### **APRIL 2025**

### VOLUME 21, Issue 9

An expert review on transcatheter treatment of pulmonary embolisms; early versus delayed mechanical treatment of acute pulmonary embolism; thrombus characterisation and evolution of hypoattenuated leaflet thickening after TAVI; prognostic implications and predictive outcomes of leaflet thrombosis post-valve-in-valve TAVI; news from the EAPCI; and more

ith an expert review followed by a series of original research articles and illuminating editorials, we are sure this issue will keep you occupied as we count down to EuroPCR 2025!

## Treating transcatheter pulmonary embolisms – an expert review

Catheter-directed therapies offer promising alternatives for selected pulmonary embolism patients. In this expert review, Francesco Costa, Antonio Micari, and colleagues provide an overview of available catheter-directed therapies for pulmonary embolisms, including discussions on optimal procedural planning, device selection, technical execution, evaluation of results, and complications management.

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### Early mechanical treatment of acute pulmonary embolisms

Orly Leiva, Sripal Bangalore, and colleagues examine how the timing of catheter-based therapies in patients hospitalised for intermediate- or high-risk pulmonary embolism impacts outcomes, including short-term mortality, readmission rates, and length of stay. Patients who received early catheter-based therapies (≤1 from admission) − compared to those who received delayed treatment (>1 day) − were associated with improved outcomes. This article is accompanied by an editorial by Irene M. Lang.

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# Hypoattenuated leaflet thickening: thrombus characterisation and evolution

The clinical value of computed tomography angiography is underlined in a study by Kajetan Grodecki, Raj R. Makkar, and colleagues, who performed quantitative assessment of hypoattenuated leaflet thickening (HALT) resolution in patients undergoing transcatheter aortic valve implantation (TAVI) at 1-year follow-up. The key factors were found to be thrombus attenuation and prosthesis deformation, which can further inform clinicians on thrombus evolution and anticoagulation strategies. Gabriela Tirado-Conte and Luis Nombela-Franco contribute an editorial on this article.

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#### Leaflet thrombosis outcomes postvalve-in-valve TAVI

Using peri- and postprocedural computed tomography to detect HALT, **Takashi Nagasaka, Raj R. Makkar, and colleagues** investigate clinical outcomes after valve-in-valve TAVI with balloon-expandable valves, focusing on HALT and potential predictors of leaflet thrombosis. Stent frame underexpansion and a lack of anticoagulation therapy were identified as predictors of HALT and are further discussed in an editorial by **Ole De Backer and Arif Khokhar.** 

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