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IN THIS ISSUE OF EUROINTERVENTION

Next-day discharge after TAVI, valve-invalve, cerebral embolic protection, transcatheter mitral valve replacement, a minifocus on chronic total occlusions, prasugrel in the elderly, and more

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What can I say about the impact factor that hasn't already been said? For example, I could say that, in spite of its critics, it is a metric which has a deeper meaning than it appears. Let's start from the denominator of the formula: it is the number of countable items in the two years preceding the year relating to the calculation. Headache? I just started. There are some rules established by Clarivate (the metric tracker computing the impact factor each year) that define which articles are counted in the denominator and which are not. For example, this opening editorial is not counted. This means that every calendar year we already know the denominator of the formula. In December 2019, before the transition to the new Board occurred, we knew that the number of countable items for the 2017-2018 two-year period was 438. In addition, we already know what the denominator of the next impact factor will be (and yes, there will be a noticeable change). What to do with the denominator is a question of strategy, and we could talk about it indefinitely without agreeing. There are journals that publish a lot and journals that publish very little. Both may have a very high impact factor. In reality, the problem is not how much you publish, but what you publish, and here the numerator comes into play. The numerator is truly the cornerstone of what matters. It corresponds to the number of citations in the year considering articles published in the previous two years (that is, the articles of the denominator). The thing that makes this formula interesting is that, for example, the citations from 2020 must relate to articles from 2019 and 2018, to be counted. So, the point is not to publish something that is much mentioned in the immediate post-publication period, but rather to publish something that is mentioned for a long time, continuously and preferably for at least two years. In other words, publish articles that enter the imagination of the academic reader, and which the academic reader remembers when quoting them. Easy, isn't it? If the denominator can change only with long-term editorial strategies, the numerator is not really under the direct control of the journal and it's up to its readers. This makes forecasting quite unpredictable, or predictable only within certain limits. In 2019, EuroIntervention attracted 1,749 citations, so the impact factor was confirmed at around 4, like the previous year (3,993, to be exact). In a year when the other interventional journals have lost a few decimals, we are happy to have kept our position, which represents the new baseline value on which the new Board will work from now on. As I said in my settlement editorial, there is only one action that I consider legitimate to increase the impact factor - publishing good articles¹. Note that the reference to my previous editorial here does not count... as it is a reference in 2020 to an article of 2020. So. let's "cut the chat" and see what we have prepared for you this month, which coincides with the first digital version of the ESC.

A minimalist approach to TAVI may enable an early discharge – and discharging the day after the procedure is not unthinkable if certain conditions are met. Giuliano Costa, Corrado Tamburino and colleagues evaluated the predictors and safety of next-day discharge in 1.232 unselected TAVI patients receiving either balloon-expandable or selfexpanding bioprostheses. Next-day discharge was applicable in 13% of patients and was demonstrated to be a safe strategy up to 1 year. Interestingly, and perhaps not surprisingly, patients with prior permanent pacemaker implantation and undergoing preprocedural computed tomography angiography had a higher chance of next-day discharge. The study is accompanied by an editorial by David A. Wood. The section on interventions for valvular heart disease also features two short reports. In the first, Malcolm Anastasius, Philipp Blanke and colleagues established reference data for computed tomography dimensions across commonly used aortic bioprostheses and sizes. The study provides a comprehensive reference chart to enable identification of the manufacturers' labelled size from computed tomography measurements, and to facilitate transcatheter heart valve sizing for valve-in-valve procedures. In the second study, Pedro G. Magalhaes, Pieter R. Stella and colleagues report data from a prospective pilot study to evaluate the safety and performance of the novel TriGUARD 3 cerebral embolic protection device in patients undergoing TAVI. Moving to the field of interventions for mitral valve disease, this month we focus on the hot topic of transcatheter mitral valve replacement, where the positioning and fixation technique of the stented valve is crucial. A study from Georg Lutter, Thomas Puehler and colleagues evaluated the impact of two different fixation strategies on neo left ventricular outflow tract and aorto-mitral angulation. Finally, a preclinical research study from Ouafa Hamza, Bruno K. Podesser and colleagues characterises a novel, reproducible animal model of ischaemic mitral regurgitation intended for safety and efficacy evaluations of transcatheter approaches to mitral regurgitation.

In the section on coronary interventions, this month we host a minifocus on chronic total occlusions (CTO). Two studies come from the same group of authors, led by Stefan P. Schumacher and Paul Knaapen. In the first study, the authors investigated the association between coronary collaterals and myocardial viability assessed by quantitative cardiac magnetic resonance imaging in 218 patients with a CTO. They found that the infarcted area in myocardium subtended by a CTO was generally limited, and well-developed collaterals were associated with less myocardial scar and enhanced preserved function. In addition, viability with potential for functional recovery was regularly present in patients with poorly developed collaterals. Based on these results, the authors conclude that patients with a CTO should not be denied consideration for CTO revascularisation based on the presence of poorly developed collaterals or a CTO artery-related history of myocardial infarction. In the second study, the authors looked at the impact of CTO PCI on relief of different levels of ischaemic burden. A total of 193 patients underwent positron emission tomography (PET) perfusion prior to and 3 months after successful CTO PCI. A greater reduction in perfusion defect size after recanalisation was observed in patients with a larger defect at baseline. These results help to understand the effects of CTO PCI on myocardial perfusion and show quantitative PET to be an effective tool to select patients with high potential for marked ischaemia reduction. An accompanying editorial by Carlo Di Mario is linked to these two studies. When talking about CTO we are interested not only in appropriate indications but also in procedural aspects. In another study, Yong-Hoon Yoon, Seung-Jung Park and colleagues compared the PCI outcomes of in-stent CTOs and de novo CTOs, showing similar rates of technical success and in-hospital adverse events, as well as of 5-year target vessel failure and target vessel revascularisation in patients who received drug-eluting stents. Closing this minifocus, Daehoon Kim, Yangsoo Janga and colleagues sought to investigate the incidence, predictors, and clinical outcomes of stent optimisation by intravascular ultrasound guidance in long coronary lesions or CTO. Importantly, under IVUS guidance, 41.4% of patients did not meet the stent optimisation criteria. Predictors of non-optimisation were older age, longer lesion length, and smaller stent diameter; non-optimisation was associated with higher rates of adverse clinical events. A final study in the interventional pharmacology domain from Claudio Montalto, Stefano De Servi and colleagues builds on the hypothesis of low-dose prasugrel as a treatment option for elderly patients presenting with acute coronary syndromes and high clinical or PCI complexity; it concludes that there is no evidence of benefit versus clopidogrel.

That's all for this month. How many of these articles that we publish in 2020 will be mentioned in 2021 and 2022? This is the subtle game of the impact factor. More importantly, how many of these articles will help you in your daily choices and/or stimulate your critical thinking? Let us know with your comments. We hope you enjoy this summer issue of the Journal and we look forward to seeing you again soon with a new issue of EuroIntervention.

Reference

1. Capodanno D. EuroIntervention: moving forward. EuroIntervention. 2020;15:e1299-300.