2026 TSOC Acute Coronary Syndrome Symposium -2 (急性冠心症系列二)

Acute Coronary Syndrome in the Current Era: An Updated Analysis from the T-FORMOSA Study

Time: 14:00-16:50, May 9, 2026

Venue: 台北張榮發會議中心 **6** 樓 **603** 會議室(台北市中山南路 **11** 號)

Time	Topic	Speaker	Chair
14:00-14:05	Opening remarks	李貽恒	
14:05-14:35	Previous TSOC ACS registries at a glance	黃金洲	李貽恒
14:35-15:00	Epidemiology of ACS in Taiwan and background characteristics of the T-FORMOSA study	賴志泓	徐國基
15:00-15:25	In-hospital clinical profile, cardiovascular outcomes, and prognostic predictors of ACS: a lesson from the T-FORMOSA study	趙庭興	徐國基
15:25-15:35	Panel discussion	徐國基	
15:35-15:45	Healthy break		
15:45-16:05	Does time elapse from symptoms onset to ED presentation matter?	蘇峻弘	吳彥雯
16:05-16:35	Treat to target < 70 mg/dL or LDL-C lowering by 50 mg/dL for ACS: Where is the holy grail?	張獻元	吳彥雯
16:35-16:45	Panel discussion	侯嘉殷	
16:45-16:50	Closing remarks	侯嘉殷	

CURRICULUM VITAE

基本資料:

姓名: 黃金洲
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目前職位:

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台灣血脂衛教協會秘書長
台灣高血壓學會理事
中華民國心臟學會副秘書長
中華民國血脂及動脈硬化學會副秘書長
台灣醫學教育學會副秘書長
財團法人心臟醫學研究發展基金會副秘書長
高級心臟救命術指導員
中華民國心臟學會雜誌執行編輯
中華民國心臟學會專科指導醫師
中華民國重症醫學會專科指導醫師

學歷:

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經歷:

臺北榮民總醫院內科部住院醫師
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德國柏林心臟醫學中心(German Heart Institute Berlin)研究員

CURRICULUM VITAE

姓名: **賴志泓 (Chih-Hung, Lai, MD, FSCAI)**

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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

Name: 趙庭興(Chao Ting-Hsing)

