



Advertisement



VALVULAR AND STRUCTURAL HEART DISEASES

Next-generation balloon-expandable Myval transcatheter heart valve in low-risk aortic stenosis patients

Mario García-Gómez MD, Jose Raúl Delgado-Arana MD, Jonathan Halim MD, Federico De Marco MD, Carlo Trani MD, Pedro Martin MD, Kim Won-Keun MD, Matteo Montorfano MD ... See all authors

First published: 14 August 2021 | <https://doi.org/10.1002/ccd.29923> | Citations: 6

Read the full text >

PDF TOOLS SHARE

Abstract

Objectives

We aimed to describe hemodynamic performance and clinical outcomes at 30-day follow-up of the balloon-expandable (BE) Myval transcatheter heart valve (THV) in low-risk patients.

Background

The results of the next-generation BE Myval THV in low-risk aortic stenosis (AS) patients are still unknown.

Methods

Retrospective registry performed in nine European centers including patients with low predicted operative mortality risk according to Society of thoracic surgeons (STS) and European system for cardiac operative risk evaluation (EuroSCORE-II) scores.

Results

Between September 2019 and February 2021, a total of 100 patients (51% males, mean age 80 ± 6.5 years) were included. Mean STS score and EuroSCORE-II were $2.4 \pm 0.8\%$ and $2.2 \pm 0.7\%$, respectively. Intermediate sizes were used in 39% (21.5 mm: 8%, 24.5 mm: 15%, 27.5 mm: 15%). There were no cases of valve embolization, coronary artery occlusion, annulus rupture, or procedural death. A definitive pacemaker implantation was needed in eight patients (8%). At 30-day follow-up aortic valve area (0.7 ± 0.2 vs. 2.1 ± 0.6 cm²) and mean aortic valve gradient (43.4 ± 11.1 vs. 9.0 ± 3.7 mmHg) improved significantly ($p < 0.001$). Moderate aortic regurgitation occurred in 4%. Endpoints of early safety and clinical efficacy were 3 and 1%, respectively.

Conclusions

Hemodynamic performance and 30-day clinical outcomes of the BE Myval THV in low-risk AS patients were favorable. Longer-term follow-up is warranted.

CONFLICT OF INTEREST

Dr. Amat-Santos is proctor for Meril Life and Boston Scientific. Dr. Won-Keun is proctor for Boston Scientific, Meril Life Sciences, Abbott, speaker fees/advisory board from Boston Scientific, Abbott, Edwards, Medtronic, Meril Life Sciences, Shockwave Med. MATCH-BALL study protocol (NCT04548726).

Open Research

REFERENCES

Citing Literature



Volume 99, Issue 3
February 15, 2022
Pages 889-895

Advertisement



SCAI Member Sign in

References Related Information

Recommended

[Balloon versus self-expandable transcatheter aortic valve implantation for bicuspid aortic valve stenosis: A meta-analysis of observational studies](#)

Michel Pompeu B.O. Sá MD, MSc, PhD,
Matheus Simonato MD,
Jef Van den Eynde BSc,
Luiz Rafael P. Cavalcanti MD,
Ali Alsagheir MBBS, MSc,
Aspasia Tzani MD, PhD,
Luca Nai Fovino MD, PhD,
Polydoros N. Kampaktis MD, MSc,
Michele Gallo MD, Pietro L. Laforgia MD,
Arjang Ruhparwar MD, PhD, ChM,
Alexander Weymann MD, MHBA, PhD,
FEBCTS, FESC

Sameer A. Hirji MD, MPH,
Tsuyoshi Kaneko MD,
Gilbert H. L. Tang MD, MSc, MBA, FRCSC,
FACC

Catheterization and Cardiovascular Interventions

[Valve-in-valve implantation with a 23-mm balloon-expandable transcatheter heart valve for the treatment of a 19-mm stentless bioprosthesis severe aortic regurgitation using a strategy of](#)

Download PDF

[About Cookies](#)

[DMCA & Reporting Piracy](#)

[Manage Cookies](#)

[Accessibility](#)

[Wiley Research DE&I Statement and
Publishing Policies](#)

[Developing World Access](#)

WILEY

Copyright © 1999-2024 John Wiley & Sons, Inc or related companies. All rights reserved, including rights for text and data mining and training of artificial intelligence technologies or similar technologies.