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IN THIS ISSUE OF EUROINTERVENTION

A European position paper on the management of patients with PFO; a mini focus on in-stent restenosis; RUC-4, a subcutaneous glycoprotein IIb/IIIa inhibitor; comparing stents according to DAPT duration in acute coronary syndromes; culprit lesion locations and outcomes in cardiogenic shock; fusing computed tomography angiography and real-time fluoroscopy in treating CTOs; failure and complications with coronary microcatheters; and more…

Davide Capodanno, *Editor-in-Chief*

There are some English words that I didn't even suspect existed before becoming the Editor of this Journal. One of the first I had to learn was "backlog". In Editorial jargon, the backlog is the number of papers accepted after peer review, which are already available online in the form of Just Accepted Articles (JAA) but have yet to be allocated to an actual edition of the Journal, whether physical or digital. As I quickly learned, the size of the backlog is a crucial aspect of a journal's health: a large backlog (e.g., with dozens of papers pending) allows you to keep a broad perspective on what the journal will look like in several months. It allows you to anticipate and postpone articles based on the theme of a specific issue. In other words, it is a large source from which to draw and distil cohesive and coherent issues each month. These are the positive aspects of a backlog, but it immediately became clear to me as I reviewed these articles what the actual problem of a large backlog was.

What does a reader expect from EuroIntervention? In my opinion (I'm a reader as well), a key aspect is that the reader wants to read, right away, what's new in the field of interventional cardiology. However, a large backlog captures the reality of papers accepted months earlier (in our case by the previous Editorial Board). The backlog must necessarily be lightened if we want to allow readers to read the Journal as we have conceived it today, in 2021. In recent months, we have subjected the Journal to an invisible slimming cure, which little by little is making it more agile – leaner, snappier and in step with trends in our discipline. The waiting time between acceptance and publication ("lag time") has shortened significantly. Yes, we must maintain a balance and avoid excessive "weight loss" (if I dare call it that), because there are some production timelines to consider.

However, not knowing today what we will publish, for instance, in November, is a luxury that we could not afford before, and a fact that I consider exciting. It means that the Journal is catching up to a cruising speed which can offer readers a timely service and authors the guarantee of not having the long wait or lag time that existed in the past. With these considerations in mind (a bit technical but hopefully interesting nonetheless), let's move on to the usual presentation of this month's issue. Here's what we've prepared for you.

We begin with part two of the European position paper on the management of patients with patent foramen ovale. While patent ovale is implicated in a large series of pathogenic conditions, no clear guidelines exist for its management. Authors **Christian Pristipino, Dariusz Dudek and colleagues** invited eight European scientific societies to provide key statements on treatment beyond the already recommended approach in left circulation thromboembolism. While stressing the lack of data and the need for future studies, the ensuing recommendations fill the gap by offering guidance in the clinical approach to this condition. Also in hypertension and stroke, we have a short report by **Ben Wilkins, Lars Søndergaard and colleagues** on the Omega left atrial appendage occluder.

In coronary interventions, our mini focus this month looks at in-stent restenosis (ISR) beginning with an article by **Hector Tamez, Robert W. Yeh and colleagues**. The authors studied the long-term outcomes of hundreds of thousands of patients with ISR from the National Cardiovascular Data Registry CathPCI Registry who underwent percutaneous coronary intervention, noting that these patients had a higher risk of major adverse cardiovascular and cerebrovascular events when compared with patients being treated for *de novo* lesions. With this increased risk in mind, clinicians need to consider all available approaches to preventing ISR. New treatments are also needed. This article is accompanied by an editorial by **Fernando Alfonso and Adnan Kastrati**.

Continuing with our mini focus, **Erion Xhepa, Adnan Kastrati and colleagues** use optical coherence tomography imaging before beginning treatment of ISR to see whether there is a relationship between neointimal pattern and clinical outcomes, or whether there is any interaction between these neointimal patterns and the chosen treatment modality – either drug-eluting stents (DES) or drug-coated balloons (DCB). While no significant clinical differences were seen regarding the first question, the authors observed a significant interaction in the second where DES appeared a better choice than DCB in the high inhomogeneity group, but not in the low inhomogeneity group. **Evan Shlofmitz** has written an editorial accompanying this article.

