# 社團法人中華民國心臟學會 肺高壓南台灣研討會

Date: 2024 年 5 月 25 日 (星期六) 13:30-16:00

Location: 台南富信大飯店 (台南市北區成功路 336 號)

MEETING AGENDA			
Time	Subject	Speaker	Moderator
13:30~13:40	Opening		吳懿哲教授
13:40~14:10	Treatment of PAH: recent progress	朱俊源醫師	吳懿哲教授
14:10~14:20	Q & A		
14:20~14:50	Novel pathways and therapies targeting the TGF-β superfamily	林佳淩醫師	許志新教授
14:50~15:00	Q and A		
15:00~15:15	Coffee break		
15:15~15:30	PAH case sharing 1	劉熙韻醫師 (小兒心臟科)	林盈瑞醫師 (小兒心臟科)
15:30~15:35	Q and A		
15:35~15:50	PAH case sharing 2	陳奕廷醫師	鍾昇穎醫師
15:50~15:55	Q and A		
15:55~16:00	Closing		鄭錦昌主任

學分申請:心臟學會、風濕科學會、內科醫學會、重症學會、胸腔暨重症學會

## Novel pathways and therapies targeting the TGF-β superfamily

#### 林佳凌醫師

## 成大醫院心臟血管科主治醫師

Traditional treatment for pulmonary arterial hypertension (PAH) involves 3 pathways: endothelin-1, prostacyclin, and nitric oxide. Previously, all approved medication targeting PAH are from these 3 pathways. There was no new class of medication for over decades, until March 2024, US FDA approved sotatercept, a first-in-class treatment for PAH.

Pulmonary arterial hypertension is the result of pulmonary vascular remodeling due in part to an imbalance between anti-proliferative (BMPR-II-mediated) and proproliferative (ActRIIA-mediated) signaling pathways, resulting in hyperproliferation of vessel wall cells. Sotatercept is an activin signaling inhibitor. It works as a ligand trap that inhibits transforming growth factor beta (TGF- $\beta$ ) superfamily members. Therefore, Sotatercept is proposed to act as a reverse-remodeling agent through rebalancing of anti-proliferative and pro-proliferative signaling pathways.

In this short talk, we would give a brief introduction of the mechanism of Sotatercept, review its hallmark trials, and discuss future perspectives.

## PAH Case Sharing 2

#### 陳奕廷醫師

#### 高雄長庚紀念醫院心臟血管內科

The case involves a 76-year-old woman presenting with interstitial lung disease, favoring idiopathic pulmonary fibrosis (IPF). Upon examination, echocardiography revealed a high right ventricular systolic pressure (RVSP), indicative of potential pulmonary hypertension. Further investigation via right heart catheterization demonstrated elevated pulmonary capillary wedge pressure (PCWP) and increased pulmonary vascular resistance.

The combination of interstitial lung disease, elevated RVSP, and findings from right heart catheterization highlights the complexity of the patient's condition. Management will likely involve a multidisciplinary approach, including optimizing lung function with medications such as corticosteroids and immunosuppressants, managing symptoms of pulmonary hypertension with vasodilator therapy, and potentially considering lung transplantation depending on the severity of the disease and the patient's overall health status.

In conclusion, this case underscores the importance of thorough evaluation and collaborative management in addressing the intricate interplay between interstitial lung disease, pulmonary hypertension, and right heart dysfunction in elderly patients.

#### 朱俊源 醫師

#### 學 歷:

高雄醫學大學醫學系學士 高雄醫學大學醫學研究所 臨床醫學組碩士 高雄醫學大學臨床醫學研究所博士班研讀

#### 現 職:

高雄醫學大學附設醫院心臟血管內科主治醫師暨專科指導醫師 高雄醫學大學醫學院醫學系內科學科助理教授 中華民國心臟學會肺高壓暨循環委員會委員 臺灣介入性心臟血管醫學會副秘書長暨甄審委員會委員 臺灣心肌梗塞學會教育委員會委員 中華民國心臟學會雜誌(ACTA CARDIOLOGICA SINICA)執行編輯及編修編輯 社團法人中華民國肺動脈高血壓關心協會監事

#### 經歷:

高雄醫學大學附設中和紀念醫院內科部 住院醫師 2002~2005 高雄醫學大學附設中和紀念醫院心臟血管內科 總醫師 2005~2007 行政院衛生署屏東醫院心臟內科主治醫師 2007-2012 行政院衛生署屏東醫院內科加護病房主任 2011-2012 高雄醫學大學附設中和紀念醫院心臟加護病房專責主治醫師 2013~2014 高雄醫學大學附設中和紀念醫院心臟血管內科 主治醫師 2007~至今 高雄醫學大學醫學院醫學系內科學科 助理教授 2015~至今 中華民國心臟學會雜誌執行編輯及編修編輯 2014~至今 中華民國心臟學會肺高壓治療小組委員 2016~至今 高雄醫學大學附設中和紀念醫院肺高壓治療團隊 總幹事 2017~至今 臺灣介入性心臟血管醫學會教育訓練委員會委員 2018~至今 高雄醫學大學附設中和紀念醫院心臟血管內科 心導管室主任 2018.8.1~2019.7.31

社團法人中華民國肺動脈高血壓關心協會第四屆監事 2019.5.3~2021.5.2

#### Lin, Jia-Ling (林佳凌)

#### **Education**

2005-2012 M.D., National Cheng Kung University, Tainan, Taiwan

#### **Employment Record**

- 2012-2013 Post-graduate year training, National Cheng Kung University Hospital
- 2013-2014, 2015-2017 Resident, Department of Internal Medicine,
  - National Cheng Kung University Hospital, Tainan, Taiwan
- 2017-2019 Clinical Fellow, Division of Cardiovascular Department,
  - National Cheng Kung University Hospital, Tainan, Taiwan
- 2019-2021 Attending Physician, Division of Cardiovascular Department, National Cheng Kung University Hospital, Tainan, Taiwan
- 2021-2023 Attending Physician, Division of Cardiovascular Department, National Cheng Kung University Hospital Dou-Liou Branch, Yunlin, Taiwan
- 2023- Attending Physician, Division of Cardiovascular Department, National Cheng Kung University Hospital, Tainan, Taiwan

#### **Board Certification**

Adult Cardiologist Interventional Cardiologist Intensivist

#### **Professional Affiliation**

Taiwan Society of Internal Medicine

Taiwan Society of Cardiology (TSOC)

2022-2024 Member of TSOC Young Physician Working Group

Taiwan Society of Cardiovascular Intervention

Taiwan Heart Rhythm Society

Taiwan Society of Critical Care Medicine

Taiwan Society of Heart Failure

#### 劉熙韻 醫師

#### 現 任:

仁愛長庚合作聯盟醫院兒童心臟內科兼任主治醫師 高雄長庚紀念醫院兒童急診主治醫師

學 歷:高雄醫學大學醫學系

## 經 歷:

高雄長庚紀念醫院兒童急診主治醫師 高雄長庚紀念醫院兒童加護病房主治醫師 高雄長庚紀念醫院兒童內科部總醫師 高雄長庚紀念醫院兒童內科部住院醫師

## 專 長:

一般兒科學、兒童心臟學、心臟超音波、兒童急救加護

## 陳奕廷 醫師

學歷:

長庚大學醫學系

現職:

基隆長庚紀念醫院 心臟血管內科