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IN THIS ISSUE OF EUROINTERVENTION

A new Impact Factor (6.534); an EAPCI/ACVC joint publication on percutaneous ventricular assist devices; a mini focus on coronary physiology; troubleshooting double kissing crush bifurcation stenting; optical frequency domain imaging artefacts mimicking lipid-rich plaques; a post hoc analysis of the COAPT trial; patient selection for transcatheter tricuspid valve interventions, and more…

Davide Capodanno, *Editor-in-Chief*

EuroIntervention's new Impact Factor is 6.534. We've known for months that a good score was coming because, in the somewhat whimsical formula that generates it, the denominator is known but the numerator only becomes known as we get closer to the release date. What has never been clear to me, in these months of waiting, was how to react to the news. Betray our legitimate satisfaction? The Journal is made up of many people (authors, reviewers, editors, producers) who have the right to feel satisfied because of their hard work at all the different levels. Or should we react by minimising the whole affair? This, perhaps, would be the more elegant approach because,

while it is true that the Impact Factor is important for a journal, it is also true that it does not fully capture all the nuances of the articles that make it up.

Ironically, it could be said that the Impact Factor is a measure which is not important if it goes down but is important if it goes up. This year, therefore, it is not only important for us but also very special, because EuroIntervention had never exceeded the 6 mark; only once in its history did it squeak above the 5 level. What is remarkable for me is that the Journal has reached the 25th position in the ranking of cardiovascular medicine journals entering the so-called "first quartile", which in many situations represents an important academic threshold.

Now, the question is what to do with these numbers.

To simply enjoy them would be the worst thing ever, because we know that this score is subject to unpredictable fluctuations, and the moving averages are probably more indicative of the number itself. Our moving average says that we are growing in the consideration of those who cite us. This is useful feedback, challenging us to attempting to meet the expectations of our public and even trying to surpass them. But how?

By selecting the very best of what you so generously entrust to us and hoping that this magic number will convince a growing number of authors to consider EuroIntervention as one of their first choices for submission.

But for now, that's enough talk about us. Instead, let's talk about what we've prepared in this issue, which is really what counts for our most precious asset – our readers.

We begin with a consensus document, a joint publication of the European Association of Percutaneous Cardiovascular Interventions and the Association for Acute Cardiovascular Care, on percutaneous ventricular assist devices. Authors **Alaide Chieffo, Susanna Price and colleagues** survey the state of the art in terms of their use as well as their similarities and differences. Possible indications are evaluated, and general guidance on their deployment discussed. The expert panel examines the currently unanswered questions concerning percutaneous ventricular assist devices and concludes by looking towards future developments.

Our mini focus this month is on coronary physiology. **Jiani Tang, Xuebo Liu and colleagues** question whether the residual functional SYNTAX score calculated by means of the quantitative flow ratio is a good predictor in patients with ST-segment elevation myocardial infarction (STEMI). This enhanced scoring system incorporates the anatomic and functional significance of lesions and looks at functional incomplete revascularisation in patients with STEMI undergoing percutaneous coronary intervention (PCI). While further studies are warranted, this method could offer a fast and feasible risk stratification system in daily clinical practice for treating non-infarct-related coronary artery lesions in patients with multivessel disease. This article is accompanied by an editorial by **Gilles Montalescot and Michel Zeitouni**.

Continuing with the coronary physiology mini focus, **Yuhei Kobayashi, William F. Fearon and colleagues** present the FAST-FFR substudy, which shows that fractional flow reserve (FFR) derived from coronary angiography has a high diagnostic and reliable performance in most lesion characteristics and regardless of patient characteristics.

Could coronary flow capacity (CFC) provide further optimisation for PCIs performed in stable lesions after FFR assessment? This is the question authors **Rikuta Hamaya,**

Tsunekazu Kakuta and colleagues pose in the next article of our mini focus. They assess the different effects of PCI on the incidence of vessel-related major adverse cardiovascular events according to CFC and suggest that PCI employed in lesions with low CFC might be prognostically beneficial. This article is accompanied by an editorial by **Nils P. Johnson and K. Lance Gould**.

In the last article in our mini focus on coronary physiology, authors **Stephane Fournier, Bernard De Bruyne and colleagues** offer the first direct invasive quantification of total and vessel-specific coronary blood flow – Q – and resistance – R. The authors determined a normal reference value for Q and R, noting that, in patients with mild atherosclerosis, overall flow was lower and microvascular resistance higher than in normal individuals. However, the wide range of hyperaemic flow and microvascular resistance that was revealed does not allow inter-patient comparison and thus a clearer index of microvascular resistance will be needed.

Also, in coronary interventions, **Allison B. Hall, Emmanouil S. Brilakis and colleagues**, in an expert review, discuss troubleshooting aspects of double kissing crush bifurcation stenting. Their review provides a precise understanding of potential complications and possible solutions at each stage of the technique to ensure that the operator achieves optimal results.

When using optical frequency domain imaging, the artefact created by a tangential signal dropout can mimic lipid-rich plaque macrophage infiltration and lead to a misclassification of stable plaque as vulnerable plaque. In this article, authors **Hiroki Shibutani, Ichiro Shiojima and colleagues** underline the importance of paying attention to the catheter geometry used for optical frequency domain imaging, citing an optimal cut-off value for the incident angle when the tangential signal dropout occurs, thus predicting when the diagnostic accuracy of this imaging technique is in question.

Three-year results from the TARGET All Comers trial are the subject of an article by **Yuichi Saito, Alexandra Lansky and colleagues**. This trial confirms the continued safety and efficacy of the abluminal groove-filled biodegradable polymer sirolimus-eluting Firehawk stent when compared to the durable polymer everolimus-eluting XIENCE stent.

In interventions for valvular disease and heart failure, authors **Stamatios Lerakis, Gregg W. Stone and colleagues** take a closer look at the COAPT trial. In patients with symptomatic significant mitral regurgitation and severe to moderate left ventricular dysfunction, their analysis shows that transcatheter mitral valve repair with the MitraClip system, in addition to guideline-directed medical therapy, was consistently effective in reducing mortality and heart failure hospitalisation, and improving general health when compared with guideline-directed medical therapy alone. This article is accompanied by an editorial by **Marco Metra and Marianna Adamo**.

While transcatheter tricuspid valve interventions to reduce tricuspid regurgitation have been shown to be safe and feasible, the role of patient selection needs to be further refined. **Florian Schlotter, Philipp Lurz and colleagues** consider the results of these interventions in relation to right ventricular function, concluding that transcatheter tricuspid valve interventions might have their greatest treatment efficacy when compared to conservative treatments in patients with mid-range reduced right ventricular function. These results suggest that assessment of right ventricular function should be a regular part of patient evaluation before interventional tricuspid valve therapies.

It's now over to you to discover the articles for yourselves.