Could the quantitative flow ratio (QFR) provide a functional assessment of ISR? This is the subject of a short report by **Catherine Liontou, Javier Escaned and colleagues** who, using fractional flow reserve as the reference standard, consider QFR in evaluating ISR lesions which they found to have a high diagnostic value. This could prove to be a useful and easily applicable tool in the assessment of ISR.

The coronary interventions section continues with an article on the efficacy of RUC-4, a second-generation, subcutaneous glycoprotein IIb/IIIa inhibitor assessed in patients with ST-segment elevation myocardial infarction. Authors **Willem L. Bor, Jurrien M. ten Berg and colleagues** observed a noticeable platelet inhibition using RUC-4 which could allow this molecule to be used as a bridge in a pre-hospital setting – before onset of oral antiplatelet agents – as a first-point-of-care treatment for these patients. This article is accompanied by an editorial by **Marco Valgimigli and Antonio Landi**.

In treating patients with acute coronary syndromes, is there a difference in clinical outcomes between the use of biodegradable polymer biolimus-eluting stents (BES) and durable polymer everolimus- or zotarolimus-eluting stents according to the different durations of dual antiplatelet therapy (DAPT)? This question is explored by **Woo Jin Jang, Joo-Yong Hahn and colleagues** in their article accompanied by an editorial by **Martine Gilard and Romain Didier**. Looking at the more than 2,700 patients from the SMART-DATE trial, the authors found no significant differences between the different devices at 18-month follow-up, showing biodegradable polymer BES to be as consistent as the other stents regardless of the DAPT used.

In patients presenting with acute myocardial infarction-related cardiogenic shock, the CULPRIT-SHOCK trial studied whether the location of a critical culprit lesion could have a predictive value in determining worse outcomes. Authors **Marie Hauguel-Moreau, Gilles Montalescot and colleagues** looked at different critical culprit lesion locations and found them to be major prognostic markers, independently associated with adverse clinical outcomes, regardless of the revascularisation strategy.

Also in coronary interventions, an article by **Yoshinobu Murasato, Kiyotaka Iwasaki and colleagues** looks at the feasibility and efficacy of using a 4 mm Glider balloon, a side branch dedicated balloon for coronary bifurcation stenting. In the treatment of bifurcation lesions, a simple Glider balloon expansion after the proximal optimisation technique was seen to provide acceptable acute and long-term results and is a relatively simple procedure to perform.

Fusing computed tomography angiography with real-time fluoroscopy to overcome the limitation inherent in computed tomography angiography – its inability to provide real-time guidance during percutaneous coronary intervention – is discussed in a short report by **Iosif Xenogiannis, Emmanouil S. Brilakis and colleagues**. Co-registration of the two systems could facilitate guidance and clarify complex anatomies with the potential of improving results in crossing chronic total occlusions.

To understand the limitations and failure mechanisms of coronary microcatheters better, **Michael Megaly, Emmanouil S. Brilakis and colleagues** examined the complication and failure modes of these devices using the Manufacturer and User Facility Device Experience (MAUDE) database. In doing this, the authors hoped to encourage a deeper understanding of how to manage adverse events if and when they occur. They also recommend that information on complications and failures of coronary microcatheters be collected in registries.

While the readers of EuroIntervention belong to a forward-looking specialty, we also partake in the wisdom and continuity that comes to us from more ancient times. In this issue we take a more philosophical turn, with author **Emmanouil S. Brilakis** exploring in a "Viewpoint" how ideas inherent in Stoic philosophy can help not only us, but also our patients, when we perform complex interventions. And now, from the discipline and precepts of this ancient philosophy, let's turn to our cutting-edge work – the articles in this issue.