Author’s response to reviews

Title: Optimal Blood Pressure Control for Patients after Thoracic Endovascular Aortic Repair of Type B Aortic Dissection

Authors:

Nan Lu (lunansd@163.com)
Xiaojing Ma (13592807059@163.com)
Tan Xu (582890886@qq.com)
Zhuoqiao He (lunanbaobei@126.com)
Bayi Xu (sdzt1@163.com)
Qingfeng Xiong (ophthal.tzhang@hotmail.com)
Xuerui Tan (xueruitan@163.com)

Version: 1 Date: 28 Apr 2019

Author’s response to reviews:

Apr. 28, 2019

To:

Sagar Mallikethi-Reddy
BMC Cardiovascular Disorders

Dear Sagar Mallikethi-Reddy,

Manuscript ID: BCAR-D-19-00127

Title: Optimal Blood Pressure Control for Patients after Thoracic Endovascular Aortic Repair of Type B Aortic Dissection

Authors: Nan Lu, MD; Xiaojing Ma, MD; Tan Xu, MD; Zhuoqiao He, MD; Bayi Xu, MD; Qingfeng Xiong, MD; xuerui tan

Journal: BMC Cardiovascular Disorders
Thank you very much for your e-mail of 27 Apr 2019 11:14. We would like to thank you and the reviewers for the constructive comments and thoughtful suggestions, which helped us tremendously in improving our manuscript. We have carefully revised the manuscript accordingly. Please find below our point-by-point responses to the comments and questions raised by you and the reviewers.

Comments from the editors and reviewers:

Rajeev Sudhakar (Reviewer 2): Blood pressure control after TEVAR in patients with Stanford type B aorta dissection is an important question for research. Introduction is solid but please address the question why a BP cutoff of 130 mm Hg was chosen instead of a lower cutoff 120 mm Hg which is also suggested in some studies.

Answer: Thank you for your kind comments on our manuscript. Hypertension is a very important risk factor for aortic dissection. In principle, lower blood pressure is beneficial for patients with aortic dissection. However, too low blood pressure can cause signs or symptoms of ischaemia and complications of malperfusion (reduced blood supply to tissues and organs). These can lead to failure or infarction of vital organs. Therefore, a BP cutoff of 130 mm Hg was chosen instead of a lower cutoff of 120 mm Hg.

In our study, SBP as a continuous variable predictor of the endpoint of 90-day ARAE was analyzed by receiver operator characteristic (ROC) curves. The optimal cut-off points of SBP to differentiate ARAE from non-ARAE outcomes were determined using Youden's index, which equally weighs sensitivity and specificity and maximizes the number of correctly classified patients. Therefore, the cut-off value of 130 mm Hg was identified by statistical methods in our study.

We have revised the content in the corresponding section. (Introduction section, line 53-57, page 4)

Finally, we are not definitely sure whether the question raised by you was understood thoroughly and the answer is reasonable and fulfills your meaning. If there is any question needed to declare, please kindly feel free to contact us immediately. What you have done ever and next will be grateful for our manuscript.

Rajeev Sudhakar (Reviewer 2): Also not able to monitor BP variability which provides more insight into overall BP control as outpatient is also a limitation of the study. Please mention this in the limitations section.
Answer: We appreciated your professional review work on our manuscript. We have added this content of limitation raised by you in the corresponding section. (Limitation section, line 267-268, page 18)

Thank you very much to the reviewers and editor again for your significant comments and valuable suggestions to improve the quality of our manuscript.

Please address all correspondence to:

Xuerui Tan M.D., Ph.D., Prof. of Cardiology,

Department of Cardiology, The First Affiliated Hospital,

Shantou University Medical College,

No. 57, Changping Road, Shantou, Guangdong 515041, China

E-mail: tanxuerui@vip.sina.com,

Phone: +86-754-88905455,

Fax: +86-754-88611690,

Yours faithfully,

Xuerui Tan