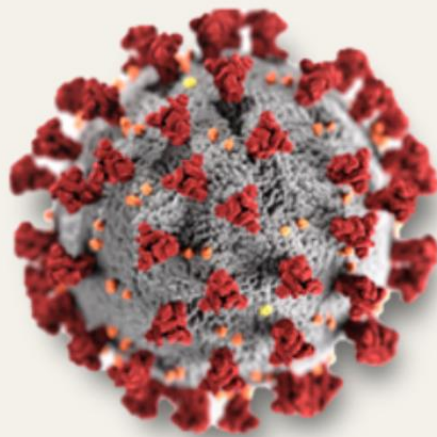


JULY 30

2022 International Symposium on COVID-19

CHNG-PU CONFERENCE HALL, 4F,
UNITED MEDICAL BUILDING
(FRONT BUILDING), TMU, TAIPEI, TAIWAN

Hybrid Symposium



International Master/Ph.D. Program in Medicine, College of Medicine, Taipei Medical University
Taipei Medical University Hospital
Taipei Municipal Wan Fang Hospital
Taipei Medical University Shuang-Ho Hospital
Taipei Medical University - Hsin Kuo Min Hospital
Guiding unit: Ministry of Education (Taiwan, R.O.C.)



臺北醫學大學
新國民醫療社團法人
新國民醫院



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Welcome Letter

Excellencies,
Colleagues,
Ladies and gentlemen,

Welcome!

It is our great pleasure to welcome you to the International Symposium on COVID-19, which will be held simultaneously with physical and virtual on Saturday, July 30, expertise. 2022.

This specialized scientific symposium aims to include recent advances from basic to clinical research on COVID-19. We invite experts from Indonesia, Vietnam and Taiwan to share their recent research discoveries and clinical expertise.

We hope to make this symposium an exciting and noteworthy scientific event. We look forward to seeing you!

With kind regards,

Committee Chair
Han-Pin Kuo, MD, Ph.D.
Dean, College of Medicine
Taipei Medical University

Organized by
International Master/Ph.D. Program in Medicine (IGPM), College of Medicine, Taipei Medical University
Taipei Municipal University Hospital
Taipei Municipal Wanfang Hospital (Managed by Taipei Medical University)
Taipei Medical University-Shuang Ho Hospital, Ministry of Health and Welfare
Taipei Medical University - Hsin Kuo Min Hospital

Supervised by
Ministry of Education Republic of China (Taiwan)

Agenda

Day1- 7/30

UTC+8 Taipei, Taiwan
(Speaker Time, UTC+7)

| | |
|-----------------|-------------|
| Registration | 08:30- |
| Opening Remarks | 09:00-09:10 |

Chun-Jen Huang, MD, Ph.D. (黃俊仁 副院長)

Vice Superintendent, Taipei Municipal Wan Fang Hospital

Session I

Moderator: Ju-Chi Liu, MD, Ph.D. (劉如濟 副院長)

Vice Superintendent, Taipei Medical University Shuang Ho Hospital

09:10-10:00

(Speaker Time, Vietnam: 08:10-09:00)

Survival from and recovery after COVID-19: A narrative review

Speaker: Pham Van Linh, MD, Ph.D.

Vice-Superintendent, Hai Phong University of Medicine and Pharmacy
(HPUMP) Hospital, Vietnam

10:00-10:50

Mesenchymal stem cell therapy for COVID-19-associated ARDS

Speaker: Chih-Hsin Lee, MD, Ph.D. (李枝新 主任)

Director, Division of Pulmonology, Wan Fang Hospital, Taiwan

Coffee Break

Session II

Moderator: Kuan-Jen Bai, MD (白冠王 教授)

Professor, School of Respiratory Therapy, College of Medicine, Taipei Medical University

Agenda

11:00-11:50

(Speaker Time, Vietnam: 10:00-10:50)

Hyperglycemia in severe and critical COVID-19 patients: Risk factors and outcomes

Speaker: Le Minh Khoi, MD, Ph.D.

Head, Unit of Cardiovascular Imaging, University Medical Center, Vietnam

11:50-12:40

(Speaker Time, Vietnam: 10:50-11:50)

Manage COVID-19 patients at home by using telemedicine combined with remote emergency settings during the pandemic time at Ho Chi Minh City

Speaker: Nguyen Nhu Vinh, MD, Ph.D.

