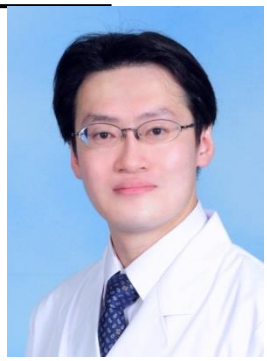
掀開本土裝置無導線心律調節器和肺高壓治療的神秘面紗-中華民國心臟學會登錄計畫幫您解惑

日期：113年5月11日(星期六)14:00-17:05

地點：張榮發國際會議中心7樓703會議室(台北市中山南路11號)

時 間	主 題	講 者
14:00	Opening Remarks	陳文鍾
	Chair: 游治節	
14:05	Update of TSOC Leadless Pacemaker Registry	黃奭毓(國泰)
14:25	Do we follow the ESC/HRS guideline and the obstacle in Taiwan	謝育整(中榮)
14:50	Optimize Leadless Pacemaker indication in Taiwan society	蔡適吉(新光)
15:15	Panel Discussion	
15:25	Healthy Break	
	Chair: 吳造中	
15:35	Association of Renal Function with Abnormal Hemodynamics and Severity of Pulmonary Arterial Hypertension	賴志泓(中榮)
16:00	Uric acid as a biomarker in distinct groups of pulmonary hypertension	吳懿哲(馬偕)
16:25	年紀對台灣肺高壓的影響	黃偉春(高榮)
16:50	Panel Discussion	
17:00	Closing Remarks	謝宜璋

CURRICULUM VITAE



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學位: 中國醫藥大學醫學系畢業

學經歷：

畢業學校	就讀科/系	起迄年月
中國醫藥大學	醫學系畢業	1999 /08－2006/08
台北榮民總醫院	內科住院醫師	2006/08－2009/08
台北榮民總醫院	心臟科總醫師	2009/08－2011/08
台北榮民總醫院	心臟科研究醫師	2011/08－2012/06
台北醫學大學-雙和醫院	心臟內科主治醫師	2012/07－2014/9
日本倉敷中央病院	循環器科臨床研究員	2012/02－2012/03

美國克里夫蘭醫學中心(Cleveland Clinic) 心臟血管中心臨床研究員 2017/10

美國希望之城國家醫學中心(City of Hope National Medical Center)貝克曼研究所研究員 2018/8-2020/8

台中榮民總醫院 心血管中心介入心臟科主治醫師 2014/10-至今

國立陽明交通大學 臨床醫學研究所博士候選人 2018/8-至今

國防醫學院臨床助理教授 2014-至今

專科證書 (Licensures): 台灣醫師執照 (No:039844)

台灣內科專科醫師執照 (Certificated No:008558)

台灣心臟專科醫師執照 (Certificated No:N1222)

台灣血管介入治療專科醫師 (DC0114)

中華民國心臟學會專科指導醫師

專科學會與會籍: 中華民國內科醫學會會員

中華民國心臟學會(TSOC)會員，卸任副秘書長

中華民國重症加護學會(TSCCM)會員

台灣肺高壓協會理事

台灣介入性心臟血管醫學會(TSCI)會員,第七與第九屆副秘書長

美國心血管造影和介入治療學會會士(FSCAI)

亞太介入心臟病學會會士 (FAPSIC)

台灣心肌梗塞學會(TAMIS)監事

Yih-Jer Wu (吳懿哲), M.D., M.Sc., M.PVD., Ph.D., FESC

Associate Professor, Department of Medicine, MacKay Medical College, New Taipei, TAIWAN
High Commissioner, Superintendent Office, and Chief, Pulmonary Hypertension Intervention Medicine, and Senior Consultant Cardiologist, Cardiovascular Center, MacKay Memorial Hospital, Taipei, TAIWAN

Education and Postdoctoral Training

1985.9 – 1991.6	M.D., School of Chinese Medicine, China Medical University, Taichung, Taiwan
1992.9 – 1994.6	M.Sc., Institute of Traditional Medicine, National Yang-Ming University, Taipei, Taiwan
2003.9 – 2006.9	Ph.D., Bristol Heart Institute, University of Bristol, Bristol, United Kingdom
2014.9 – 2015.6	M.PVD. (Master of Pulmonary Vascular Disease), University of Bologna, Bologna, Italy

Experience & Honors

1995-1999	Medical Residency & cardiology fellowship, Department of Internal Medicine, MacKay Memorial Hospital, Taipei, Taiwan
1999-2003	Consultant Cardiologist, Cardiovascular Medicine and Coronary Care Unit, MacKay Memorial Hospital, Taipei, Taiwan
2006	"Young Research Worker's Prize (YRWP)", British Society of Cardiology, UK
2016-2023	Chair, Department of Medicine, MacKay Medical College, New Taipei, Taiwan
2016-2023	Director, Department of Medical Education, MacKay Memorial Hospital, Taipei, Taiwan

Professional Societies or Association

2015-2017	Board of Supervisors, Taiwan Heart Rhythm Society
2016-	Chair (2022-)/ Committee Member, Pulmonary Hypertension & Circulation Committee, Taiwan Society of Cardiology
2020-2022	Deputy Chair, Medical Education Committee, Taiwan Society of Cardiology
2016-	Fellow, European Society of Cardiology
2018-	Executive Director, Taiwan Society of Lipid and Atherosclerosis
2018-	Director, Taiwan Pulmonary Hypertension Association

Publications

Publications including over 100 articles on ***Circ Res, ATVB, JMCC, Cardiovasc Res, Sci Rep, Plos One, Am J Cardiol, J Vasc Surg,***..., etc.

