

doi:10.1093/eurheartj/ehy322

# CIT 2018: A New Era, New Journey

## Report from the China Interventional Therapeutics (CIT) 2018, the largest interventional cardiology scientific congress in the Asia-Pacific region

From 22 March to 25 March 2018, global interventional cardiology opinion leaders, experts, and scholars gathered at the 16th annual China Interventional Therapeutics (CIT) 2018 in partnership with Transcatheter Cardiovascular Therapeutics (TCT). The three-and-a-half-day program encompassing 165 sessions, 1474 didactic presentations, 16 late breaking clinical trials and first report investigations, and 45 live cases from 7 domestic and international medical centres offered an academic feast to everyone.

With enduring focus on 'C-Co-operation, I-Innovation, T-Transition', CIT has developed into the largest scientific congress in the field of interventional cardiology in the Asian-Pacific region.

concerted focus on both cardiovascular intervention therapeutics and comprehensive cardiovascular disease prevention and control.

### Innovations in China on Cardiovascular Intervention Devices

China Interventional Therapeutics 2018 served as a forum for presentation and discussion of innovations in cardiovascular devices developed in China.



Humble Administrator Garden, Suzhou

Main arena CIT 2018

Jinji Lake International Convention Center, Suzhou

Held at the Jinji Lake International Convention Center, Suzhou, one of the most beautiful cities in China. China Interventional Therapeutics 2018 had a total of 8448 participants, of whom 6094 were from mainland China, 485 from overseas countries or regions, 1549 from industry, and 180 volunteers from local universities or other institutions. China Interventional Therapeutics as a major international meeting in interventional cardiology will continue to serve as a prolific venue to introduce new knowledge and technologies into China and foster meaningful academic exchanges and co-operation while showcasing local innovation and progress in the field of cardiovascular interventions to the outside world.

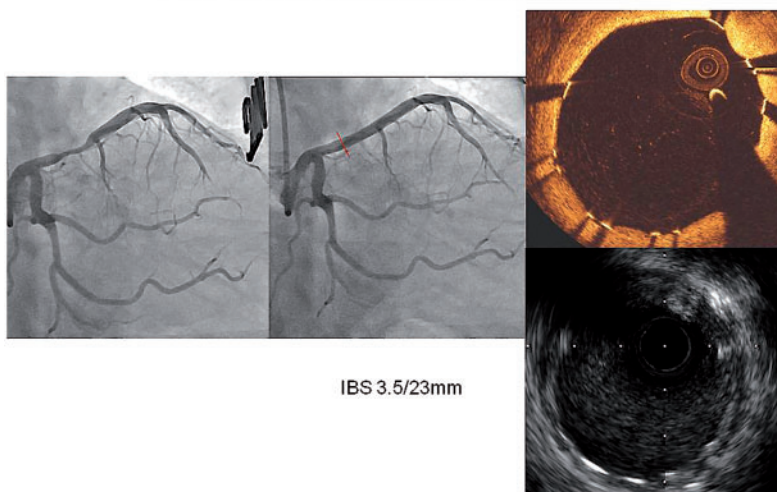
In the opening remarks during the grand opening of CIT 2018 hosted by Dr Bo Xu, the Secretary-General of CIT, Dr Runlin Gao, the Chairman of CIT, emphasized that cardiovascular disease remains the number one killer in China, accounting for 45% and 43% of deaths in 2015 among rural and urban residents, respectively. With the rapid development of China's economy, accelerated urbanization, and ageing of the overall population, the heavy burden of cardiovascular disease in China continues its growth. To approach the 'break point' of cardiovascular events in China, more attention must be paid to prevention and control of risk factors, such as hypertension, hypercholesterolaemia, and smoking cessation, among others. Dr Runlin Gao, therefore, invited attendees to join efforts and resources in ushering a new era of

In the field of bioresorbable scaffolds, the results of the registration clinical trials for NeoVas, the bioresorbable sirolimus-eluting scaffold developed by LePu, Beijing, and the 2-year intravascular imaging outcomes of the first-in-man study of Firesorb, the second generation of bioresorbable sirolimus target eluting coronary scaffold with a strut thickness of 100–120  $\mu\text{m}$  developed by MicroPort, Shanghai, were reported during the Late Breaking Clinical Trials and First Report Investigations sessions.

A novel iron bioresorbable sirolimus-eluting scaffold (IBS) independently innovated and developed by Lifetech, Shenzhen, with a strut thickness of 70  $\mu\text{m}$  and a scaffold that can be biodegraded in one and a half years showed similar mechanical properties and good biocompatibility as compared with the Xience stent in animal experiments. After over 10 years of research, the China Food and Drug Administration (CFDA) granted approval for the IBS to undergo a first-in-human study, and on 23 March 2018, Dr Kefei Dou successfully implanted the world's first IBS in the human body at Fuwai Hospital, Beijing; the procedure was transmitted live to the first plenary session of CIT 2018.

In the field of transcatheter aortic valve replacement (TAVR), VENUS-A (Venus Medtech, Hangzhou) and J-Valve System (Jiecheng, Suzhou) were approved by CFDA and launched commercially. VENUS-A was implanted in about 700 patients with favourable outcomes. Vita Flow TAVR system (by MicroPort, Shanghai) completed

## The first in human IBS Case



IBS 3.5/23mm

its registration trial, and the results were presented in the Late Breaking Clinical Trials session. The registration trial of VENUS-A Plus, a retrieval system with an expandable sheath, is ongoing. The new retrievable TAVR system allows for valve recovery, repositioning, and re-release when the valve placement position is inaccurate. During CIT 2018, Dr Yongjian Wu performed a live case demonstration on 23 March using the new device to successfully treat a patient with severe bicuspid aortic stenosis at Fuwai Hospital.

