Hotlines in Cardiometabolic Disease

[台中場]
時間：114年1月18日(星期六) 14:00-17:00
地點：台中集思新烏日會議中心4F 402史蒂文生廳(台中市烏日區高鐵東一路26號3樓)

Time	Topic	Speaker	Chair
14:00-14:10 (10")	Opening Remarks	李貽恒	
14:10-14:40 (30")	Obesity, Diabetes and Cardiovascular Diseases	洪崇烈	黃金隆
14:40-15:10 (30")	Mechanism of Incretin-based Therapy including GLP-1 & GIP	林姝含	黃金隆
15:10-15:20 (10")	Healthy Break		
15:20-15:50 (30)	Evidence of GLP-RA	王宇澄	林宗憲
15:50-16:20 (30")	Evidence of Dual GIP/GLP-1 RA	陳政瑋	林宗憲
16:20-16:50 (30")	Panel Discussion	林宗憲	
16:50-17:00 (10")	Closing Remarks	謝宜璋	

洪崇烈 醫師

現職：
馬偕紀念醫院遠距暨居家照護中心主任
馬偕紀念醫院心血管中心 超音波影像學兼遠距醫療主任馬
偕紀念醫院心血管中心 心臟衰竭暨影像醫學科主任馬偕
紀念醫院心血管中心 資深主治醫師
教育部部定教授
馬偕生醫所教授
中華民國醫用超音波學會監事
台灣心臟超音波學會監事
台灣老人急重症醫學會副秘書長
中華民國心臟學會心臟影像委員會委員
中華民國心律學會植入性心臟儀器委員會委員
中華民國心臟學會(TSOC)、中華民國醫用超音波學會(JMU)、老人急重症(IJG)
等雜誌編輯

主要學歷：
國立臺灣大學醫學院醫學系 醫學士
國立臺灣大學公共衛生學院 碩士
國立陽明大學臨床醫學研究所醫學博士
美國梅奧醫院(Mayo Clinic)心臟衰竭中心訪問學者
美國哈佛大學 Brigham and Woman's Hospital 研究員及訪問學者

主要經歷：
中華民國內科專科指導醫師
中華民國心臟內科專科指導醫師 中
華民國醫用超音波學會指導醫師台
灣心臟超音波學會指導醫師
心臟電生理暨介入治療專科醫師
台灣心血管介入專科醫師
馬偕紀念醫院 心臟內科總醫師
馬偕紀念醫院 內科住院醫師台
灣大學附設醫院 實習醫師

主項目或專長：
心血管影像及功能評估、心臟超音波學、心衰竭、心肌病變、植入式心臟儀器
監測、遠距醫療

林姝含 醫師

現職：新光醫院心臟內科主治醫師

經歷

- 新光醫院心臟內科主治醫師
- 新竹台大分院心臟內科主治醫師
- 台大醫院心臟內科研修醫師
- 台大醫院內科部總醫師
- 台大醫院內科部住院師

學歷

- 國立陽明交通大學醫學院醫學士

醫學會職

- 中華民國心臟學會(TSOC)青年醫師工作小組委員
- 中華民國心臟學會(TSOC)國際暨兩岸交流委員會委員
- 台灣周邊血管學會(TSPI)學術教育委員會委員
- 台灣周邊血管學會(TSPI)編輯暨研究委員會副主委
- 台灣心肌梗塞學會(TAMIS)國際委員會委員
- 臺灣介入性心臟血管醫學會(TSCI)青年委員會委員

教職

- 教育部部定講師

王宇澄 醫師

王宇澄醫師現為亞洲大學附屬醫院內科部主任兼心臟科主任，同時是亞洲大學醫學檢驗暨生物技術學系副教授。王醫師專長於心血管疾病導管介入與藥物治療、心臟衰竭與各種心律不整之藥物治療、與三高慢性病(高血壓、糖尿病、高血脂)之預防與控制，並積極參與國內心臟學會目前各種心血管疾病治療指南的撰寫與修訂。希望能透過全方位的預防與照護，有效提升各種心血管疾病的預後，以減輕病患痛苦，延長病人壽命。

學歷：
陽明大學醫學系醫學士(1994-2000)
中國醫藥大學臨床醫學研究所博士(2010-2016)
美國德州心臟醫學中心Texas Heart Institute研究員 (2011-2012)

