headache, otitis media, pharyngitis, and upper respiratory infection. 7) SINGULAR has been evaluated for safety in 3357 adult and adolescent patients 15 years of age and older with perennial allergic rhinitis of whom 1632 received SINGULAR in two, 6-week, clinical studies. SINGULAR administered once daily had a safety profile consistent with that observed in patients with seasonal allergic rhinitis and similar to that of placebo. Although the relationship with drug is not clear, the following events were reported with SINGULAR with a frequency ≥1% and at an incidence greater than placebo: sinusitis, upper respiratory infection, sinus headache, cough, epistaxis, and increased ALT. The incidence of somnolence was similar to that of placebo. 8) The safety in patients 2 to 14 years of age with perennial allergic rhinitis is supported by the safety in patients 2 to 14 years of age with seasonal allergic rhinitis. The safety in patients 6 to 23 months of age is supported by data from pharmacokinetic and safety and efficacy studies in asthma in the pediatric population and from adult pharmacokinetic studies. 9) Integrated analysis of clinical trial results. In an integrated analysis of 41 placebo-controlled clinical trials including 9,929 patients receiving SINGULAR and 7,780 patients receiving placebo, one suicide thinking in SINGULAR group was reported. Any suicide, suicide actions and behavior is not reported in both group. A 2.73% odds ratio in the SINGULAR group and 2.27% in the placebo group, with an odds ratio of 1.12 (95% CI [0.93-1.36]). 10) The following adverse reactions have been identified during post-marketing use of SINGULAR. Upper respiratory infection, increased bleeding tendency, hypersensitivity (anaphylaxis, very rare hepatic eosinophilic infiltration), agitation including aggressive behavior or hostility, anxiety, depression, disorientation, disturbance in attention, dysphasia, dream abnormalities, hallucinations, insomnia, memory impairment, obsessive-compulsive symptoms(including irritability, restlessness and uncontrolled muscle movements), somnambulism, suicidal thinking and behavior (including suicide), dizziness, somnolence, paraesthesia/hypoaesthesia, very rare seizure convulsion, paraesthesia, palpitation, epistaxis, diarrhea, dyspepsia, nausea, very rare pancreatitis, vomiting, increased ALT and AST, very rare cholestatic hepatitis, hepatocellular liver injury, mixed pattern liver injury, angioedema, bruising, erythema multiforme, erythema nodosum, pruritus, rash, urticaria, syndromic epidermal necrosis, Stevens-Johnson syndrome, arthralgia, myalgia including muscle cramps, asthenia/fatigue, fever. Asthma patients who administered SINGULAR may present with systemic eosinophilia and sometimes presenting with clinical features of vasculitis consistent with Churg-Strass syndrome. 11) In 6 year post marketing experience including 1,635 patients for reevaluation in Korea, adverse events rate regardless of relationship with drug are 28 cases (1.7%) and 64 adverse cases. Of these, 6 cases (0.37%) had 6 adverse events that could not exclude the relationship with this drug, including nausea (2 cases), edema, dyspepsia, alopecia, and pruritus. Alopecia is unpredictable adverse events reported in a pediatric patient. 4. **Precautions** 1) SINGULAR is not indicated for use in the reversal of bronchospasm in acute asthma attacks, including status asthmaticus. 2) Patients should be advised to have appropriate rescue medication available. 3) While the dose of inhaled corticosteroid may be reduced gradually under medical supervision, SINGULAR should not be abruptly substituted for inhaled or oral corticosteroids. 4) Neuropsychiatric events have been reported with use of SINGULAR. It has not been known these symptoms are related to this drug. 5) In patients with exercise-induced bronchoconstriction should not take SINGULAR alone. 6) Patients with known anginal sensitivity should not take aspirin or non-steroidal anti-inflammatory agents while taking SINGULAR. 7) Eosinophilia. Revision date: 2021. 11. 30. **※Before prescribing, please refer to the product manual for further details.**



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전문약품

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ALK, anaplastic lymphoma kinase; **BIRC**, blinded independent review committee; **INV**, investigator-assessed; **NSCLC**, non-small cell lung cancer; **PFS**, progression-free survival.