甲、現職：

1、國立成功大學醫學院醫學系內科部定教授兼心臟血管科主治醫師。

2、國立成功大學醫學院附設醫院健康管理中心主任、心臟血管科主任。

3、行政院衛生福利部醫院評鑑儲備委員、內科專科訓練醫院訪視委員。

4、財團法人醫院評鑑暨醫療品質策進會「疾病品質照護認證」委員、「國家醫療品質獎」委員、「台灣臨床成效指標」小組委員。

5、中華民國心臟學會第 28 屆副理事長；台灣心臟基金會副執行長。

6、台灣高血壓學會第 7 屆理事、台灣醫療品質協會第 10 屆理事。

乙、經歷：

1、國立成功大學醫學院附設醫院主任秘書、門診部主任、公共事務室主任。

2、國立成功大學醫學院附設醫院品質中心副主任、斗六分院副院長兼品管中心主任、斗六分院醫務秘書兼內科部主任。

3、財團法人醫院評鑑暨醫療品質策進會「醫院品質績效量測指標系統與落實品質改善計畫」稽核委員。。

4、台灣介入性心臟血管醫學會第 5、6 屆理事、第 7 屆監事暨公共醫療政策委員會召集人；台灣醫療品質協會第 9 屆理事。

5、台灣高血壓學會第 6 屆理事、中華民國心臟學會第 22 屆副祕書長及第 27 屆秘書長、中華民國血脂及動脈硬化學會副祕書長、第屆雲林縣醫師公會理事。

丙、學歷：台北醫學大學醫學士。

丁、海外進修：日本國立京都大學大學院醫學研究部研究員。

戊、專科醫師：內科醫學會、心臟學會、急救加護醫學會(重症)、介入；高階醫品師。

己、專科指導醫師：內科醫學會、心臟學會。

庚、榮譽及受獎：

1、第 30、31 屆及第 38 屆中華民國心臟醫學會(TSOC)年會最佳海報獎。

2、93、105、106 年國立成功大學醫學中心內科部主治醫師最佳研究獎。

3、國立成功大學醫學院(94、95、96 年度)最佳教學主治醫師。

4、97、99 及 100 年國立成功大學醫學中心醫療科技研究計劃成果海報獎。

5、2010、2015、2017、2022 TSOC 高血壓治療指引編撰委員。

6、2013 年美國心臟學院(ACC)年會最佳海報論文獎。

7、FACC、FESC 及 FAPSC；2014 年台灣內科醫學會最佳海報論文獎。

8、2017 年中華民國血脂及動脈硬化學會血脂治療指引編撰委員。

9、2018、2020 年 TSOC 糖尿病心血管藥物治療共識編撰委員。

10、 2021 年 TSOC Fabry’s Disease 診斷治療共識編撰委員。

11、 2022 年 TSOC 慢性冠心症治療指引編撰委員。

姓　　名: 蘇峻弘　　英文名字: **Chun-Hung Su**

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現職單位　: 中山醫學大學附設醫院心臟內科主任

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學歷 :

中山醫學大學 醫學士

中山醫學大學 臨床醫學研究所醫學碩士

中山醫學大學 臨床醫學研究所醫學博士

專科學會 :

台灣內科醫學會 內科專科醫師 (91 年至今)

中華民國心臟學會 心臟內科專科醫師 (93 年至今)

中華民國重症醫學專科醫師 (94 年至今)

中華民國心臟學會 心臟內科專科醫師指導醫師 (100 年至今)

中華民國心臟學會 心臟血管介入專科醫師 (96 年至今)

中華民國心臟學會第 26 屆副秘書長 (107 年 5 月至 109 年 7 月)

中華民國心臟學會 心衰竭委員會委員 (106 年至 107 年)

中華民國心臟學會 預防醫學委員會委員 (111 年 7 月至今)

台灣介入性心臟血管醫學會第 8-9 屆副秘書長 (109 年 2 月至今)

台灣介入性心臟血管醫學會第 10 屆監事暨編輯委員會副主委

台灣心肌梗塞學會第 2 屆學術委員會副主委

中山醫學大學醫學系內科學科主任(109 年 8 月至 110 年 7 月)

中山醫學大學醫學系專任教授(112 年 2 月至至今)

CURRICULUM VITAE

Hsien-Yuan Chang, MD, PhD

Current position

2019 ~ Attending Physician, Division of Cardiology, Dept. of Internal Medicine, NCKU Hospital, Tainan, Taiwan

2025~ Associate Professor, Dept. of Internal Medicine, College of Medicine, NCKU, Tainan, Taiwan

Education

2000 ~ 2007 MD, College of Medicine, NCKU, Taiwan

2015 ~ 2016 Master, Institute of Clinical Medicine, NCKU

2019 ~ 2024 Doctorate, Institute of Clinical Medicine, NCKU

Relevant Experience

2009 ~ 2011 Residency, Dept. of Internal Medicine, NCKU Hospital

2012 ~ 2013 Fellowship in Cardiology, NCKU Hospital

2014 ~ 2019 Cardiologist / Chief of Cardiology, NCKU Hospital Dou-liou Branch

2020 ~ 2022 Vice Secretary, Taiwan Society of Cardiology

2022 ~ 2024 Finance Committee, Taiwan Society of Cardiology

2022 ~ 2024 Peripheral Vascular Intervention Committee, Taiwan Society of Interventional Cardiology

