



Letter to the Editor

## Growth differentiation factor-15 is a strong predictor for all-cause mortality in acute myocardial infarction

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Dear editor,

Growth differentiation factor-15 (GDF-15), a member of the transforming growth factor beta (TGF- $\beta$ ) super family, is widely expressed in the various cells and plays a critical role in a variety of biological processes [1]. Increasing evidence shows that GDF-15 is a new biomarker to predict all-cause mortality. Recently, *Walter et al.* demonstrated that GDF-15 concentrations provide a high discriminative performance for all-cause mortality in patients with suspected acute myocardial infarction (AMI) [2]. Their results indicated that the concentrations of GDF-15 was significantly increased both in individuals with or without AMI who died in 2-year all-cause death. A GDF-15 cutoff of  $\leq 1560$  ng/L and  $\leq 886$  ng/L predicted 2-year survival with 100% sensitivity in patients with or without AMI respectively, but the specificity is low. Increased circulating concentrations of GDF-15 may be an indication of all-cause mortality, but GDF-15 alone appears not to be useful

as a screening marker owing to its lack of tissue specificity. The levels of GDF-15 in serum reflect these acute and chronic cellular stressors, which are associated with aging and disease [3]. Thus, how to further improve diagnostic sensitivity and specificity of GDF-15 in special types of diseases urgently needs to be solved. An effective solution is to combine with other indicators to improve the low specificity resulted from GDF-15 only, such as combining with hs-cTn or NT-proBNP in AMI patients.

#### Declaration of competing interest

The authors report no relationships that could be construed as a conflict of interest.

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