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PRESCRIBING INFORMATION **[제품명]** 알루브릭® 정 30 mg, 90 mg, 180 mg (브리가티닙) **[효능 효과]** 역형성 림프종 인산화효소 (ALK) 양성 진행성 또는 전이성 비소세포 폐암 환자의 치료 **[용법 용량]** 1. ALK 검사가 이 약을 투여하고자 하는 경우, 치료 시작 전에 ALK 양성 상태를 평가해야 한다. ALK 양성 진단 시험은 식품의약품안전처에서 동 약품의 사용에 적합하게 허가된 체의 진단을 의료기기를 사용하여 평가한다. 정확하게 검증된 ALK 검사가 ALK 양성 비소세포 폐암 환자의 선택을 위해 사용되어야 한다. ALK 양성 비소세포 폐암의 평가는 활동되는 특정 기술에 대해 숙련도가 입증된 실험실에서 검사가 이루어져야 한다. 2. 권장 용량 이 약에 대해 권장되는 용량 및 용법은 다음과 같다. • 처음 7일 동안 90 mg 1일 1회 경구투여. • 처음 7일 동안의 내약성이 좋은 경우, 용량을 180 mg 1일 1회로 증량한다. 질병이 진행되거나 관리 불가능한 독성이 발생될 때까지 이 약의 투여를 지속한다. 이상반응이 아닌 다른 이유로 14일 이상 이 약의 투여를 중단한 경우, 이전의 용량으로 증량하기 전에 90 mg 1일 1회 7일동안 투여로 치료를 재개한다. 이 약은 음식과 함께 또는 공복 상태에서 투여가 가능하다. 정제를 부수거나 씹어서는 안 되고, 그대로 삼켜야 한다. 이 약의 투여를 빠트리거나 복용 후 구토하더라도 추가 용량을 투여해서는 안 되며, 계획된 다음 투여 시간에 해당 용량을 복용해야 한다. 이상반응에 따른 권장 용량 변경 등에 대한 자세한 정보는 제품 설명서 참조. **[사용상의 주의 사항]** 1. 경고: 1) 간질성 폐질환 (ILD)/폐렴 (자세한 정보는 제품 설명서 참조) 2. 다음 환자에는 투여하지 말 것 1) 이 약의 주성분 또는 첨가제에 과민반응의 병력이 있는 환자 2) 이 약은 유당을 함유하고 있으므로, 갈락토오스 불내성 (galactose intolerance), 락포 유당분해효소 결핍증 (Lapp lactase deficiency) 또는 포도당-갈락토오스 흡수 장애 (glucose-galactose malabsorption) 등의 유전적인 문제가 있는 환자에게는 투여하면 안 된다. 3. 이상반응: 1) 안전성 프로파일 요약 이 약을 권장 용량으로 투여한 환자에게 보고된 가장 흔한 이상반응 (≥ 25%)은 AST 증가, CPK 증가, 고혈당증, 리파아제 증가, 고인슐린혈증, 설사, ALT 증가, 아밀라제 증가, 빈혈, 오심, 피로, 지인산혈증, 림프구 수 감소, 기침, 알칼리성 인산 분해 효소 증가, 발진, APTT 증가, 근육통, 두통, 고혈압, 백혈구 수 감소, 호흡 곤란 및 구토이다. 이 약을 권장 용량으로 투여한 환자에게 중양의 진행과 관련된 증상 이외의 가장 흔하고 중대한 이상반응 (≥ 2%)은 폐렴, 간질성폐렴, 호흡 곤란 및 발열이다. (자세한 정보는 제품 설명서 참조) 4. 일반적 주의: 1) 고혈압, 2) 사력, 3) 시각 장애, 4) 크레아티닌 인산 분해 효소 (CPK) 상승, 5) 제창 효소 상승, 6) 간독성, 7) 고혈당증, 8) 피임 (동 이상반응 관리 등에 관한 자세한 정보는 제품 설명서 참조) 5. 상호 작용: 1) 이 약의 혈장 농도를 증가시킬 수 있는 약물: CYP3A 억제제, CYP2C8 억제제, P-gp 및 BCRP 억제제 2) 이 약의 혈장 농도를 감소시킬 수 있는 약물: CYP3A 유도제 3) 이 약에 의해 혈장 농도가 변할 수 있는 약물: CYP3A 기질 4) 수송체 기질 (동 약물 상호 작용에 따른 자세한 정보는 제품 설명서 참조) 6. 