To the Editor,
We read the recently published article ‘Red cell distribution width as predictor for mortality in critically ill patients’ by Meynaar et al.1 In the mentioned article, the authors aimed to evaluate whether red cell distribution width (RDW) is a significant risk factor for hospital mortality in critically ill patients and to investigate whether RDW is a parameter indicating inflammation. They concluded that RDW level was an independent predictor of mortality in critically ill patients on ICU admission. The low cost and easy attainability of this parameter may strengthen its usefulness in daily practice in the near future. We would like to thank the authors for their contribution.

RDW, which is used in the differential diagnosis of anaemia, is an automated measure of the variability of red blood cell size.2 Previously it was shown that RDW is an independent variable of prognosis in patients with cardiovascular diseases such as heart failure, myocardial infarction, stroke, and pulmonary hypertension.2-6 In addition, it was also found to be related to mortality and other severe adverse outcomes in renal and infectious diseases.7 Ageing, malnutrition, iron or vitamin B12 deficiency, bone marrow depression, chronic inflammation and any medication may affect RDW levels.2-6 Thus, it would have been useful if the authors had mentioned these RDW-affecting factors. Moreover, it would have been contributory to know the time elapsed between taking the blood samples and measuring RDW since the RDW value may be affected by a delay.8 On the other hand, it would have been better if the phrase ‘critically ill patients’ had been described in a more detailed explanation in terms of potential life-threatening health problems.

In a recent study, atrial natriuretic peptide (ANP) was demonstrated to be a valuable predictor in early diagnosis of sepsis in ICU patients.9 Recent studies have shown that the neutrophil-to-lymphocyte ratio and mean platelet volume (MPV) are also associated with inflammatory diseases and mortality in critically ill patients.6,8,10-11 In this view, it would also have been relevant if the authors had included these parameters in the study.

We are of the opinion that the findings of Meynaar et al. will lead to further studies and research concerning the relationship between RDW and mortality in critically ill patients. So, RDW should be considered with other inflammatory markers (e.g. procalcitonin, atrial natriuretic peptide and brain natriuretic peptide) to provide certain information about the inflammatory status of the patient.

REFERENCES