

**Plenary Lecture
Opening Lecture
Lecture**

Plenary 1

THURSDAY · MARCH 23

9 : 00 - 9 : 30

Room 1 (Hall C)

Chair: Yi-Wen Huang
(Chang-Hua Hospital/Taiwan Society of Tuberculosis and Lung disease, Taiwan)

PL1 Contribution of Japan to the global TB control

Speaker: Tadao Shimao
(Japan Anti-Tuberculosis Association, Japan)

Plenary 2

THURSDAY · MARCH 23

11 : 15 - 12 : 15

Room 1 (Hall C)

Chair: Shimao Fukai
(National Hospital Organization Ibarakihigashi National Hospital, Japan)

PL2 The Innate Immunity on Mycobacteriosis

Speaker: Henry Koziel
(Harvard Medical School Teaching Hospital, USA)

Plenary 3

THURSDAY · MARCH 23

15 : 20 - 16 : 10

Room 1 (Hall C)

Chair: Chen-Yuan Chiang
(International Union Against Tuberculosis and Lung Disease, Taiwan)

PL3 National TB Prevalence Surveys: Results, Programmatic Implications, and Lessons

Speaker: Ikushi Onozaki
(WHO, Myanmar
Former Team Leader, TB Prevalence Survey, WHO Global Task Force on TB Impact Measurement, WHO, Geneva.)

Summary

The WHO Global Task Force on TB Impact Measurement began supporting National TB prevalence surveys to measure the impact of TB control efforts from 2008. 19 countries completed the National Survey with Chest X-ray

screening and diagnostic culture between 2009 and 2015. The results of the survey often led the upper revision of global/country burden estimates. Country surveys showed not only a better estimate of the TB burden but also programmatic implications to develop evidence based strategy to improve TB control and care. Results, lessons and challenges from experiences in last ten years will be discussed in the session.

Plenary 4

FRIDAY · MARCH 24

9 : 00 - 9 : 50

Room 1 (Hall C)

Chair: Xiexiu Wang
(The Union, APR, China)

PL4 Implementing the End TB Strategy in Asia and Pacific

Speaker: Nobuyuki Nishikiori
(WHO Regional Officer for the Western Pacific, Philippines)

Summary

The End TB Strategy envisions "ending the global TB epidemic" by 2035 in line with the Sustainable Development Goals (SDGs). It set three ambitious global targets: (1) 90% incidence reduction, (2) 95% reduction in TB deaths, and (3) no families suffer from catastrophic cost due to TB. WHO in the Western Pacific and South East Asia Regions, developed region-specific guidance documents to facilitate the adaptation of the strategy, namely "Regional Framework for Action on Implementing the End TB Strategy in the Western Pacific" and "Ending TB in the South East Asia Region: Regional Strategy Plan 2016-2020".

Countries are progressively adopting the End TB Strategy and transforming national TB control policies and systems. The critical areas that require substantial attention and investment include rapid adoption and scale-up of innovations to address the MDR-TB crisis, progressive realisation of people-centred TB services with a strong focus on equity, attaining universal health coverage and enhancing social protection, multi-sector collaboration and actions.

The Moscow Ministerial Conference in 2017 and the UN high-level meeting in 2018 will provide tremendous opportunities to secure political commitment, raise TB high on the agenda and join the forces of all partners together.

Plenary 5

SATURDAY · MARCH 25

9 : 00 - 9 : 50

Room 1 (Hall C)

Chair: Faisal Yunus
(University of Indonesia-Persahabatan Hospital, Indonesia)

PL5 Current priorities for research in tuberculosis

Speaker: Wing Wai Yew
(The Chinese University of Hong Kong, Hong Kong, China)

Summary

To achieve better control of tuberculosis (TB) towards its elimination worldwide, research and innovations are of paramount importance. Setting of research priorities paves the way to establish the research agenda, which may require tailoring to country/ region specificity. The highest priorities for TB research focus on the development of new diagnostic tools, new drugs/ regimens and vaccine(s), alongside their implementation in patient-centred care of TB. Building a multidisciplinary team, based on individual/ institution/ organization, is the best approach to enable optimal translation of knowledge harvested from TB research.

Opening Lecture

THURSDAY · MARCH 23

18 : 10 - 18 : 40

Room 1 (Hall C)

Chair: Sang Jae Kim

(Korean Institute of Tuberculosis, The Korean National TB Association, Korea)

OL Steps toward lower prevalence of TB and tobacco-free Asia**Speaker:** Toru Mori

(Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan)

Summary

Japan has experienced the *evolutionary or transitional* trends of interactions between TB and human population with its socioeconomic and demographic conditions during last 100 years. Each Asian country's current situations could be compared to one or some of them. However, under the End TB strategy worldwide we are expected to create a new evolution, not leaving ourselves to the ongoing trends, by employing all possible technologies and societal tools in most effective ways. In contrast to TB, tobacco disaster is a man-made problem and then should be controlled by the people. The complete implementation of the FCTC is a model of solution for which the Asian countries, with Japan being in a top urgency, must make more efforts.

Lecture 1

THURSDAY · MARCH 23

15 : 20 - 16 : 20

Room 2 (Hall B5-1)

Chair: Hideaki Nagai

(National Hospital Organization Tokyo National Hospital, Japan)

L1 What is the real situation of TB/HIV in Asia ?**Speaker:** Charoen Chuchottaworn

(Central Chest Institute of Thailand, Department of Medical Services, Ministry of Public Health, Thailand)

Summary

In 13 countries with high TB, TB/HIV and MDR-TB burden, 6 countries are in Asia. Coverage of HIV screening in TB cases and accession to ARV treatment varied in a wide range and lower than expected. There was a large number of TB/HIV cases pool which were spreading diseases and with high economics growth in Asia will facilitate spreading. Tuberculosis in newly diagnosed HIV cases is not higher than other region of the world and drug resistant tuberculosis. Integration of TB and HIV care, universal health coverage, PPM, laboratory strengthening and advocacy are main strategies to control TB/HIV situation in Asia.

Lecture 2

FRIDAY · MARCH 24

15 : 50 - 16 : 50

Room 1 (Hall C)

Chair: Toshio Takatorige

(Kansai University, Japan)

L2 Addressing social determinants**Speaker:** Chi Chiu Leung

(Tuberculosis and Chest Service, Hong Kong, China)

Summary

Various social determinants are known to increase tuberculosis risk, either directly or via other intermediate factors. The current strategy of controlling tuberculosis at source relies critically on sound social and health infrastructures. Programmatic failure breeds drug resistance and further complicates the problem. With political commitment and community mobilization, careful strategical planning is essential to tailor-made sustainable interventions to suit specific local needs. Intensified research efforts are required to fill major knowledge gaps, especially in view of the various limitations of the current tools in tackling either the social inequities or tuberculosis itself.

Symposium
Panel Meeting

Symposium 1

THURSDAY · MARCH 23

9 : 35 - 11 : 05

Room 1 (Hall C)

S1 TB prevention and care of immigrants

Target Audience

This symposium is designed for policy maker, NTP manager, international organization etc. who is responsible for TB control on migrant issue. It will provide with useful information to health care professionals and staff of NGOs who work for screening, medical care and patients' support of tuberculosis at a field level.

Objectives

- 1) Learn about current situation on migrant TB in Asia Pacific region
- 2) Share experience on prevention and care for migrants TB

Summary

International migration has increased greatly over the last few decades and is estimated at 244 million globally. Migrants are a key target population for global tuberculosis (TB) control and elimination efforts under the World Health Organization's post-2015 End-TB strategy. Migrant populations face a spectrum of determinants which make them particularly vulnerable to disease and migration itself is a social determinant of health which may increase TB related morbidity and mortality among mobile populations.

International migration, caused by a variety of push and pull factors, including poverty, conflict, structural adjustment policies are no longer a one-way trajectory, and increase complexities between global and local communities, where migration acts as a bridge across borders with people bringing different health profiles that inevitably impact on disease burden, health care access and health seeking behaviours in receiving countries.

To be effective in addressing TB control for migrants requires population health-based approaches that consider the relationship between migration and health as a progressive, interactive process influenced by temporal and local variables and as far upstream in the process as possible.

This session identifies different experiences and approaches to migrants in respect to TB and outlines how some of these challenges can be met.

Chairs: Paul Douglas

(Department of Immigration and Border Protection, Australia)

Seiya Kato

(Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan)

1. Strengthening international cooperation to ensure continuum of TB care for mobile populations

Nobuyuki Nishikiori

(WHO Regional Office for the Western Pacific (WHO WPRO), Philippines)

2. Issue and challenge of TB control for immigrant in Japan

Seiya Kato

(Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan)

3. IOM-cross-border TB programmes

Patrick Duigan

(International Organization for Migration, Thailand)

4. Active and latent migration screening and electronic processing: policy and practice

Paul Douglas

(Department of Immigration and Border Protection, Australia)

Symposium 2

THURSDAY · MARCH 23

9 : 35 - 11 : 05

Room 2 (Hall B5-1)

S2 Prevention and treatment of COPD in Asia

Target Audience

Clinicians, physical therapist, nurses, respiratory therapist, clinical and basic science researchers, physicians in training, etc

Objectives

- 1) Understand the pathogenetic mechanisms and impact of dyspnea
- 2) Describe incentive program with pharmacologic therapy for smoking cessation
- 3) Integrate strategies for the management of COPD

Summary

This session will provide an update on key advances in the prevention and management of COPD ranging from current to emerging novel pharmacologic and non-pharmacologic therapies. It will emphasize the need for promotion to spread incentive program for smoking cessation in Asia-pacific region where a high smoking rate prevails. The speakers should also provide participating audience with some insights on the pathogenetic mechanisms and impact of dyspnea in COPD patients. There have been extensive publications on novel bronchodilators and pulmonary rehabilitation regarding the physical activity over the last few years. Furthermore, the presenters will propose a framework for selecting the most appropriate treatment modalities based on an individual's phenotypes and comprehensive assessment of health-status.

Chairs: Yoshinosuke Fukuchi

(Department of respiratory medicine, Juntendo University, Japan)

Jun Ueki

(Clinical Research Unit of Respiratory Pathophysiology, Graduate School of Health Care and Nursing, Juntendo University, Japan)

1. Fighting against Tobacco use in Indonesia

Faisal Yunus
(Department of Pulmonology and Respiratory Medicine, Faculty of Medicine, University of Indonesia-Persahabatan Hospital, Indonesia)

2. Mechanism of dyspnea in COPD

Ichiro Kuwahira
(Department of Pulmonary Medicine, Tokai University Tokyo Hospital, Japan)

3. Pharmacotherapy up to date

Koichiro Tatsumi
(Department of Respirology, Graduate School of Medicine, Chiba University, Japan)

4. Pulmonary rehabilitation: Asian perspective

Hideki Katsura
(Division of Respiratory Medicine, Tokyo Women's Medical University Yachiyo Medical Center, Japan)

1. TB vaccine inducing mucosal immune responses

Yasuhiro Yasutomi
(National Institutes of Biomedical Innovation, Health and Nutrition, Japan)

2. Head to head comparison of TB vaccine candidates in a mouse model of tuberculosis

Sang Nae Cho
(Yonsei University College of Medicine, Korea)

3. Novel Therapeutic vaccine against multi-drug resistant TB

Masaji Okada
(National Hospital Organization, Kinki-chuo Chest Medical Center, Japan)

4. Novel multi-stage TB vaccine that is protective as a parenteral and mucosal vaccine

Warwick Briton
(Centenary Institute and University of Sydney, Australia)

Symposium 3

THURSDAY · MARCH 23

9 : 35 - 11 : 05

Room 3 (G502)

Symposium 4

FRIDAY · MARCH 24

10 : 00 - 11 : 30

Room 1 (Hall C)

S3 Possibilities of new vaccines for prevention and treatment**Target Audience**

Research workers in basic sciences and prevention of TB

Objectives

- 1) understand selection process of vaccine candidate antigens against *M. tuberculosis* infection
- 2) recognize the possibility of using vaccines for treatment support

Summary

There are numerous *M. tuberculosis* antigens as listed in the literature, which showed a significant reduction of its growth in animal models thus indicating their efficacy; however, only limited number of antigens can be incorporated into a vaccine, so one has to select the best combination of *M. tuberculosis* antigens for the purposes of prevention as well as treatment. In this session, possibilities of the new vaccines with different strategies in terms of primary purposes, such as priming/boosting, and route of administration, are discussed from different points of view.

Chairs: Sang Nae Cho

(Yonsei University College of Medicine, Korea)
Yasuhiro Yasutomi
(National Institutes of Biomedical Innovation, Health and Nutrition, Japan)

S4 Active TB case finding in high-risk group in urban & rural areas in Asian countries**Target Audience**

Physician, nurse, public health doctor, public health nurse, public health staff

Objectives

- 1) Acknowledge the situation of high TB prevalence in urban & rural areas in Cambodia, Japan, Taiwan & the Philippines.
- 2) Compare the different case finding methods: chest x-ray, sputum examination.
- 3) Understand the importance of coordination with other sectors, medical services, social welfare and NGOs, and community volunteers etc.

Chairs: Pin-Hui Lee

(Centers for Disease Control, Taiwan)
Akira Shimouchi
(Nishinari District, Osaka City, The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan)

1. Active TB case finding in mountainous areas: Experience from Taiwan

Pin-Hui Lee
(Centers for Disease Control, Taiwan)

2. Active tuberculosis case finding in high-risk people as contact tracing by Japan Anti-Tuberculosis Association in Cambodia

Susumu Hirao

(The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan)

3. Strengthening the link between Government and NGOs in TB Control in the Urban Poor, Metro Manila, Philippines

Aurora G. Querri

(Research Institute of TB/Japan Anti-TB Association Philippines, Inc., Philippines)

4. Active case finding in urban poor area, Osaka City, Japan

Akira Shimouchi

(Nishinari District, Osaka City, The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan)

1. Current situation and issues of Pediatric TB in Japan

Osamu Tokunaga

(Dept of Pediatrics, National Minami-Kyoto Hospital, Japan)

2. Primary MDR-TB transmission and how children are affected

Ben J Marais

(The Centre for Research Excellence in Tuberculosis (TB-CRE) and The Children's Hospital at Westmead, University of Sydney, Australia)

3. Epidemiologic Features of Pediatric TB in Korea

Dong Soo Kim

(Department of Pediatrics, Yonsei University College of Medicine, Severance Children's Hospital, Korea)

4. Evaluation of tuberculosis infection in children using interferon-gamma release assay (IGRA)

Tomoo Miyakawa

(Dept of Pediatric Pulmonology, Tokyo Metropolitan Children's Medical Center, Japan)

Symposium 5

THURSDAY · MARCH 23

13 : 40 - 15 : 10

Room 3 (G502)

S5 Pediatric TB: Epidemiology & Prevention

Target Audience

TB program officers with focus on childhood tuberculosis, Paediatricians and physicians that are diagnosing and treating childhood tuberculosis cases, Public health officials that have interest in childhood diseases

Objectives

- 1) To understand the current situations of tuberculosis and its control among childhood tuberculosis, including MDR tuberculosis
- 2) To be able to make an improvement plan for the childhood tuberculosis control
- 3) To improve the clinical system of their own health facilities for the diagnosis and treatment of childhood tuberculosis

Summary

Diagnosis of childhood tuberculosis is one of the most under-evaluated area of tuberculosis control because of its difficulty and lack of public health importance as the source of infection. However, for the childhood survival, all childhood tuberculosis cases needs to be diagnosed and treated correctly. We would like to present and share the epidemiologic features and the newest knowledge for the diagnosis of pediatric TB. Accurate diagnosis and appropriate treatment of MDR-TB are also very important problems in children. We would like to present the diagnosis and treatment of MDR tuberculosis among children in this situation.