Deputy Head, Department of Family Medicine, University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam

Lunch

Session III

Moderator: Chi-Li Chung, MD, Ph.D. (鍾啟禮 主任)

Director, Division of Thoracic Medicine, Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University

13:30-14:20

(Speaker Time, Indonesia: 12:30-13:20)

Outcomes of patients infected with SARS-CoV-2 Delta and Omicron variants

Speaker: Gunadi, MD, Ph.D., Sp.BA

Head, Research Translational Unit, FK-KMK UGM, Indonesia

14:20-15:10

COVID-19: Our Efforts in Critical Care

Speaker: Kevin Shu-Leung Lai, MD (黎書亮 主任)

Attending Physician of ICU, Pulmonary and Critical Care Medicine, Division of Pulmonary Medicine, Department of Internal Medicine, TMU Hospital, Taiwan

Agenda

Coffee Break

Session IV

Moderator: Pai-Chien Chou, MD, Ph.D. (周百謙 主任)

Director, Department of Business Development, Taipei Medical University Hospital

15:10-16:00

Real world experience of stem cell treatment in severe COVID-19 pneumonia_ Immunological aspect

Speaker: Mei-Chuan Chen, MD (陳美娟 醫師)

Attending physician, Division of pulmonary medicine, Department of internal medicine, TMU Hospital, Taiwan

16:00-16:50

(Speaker Time, Indonesia: 15:00-15:50)

Sharing experience of COVID-19 management in UGM academic hospital: Balancing to save the patients and protect the staffs

Speaker: Siswanto Sp.P (K) Onk, MD

Chairman of COVID 19 Task Force, Division of Pulmonology, Academic Hospital UGM, Indonesia

Closing Remarks

16:50-17:00

Sin-Yu Shen, Ph.D. (沈芯仔 主任)

Director, International Master/Ph.D. Program in Medicine, College of Medicine, Taipei Medical University

Map Guide



臺北醫學大學校區及附屬醫院平面分佈圖
Campus Map



Wireless Setting

Wi-Fi: TMU-Guest

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TMU-Guest

登入 取消

臺北醫學大學
Taipei Medical University

請輸入帳號密碼
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密碼 Password:

1 Log In

申請訪客帳號 **Create Account**

有遇到任何問題請洽資訊處
If you encounter any problems, please contact the Server Room.

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請填寫下面的表格才可以使用網路。
Please complete the form below to gain access to the network.

2 姓名 Your Name:
Jennifer
請輸入您的姓名
Please enter your full name.

請輸入您的電話 Mobile Phone Number
09XX000XXX
輸入您的電話數位帳號使用
Please enter your phone number.
This will become your username to log into the network.

3 確認 Confirm:
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已經有帳號了?
Already have an account?
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Taipei Medical University

您的訪客帳號的詳細資訊如下所示。
The details for your guest account are shown below.

訪客姓名 Guest's Name:
Jennifer

使用者帳號 Account Username:
09XX000XXX

訪客密碼 Guest Password:
1235

啟動時間 Activation Time:
Monday, 25 July 2022, 4:43 PM

到期時間 Expiration Time:
Tuesday, 26 July 2022, 4:43 PM

5 登入 Log In

INVITED SPEAKERS



PHAM VAN LINH
, MD, PH.D.

Graduated from Hanoi Medical University (HMU) in 1995, started to work since then as lecturer in Haiphong University of Medicine and Pharmacy (HPMU) and as physician in Viet-Czech Hospital.

Got scholarships from AUF, France Embassy, WHO, Vietnam Government and did specialization trainings in Immunology, Chest medicine and Tropical diseases in France and in Switzerland.

Promoted to work as Vice Head of Outpatient and ED in 2011 and, from 2013, as Head of Cardiovascular and Pulmonary Medicine Department in Haiphong University Hospital.

Nominated Associate Professor and promoted to Vice Director of University Hospital in 2015, then Vice Rector of HPMU in 2021.

ABSTRACTS

Survival from and recovery after covid-19: a narrative review

Phạm Văn Linh, MD, Ph.D.

Haiphong University of Medicine and Pharmacy

COVID-19 – the pandemic that is caused by a coronavirus called SARS-CoV-2, emerged from Wuhan then spread rapidly to the rest of the world – has caused not only high morbidity and mortality but also unprecedented health and economic impact worldwide. After the period of pandemic peaking associated with variants of concern and large number of new cases including those with severe or critical illness and deaths, along with the acceleration operations of COVID-19 vaccination worldwide, the new cases has decreased sharply since the beginning of 2022 and most people who get COVID-19 from then on had only mild illness in acute phase and could be able to rest at home and recover without hospitalisation. However, some SARS-CoV-2 infected patients, especially those survived from severe COVID-19 cases might experience multiorgan effects involving especially the heart, lung, kidney, skin, and brain or autoimmune conditions with symptoms lasting weeks or months after COVID-19 illness. This review will describe and discuss some issues relating the recovery after COVID-19 including post-COVID-19 conditions.

