Current Trends in PCI

elcome to our first issue of 2017! We wanted to begin the year with a fresh look at the current status of techniques and technologies in percutaneous coronary intervention (PCI), including a focus on chronic

total occlusions (CTOs), the status of atherectomy, as well as advances in drug-eluting stents (DESs) and DES polymers, drug-coated balloons (DCBs), and bioresorbable stents.

Our focus on PCI commences with Barbara Anna Danek, MD, and Emmanouil S. Brilakis, MD, who review five benefits of PCI in CTOs. These include marked improvements in quality of life, myocardial function, long-term survival and tolerance of subsequent coronary events, as well

as the reduction of long-term health care costs. The authors also suggest the use of an online tool that provides objective assessment of success and risk likelihoods for patients.

Next, we turn our attention to atherectomy, which has evolved into an essential tool for lesion preparation to optimize PCI results. Evan Shlofmitz, DO, offers a review of recent developments of atherectomy modalities, including rotational and orbital, which are the two current modalities used for severely calcified coronary lesions to facilitate stent delivery.

Advancements in DESs and DCBs have helped to address several challenges to treating PCI. Raffaele Piccolo, MD, and Thomas Pilgrim, MD, address the former with an in-depth conversation on the enhanced design features of new-generation DESs. They provide an overview of the significance of thin struts and an assessment of current clinical data on biodegradable polymers. On the DCB front, Robert M. Bersin, MD, evaluates the technical considerations of these tools in terms of lesion preparation, dissection and bailout stenting, anticoagulation, and stent thrombosis. In addition, he offers a review of current research related to DCBs and their impact on in-stent restenosis and de novo lesions.

Our PCI update concludes with an analysis of the benefits of using bioresorbable stents as an alternative

to metallic stents. Jiang Ming Fam, MD, and Robert-Jan van Geuns, MD, offer a look at one of the more widely available bioresorbable stents and review recent research on it. They also review the standard implantation technique for the device.

In addition to our PCI coverage, we also have a pharmacology panel discussion on glycoprotein IIa/IIIb inhibitors and bleeding avoidance strategies employed by various institutions in the treatment of acute coronary syndrome. Andrey Espinoza, MD; Paul Gurbel, MD; Sunil Rao, MD; and Steven Yakubov, MD, provide insight on both their personal preferences and their institutions' approaches to the issue of access- and nonaccess-related bleeding risk.

As part of our ongoing Coding & Reimbursement series, Larry Sobal, MBA, and Nicole Knight, LPN, offer a review of what's ahead for physicians with the implementation of the Medicare Access and CHIP Reauthorization Act (MACRA). They provide details on the potential payment options and advice to maximize reimbursement and obtain additional bonuses.

Finally, we interviewed Josep Rodés-Cabau, MD, about the current and future outlook for transcatheter valve technologies, and the prospect of DESs to treat nonobstructive coronary saphenous vein graft lesions, among other topics.

We have a clear editorial mission: to provide concise and practical summaries of the relentlessly growing pile of journals that stream into our inboxes and across our desks. If we are succeeding, let us know, and if there are topics you would like to see addressed in future issues, send us a note.

> Ted E. Feldman, MD, MSCAI, FACC, FESC Chief Medical Editor citeditorial@bmctoday.com