Chairs: Dong Soo Kim

(Department of Pediatrics, Yonsei University College of Medicine, Severance Children's Hospital, Korea)

Osamu Tokunaga

(Dept of Pediatrics, National Minami-Kyoto Hospital, Japan)

Symposium 6

THURSDAY · MARCH 23

13 : 40 - 15 : 10

Room 4 (G510)

S6 Lung cancer: Recent advances in lung cancer treatments

Target Audience

Pulmonologists, medical oncologists, thoracic surgeons basic scientists, radiologists

Objectives

- 1) Discuss the current and new treatments for lung cancer
- 2) Discuss novel problems concerning with new lung cancer treatments

Summary

Recent advances in molecular oncology have revealed that activating mutations of the EGFR, ALK, RET, ROS genes, etc are present in a subset of patients with lung cancer. Tyrosine kinase inhibitors (TKI) for each molecular lesion usually generate objective response rate of ~60% and progression-free survival of ~10 months which is significantly longer than that obtained by platinum doublet chemotherapy in the first-line settings. However, tumor cells almost inevitably acquire resistance, mechanisms of which have been extensively studied. In the cases of EGFR or ALK driven tumors, newer generation of TKIs are often effective. Furthermore, enhancement of tumor immunity through immune checkpoint inhibitors has recently been added to the armamentarium against lung cancer.

In the field of local therapy, efforts have been made to minimize invasiveness of surgery, part of which are due to development of improved stapling, optical, or energy-devices. Also, trials have been performed to validate limited surgery for less invasive tumors as determined by CT imaging studies. Advance in the field of radiation oncology s development of intensity modulated radiation therapy and particle beam therapy.

In this session, the international experts will offer the up-to-date information on lung cancer treatments and will discuss future perspectives.

Chairs: Akihiko Gemma

(Nippon Medical School, Japan)
Tetsuya Mitsudomi
(Kindai University, Japan)

1. Diagnosis and Treatment for Lung Cancer in the Era of Precision Medicine ~Over view~

Miyako Satouchi
(Department of Thoracic Oncology and Director of Chemotherapy, Hyogo Cancer Center, Japan)

2. Recent advance in the surgical management of lung cancer

Norihiko Ikeda
(Tokyo Medical University, Japan)

3. Target-based therapy for lung cancer

Yuichiro Ohe
(National Cancer Center Hospital, Japan)

4. Immunotherapy and future perspective

Tony Mok
(The Chinese University of Hong Kong, Hong Kong)

Symposium 7

THURSDAY · MARCH 23

13 : 40 - 15 : 10

Room 1 (Hall C)

S7 Recent advances and expected impact in TB diagnosis

Target Audience

Clinicians including respiratory physicians, internists, general practitioners, researchers and other health professionals involved in TB control activities

Objectives

- 1) Understand the general background of current situation of TB diagnostics
- 2) Discuss new microbiological and immunological diagnostic methodologies
- 3) Describe the impact of new diagnostics to TB control

Summary

The session will review the current situation of TB diagnostics, and reveal the issues to be sorted out. It may introduce several new microbiological and immunological techniques/ideas for specific diagnosis of tuberculosis, either active or latent forms. Further, on the basis of such information, it also tries to analyse the clinical impact of such new diagnostics. The session will update the perspectives of TB management from the viewpoint of laboratory examinations.

Chairs: Kai Man Kam

(The Chinese University of Hong Kong, Hong Kong)
Satoshi Mitarai
(Research Institute of Tuberculosis, Japan)

1. Situation analysis of TB diagnostics

Kai Man Kam
(The Chinese University of Hong Kong, Hong Kong)

2. New diagnostics in development

Chang-Ki Kim
(Guri hospital, Hanyang University, Korea)

3. Diagnosis of TB infections

Sohkichi Matsumoto
(Niigata University, Japan)

4. Clinical impact of new diagnostics

Satoshi Mitarai
(Research Institute of Tuberculosis, Japan)

Symposium 8

FRIDAY · MARCH 24

10 : 00 - 11 : 30

Room 2 (Hall B5-1)

S8 Pneumonia Up-Date

Target Audience

Clinicians including respiratory physicians and general physicians

Objectives

- 1) Pathogenesis
- 2) Diagnosis
- 3) Epidemiology

Summary

This session will update audience with the latest information on pneumonia

Chairs: Junichi Kadota

(Oita university, Japan)
Kazuhiro Tateda
(Toho University School of Medicine, Japan)

1. pathogenesis

Yu Chen
(Shengjing Hospital of China Medical University, China)

2. Advances in Diagnosis of Respiratory Infectious Diseases

Koichi Izumikawa
(Department of Infectious Diseases, Nagasaki University Graduate School of Biomedical Sciences, Japan)

3. Ensuring Optimal Selection of Antimicrobials for Treatment of Pneumonia in Asia and the Pacific

Krispin Hajkowicz
(University of Queensland, Australia)

4. Epidemiology of Pneumonia in Asia

Visanu Thamlikitkul
(Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand)

5. research

Kazuhiro Tateda
(Toho University School of Medicine, Japan)

2. NTP and UHC in the Philippines

Anna Marie Celina G. Garfin
(Disease Prevention and Control Bureau, Department of Health, Philippines)
Mary Antonette Yason-Remonte
(Philippine Health Insurance Corporation, Philippines)

3. TB, UHC in Thailand, and Challenges in TB control in Urban Area

Chawetsan Namwat
(Institute for Urban Disease Control, DDC, MOPH, Thailand)

4. TB and UHC in Japan

Norio Yamada
(Research Institute of Tuberculosis, Japan)

Symposium 9

FRIDAY · MARCH 24

10 : 00 - 11 : 30

Room 3 (G502)

S9 Progress in TB programme and Universal Health Coverage (UHC) in AP countries

Target Audience

Health professionals engaged in TB programme and UHC, researchers in the field of TB and UHC, health policy makers

Objectives

- 1) Review the progress of TB programme and UHC focusing on their relationship
- 2) Discuss issues for strengthening TB programme under UHC and vice versa

Summary

This session will update audience with information on the progress of TB programme and UHC in four countries in Asian Pacific Region: China, Philippines, Thailand and Japan. In this session, we would like to emphasize relationship between tuberculosis programme and UHC in terms of financing and health service delivery and issues to be addressed for strengthening TB programme under UHC, taking into account unique aspects of TB programme consisting of patient care service and public health programme.

Chairs: Cheng Jun

(Chinese Center for Disease Control and Prevention, China)
Nobukatsu Ishikawa
(Research Institute of Tuberculosis, Japan)

1. Progress of TB control and universal health coverage in China

Cheng Jun
(Chinese Center for Disease Control and Prevention, China)

Symposium 10

FRIDAY · MARCH 24

10 : 00 - 11 : 30

Room 4 (G510)

S10 Strengthening contact investigation

Target Audience

NTP managers, TB supervisors, NGO members involved in TB control, field workers for TB

Objectives

- 1) recognize the importance of contact investigation in TB control
- 2) understand how to transmit TB through contact investigation
- 3) understand how to conduct contact investigation

Chairs: Mao Tan Eang

(National Center for TB and Leprosy Control (CENAT), Cambodia)
Kosuke Okada
(Japan Anti-Tuberculosis Association (JATA), Japan)

1. Household contact investigation for tuberculosis in a high-prevalence setting: insights from multi-centre studies in Vietnam

Greg J. Fox
(University of Sydney, Australia)

2. Mitigating financial burden of tuberculosis through active case finding targeting household and neighborhood contacts in Cambodia

Fukushi Morishita
(World Health Organization Regional Office for the Western Pacific, Japan)

3. A review of tuberculosis contact investigation in the urban poor areas in Metro Manila, the Philippines

Aurora G. Querri
(Research Institute of TB/Japan Anti-TB Association Philippines, Inc., Philippines)

4. Lessons learnt from a large outbreak of TB at junior high school in Japan

Makoto Toyota
(Kochi-city Public Health Center, Japan)

Symposium 11

FRIDAY · MARCH 24

13 : 45 - 15 : 45

Room 1 (Hall C)

S11 NTM: Current challenges

Chairs: Naoki Hasegawa

(Division of Infection Control, Keio University School of Medicine, Japan)

Kozo Morimoto

(Fukujuji hospital, Japan Anti tuberculosis Association, Japan)

1. Host susceptibility to pulmonary nontuberculous mycobacterial (PNTM) disease

Masashi Matsuyama

(Laboratory of Clinical Infectious Diseases, NIAID, NIH, USA)

2. Antibiotic treatment of nontuberculous mycobacterial lung disease

Won-Jung Koh

(Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea)

3. Hsa-miR-346 is a potential serum biomarker of Mycobacterium avium complex pulmonary disease activity

Tomoyasu Nishimura

(Health Center, Keio University, Japan)

4. Current topics and future perspective in the nontuberculous mycobacteriosis in Eastern Asia

Po-Ren Hsueh

(National Taiwan University Hospital, National Taiwan University College of Medicine, Taiwan)

Symposium 12

FRIDAY · MARCH 24

13 : 35 - 15 : 05

Room 2 (Hall B5-1)

S12 Diagnosis and Management of Interstitial Lung Diseases in Asia

Target Audience

Pulmonologists, epidemiologists, physiologists, radiologists, nurses, physical therapists (PT), and basic researchers of interstitial lung diseases. In addition, experts of respiratory infection of mycobacterium in the interstitial distortion of interstitial lung diseases.

Objectives

- 1) understand the classification of interstitial lung disease
- 2) share the information of diagnostic and differential diagnostic procedures
- 3) understand recent topic of treatment of pulmonary fibrosis

Summary

Interstitial lung disease (ILD)/pulmonary fibrosis (PF) develops by various factors. Air pollution and occupational dust exposure are also major factors. Depending on the cause, progress type and speed of ILDs are different. In recent years, due to the development of antifibrotic agents, idiopathic pulmonary fibrosis (IPF) has become a treatable disease. How to guide accurate diagnosis of IPF based on international guidelines is an important issue in the clinical practice. It is a method that can lead a prolonged PF to prolongation by making a reasonable diagnosis as soon as possible. At this symposium, we will explore early diagnosis and pathways to treatment through sharing information on ILD diagnosis and management in Asian countries.

Chairs: Sakae Homma

(Toho University Omori Medical Center, Japan)

Arata Azuma

(Nippon Medical School, Japan)

1. Epidemiology and disease severity grading of IPF in Japan

Hirohumi Chiba

(Department of Respiratory Medicine and Allergology, Sapporo Medical University School of Medicine, Japan)

2. Management of IPF in Japan

Susumu Sakamoto

(Toho University Omori Medical Center, Japan)

3. Idiopathic interstitial pneumonias other than IPF - diagnosis and management

Low Su Ying

(Department of Respiratory & Critical Care Medicine, Singapore General Hospital, Singapore)

4. Exposure and ILD: Exploring novel therapy

Shinichiro Ohshimo

(Department of Emergency and Critical Care Medicine, Hiroshima University, Japan)

5. Idiopathic pulmonary fibrosis: What have we achieved?**The current status in Taiwan**

Diahn-Wang Perng

(Division of Clinical Respiratory Physiology, Department of Chest Medicine, Taipei Veterans General Hospital, National Yang Ming University, Taiwan)

3. Risk and Management of LTBI in dialysis patients

Mikio Takamori

(Tokyo Metropolitan Tama Medical Center, Japan)

Symposium 13

FRIDAY · MARCH 24

13 : 35 - 15 : 05

Room 3 (G502)

S13 LTBI treatment for further reduction of TB in various environment**Target Audience**

Public health officials working for tuberculosis control, Government officers working for other high risk persons for tuberculosis including prisoners, Clinicians treating latent tuberculous treatment, Clinicians treating PLWHA and other immunocompromised host

Objectives

- 1) To understand the individual and public health merit and demerit (adverse drug reactions) of treatment of latent tuberculosis control
- 2) To understand the feasibility of treatment of latent tuberculosis infection in each high risk settings of tuberculosis diseases
- 3) To be able to make an expansion and introduction plan of treatment of latent tuberculosis infection for socially high risk groups

Summary

For the reduction of active tuberculosis, treatment of sputum smear positive tuberculosis with passive case finding was the classical answer and DOTS has been effective for the reduction of tuberculosis. However, for the further reduction of tuberculosis, several other target groups need to be treated, including persons with latent tuberculosis infection. WHO has recommended to do treatment of latent tuberculosis infection for this purpose and the actual implementation at each country at each target group needs careful consideration for the selection of target persons. With this symposium, we would like to introduce the situations in several countries with several target groups and would like to contribute for the further expansion of TLTBI in each country.

Chairs: Pei Chun Chan

(Centers for Disease Control, Taiwan)

Hidetoshi Igari

(Division of Control and Treatment of Infectious Diseases, Chiba University Hospital, Japan)

1. Current situation of LTBI intervention study in China

Lei Gao

(Institute of Pathogen Biology, Chinese Academy of Medical Sciences & Peking Union Medical College, China)

2. LTBI and the contact investigation using IGRAs in Japan

Makoto Miki

(Department of Pulmonary and Respiratory Medicine, Japanese Red Cross Sendai Hospital, Japan)

Symposium 14

FRIDAY · MARCH 24

15 : 15 - 16 : 45

Room 2 (Hall B5-1)

S14 Recent advances in asthma

Target Audience is health care professionals, including not only physicians but also nurses and other medical staffs, who are involved in health care of asthma patients and/or who are interested in asthma, allergy and pulmonary medicine, and researchers who are engaged in translational study subjects in the field of asthma and allergy.

Objectives

- 1) describe the pathogenesis of asthma with new information
- 2) diagnose asthma with and without comorbidity
- 3) summarize updated GINA 2016

Summary

Asthma has been recognized as a syndrome and its pathogenesis has been clarified based on the recent advances of immunology, cell biology and molecular biology. Through the clarification of its diverse pathogenesis, asthma has been classified as three patterns of inflammatory cells, i.e. eosinophilic based on the condition of Th2 high, neutrophilic and paucigranulocytic both on the state of Th2 low. Moreover, the condition of Th2 high is brought about by activation of not only Th2 cells but also group 2 innate lymphoid cells (ILC 2). Along with the progress in the field of basic science, biomarkers for diagnosis and treatment for asthma have been in progress, and efforts have been made to get clusters based on the phenotypes and endotypes to determine an appropriate strategy to treat intractable and severe asthma with and without comorbidities. It is important to know the widely-accepted management of asthma based on EBM, and in this sense, the new global guideline, GINA 2016, can show us a kind of the standard strategy for asthma management. Through this symposium, we can update our knowledge dealing with asthma from bench to clinic and scope the future direction of asthma.