Key words: COVID-19 pandemic, recovery, survival, post-COVID-19 conditions

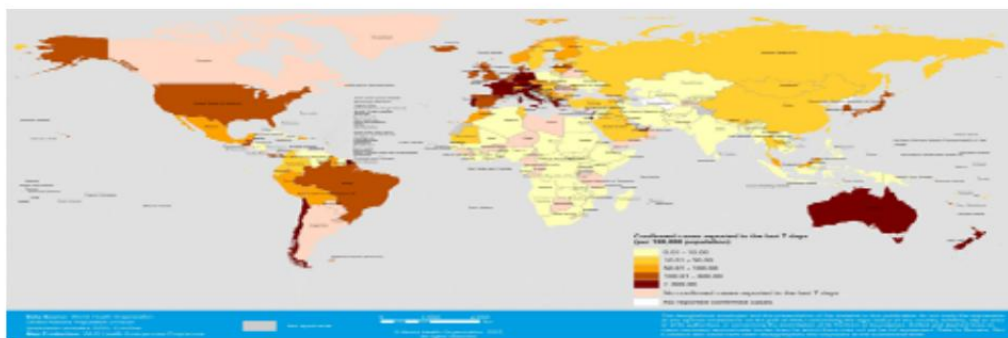
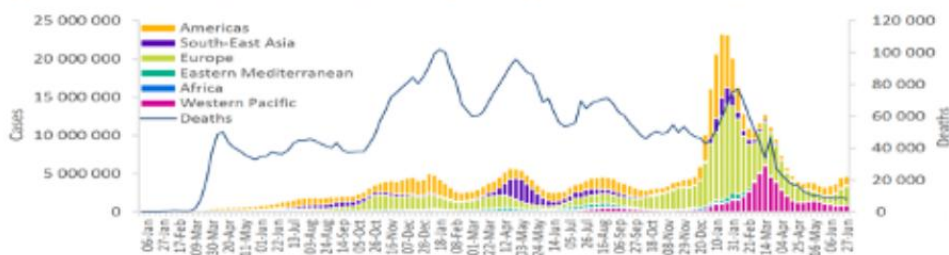


Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 3 July 2022**



INVITED SPEAKERS



CHIH-HSIN LEE
MD, PH.D.

Chih-Hsin Lee is a physician who specializes in pulmonary medicine. He joined the Tuberculosis Center of Wan Fang Hospital in 2014, where he has devoted himself to tuberculosis's clinical care and public control. The Tuberculosis Center of Wan Fang Hospital is one of the core institutes of the Taiwan MDR-TB Treatment Consortium. He has extensive experience in patient-centered care for patients with drug-resistant tuberculosis or treatment-associated adverse events. He is a consultant on individualized regimens for drug-resistant tuberculosis and established the therapeutic drug monitoring program for anti-tuberculosis agents in Taiwan. He paid particular attention to the interactions between tuberculosis and non-communicable diseases and the impact of diagnosis delay on the nosocomial spread of tuberculosis. He is one of the Taiwan Guidelines for TB Diagnosis and Treatment co-authors.

Recent publication:

- Putri, D.U., et al., Distinct B and NKT cell responses shape the delayed response to ChAdOx1 nCoV-19 vaccine in end-stage renal disease. *J Infect*, 2022.
- Putri, D.U., et al., Hemodialysis acutely altered interferon-gamma release assay test result and immune cell profile. *J Microbiol Immunol Infect*, 2022. 55(2): p. 332-335.
- Peng, T.R., et al., Advantages of short-course rifamycin-based regimens for latent tuberculosis infection: an updated network meta-analysis. *J Glob Antimicrob Resist*, 2022. 29: p. 378-385.



ABSTRACTS

Mesenchymal stem cell therapy for COVID-19-associated ARDS

Chih-Hsin Lee, MD, Ph.D.

Division of Pulmonology, Wan Fang Hospital

The cytokine storm, also known as cytokine release syndrome, may cause systemic inflammation and organ dysfunction and lead to severe morbidity in COVID-19 patients. Although immunomodulation with dexamethasone and interleukin-6 antagonists was reported to improve the survival of patients with severe COVID-19, the mortality of those who developed acute respiratory distress syndrome still approaches 30%. Mesenchymal stem cell therapy has a strong immunomodulating effect and was demonstrated to enhance the recovery of respiratory failure for COVID-19-associated acute respiratory distress syndrome in randomized clinical studies. Herein, we share our experience of applying the mesenchymal stem cell therapy to two patients of COVID-19 who developed severe hypoxemic and hypercapnic respiratory failure with favorable outcomes. Management of patients with severe COVID-19 remains a challenging issue for real-world clinical practice. Mesenchymal stem cell therapy has great potential to improve the outcomes of this vulnerable cohort. Further studies to delineate the optimal selection criteria and dosing strategies are warranted.

INVITED SPEAKERS



LE MINH KHOI , MD, PH.D.

