Does Red Blood Cell Distribution Width Really Have a Prognostic Role in Upper Tract Urothelial Carcinoma?

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TO THE EDITORS:

In the article by Cheng et al.,¹ the authors estimated the prognostic role of blood markers in upper tract urothelial carcinoma. The results showed that high red blood cell distribution width (RDW) was independently associated with poor overall survival (OS), and white blood cell (WBC) count was a significant prognosticator for both OS and cancer-specific survival (CSS). This is a novel issue, but there are some points to be noticed.

As a marker of red blood cell heterogeneity, RDW is used as a parameter not only for anemia diagnosis but also in other conditions, including heart failure and inflammatory diseases.^{2,3} However, it should be noticed that RDW levels might be affected by numerous factors. Some factors have been adjusted for in this study, such as age, gender, smoking, anemia, chemotherapy, and radiation. However, others were not mentioned, including body mass index, hepatic or renal dysfunction, diabetes mellitus, hypertension, and autoimmune diseases.

Moreover, some drugs or therapies might also affect RDW levels, including antibiotics, erythropoietin, and transfusion.^{2,3} Details on these might help understand the prognostic role of RDW further. Additionally, the devices

(anticoagulant, automated counter model) and elapsed time used for blood collection and RDW measurement should be mentioned, because RDW levels and reference range might changed with different detection methods.⁴

Our point is that such use of RDW as an independent prognostic marker for upper tract urothelial carcinoma remains unclear. Details regarding the information mentioned above might be beneficial to validate the role of RDW.

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