Letter to the Editor Regarding AHA Scientific Statement, "Cardiorenal Syndrome: Classification, Pathophysiology, Diagnosis, and Treatment Strategies"

Schanz, Moritz¹; Alscher, Mark Dominik¹; Kimmel, Martin²

Disclosures:

Schanz: Robert-Bosch-Foundation research grant (significant)

Alscher: Robert-Bosch-Foundation research grant (significant); Other Research Support: Berthold Leibinger Foundation (significant); Speakers Bureau/Honoraria: Varia (Baxter (modest), FMC(modest), Vifor (modest), Roche (modest))

Kimmel: Robert-Bosch-Foundation research grant (significant); Other Research Support: Astute Medical (significant); Speakers Bureau/Honoraria: Varia (Astute Medical (modest), Fresenius (modest), Baxter (modest), Vifor (modest), Amgen (modest), Roche (modest), GSK (modest)); Consultant/Advisory Board: Astute Medical (modest), Vifor (modest), Amgen (modest), Roche (modest)

To the Editor:

With great interest we read the Scientific Statement from the American Heart Association "Cardiorenal Syndrome: Classification, Pathophysiology, Diagnosis, and Treatment Strategies" from Rangaswami et al. [1]. We would like to congratulate to this comprehensive and sophisticated review. However, in one point we have to disagree with the authors: Rangaswami et al. state, that the relationship between the urinary biomarker [TIMP-2]•[IGFBP7] and cardiorenal syndrome has not yet been described [1]. We would venture to point out that data on [TIMP-2]•[IGFBP7] in cardiorenal syndrome already exist. In our study of acute decompensated heart failure patients we examined the predictive ability of [TIMP-2]•[IGFBP7] for development of moderate-severe acute kidney injury (Stage 2-3) [2]. The cell cycle arrest biomarker discriminated for acute kidney injury stage 2 and 3 over the first day with an area under the ROC curve of 0.84 (95% confidence interval: 0.72-0.93) [2]. This may indicate that cell cycle arrest biomarkers are useful in early detection of cardiorenal syndrome. Nevertheless, further studies are needed to recommend these new renal biomarkers in cardiorenal syndrome.

References

- 1. Rangaswami J, Bhalla V, Blair JEA et al. Cardiorenal Syndrome: Classification, Pathophysiology, Diagnosis, and Treatment Strategies: A Scientific Statement From the American Heart Association. Circulation 2019. doi:10.1161/CIR.0000000000000664
- 2. Schanz M, Shi J, Wasser C et al. Urinary [TIMP-2] x [IGFBP7] for risk prediction of acute kidney injury in decompensated heart failure. Clin Cardiol 2017; 40: 485-491. doi:10.1002/clc.22683

¹Department of Internal Medicine, Division of General Internal Medicine and Nephrology, Robert-Bosch-Hospital, Stuttgart, Germany.

²Department of Internal Medicine, Division of Nephrology, Hypertension and Autoimmune Disorders, Alb-Fils Kliniken, Göppingen, Germany.