

## LETTER TO THE EDITOR

## COMMENTS ON THE ARTICLE

“THE ASSOCIATION OF TUMOUR LYMPHOCYTE INFILTRATION WITH CLINICO-PATHOLOGICAL FACTORS AND SURVIVAL IN BREAST CANCER” BY HUSZNO *ET AL.*

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The authors have considered the influence of tumour lymphocyte infiltration (TLI) on the overall survival of 76 breast cancer—cases concerning patients who underwent surgery followed by systemic treatment [1]. Huszno *et al.* classified TI as absent (grade 0), mild (grade 1), moderate (grade 2), or severe (grade 3). TLI was found in 87% of patients. Severe grade TLI was present in 7% of cases, mild grade in 45%, and moderate grade in 35%. Among 34 patients with pT1 breast cancer, grade 0 TLI was found in 19 (56%) cases and grade 2-3 in 15 patients (44%). The authors concluded that TLI appears to be associated with negative steroid receptor status, HER overexpression, younger age, and higher histological grade. In the results reported by Huszno *et al.*, TLI was not a significant prognostic factor for overall survival.

Instead, we retrospectively studied the presence of TLI in 113 female patients affected by breast ductal carcinoma and aged between 39 and 66 years [2]. We subdivided the patients into two groups. The first group included 73 patients with pre-surgical biopsy and subsequent neoadjuvant treatment. The

second group was composed of 40 patients directly treated with surgical resection. In 17 cases displaying TLI presence, an immunohistochemical study was performed, including CD3, CD4, CD8, CD20, CD56, granulysin, perforin-1, granzyme-B, and TIA analyses. TLI was composed of T and B lymphocytes. The prevalent population showed a T immunoprofile, with a CD-8 immunopositive killer subpopulation inside the tumour. Granulysin, perforin-1, and granzyme-B were expressed by killer subpopulation lymphocytes, accompanied by secretion of the bending to malignant target cells and with its lytic planned death. In our study, the cytotoxicity is an important favourable prognostic factor. As for melanoma, we proposed a graduation system for TLI as: absent, non-brisk, and brisk. We observed brisk TLI in patients with a survival time surpassing 10 years. We believe that our TLI graduation system provides a more objective and accurate prognostic impact than the evaluation proposed by Huszno *et al.*

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*The author declares no conflict of interest.*

## References

- 1 Huszno J, Nozynska ES, Lange D, *et al.* The association of tumor lymphocyte infiltration with clinicopathological factors and survival in breast cancer. *Pol J Pathol* 2017; 68: 26-32.
- 2 Roncati L, Barbolini G, Piacentini F, *et al.* Prognostic factors for breast cancer and immunomorphological update. *Pathol Oncol Res* 2016; 22: 449-452.

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