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# A EuroIntervention state-of-the-art on functional coronary angiography; a mini focus on bioresorbable scaffolds; a new trial of short DAPT; 30-day and 1-year outcomes of the Navitor transcatheter heart valve; self-expanding valves vs balloon-expandable valves in small annuli; early evolution of cardiac damage after TAVI; and more

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Looking back at the memorable moments of EuroPCR 2023, or rather the moments of "my" EuroPCR 2023, I cannot help but mention the events related to EuroIntervention.

Let's start with the official events included in the program. First and foremost, the joint session with colleagues from JACC Cardiovascular Interventions was designed to attract and engage the participants with an irresistible combination: clinical cases and scientific articles. What could be better? In particular, we asked the speakers (Deputy or Associate Editors of both journals) to present a clinical case followed by a paper from EuroIntervention and a paper from JACC Cardiovascular Interventions that changed their typical approach to managing the case at hand. During the discussion, we explained why these papers were accepted and what made them more deserving than others in the eyes of their respective Editorial Boards. It was easier to see than to explain, and if you haven't seen it, I believe there will be other opportunities, because it was fun and instructive, and we got positive feedback.

Then, how can we not mention our annual Editorial Board meeting, where, together with the Deputy Editors and our Managing Editor, we shared with the many attendees present (even at the end of a long day) the journal's statistics, new initiatives, and our future strategies? We answered questions and presented awards and certificates to the best articles, reviewers, and editors. We celebrated the year's work by having a toast with the Editorial Board and all those who are a part of the great EuroIntervention family.

But then there are all those innumerable moments that occurred during the days of the Course involving interactions with our readers and authors: at the EuroIntervention booth, where we answered questions from those who approached us, but also along the corridors of the Palais des Congrès, or on the sidelines of various sessions. Finally, there were the private moments of discussion with the formidable team that manages the journal's social and production aspects.

EuroPCR is also our yearly opportunity to see each other in person and to thank everyone one by one for the extraordinary work they do to provide us with a pleasant and interesting array of content every time.

Just like the content of this issue that I am about to share with you here.

We begin with a state-of-the-art review by **Daniel Faria, Javier Escaned and colleagues** on functional coronary angiography (FCA) for the assessment of the epicardial vessels and the microcirculation. This survey of the emerging field of FCA examines the foundations and rationale behind FCA indices derived from both invasive and computed angiograms. The authors include a description of the new systems available, the evidence supporting their use and a look at the specific clinical scenarios in which FCA might facilitate patient management. A discussion on the application of FCA to the diagnosis of coronary microvascular dysfunction wraps up this deep dive into a field that is facilitating physiological assessments without the need for contrast or invasive intracoronary instrumentation.

We then turn to a mini focus in coronary interventions on bioresorbable scaffolds. We start with a debate. The lure of a foreign body-free stent is attractive for a multitude of reasons, but the safety and design problems surrounding the first generation of devices have set this new technology back. Can they make a comeback? **Gregg W. Stone and Solomon W. Bienstock** give a broad overview of the evolution of the first generation of devices and believe that, should the outcomes of the next generation of devices be even comparable to the outcomes of current-generation DES, they will be welcomed. **Franz-Josef Neumann** steps back and reflects on what criteria must first be met for a device to earn its place in contemporary practice and then argues that it is less certain that bioresorbable scaffolds can re-establish themselves.

Next in our mini focus, **Runlin Gao, Gregg W. Stone and colleagues** report the three-year outcomes of a novel ultrathin-strut iron sirolimus-eluting scaffold used in patients with single *de novo* coronary lesions. This first-in-human trial shares its three-year clinical and multimodality imaging results showing promising safety and efficacy of the iron bioresorbable scaffolds for the treatment of non-complex coronary lesions. In an accompanying

editorial, **Michael Joner, Grace Klosterman and Robert A. Byrne** discuss the differences in the degradation of magnesium versus iron and how this may impact trial designs.

Next in the mini focus, we look at a magnesium-coated scaffold: **Adrian Wlodarczak and Stefan Verheye on behalf of the BIOSOLVE-IV investigators** assess the two-year outcomes of the second-generation magnesium-based sirolimus-eluting Magmaris scaffold. In this large real-world registry that included non-ST-elevation myocardial infarction patients, the Magmaris achieved good safety and efficacy outcomes, confirming a safe rollout into clinical practice. By the way, we will soon publish in these pages the results of BIOMAG-1, a study of the third-generation magnesium scaffold that was presented at EuroPCR 2023 and is already available online ahead of print.

Finally, in coronary interventions, **Giuseppe Tarantini, Guillaume Cayla and colleagues** present the design and rationale of the TARGET-FIRST trial, the first randomised clinical trial to investigate the optimisation of antiplatelet therapy in patients with acute myocardial infarction after achieving complete revascularisation with Firehawk, an abluminal in-groove biodegradable polymer rapamycin-eluting stent. Enrolment of approximately 2,000 patients in 50 European centres began in 2021, and the primary endpoint reports are expected in late 2024.

In interventions for valvular disease and heart failure, **Lars Sondergaard, Michael J. Reardon and colleagues** present the 30-day and one-year outcomes of the PORTICO NG Study, assessing the safety and performance of the Navitor transcatheter heart valve in patients with symptomatic, severe aortic stenosis who are at high or extreme surgical risk. The Navitor includes the outer "NaviSeal" fabric cuff designed to reduce paravalvular leakage, offered both favourable outcomes and haemodynamics at one year, with a reduction in paravalvular leakage.

**Pier Pasquale Leone, Azeem Latib and colleagues** on behalf of the TAVI-SMALL Investigators report on the treatment of aortic stenosis in patients with small annuli and subsequent prosthesis-patient mismatch in the TAVI-SMALL 2 registry. They found that self-expanding and supra-annular valves outperformed balloon-expandable valves and intra-annular devices, respectively, in terms of postprocedural mean aortic gradients and the incidence of severe prosthesis-patient mismatch. This article is accompanied by an editorial by **Kentaro Hayashida and Yusuke Kobari**.

Finally, **Yaoyao Zhou, Jian'an Wang and colleagues** investigate the early evolution of cardiac damage after TAVI and how assessment of early and residual cardiac damage may be used to enhance risk stratification for TAVI recipients. Using transthoracic echocardiograms, they created five stages based on the presence or absence of extra-valvular cardiac damage from baseline to 30 days and found that early cardiac deterioration following TAVI is indeed associated with poor clinical prognosis, notably for patients with aortic stenosis.

And now, let's explore the articles themselves.