The Venibri I, a pre-mounted TAVR system with a dry tissue valve, has been implanted in 15 cases from Argentina, India, and China. The Venibri II TAVR system integrating retrieval and cerebral protection will soon undergo clinical testing. The original technique for the detection of haemodynamic abnormalities and quantitative flow ratio (QFR, Pulse Medical Imaging, Shanghai) which performed well in clinical studies was also presented in the Late Breaking Clinical Trials and First Report Investigation sessions. The results of the novel LAMBRE left atrial appendage closure device (Lifetech, Shenzhen) in patients with anatomies unsuitable for Watchman device use were promising and reported during the First Report Investigations session. SyMapCath I Catheter and SYMPIONEER S1 Stimulator/Generator, a novel renal denervation (RDN) system (SyMap Medical, Suzhou), integrating functions of guiding, angiography, stimulation/mapping, temperature-controlled ablation, and manual open-loop irrigation, and the Iberis RDN system (Angiocare, Shanghai) with spiral ablation catheter are undergoing multicentre, single-blinded, randomized, sham-controlled clinical trials.

### In-depth discussion of the most impactful research presented at last year's transcatheter cardiovascular therapeutics meeting

On 23 March, immediately following the opening ceremony, Drs Gary Mines, Patrick Serruys, and Ajay Kirtane chaired a plenary session at CIT in partnership with TCT, in which the most impactful studies

presented at last year's TCT meeting were reviewed. Drs Steffen Desch, Justin E. Davies, Shaoliang Chen, and Allen Jeremias presented on CUPRRIT-SHOCK, ORBITA, DKCRUSH-V, and FAME 2 trials, respectively. The in-depth discussions by speakers and panellists on the clinical significance and limitations of the studies were welcomed and very useful to the audience.

### Case-oriented discussion on clinical hot topics

In a subsequent case-oriented plenary session, Dr Martin Leon delivered a keynote lecture entitled 'Indication for TAVR: the latest evidence and future directions' from New York via internet. Dr Eberhard Grube then lectured on 'Modern era: TAVR with optimal technology and techniques'. Both lectures summarized the latest advances in the field of TAVR. The plenary session went on to highlight complex and high-risk percutaneous coronary intervention (PCI), such as PCI in patients at high risk for bleeding, ST elevation myocardial infarction (STEMI) with multi-vessel disease, severe coronary calcification, left main bifurcation, and chronic total occlusion. The presentations and discussions by domestic and international authoritative experts in the field were well attended and received.

On 24 March, the PCR at CIT plenary session chaired by Drs Jean Fajadet, Christoph Naber, Bo Xu, and Runlin Gao focused on TAVR for aortic stenosis with complex anatomy and best practices for complex PCI. A case of rheumatic aortic stenosis was presented and treated by TAVR by Dr Mao Chen and Lars Søndergaard at West China Hospital. A heated discussion ensued around the indication and techniques for this kind of rheumatic aortic valvular disease which is not uncommon in China, especially in the southwest. Then, Dr Nicolo Piazza gave a lecture on 'Evolution of TAVI: east meets west' which addressed differences in aortic stenosis presentations between eastern and western patients. The complex PCI session started with a case of complex left main bifurcation lesion, and after discussion between operators and panellists on indications and treatment strategy, Drs Yong He and Goran Stankovic successfully performed bifurcation stenting with culotte technique at West China Hospital.



**Practical Course on PCI-Complex Case Discussions**

The overall level of cardiovascular interventions in China has rapidly improved in recent years. One of the major goals for CIT is optimization of treatment of complex lesions and patients at high risk. To this end, a 1.5-day academic agenda focused heavily on Complex and High-risk Indicated Patients (CHIP), as did the international partnership sessions and most of the cases that were transmitted live to the auditorium audience. Participants benefitted from intellectually enriching exchanges of theory and practice during live case demonstrations, case reports, technical lectures, indication seminars, and panel discussions.

## The 10th Clinical Research Workshop

The 10th Clinical Research Workshop was another attractive session with broad content coverage from Good Clinical Practice principles to design and implementation of a scientific research project, from paper writing to Young Investigator Award competition. The program was designed by Drs Ajay Kirtane, Bo Xu, and Roxana Mehran. The

lectures given by prominent physician scientists benefited attendees, in particular, young investigators. The workshop audience continues to increase year after year.

China Interventional Therapeutics 2018 in Partnership with TCT was very successful, thanks to the outstanding contributions from its international and domestic faculty, the CIT Working Group, and all participants. China Interventional Therapeutics 2019 in Partnership with TCT will be held at the National Convention Center, Beijing, China, from 28 to 31 March 2019.



Runlin Gao MD FESC FACC FSCAI  
Professor of Medicine Fuwai Hospital  
Chinese Academy of Medical Sciences  
Peking Union Medical College  
Chairman of China Interventional  
Therapeutics (CIT)  
Beijing 100037, China  
E-mail: gaorunlin@citmd.com  
Tel: 0086 10 68331622

**Conflict of interest:** none declared.