教職：
亞洲大學生物科技學系專任副教授
中國醫藥大學醫學系兼任助理教授

現職：
亞洲大學附屬醫院內科部主任 (2021-迄今)
亞洲大學附屬醫院心臟科主任(2016-迄今)
教育部定副教授(2022-迄今)
亞洲大學醫學檢驗暨生物技術學系專任副教授(2022-迄今)
中國醫藥大學附設醫院心臟血管系兼任主治醫師(2019-迄今)
中華民國心臟內科專科醫師 (2008-迄今)
中華民國心臟學會心臟內科介入性次專科醫師 (2009-迄今)
中華民國心臟學會專科指導醫師(2015-迄今)
臺灣介入性心臟血管醫學會理事(2022-迄今)
台灣高血壓學會理事(2021-迄今)
台灣心肌梗塞學會理事(2021-迄今)
中華民國血脂及動脈硬化學會監事(2021-迄今)
臺灣介入性心臟血管醫學會編輯暨登錄委員會主委(2022-迄今)
台灣心肌梗塞學會學術委員會主委(2021-迄今)
中華民國心臟學會學術委員會委員(2022-迄今)
中華民國心臟學會治療準則與共識委員會委員(2022-迄今)
臺灣大學智慧健康科技研發中心諮詢委員(2021-迄今)
台中市醫師公會會員代表(2023-迄今)

Curriculum Vitae Zheng-Wei Chen

Education	Degree	Institution	Year
	M.D.	College of Medicine, National Taiwan University	2012
Work experience	Position	Institution	Time
	Attending physician, Cardiology	Division of Cardiology, Department of Internal Medicine, National Taiwan University Hospital Yunlin Branch	Aug 2018 –
	Fellow, Cardiology	Division of Cardiology, Department of Internal Medicine, National Taiwan University Hospital	Jul 2016 – Jul 2018
	Resident, Internal Medicine	Department of Internal Medicine, National Taiwan University Hospital	Jul 2013 – Jun 2016

Summary of qualification		Time
	Board of Specialist of Critical Care Medicine	2020 -
	Board of Interventional Cardiologist	2019 -
	Board of Cardiology	2018 -
	Board of Internal Medicine	2016 -
Professional		Time
	Taiwan Society of Cardiovascular Interventions	2018 -
	Taiwan Society of Aldosteronism	2017 -
	Taiwan Society of Cardiology	2017 -
	Society of Internal Medicine of Taiwan (ROC)	2016 -

Publication:

1. **Chen ZW**, Huang KC, Lee JK, Lin LC, Chen CW, Chang YY, et al. Aldosterone induces left ventricular subclinical systolic dysfunction: a strain imaging study. Journal of hypertension 2017.
2. **Chen ZW**, Hung CS, Wu VC, Lin YH; TAIPAI study group. Primary Aldosteronism and Cerebrovascular Diseases. Endocrinol Metab (Seoul). 2018.
3. **Chen ZW**, Chen CW, Wu CK, Hsu HH, Hwang JJ, Lin YH. Balloon Pulmonary Angioplasty in Chronic Pulmonary Thromboembolic Pulmonary Hypertension. Acta Cardiol Sin 2019.
4. **Chen ZW**, Tsai CH, Pan CT, Chou CH, Liao CW, Hung CS, Wu VC, Lin YH, TAIPAI study group. Endothelial Dysfunction in Primary Aldosteronism. Int. J. Mol. Sci. 2019
5. **Chen ZW**, Wu CK, Kuo PH, Hsu HH, Tsai CH, Pan CT, Hwang JJ, Ko CL, Huang YS, Ogo T, Lin YH. Efficacy and safety of balloon pulmonary angioplasty in patients with inoperable chronic thromboembolic pulmonary hypertension. J Formos Med Assoc 2020.
6. **Chen ZW**, Pan CT, Tsai CH, Chang YY, Chang CC, Lee BC, Chiu YW, Huang WC, Lin YL, Wu VC, Hung CS, Liao CW, Lin YH; TAIPAI study group. Heart-Ankle Pulse Wave Velocity Is Superior to Brachial-Ankle Pulse Wave Velocity in Detecting Aldosterone-Induced Arterial Stiffness. Biomedicines 2021.
7. **Chen ZW**, Pan CT, Liao CW, Tsai CH, Chang YY, Chang CC, Lee BC, Chiu YW, Huang WC, Wang SM, Lu CC, Chueh JS, Wu VC, Hung CS, Lin YH. Implication of MR activity in post-treatment arterial stiffness reversal in patients with primary aldosteronism. J Clin Endocrinol Metab. 2022
8. **Chen ZW**, Wu VC, Huang YT, Lin YH. From science to practice: Development of evidence-based guidelines for primary aldosteronism. J Formos Med Assoc. 2023 Jun 27;S0929-6646(23)00241-3.
9. **Chen ZW**, Liao CW, Pan CT, Tsai CH, Chang YY, Chang CC, Lee BC, Chiu YW, Huang WC, Lai TS, Lu CC, Chueh JS, Wu VC, Hung CS, Lin YH; TAIPAI study group. Reversal of arterial stiffness in medically and surgically treated unilateral primary aldosteronism. J Hypertens. 2024 Mar 1;42(3):538-

