Reviewer's report

**Title:** EuroScore 2 for identification of patients for transapical aortic valve replacement - a single center retrospective in 206 patients.

**Version:** 1  **Date:** 31 May 2012

**Reviewer:** Jochen Börgemann

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In their retrospective analysis of a population of 206 patients status post aortic valve replacement (conventional AVR: 130 patients; TA-TAVI: 76 patients), Goetzenich et al. compare 4 different risk stratification scores (EuroSCORE 1, EuroSCORE 2, STS score, and ACEF).

For three of four scores, the authors calculate the corresponding sensitivities, specificities, ROC curves, and Youden’s indices. They discuss that it is important to distinguish between discriminative power and score calibration for a specific cohort.

**Major Compulsory Revisions:**

To become acceptable for a re-review, the paper should be thoroughly revised:

1. From the title, one would expect an analysis of risk stratification in a TAVI population based on the EuroSCORE 2. Although the authors provide ES2 data in the Abstract and in the Results, the remainder of the manuscript emphasizes the comparison of EuroSCORE 1, STS scores, and ACEF. This issue needs to be rectified. On the same token, all four scores should be compared regarding their respective calibration and discriminative power for the given group of 206 patients, because readers would like to see an answer to the question: “Which of the four scores is the most suitable one for differentiating which patients in this population end up surviving TAVI and which ones do not?” Next, the authors should discuss and analyze if the answer is also applicable to other populations.

2. The manuscript needs to be evaluated by a statistician who should make corrections if needed. The ROC curves ought to be shown. PPV and NPV as well as the f-score from Table 2 should be addressed.

3. The English diction and grammar should be completely revised by a native speaker.

**Minor Essential Revisions:**

4. The Abstract contains abbreviations. Amend this, please.

5. The title is incomplete: “… - a single center retrospective analysis/study in 206 patients”
Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.