

2026 TSOC Acute Coronary Syndrome Symposium -3 (急性冠心症系列三)
Acute Coronary Syndrome in the Current Era: An Updated Analysis from the T-FORMOSA Study

Time: 09:00-12:00, August 9, 2026

Venue: 台中集思新烏日會議中心 3F 301 瓦特廳(台中市烏日區高鐵東一路 26 號 3 樓)

Time	Topic	Speaker	Chair
09:00-09:05	Opening remarks	謝宜璋 理事長	
09:05-09:35	Updated background characteristics and in-hospital clinical profile and cardiovascular outcomes in Taiwan: what the T-FORMOSA study tells us?	李任光	謝宜璋 理事長
09:35-10:00	Choice of P2Y12 inhibitor therapy in ACS patients: New insight into the T-FORMOSA study	黃祺耀	李文領
10:00-10:25	Impact of LDL-C levels on cardiovascular outcome in ACS patients: A lesson from the T-FORMOSA study	趙庭興	李文領
10:25-10:35	Panel discussion	李文領	
10:35-10:45	Healthy break		
10:45-11:10	Old age as a risk factor of ACS: An old dog plays new tricks?	陳坤雄	蔡佳醞
11:10-11:35	Reappraisal of the clinical role of beta-blocker in ACS: An analysis from the T-FORMOSA study	劉維新	蔡佳醞
11:35-11:45	Panel discussion	侯嘉殷	
11:45-11:50	Closing remarks	侯嘉殷	

內科部—李任光醫師



● 現職：

臺大醫院內科部主治醫師

● 專長：

高血壓及心血管疾病、冠狀動脈導管手術、下肢動脈血管阻塞、實驗室醫學

● 學歷：

國立臺灣大學生醫電子與資訊學研究所博士班

國立臺灣大學醫學院醫學系學士

● 經歷：

臺大醫院心臟內科總醫師

臺大醫院內科部住院醫師

臺大醫院檢驗醫學部住院醫師

亞東紀念醫院心臟內科暨臨床病理科主治醫師

● 醫師小叮嚀：

心臟與血管組成了人體的循環系統，當心臟或周邊血管因硬化而狹窄，或因血栓造成阻塞，則會導致各種疾病，如中風、冠狀動脈心臟病、腎功能退化、手腳冰冷、疼痛或水腫跛行，其危險因子包含高血壓、糖尿病、高血脂及抽菸。此外，肥胖、缺少運動、年紀大的男性或過了更年期的女性，發病率也會逐漸上升。

心臟血管疾病的治療可分為藥物與手術，手術則包含外科手術及內科心導管手術，兩者近年來均有顯著的發展，並帶來優異的療效。

黃祺耀醫師

現職:

臺中榮民總醫院 心臟血管中心 契約主治醫師

主治專長

冠狀動脈疾病、心血管疾病

心血管介入治療(冠狀動脈、週邊動脈)

• 專業經驗

高血壓治療、高血脂治療、冠狀動脈氣球擴張術、冠狀動脈血管支架

• 重要經歷/進修訓練

經歷：

臺中榮民總醫院 心臟血管中心 契約主治醫師

衛生福利部南投醫院 心臟內科主治醫師

衛生福利部豐原醫院內科 住院醫師

進修訓練：

臺北榮民總醫院心臟內科經胸前/食道心臟超音波與結構性心臟病進修

香港中文大學醫院結構型心臟疾病經食道心臟超音波(Sep-Oct 2023)

• 學歷

國立陽明交通大學醫學系畢業

• 專科證照

臺灣內科醫學會內科專科醫師

中華民國心臟學會心臟血管內科專科醫師

中華民國心臟學會心臟血管介入專科醫師

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質中心主任、斗六分院醫務秘書兼內科主任。
- 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 屆副秘書長及第 27 屆秘書長、中華民國血脂及動脈硬化學會副秘書長、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。

2026 TSOC Acute Coronary Syndrome Symposium-3

講師簡歷

一. 課程名稱: Old age as a risk factor of ACS: An old dog plays new tricks ?

二. 地點: 台中集思新烏日會議中心 3F 301 瓦特廳

三. 課程日期: 115/08/09 (星期日) 10:45~11:10

四. 講師: 陳坤雄 醫師

五. 現職: 童綜合醫院 /心臟內科主治醫師

六. 學歷: 國防醫學院醫學系 學士

亞洲大學資訊電機學院生物資訊與醫學工程學系 碩士

七. 經歷: 高雄榮民總醫院 內科部心臟科進修醫師

財團法人義大醫院 心臟內科主治醫師

日本倉敷中央病院 循環器內科進修醫師

童綜合醫院 心臟內科主治醫師 (2013 迄今)

八. 教職: 教育部 部定講師

劉維新醫師

現職:

- 花蓮慈濟醫院心臟內科心功能檢查室主任
- 花蓮慈濟醫院心臟內科主治醫師

學經歷

- 台北醫學院醫學士
- 玉里慈濟醫院一般內科、心臟內科主治醫師
- 花蓮慈濟醫院內科加護病房主治醫師
- 介入性心臟專科醫師
- 心臟科專科醫師
- 內科專科醫師

Updated background characteristics and in-hospital clinical profile and cardiovascular outcomes in Taiwan: what the T-FORMOSA study tells us?

李任光

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 functional. 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 administering 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.

Choice of P2Y12 inhibitor therapy in ACS patients: New insight into the T-FORMOSA study

黃祺耀

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.

Impact of LDL-C levels on cardiovascular outcome in ACS patients: 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.

Old age as a risk factor of ACS: An old dog plays new tricks?

陳坤雄

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 consistent 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.

Reappraisal of the clinical role of beta-blocker in ACS: An analysis from the T-FORMOSA study

劉維新

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 PCSK9 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.