Chairs: Ken Ohta

(NHO Tokyo Hospital, Japan)

Hiromasa Inoue

(Kagoshima University, Japan)

1. Pathogenesis

Hiroyuki Nagase

(Teikyo University, Japan)

2. Diagnosis

Junpei Saito

(Fukushima Medical University, Japan)

3. Comorbidity

Tsutomu Tamada

(Tohoku University, Japan)

4. GINA update

Ko Wai San Fanny
(The Chinese University of Hong Kong, Hong Kong)

Symposium 15

FRIDAY • MARCH 24

13 : 35 - 15 : 05

Room 4 (G510)

S15 MDR-TB, epidemiology and management**Target Audience**

* Staff of national TB programme and NGO partners working in tuberculosis control, especially MDR-TB control

* Clinicians who are responsible for the diagnosis and treatment of MDR-TB

Objectives

- 1) Describe the updated epidemiology and management of MDR-TB under program conditions
- 2) Understand the merit and limitations of shorter MDR-TB regimens, and practical issues related to the implementation of shorter MDR-TB regimens.
- 3) Propose revision in the management of MDR-TB, taking resource and infrastructure in each country into account.

Summary

WHO has published new guidelines for the management of drug resistant tuberculosis in 2016. Several countries have begun to plan for revision of both clinical and programmatic management of drug-resistant TB (PMDT). As country has different infrastructure and epidemiological situation of MDR TB, proper planning and implementation of PMDT requires taking country situation into account. This symposium will provide updated information on PMDT in the Asia Pacific Region, address issues related to implementation of shorter MDR-TB regimens, and present updated information on adverse reactions and surgical intervention in the management of DR-TB.

Chairs: Heping Xiao

(Shanghai Pulmonary Hospital, China)

Takashi Yoshiyama

(Fukujuji hospital, Japan Anti tuberculosis Association, Japan)

1. Update on programmatic management of drug-resistant TB in the Asia Pacific Region

Shalala Ahmadova

(WHO Regional Office for the Western Pacific, Philippines)

2. Implementation of shorter MDR-TB regimens: practical approach

Chen-Yuan Chiang

(International Union Against Tuberculosis and Lung Disease, Taiwan)

3. Management of adverse drug reactions in the treatment of MDR-TB

Masao Okumura

(Japan Anti-Tuberculosis Association Fukujuji Hospital, Japan)

4. The first-line antituberculosis drugs -Do not give up

Heping Xiao

(Shanghai Pulmonary Hospital, China)

5. Current Status and Future Perspectives of Surgical Treatment of Multidrug-resistant Tuberculosis

Yuji Shiraiishi

(Fukujuji hospital, Japan)

Symposium 16

FRIDAY • MARCH 24

15 : 15 - 16 : 45

Room 3 (G502)

S16 TB Surveillance systems in east Asia**Target Audience**

NTP staff, data management officers, researchers, clinicians, administrators, policy-makers and other key stakeholders working in tuberculosis control.

Objectives

- 1) learn how to improve the current TB surveillance systems in their respective country.

Summary

The session aims to share the history and present situation of the TB surveillance systems in three east Asian countries and a large city in Japan, i.e., China, Taiwan, Japan, and Tokyo, to discuss issues and possible solutions so that the participants of the symposium would be able to learn how to improve the current TB surveillance systems concerned. The session shall be an important opportunity for all who are engaged in tuberculosis control to reconsider its critical roles of TB surveillance to monitor TB situation nationwide towards TB elimination.

Chairs: Wang Li Xia

(China Center for Disease Control (China CDC), China)

Akihiro Ohkado

(Research Institute of Tuberculosis (RIT), Japan Anti-Tuberculosis Association (JATA), Japan)

1. TB surveillance in China—an integrated web-based reporting and management system

Li Tao

(National Center for Tuberculosis Control and Prevention, China CDC, China)

2. TB surveillance system in Taiwan—linking digital health to the End TB Strategy

Po-Wei Chu

(Division of Chronic Infectious Diseases, Taiwan Center for Disease Control (Taiwan CDC), Taiwan)

3. TB surveillance system in Japan—its achievement and future prospects

Kazuhiro Uchimura

(Department of Epidemiology and Clinical Research, Research Institute of Tuberculosis (RIT), Japan Anti-Tuberculosis Association (JATA), Japan)

4. TB surveillance system in Tokyo Metropolitan Government—its achievement and future challenges

Kuniko Murakami

(Department of Planning and Coordination, Tokyo Metropolitan Institute of Public Health, Japan)

2. Continuous support with multi-disciplinary cooperation for TB patients from hospital to community

Keiko Oshima

(Gunma University Hospital, Japan)

3. The strategy of Japanese “patient centered TB car” - Overcoming TB, regaining health, and living a healthier life -

Tamae Shimamura

(The research institute of tuberculosis, Japan anti-tuberculosis association, Japan)

4. To share experience of, and discuss some issues on, patient-centered care in Australia

Kerrie Shaw

(South Eastern Sydney Local Health District, Australia)

Symposium 17

SATURDAY · MARCH 25

10 : 00 - 11 : 30

Room 1 (Hall C)

S17 Patient-centered TB care and support**Target Audience**

Nurses, pharmacists and other healthcare workers who are involved in supporting TB patients in completing treatment

Objectives

- 1) Share experience and knowledge on patient-centered care and support
- 2) Understand and recognize various ways of multi-professional collaboration
- 3) Promote community based care

Summary

Japanese DOTS is unique in that it involves multiple institutions and professionals, including medical institution, public health centers and the community, in supporting TB patients in completing treatment. In this session, the participants can expect to share experiences of patient-centered care and multi-professional collaboration from different Asian countries. It is hoped that this symposium will contribute to participant's effort not only in supporting treatment completion but also early detection of patients.

Chairs: Kerrie Shaw

(South Eastern Sydney Local Health District, Australia)

Yoko Nagata

(The Research Institute of Tuberculosis, JATA, Japan)

1. To share experience of and discuss issues on patient-centered care in Taiwan

Wei-Wen Chen (Sally)

(Research Assistant of Tuberculosis, MDR Department, Chang-Hua Hospital, Taiwan)

Symposium 18

SATURDAY · MARCH 25

10 : 00 - 11 : 30

Room 2 (Hall B5-1)

S18 Current status of molecular epidemiology of tuberculosis in Asia**Target Audience**

All participants in APRC2017 interested in molecular epidemiology are welcome. The target audiences of this symposium are molecular epidemiologists, field epidemiologists, public health specialists, respiratory physicians, clinical microbiologists, infection control officers, tuberculosis epidemiologist, scientists interested in pathogen genotyping and its application. Students in medical and public health field are also welcome.

Objectives

- 1) learn about TB molecular epidemiology in general.
- 2) know the recent trend of TB molecular epidemiology in Asia.
- 3) discover opportunities and challenges of their own in TB molecular epidemiology.

Summary

In the past decades, molecular epidemiology of tuberculosis (TB) brought significant insights into the infection sources and transmission ways, discrimination between re-infection and re-activation, and phylogeographical characterization of *Mycobacterium tuberculosis*. Before the era of molecular epidemiology, it was quite difficult to ascertain the infection routes and transmission dynamics since *M. tuberculosis* can remain latent as an asymptomatic infection for years. Now a day, we can utilize molecular typing methods such as variable number of tandem repeats (VNTR) as an adjunct to ordinary epidemiological approach (contact investigation). In this symposium, we have invited five leading researchers from China, Japan, Philippines, Taiwan, and Vietnam. They will provided us updated information on molecular epidemiological studies in each country. We, as the chairpersons of this symposium, hope that this symposium would trigger the development and strength our molecular epidemiological network of TB in Asia.

Chairs: Qian Gao

(Fudan University, China)
Tomotada Iwamoto
(Kobe Institute of Health, Japan)

- 1. Establishment of VNTR typing system in Japan for Beijing genotype of *Mycobacterium tuberculosis***
Shinji Maeda
(Hokkaido Pharmaceutical University, Japan)
- 2. *Mycobacterium tuberculosis* transmission in China.**
Zhao Yanlin
(Chinese Center for Disease Control and Prevention, China)
- 3. Molecular genotyping of tuberculosis in Taiwan**
Ruwen Jou
(Taiwan Centers for Disease Control, Taiwan)
- 4. Molecular Epidemiology of *Mycobacterium tuberculosis* in Selected High Risk Populations in the Philippines**
Jaime C. Montoya
(Philippine Council for Health Research and Development-
Department of Science and Technology / University of the
Philippines Manila College of Medicine, Philippines)
- 5. Molecular epidemiology of tuberculosis in Hanoi, Vietnam**
Nguyen Thi Le Hang
(NCGM-BMH Medical Collaboration Center, Vietnam)

Symposium 19

SATURDAY • MARCH 25

10 : 00 - 11 : 30

Room 3 (G502)

S19 New drugs, New treatment**Target Audience**

- Public health program managers and NGO managers working in tuberculosis control, especially MDR TB control
- Clinicians working for the treatment of MDR TB

Objectives

- 1) To share the knowledge of the new drugs
- 2) To be able to make clinical decision for the treatment of cases that cannot be treated with Isoniazid, Rifampin, Quinolones, Injectable drugs, and/or Pyrazinamide
- 3) To be able to make national/regional program plan for difficult cases, that cannot be treated with Isoniazid, Rifampin, Quinolones, Injectable drugs, and/or Pyrazinamide

Summary

From 2000s, Linezolid has come to be recognized as useful against tuberculosis cases and other two new drugs, Bedaquiline and Delamanid, has come to be clinical and public health use in recent years. However, it is not yet clear how to utilize these drugs under various settings of availability of drug susceptibility test and management of adverse drug reactions. In this symposium,

we would like to provide necessary information for the utility of these drugs and discuss how to use these drugs in various circumstances. Although newer drugs are under development and current recommendation is only the temporal one, we need to proceed step by step and summarization at present will be useful for the future development as well.

Chairs: Kwok Chiu Chang

(Tuberculosis and Chest Service, Department of Health,
Hong Kong)
Katsuhiro Suzuki
(National Hospital Organization Kinki-Chuo Chest Medical
Center, Japan)

- 1. New MDR-TB treatment combinations: updates with a clinician's perspective**
Kwok Chiu Chang
(Tuberculosis and Chest Service, Department of Health,
Hong Kong)
- 2. Linezolid for the treatment of drug-resistant tuberculosis**
Myungsun Lee
(International TB Research Center (ITRC), Korea)
- 3. Delamanid**
Lawrence Geiter
(Otsuka Pharmaceutical Development and Commercialization, USA)
- 4. Update on the Bedaquiline development program, worldwide roll-out and ongoing clinical trial activities**
Myriam Theeuwes
(Janssen Pharmaceutica N.V., Belgium)

Symposium 20

SATURDAY • MARCH 25

13 : 30 - 15 : 00

Room 2 (Hall B5-1)

S20 Place of IGRA in TB control**Target Audience**

Clinicians diagnosing latent tuberculosis infection and tuberculosis diseases, Government officers working for the tuberculosis control, especially for treatment of latent tuberculosis infection

Objectives

- 1) To understand the merits and limitations of IGRA tests, especially in comparison to conventional tuberculin skin test and the difference of commercially available IGRA tests, from clinical and public health points
- 2) To understand the merits and demerits of introduction of IGRA for tuberculosis control with consideration of treatment of latent tuberculosis infection
- 3) To make a implementation plan of IGRA tests in conjunction with treatment of latent tuberculosis infection, in the tuberculosis control program in each country for each high risk group

Summary

Diagnosis of latent tuberculosis infection has been done with tuberculin skin test for many years. The introduction of IGRA tests has made diagnosis of latent tuberculosis infection more precise, especially in the area with high coverage of BCG vaccination. IGRA has been introduced for clinical and public health purpose in some APR countries and probably some countries are also planning to start. The barrier to the use of IGRA is its high cost and we need to consider the cost effectiveness. We would like to share the experiences in some countries and we hope this to be useful for the introduction of IGRA further.

Chairs: Cynthia Chee

(Tan Tock Seng Hospital, Singapore)

Arisu Kamada

(National Hospital Organization Hokkaido Medical Center, Japan)

1. Contact investigation and mass LTBI screening in Korea

Hee Jin Kim

(The Korean Institute of Tuberculosis, Korea)

2. Evaluation of IGRAs in Japanese patients with rheumatoid arthritis.

Satoru Ishikawa

(Department of Respiratory Medicine, National Hospital Organization Chiba-East-Hospital, Japan)

3. Measures against LTBI in the young and the elderly in Japan.

Jin Takasaki

(National Center for Global Health and Medicine, Japan)

4. The use of IGRA in Australian TB contact management

Justin T Denholm

(Victorian Tuberculosis Program, Melbourne Health; and Principal Research Fellow, Department of Microbiology and Immunology, University of Melbourne, Australia)

Symposium 21

SATURDAY • MARCH 25

13 : 30 - 15 : 00

Room 3 (G502)

S21 Ensuring TB control Policy : Legislation and political commitment**Target Audience**

Decision makers, planners and implementers of tuberculosis control program

Objectives

- 1) Recognize the needs for clear political commitment in planning and implementing TB program
- 2) Understand the current political challenges in TB control for materializing End TB Strategy

Summary

In order to pursue the End TB Strategy fulfilling sustainable development goals, clear political commitment is an important prerequisite. The symposium reviews the Japan's post-war health policy toward the establishment of the substantial universal health coverage, together achieving high success in TB control by 1960s. An example of the high TB burden countries' effort is introduced, that involves the political parties including parliamentarians and has contributed to the enhancement of national TB control. Also, funding organizations' roles are more and more indispensable and critical now, as exemplified by Global Fund, in making the efforts by both donors and recipients more effective, in targeting End TB paradigm.

Chairs: Emiko Takagai

(MP, House of Councillors, Japan)

Kosuke Okada

(Research Institute of Tuberculosis (RIT), Japan Anti-Tuberculosis Association (JATA), Japan)

1. TB Control in the health policy in post-war Japan

Keizo Takemi

(MP, House of Councillors, Japan)

2. Political commitment to national TB program: a case of the Philippines

Angelina Tan

(MP, Philippines)

3. Development and global TB control

Osamu Kunii

(Global Fund to fight AIDS, TB & Malaria, Japan)

Symposium 22

SATURDAY • MARCH 25

13 : 30 - 15 : 00

Room 4 (G510)

S22 Pharmacovigilance and side effect management**Target Audience**

Physician, nurse, and other health professionals who treat patients with TB

Objectives

- 1) Acquire knowledge of adverse reactions to major antituberculosis drugs
- 2) Learn about management of adverse drug reactions during antituberculosis chemotherapy

Summary

Tuberculosis is now a curable disease with chemotherapy. As antituberculosis chemotherapy requires at least 6 months, management of adverse drug reactions is an important element of treatment for tuberculosis. Although most of the adverse reactions are mild and can be managed with symptomatic therapy, sometimes there are severe cases that require prompt discontinuation and otherwise it can be fatal. In this symposium, we will discuss how to monitor and manage major adverse drug reactions during antituberculosis chemotherapy. We hope this symposium will lead to better understandings of management of adverse drug reactions and successful implementation of antitu-

berculosis chemotherapy.