Association of Renal Function with Abnormal Hemodynamics and Severity of Pulmonary Arterial Hypertension

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Introduction: Pulmonary arterial hypertension (PAH) is associated with the development of right heart failure and the deterioration of related hemodynamic parameters, such as increased right atrial pressure and decreased cardiac output index. Persisted changes of these hemodynamic indexes could affect multiple organs system, precipitating the alternation of renal function and clinical outcome. However, which hemodynamic parameter associating the severity of PAH might alter renal function remains uncertain.

Methods: The study PAH cohort were extracted from the TAIPANS. The COMPERA risk assessment strategy was used to grading the severity of PAH, categorizing patients into low, intermediate, or high risk by assigning a grade (low = 1, intermediate = 2, high = 3) to specific variables according to thresholds prescribed by the 2016 ESC/ERS guidelines.

Results: A total 353 PAH diagnosed patients were included from TAIPANS registry. All the patients were divided into three risk strata by COMPERA scale including 29, 247 and 77 patients were categorized into low, intermediate and high COMPERA risk category respectively. The higher risks group had been significantly older (43% vs 48% vs 52%, $p = 0.037$), had significantly more diuretic usage (34% vs 55% vs 77%, $p < 0.001$), more digoxin usage (10% vs 26% vs 47%, $p < 0.001$), higher WHO Fc ($P < 0.001$), higher NT-pro BNP level ($P < 0.001$), higher mPAP (35 vs 46 vs 51, $P < 0.001$), higher PVR (5.1 vs 10.1 vs 15, $P < 0.001$), higher RAP (5.6 vs 10.1 vs 16.7, $p < 0.001$), and lower CI (3.6 vs 3.0 vs 1.7, $P < 0.001$). The higher risk group carried lower eGFR (104 vs 90 vs 79.8, $p < 0.004$) but the non-significant prevalence of CKD (10% vs 15% vs 20%, $p = 0.363$). After adjusting age, comorbidities, and medications, the intermediate and high risk groups were still significantly decreased 10 and 18.3 in eGFR respectively (p trend was 0.01). The component of COMPERA risk score, that is, higher RAP and NT-proBNP were significant associated with decrease of eGFR. The RAP level showed significant negative correlation with eGFR.

Conclusions: The renal dysfunction is associated with PAH severity by COMPERA risks scale and associated with worse hemodynamic profile, especially elevated RAP.

Uric acid as a biomarker in distinct groups of pulmonary hypertension

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Rationale: Current studies suggest that uric acid (UA) is a potential biomarker of pulmonary hypertension (PH). Yet, these studies mostly focus on pulmonary arterial hypertension (PAH). Data that addresses the role of uric acid in other groups of PH is limited. Thus, present research aims to investigate whether uric acid is a prognostic biomarker in different PH groups.
Methods: We retrospectively studied 157 PH patients enrolled in TAIPANS registry with complete right heart catheterization and uric acid data between 2010 and 2020. Basic demographic and clinical data including serum UA levels, hemodynamics, exercise capacity, and heart failure biomarker (N-terminal pro-B type natriuretic peptide, NT-proBNP) levels were collected. Relationship between UA levels and severities of PH in different groups was analyzed.
Results: Elevated UA levels were associated with disease severities across PH groups. UA levels were negatively correlated with cardiac index ($R=-0.356$, $P<0.05$) in patients with group 1 PH, positively correlated with pulmonary arterial wedge pressure and NT-ProBNP levels ($Rs=0.435$ and 0.748, respectively, both $P<0.05$) in those with group 2 PH, and right atrial area ($R=0.557$, $P<0.05$) in group 4 PH. Interestingly, UA levels were highly correlated with 6-min walking distance ($R= -0.956$, $P<0.05$), which is a general index for both cardiac and pulmonary performance, exclusively in group 3 PH. Moreover, UA levels of PAH-targeted therapy non-responders, who are group 2 and 3 PH patients, are significantly higher than PAH-targeted therapy responders, group 1 and 4 PH patients.
Conclusions: These results reveal that UA is a promising biomarker not only for PAH, but for distinct PH groups. Additionally, UA may be an efficient tool to differentiate PAH-targeted therapy responders from non-responders.