Manager, Training & Scientific Research Department
Head, Unit of Cardiovascular Imaging, University Medical Center
Associate Professor, Senior Lecturer, Dept. of Critical Medicine,
University of Medicine and Pharmacy at Ho Chi Minh City

Specialty: Pediatric Cardiology, Echocardiography and Cardiac
Intensive Care

Recent publication:

- Nguyen Hoang Bac, Nguyen Thi Bang Suong, Nguyen Huu Huy, Nguyen Trung Tin, Le Minh Khoi. The Mutation Spectrum and Two Novel Point Mutations in the APC Gene in Vietnamese Patients with Familial Adenomatous Polyposis. Asian Pac J Cancer Prev. 2022 May 1;23(5):1517-1522.
- Nguyen Hoang Bac, Le Thi Xuan Thao, Nguyen Huu Huy, Vo Thanh Thanh, Le Minh Khoi, Nguyen Ngan Trung, Do-Nguyen Thien Minh, Truong-Nguyen Cong Minh, Nguyen Thi Bang Suong. Diagnostic Value of hTERT mRNA and in Combination With AFP, AFP-L3%, Des-γ-carboxyprothrombin for Screening of Hepatocellular Carcinoma in Liver Cirrhosis Patients HBV or HCV-Related. Cancer Inform. 2022 May 20;21:11769351221100730.
- Nguyen Hoang Bac, Nguyen Hoang Dinh, Phan Van Thuan, Tran Chau Bich Ha, Le Minh Khoi. Atrial Myxoma on Atrial Septal Defect Occlusion Device: A Rare but True Occurrence. CASE (Phila). 2021;5(4):204-208. Published 2021 Jun 22.
- Vu Hoang Vu, Nguyen Duong Khang, Mai Thanh Thao, Le Minh Khoi. Acute Pulmonary Embolism Associated with Low-Dose Olanzapine in a Patient without Risk Factors for Venous Thromboembolism. Case Rep Vasc Med. 2021 Jul 27;2021:5138509.
- Hoang Bac Nguyen, Hoang Dinh Nguyen, Thi Thanh Thuy Tran and Minh Khoi Le. Cardiogenic Shock Secondary to Dynamic Left Ventricular Outflow Tract Obstruction and Apical Ballooning after Nonmitral Cardiovascular Surgery. Case Reports in Critical Care. Volume 2020 |Article ID 8826187 |

ABSTRACTS

Hyperglycemia in severe and critical covid-19 patients: risk factors and outcomes

Viet Tran Le¹, Minh Triet Tran^{1,2}, Quoc Hung Ha¹, Ngoc Trong Le¹, Van Tuyen Le¹, Minh Khoi Le^{1,3}

¹COVID-19 Intensive Care Center, University Medical Center, Ho Chi Minh City, Viet Nam;

²Department of Endocrinology, University Medical Center, Ho Chi Minh City, Viet Nam;

³Department of Critical Care Medicine, University of Medicine and Pharmacy at Ho Chi Minh City, Ho Chi Minh City, Viet Nam.

Corresponding author: Minh Khoi Le.

Department of Critical Care Medicine, University of Medicine and Pharmacy at Ho Chi Minh City, Ho Chi Minh City, 70000, Viet Nam.

Cellphone: (84) 919 731 386. Fax: (84.28) 3950 6126. E-mail: khoi.lm@umc.edu.vn.

Background. Hyperglycemia is commonly seen in critically ill patients. This disorder was also seen in COVID-19 patients and was associated with a worse prognosis. The current study determined the prevalence, risk factors and prognostic implications of hyperglycemia in COVID-19 patients. **Method.** This was a retrospective observational study performed in an intensive care unit for COVID-19 patients. Electronic data of COVID-19 patients admitted to the intensive care unit from August 2nd to October 15th, 2021, were collected. Patients were divided into non-hyperglycemia, hyperglycemia in diabetic patients and hyperglycemia in non-diabetic patients. Primary outcomes were 28-day and in-hospital mortalities. Multinomial logistic regression and multivariable Cox regression models were used to determine the risk factors for hyperglycemia and mortality, respectively. **Results.** Hyperglycemia was documented in 65.6% of patients: diabetic patients (44.8%) and new-onset hyperglycemia (20.8%). In-hospital and 28-day mortality rates were 30.2% and 26.1%, respectively. Respiratory failure, corticosteroid therapy and a higher level of procalcitonin were risk factors for hyperglycemia in diabetic patients, whereas cardiovascular diseases, respiratory failure and higher AST/ALT ratio were risk factors for hyperglycemia in non-diabetic patients. The risk of the 28-day mortality rate was highest in the new-onset hyperglycemia (HR 3.535, 95% CI 1.338-9.338, $p=0.011$), which was higher than T2DM hyperglycemia (HR 1.408, 95% CI 0.513-3.862, $p=0.506$). **Conclusion.** Hyperglycemia was common in COVID-19 patients in the intensive care unit. Hyperglycemia reflected the disease severity but was also secondary to therapeutic intervention. New-onset hyperglycemia was associated with poorer outcomes than that in diabetic patients.

