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Letter to the Editor

A potential and novel prognostic marker in cardiovascular diseases: Neutrophil gelatinase-associated lipocalin

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Dear Editor,

Recently, the original paper entitled "Serum neutrophil gelatinase-associated lipocalin (NGAL) concentration is independently associated with mortality in patients with acute coronary syndrome" reported by Ståle H. Nymo and colleagues attracted our interest [1]. Their results revealed that serum NGAL concentration at admission was strongly associated with all-cause mortality during long-term follow-up in acute coronary syndrome (ACS) patients. The association was stronger in non-ST-elevation myocardial infarction (NSTEMI) patients than ST-elevation myocardial infarction (STEMI) patients [1]. Neutrophils might be the most important cellular source of NGAL; given the postulated role of it in plaque erosion, NGAL primarily reflects plaque inflammation and/or erosion, in accordance with outcome in NSTEMI subjects [1,2]. Therefore, NGAL may be a useful biomarker for risk stratification in ACS patients, especially in NSTEMI patients. Growing evidence suggested that NGAL might also be involved in other processes such as inflammation and matrix degradation in cardiovascular diseases (including atherosclerotic carotid lesions, acute and chronic heart failure, chronic obstructive pulmonary disease, etc.) [3–5]. Collectively, these findings supported that NGAL could be applied as a potential prognostic marker in cardiovascular diseases with its association with inflammation, matrix remodeling and CAD severity. However, it needs a larger sample size and multi-centered nature to evaluate the possible prognostic implications of clinical management changes based on admission NGAL levels.

Conflict of interest

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

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