Transcatheter aortic valve implantation (TAVI): an updated health technology assessment
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Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' objectives
The aims of this report are as follows:
Critical analysis of the PARTNER study

Health economic study of TAVI based on the PARTNER results and cost figures from Belgium

Authors' conclusions
Caution is advised when interpreting the findings of the PARTNER study. Critical analysis shows that, due to methodological shortcomings, the published results may have overestimated the clinical efficacy of TAVI. TAVI can only be considered in patients who are inoperable. If the inoperability is the result of anatomical limitations, then reimbursement of TAVI could be justified. These patients are easy to identify clinically, their life expectancy is not compromised by concomitant severe medical conditions and they represent the population in whom TAVI is the most cost effective.

In patients considered to be inoperable due to severe medical co-morbidities, a much greater willingness to pay for a QALY gained is required in order to make the procedure acceptable. Furthermore, the evaluation of the operability of a patient is highly subjective. Experience abroad and analysis of the characteristics of patients treated previously with TAVI in Belgium show that, in practice, one has the tendency to widen the limits of operability to extend the scope of application of TAVI, possibly also at the request of the patients themselves. However, based on current scientific knowledge, extension of the use of TAVI to high-risk patients or operable low-risk patients is not advised. The estimated annual demand in Belgium for TAVI due to anatomical limitations is 25 to 30. In practice, this could be optimally provided in 1 or 2 heart centres with a great body of experience in valve surgery and interventional cardiology. The centres could for example be selected based on their current experience with TAVI combined with the number of isolated aortic valve replacements performed annually. Here, a figure of 100 cases per year could be used as the lower limit. In 2008, 2 Belgian centres performed at least 100 isolated aortic valve replacements. The PARTNER trial does not provide an answer to questions regarding the efficacy of transapical TAVI in inoperable patients or the clinical efficacy of the CoreValve® prosthesis. No other sources were found that could change the KCE’s standpoint with respect to its 2008 report.

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