Response to letter by Dr. Imamura: implication of urine aquaporin-2 levels following cardiac surgery

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We would like to thank Dr. Imamura for his insightful opinions and suggestions.

Patients with chronic kidney disease were not included because our study is at a rudimentary stage [1]. As Dr. Imamura previously indicated, the poor response of urinary aquaporin-2 excretion to plasma arginine vasopressin can result from impaired renal function [2]. Further studies investigating changes in plasma arginine vasopressin and urinary aquaporin-2 excretion during perioperative cardiac surgery in patients with chronic kidney disease will be of great interest.

In the future, I would like to investigate how perioperative plasma arginine vasopressin and urinary aquaporin-2 excretion changes in patients with impaired cardiac function and/or in patients suffering from heart failure postoperatively.

References

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2. Imamura T, Kinugawa K, Fujino T, Inaba T, Maki H, Hatano M, Yao A, Komuro I (2014) Increased urine aquaporin-2 relative to plasma arginine vasopressin is a novel marker of response to tolvaptan in patients with decompensated heart failure. *Circ J* 78:2240–2249

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