Chairs: Ming-Chih Yu

(Taipei Medical University-Wan Fang Hospital, Taiwan)
Kazunari Tsuyuguchi
(National Hospital Organization Kinki-chuo Chest Medical Center, Japan)

1. Desensitization therapy for allergic reaction to antituberculous drugs

Yoshihiro Kobashi
(Department of Respiratory Diseases, Kawasaki Medical School, Japan)

2. Anti-tuberculosis drug-induced hepatotoxicity

Taisuke Tsuji
(National Hospital Organization Kinki-chuo Chest Medical Center, Japan)

3. Prothionamide associated hypothyroidism in MDR/RR-TB treatment

Chih-Hsin Lee
(Wanfang Hospital, Taipei Medical University, Taiwan)

Symposium 23

SATURDAY · MARCH 25

15 : 20 - 16 : 50

Room 2 (Hall B5-1)

S23 TB in elderly and immune compromised host

Target Audience

Clinicians treating elderly and immunocompromised hosts (not limiting to doctors working for tuberculosis), Clinicians treating tuberculosis patients, Administrators of elderly facilities

Objectives

- 1) To understand the difference of tuberculosis among elderly and immunocompromised host from other immunocompetent hosts
- 2) To understand the tuberculosis among elderly and immunocompromised host for earlier diagnosis
- 3) To understand the management of elderly persons from the point of view of tuberculosis infection control

Summary

Tuberculosis was the diseases among the young when it increased with urbanization and industrialization. In Asian countries, tuberculosis is now becoming more the diseases of the elderly and immunocompromised hosts especially with immunosuppression therapy. The symptoms and signs of tuberculosis are different for these persons and understanding of the diseases is necessary for prevention, earlier diagnosis and better management. Asian countries experience the aging society with high prevalence of tuberculosis infection and to share the experiences in these countries will help the reduction of tuberculosis in future.

Chairs: Chi Chiu Leung

(Tuberculosis and Chest Service of the Department of Health of Hong Kong, Hong Kong, China)
Akira Fujita
(Tama-Nambu Chiiki Hospital, Japan)

1. Elderly

Junko Suzuki
(National Hospital Organization Tokyo National Hospital, Japan)

2. RA and immunocompromised host

Tomoshige Matsumoto
(Osaka Anti-Tuberculosis Association Osaka Hospital, Japan)

3. Tuberculosis in Immunocompromised host

Nicolas I Paton
(University Medicine Cluster, National University Health System, Singapore)

Symposium 24

SATURDAY · MARCH 25

15 : 20 - 16 : 50

Room 3 (G502)

S24 Severe acute respiratory infections in Asia: Lessons learned and future prospects

Target Audience

Healthcare workers and public health practitioners

Objectives

- 1) Review several major outbreaks of severe acute respiratory infections in Asia in the past 14 years
- 2) Better prepare for the emergence of severe acute respiratory infections

Summary

It is 14 years since severe acute respiratory syndrome caused by a novel coronavirus (SARS) emerged in China. Since then, Asia has been facing outbreaks of severe acute respiratory infections (SARI) including avian influenza H5N1 and H7N9. The region is now better able to respond to SARI than it was a decade ago, but the recent outbreak of Middle East respiratory syndrome (MERS) in Korea shows that many challenges remain to be overcome. This session reviews several major outbreaks of SARI in Asia and provides the audience with an opportunity to learn front-line experience in the hot spots.

Chairs: Leo Yee Sin

(Tan Tock Seng Hospital, Singapore)
Yasuyuki Kato
(National Center for Global Health and Medicine, Japan)

1. SARS

Leo Yee Sin
(Tan Tock Seng Hospital, Singapore)

2. Human Infection caused by Avian Influenza Virus

Bin Cao
(National Clinical Research Center of Respiratory Diseases; Center for Respiratory Diseases, China-Japan Friendship Hospital; Department of Pulmonary and Critical Care Medicine, China-Japan Friendship Hospital; Capital Medical University, China)

3. 2015 MERS Outbreak in South Korea

Sun Hee Park
(Division of Infectious Diseases, Department of Internal Medicine, College of Medicine, the Catholic University of Korea, Korea)

Chair: Naoto Keicho

(The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan)

1. Investigations of RNA/miRNA signature as potential biomarkers for tuberculosis

Minako Hijikata
(The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan)

2. Gene expression biomarkers for Tuberculosis: assay development and clinical implementation

Nusara Satproedprai
(Ministry of Public Health, Thailand)

3. Epigenetic changes of miRNA and methylated DNA in Mycobacterium tuberculosis Infections of Beijing and non-Beijing strains

Margaret IP
(Chinese University of Hong Kong, Hong Kong)

4. M. tuberculosis infected macrophages release microparticles containing microRNA and type-1 interferon inducible proteins and have potential as biomarkers to aid TB diagnosis.

Bernadette Saunders
(University of Technology Sydney, Australia)

Symposium 25

SATURDAY · MARCH 25

15 : 20 - 16 : 50

Room 4 (G510)

S25 New biomarkers in tuberculosis**Target Audience**

Clinicians, clinical researchers, basic researchers, bacteriologists, and those who are interested in biomarkers' role in tuberculosis medicine: Innovative biomarker studies will help diagnosis, treatment and prevention of tuberculosis. Particularly new markers will provide scientific clues about appropriate duration of tuberculosis treatment, and finding high-risk individuals who may develop the disease among infected people in the near future.

Objectives

- 1) know why new biomarkers are essential in tuberculosis medicine
- 2) understand current status of biomarker studies on RNA and miRNA molecules
- 3) expect changes in future tuberculosis medicine

Summary

Identification of new biomarkers is essential because it may predict infection and development of tuberculosis, and treatment response. It will eventually lead to shortening of treatment duration for active tuberculosis including multidrug-resistant tuberculosis, and their use will also be a basis of appropriate prophylactic treatment for latent tuberculosis infection shifting to active disease with high probability. Interventions based on such markers are promising countermeasures against tuberculosis.

A microRNA (miRNA) is a small non-coding RNA molecule that regulates messenger RNA (mRNA) expression, and mRNA conveys genetic information from DNA to the ribosome. Both types of RNA molecules have been studied as biomarker in cancer first but now more in infectious diseases, and further highlighted in the field of tuberculosis. In this symposium, the participants will obtain sufficient knowledge about this topic from front-line researchers and expect the future world with zero tuberculosis.

Panel Meeting

FRIDAY · MARCH 24

12 : 30 - 13 : 30

Room 1 (Hall C)

PM MDR-TB Control in Asia-Pacific NTPs**Target Audience**

TB control workers involved in the management and prevention of MDR-TB in NTP

Objectives

- 1) recognize the essential features of MDR-TB issues
- 2) understand the current principles of administrative management of MDR-TB

Summary

First, participants listen to an expert's lecture on the current concepts of addressing the MDR-TB issues, including the possibility of conducting any clinical trial of MDR-TB treatment. Then, as requested in advance, several participants make free remarks on the management of MDR-TB problems in their own countries' program. Each remarks are followed by reactions, comments or questions, of the fellow participants and the audience.

Chair: Masaki Ota

(Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan)

Current challenge and research issues of management

MDR-TB

Bao Jing

(Tuberculosis Clinical Research Branch, Division of AIDS/
NIAID/NIH, USA)

Workshop

Workshop 1 (WPRO rGLC - GLI - GFATM Joint Workshop)

WEDNESDAY • MARCH 22 Part 1. 10 : 00-12 : 30/Part 2. 13 : 30-17 : 00

Room 5 (G701)

WS1 Accelerating Innovations for 'Ending TB': Investing for Impact**Target Audience**

National TB Programmes, technical and funding partners, civil society organizations and community representatives

Course Objectives

- 1) To update on recent advances in rapid diagnosis and treatment of drug resistance and to discuss how these advances can be quickly adopted and expanded in Western Pacific countries;
- 2) To bring together NTP managers, Regional Green Light Committee (rGLC) members, donors, scientists and other stakeholders to share their knowledge and insights on programmatic management of DR-TB;
- 3) To share countries' practical experiences in adoption and expansion of innovations to combat drug resistance;
- 4) To share best practices and optimal implementation of Global Fund grants for impact in the Region;
- 5) To discuss New Global Funding cycle in the context of the End TB strategy, Global Plan to End TB and Universal Health Coverage;
- 6) To discuss regional priorities for the Multi-country approach to TB and MDR-TB.

Summary

During 2016, WHO released several guidelines and policies highlighting new developments and innovations required to combat drug resistance. These include recommendations on first and second-line line-probe assays to identify resistance, usage of TB LAMP and other technologies to diagnose TB and expansion of utilization of new drugs (bedaquiline and delamanid) as well as the standardized shorter treatment regimen for MDR-TB patients under programmatic conditions.

Without adequate technical assistance and sufficient funding, these innovations may not be rapidly adopted and expanded worldwide especially in high TB burden countries.

At the end of 2016, the GFATM launched the New Funding Cycle to support countries to achieve their ambitious goals in line with national strategies. This will help countries to improve the performance of their programs and reduce the burden of disease; however, addressing of some major challenges requires the adoption of the regional approach and collective efforts of all countries in the region.

In view of the above, it is proposed to hold a joint workshop with Regional Green Light Committee (rGLC WP), Global Laboratory Initiative and the Global Fund to fight against HIV, TB and Malaria (GFATM). The workshop will discuss latest policy updates from WHO, challenges for adaptation and scale up, good practices and experiences from countries, and effective use of resources for impact particularly on Global Fund grant application and implementation.

Coordinators: Nobuyuki Nishikiori

(Regional Office for the Western Pacific, WHO (WPRO), Philippines)

Shalala Ahmadova

(Secretariat of the rGLC Western Pacific, WHO (WPRO), Philippines)

Wayne van Gemert

(Secretariat of the Global Laboratory Initiative (GLI), WHO, Switzerland)

Nguyen Van Hung

(National TB Reference Laboratory, Viet Nam)

Eliud Wandwalo

(Global Fund to fight HIV, TB and malaria (GFATM), Switzerland)

Topics and Lectures

Part 1 (10:00-12:30): rGLC-GLI session

1. Innovations for Ending TB
2. Challenges in rapid adoption of and access to innovations

Part 2 (13:30-17:00): GFATM session

Investing for impact

Priorities for a regional approach to TB and MDR-TB

Lecturers: Nobuyuki Nishikiori

(WHO Western Pacific Region, Philippines)

Wayne van Gemert

(WHO Headquarters, Switzerland)

Chen-Yuan Chiang

(rGLC WPR, Taiwan)

Eliud Wandwalo

(GFATM, Switzerland, Switzerland)

Representatives from civil society organizations

Representative from partners

Workshop 2 (union WS)

WEDNESDAY • MARCH 22

13 : 00 - 17 : 00

Room 2 (Hall B5-1)

WS2 Health Research Ethics**Target Audience**

Medical students, researchers, academic staff, members of Ethical Review Boards/Ethics Committees, health practitioners and anyone with an interest in ethics.

Objectives

- 1) To introduce participants to the basic concepts and principles in health research ethics involving human subjects, through interactive case studies, presentations, and discussions
- 2) To familiarize participants with the ethical issues around conducting health research, such as informed consent, study design, standard of care, harm and benefit, privacy and confidentiality, etc, through interactive case studies and group discussions

3) To give participants a brief insight into the broader Bioethics Concepts, International Ethical Guidelines and Declarations, and the structure and functioning of Ethics Committees-and to outline the Union Ethics Advisory Group and its review process for interested participants

Summary

This interactive workshop on "The Ethics of Health Research" will combine case studies, brief presentations, and group discussions, on the ethics of medical/tuberculosis research with human subjects, and will introduce participants to the basic ethical principles, concepts and issues involved in health research. Its duration is about four hours, with or without a break. It typically has 30-35 participants, though the number can be less or more. Participant profiles range from medical students and researchers to academic staff, members of Ethical Review Boards, health practitioners, and those with an interest in ethics. It will be conducted by two members of The Union's Ethics Advisory Group (EAG), who will facilitate the case studies, moderate discussions, make presentations, and answer any questions. Participants are also encouraged to engage with the ethical principles discussed in the workshop, and with the EAG if needed, in their future work.

Coordinator: Justin Denholm
(Victorian Tuberculosis Program, Australia; Apurva Narain,
The Union Ethics Advisory Group, India)

Lecturers: Apurva Narain
(The Union Ethics Advisory Group, India)
Razia Fatima
(The Union Ethics Advisory Group, Pakistan)

Workshop 3 (Joint Program with AuTuMN/modelling TB transmission)

WEDNESDAY · MARCH 22

13 : 00 - 17 : 00

Room 3 (G502)

WS3 Using epidemic and economic models for tuberculosis for national decision support

Target Audience

public health policy makers including National TB program members, epidemiologists, modellers, health economists

Objectives

- 1) Understand structure mathematical models of tuberculosis transmission
- 2) Understand the implementation of models to provide policy-relevant outputs
- 3) Understand the role of health economics and optimization tools to TB modelling
- 4) Provide end user feedback and critique to modellers
- 5) Develop an understanding of key drivers of TB transmission dynamics

Summary

National tuberculosis programs and funders have ambitious goals to eliminate tuberculosis and wish to extend the reach and impact of control activity, while keeping to existing budgets. Simulation and modelling tools can assist in this process, by estimating both impact on the epidemic of a number of control programs and estimating the impact on the health budget. A number of coun-

tries and policy makers have worked with modellers (both disease transmission models and health economic models) to understand their tuberculosis epidemic and ways of controlling it; simulating different scenarios including improved contact tracing, targeting hard to reach populations, treating latent tuberculosis (or expanding this treatment) and improving TB programs to reduce default and failure rates.

This forum is an opportunity for interested policy makers and program executives to see some examples of how modelling and simulation has been applied.

Coordinator: Emma McBryde
(James Cook University, Australia)

Emma S McBryde
(James Cook University, Australia)

Shufang Zhang
(Global Fund, Switzerland)

James, M Trauer
(Monash University, Australia)

Frank Underwood
(Fiji NTP, Fiji)

Romain Ragonnet
(University of Melbourne, Australia)

Tan N Doan
(University of Melbourne, Australia)

Qi Cui
(NTP, The Philippines)

Justin T Denholm
(Victorian Tuberculosis Control Program and Doherty Institute, Australia)

Workshop 4 (Médecins Sans Frontières Workshop)

WEDNESDAY · MARCH 22

13 : 00 - 15 : 00

Room 4 (G510)

WS4 Overcoming challenges of access to TB care in MSF: from the use of drone technology to advocacy

Target Audience

Health workers, NTP managers, medical students, advocates, policy makers, corporate sector

Objectives

- 1) Understand challenges and solutions to access to TB care in Papua New Guinea
- 2) Understand the potential of drone technology in the delivery of medical care

3) Understand the current barriers to access to new treatment and potential solutions

Summary

Session 1: Overcoming challenges of tuberculosis diagnostics and follow up in rural Papua New Guinea

1. Use of drone technology for tuberculosis sample transport (*OCP Tokyo Cell*)
2. Reasons for LTFU in Gulf Province, PNG (*Head of Mission, PNG*)
3. DRTB-the public health emergency of PNG (*PNG NTP*)

Session 2: New treatments, shorter regimens: MSF experience and potential solutions for better outcomes for drug-resistant tuberculosis

1. New treatments, shorter regimens and barriers to access
 - Status of access to BDQ and DLM
 - Access barriers (price, registration, patents, suppliers)
 - What needs to happen to increase access
2. Role of advocacy for access to medicines in Japan: perspective of Japanese civil society
3. The 3P Project for a one month or less treatment for TB
 - Introduction to the 3P project for a one month or less treatment for TB that works for everyone, everywhere.

