Author's response to reviews

Title: The effect of reduced beta2-glycoprotein I on aortic matrix metalloproteinases and tissue inhibitor matrix metalloproteinases of diabetic mouse and its mechanism

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Dear Editor:

This is a manuscript entitled “The effect of reduced #2-glycoprotein I on aortic matrix metalloproteinases and tissue inhibitor matrix metalloproteinases of diabetic mouse and its mechanism”. #2GP I and oxLDL-c can form a complex in the body, as an antigen to promote arteriosclerosis. Our previous study found that endothelial cells can secrete thioredoxin-1 to change #2GP I into reduced #2GP I, which is generated when the functional disulphide (Cys288-Cys326) is opened and have free sulfhydryl group in domain #, plays a role in endothelial protection in oxidative stress in vitro. Our previous studies have shown that reduced #2GP I can inhibit macrophage to form foam cell and apoptosis in vitro, too. How reduced #2GP I to effect the aorta in vivo? And whether to play a role by MMPs/TIMPs? What is the mechanism? This is the purpose of our study. This is a first study about reduced #2GP I and vascular protection in diabetic mouse.

We have read and have abided by the statement of ethical standards for manuscripts submitted to BMC Cardiovascular Disorders. The manuscript described has not been submitted elsewhere for publication, in whole or in part, and all authors have seen the manuscript and approved to submit to your journal.

All authors declare that they have no competing interests.

Thank you very much for your attention and consideration.

Your sincerely,

Pei Yu and Demin Yu