Title
Homocysteine and reverse epidemiology - Reply

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inflammation and wasting. In our paper, this was clearly acknowledged, and several study limitations were discussed. We should note that the small size of our study population limits the statistical power leading to widening confidence intervals. Notwithstanding this and other limitations of our study, the reversal of the direction of the associations after multivariate adjustment for surrogates of inflammation and wasting indicates a trend with possible biological plausibility. Indeed, patients with higher total serum homocysteine (tHcy) levels tended to have lower mortality before adjustment for inflammation-wasting, whereas after adjustment they had a 27% higher all-cause and 22% higher cardiovascular mortality. Consistent with our foregoing findings, a recent study by Ducoux et al. [2] found that tHcy in haemodialysis (HD) patients with inflammation-wasting syndrome was inversely related to all-cause mortality, but this association was in the opposite direction in HD patients without the inflammation-wasting. Although these studies may not provide sufficient explanation for the reverse epidemiology phenomenon, they show that the inflammation-wasting confounds the background association between tHcy and mortality in CKD and that this effect may be so overwhelming that it may even reverse the direction of the associations. Prospective studies including larger numbers of patients are required to better examine the true aetiology of the enigmatic phenomenon of reverse epidemiology of tHcy in CKD.

Conflict of interest statement. None declared.

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Reply

Sir,
We thank Dr Movilli for his comments and for the interest shown in our study [1]. We agree that there was no statistically significant difference in hazard ratio after adjustment for...