Coordinators: Clara van Gulik

(Humanitarian Affairs Representative, Medecins San Frontieres, Japan)

Brian Davies

(Head of East Asia, Access Campaign, Medecins Sans Frontieres, Japan)

Lecturers:

1. Bringing TB care closer to the community: decentralization strategy in PNG

Clara van Gulik

(Humanitarian Affairs Representative, Medecins San Frontieres, Japan)

2. DRTB: a public health emergency

Jakob Kisomb

(National TB Program, Department of Health, Papua New Guinea)

3. Unmanned aerial vehicles for TB sample transport in rural Papua New Guinea

Eric Pujo

(Operations Cell Manager, MSF Operations, Japan)

4. New treatments, shorter regimens and barriers to access

Shailly Gupta

(Access Campaign, MSF International, India)

5. Role of advocacy for access to medicines in Japan: perspective of Japanese civil society

Masaki Inaba

(Africa Japan Forum, Japan)

6. The 3P Project for a one month or less treatment for TB

Brian Davies

(Access Campaign, MSF International, Japan)

**Joint Program
Public Open Lecture**

Joint Program with National Federation of Community Women's Organization For TB Control

THURSDAY · MARCH 23

13 : 40 - 15 : 10

Room 2 (Hall B5-1)

**JP Asia Pacific's women's group activity: Role of
NGO in TB control**

Objectives

- 1) Appreciate the importance and roles of the community in advancing TB control
- 2) Contribute to effective collaboration between the public and civil society sectors
- 3) Form coalitions and partnerships among organizations across Asia Pacific Regions

Summary

Women's associations play critical roles in TB control and care in Japan. As early as 1945, many women's organisations were formed across Japan to respond to the TB crisis. The emergence of such community-based movement further lead to the formulation of a nationwide coalition network of women's associations to fight against TB (National Federation of Community Women's Organization For TB Control). The network council has been playing critical roles in TB prevention and care by mobilising people and making a bridge between communities and local health administrations.

By reviewing activities of women's associations in Japan, as well as learning from a more recent example from Thailand, the symposium will identify the roles and contributions of women's associations in TB control as part of a whole-of-societal approach to ending TB in the Asia Pacific.

Chairs: Nobuyuki Nishikiori

(WHO Regional Office for the Western Pacific (WHO WPRO), Philippines)
Noriko Kobayashi
(Japan Anti-TB Association (JATA), Japan)

1. The roles and activities of women's anti-TB associations in Japan

Sachiko Kinoshita
(Secretary General, National Federation of Community Women's Organization For TB Control, Japan)

2. The organizational development and support activities of women's anti-TB associations

Kazumi Maruse
(President, Tottori Health Service Association, Japan)

3. Report of the Asian National Stop TB Partnership Forum

Ayako Miyamoto
(Secretariat, Stop TB Partnership Japan, Japan)

4. Engaging women volunteers for the prevention and care of TB/HIV in Chiang Rai, Thailand

Sarnwai Luangjina
(TB/HIV Research Foundation, Thailand)

Public Open Lecture 1

SATURDAY · MARCH 25

13 : 30 - 15 : 00

Room 1 (Hall C)

**POL1 Union's program on patients' smoking cessation
—How to make TB patients and their family free
from tobacco—**

Target Audience

Researchers, clinicians, administrators, policy-makers and other key stakeholders working in tuberculosis and tobacco control

Objectives

- 1) understand the importance of tobacco cessation of TB patients
- 2) master the Union's ABC of tobacco cessation

Summary

Smoking increases the risk of TB infection and TB diseases, delay in TB diagnosis, worse treatment outcomes and relapse. Therefore helping TB patients to quit or never become a smoker will help to control tuberculosis in the community. The Union ABC (A= Ask, B= Brief advice, C= Cessation support) approach presents an intervention that TB services can use in their routine activities to help patients quit smoking and make their homes smoke-free. The approach keeps smoking cessation simple, short and systematic; it can be delivered within as little as 5-10 minutes by any health care worker, and it does not require specialized staff, clinics or medicine.

Chairs: Tara Singh Bam

(International Union Against Tuberculosis and Lung Disease, Singapore)
Akihiro Ohkado
(Research Institute of Tuberculosis (RIT), Japan Anti-Tuberculosis Association (JATA), Japan)

1. Change of smoking status after the start of TB chemotherapy - lessons learnt from Japan

Yuko Yamauchi
(Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Japan)

2. Results of ABC: smoking cessation into regular DOTS program for TB patients- Does it work?

Tara Singh Bam
(International Union Against Tuberculosis and Lung Disease, Singapore)

3. Long-term outcome of smoking cessation intervention for TB patients in China

Lin Yan

(International Union Against Tuberculosis and Lung Disease, China)

4. How effective is the systemic integration of smoking cessation into tuberculosis control programme in creating smoke-free environments? - A pilot study in urban setting in the Philippines

Anna Marie Celina G. Garfin

(Disease Prevention and Control Bureau Department of Health, Philippines)

2. Perspectives to Legislation on tobacco control in Japan

Shigefumi Matsuzawa

(MP, House of Councillors, Japan)

3. Tobacco ban on passive smoking: Korea's case

Yumi Oh

(National Tobacco Control Center at the Korea Health Promotion Foundation, Korea)

4. Moving forward together: Learning from tobacco control success stories in the Western Pacific Region

Mina Kashiwabara

(WHO Regional Office for the Western Pacific, Philippines)

Public Open Lecture 2

SATURDAY · MARCH 25

15 : 20 - 16 : 50

Room 1 (Hall C)

POL2 For Tobacco-free Tokyo Olympic-Paralympic Game 2020
—How to realize the complete ban on passive smoking in public spaces—

Target Audience

Everybody concerned with tobacco and health; both professional and non-professional

Objectives

- 1) understand the current situation of legal ban on tobacco in public space in Asia-Pacific
- 2) understand the problems of intervention of tobacco industry, with Japan's case an example
- 3) formulate the concrete perspectives to tobacco free Asia-Pacific

Summary

Tokyo Olympic-Paralympic Games 2020 poses a unique opportunity for the Japanese government to pursue a long-awaited national smoking ban. However, its realization seems to be hampered in various ways, which is a typical feature of difficulty of the tobacco control in general as seen elsewhere in the world. The experiences in Korea will be shown in comparison with the Japan's case. Also, discussions will be made from a wider perspective of fighting for tobacco control in the Western Pacific.

Chairs: Mina Kashiwabara

(WHO Regional Office for the Western Pacific, Philippines)

Reiko Saito

(Jumonji University, Japan)

1. Japan's effort toward legislation for tobacco ban in public spaces

Masakazu Nakamura

(Health Promotion Research Center, Japan Association for Development of Community Medicine, Japan)

**Luncheon Seminar
Evening Symposium**

Luncheon Seminar 1

THURSDAY · MARCH 23

12 : 30 - 13 : 20

Room 2 (Hall B5-1)

LS1 BCG vaccination in Japan; the past, the present and the future

Summary

In Japan, universal BCG vaccination program was started in 1948 as a part of national immunization program, and this program has been continued until now, modifying its method of vaccine delivery, recommended number of immunization and recommended schedule. The BCG vaccination program has made a significant contribution to the excellent control of TB disease in Japanese children.

In this seminar, I would like to review its history, its contribution to pediatric TB disease control in Japan, and some issues in the present and the future vaccine program.

The Past; The administration route of BCG vaccine was changed from intradermally to percutaneously, using a multipuncture injection device, in 1967. Since then, multiple vaccination policy, with initial vaccination until 4 y.o. and booster vaccinations at 7 y.o. and 13y.o., to children with negative TST reaction, had been adopted. The booster vaccination policy was ceased in 2003, and the direct BCG vaccination (=BCG vaccination without confirmation of negative TST reaction) policy in early infantile period was adopted in 2005.

The BCG vaccination program has contributed greatly to the excellent control of TB disease in Japanese children and the incidence rate of childhood TB disease in Japan (0.3/100,000) is now the lowest in the world, though the TB incidence rate of all ages has not reached "low prevalent" level.

The Present; At present, universal BCG vaccination in infantile period is recommended by the government and the BCG vaccine coverage rate at 1 y.o. remained stable around 97%. Since the direct vaccination in early infantile period (between 3 mo. and 6 mo. after birth) has started in 2005, we have encountered two big issues about BCG vaccination, one is the detection of babies with TB infection/disease by Koch's phenomenon after BCG vaccination, and the other is the increasing trend of the vaccine adverse events, especially BCG osteitis/osteomyelitis and tuberculoid skin lesions.

Koch's phenomenon after BCG vaccination, the strong local reaction at the injected site appearing 1~3 days after vaccination, are found in babies who have already infected with TB at vaccination. Through detecting this phenomenon after vaccination, about 100 babies are diagnosed with TB infection and 1~2 babies are diagnosed with TB disease every year.

Relationship between the increasing trend of BCG osteitis/osteomyelitis since 2005 and the change of the recommended vaccination schedule in 2005 (from "3 mo.~4 y.o." to "3 mo.~6 mo.") were suspected, and the recommended vaccination schedule has changed again in 2013. It is recommended to give BCG vaccination to babies between 5mo. and 8mo. now. We should monitor closely the trend of the adverse events after the change of the recommended vaccination schedule.

The future; It is expected that the TB incidence rate of Japan will go down below 10/100,000 in these 5 years. Some countries have already ceased universal BCG vaccination program and switched to selective vaccination to the high-risk children group for TB infection, when they have changed to "low TB prevalent" countries. Now, we should start to prepare to discuss the future di-

rection of BCG vaccination program in Japan.

Chair: Ben J Marais

(The Children's Hospital at Westmead and the Marie Bashir Institute for Infectious Diseases, University of Sydney, Australia)

Speaker: Osamu Tokunaga

(Department of Pediatrics, National Minami Kyoto Hospital, Japan)

*Co Sponsored by
Japan BCG Laboratory*

Luncheon Seminar 2 and Evening Symposium

Summary

SANOPI and QIAGEN are pleased to invite you to a two-part lunch and evening symposium to be held on the 23rd March 2017 and 24th March 2017. The symposium will address the Three T'S of TB Prevention: Test, Treat and Track. A panel of experts will present and discuss practical steps required to implement the 3T's (Test, Treat and Track) of LTBI management in the Asia Pacific region and will be exploring pragmatic ways of ENDING TB.

Luncheon Seminar 2

THURSDAY · MARCH 23

12 : 30 - 13 : 20

Room 3 (G502)

LS2 TB Prevention with 3T's: Test, Treat, Track (Part 1)

Chairs: Justin Denholm

(University of Melbourne and Peter Doherty Institute for Infection and Immunity, Australia)

Masahiro Narita

(Tuberculosis Control Program, Public Health for Seattle & King County, USA)

Speakers:

1. The TB taboo

Lee Reichman

(The New Jersey Medical School Global Tuberculosis Institute, USA)

2. QuantiFERON® Plus the most accurate test for TB infection.

Masae Kawamura

(Medical and Scientific Affairs, QIAGEN, USA)

*Co Sponsored by
QIAGEN / SANOFI*

Evening Symposium

FRIDAY • MARCH 24 17 : 00 - 18 : 30
Room 2 (Hall B5-1)

ES TB Prevention with 3T's: Test, Treat, Track (Part 2)

Chairs: Lee Reichman
(The New Jersey Medical School Global Tuberculosis Institute, USA)
Masae Kawamura
(Medical and Scientific Affairs, QIAGEN, USA)

Speakers:

- 1. To screen or not to screen**
Christopher Devasahayan Jesudas
(Christian Medical College (CMC) Vellore, India)
- 2. TB prevention strategies in high burden countries**
Aamir Khan
(Interactive Research & Development (IRD), Pakistan)
- 3. Is it time for universal treatment of contacts?**
Jann-Yuan Wang
(National Taiwan University, Taiwan)

Panel Discussion: Panel discussion: Back to the Patient

Moderator: Masae Kawamura
(Medical and Scientific Affairs, QIAGEN, USA)

Panelist: Lee Reichman
(New Jersey Medical School Global Tuberculosis Institute, USA)
Christopher Devasahayan Jesudas
(Christian Medical College (CMC) Vellore, India)
Jann-Yuan Wang
(National Taiwan University, Taiwan)
Aamir Khan
(Interactive Research & Development (IRD), Pakistan)

Co Sponsored by
SANOFI / QIAGEN

Luncheon Seminar 3

THURSDAY • MARCH 23 12 : 30 - 13 : 20
Room 4 (G510)

LS3 How best to manage EGFR-TKI resistance?

Summary

This seminar highlights treatment strategy for EGFR tyrosine kinase inhibitors (TKIs) resistance. Osimertinib is an oral, irreversible EGFR-TKI that is selective for both EGFR and T790M resistance mutations with activity in the central nervous system (CNS). AURA3 (phase 3 trial) demonstrated osimertinib was more effective than combination platinum-based chemotherapy in patients with T790M-positive non-small-cell lung cancer (including those with CNS metastases) after disease progression with first-line EGFR-TKI therapy. Author of AURA3 in NEJM, Professor Mok Shu Kam, Tony, will lecture with the latest data and interpretation in clinical setting under the title "How best to manage EGFR-TKI resistance".

Chair: Makoto Maemondo
(Respiratory Oncology, Miyagi Cancer Center, Japan)

Speaker: Mok Shu Kam Tony
(Department of Clinical Oncology, The Chinese University of Hong Kong, Hong Kong)

Co Sponsored by
AstraZeneca K.K.

Luncheon Seminar 4

FRIDAY • MARCH 24 11 : 40 - 12 : 30
Room 2 (Hall B5-1)

LS4 Current topics on pharmacotherapy in COPD

Summary

Chronic Obstructive Pulmonary Disease (COPD) is a common, preventable and treatable disease that is characterized by persistent respiratory symptoms and airflow limitation that is due to airway and/or alveolar abnormalities usually caused by significant exposure to noxious particles or gases (GOLD 2017). Long-acting bronchodilators such as a long-acting muscarinic antagonist (LAMA) and a long-acting β_2 -agonist (LABA) play a central role in the maintenance treatment of COPD to achieve the goal of effective COPD management; improvement of breathlessness, exercise tolerance, daily activities and overall health status, and reduction of future risks such as exacerbation, disease progression and mortality. GOLD strategy classified COPD patients into GOLD groups into A, B, C, and D based on individual risks such as symptoms and exacerbation history and recommend initial treatment for patients based on this classification. In this symposium, we will introduce the recent data on initial pharmacotherapy for management of COPD and discuss the future direction of it.