임부, 수유부, 가임여성에 대한 투여 1) 가임기 여성 및 남성 이 약으로 치료를 받고 있는 가임기 여성에게 임신하지 않도록 권고해야 하며 이 약으로 치료를 받고 있는 남성에게 치료 중 배우자를 임신시키지 않도록 권고해야 한다. 가임기 여성에게 이 약의 투여 중과 마지막 투여 후 최소 4개월 동안은 효과적인 비호르몬 피임 방법을 사용하도록 조언해야 한다. 가임기 여성의 남성 파트너에게 이 약의 투여 기간 중 및 마지막 투여 후 최소 3개월 동안은 효과적인 피임방법을 사용하도록 권고한다. (임부 및 수유부, 가임력에 대한 자세한 정보는 제품 설명서 참조) 이하 7. 소아에 대한 투여, 8. 고령자에 대한 투여, 9. 간장애 환자, 10. 신장애 환자에 대한 투여, 11. 보관 및 취급상의 주의사항 12. 전문가를 위한 정보는 제품 설명서 참조 **[표장 단위]** 알루브릭® 정 30밀리그램 28정 (14정/PTPX2), 56정 (14정/PTPX4), 알루브릭® 정 90밀리그램 28정 (7정/PTPX4), 7정 (7정/PTPX1), 알루브릭® 정 180밀리그램 28정 (7정/PTPX4) **[저장 방법]** 기밀용기, 실온보관 [수입자] 한국캐나다제약/서울특별시 송파구 올림픽로 300, 37층 (신전동, 롯데월드 타워) 전화: (02)3484-0800 이 내용은 허가사항을 요약한 것으로, 더 자세한 제품정보는 식품의약품안전처 홈페이지 (<https://nedrug.mfds.go.kr>)의 제품 허가사항을 참조하시기 바랍니다.

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[원료약품 및 분량] 1회 분무량 중 160/4.5 mcg: • **유효성분:** 부테소나이드 (BP) 160 μ g, 포르모테롤무아르산염수화물 (FP) 4.5 μ g. • **첨가제:** 유당수화물, 320/9 mcg: • **유효성분:** 부테소나이드 (BP) 320 μ g, 포르모테롤무아르산염수화물 (FP) 9 μ g. • **첨가제:** 유당수화물 **[효능·효과]** 천식환자의 치료, 중증의 만성폐쇄성폐질환 **[용법·용량]** **[1] 160/4.5 mcg (천식)** - 이 약은 천식 증상의 예방과 증상의 완화 그리고 증상악화 위험의 감소를 포함한 전반적인 천식의 조절을 위한 천식의 치료를 목적으로 한다. 이 약은 흡입 코르티코스테로이드의 사용이 적절한 천식 환자들에게 천식의 중증도와 상관없이 투여 가능하여 용량은 질환의 중증도에 따라 개별로 조절해야 한다. 이는 치료의 시작 시점이나 용량 조절 시점에도 고려되어야 한다. 만일 환자 개개인이 복합제로서 가능한 용량 이외의 복합 용량을 필요로 하는 경우 개개 성분의 흡입제에 의한 적절한 용량의 β 2 호농약이나 코르티코스테로이드를 처방하여야 한다. - 환자는 정기적으로 의사의 진단을 받아 이 약의 최적의 용량을 유지할 수 있도록 해야 하며 천식증상을 조절할 수 있는 최저용량으로 유지되어야 한다. - 이 약은 아래와 같은 치료 요법들이 있다. **1. 항염증 증상완화요법(Anti-inflammatory reliever therapy)** **2. 항염증 증상완화요법을 포함한 유지요법(Anti-inflammatory reliever plus maintenance therapy)** **3. 유지요법(Maintenance therapy)** **1. 항염증 증상완화요법 (경증 천식 환자):** 이 약은 천식의 증상이 발생했을 때 필요시(as needed) 흡입되어 일회용 기밀 또는 자동으로 유발된 기관지수축 (또는 천식발작을 촉진시킨다고 생각되고 있는 환경에서의 증상을 예방하기 위해서) 필요한 경우 흡입된다. 