



COMMENT ON “PROGNOSTIC SIGNIFICANT OF NEUTROPHIL: LYMPHOCYTE RATIO, PLATELET – LYMPHOCYTE RATIO, AND LYMPHOCYTE: MONOCYTE RATIO IN KURDISH PATIENTS WITH BREAST CANCER”

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Dear Editor,

We read with great interest the article “Prognostic significant of neutrophil: lymphocyte ratio, platelet – lymphocyte ratio, and lymphocyte: monocyte ratio in Kurdish patients with breast cancer”¹. In their analysis, Khazaei et al¹, reported that serum inflammatory indicators as neutrophil, lymphocyte, platelet and relative ratio (neutrophil to lymphocyte ratio, derived neutrophil to lymphocyte ratio, platelet to lymphocyte ratio, and lymphocyte to monocyte ratio) had no significant influence on prognosis in patients with breast cancer¹. In their manuscript, authors reported a lower overall survival rate of 5 and 10 years than women in other country¹. This worst result is probably associated to a delay in diagnosis and consequently advanced breast cancer tumor staging due to lack of information, cultural differences and limited possible treatments¹. Early diagnosis is one of the most influent prognostic factors, especially in the western country; therefore, the introduction of breast cancer screening led to a reduction in the incidence of advanced stage cancer, and it improved the overall survival^{2,3}. Breast cancer survival has improved during the last decades, reaching about 87% at five years⁴. This outcome improvement, as reported in literature by many authors, is strongly correlated with breast cancer screening (considering both health policy organized screening and self-referral screening)^{5,6}. Diagnosis of early-stage breast cancer reduces the likelihood of involved lymph nodes allowing less

invasive treatments in relation to the greater likelihood of local rather than systemic disease⁷. The advent of tailored and target therapy according to breast cancer predictive and prognostic factors contributes to achieve survival improvement^{8,9}. Despite the identification of different subtype, the behavior of breast cancer is unpredictable, so even in women with same prognostic factors, a different clinical outcome is obtained^{1,10}. In this context many researchers investigate novel cancer prognostic factors¹¹. The role of inflammatory response in the progression and growth also in breast cancer is widely reported in literature¹. Reduction of post-operative surgical stress, as strategy to avoid immunological response impairment, is a modern tenet in oncological surgery with the aim of reducing early post-operative lymphopenia^{5,12}. Avoidance of immunological response impairment is reported as possible benefit on oncological outcome but it is still debated in literature⁵. The key element between the immunological response and cancer progression has not been clearly identified¹³ and biomarkers such as lymphocytes, neutrophils, have been suggested as possible cancer prognostic factors¹. Correlations between immune biomarker and oncological outcome in breast cancer is contradictory¹. In contrast with Khazaei et al¹ analysis, some studies documented a significant association of neutrophil to lymphocyte ratio with worst disease-free survival and overall survival in breast cancer patients^{1,14}.

We strongly believe in the role of the immunological response in cancer patients¹⁵. All the mea-



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asures to reduce surgical stress and immunological impairment should be preferred⁵. In agreement with the authors, we believe that large prospective studies are needed; or probably these immunological biomarkers are not the factors that allow us to evaluate this impairment. Genetic or bioengineering studies will allow us to better understand this correlation or the pathway that allows cancer progression¹⁶.

CONFLICT OF INTEREST:

The authors declare no conflict of interest

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