Keywords: COVID-19, hyperglycemia, diabetes, intensive care, corticosteroid

INVITED SPEAKERS



NGUYEN NHU VINH
, MD, PH.D.

Dr Nguyen graduated from medical school in Ho Chi Minh City (HCMC), Vietnam in 1998. He then finished his residency in tuberculosis and pulmonology in 2002 and earned a master's degree (2005) and PhD degree (2019) in the same specialty. He is also a specialist in family medicine and obtained a master diploma in this field at the University of the Philippines, Manila in 2010 and on the way to finish another PhD at Leiden University, the Netherlands.

He is Vice Director of Family Medicine department and a Head of Research Unit at Faculty of Medicine, University of Medicine and Pharmacy (UMP) at HCMC. He does clinical practice at the University Medical Center (UMC) in HCMC and hold a Head of Respiratory Functional Exploration department which includes a sleep center. He is a Vietnamese representative of International Primary Care Respiratory Group (IPCRG), President of Vietnam Association of Snoring and Sleep Apnea (VASSA), Vice-President of HCMC Society of Family Physicians (HSFP) and General Secretary of Vietnam Society of Sleep Medicine (VSSM). He is also an executive committee member of Viet Nam Respiratory Society (VRS), HCMC Respiratory Society (HRS), HCMC Society of asthma, allergy, and clinical immunology (HSAACI). Dr. Vinh has worked in respiratory and family medicine for more than 20 years and has conducted many studies and delivered many presentations on these fields at national and international conferences.



ABSTRACTS

Manage COVID-19 patients at home by using telemedicine combined with remote emergency settings during the pandemic time at Ho Chi Minh City

Vinh Nhu Nguyen, MD, Ph.D.

University of Medicine and Pharmacy at Ho Chi Minh City, Viet Nam

From early 2020 until now (07/2022), Viet Nam had four waves of COVID-19. The first three waves had minor impact to people health but the fourth time from 04/2021 to 10/2021 caused more than 2 million people got infection and 36 thousand died. Ho Chi Minh City is the city getting the most consequence of the pandemic in the country because it is the first place COVID-19 outbreaks with majority of city residents had not COVID-19 vaccination yet. From 4/2021 to 7/2021, the anti-COVID policy in Viet Nam is isolate infected persons (called F0 persons) and the persons contacted with F0 (called F1) or even contacted persons of F1 (called F2). However, when the isolated settings are not enough for F0, F1 and F2 persons, the city government had to decide to quarantine them at home and the area contained these houses was blocked. This led to the need for a model of care for people in that isolated area and the combination model between telehealth care (team 1 – large group with 3000 healthcare providers and medical students) and frontline emergency care with temporary emergency settings (team 2 – small group with 100 doctors and nurses) was formed to solve this problem in a situation of overloaded hospitals at that time. With more than 3 months applying this model, 60,000 people monitored and followed up and about 500 persons were treated in local temporary emergency settings. This presentation will explain the model of working to adapt the local situation time by time as well the impact of the model to pandemic situation in Ho Chi Minh City.

INVITED SPEAKERS



GUNADI
, MD, PH.D., SP.BA

My research focuses on understanding susceptibility genes for Hirschsprung disease (HSCR), for which I was recently awarded a multi-year Indonesian Ministry of Education, Culture, Research and Technology grant. Our goal is how this genetic information can be used for disease prediction and management for better patient services and quality of life (translational research). Being trained in Kobe University Graduate School of Medicine by the Monbukagakusho scholarship (2005-2009), my doctoral dissertation was on understanding the role of the ED1 gene on hypohidrotic ectodermal dysplasia. Immediately after I received my PhD from Kobe University, I joined one of the excellent research institutes in Japan named RIKEN Center for Developmental Biology in the Laboratory for Neocortical Development. I also conducted a postdoctoral fellowship at Johns Hopkins University School of Medicine, McKusick-Nathans Institute of Genetic Medicine, in 2013. I am actively involved in developing molecular genetic analysis for rare diseases in Indonesia, particularly Hirschsprung disease, by organizing the Annual Meeting of the Indonesian Society of Human Genetics and routinely performing Workshop on Molecular Genetics and Next Generation Sequencing application in Indonesia.

Furthermore, we routinely share information on rare genetic diseases regarding their diagnosis and management to the community through the website of pokjagenetik.fk.ugm.ac.id. In 2014 and 2017, I was awarded the Young Scientist Award by the Ministry of Research and Technology – Kalbe Science Awards (RKSA) and the Indonesian Institute of Sciences (LIPI), respectively, for my consistently performing molecular genetics approach to the diagnosis of rare diseases. In 2016, I was awarded as Best Research Award – Winner II by the Indonesian Ministry of Research, Technology and Higher Education – Kalbe Science Awards (RKSA) for our work titled “Multiple Genetic Markers for Early Identification of Hirschsprung Disease and Implementation of Highly Accurate and Affordable Genotyping Method” . During the COVID-19 pandemic, I was assigned by the Indonesia Ministry of Health to lead the genomic team for conducting the genomic surveillance of SARS-CoV-2, particularly in Yogyakarta and Central Java provinces.