Mechanism of Incretin-based Therapy including GLP-1 & GIP

Glucagon-like peptide-1 receptor agonists (GLP-1RAs) have emerged as promising therapeutic agents for heart failure (HF). These medications, initially developed for the treatment of type 2 diabetes, have been shown to exert cardioprotective effects beyond their glycemic control benefits. Today's speech will discuss the results of key clinical trials investigating the use of GLP-1RAs in HF.

FIGHT Trial

The the Functional Impact of GLP-1 for Heart Failure Treatment (FIGHT) trial was a large-scale, randomized controlled trial that evaluated the efficacy of liraglutide in patients with HF with reduced ejection fraction (HFrEF). The primary endpoint was the composite of cardiovascular death and hospitalization for HF. Liraglutide did not significantly reduce the risk of the primary endpoint, and it also did not improve several secondary outcomes, including quality of life, exercise capacity, and certain biomarkers of heart failure.

LIVE Trial

The Effect of Liraglutide on Left Ventricular Function in Stable Chronic Heart Failure Patients with and without Diabetes (LIVE) trial was another multicentre, dou ble-blind, randomised, placebo-controlled clinical trial to investigate the effects of liraglutide in patients with HFrEF. The primary endpoint was the change of LVEF after 24 weeks treatment of liraglutide. Similar to FIGHT trial, liraglutide failed to improve LVEF in patients with HFrEF.

Summary of Clinical Trial Results

Overall, the results of clinical trials investigating the use of GLP-1RAs in HF have been mixed. While some studies have shown benefits in terms of reducing cardiovascular events, improving quality of life, and enhancing exercise capacity, others have not. The reasons for these discrepancies may be related to differences in patient populations, study designs, and the specific GLP-1RA used.

Implications for Clinical Practice

Despite the mixed results, GLP-1RAs may still have a role to play in the management of HF. For obese patients with HFmrEF and HFpEF, semaglutide appears to be a promising therapeutic option. However, the optimal use of GLP-1RAs in HF remains to be determined.

Evidence of GLP-RA

Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) have become essential therapies for type 2 diabetes mellitus (T2DM) due to their multifaceted benefits. Beyond improving glycemic control via glucose-dependent insulin secretion, GLP-1 RAs offer significant cardiovascular and renal protection. Landmark trials such as LEADER, SUSTAIN-6, and REWIND demonstrated that agents like liraglutide, semaglutide, and dulaglutide reduce HbA1c levels while lowering the risk of major adverse cardiovascular events (MACE), including cardiovascular death, myocardial infarction, and stroke. These findings make GLP-1 RAs a preferred option for diabetic patients at high cardiovascular risk.

In chronic kidney disease (CKD), GLP-1 RAs effectively slow disease progression. Trials such as FLOW (semaglutide) and AMPLITUDE-O (efpeglenatide) showed reductions in albuminuria, slower GFR decline, and decreased risk of kidney failure. These benefits are mediated through glycemic control, blood pressure regulation, anti-inflammatory effects, and direct renal actions. Consequently, GLP-1 RAs are increasingly critical for managing diabetic kidney disease.

For obesity management, GLP-1 RAs have been transformative. They suppress appetite and enhance satiety, leading to significant weight loss. The STEP trials (semaglutide) demonstrated substantial weight reductions. These results position GLP-1 RAs as leading pharmacological options for obesity, with additional benefits of improved metabolic health and reduced cardiovascular risk.

Emerging evidence suggests a role for GLP-1 RAs in heart failure, particularly in reducing hospitalizations for preserved or reduced ejection fraction.

In summary, GLP-1 RAs have evolved from diabetes treatments to versatile agents addressing hyperglycemia, obesity, cardiovascular risk, and CKD. Their broad therapeutic applications underscore their importance in managing complex cardiometabolic conditions, with ongoing research likely to expand their potential further.