

Editorial

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# Current status and future prospects of percutaneous treatment of mitral valve disease: repair vs. replacement

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After a hesitant start, transcatheter treatment of mitral valve disease is now rapidly evolving. Technical advancements have made percutaneous treatment a reality. While edge-to-edge repair is a consolidated procedure with demonstrated clinical efficacy, development of percutaneous mitral valves is relatively more cumbersome. In this special issue, we have selected five interesting papers that will shed light on this topic. Cepas-Guillen *et al.*<sup>[1]</sup> reviewed current techniques to repair (e.g., leaflet repair, annuloplasty systems, and chordae repair) or replace mitral valve (e.g., percutaneous prosthesis) in the context of severe regurgitation. Scotti *et al.*<sup>[2]</sup> described the clinical, anatomical, and technical factors in selecting patients for either valve repair or replacement procedure. Furthermore, the authors provided with a practical algorithm to help in the selection process of different techniques. Spieker *et al.*<sup>[3]</sup> demonstrated the benefit of edge-to-edge repair in patients in whom the handgrip manoeuvre unmasked a severe mitral regurgitation. Echarte-Morales *et al.*<sup>[4]</sup> reviewed the different techniques used to treat mitral regurgitation following failed surgical valve repair or replacement.

In this regard, mitral paravalvular leak closure and percutaneous mitral valve-in-valve procedures were presented. Finally, Nappi *et al.*<sup>[5]</sup> focused on emerging transcatheter mitral valve replacement devices as therapeutic options for degenerated mitral bioprosthesis or failed mitral repair. In that paper the authors summarized current interventional techniques and available evidence and compared outcomes between



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transcatheter technologies and reoperative mitral valve surgery. Additionally, practical algorithms to decide the type of surgical procedures (i.e., sternotomy vs. minimally invasive surgery with right thoracotomy) and to select between transcatheter intervention and re-do surgery were also provided.

I truly believe that the reader will enjoy this special issue of *Vessel Plus* and find it very useful in understanding current techniques and future prospects in this field.

## DECLARATIONS

### Authors' contributions

The author contributed solely to this article.

### Availability of data and materials

Not applicable.

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None.

### Conflicts of interest

The author declared that they are bound by confidentiality agreements that prevent them from disclosing their conflicts of interest in this work.

### Ethical approval and consent to participate

Not applicable.

### Consent for publication

Not applicable.

### Copyright

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