Special Issue

Advancements and Challenges in Transcatheter Aortic Valve Replacement (TAVR)

Message from the Guest Editors

The treatment of aortic stenosis has been improved through transcatheter aortic valve replacement (TAVR). At the beginning, TAVR was only performed in patients at high surgical risk. However, with the accumulation of evidence and the expansion of indications, TAVR is now performed and approved for patients at all risk levels. The developments in valve technology and delivery systems have been rapid, with a concomitant reduction in the complication profile, particularly vascular complications. However, as TAVR continues to advance, several important challenges remain. This review summarizes the historical developments leading to modern TAVR practices and discusses their future trajectory. This Special Issue will investigate current TAVR practices and discuss future directions. This is a great opportunity to provide a guide to physicians and to offer them a general understanding of the most important issues in this field.

Guest Editors

Prof. Dr. Raffaele Serra

Department of Medical and Surgical Sciences, University Magna Graecia of Catanzaro, 88100 Catanzaro, Italy

Prof. Dr. Giuseppe Filiberto Serraino

Department of Experimental and Clinical Medicine, University Magna Graecia of Catanzaro, 88100 Catanzaro, Italy

Deadline for manuscript submissions

closed (20 June 2025)



Prosthesis

an Open Access Journal by MDPI

Impact Factor 4.5 CiteScore 4.7



mdpi.com/si/197776

Prosthesis
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
prosthesis@mdpi.com

mdpi.com/journal/ prosthesis





Prosthesis

an Open Access Journal by MDPI

Impact Factor 4.5 CiteScore 4.7



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Marco Cicciu

Department of Biomedical and Surgical and Biomedical Sciences, Catania University, 95123 Catania, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), and other databases.

Journal Rank:

JCR - Q2 (Materials Science, Biomaterials) / CiteScore - Q1 (Oral Surgery)

