Author's response to reviews

Title: The impact of administration of tranexamic acid in reducing the use of red blood cells and other blood products in cardiac surgery.

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Author's response to reviews: see over
Dear Editor,

Thank you for accepting our manuscript for publication (while this is not spelt out in your email, it appears to be the suggestions made by the reviewers).

We have modified and formatted the manuscript as instructed, and hereafter are listed the changes made.

With thanks

Alain Vuylsteke

➢ A conflict of interest section has been added:

Competing interests
Dr Vuylsteke is receiving consultancy fees from by Novo Nordisk, in elation to the development of Novoseven®. No other competing interests.

➢ An acknowledgment section has been added:

Acknowledgement section - None

➢ The background of the abstract includes context (bold) and purpose (underlines) of the study.

To study the effect of administration of tranexamic acid on the use of blood and blood products, return to theatre for post-operative bleeding and the length of intensive care stay after primary cardiac surgery, data for 4191 patients, of all priorities, who underwent primary cardiac operation during the period between 30/10/00 and 21/09/04 were analysed.

➢ We have revised the text to answer the minor comments of one of the reviewer:

In analysis of data, we have added:

(2) In the second step, we used univariate logistic regression to assess the effect of administration of tranexamic acid on each of the 5 main outcomes of interest.

(5) In the final step we considered the blood loss outcome. Total blood loss and 12 hour blood loss were compared between the TA and NTA groups using the Mann-Whitney U test. Separate comparisons were made for those who were and were not returned to theatre for further
investigation. Multivariate linear regression was then performed to assess which covariates had an independent effect on total blood loss. The same set of covariates was considered, and stepwise procedures were performed, as before. Since the distribution of blood loss was positively skewed, the outcome was transformed prior to modelling using the natural log transformation. Results are therefore reported as the proportionate change in blood loss attributable to a given covariate (i.e. the exponentiated coefficient corresponding to that covariate).