ABSTRACTS

Outcomes of patients infected with SARS-CoV-2 Delta and Omicron variants

Gunadi^{1*}, Mohamad Saifudin Hakim², Hendra Wibawa³, Khanza Adzkia Vujira¹, Dyah Ayu Puspitarani¹, Endah Supriyati², Ika Trisnawati⁴, Riat El Khair⁵, Kristy Iskandar⁶, Afiahayati⁷, on behalf of the Yogyakarta-Central Java COVID-19 study group

1.Pediatric Surgery Division, Department of Surgery/Genetics Working Group/Translational Research Unit, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada; 2.Department of Microbiology, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada; 3.Disease Investigation Center Wates (Balai Besar Veteriner Wates), Directorate General, and Livestock Services, Ministry of Agriculture Indonesia; 4.Pulmonology Division, Department of Internal Medicine, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada/Dr. Sardjito Hospital; 5.Department of Clinical Pathology and Laboratory Medicine, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada/Dr. Sardjito Hospital; 6.Department of Child Health/Genetics Working Group, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada/UGM Academic Hospital; 7.Department of Computer Science and Electronics Faculty of Mathematics and Natural Sciences, Universitas Gadjah Mada, Yogyakarta, Indonesia

Introduction: The current increase in the COVID-19 infectivity rate worldwide is associated with the SARS-CoV-2 Omicron variant. However, reports comparing Omicron and the previous dominant variant, Delta, on the outcomes of patients with COVID-19 are minimal, especially in developing countries. Here, we determined the clinical outcomes of patients with COVID-19 infected with Omicron and Delta variants in Yogyakarta and Central Java provinces, Indonesia. **Methods:** This study involved 352 patients, consisting of 139 Omicron and 213 Delta groups. Clinical outcomes were patients' hospitalization and mortality. **Results:** The Ct value was not significant difference between both groups (Delta: 20.35 ± 4.07 vs. Omicron: 20.62 ± 3.75 ; $p=0.540$). No significant difference of hospitalization ($p=0.433$) and mortality rates ($p=0.565$) between both groups were noted. A significant association was noted between older age (≥ 65 years) and hospitalization (OR=3.67 [95% CI=1.22-10.94]; $p=0.019$) and mortality (OR=3.93 [95% CI=1.35-11.42]; $p=0.012$). In addition, patients with cardiovascular disease revealed higher hospitalization rate (OR=5.27 [95% CI=1.07-25.97]; $p=0.041$), while patients with diabetes showed higher mortality rate (OR=9.39 [95% CI=3.30-26.72]; $p<0.001$). **Conclusion:** The clinical outcomes of patients infected with Omicron and Delta variants are similar. Patients with comorbidities, especially older, cardiovascular disease, and diabetes, are strongly related to high hospitalization and mortality rates.

Acknowledgement:

We thank the Collaborator Members of the Yogyakarta-Central Java COVID-19 study group, authors, originating and submitting laboratories for their sequence and metadata shared through GISAID. This study was funded by the Ministry of Health and Dr Sardjito Hospital, Indonesia.

INVITED SPEAKERS



KEVIN SHU-LEUNG LAI , MD, PH.D.

Attending Physician of ICU, Pulmonary and Critical Care Medicine,
Division of Pulmonary Medicine, Department of Internal Medicine,
Taipei Medical University Hospital, Taipei, Taiwan R.O.C

Publication:

- Kevin S. Lai, Sey-En Lin , Ming-Syong Zeng, Kai-Ling Lee ,Shih-Hsin Hsiao , Chi-Li Chung
Myth of Atypical Adenomatous Hyperplasia or Pulmonary Adenocarcinoma. Thorac Med
2015; 30: 224-231.
- Jer-Hwa Chang, Shu-Leung Lai, Wan-Shen Chen, Wen-Yueh Hung, Jyh-Ming Chow,
Michael Hsiao , Wei-Jiunn Lee, Ming-Hsien Chien Quercetin suppresses the metastatic
ability of lung cancer through inhibiting Snail-dependent Akt activation and Snail-
independent ADAM9 expression pathways. BBA - Molecular Cell Research 2017 1864 ; 1746
-1758.
- Mei-Chuan Chen, Yueh-Lin Wu, Kai-Ling Lee , Kevin S. Lai, Chi-Li Chung* Lupus
pneumonitis presenting with high titre of anti-Ro antibody. Respirology Case Report 2018 ;
6(1): e00280.
- Kai-Ling Lee, Wei-Lin Chen, Ray-Jade Chen, Kevin S. Lai, Chi-Li Chung* (2018, Jan)
Lipoteichoic acid upregulates plasminogen activator inhibitor - 1 expression in
parapneumonic effusions. Respirology 2018 ; 23, 89-95.
- Kuo-Ching Yuan, Lung Wen Tsai, Kevin S. Lai, Sing-Teck Teng, Yu-Sheng Lo, Syu-Jyun
Peng* (2021, Oct) Using Transfer Learning Method to Develop an Artificial Intelligence
Assisted Triaging for Endotracheal Tube Position on Chest X-ray. Diagnostics 2021 ; 11,
1844. <https://doi.org/10.3390/diagnostics111101844>



