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Expert consensus on drug-coated balloons in coronary artery disease; photon-counting computed tomography for in-stent restenosis; clinical risk, high-risk plaques, and clinical outcomes; "double-tap" technique for balloon expandable valves; in-depth analysis of the NOTION-2 trial; and more

t is our first publication of the autumn, and we'll touch on topics from drug-coated balloons (DCBs) to in-stent restenosis (ISR) to high-risk plaques, with just a hint, why not, of transcatheter aortic valve implantation (TAVI) in anticipation of this season's big event – PCR London Valves in November!

Ischaemic heart disease and DCBs

Simone Fezzi, Patrick W. Serruys and colleagues from the Drug Coated Balloon Academic Research Consortium contribute an expert consensus aimed at standardising study designs and endpoints for clinical trials involving DCBs in order to provide consistent, practical, and reproducible terminology for interventional cardiologists and trialists in the field.

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Clinical risk, high-risk plaques, and clinical outcomes

Rick H.J.A. Volleberg, Niels van Royen and colleagues performed a pooled analysis of patient data from the COMBINE (OCT-FFR) and PECTUS-obs studies examining the relationship between clinical risk factors, high-risk plaques (HRPs), and the impact of these plaques on various clinical risk profiles. They determined that the modified Thrombolysis in Myocardial Infarction Risk Score for Secondary Prevention alone could not predict the presence of HRPs and that, in patients at risk for recurrent events, intracoronary optical coherence tomography has an independent prognostic value beyond traditional clinical risk factors. Joost Daemen and Karol Sadowski continue the discussion in an accompanying editorial.

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Photon-counting CT for ISR

The potential of photon-counting detector computed tomography (CT) to improve the evaluation of stented vessels and help identify obstructive ISR is explored by **Doosup Shin, Ziad A. Ali and colleagues**. Technological advances have allowed for a reduction in blooming artefacts and enhanced spatial resolution and, in this study, photon-counting detector CT demonstrated good diagnostic performance for ISR at both the stented-lesion and the patient level. This article is accompanied by an editorial from **Daniele Andreini and Carlo Di Mario**.

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Routine double-tap after balloonexpandable TAVI – the DOUBLE-TAP study

Could routine double-tap after balloon-expandable TAVI improve valve expansion? Ali Husain, John G. Webb and colleagues explore the safety and feasibility of this approach in a benchtop assessment and a clinical cohort. SAPIEN valves in a range of sizes were subjected to post-dilatation using the same delivery system balloon at nominal volume, with a statistically significant improvement in transcatheter valve expansion and no procedural issues. Darren Mylotte and Bing Wei Thaddeus Soh contribute an editorial on this article.

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NOTION-2 trial: in-depth analysis

Arif A. Khokhar, Ole De Backer and colleagues zoom in on the hard clinical endpoints of the NOTION-2 trial in this research correspondence, analysing the individual patients who experienced either stroke or cardiovascular death after TAVI or surgical aortic valve replacement. Their analysis provides both a list of practical considerations and thoughts as to how these may be integrated into future trials.

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