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IN THIS ISSUE OF EUROINTERVENTION

An expert consensus on STEMI networks; TAVI outcomes in younger inoperable patients; TEER in patients with mitral annulus calcification; temporal trends in clinical outcomes after PCI; ticagrelor monotherapy and DES type; final 5-year results of the AIDA trial; calcified nodules and in-stent restenosis; and more…

Davide Capodanno, *Editor-in-Chief*

By this time of year, our next impact factor is probably already decided.

As anyone who has read these pages over the last couple of years knows, the next impact factor will be based on the year 2021, and specifically on the citations collected over the course of 2021 from the papers published in 2019 and 2020. For the whole of the last year, we have been aware of the denominator (of which each Journal has full control and is responsible for) and we monitored the numerator (which depends on the overall quality and reputation of the Journal, but ultimately on external factors independent of any control). In short – if we want to summarise – we choose the denominator, and the readers make the numerator happen.

By the time March comes around we know roughly what order of magnitude to expect (and the feeling is good), but the final number will depend on a series of things that, as always, make the forecast random and unpredictable.

For instance, Clarivate, which produces the Journal Citations Reports responsible for the impact factors, uses the first months of the year to consolidate its database and correct any errors. I never realised how many errors and wrong attributions made predictions so unreliable until the final definition of the number that so fascinates the world of scientific publishing.

What's more, when I say, "papers published in 2019 and 2020", I originally meant papers published in print, but at some point – perhaps as early as this year – Clarivate will start counting EuroIntervention papers published digitally (and therefore in the "JAA" or early view or "Ahead-of-Print" format), with complex implications for the denominator. Following this change in the calculation of the denominator, analysts predict an inflation in impact factors followed by a deflation: so, in preparation for the years ahead, staying more or less at last year's level would be an excellent result for us.

We shall see. In the meantime, we're in March, and this means that the race for the 2022 impact factor to be released in 2023 has already begun: what a headache!

Let's focus on the Journal and the individual articles instead, which is a far better way to spend our time...

We begin by stepping back from pure clinical or research questions to look at the logistical issues involved in providing the best ST-elevation myocardial infarction (STEMI) care possible to the largest population – an aim of the Stent – Save a Life! Initiative. The expert consensus by **Alfonsina Candiello, Christoph K. Naber and colleagues** looks at the nuts and bolts of setting up regional and national level STEMI networks anywhere in the world. While the clinical guidelines clearly recommend offering STEMI patients the best possible care – primary coronary angioplasty – the reality on the ground is challenging. This is often due to organisational issues rather than a lack of resources. The Stent – Save a Life initiative provides the experience, expertise, and structure to help create viable and long-lasting networks to ensure that STEMI patients continue to receive the best reperfusion treatment possible. Through this consensus document, Stent – Save a Life shows how to establish a durable STEMI network, laying the foundation that federates the different healthcare players on the local, regional, and national levels as well as providing the incentive for continued evolution in the quality of care offered.

As the indications for transcatheter aortic valve implantation (TAVI) are enlarged to include younger individuals, it is imperative to closely follow their clinical outcomes. In an original article, **Guy Witberg, Ran Kornowski and colleagues** review the AMTRAC registry concerning patients <70 years of age who underwent TAVI. What were their specificities, their comorbidities and what set them apart from other patients being treated for aortic stenosis? Why was the STS score seen to be inadequate in evaluating whether they were operable or not? This article examines all these issues, and results show that the initial clinical outcomes were similar to those seen in other age groups undergoing TAVI. To further guide decision-making it is essential that dedicated trials be designed comparing TAVI with SAVR in the all-comers younger aortic stenosis population. This article is accompanied by an editorial by **Vivian G. Ng, Susheel K. Kodali, and Martin B. Leon**.

Treating patients with mitral regurgitation (MR) and moderate to severe mitral annulus calcification percutaneously is the subject of the next article by **Estefanía**

Fernández-Peregrina, Dabit Arzamendi and colleagues. In this particular group of patients where mitral annulus calcification with MR is associated with high levels of morbidity and mortality and who are unsuitable for surgery, this approach was seen to provide good clinical results, demonstrating that the use of transcatheter edge-to-edge repair using MitraClip is a safe and feasible alternative to surgery. Further and larger studies, however, are still needed.

Over the last 20 years we have become accustomed to the continued evolution in percutaneous coronary intervention (PCI) and post-PCI patient management – but what has actually been the widespread prognostic impact of this development? In a meta-regression analysis, authors **Taku Asano, Nobuyuki Komiyama and colleagues** consider the current trends over time in clinical outcomes after PCI by looking at 25 all-comer trials. They concluded that there have been significant decreasing trends in PCI-related adverse events, as well as a decrease in the incidence of cardiac death, but with no discernible trends in relation to myocardial infarction. Looking toward the future, they believe that maintaining these trends and improving those for myocardial infarction requires the continued evolution and further integration of techniques, prevention strategies, and therapeutic approaches. This article is accompanied by an editorial by **Spencer B. King III**.

In the TWILIGHT trial, ticagrelor monotherapy was seen to be beneficial and provided, in high-risk patients undergoing PCI, a safe bleeding avoidance strategy after a short course of dual antiplatelet therapy (DAPT), resulting in significantly lower, clinically relevant bleeding without increasing the risk of ischaemic events. In a subanalysis of the trial, **George Dangas, Roxana Mehran and colleagues** studied whether this beneficial effect was specific to a particular stent type, concluding that the positive effects of ticagrelor monotherapy hold true regardless of which type of stent was used.

DAPT plays a part in the next article as well, with authors **Laura S.M. Kerkmeijer, Joanna J. Wykrzykowska and colleagues** reviewing the five-year follow-up from the AIDA trial which compared the Absorb bioabsorbable scaffold (BVS) with the XIENCE everolimus-eluting stent. This trial also included a specific focus on the effect of prolonged DAPT on events in the scaffold group. Absorb BVS showed an excess risk of late adverse events, ischaemic risk during the reabsorption process, especially device thrombosis risks that persisted up to 4 years before levelling off. When using BVS, these results led the authors to suggest a protective effect on scaffold thrombosis of prolonged DAPT. This article is accompanied by an editorial by **Stephen G. Ellis**.

Finally, calcified nodules (CN) are understood to be associated with in-stent restenosis (ISR). Using optical coherence tomography, **Takeshi Tada, Kazushige Kadota and colleagues** studied the prevalence and predictors of ISR lesions and CN. They observed that calcified lesions, incomplete stent apposition, haemodialysis, or female gender were associated with CN formation and that ISR lesions with CN appear to have poorer outcomes when compared with ISR lesions without CN. As CN formation suggests a poorer outcome after repeat PCI, the high-risk factors that lead to their formation should be taken into account when planning procedures.

And now to the articles themselves.