

## CORRESPONDENCE

# Biomarkers for right-sided heart failure

*Hypertension Research* (2017) **40**, 899; doi:10.1038/hr.2017.58; published online 27 April 2017

In a recent issue of this journal, Imazu *et al.*<sup>1</sup> examined the levels of serum fibroblast growth factor 23 (FGF23) in patients with heart failure (HF). Specifically, the authors observed a positive association between FGF23 levels and hemodynamic indicators of right-sided HF. Based on their findings, the authors concluded that serum FGF23 levels may provide beneficial information for patients with HF. However, the data presented do not support the authors' conclusion. In Figure 3, the combination of FGF23 and plasma B-type natriuretic peptide (BNP) predicts the clinical outcomes examined, as does either FGF23 or BNP alone. The results do not support the conclusion that the combination of FGF23 and BNP exhibit the strongest association with clinical outcomes. Furthermore, the serum FGF23 levels reflect accompanying renal dysfunction. As the authors noted,

HF worsens renal function, and declining renal function can increase serum FGF23 levels.<sup>2,3</sup> Although HF can increase serum FGF23 levels independent of renal function,<sup>4</sup> the serum FGF23 levels in the report by Imazu *et al.*<sup>1</sup> reflect renal function; Table 3 shows a strong association between FGF23 and indicators of renal function. Indicators of renal function, such as blood urea nitrogen levels and the estimated glomerular filtration rate could be more useful than FGF23.

### CONFLICT OF INTEREST

The author declares no conflict of interest.

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