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The new European Bifurcation Club expert consensus document; an EAPCI/ESC expert consensus on the management of coronary artery disease in patients undergoing TAVI; an EAPCI position statement on radiation protection for healthcare workers during pregnancy; debating invasive coronary testing in INOCA patients; single antiplatelet therapy after PCI; ultrasound-guided femoral access in the UNIVERSAL trial; oesophageal and gastric injuries after tricuspid TEER; and more

Davide Capodanno, *Editor-in-Chief*

A few months ago, I wrote an editorial about ChatGPT, a chatbot that I thought was an interesting and niche discovery. However, I couldn't foresee the revolution this technology has caused – and which everyone is now talking about – nor the fear that has accompanied this attention. As with all new technologies, the classic trajectory of enthusiasm followed by habituation, annoyance, suspicion, and fear may apply to ChatGPT. Nevertheless, I believe this technology is here to stay and could make our lives easier.

What impresses me about ChatGPT are the many spin-offs already generated from GPT-4, the latest iteration, promising to accompany us in any playful or non-playful activity. Artificial intelligence is bringing about a rapid revolution, with potential applications in dozens, if not hundreds of different fields. At the time I'm writing to you,

things are moving so fast that I find it hard not only to imagine the future but also to understand the present.

As an example of an unexpected application, think of EuroPCR, which now offers several sessions designed by faculty acting as “producers”. This year, I was asked to write one on multivessel disease, and while I designed my session many months ago – so you shouldn’t worry if you think that it was accomplished using artificial intelligence behind the scripting – I recently discovered that it could have been done that way. You could easily educate ChatGPT to write a logical, fluid and coherent session, organising and critiquing the content. Of course, you must feed the bot with learning objectives, key takeaways, and the structure of your idea, but the bot learns rapidly, very rapidly.

Although it still requires human input, it is a romantic, and probably unrealistic, notion to believe this will always be the only way to produce something of educational value. ChatGPT may still be primitive in producing content, but it is already strong in organisation and coherence. We, as humans, will be able to focus on more creative and futuristic projects while the bot will handle basic tasks.

Isn’t this what we call progress, after all?

But right now, this is the month of EuroPCR, and as usual, there is a special issue of the Journal to describe (and for those attending the Course, they will be able to actually hold and touch the Journal, as they will receive the traditional free copy).

We’ll begin with a debate, and for this issue, we’ve invited four authors who, while they concur that ischaemia with non-obstructive coronary arteries (INOCA) is often mismanaged, part ways on the routine use of invasive coronary testing for this condition. **Bernard De Bruyne and Marta Belmonte** argue that in a world where we can offer a thorough functional investigation of the coronary microcirculation, we should, especially given the technical and theoretical advances in the domain. In contrast, **Nick Curzen and Richard J. Jabbour** raise concerns about the limitations and the risk-benefit ratio of wire-based testing, as well as the concurrent advances in non-invasive testing, suggesting that wire-based testing is not yet optimised nor fully reliable.

As we said, it is the EuroPCR 2023 edition, and we have not one but three expert consensus papers for you.

First, in coronary interventions, we begin with the European Bifurcation Club’s 17th expert consensus document in which authors **Manuel Pan, Goran Stankovic and colleagues** present the various techniques used to preserve access to the side branch during stepwise provisional stenting. The authors discuss the evidence, old and new, on jailed wires, and then, survey current approaches to side branch rewiring and the existing rescue strategies, including discussions on advances in single and dual lumen microcatheters, rewiring in challenging anatomies and more. They demonstrate that while restoring side branch patency can be difficult, stepwise provisional stenting can be adopted for most complex bifurcation lesions.

Our next expert consensus, in interventions for valvular disease, is a collaboration of the European Association of Percutaneous Cardiovascular Interventions (EAPCI) and the European Society of Cardiology (ESC) Working Group on Cardiovascular Surgery in which authors **Giuseppe Tarantini, Lars Sondergaard and colleagues** discuss the management of coronary artery disease in patients with severe aortic stenosis undergoing transcatheter aortic valve implantation (TAVI). After a review of the available evidence on the topic, they propose a rationale for both the preprocedural diagnostic evaluation and the indications for percutaneous revascularisation in this patient population, including a discussion on the choice of transcatheter heart valves (THV) and commissural alignment techniques for future redo-TAVI.

