Reviewer’s report

Title: ACE-inhibition attenuates uremia-induced aortic valve thickening in a novel mouse model

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Reviewer: Masataka Sata

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This is an interesting animal study that reports a novel mouse model of uremia and hyperlipidemia-induced aortic valve thickening. Enalapril was effective in attenuating aortic valve thickening. The findings are significant and of clinical interest. I have a few comments that should be addressed before publication.

(1) The molecular mechanism by which enalapril attenuates valvular thickening remains unknown. Enalapril ameliorated systolic blood pressure, urea concentration, creatinine, and total cholesterol. It is possible that the improvement in these metabolic indices was associated with attenuation of aortic valvular thickening. The authors should discuss the potential mechanisms.

(2) It should be shown that ACE expression was up-regulated in the aortic valve in the mice with renal failure.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.