Aortic Valve Update

he PARTNER trials have defined much of the development of transcatheter therapy for aortic valve disease. This issue opens with D. Scott Lim, MD, walking us through the current PARTNER I trial data, as well as looking ahead at what may come from PARTNER II.

Peter S. Fail, MD, FACC, FACP; Edgar Feinberg, MD, FACS; and Gary Chaisson, RTR, RICA, highlight the CoreValve revalving system (Medtronic, Inc., Minneapolis, MN) and provide an update on data from abroad, as well as on the status of the United States pivotal trial.

Initial transcatheter aortic valve replacement (TAVR) procedures were limited by large access sheath diameters. Device development and experience with alternative access routes in recent years have made the method grow rapidly

in popularity. Michael A. Borger, MD, PhD; Joerg Seeburger, MD, PhD; Johannes Blumenstein, MD; David M. Holzhey, MD, PhD; and Friedrich W. Mohr, MD, PhD, review the transapical aortic valve prostheses with the most clinical experience and provide a glimpse at future developments.

Even patients with challenging iliofemoral anatomies can benefit from TAVR, thanks to growing developments for alternate access approaches. Nicolas M. Van Mieghem, MD; Carl Schultz, MD, PhD; Hafid Amrane, MD; and Peter P. de Jaegere, MD, PhD, detail the major strategies, including transsubclavian/transaxillary access, direct aortic access, and transapical access.

We also have a great glance at next-generation TAVR, with three authors looking at some of the next-generation devices. Jeffrey Southard, MD, and Reginald Low, MD, FACC, provide us with details about the Direct Flow valve system (Direct Flow Medical, Inc., Santa Rosa, CA). Ian T. Meredith, MBBS, PhD; Kristin

L. Hood, PhD; Dominic J. Allocco, MD; and Keith D. Dawkins, MD, have contributed an overview of the Lotus valve system (Boston Scientific Corporation, Natick, MA), including a case study to illustrate deployment of the valve. Last, but not least, Luis Nombela-Franco, MD; Michael Mok, MBBS, FRACP; Robert De Larochellière; and Josep Rodés-Cabau, MD, discuss the Portico transcatheter heart valve (St. Jude Medical, Inc., St. Paul, MN).

Drug-eluting stents have seen a favorably low rate of restenosis in ran-

domized trials, but the technology doesn't come without other potential risks. Usman S. Khokhar, MD, and Allen Jeremias, MD, MSC, compare rates of stent thrombosis for drug-eluting stents versus bare-metal stents.

Finally, we talk to Jennifer A. Tremmel, MD, MS, for our featured interview. Dr. Tremmel shares her thoughts about the advantages of transradial access and her research on sex differences in cardiovascular disease.

We hope these reviews help you stay current with the accelerating volume of new data we see every month. Let us know about any topics you'd like to see addressed in upcoming issues.

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