## Worldwide Trends in TAVR

ranscatheter aortic valve replacement (TAVR) remains an exciting and rapidly evolving field.
Ongoing trials to extend the option for TAVR into lower-risk patients are well underway, with

some results in this group already previewing what we might expect from larger trials. This issue provides an overview of the state of the procedure in practice today, while other reviews round out this issue, including advances in coronary assessment and mechanical circulatory support.

Troels Højsgaard Jørgensen, MD, and Lars Søndergaard, MD, kick off our cover features with a review of various risk assessment tools for TAVR, including the Society of Thoracic Surgeons score, EuroSCORE II, and frailty indices. Marc Dweck, MD, provides his commentary on the current state of lowrisk TAVR trials and clinical expectations for their outcomes.

Then, John C. Messenger, MD, evaluates the current status of TAVR practice trends in the United States, which is counterbalanced by an appraisal of current applications in Europe by Giuliano Costa, MD, Marco Barbanti, MD, and Corrado Tamburino, MD.

The growth of TAVR procedures coincides with the development of novel technologies for their further refinement and improvement. Darren Mylotte, MD, and colleagues assess several emerging TAVR devices from both Western and Eastern markets. Western market devices highlighted include Sapien 3 Ultra (Edwards Lifesciences), Lotus Edge (Boston Scientific Corporation), and Evolut PRO (Medtronic), and devices from Eastern countries including the Venus A-Valve (Venus Medtech Inc.) and VitaFlow (Microport Medical).

Also, be sure to checkout our redesigned TAVR Clinical Trials Guide at https://citoday.com/trials/tavr/.

Our subfeature this month focuses on advances in hemodynamics. Ivan D. Hanson, MD, and James A.

Goldstein, MD, tackle a review of percutaneous mechanical circulatory support for acute right ventricular failure. Jonathon Leipsic, MD; Stephanie Sellers, PhD; and Frederick St. Goar, MD, then offer their perspective on

fractional flow reserve CT and its role as an effective noninvasive test for the evaluation of ischemia without additional testing or radiation exposure.

This issue also features a patient-centered debate concerning the role of TAVR versus SAVR in the treatment of intermediate-risk patients. Bruce Rutkin, MD, provides Issam D. Moussa, MD, and S. Jacob Scheinerman, MD, a typical patient case scenario to open discussion on the merits of each procedure in this population.

Our Coding & Reimbursement section suggests various ways to create better designed clinical care strategies to benefit patients and physicians alike.

Finally, in our featured interview, Alec Vahanian, MD, offers his insight on recent European Society of Cardiology/European Association for CardioThoracic Surgery guideline updates as well as the rapidly changing landscape of valvular intervention.

As is always our mission, we hope to synthesize the ever-expanding interventional literature with reviews and discussion that are topical and relevant.



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