환자는 증상완화를 위해 항상 이 약을 휴대하는 것이 권장된다. 예방 목적으로 사용 시 의사는 일회용 기밀의 노출과 운동 양상을 고려해야 한다 (사용상의 주의사항 4, 일반주의의 5항 참조) **[추천용량]** • 12 세 이상의 천식환자 및 성인: 환자는 증상완화를 위하여 일회용 기밀 1회를 흡입해야 하며, 천식 조절을 위하여 일회용 기밀 또는 자동으로 유발된 기관지수축에 대한 목적으로도 사용할 수 있다. 만약 증상이 수분동안 추가적인 흡입이 필요하다. 환자가 1회에 한하여 초과하여 흡입하지 않도록 한다. 총 1일 흡입용량은 8번 이하이지만 예방적인 경우에 일시적으로 1일 최대 12번까지 흡입할 수 있다. 1일 흡입용량이 8번 이상 요구되는 환자는 저용량의 증상완화요법의 효과와 안전성을 연구되지 않았다. **2. 항염증 증상완화요법을 포함한 유지요법:** 이 약은 흡입 코르티코스테로이드와 지속형 β 2 호농약의 병용 유지요법이 필요한 경우 항염증 증상완화요법으로 흡입하면서 매일 유지요법으로도 사용된다. 필요시(as needed) 흡입은 신속하게 증상을 완화시키고 전반적인 천식 조절을 개선시킨다. 환자는 증상완화를 위하여 이 약을 항상 휴대하여야 한다. 증상완화를 위한 별도의 흡입제는 필요하지 않다. - 이 약의 항염증 증상완화요법을 포함한 유지요법은 특히 다음의 환자에서 고려되어야 한다. • 천식이 충분히 조절되지 않고 자주 증상완화요법이 필요한 환자. • 개가 간헐적인 천식환자를 경험한 환자 - 증상완화를 위하여 이 약의 흡입횟수가 높은 환자는 용량관련 이상반응의 모니터링이 필요하다. **[추천용량]** • 12세 이상의 천식환자 및 성인: 환자들은 추천 유지용량(1회 1번을 1일 2회 흡입, 아침 1회, 저녁1회씩 흡입 또는 아침에만 2회 흡입 또는 저녁에만 2회 흡입)을 흡입한다. 일부 환자는 최대 1회 2번을 1일 2회 유지요법으로 흡입할 수 있다. 환자는 증상완화를 위하여 필요시 1회를 흡입해야 하며, 만약 증상이 수분동안 지속되면 추가적인 흡입이 필요하다. 환자가 1회에 8번을 초과하여 흡입하지 않도록 한다. 총 1일 흡입용량은 8번 이하이지만 예방적인 경우에 일시적으로 1일 최대 12번까지 흡입할 수 있다. 1일 흡입용량이 8번 이상 요구되는 환자는 추가적인 의학적 처치가 필요하며, 환자의 상태를 재평가하고, 유지요법을 재고하여야 한다. • 12세 미만의 소아: 12세 미만의 소아에게 증상완화를 포함한 유지요법은 추천되지 않는다. **3. 유지요법(고정용량):** - 흡입 코르티코스테로이드와 지속형 β 2 호농약의 병용 유지요법이 필요한 경우 이 약의 고정된 용량의 유지요법을 사용하여야 한다. 증상완화의 목적으로 별도의 속효성 기관지확장제를 사용하는 요법이다. 환자는 증상완화의 목적으로 별도의 속효성 기관지확장제를 항상 휴대하여야 한다. **[추천용량]** • 18세 이상의 성인: 1회 1~2번을 1일 2회 흡입하거나 또는 1회 1~2번 1일 1회 흡입한다. 일부환자는 최대 1회 4번을 1일 2회까지 흡입할 수 있다. • 12~17세의 천식환자: 1회 1~2번을 1일 2회 흡입한다. 일부환자는 최대 1회 2번을 1일 2회 흡입한다. 12세 이하의 소아에 대한 이 약의 투여는 추천되지 않는다. - 이 약 1일 2회 투여로 증상이 조절될 경우, 지속형 기관지 확장제가 증상조절에 필요하다는 의사의 처방이 있는 경우에 한하여, 최저유량용량의 용량 조절 범위에 이 약 1일 1회 투여가 포함될 수 있다. - 구제요법으로 사용하는 속효성 기관지확장제의 용량 증가는 기저 질환의 악화를 나타내며 천식 치료가 재평가되어야 한다. - 증상이 조절된 경우, 천식증상을 조절할 수 있는 최저용량으로 유지되어야 한다. • **특정 환자군** - 노인환자의 경우 용량을 조절할 필요는 없다. - 간이나 신손상 환자에서 이 약의 사용에 대한 자료는 없다. 