Our third expert consensus is on the radiation exposure experienced by healthcare professionals working in catheterisation labs during pregnancy. As we are aware, this is a non-negligible reality and can be a deterrent to women pursuing careers in interventional cardiology. In an effort to improve both workplace safety and equity, **Stéphane**

Manzo-Silberman, Alaide Chieffo and colleagues present this EAPCI position statement in collaboration with the European Heart Rhythm Association (EHRA), the European Association of Cardiovascular Imaging (EACVI), the ESC Regulatory Affairs Committee and Women as One on radiation risk and the current data on the experiences of cardiologists who continue to work in cath labs during pregnancy.

In a clinical research article in coronary interventions, **Niels M.R. van der Sangen, José P.S. Henriques and colleagues** share the results of the OPTICA study in which they examined the safety and feasibility of ticagrelor or prasugrel monotherapy directly following percutaneous coronary intervention (PCI) in patients with non-ST-segment elevation acute coronary syndrome and ask whether direct P2Y₁₂ inhibitor monotherapy is a feasible alternative to dual antiplatelet therapy. The results from this pilot trial show no overt safety concerns and indicate that large-scale randomised trials are warranted. In an accompanying editorial, **Raffaele Piccolo and Giovanni Esposito** discuss both the limitations and the potential that this proof-of-concept study suggests.

Next in coronary interventions, **Marc-André d'Entremont, Sanjit S. Jolly and colleagues** look at the safety of ultrasound-guided femoral access for patients receiving a vascular closure device. In their subgroup analysis of the UNIVERSAL trial, they show that at 30 days there were fewer bleeding and vascular complications for patients who had ultrasound-guided versus non-ultrasound-guided femoral access. In an accompanying editorial **Harold L. Dauerman and Tanush Gupta** discuss these results and the revival of interest in femoral access in the context of two other recent trials.

In a research correspondence, **Tara Neleman, Joost Daemen and colleagues** report on changes in operator-defined optimisation strategies within the FFR REACT trial after disclosure of the post-PCI fractional flow reserve (FFR) pullback data and before intravascular ultrasound acquisition. Through a dedicated questionnaire given to operators, they found that the optimisation strategy was altered in over 53% of vessels after intravascular ultrasound evaluation, as compared to the planned treatment strategy based on FFR pullback data alone.

In interventions for valvular disease and heart failure, **Won-Keun Kim, Lars Sondergaard and colleagues** present the ACURATE *neo2* post-market clinical follow-up study, looking at patients with severe aortic stenosis and at high operative risk treated with the ACURATE *neo2* transcatheter aortic valve in routine clinical practice. The study included 30-day primary safety endpoints of all-cause mortality and the 30-day data on hypoattenuated leaflet thickening, permanent pacemaker implantation, valve haemodynamics and paravalvular leakage. This article is accompanied by an editorial by **Jan-Malte Sinning**.

In a translational research article, **Mariama Akodad, Janarthanan Sathananthan and colleagues** consider the use of a balloon-expandable valve for treating a failed self-expanding valve. They assess the neoskirt height, degree of leaflet overhang, leaflet deflection, THV expansion and valve performance at two different implant depths of redo-TAVI using the SAPIEN 3 Ultra within the ACURATE *neo2* THV. Redo-TAVI with the SAPIEN 3 within an ACURATE *neo2* has favourable hydrodynamics and moderate leaflet overhang, with the design of the ACURATE *neo2* facilitating coronary flow and access.

Oesophageal injuries after tricuspid transcatheter edge-to-edge repair (TEER) are common, but what provokes them? In a research correspondence, **Tanja Kuecken, Christian Butter and colleagues** report on the incident rate and risk factors for both oesophageal and gastric injury caused by echocardiographic probe manipulation during TEER for tricuspid regurgitation. Their analysis looks at procedural duration, positional changes and lesion location and severity with unexpected results.

And now, just before we explore the articles themselves, we'd like to turn to the special EuroPCR editorial by the EuroPCR Course Directors, EAPCI President and PCR Chairs in which they highlight the abundant opportunities on offer at EuroPCR 2023 (of which this journal is the official publication). They offer a whirlwind tour of the Course educational programme, underlining how EuroPCR captures the fundamental spirit that brings us together as a community and as health practitioners.