We thank Balta et al. [1] for their interest in our article: preoperative anaemia is a risk factor for mortality and morbidity following aortic valve surgery [2] and for the interesting points they raised. Balta et al. are in agreement that preoperative anaemia is a common finding and an important risk factor for morbidity and mortality in patients undergoing aortic valve surgery. We disagree with their assertion that blood transfusion is ‘dangerous’. In fact, blood transfusions can be life-saving and make surgery possible in many patients who would otherwise not be candidates for cardiac surgery. It is more likely that the pre-existing conditions that lead to blood transfusion (i.e. preoperative anaemia, excessive bleeding and haemodilution) are likely associated with worse outcome [3, 4]. In our study, red blood cell distribution width was not routinely measured. However, it is unlikely that this would have a significant impact on the primary message of this study. Pre-existing renal dysfunction (as measure by estimated glomerular filtration rate) was incorporated in our multivariable model and was adjusted in this study. Balta et al. also commented that we should define ‘how much time [we] specified on measuring haemoglobin levels’. If the authors mean which preoperative haemoglobin was used to define preoperative anaemia, in our study we used the latest available laboratory result for haemoglobin before surgery to define anaemia. For in-hospital patients, this was the day before the surgery and for elective patients the haemoglobin measurement was typically within 2 weeks of their surgery date. As noted in the study, preoperative anaemia was defined as per World Health Organization guidelines. Finally, we agree with the authors that further studies are warranted to better understand the mechanism and effect of preoperative anaemia on outcome after cardiac surgery.

REFERENCES