2024 ~ Cardiovascular Intervention Committee, Taiwan Society of Cardiology

Board certification

2008 Registered Physician – Taiwan

2012 Board of Internal Medicine – Taiwan

2014 Board of Adult Cardiologist – Taiwan

2016 Board of Interventional Cardiologist – Taiwan

Award

2020 Young Investigator Award, Taiwan Society of Cardiology

2022 Best Research Award (Assistant Professor), NCKU Hospital Internal Medicine

2025 Clinical Medicine Outstanding Paper Award, Cheng-Hsing Medical Foundation

Publications

1. First / Co-First / Corresponding Author: 16
2. Co-author: 15

Previous TSOC ACS registries at a glance

黃金洲

Anemia is an important and common comorbidity in patients with heart failure. Patients with anemia and heart failure are associated with poor clinical status and worse outcomes than those without. Whether anemia is just a marker of heart failure severity or it is also involved in heart failure progression and outcomes and therefore should be treated is not entirely clear. Using erythropoiesis-stimulating agents to treat anemia in patients with heart failure has been evaluated intensively during the past several years and is regarded as a promising treatment strategy for heart failure patients. Unfortunately, it has been demonstrated in a large scale randomized controlled trial that these agents did not improve outcomes but were associated with a higher risk of adverse events. The iron deficiency in patients with heart failure can be absolute or function. The former refers to that total body iron is decreased, and the latter is caused when total body iron is normal or increased but is inadequate to meet the needs of target tissues because of sequestration in the storage pool. It seems appropriate to supplement iron in patients with anemia resulting from absolute iron deficiency; however, it has been unclear whether and how absolute or functional iron deficiency should be treated in nonanemic patients with heart failure. Recently, some beneficial effects have been observed in small studies by administrating intravenous iron in patients with heart failure and absolute or functional iron deficiency with or without anemia improves symptoms and exercise capacity. Nonetheless, their long-term outcomes and safety data are not yet available. In this lecture, we discuss the causes and pathogenesis of and treatment options for anemia and iron deficiency in patients with heart failure.

Epidemiology of ACS in Taiwan and background characteristics of the T-FORMOSA study

賴志泓

For many years, patients with diabetes and no known coronary artery disease (CAD) were thought to have the same risk for future myocardial infarction (MI) as did patients with known CAD. CAD is a major determinant of the long-term prognosis among patients with T2DM. Furthermore, in patients with T2DM there is an increased mortality after MI, and worse overall prognosis in T2DM patients with CAD. In the past prior to 2008, the available drugs for glycemic control in DM had been largely neutral or even had some harmful effects. The newer agents, like SGLT-2 inhibitors and GLP-1 receptor agonists have recently been shown to be not only effective and safe for glycemic control, but also have cardio-protective effects. It is well recognized that as many as two- thirds of T2DM patients with either ACS or stable CAD have either previously diagnosed DM or will be subsequently diagnosed with it. It is, therefore, essential for the clinical cardiologist to be familiar with the latest therapeutic strategies and advances for the management of these patients. Given that there has been significant evolution in the development of pharmacologic management of T2DM patients and selection of the optimal antidiabetic strategy for T2DM patients with CAD is crucial. The TSOC consensus suggests the target of HbA1c <7%. Metformin remains the first-line therapy in diabetic patients with CAD, mainly based on the findings from the UKPDS trial, 3 meta-analyses,1 observational study, and its effect on the reduction in CAC severity. For dual therapy, we recommend metformin plus SGLT-2 inhibitors, followed by metformin plus GLP-1 RAs, and then metformin plus TZDs (pioglitazone only). The PROactive trial, an important meta-analysis,74 and 2 image studies (CHICAGO and PERISCOPE provided evidences to support the place of pioglitazone in the management of type 2 diabetes and CAD. The EMPA-REG OUTCOME trial, the CANVAS program, DECLARE TIMI-58 studies and the CVD-REAL Nordic study gave a rationale for the use of SGLT-2 inhibitors. Reassuringly, each of the completed large-scale 7 CVOTs and their recent meta-analysis of these trials demonstrates cardioprotective effect of GLP-1RA gave a rationale for the use of GLP-1 RAs. If the fourth drug is to be added, DPP-4 inhibitors are recommended due to their neutral effects and safety. Sulfonylurea did not have any positive trial to support its use, and the result of a Taiwanese cohort showed a worse outcome. In addition, the risk of hypoglycemia is well-known. Glinides and acarbose have low priority due to lack of any supporting evidence.

In-hospital clinical profile, cardiovascular outcomes, and prognostic predictors of ACS: A lesson from the T-FORMOSA study

趙庭興

Heart failure section:

