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EuroIntervention in the top quartile of cardiovascular journals; QFR as a predictor for MI; mechanisms of ostial right coronary artery in-stent restenosis; thrombectomy and no-reflow in the TOTAL Trial; 10-year results of biodegradable polymer drug-eluting stents; the new-generation DREAMS 3G magnesium scaffold; outcomes of the BASILICA technique; paravalvular leak closure with vascular plugs; right heart remodelling with the TricValve; and more...

Davide Capodanno, *Editor-in-Chief*

The new impact factor of EuroIntervention is 6.2. Reacting to this number is always a challenge, because it is rarely a surprise. We had more or less anticipated this outcome since February, when the numbers (numerator and denominator) started to consolidate. Furthermore, it became clear by the end of last year that it would be a year of deflation and adjustment for all impact factors in general. Therefore, the absolute value is subject to its usual fluctuations, and the statistic that mattered to us the most was the ranking position among cardiovascular journals. From this perspective, we are pleased to confirm that we remain in the first quartile and within the top 30 of the best journals in this field. In such a competitive environment, and with so many good journals around, this is a great result for which I must express my gratitude to our readers, reviewers, publishers, and, of course, the authors who trust us with their best work.

This year's impact factor is determined by the number of citations garnered in 2022 of articles published in 2021 and 2020. Among the articles that contributed to this metric are those belonging to the new formats that we have launched or started accepting in the past few years, such as our state-of-the-art reviews or trial designs. I am pleased with this accomplishment, because it represents a deliberate effort to diversify the types of articles we publish, resulting in a varied journal with contributions ranging from original research to informative and consultative reviews, correspondences, debates and viewpoints.

Knowing that these efforts have placed the journal at the forefront of this subspeciality is both motivating and inspiring, urging us to do even more to capture the most exciting trends in the field of interventional cardiology. This issue is no exception, and I will now proceed to our customary overview of its contents.

We begin in coronary interventions with **Changdong Guan, Bo Xu and colleagues** who present a novel angiographic method for optimising vessel selection for percutaneous coronary intervention (PCI). Their study on the association between quantitative flow ratio (QFR) and myocardial infarction as affected by PCI versus medical therapy demonstrates a continuous, inverse relationship between the QFR value of a vessel and its subsequent risk for myocardial infarction. In particular, they showed that PCI, compared to medical therapy, reduced this risk beginning at a QFR value of 0.64. We invited **Morton J. Kern** to probe the question of whether QFR has the potential to replace fractional flow reserve in an accompanying editorial.

Next, **Kei Yamamoto, Akiko Maehara and colleagues** investigate the causes of ostial right coronary artery in-stent restenosis (ISR) using intravascular ultrasound. Stent fracture, stent underexpansion, and protruding calcified nodules were all identified as mechanical causes of in-stent restenosis, and event rates in the ISRs that did not receive a new stent were notably high. The authors discuss potential solutions for reducing the rate of ostial right coronary artery ISR, including stent positioning, modification of calcified nodules and the use of stents with higher radial force.

We then move to the problem of coronary no-reflow, which is prognostically important and associated with adverse events. **Marc-André d'Entremont, Sanjit Jolly and colleagues** share a *post hoc* analysis of the TOTAL trial, examining whether being randomised to thrombectomy versus PCI alone affected the angiographic core lab-adjudicated outcome of no-reflow. While they found that thrombectomy is not associated with a reduction in no-reflow, it may be synergistic with direct stenting. In an accompanying editorial, **Gjin Ndrepepa** comments on the discrepancies between the angiographic core laboratory and the investigator analyses as well as the therapeutic implications of the study.

Also in coronary interventions, **Masahiro Natsuaki, Takeshi Kimura and colleagues** compare the 10-year clinical outcomes of biodegradable polymer biolimus-eluting stents and durable polymer everolimus-eluting stents from the NEXT trial. With a primary efficacy endpoint of any target lesion revascularisation and a primary safety endpoint of composite of death or myocardial infarction, the 10-year outcomes were not significantly different between the two groups from one year after stent implantation up to 10 years.

In our last clinical research paper in coronary interventions, **Michael Haude, Ron Waksman and colleagues** assess the clinical and imaging data for the third-generation

coronary sirolimus-eluting magnesium scaffold, DREAMS 3G, at 12 months, which represents the end of the resorption period. The 1-year results of the BIOMAG-I first-in-human study demonstrate that the device has met the initial design goals. Late lumen loss is improved compared to its precursor, and intravascular imaging revealed good strut apposition and lumen preservation between 6 and 12 months. Has a bioresorbable competitor to contemporary drug-eluting stents emerged again?

Moving to translational research, **Stefano Cangemi, Paul Anthony Iaizzo and colleagues** present the MOBBEM study – an examination of post-PCI stent configurations in explanted porcine beating hearts via microcomputed tomography. In searching for the predictors of suboptimal stent implantation, the authors found that neither baseline anatomy nor the stenting strategy were responsible. However, bifurcation PCI-specific ballooning techniques, such as proximal optimisation technique and kissing balloon inflation, as well as adherence to expert recommendations might reduce suboptimal stent configurations.

We turn to interventions for valvular disease and heart failure with an examination of BASILICA (Bioprosthetic or Native Aortic Scallop Intentional Laceration to Prevent Iatrogenic Coronary Artery Obstruction), a complex interventional technique requiring advanced operator expertise, meticulous preprocedural planning, and dedicated material. Its applicability to real-world practice remains unresolved. **Mohamed Abdel-Wahab, Jonas Lanz and colleagues** evaluate the procedural and one-year outcomes of patients at high risk for coronary artery obstruction undergoing transcatheter aortic valve implantation (TAVI) and BASILICA. Their study demonstrates high technical and procedural feasibility, regardless of whether single- or double-leaflet procedures were performed, and they identify factors that may increase the risk for target leaflet-related coronary artery obstruction. This article is accompanied by an editorial by **Toby Rogers and Christopher G. Bruce**.

We follow with clinical research from **Eduardo Flores-Umanzor, Xavier Freixa and colleagues** who investigate the safety, feasibility and long-term outcomes of percutaneous post-TAVI paravalvular leak closure with vascular plugs. In this retrospective study of 45 patients, the procedure proved to be technically feasible with a high success rate for patients who had received both self-expanding and balloon-expandable devices during TAVI and a low rate of significant adverse periprocedural events. Acute and long-term improvements in clinical outcomes suggest that this could be a valid therapeutic option.

In a research correspondence, **Ignacio J. Amat-Santos, Alberto San Román and colleagues** present a computed tomography-based analysis of right heart remodelling at six months following implantation of the TricValve, the first CE-marked heterotopic caval valve implantation device. Both significant reverse modelling of the right ventricle and a trend towards a decrease in tricuspid annular dimensions were demonstrated. The authors postulate that the gradual reverse modelling offered through caval valve devices might be better tolerated than orthotopic tricuspid valve replacement.

And, as you begin to explore the articles themselves, we would also like to announce the return of the regular column by the EAPCI, our professional organisation within the ESC, which will certainly have other practical information to bring you over the coming months.