ABSTRACTS

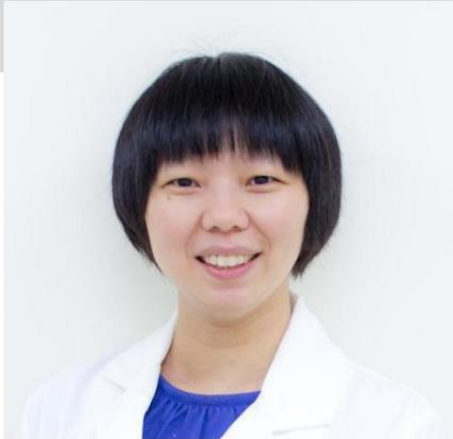
COVID-19: Our Efforts in Critical Care

Kevin S Lai, MD.

Critical Care and Pulmonary Medicine, Taipei Medical University Hospital

The explosion of COVID-19, the illness that related to novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has been an on-going global crisis for more than 2 years. Despite many of those infected are of mild to moderately severe, the pandemic has exerted unprecedented challenge on healthcare systems and medical providers, particularly in the management of those who are critically ill. In light of the efforts for global vaccination and development of new therapeutics, infection and mortality rates are on the decline. At the frontline, we are witnessing the emergence of new COVID-19 variants and learning the changes in disease presentations and clinical outcomes. The strife to save lives continues on in the Intensive Care Unit.

INVITED SPEAKERS



MEI-CHUAN CHEN , MD

Attending physician, Division of Pulmonology, Department of Internal Medicine, Taipei Medical University Hospital;
In charge of COVID isolation Ward, Taipei Medical University Hospital

Publication:

- [Mei-Chuan Chen#](#), Lai KS, Chien KL, Teng ST, Lin YR, Chao W, Lee MJ, Wei PL, Huang YH, Kuo HP, Weng CM, Chou CL. pcMSC Modulates Immune Dysregulation in Patients With COVID-19-Induced Refractory Acute Lung Injury. *Front Immunol*. 2022 Apr 29;13:871828.
- Chun-Hua Wang, Chih-Ming Weng, Tzu-Ting Huang, Meng-Jung Lee, Chun-Yu Lo, [Mei-Chuan Chen](#), Chun-Liang Chou, Han-Pin Kuo (2021 Sep). Anti-IgE therapy inhibits chemotaxis, proliferation and transformation of circulating fibrocytes in patients with severe allergic asthma. *Respirology*, 26:842-850 (IF=6.424, 5-Year IF=5.206, SCIE, 12/64, 18.8%, RESPIRATORY SYSTEM).
- Wei-Lin Chen#, [Mei-Chuan Chen#](#), Shang-Fu Hsu, Shih-Hsin Hsiao, Chi-Li Chung (2021 Jun). HDAC Inhibitor Abrogates LTA-Induced PAI-1 Expression in Pleural Mesothelial Cells and Attenuates Experimental Pleural Fibrosis. *Pharmaceuticals*, 14:585 (IF=5.863, 5-Year IF=5.850, SCIE, 38/276, 13.8%, PHARMACOLOGY & PHARMACY).
- [Mei-Chuan Chen#](#), Yueh-Lin Wu, Kai-Ling Lee, Kevin S Lai, Chi-Li Chung (2017 Oct). Lupus pneumonitis presenting with high titre of anti-Ro antibody. *Respirol Case Rep*, 6:e00280 (SCIE, 81/96, 84.4%, RESPIRATORY SYSTEM). Case Reports
- [Mei-Chuan Chen#](#), Chen-Jung Chang, Yung-Hsiu Lu, Dau-Ming Niu, Horng-Yuan Lou, Chun-Chao Chang (2015 Mar). R173W mutation of hydroxymethylbilane synthetase is associated with acute intermittent porphyria complicated with rhabdomyolysis: the first report. *J Clin Gastroenterol*, 49:256-257 (IF=3.062, SCIE, 67/92, 72.8%, GASTROENTEROLOGY & HEPATOLOGY). Case Reports

ABSTRACTS

Real world experience of stem cell treatment in severe COVID-19 pneumonia_ Immunological

