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## LETTER TO THE EDITOR

### TAVI registries: Full disclosure?

Publication des registres TAVI : transparence ?

**Keywords:** Transcatheter aortic valve implantation ; Percutaneous coronary intervention ; Coronary artery disease

**Mots clés :** Implantation percutanée de valve aortique ; Angioplastie coronaire ; Coronaropathie

Transcatheter aortic valve implantation (TAVI) is an increasingly recognized modality for the treatment of severe aortic stenosis. The randomized Placement of Aortic Transcatheter Valves (PARTNER) trial [1] followed by national registries such as the French Aortic National CoreValve and Edwards (FRANCE 2) Registry [2] have provided strong evidence in favour of TAVI procedures in high-risk patients with severe aortic valve stenosis with a Society of Thoracic Surgeons (STS) score > 10% or EuroSCORE > 20%. Outcomes were similar in TAVI and surgical cohorts in the PARTNER trial [1]. Of note, any percutaneous coronary intervention (PCI) within 30 days of a bare-metal stent implantation or within 6 months of a drug-eluting stent implantation was an exclusion criterion in the PARTNER trial. Three-quarters of the patients in the PARTNER trial did, however, have coronary artery disease (CAD); 43% of the patients had had coronary artery bypass graft (CABG) surgery and 32% had undergone PCI [1]. In the FRANCE 2 registry, 48% of the 3195 patients had a history of CAD and 18% had previous CABG surgery [2]. Similarly, in the Belgian national registry 58% of the 328 patients had CAD and 26% had previous CABG surgery [3]. In the UK TAVI registry 48% of the 870 patients who underwent TAVI had CAD and 30% had previous cardiac surgery [4]. The percentage of patients who had undergone PCI in these studies was not provided [2–4]. The German TAVI registry reported 21% of the 697 patients having a prior CABG, 34% a PCI and 14% a balloon valvuloplasty [5]. Clinical outcomes were analysed only once patients were undergoing the TAVI procedure [2–5].

In daily practice, however, coronary angiography and PCI are often performed a few days or weeks before TAVI, as percutaneous access to the coronary artery tree may be compromised after TAVI and revascularization of

significant CAD may improve outcome in the setting of TAVI. Moreover, patients with depressed left ventricular ejection fraction and severe aortic stenosis may undergo percutaneous balloon valvuloplasty as a bridge to TAVI. Stroke, arterial access mishap, bleeding and acute kidney injury may complicate pre-TAVI percutaneous procedures in elderly patients. Untoward events, including heart failure decompensation or sudden death, can also occur while awaiting a TAVI. Such complications have to be taken into consideration when comparing clinical outcomes in TAVI and surgical cohorts. Present registries have focused on outcomes post-TAVI without tallying up outcomes of pre-TAVI procedures [2].

In future controlled studies on TAVI, when coronary revascularization is indicated, the outcome following surgical aortic valve replacement and CABG needs to be compared with that of pre-TAVI and TAVI procedures and not exclusively with TAVI alone.

#### Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

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