Letter to the Editor

Response to: Soluble regulators of Interleukin-1 signaling: Novel biomarkers for early acute myocardial infarction diagnosis and to predict ischemia/reperfusion injury?

Niklas Schofer [a,*], Tanja Zeller [a,b]

[a] Department of General and Interventional Cardiology, University Heart Center Hamburg, Hamburg, Germany
[b] German Center of Cardiovascular Research (DZHK), Partner Site Hamburg/Lübeck/Kiel, Hamburg, Germany

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Dear Dr. Wan:

We thank you for your valuable comment on our recent publication in the *International Journal of Cardiology*. You point out the putative value of inflammatory biomarkers for early diagnosis of acute myocardial infarction (AMI). Certainly, this is a very interesting approach, particularly because inflammation seems to play an important role in plaque rupture and erosion causing thrombotic coronary occlusion, defined as type 1 AMI [1,2]. As our study focused on the prognostic impact of IL-1 receptor antagonist (IL-1 Ra) in both, patients with unstable and stable coronary artery disease, we did not investigate the diagnostic performance of IL-1 Ra in patients presenting with suspected AMI.

To date, high-sensitivity troponin enables a safe and efficient rule-out of AMI assayed at a time point of 1 h after admission for approximately half of the patients presenting with suspected AMI [3]. However, this implicates that a substantial amount of these patients ends up in the diagnostic "grey zone", meaning that the diagnosis of AMI can neither be safely ruled out nor can it be established with a high positive predictive value. Thus, implementing an additional biomarker tool that could increase the diagnostic accuracy in identifying type 1 AMI in this subset is of great clinical need, because these patients benefit from urgent coronary revascularization. As pointed out by you, inflammatory biomarkers, such as IL-1 Ra, could be promising in filling this diagnostic gap and should be further investigated in future studies in this context.

Conflict of interest

None.

References

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* Corresponding author at: Department of General and Interventional Cardiology, University Heart Center Hamburg, Martinistrasse 52, 20246 Hamburg, Germany.
E-mail address: n.schofer@uke.de (N. Schofer).