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Erratum: Investigating tumor immunogenicity in breast cancer: deciphering the tumor immune response to enhance therapeutic approaches

Frontiers Production Office*

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An Erratum on

Investigating tumor immunogenicity in breast cancer: deciphering the tumor immune response to enhance therapeutic approaches

By Naji O, Ghouzlani A, Rafii S, Sadiqi Ru, Kone A-s, Harmak Z, Choukri K, Kandoussi S, Karkouri M and Badou A (2024) *Front. Immunol.* 15:1399754. doi: 10.3389/fimmu.2024.1399754

Due to a production error, there was a mistake in Figure 2 and Figure 3 as published. The correct Figure 2 was inadvertently published as Figure 3, and the correct Figure 3 file was omitted from the published article. The corrected Figure 2 and Figure 3 appear below. The publisher apologizes for this mistake.

The original version of this article has been updated.



FIGURE 2

Illustration depicting changes in immune cell populations during breast cancer progression. (A) At the initial stage of tumor development, TILs predominantly consist of Th1 and CD8+ T cells which are involved in immunosurveillance and combating malignant cell growth. (B) In advanced stages of cancer, there is a notable increase in CD4+ TILs, with a shift towards the predominance of Treg and Th17 cells. These changes contribute to tumor growth by modulating the immune environment within the tumor.



FIGURE 3

Concept of immunotherapy. T cells become exhausted after prolonged antigen stimulation and interaction with inhibitory ligands (PD-L1,L2; CD80, CD86) related to immune-checkpoint pathways. Immunotherapy involves inhibiting these immune checkpoint pathways using antibodies, with the goal of restoring T-cell functions. Most breast cancer immunotherapies focus mainly on anti-PD-1 drugs, which stop the interaction between PD-1, PD-L1, and PD-L2, such as pembrolizumab, avelumab, and atezolizumab.