

Review of: "Effect of neutrophil-to-lymphocyte ratio and vitamin D3 levels on the pathological complete response after neoadjuvant treatment in TNBC and HER2-positive early breast cancer – results of a prospective study"

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Potential competing interests: No potential competing interests to declare.

Effect of neutrophil-to-lymphocyte ratio and vitamin D3 levels on the pathological complete response after neoadjuvant treatment in TNBC and HER2-positive early breast cancer – results of a prospective study is an interesting research paper that studied association between NLR, vitamin D and breast cancer. There are few issues that must be revised. 1- Abstract is a well written summary but keywords are missing. 2- Introduction must be improved because it should include adequate background data to explain the study rationale. Cancer cause significant amount of inflammation (Journal of the College of Physicians and Surgeons Pakistan 2017;27(9): 556-558). On the other hand, deficiency of vitamin D is associated with increased burden of inflammation (J Coll Physicians Surg Pak 2018;28(10):779-782). Elevated NLR is also characteristics of various inflammatory conditions including gastrointestinal diseases (Iran J Colorectal Res. 2022;10(3):75-86. doi: 10.30476/ACRR.2022.97244.1160), cardiac conditions (Acta Medica Mediterranea 2013;29:847-851), thyroiditis (Rev Assoc Med Bras 2017; 63(12):1065-1068. DOI: 10.1590/1806-9282.63.12.1065), irritable bowel disease (Fam Med Prim Care Rev 2020; 22(2): 107–110. DOI: 10.5114/fmpcr.2020.95311.), and Covid-19 infection (Rev Assoc Med Bras 2021;67(Suppl 1):1-2. DOI: 10.1590/1806-9282.67.Suppl1.20200678.). Thus, it can be associated both with vitamin D and breast cancer. 3- Study design was described appropriately and statistical analyses look complete. But, Kolmogorov Smirnov test would be a well substitution for Shapiro Wilk test as a normality analysis. 4- Results presented clearly

but all variables must have units in the tables. I recommend % for NLR and kg/m² for BMI. 5-
Discussion is fair and folowed by justified conclusions. However, limitations could be
presented at the end of the discussion.