1. Vericiguat, a novel oral soluble guanylate cyclase stimulator, in this phase 3, randomized, double-blind, placebo-controlled trial showed beneficial effects in 5050 patients with NYHA II-IV and an EF < 45%. Vericiguat reduced 10% of composite endpoints including cardiovascular death and first heart failure hospitalization in mean 10.8 months.
2. PARALLAX, a prospective, randomized, controlled, double-blind multicentre clinical trial in patients with chronic symptomatic HF with EF >40%, New York Heart Association class II-IV symptoms, found sacubitril/valsartan reduced NT-proBNP levels at 12 weeks, but didn't increased 6-minutes walk distance at 24 weeks, compared to inhibitors of the RAS including ACE inhibitors or ARBs.
3. EXPLORER-HCM, a phase 3, randomised, double-blind, placebo-controlled trial found mavacamten (a first-in-class cardiac myosin inhibitor) improved exercise capacity, LVOT obstruction, NYHA functional class, and health status in patients with obstructive hypertrophic cardiomyopathy. Patients on mavacamten had greater reductions than those on placebo in post-exercise LVOT gradient (–36 mm Hg, 95% CI –43·2 to –28·1; p<0·0001). Thirty four% more patients in the mavacamten group improved by at least one NYHA class (80 of 123 patients in the mavacamten group vs 40 of 128 patients in the placebo group; 95% CI 22·2 to 45·4; p<0·0001).
4. EMPEROR-Reduced, a double-blind trial of 3730 patients with class II-IV HF and LVEF<40% to receive empagliflozin or placebo in addition to recommended therapy, found 25% reduction of cardiovascular death and HF hospitalization. The effect of empagliflozin on the primary outcome was consistent in patients regardless of the presence or absence of diabetes. The annual rate of decline in eGFR was slower in the empagliflozin group than in the placebo group, and empagliflozin-treated patients had a lower risk of serious renal outcomes.

Does time elapse from symptoms onset to ED presentation matter?

蘇峻弘

In the ACC 2025 conference, there was no ground-breaking news in the arrhythmic field. Nonetheless, there were a few interesting researches helping to fine tune the best strategy to treat patients in clinical practice.

As for the management of atrial fibrillation, the launch of ACC 2019 guideline did not differ much from previous one. The low risk of stroke in women with no other risk factor was incorporated into the guideline and needed other risk factors to warrant anticoagulation. The coverage of device detected atrial high rate was new and recommendation of anticoagulation was put into the guideline. However, more evidence is needed. The use of aspirin for stroke prevention in AF patients is totally out of the recommendation due to the similar bleeding risk and less efficacy of stroke prevention than warfarin.

To clarify the role of ablation in treating atrial fibrillation, there are many registries going on all over the world. The one year recurrent rate was around 70% among all the registries, even with the better ablation tools and the improvement of the durability of PV isolation, implying that 30% of the AF patients had triggering foci outside PVs.

There were some post-marketing registries of NOAC, aiming to study the safety of NOAC in real world, including Norway registry, ORBIT-AF registry, and XaPASS. The results were generally consistentent with the phase III RCTs. Edoxaban was mostly not in the analysis of these registries due to its late launch. Its study, ENSURE-AF, showed the safety profile of edoxaban in the use of electrical cardioversion. As for the anti-dote of Xa inhibitor, ANNEXA-4 revealed the efficacy and safety of the drug, andexanet, in reversing the effect of apixaban or revaloxaban.

As for ventricular tachyarrhythmia, DANISH proved no survival benefit of ICD in patients with non-ischemic cardiomyopathy as primary prevention. Numerous studies searched for better risk stratification markers, but the adoption for clinical use needs further studies. The same scenario applied to ischemic cardiomyopathy too. The hot topic of HRS this year, early repolarization, was not hot anymore in ACC. However, it seems to be a good marker of future ventricular arrhythmia events in heart failure patients.

Treat to target < 70 mg/dL or LDL-C lowering by 50 mg/dL for ACS: Where is the holy grail?

張獻元

Many clinical trials are presented in the “Hot-Line sessions” of European Society of Cardiology scientific conference this year. Studies, including DANISH and REM-HF for the efficacy of implantable cardioverter defibrillator in heart failure patients were presented and discussed. Strategies of dual antiplatelet treatment (DAPT) and platelet function monitoring (ANTARCTIC) challenged the current concept of DAPT treatment. Management for hyperlipidemia is still a hot topic in this year. Study from Japan (IJ-PROPER) argued the effect of ezetimibe on acute coronary event. ESCAPE trial investigated the effect of alirocumab, a PCK9 inhibitor, on the frequency of lipoprotein apheresis in a randomized phase 3 setting. CE-MARC 2 trial investigated the diagnostic accuracy for coronary artery disease by various image modality, including MR and SPECT and presented in the meeting. The choice of anti-platelet agents and its effects in patients without stenting were discussed in EROSION and PRAGUE-18 trials. ENSURE-AF study reported the effects of edoxaban vs. enoxaparin/warfarin in subjects undergoing cardioversion of atrial fibrillation. These results of clinical trials update the concept and provide information on treatment strategies on patients with cardiovascular diseases.