Chair: Shoji Kudoh
(Japan Anti-Tuberculosis Association, Japan)

Speaker: Shu Hashimoto
(Division of Respiratory Medicine, Department of Internal Medicine, Nihon University School of Medicine, Japan)

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Luncheon Seminar 5

FRIDAY • MARCH 24

11 : 40 - 12 : 30

Room 3 (G502)

LS5 Progress and perspective in treatment of lung cancer**Summary**

Lung cancer is the leading cause of cancer related death all over the world. Chemotherapy remains standard treatment for most metastatic lung cancer patients. Recent years, there was two crucial discoveries in treatment of lung cancer. One is immune checkpoint inhibitor (ICI) that modulate mechanisms of tumor to avoid host immune system, the other is a third-generation EGFR tyrosine kinase inhibitor (EGFR-TKI) to overcome resistance due to resistant T790M mutation. Subgroup analyses of phase III study of ICI showed ICI didn't have enough efficiency on EGFR-mutated lung cancer. Now, Indication of ICI has few overlap with of EGFR-TKI. In this lecture, I will present new paradigm of treatment of lung cancer.

Chair: Toshihiro Nukiwa
(Japan Anti-Tuberculosis Association, Japan)

Speaker: Makoto Maemondo
(Dept. of Respiratory Medicine Miyagi Cancer Center, Japan)

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CHUGAI PHARMACEUTICAL CO., LTD.

Luncheon Seminar 6

FRIDAY • MARCH 24

11 : 40 - 12 : 30

Room 4 (G510)

LS6 Clinical Advances in Idiopathic Pulmonary Fibrosis**Summary**

Pulmonary fibrosis (PF) develops by various factors. Disappearance of the epithelium accompanying inflammation eventually induces fibrosis. The cause of inflammation varies, but the loss of epithelium without inflammation leads to idiopathic pulmonary fibrosis (IPF). In recent years, due to the development of antifibrotic agents, IPF has become a treatable disease. How to guide accurate diagnosis of IPF based on international guidelines is an important issue in the clinical practice. It is an only method that can lead a patient with progressive PF to survival prolongation by making a reasonable diagnosis as soon as possible. In this lecture, I will introduce the latest information and treatment strategies of the pathogenesis/pathology of IPF.

Chair: Yukihiko Sugiyama
(Jichi Medical University and Nerima Hikarigaoka Hospital, Japan)

Speaker: Arata Azuma

(Department of Pulmonary Medicine and Oncology, Graduate School of Medicine, Nippon Medical School, Japan)

Co Sponsored by
SHIONOGI & CO., LTD.

Luncheon Seminar 7

SATURDAY • MARCH 25

11 : 45 - 12 : 35

Room 2 (Hall B5-1)

LS7 Sustainable End TB strategy with application of new technology in Thailand**Summary**

Tuberculosis is one of the sustainable development goals that the United Nation recommended all countries. In End TB strategy, implementation of new technology is the target that all nations should achieve to End TB in their countries. Thailand has been an upper middle income country since 2014 and the country aims to develop new technology to sustain the EndTB with universal health coverage. New technology applicable in Thailand is discussed and several technologies are surprisingly affordable, especially the genotyping and sequencing of pathogen. With rapid implementation cycle by the policy innovation, End of tuberculosis is achievable.

Chair: Hideki Yanai
(Department of Clinical Laboratory, Fukujuji Hospital, Japan Antei-Tuberculosis Association, Japan)

Speaker: Surakameth Mahasirimongkol
(Medical Genetics Center, Medical Life Sciences Institute, Ministry of Public Health, Thailand)

Co Sponsored by
NIPRO CORPORATION

Luncheon Seminar 8

SATURDAY • MARCH 25

11 : 45 - 12 : 35

Room 4 (G510)

LS8 An account of clinical experience in treating MDR-TB patients in Korea with Delyba, a new anti-tuberculosis drug**Summary**

Prof. Jeong Ha Mok of Pusan National University Hospital has treated more than ten MDR-TB patients with Delyba in Korea since its launch in 2015. He will present an account of his actual field experience in treating those patients and a summary of the safety and efficacy in 27 cases treated in the Busan area. Prior to Prof. Mok's presentation, Dr. Lawrence Geiter of Otsuka Pharmaceutical Development and Commercialization will first introduce

Delyba citing clinical trial data.

Chair: Won-Jung Koh
(Samsung Medical Center, Korea)

Speaker: Jeong Ha Mok
(Pusan National University Hospital, Korea)

Co Sponsored by
Otsuka Pharmaceutical Co., Ltd.

Oral Session

Oral 1

THURSDAY · MARCH 23

9:35 - 10:25

Room 4 (G510)

OS1 TB Biomarkers and Diagnosis

Chair: Nusara Satproedprai
(Ministry of Public Health, Thailand)

- OS1-1 Comparative genetic variation of DosR-related genes among *Mycobacterium tuberculosis* lineages**
Ponpen Tantivitayakul
(Department of Oral Microbiology, Faculty of Dentistry, Mahidol University, Bangkok, Thailand)
- OS1-2 GWASs functional variants with tuberculosis susceptibility in the Han Chinese population**
Cheng Chen
(Center for Disease Control and Prevention of Jiangsu Province)
- OS1-3 Comparisons of *Mycobacterium tuberculosis* drug susceptibility based on the whole genome sequences with phenotypic drug resistance in Thailand**
Therdsak Prammananan
(Tuberculosis Research Laboratory, National Center for Genetic Engineering and Biotechnology, NSTDA, Ministry of Science and Technology, Pathun Thani, Thailand)
- OS1-4 Pilot study of development of EQA program for molecular technique of *Mycobacterium tuberculosis* in Thailand**
Somsak Rienthong
(National TB Reference Laboratory, Bureau of Tuberculosis, Thailand)
- OS1-5 Household catastrophic expenditure for tuberculosis care and its determinants after the implementation of universal health coverage in Indonesia**
Ahmad Fuady
(Department of Public Health, Erasmus MC, University Medical Center Rotterdam, The Netherlands/Department of Community Medicine, Universitas Indonesia, Indonesia)

Oral 2

THURSDAY · MARCH 23

10:25 - 11:15

Room 4 (G510)

OS2 Bacteriological Diagnosis of TB

Chair: Kai Man Kam
(The Chinese University of Hong Kong, Hong Kong)

- OS2-1 Remote Smearing Station/Smearers at GIDA (Geographically Isolated Disadvantage Areas) and far flung barangays)**
Lenny Joy J. Rivera
(Department of Health-Region IX, Zamboanga Peninsula, Philippines)
- OS2-2 Specific differentiation of *Mycobacterium bovis* from *Mycobacterium tuberculosis* of the *Mycobacterium tuberculosis* complex by molecular methods**
Niramom Praphanmune
(Department of Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok 10700, Thailand)
- OS2-3 Comparative performance of “Loopamp™ MTBC Detection” kit for rapid detection of complex *Mycobacterium tuberculosis*: a retrospective study**
Sokleaph Cheng
(Institut Pasteur du Cambodge)
- OS2-4 Clinical efficiency of TB-LAMP for the diagnosis of tuberculosis**
Oyuntuya Tumenbayar
(National Centre For Communicable Diseases)
- OS2-5 Comparative Performance Study of Loopamp™ MTBC Detection Kit for Rapid Detection of *Mycobacterium tuberculosis* Complex in Cameroon**
Valerie Flore DONKENG DONFACK
(Tuberculosis National Reference Laboratory, Centre Pasteur of Cameroon, Yaoundé, Cameroon)

Oral 3

THURSDAY · MARCH 23

15:20 - 16:10

Room 3 (G502)

OS3 MDR

Chair: Wing Wai Yew
(The Chinese University of Hong Kong, Hong Kong)

- OS3-1 Treatment outcomes in patients with Multidrug resistant TB and other Drug Resistant TB in Cambodia: an 8-year experience**
SAM SOPHAN
(Cambodian Health Committee/Family Health International 360, Cambodia/National Tuberculosis Control Program (CENAT), Phnom Penh, Cambodia/Johns Hopkins School of Medicine/Immune Disease Institute and Program in Cellular and Molecular Medicine at Children's Hospital Boston, Harvard Medical School, Boston, USA)

OS3-2 Primary Drug Resistance is the Major Cause of Resistance Among Treated Tuberculosis Patients in Shanghai, China

Chijioke A. Nsofor
(Key Laboratory of Medical Molecular Virology of Ministries of Education and Health, Institutes of Biomedical Sciences and Institute of Medical Microbiology, Shanghai Medical College, Fudan University, Shanghai, China.)

OS3-3 Multidrug-Resistant Tuberculosis in Singapore

Hoi Wah She
(Singapore Tuberculosis Control Unit)

OS3-4 pncA mutations are associated with slower sputum conversion during the WHO standard treatment of multidrug-resistant tuberculosis

Yi Hu
(School of Public Health, Fudan University/Key Laboratory of Public Health Safety (Fudan University), Ministry of Education, China)

OS3-5 Body Mass Index on Six-month Sputum Culture Conversion in Multi-Drug Resistant Tuberculosis Patients

Wen-Ta Yang
(Taichung Hospital, Ministry of Health and Welfare, Taiwan)

Oral 4

THURSDAY · MARCH 23 15:20 - 16:20

Room 4 (G510)

OS4 Paediatric

Chair: Kim Dong Soo
(Yonsei University College of Medicine, Severance Children's Hospital, Korea)

OS4-1 Documenting prevalence of childhood TB in a village community in Sindh—Policy implications for TB programs

Afshan Khurshid
(Provincial TB Control Program Sindh)

OS4-2 Enhanced pulmonary TB case detection among children at a rural chest diseases center in Pakistan

Amyr A Malik
(The Indus Hospital/Interactive Research and Development/ Emory University Rollins School of Public Health)

OS4-3 Vitamin D in TB Prevention in School Age Children in Mongolia

Ganmaa Davaasambuu
(Assistant Professor at Harvard School of Public Health)

OS4-4 Hospitalized Pediatric Antituberculosis Drug Induced Hepatotoxicity: Experience of an Indonesian Referral Hospital

Heda M Nataprawira
(Departement of Child Health Faculty of Medicine Universitas Padjadjaran, Dr. Hasan Sadikin General Hospital)

OS4-5 IPT: Preliminary results from a rural setting in Pakistan

Sara A Siddiqui
(The Indus Hospital)

OS4-6 Characteristics and Surgical Outcomes of Tuberculous Meningitis and of Tuberculous Spondylitis in Pediatric Patients at Dr. Hasan Sadikin Hospital, Bandung, Indonesia

Ahmad Faried
(Department of Neurosurgery, Faculty of Medicine, UNPAD-RSHS, Bandung)

Oral 5

FRIDAY · MARCH 24

15:15 - 15:55

Room 4 (G510)

OS5 Diagnosis of MDR TB

Chair: Chang-Ki Kim
(Guri hospital, Hanyang University, Korea)

OS5-1 Significance of Xpert® MTB/RIF for the detection of Mycobacterium Tuberculosis and Rifampicin resistant TB in Resource limited setting of Enugu State, Nigeria

Ali Kwizera
(Center for clinical care and clinical research Nigeria)

OS5-2 Comparison of two drug susceptibility testing methods of fluoroquinolones for cross resistance analysis in vitro

Zhenling Cui
(Shanghai Key Laboratory of Tuberculosis, Tuberculosis Clinical Research Center, Shanghai Pulmonary Hospital Affiliated to Tongji University)

OS5-3 Evaluation of the new improved version of GenoType MTBDRsl line probe assay to detect extensively drug-resistant tuberculosis (XDR-TB), a multi-center study in China

Zhiqi Yang
(Department of Epidemiology, School of Public Health, Fudan University, Shanghai 200032, China and Key Laboratory of Public Health Safety (Fudan University), Ministry of Education, China)

- OS5-4 Detection of drug resistance isolates from false-negative vials of MGIT-960 instrument**
ROHINI SHARMA
(Department of Medicine, All India Institute of Medical Sciences, New Delhi, India)

Oral 6

FRIDAY • MARCH 24 15:55 - 16:45
Room 4 (G510)

OS6 TB Program 1

Chair: Kosuke Okada
(RIT the Research Institute of Tuberculosis, Japan Anti-tuberculosis Association, Japan)

- OS6-1 Active case-finding for tuberculosis by mobile teams in Myanmar: yield and treatment outcomes**
OHNMAR MYINT
(National Tuberculosis Programme, Myanmar/Department of Medical Research, Yangon Myanmar/Médecins sans Frontières, Operational Research Unit, Luxembourg/National Tuberculosis Programme, Vietnam/Centre for Operational Research, International Union Against Tuberculosis and Lung Disease, Paris, France/TB Unit, WHO Country Office for Myanmar)

OS6-2 Withdrawn

- OS6-3 The acceptability of chemical prophylaxis for latent tuberculosis infection among student contacts of tuberculosis in Shanghai, China**
Yang Li
(School of Public Health, Fudan University, Shanghai, China/Key Laboratory of Public Health Safety (Ministry of Education), Shanghai, China)

- OS6-4 Finding of the first national TB prevalence survey in Mongolia, 2014-2015**
Tugsdelger Sovd
(MD, MPH, Director of Monitoring, Evaluation and Internal Audit Department at MoH)

- OS6-5 The Utility of Chest Radiology from the National Tuberculosis Prevalence Survey in Mongolia, Phase 1**
Yasunori Ichimura
(Chiba University Hospital)

Oral 7

SATURDAY • MARCH 25 10:00 - 10:50
Room 4 (G510)

OS7 TB Program 2

Chair: Norio Yamada
(RIT the Research Institute of Tuberculosis, Japan Anti-tuberculosis Association, Japan)

- OS7-1 DETERMINANTS OF CLIENTS' ADHERENCE TO PUBLIC—PRIVATE MIX DOTS (PPMD) TREATMENT**
JOHN CARLO L DIVINA
(TALISAY DISTRICT HOSPITAL/CEBU NORMAL UNIVERSITY/CEBU DOCTORS' UNIVERSITY HONOR SOCIETY OF NURSING)

- OS7-2 Trend of Tuberculosis incidence since 1987, Chiang Rai, Thailand: Impact of HIV epidemic and medico-social determinants**
Supalert NEDSUWAN
(Chiang Rai Hospital, Ministry of Public Health)

- OS7-3 TRUNCATE-TB: design and implementation of a strategic clinical trial in Asia**
Padmasayee Papineni
(National University of Singapore)

- OS7-4 Assessing the impact of contact tracing coupled with preventive therapy of tuberculosis in Taiwan: an empirical individual-based modelling study**
Chu-Chang Ku
(School of Health & Related Research, University of Sheffield/Institute of Epidemiology and Preventive Medicine, National Taiwan University)

- OS7-5 Medical expenditure and financial burden for pulmonary tuberculosis patients under a 'free tuberculosis treatment policy': a case study from Shanghai, China**
WEI WANG
(FUDAN UNIVERSITY, SHANGHAI, CHINA)

Oral 8

SATURDAY • MARCH 25 10:50 - 11:30
Room 4 (G510)

OS8 Risk Factors for TB

Chair: Akihiro Ohkado
(RIT the Research Institute of Tuberculosis, Japan Anti-tuberculosis Association, Japan)