부테소나이드와 포르모테롤은 주로 간대사를 통해 제거되므로 심각한 간장애 환자에서는 노출의 증가가 예상된다. **(만성폐쇄성폐질환)** 성인: 1회 2번을 1일 2회 흡입 **[2] 320/9mcg (천식)** - 이 약은 유지요법으로만 사용되어야 하며, 증상완화를 포함한 유지요법을 위해서는 낮은 용량의 제품을 사용한다. - 이 약은 천식의 초기치료용은 아니며 용량은 질환의 중증도에 따라 개별로 조절해야 한다. 이는 치료의 시작 시점이나 용량 조절 시점에도 고려되어야 한다. 만일 환자 개개인이 복합제로서 가능한 용량 이외의 복합 용량을 필요로 하는 경우 개개 성분의 흡입제 의한 적절한 용량의 β 2 호농약이나 코르티코스테로이드를 처방하여야 한다. - 환자는 정기적으로 의사의 진단을 받아 최적의 용량을 유지할 수 있도록 해야 하며 천식증상을 조절할 수 있는 최저용량으로 유지되어야 한다. **(만성폐쇄성폐질환)** 성인: 1회 1번을 1일 2회 흡입 **[수입자]** (의약품정보) 02-627-6506 ※ 제약품 목록에서 사명을 식품의약품안전처 의약품정보시스템 (<http://nedrug.mfds.go.kr>) 또는 제품의 첨부문서를 확인하여 주시기 바랍니다.

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[References] 1. Brozek JL, et al. J Allergy Clin Immunol. 2013;140(4):950-958. 2. Dykewicz MS, et al. J Allergy Clin Immunol. 2020;146(4):721-767. 3. Ryaltris® FDA-approved label (Revised on Jul. 2022) 4. 리알트리스나잘스프레이액 제품설명서 (작성연월일 2022.03.18). 5. Sher ER, et al. Allergy Asthma Proc. 2014;35(1):24-33. 6. Meltzer EO, et al. Treat Respir Med. 2005;4(4):289-296. 7. Meltzer EO, et al. Allergy Asthma Proc. 2008;29(6):659-668.

리알트리스나잘스프레이액 제품요약정보

[원료 약물 및 분량] 1 mL 중 모메타손푸로에이트알수화물(EP) 0.259 mg (모메타손푸로에이트로서 0.25 mg), 올로파타딘염산염(USP) 6.65 mg (올로파타딘으로서 6 mg) **[효능·효과]** 성인 및 12세 이상 청소년: 계절 알레르기비염 증상의 치료 **[용법·용량]** 계절 알레르기 비염: 하루2회 각 비공에 2번씩 분무하십시오. **[사용상의 주의사항]** 1. 다음 환자에는 투여하지 마십시오. 1) 이 약 또는 이 약의 구성성분에 대해 과민반응 및 그 병력이 있는 환자 2) 비강 궤양, 비종격 천공, 비출혈, 비강점막에 치료되지 않은 국소감염, 칸디다 알비칸스 감염 3) 최근에 비강의 외과수술을 받았거나 비강의 질병을 가진 환자, 비종격궤양 환자 또는 코에 이상이 있는 환자(코르티코스테로이드류의 상처치유 방해효과를 고려하여 이러한 환자는 치료가 될 때까지 비강용 코르티코스테로이드류를 사용해서는 안 된다.) **[저장방법]** 기밀용기, 15°C~25°C 보관 **[포장단위]** 18 mL/병, 31 mL/병 **[작성연월일]** 2022.03.18

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