

Commentary and Critique to “Red Cell Distribution Width/Albumin Ratio: A Predictor of in-Hospital All-Cause Mortality in Patients with Acute Myocardial Infarction in the ICU” by Jian et al [Letter]

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Dear editor

I have read with great enthusiasm the paper that Jian et al have submitted. While their findings regarding red cell distribution width-to-albumin ratio (RAR) and acute myocardial infarction (AMI) mortality are interesting and consistent with the existing literature, their manuscript contains a major epidemiological nomenclature flaw. Although the conclusion part of the main text is correct, the conclusion part of the abstract states that the RAR was an independent risk factor for in-hospital all-cause mortality in intensive care patients with AMI. A risk factor is a feature that has a “causal impact” on disease occurrence, progression, or severity, and the disease would not have occurred in its current form in the absence of the risk factor.¹

As the authors have mentioned in the manuscript, red cell distribution width (RDW) and albumin levels alter during inflammatory states. While the former is a negative acute phase reactant, the latter is known to increase in both acute and chronic inflammatory states.^{2–4} Albeit their levels change during inflammation, they are not the cause of inflammation but only the surrogate markers of various inflammatory conditions. Specifically, lower albumin or higher RDW levels in a patient only reflect that patient having a higher level of inflammation compared to a patient with higher albumin or lower RDW levels. Studies on these indexes always conclude that “RAR is a predictor of” or “RAR is associated with”.^{3,4} Thus, the term “independent risk factor” is inappropriate in this context. I recommend authors make an erratum on the abstract.

Disclosure

The author reports no conflict of interest in this communication.

References

1. Dekkers OM, Vandenbroucke JP. Causaliteit: over risicofactoren en interventies [Causality: risk factors and interventions]. *Ned Tijdschr Geneesk*. 2013;157(24):A5882.
2. Peng Y, Guan X, Wang J, Ma J. Red cell distribution width is correlated with all-cause mortality of patients in the coronary care unit. *J Int Med Res*. 2020;48(7):300060520941317. doi:10.1177/0300060520941317
3. Zhao N, Hu W, Wu Z, et al. The red blood cell distribution width-albumin ratio: a promising predictor of mortality in stroke patients. *Int J Gen Med*. 2021;14:3737–3747. doi:10.2147/IJGM.S322441
4. Xu W, Huo J, Chen G, et al. Association between red blood cell distribution width to albumin ratio and prognosis of patients with sepsis: a retrospective cohort study. *Front Nutr*. 2022;9:1019502. doi:10.3389/fnut.2022.1019502

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