OS8-1 J-shaped association between alcohol drinking and incidence of active tuberculosis in a prospective cohort of middle-aged and elderly adults

Avril, Z Soh

(Saw Swee Hock School of Public Health, National University of Singapore)

OS8-2 A matched case-control study to identify risk determinants of tuberculosis in Bangladesh

Malabika Sarkar

(James P Grant School of Public Health, BRAC University)

OS8-3 NAT2 rapid acetylator showed significant association with mortality in HIV positive tuberculosis patients

Licht Toyo-oka

(Department of Human Genetics, Graduate School of Medicine, The University of Tokyo)

OS8-4 Depicting recent transmissions of multi-drug resistant tuberculosis in Shanghai, China: a population-based genotypic and spatial study

Xiaolin Wei

(Dalla Lana School of Public Health, University of Toronto)

Poster Session

Poster 1

FRIDAY · MARCH 24

12:45 - 13:30

Poster (Hall B5-2)

TB in Special Population

- PS1 TB DOTS facility with isolation ward/cell, laboratory for regular TB/MDR TB at San Ramon Penal colony/Prison**
Lenny Joy J. Rivera
(Department of Health-Region IX, Zamboanga Peninsula, Philippines)
- PS2 Identifying Strategic Framework of Tuberculosis control and prevention in Older People: A Scoping Review**
Jun Li
(JC School of Public Health and Primary Care, Chinese University of Hong Kong)
- PS3 Tuberculosis screening in an elderly residential facility in a low-incidence setting**
Nompilo Moyo
(Victorian Tuberculosis Program, Melbourne Health, Melbourne, Victoria, Australia)
- PS4 The Impact of Systematic Screening and Rapid Diagnosis for TB in Jails and Prison: The DetectTB Project Experience in the Philippines**
WOO JIN LEW
(World Health Organization/Mongolia)
- PS5 SCREENING and RISK ASSESSMENT of TUBERCULOSIS AMONG IMMIGRANT WORKERS in SABAH, MALAYSIA**
Zahiruddin Wan Mohammad
(School of Medical Sciences, Universiti Sains Malaysia, Malaysia)
- PS6 Prevalence of Asymptomatic Pulmonary Tuberculosis with Positive GeneXpert Test and Association of the Risk Factors in All Male Inmates of Cebu City Jail, Philippines**
Jken, P Basilla
(Department of Family and Community Medicine, Vicente Sotto Memorial Medical Center)
- PS7 COMMUNITY TB CARE AND CONTROL AMONG ILLEGAL MINERS**
Samuel Morkli Akoto
(KICK TB GHANA)

PS8 Paradoxical reactions and immune reconstitution inflammatory syndrome during anti-tuberculosis therapy with continued administration of infliximab

Asuka Jingu

(Division of Allergy and Respiratory Medicine, Gunma University)

PS9 Tuberculosis consultation services for foreign residents in Japan

Azusa Yamaguchi

(Japan Anti Tuberculosis Association (JATA), Tuberculosis Consultation Service Section for foreign residents)

PS10 Role of social adaptation in management of patients with pulmonary tuberculosis

Maria Vinokurova

(State Budget-Funded Institution of the Sakha Republic (Yakutia) Research-and-Practice Center for Tuberculosis)

PS11 Home care for elderly tuberculosis patients in Japan

Tamae Shimamura

(Research institute of tuberculosis, Japan anti-tuberculosis association)

PS12 The impact of private practitioner engagement and verbal screening on child TB notification in an urban and rural setting in Pakistan.

Junaid F Ahmed

(Indus Hospital)

PS13 Factors associated with Tuberculosis infection among children and adolescents in a northern state of Malaysian: a comparative cross-sectional study

Hafizuddin A

(Department of Community Medicine, School of Medical Sciences, Health Campus, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan, Malaysia)

Poster 2

FRIDAY · MARCH 24

12:45 - 13:30

Poster (Hall B5-2)

MDR

PS14 To Study the Effect of Concomitant Administration of Moxifloxacin Anti-tubercular Activity of Isoniazid and Rifampicin in the form of Microspheres

Prashant, Lakshaman Pingale

(GES's Sir Dr. M.S.Gosavi College of Pharmaceutical Education and Research, Nashik)

- PS15 Treatment success rate of re-treatment of previously failed drug resistant tuberculosis patients at The Indus Hospital, Karachi**
Rabab Batool
(The Indus Hospital)
- PS16 Effect of interruption on treatment outcome of drug resistant tuberculosis patients at The Indus Hospital.**
Rabab Batool
(The Indus Hospital)
- PS17 In vitro activity against multidrug-resistant Mycobacterium tuberculosis isolates of rifabutin and rifapentin in combination with pasiniazid and moxifloxacin**
Hua Yang
(Clinic and Research Center of Tuberculosis, Shanghai Key Laboratory of Tuberculosis, Shanghai Pulmonary Hospital, Tongji University School of Medicine)
- PS18 Multi-drug resistance among foreign-born pulmonary tuberculosis patients in Japan, 2007-2015**
Lisa Kawatsu
(Department of Epidemiology and Clinical Research, the Research Institute of Tuberculosis)
- PS19 Success clinical Regimen in treating pre-extensive and extensively drug-resistant Mycobacterium tuberculosis**
Yi-Wen Huang
(Institute of Medicine, Chung Shan Medical University, Taiwan/Pulmonary and Critical Care Unit, Changhua Hospital, Ministry of Health and Welfare, Taiwan)
- PS20 Improved outcome of MDRTB through enhance DOTS-plus Program in Central Taiwan**
Chih-Yun Lin
(Institute of Medicine, Chung Shan Medical University, Taiwan/Pulmonary and Critical Care Unit, Changhua Hospital, Ministry of Health and Welfare, Taiwan)
- PS21 Why are rates of MDR-TB so much higher at re-treatment than in new cases?**
James, M Trauer
(School of Public Health and Preventive Medicine, Monash University/The Victorian Tuberculosis Program at the Peter Doherty Institute)
- PS22 Modelling results give insights into the risk of global epidemic replacement with drug resistant M. tuberculosis strains**
Emma S McBryde
(Australian Institute of Tropical Health and Medicine)
- PS23 Can the current MDR-TB detection strategy detect most MDR-TB patients in China?**
Changming Zhou
(School of Public Health, Fudan University, Shanghai, China/Key Laboratory of Public Health Safety (Ministry of Education), Shanghai, China)
- PS24 Transmission rates to household contacts of multidrug-resistant and drug-susceptible tuberculosis patients: a multicenter, prospective cohort study**
Qiao Liu
(Jiangsu Province Center for Disease Control and Prevention/School of Public Health, Nanjing Medical University)
- PS25 The difference of effectiveness among 3 Newquinolones against multidrug-resistant tuberculosis isolates with various mutations in Gyrase A**
koji sato
(jiaikai amami hospital)
- PS26 The survey of an eight-year epidemic situation on multidrug-resistant tuberculosis from hospital based data in Zunyi, Guizhou Province of China**
Yuqin Li
(Department of Respiratory Medicine, Affiliated Hospital of Zunyi Medical College, Zunyi, Guizhou, 563003, China/Department of Respiratory Medicine, Affiliated Hospital of Zunyi Medical College, Zunyi, Guizhou, 563003, China)
- PS27 Group intervention and psychosocial support enhance daily life quality of patients with MDR-TB**
Jie Ding
(Department of Respiratory Medicine, Affiliated Hospital of Zunyi Medical College, Zunyi, Guizhou, 563003, China/Department of Respiratory Medicine, Affiliated Hospital of Zunyi Medical College, Zunyi, Guizhou, 563003, China)
- PS28 Subclinical and Clinical hypothyroidism among MDR-TB patients treated with prothionamide and/or para-amino salicylic acid**
Shun-Tien Chien
(Chest hospital/Ministry of Health and Welfare Taiwan)
- PS29 Comparison of 1st M. Tuberculosis culture conversion between pre-XDR and XDR patient who get standard regimen and Bedaquiline regimen in Persahabatan hospital, Jakarta 2015-2016**
Fathiyah Isbaniah
(Department Pulmonology and Respiratory Medicine, Faculty of Medicine University of Indonesia, Jakarta, Indonesia)

PS30 Investigation on spoligotyping and phenotypes of drug resistance to four first-line drugs of 251 *Mycobacterium tuberculosis* isolates from Qinghai, China
Zhaofen WANG
(Qinghai University/Qinghai Center for Disease Control and Prevention)

PS31 Accelerate access to new anti TB drugs for MDR & XDR TB treatment in India
Shaibly Gupta
(Médecins Sans Frontières (MSF))

PS32 Genetic profile of the arylamine n-acetyltransferase 2 among multidrug-resistant tuberculosis patients in Persahabatan Hospital, Jakarta
Dwina Kardita
(Department of Pharmacology and Therapeutics Faculty of Medicine University of Indonesia)

PS33 Withdrawn

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TB Program

PS34 Epidemiology of Tuberculosis in Adolescents and Young Adults in the Philippines
Kathryn J Snow
(Centre for International Child Health, University of Melbourne Department of Paediatrics and Murdoch Childrens Research Institute, Royal Children's Hospital)

PS35 FACTORS AFFECTING THE ACCEPTANCE OF DIRECTLY OBSERVED THERAPY (DOTS) OF TUBERCULOSIS IN COMMUNITIES. A CASE OF KAWEMPE COMMUNITY, KAMPALA UGANDA
Abel H Tumusiime
(Mbarara Development Agency/Mbarara Development Agency)

PS36 Withdrawn

PS37 Tuberculosis Direct-Observe Treatment Short Course (TB DOTS) Facility Online Certification System
Lenny Joy J. Rivera
(Department of Health-Region IX, Zamboanga Peninsula, Philippines)

PS38 Assessment on filterability and killing activity of nanomembranes with *Mycobacterium tuberculosis*
Wichanan Wannasrichan
(Department of Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University)

PS39 Tuberculosis in the Balimo region of Papua New Guinea: enhancing clinical diagnoses in a resource-limited setting
Tanya, R Diefenbach-Elstob
(College of Public Health, Medical & Veterinary Sciences, James Cook University/Australian Institute of Tropical Health & Medicine, James Cook University)

PS40 Knowledge and Practices of Clients, Health Care Providers and Local Government Units on Pulmonary Tuberculosis and Tuberculosis—Directly Observed Treatment Short Course
Alma, S. Banua
(Bicol University)

PS41 Perspectives on support for tuberculosis patients by skilled public health nurses and fostering of new nurses
Shigeo Kizoe
(Miyazaki Prefectural Office Health Promotion Division/Miyazaki Prefectural Nursing University/University of Human Environments/University of Human Environments/Miyazaki Prefectural Nursing University/The Research Institute of Tuberculosis/Japan Anti-Tuberculosis Association/Former Uki Health Office)

PS42 Development of the AuTuMN framework to guide decision-making in tuberculosis programs
Tan N Doan
(Department of Medicine, University of Melbourne/Australian Institute of Tropical Health and Medicine, James Cook University)

PS43 Reinvestigating TB latency to better inform TB control
Romain Ragonnet
(University of Melbourne, Department of Medicine, Melbourne, Australia/Burnet Institute, Melbourne, Australia)

PS44 Treatment outcomes in TB patients detected through active case finding strategies in rural Sindh-Pakistan
Maria R Jaswal
(The Indus Hospital)

PS45 Contribution of community-based Tuberculosis care by international non-governmental organizations in Myanmar 2013-2014
KYAW THU SOE
(Department of Medical Research (Pyin Oo Lwin Branch))

PS46 Tuberculosis mortality rates and trends in Bangladesh
Fahmida Homayra
(James P Grant School of Public Health, BRAC University)

PS47 **The impact of the issue of the state of emergency in tuberculosis epidemic by the minister of the health on epidemiology of TB, Japan, 1992-2005**

Masaki Ota
(Research Institute of Tuberculosis)

PS48 **Prevalence of tuberculosis suspects and their healthcare-seeking behavior in Mongolia**

Tsolmon Boldoo
(National Center for Communicable Diseases)

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Risk Factors for TB

PS49 **Bone marrow mesenchymal stem cells kill mycobacteria by inducing the expression of cathelicidin.**

Sumanta Kumar Naik
(KIIT University)

PS50 **A Case Control Study on Environmental and Host related Risk factors of Tuberculosis in Eastern Terai Region**

Puspanjali Adhikari
(Community Health Sciences, Patan Academy of Health Sciences/School of Public Health and Community Medicine, B.P.K.I.H.S, Dharan, Nepal/Department of Microbiology and Infectious Diseases, B.P.K.I.H.S, Dharan, Nepal)

PS51 **Malnutrition and survival in patients admitted to the Tuberculosis (TB) ward at San Lazaro Hospital, Manila, the Philippines**

Laura, V White*
(Nagasaki University)

PS52 **Risk factor for tuberculosis incidence and mortality in people living with HIV, Chiang Rai, Thailand**

Surachai PIYAWORAWONG
(Mae Chai Hospital, Ministry of Public Health)

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Bacteriological Diagnosis of TB

PS53 **Evaluation of test results about MTB in sputum specimens by loop-mediated isothermal amplification method**

SUN Bing-qi
(Shenyang Chest Hospital)

PS54 **Gene mutations and level of susceptibility to fluoroquinolones in *Mycobacterium tuberculosis* clinical isolates**

Suporn Foongladda
(Department of Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand)

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Other Respiratory Disease

PS55 **Adverse effects of treatment for *Mycobacterium abscessus* complex lung disease**

Takehiko Kobayashi
(Department of Internal Medicine, National Hospital Organization, Kinki-Chuo Chest Medical Center)

PS56 **Epidemiology of nontuberculous mycobacterial lung disease in a subtropical region of Japan and investigation on clinical features of rapidly growing mycobacterial disease**

Hiroaki Nagano
(Okinawa Chubu Hospital)

PS57 **The Impact of bronchodilator (LAMA, Glycopyrronium) on previous Tuberculosis history patients with chronic airway obstruction**

Yi-Wen Huang
(Institute of Medicine, Chung Shan Medical University, Taiwan)

PS58 **Talc pleurodesis; It's not for everyone**

Carmen, Pei Sze Tan
(Tan Tock Seng Hospital)

PS59 **Primary Sjogren's syndrome presenting unilateral bloody pleural effusion complicated with Waldenstrom's macroglobulinemia**

Yasuhiko Koga
(1) Department of Medicine and Molecular Science, Gunma University Graduate School of Medicine)

PS60 **Tuberculosis and asthma: a systematic review**

Anthony, L Byrne
(The University of Sydney, Australia/Socios En Salud Sucursal, Partners In Health, Lima, Perú;/Centre for Research Excellence in Tuberculosis (TB-CRE), Sydney, Australia/St Vincent's and Blacktown Hospitals Sydney, Australia/The Woolcock Institute of Medical Research, Sydney, Australia)

PS61 Relation of ADRB2 and ACE gene polymorphisms and clinical parameters of COPD in Mongolian patients

Jambaldorj Jamiyansuren
(Department of Molecular Biology and Genetics, School of Pharmacy and Bio-medicine, MNUMS)

