

Letter to the Editor

One biomarker does not fit all

Dear Editor,

We have greatly enjoyed reading the recently published article by Toprak et al. Authors suggest that concentration of Galectin-3 was significantly increased in dilated cardiomyopathy compared to ischemic cardiomyopathy¹. This is a fascinating finding because it is compatible with prior data^{2,3}. Also, the authors noted critical role of matrix metalloproteinases (MMPs) and prolyase in cardiac remodeling. Data set from this study underline the pathophysiological role of MMPs and Galectin-3 in heart failure and suggested prolyase as a biomarker in heart failure patients with dilated cardiomyopathy.

An ideal biochemical marker should guide the management of patients with heart failure. Also it should be highly sensitive and specific. Changes in the level of a biomarker for heart failure should accurately reflect changes in patient's clinical status and prognosis. In literature there is a list of circulating biochemical markers that speculated to predict poor outcomes in patients with heart failure. The capability of identifying the most critical patient is also important, especially considering that many therapeutic options are available today. This goal has not been yet achieved although many novel biomarkers have been proposed and tested. A single marker cannot reflect all the features of this syndrome, whereas the combined use of more than one biochemical marker would better characterize heart failure patients and create new opportunities for their management.

Fibrosis is one of the multiple steps in whole heart failure syndrome pathogenesis and current study reveals that a single biomarker does not suffice even one aspect of the syndrome. Present biomarkers does not fully satisfy the clinicians during patient management and follow-up. Further studies should either focus on identifying an ideal single biomarker with above mentioned characteristics or should test combinations of up-to-date markers for satisfactory results.

As a result one biomarker doesn't fit all yet in heart failure patients.

Conflict of Interest

The authors have no commercial associations or sources of support that might pose a conflict of interest.

References

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H. Olgun Kucuk, U. Kucuk¹, K. Hakan Cansiz², S. Balta³, Z. Arslan³

Department of Cardiology, Van Education and Research Hospital, Van, Turkey

¹Department of Cardiology, Van Army District Hospital, Department of Cardiology, Van, Turkey

²Department of Anesthesiology, Elazig Army District Hospital, Elazig, Turkey

³Department of Cardiology, Gulhane Military Medical Academy, Ankara, Turkey