

## Effects of TAVI Versus SAVR and Patient Preferences



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A systematic review and meta-analysis published in *British Medical Journal*, examines the effect of TAVI versus surgical replacement of an aortic valve (SAVR) in patients with severe aortic stenosis at low and intermediate risk of perioperative death and reviews on the values and preferences of patients.

TAVI has been increasingly used as an alternative to SAVR, partly due to the fact that it does not require thoracotomy. Current practice guidelines suggest that either surgical methods can be performed in patients at high surgical risk (STS-PROM  $\geq 8\%$ ) but recommend SAVR over TAVI for lower risk patients. Despite this recommendation, a large number of the TAVI centres in European countries perform TAVI in patients of intermediate risk (STS-PROM 4-8%) and only 10% of TAVI centres perform TAVI in low-risk patients (<4%).

**See also :** [TAVI a Good Therapeutic Option in Very Elderly Patients](#)

The authors of the PARTNER 2A trial, who compared TAVI with SAVR in intermediate risk patients, claimed that TAVI was not inferior to SAVR in terms of composite endpoint of death from any cause or disabling stroke at two years and that TAVI was associated with lower chances of major bleeding, acute kidney injury and new onset atrial fibrillation. However, the researchers did not address the issue of valve durability and the need for aortic reintervention after TAVI, did not rate the quality of the evidence and the credibility of the subgroup analyses, and did not provide absolute risks. This lack of credibility of the findings of the PARTNER 2A trial prompted Reed A. Siemieniuk, of McMaster University, and colleagues to perform a systematic review and meta-analysis of randomised controlled trials of TAVI compared to SAVR for patients at low and intermediate surgical risk in order to inform recommendations for TAVI.

The findings showed that in patients with lower life expectancy, such as those aged over 85, the benefits of transfemoral TAVI were particularly evident in terms of mortality, stroke, and life-threatening or disabling bleeding. Younger patients, aged 65-85, may not find these mortality and morbidity benefits compelling. Even younger patient, aged under 65, are more likely to choose SAVR over TAVI or even a mechanical over a bioprosthetic valve. Patients in whom a transfemoral TAVI procedure is not feasible are unlikely to view the transapical approach as an attractive option since it is associated with a higher risk of stroke and a higher mortality rate than SAVR, which was found to perform better than the transapical TAVI procedure.

**Source :** [British Medical Journal](#)

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