PS62 EPHX, GSTM1 AND GSTT1 gene polymorphisms in Mongolian patients with COPD

Chimedlkhamsuren Ganbold
(Department of Molecular Biology and Genetics, School of Pharmacy and Bio-medicine, MNUMS)

PS68 SHORT-TERM EFFECTIVENESS OF A TRAINING COURSE ON THE QUALITY OF CHEST RADIOGRAPHY IN VIET NAM

Akihiro Ohkado
(Research Institute of Tuberculosis (RIT)/Japan Anti-Tuberculosis Association (JATA), Kiyose, Japan)

PS69 Development of an isothermal recombinase polymerase amplification assay for rapid detection of Mycobacterium tuberculosis

Shin-Yuan Fan
(Taiwan Centers for Disease Control)

PS70 Genetic Polymorphism of Whole Genome Sequencing for 1,184 Clinical Isolates Analysis Reveals a New RD Signature for M. tuberculosis Lineage I (Indo-Oceanic)

Wasna Viratyosin
(Tuberculosis Research Laboratory, National Center for Genetic Engineering and Biotechnology, National Science and Technology Agency, Pathum Thani)

PS71 Natural Classification of the TbD1 positive lineage of Mycobacterium tuberculosis by whole genome sequencing

Prasit Palittapongarnpim
(Department of Microbiology, Faculty of Science, Mahidol University/Tuberculosis Research Laboratory, National Science and Technology Development Agency)

PS72 Withdrawn**PS73 Naked-eye colorimetric and electrochemical detection of Mycobacterium tuberculosis-towards rapid screening for active case finding**

Benjamin Y. C. Ng
(Australian Institute for Bioengineering and Nanotechnology, The University of Queensland, Australia/School of Chemistry and Molecular Biosciences, The University of Queensland, Australia)

PS74 Clone, expresses and purification of recombinant antigen Rv3480c in Mycobacterium tuberculosis

Mingmei Tang
(Department of Respiratory Medicine, Affiliated Hospital of Zunyi Medical College, Zunyi, Guizhou, 563003, China/Department of Respiratory Medicine, Affiliated Hospital of Zunyi Medical College, Zunyi, Guizhou, 563003, China)

PS75 Single Nucleotide Polymorphism (SNP) Phylogeny of Thai Isolates of Mycobacterium tuberculosis Genomes

Pravech Ajawatanawong
(Department of Microbiology, Faculty of Science, Mahidol University, Bangkok, Thailand 10400)

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TB Biomarkers and Diagnosis**PS63 Clinical comparison study of T-SPOT, QFT and QFT-Plus for Immunodiagnosis of active pulmonary tuberculosis in the elderly.**

Kiyoyasu Fukushima
(Japanese Red Cross Nagasaki Genbaku Isahaya Hospital)

PS64 Cycloserine; Microdialysis; Pharmacokinetics; Pharmacodynamic; High performance liquid chromatography mass spectrometry/mass spectrometry

Yan Liping
(Shanghai Pulmonary Hospital)

PS65 Selective destruction of IL-23 signal expansion of major Ag-specific $\gamma\delta$ T-cell subset in TB patients

Hongbo SHEN
(Institut Pasteur of Shanghai, Chinese Academy of Sciences, China)

PS66 A POSSIBLE SOLUTION FOR IMPROVING THE QUALITY OF CHEST RADIOGRAPHY BASED ON THE EXPERIENCES IN RESOUC E CONSTRAINED SETTINGS

Takuji Date
(College of Healthcare Management/Research Institute of Tuberculosis (RIT)/Japan Anti-Tuberculosis Association (JATA))

PS67 The value of pro-inflammatory cytokine interleukine-2 concentration in pleural fluid to differentiate tuberculosis pleurisy from non tuberculosis pleurisy patients

Agnes, Rengga Indrati
(Clinical Pathology Department, Medical faculty University of Padjadjaran/Hasan Sadikin hospital, Bandung, Indonesia)

PS76 Quantitative PCR using ethidium/propidium monoazide for monitoring treatment outcome of tuberculosis patients
Akiko Takaki
(Department of Mycobacterium Reference & Research, The Research Institute of Tuberculosis (RIT), JATA)

PS77 Early diagnosis of active TB is still difficult especially for elder patients.
Yasushi Nakano
(Kawasaki Municipal Ida Hospital)

PS78 The epidemiological significance and temporal stability for Mycobacterial Interspersed Repetitive Unit-Variable-Number Tandem Repeat (MIRU-VNTR) based methods applied in Mycobacterium tuberculosis circulating in China
Dange Li
(Department of Epidemiology, School of Public Health, Fudan University, Shanghai 200032, China/Key Laboratory of Public Health Safety (Fudan University), Ministry of Education, Shanghai, China)

PS79 Meta-analysis of the Sputum Microbiome in Pulmonary Tuberculosis
Jorge Cervantes
(Texas Tech University Health Sciences Center, USA)

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Diagnosis of MDR TB

PS80 Pilot study of whole genome sequencing service for tuberculosis control in Thailand
Areeya Disratthakit
(Medical Life Science Institute, Department of Medical Sciences, Ministry of Public Health, Thailand)

PS81 Streamline and timely diagnosis of MDR-/XDR-TB using molecular tests
Ting-Yi Chiang
(Taiwan Centers for Disease Control)

PS82 Drug resistance mutations in M. tuberculosis isolates from rural participants of TB prevalence survey
B. Hong
(The Jackson Laboratory for Genomic Medicine, USA)

PS83 Use of RT-PCR in the detection of MDR tuberculosis among patients tested for the presence of pulmonary tuberculosis
Maria Vinokurova
(State Budget-Funded Institution of the Sakha Republic (Yakutia) Research-and-Practice Center for Tuberculosis)

PS84 Diagnosis and treatment of 40 cases with combination of drug-resistant pulmonary tuberculosis and nontuberculous mycobacteria pulmonary disease
Lin Fan
(Shanghai Pulmonary Hospital, Tongji University School of Medicine, Shanghai)

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Sociological Aspect/Civil Society

PS85 A combined use of social network analysis and geographic information system in understanding the transmission dynamics of tuberculosis in an urban setting in Japan
Kiyohiko Izumi
(The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association/Graduate School of Biomedical Sciences, Nagasaki University)

PS86 The contribution of a non-governmental organisation's Community Based Tuberculosis Care Programme to case finding in Myanmar: trend over time
Htet-Myet Win-Maung
(National Tuberculosis Programme, Myanmar)

PS87 Health-related quality of life assessment in pulmonary TB patients
Saniya Saleem
(The Indus Hospital/New York University)

PS88 Anxiety and depression among diagnosed TB patients seen at the UP-PGH using the validated Filipino version of the hospital anxiety depression score (HADS-P)
Gene Philip Louie C Ambrocio
(University of the Philippines-Philippine General Hospital)

PS89 POST-2015, why delay to seek health care? Perceptions and lived experiences of TB health care providers in the northern region-Malawi
Nathan B.W. Chimatata
(School of Public Health, Fudan University, Shanghai, China/Key Laboratory of Public Health Safety (Ministry of Education), Shanghai, China/Mzuzu University, Mzuzu, Malawi)

PS90 A comparative study of tuberculosis diagnosis delays in China and Malawi
Changming Zhou
(School of Public Health, Fudan University, Shanghai, China/Key Laboratory of Public Health Safety (Ministry of Education), Shanghai, China)

PS91 The Failure Treatment of MDR-TB in Three Generations: A Case Study of the Household in Northeastern, Thailand
Supasai Sangawong
(Disease Prevention and Control Region 10th Ubon Ratchathani)

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Clinical Management

PS92 Transcultural adaptation and validation of Korean version of brief illness perception questionnaire for patients with pulmonary tuberculosis
Jinsoo Min
(Chungbuk National University Hospital)

PS93 Withdrawn

PS94 High-dose vitamin D3 during intensive phase treatment of pulmonary tuberculosis in Mongolia: a double-blind randomised controlled trial
Ganmaa Davaasambuu
(Assitant Professor at Harvard University)

PS95 Simultaneous quantification of first line anti-tuberculosis drugs in human plasma by development and validation of liquid chromatography tandem mass spectrometry method
Phongpan MOKMUED
(First Author)

PS96 Polymorphisme of genotype N-acetyltransferase 2 (NAT2) in the early treatment failure tuberculosis patient in North Jakarta population: a pharmacogenetic study
Lela D Sary
(Department of Pharmacology Faculty of Medicine University of Indonesia)

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Tobacco control

PS97 Impact of the new Vietnamese pictorial cigarette pack warnings on male smokers' intention to quit smoking
Ngan T Tran
(Hanoi School of Public Health)

PS98 Nicotine dependence assessment using Fagerstrom test and Nicotine Replacement therapy (NRT) recommendation techniques for smoking cessation among Paniya tribes
Dexton Johns
(DM wayanad Institute of Medical Science)

PS99 CLINICAL TRIAL COMPARING NICOTINE REPLACEMENT THERAPY PLUS BRIEF COUNSELLING AND COUNSELLING ALONE ON SMOKING CESSATION IN PATIENTS PRONE TO LUNG CANCER USING BEDFONT MICRO-SMOKERLYZER
Heeda Priyanka
(DM wayanad Institute of Medical Science)

PS100 "An assessment of oral health status, tobacco use and cancer awareness among tea plantation workers, Nilgiri hills, Tamilnadu India"
Delfin Lovelina Francis
(Public Health consultant, Tagore Dental College and Hospital)

PS101 Role of pictorial warning on cigarette packets in tobacco cessation—A questionnaire survey among cigarette smokers in Chennai.
Delfin Lovelina Francis
(Dental Public Health consultant, Tagore Dental College)

PS102 Smoking habits and awareness about anti-smoking acts among General Public in Gurgaon, Haryana, India.
Clement Joy Kingsly Francis
(Social Worker)

PS103 Role of pictorial warning on cigarette packets in tobacco cessation—A questionnaire study among cigarette smokers in Chennai city, India
Clement Joy Kingsly Francis
(Social Worker)

PS104 Public Private Mix collaboration model of smoking cessation under PAL program an experience from NepalDee
Deepak Kumar Yadav
(BP Koirala Institute of Health Sciences)

PS105 TOBACCO USE, SMOKING QUIT RATES, AND SOCIO-ECONOMIC PATTERNING AMONG INDIGENOUS TRIBE OF RURAL MANGALORE—A CROSS SECTIONAL STUDY
Eby Aluckal
(Mar Baselios Dental college, Kothamangalam, Kerala)

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HIV

- PS106 An experience of home nursing of a TB/AIDS patient under DOTS in Japan**
Hideko Ishii
(University of Human Environments)
- PS107 Strengthening the national HIV health information system through the use of an electronic reporting system: Experience of monitoring, evaluation and monitoring interface in DR Congo**
Jean Paul ILUNGA MULAJA
(Equilibre International DR Congo)
- PS108 Perception towards buying condoms and tobacco products among Migrant male population in Chennai, India—a cross sectional study**
Saravanan Poorni
(Reader, Dept of Conservative Dentistry and Endodontics, Sri Venkateswara Dental College and Hospital)
- PS109 Quality of life and HIV—a bibliometric analysis of publication trends between 1995 to 2013**
Parangimalai Diwakar Madan Kumar
(Department of Public health dentistry, Ragas Dental College and Hospital)
- PS110 CLINICAL AND LABORATORY FINDINGS OF PEDIATRIC HIV-TB: SITUATION IN WEST-JAVA INDONESIA**
Djatnika Setiabudi
(Department of Child Health, Faculty of Medicine, Universitas Padjadjaran, Dr. Hasan Sadikin General Hospital, Bandung, Indonesia)

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Paediatric

- PS111 Psychological impact of tuberculosis on parents of children attending TB Clinic at The Indus Hospital, Karachi.**
Zainab Barry
(Interactive Research Development)

- PS112 CHANGES OF BODY MASS INDEX IN 100 PEDIATRIC PATIENTS TREATED FOR PULMONARY TUBERCULOSIS IN AN OUTPATIENT DEPARTMENT OF A TERTIARY HOSPITAL IN QUEZON CITY**

Theresia Umboh
(Fe Del Mundo Medical Center)

- PS113 Impact of counseling on Isoniazid Preventive Therapy (IPT) outcome at the TB Clinic Indus Hospital, Karachi Pakistan**

Zainab Barry
(Indus Hospital)

- PS114 Latent tuberculosis infection among children aged 0-14 years in Japan**

Shoji Yoshimatsu
(Department of Pediatrics, Minami Kyoto Hospital, National Hospital Organization)

- PS115 ASSOCIATION OF FACTORS WITH SUCCESSFUL TREATMENT OUTCOME OF CHILDHOOD TUBERCULOSIS IN BARANGAY COMMONWEALTH, QUEZON CITY: A 2-YEAR RETROSPECTIVE STUDY**

Christine N. Pecson
(East Avenue Medical Center)

- PS116 Vitamin D3 in LTBI Prevention trial in Mongolia: a double-blind randomised controlled trial**

Davaasambu Ganmaa
(Harvard University)

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TB Program

- PS117 The Educational Approach in TB Program by Using Video and Song Media for Increasing Community's Knowledge and Awareness in Medan City**

Delyuzar Haris
(Networking for Community Welfare & Health (Jaringan Kesehatan Masyarakat))

- PS118 Risk Factors of Non-adherent to Tuberculosis Treatment among Community Patients undergoing DOTS in Japan**

Kae, N Shiratani
(Yokohama City University)

- PS119 A motivation model to support TB patients to successfully completed treatment through Ex-TB Patient in Indonesia**
Rizanda Machmud
(Faculty of Medicine, Andalas University, Public Health and Community Medicine Department)
- PS120 An attempt to use a computerized database for tuberculosis management in Hanoi city, Vietnam**
Thuong H Pham
(Hanoi Lung Hospital, Hanoi, Vietnam)
- PS121 Withdrawn**
- PS122 Impact of Discontinuing Bacillus Calmette-Guérin Vaccination on Tuberculosis Epidemic in Taiwan**
Han Fu
(Department of Infectious Disease Epidemiology, Imperial College London)
- PS123 Improving the knowledge among the people as one strategy in Pre-elimination of Tuberculosis**
Elsa Pudji Setiawati
(Department of Public Health, Faculty of Medicine, Universitas Padjadjaran, Bandung, West Java)
- PS124 Comparative Study of Herbal Extract of Piper nigrum, Piper album and Piper longum on Various Characteristics of Pyrazinamide and Ethambutol Microspheres**
Prashant Pingale
(Associate Professor)
- PS125 The Knowledge About Tuberculosis Of Directly Observing Personals In Health Centre In North Jakarta**
Citra Febriony
(Department of Pharmacology and Therapeutics, Faculty of Medicine, University of Indonesia)
- PS126 Treatment Outcomes and Associated Factors of Childhood Tuberculosis: Treated Under Dots Program in Health Centers of Mekelle Town, Tigray Regional State, Ethiopia**
Misganaw Daniel Daemo
(BSc, MSc in Child Health and Pediatrics, Aids Health Care, Addis Ababa, Ethiopia)
- PS127 Lost to Follow-up amongst patients on Tuberculosis Treatment after Smear Conversion in Gauteng Province, South Africa**
Mntambo N. Selina
(Gauteng Department of Health South Africa)