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Background and objective: The novel coronavirus disease 2019 (COVID-19) has been a global pandemic health issue since 30, January 2020. Mortality rate is as high as more than 50% in critically ill patients. Stem cell therapy is effective in refractory severe critically ill COVID-19 patients. However, the immune responses underlie stem cell therapy have not been reported well, especially those in moderate to severe acute respiratory distress syndrome (ARDS). **Methods:** Intravenous infusion of 2×10^7 placenta-derived mesenchymal stem cells (pcMSCs) (MatriPlax) were given to five severe COVID-19 patients who are refractory to current standard therapies at Day 0 and day 4. Peripheral blood inflammatory markers and immune profiles determined by multi-parameter flowcytometry were studied at Day 0, 4 and 8. Clinical outcomes were also observed. **Results:** The pc-MSCs treated patients had significant improvement in PaO₂/FiO₂ ratio and Murray's lung injury scores, reduction in Ferritin, Lactate dehydrogenases (LDH), C-reactive protein (CRP). The cytokine profiles also showed the reduction of IL-1 β , IFN- γ , IL-2, IL-6 and increase of IL-13 and IL-5 type 2 cytokines within 7 days of therapy. Lymphopenia was also significantly improved after 7 days of treatment. Immune cell profiles showed an increase in the proportions of CD4⁺ T cells (including CD4⁺ naïve T cells and CD4⁺ memory T cells subtypes), Treg cells, CD19⁺ B cells (including CD19⁺ naive B cells, CD27⁺ switched B cells subtypes) and dendritic cells, and a significant decrease in the proportion of CD14⁺ monocytes (including CD16⁻ classical and CD16⁺ non-classical subtypes) as well as plasma/plasmablast cells. No adverse effects were noted after following up for 2 months of therapy. **Conclusion:** pc-MSCs therapy suppressed hyper-inflammatory states of innate immune responses to COVID-19 infection by increasing Treg cells, decreasing monocytes and plasma/plasmablast cells, and promoted CD4⁺ T cells and CD19⁺ B cells towards adaptive immune responses in severe critically ill COVID-19 patients with moderate to severe ARDS, especially those who were refractory to current standard care and immunosuppressive therapies.

INVITED SPEAKERS



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I finished my MD at 2004 from Universitas Gadjah Mada faculty of medicine and started working as General doctor at Gondokusuman primary health center (2005-2007), then at GMC Health Center UGM (2007-2010), then started a residency training program for pulmonologist that finished in 2017, since 2018 I am working as a Pulmonologist at Universitas Gadjah Mada Academic Hospital. Since 2019 I took a thoracic oncology fellowship training and got a thoracic oncologist consultant brevet from pulmonology and respiratory medicine collegium Indonesia.

During my career I joined some organizations such as Leader for Yogyakarta branch at Indonesian Red Cresent, Medical Emergency Rescue Committee Yogyakarta branch and won some prizes such as 2nd best grade for National Exam on Pulmonology and Respiratory Medicine, Best paper at the 3rd TB Research National Seminar, 3rd Best oral Presentation at Indonesian Society of Respirology, Best Participant at the 1st GELS Dr Sardjito General Hospital and 2nd best oral presentation in National scientific symposium of Indonesian Oncology Association.

I also joined some workshops such as ATLS, ACLS, GELS, thoracic ultrasound, thoracic oncology also I participated as an oral speaker at the 2016-2017 KONKERNAS PDPI, 2018-2022 PIR PDPI and participated in IASTO, PDPI, APSR scientific events.

ABSTRACTS

Sharing experience of COVID-19 management in UGM academic hospital: Balancing to save the patients and protect the staffs

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The Coronavirus Disease 2019 (COVID-19) is a worldwide outbreak disease caused by Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2). Indonesia is the fourth most populous country in the world and is predicted to be affected significantly over a longer period. Universitas Gadjah Mada (UGM) Academic Hospital is one of the COVID-19 referral hospitals located in the Yogyakarta Special Region, Indonesia. Since the early months of the pandemic, the hospital had prepared strategies to provide effective and efficient patient care. The focus has been safety for both patients and health care staffs. Here, we will share our experiences in activating a Hospital Incident Command System (HICS) as a hallmark for preparedness and response to the COVID-19 pandemic disaster so it can be adapted in other hospitals nationwide or worldwide. The HICS in the UGM Academic Hospital includes: 1) surge capacity for isolation room, 2) infection prevention and control, 3) human resources, 4) continuity of essential health services and patient care, 5) communication, 6) logistics and management of supplies including pharmaceuticals, 7) essential support services, 8) case management system, 9) surveillance early warning and monitoring, 10) laboratory services, and 11) additional programs including community service programs. Based on our experiences, early preparedness with a proactive response, and adapting plans to local needs, the national and global current situation are the keys to manage patient care. Implementing all level of the hierarchy of control infection and keeping the human resource adequate also could protect staffs.

Keywords: COVID-19; hospital incident command system (HICS), hierarchy of control infection